ASX: HRZ

ASX ANNOUNCEMENT

19 JULY 2023

# MAIDEN RESOURCES FOR MONUMENT AND GOLDEN RIDGE NORTH

## HIGHLIGHTS

- Mineral Resource Estimates have been completed at the Greater Boorara-Golden Ridge and Cannon core projects
- The Monument gold prospect is part of the Cannon project group and is located less than 1km from the proposed Cannon underground project, 30km to the southeast of Kalgoorlie.
- The Golden Ridge North prospect is immediately adjacent to the historic Golden Ridge open pit mine, 20km to the southeast of Kalgoorlie in the WA goldfields.
- Two maiden JORC compliant resources have been estimated by Horizon for both deposits which are as follows: [1]
    - **Monument – 395,000t grading 1.97g/t Au for 25,000oz at a 0.8g/t Au cut-off grade**
    - **Golden Ridge North – 1.42Mt grading 1.23g/t Au for 57,000oz at a 0.8g/t Au cut-off grade**
- With the addition of these new resources, and reduction due to the completion of the Gunga West divestment [2], Horizon's total Mineral Resource estimate now stands at: [1]
    - **23.22Mt grading 1.69g/t Au for 1,262,000oz [1, 2]**
- Further drilling at Monument is currently underway, focussing on the shallower mineralisation aiming to upgrade this portion of the resource to an Indicated category. A scoping study will be commissioned to assess open pit viability, with approvals progressed in parallel to leverage off synergies with the Cannon underground project. [3]
- At the Golden Ridge North deposit, a scoping study has been initiated to examine open pit mining opportunities in conjunction with Monument. In addition, recent sampling (380 samples) at Golden Ridge has identified a small-scale treatment opportunity with many of the historic stockpiles, truck dumps and bunds returning economic grades (>1.0 g/t) from the previous open cut mining operation. [3]

Commenting on the new resources, Horizon Chief Executive Officer, Mr Grant Haywood said:

"These projects provide Horizon with additional potential for satellite ore sources to complement the underground production at the Cannon gold project due to their proximity, enabling synergies with shared infrastructure and personnel. We shall immediately commence the study work to bring these maiden resources into an Ore Reserve and progress approvals in parallel, as we build our production profile to reach our ultimate goal of becoming an emerging mid-tier gold business for the benefit of all stakeholders."

[1] See Tables and Competent Persons Statement on pages 7, 19 JORC Tables on Page 19. [2] As announced to the ASX on 17 July 2023. [3] See Forward Looking and Cautionary Statements on Page 6.

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## Overview

Horizon Minerals Limited (ASX: HRZ) ("Horizon" or the "Company") is pleased to announce maiden Mineral Resource estimates for the Monument and Golden Ridge North prospects located near Kalgoorlie in the heart of the Western Australian Goldfields (Figure 1).

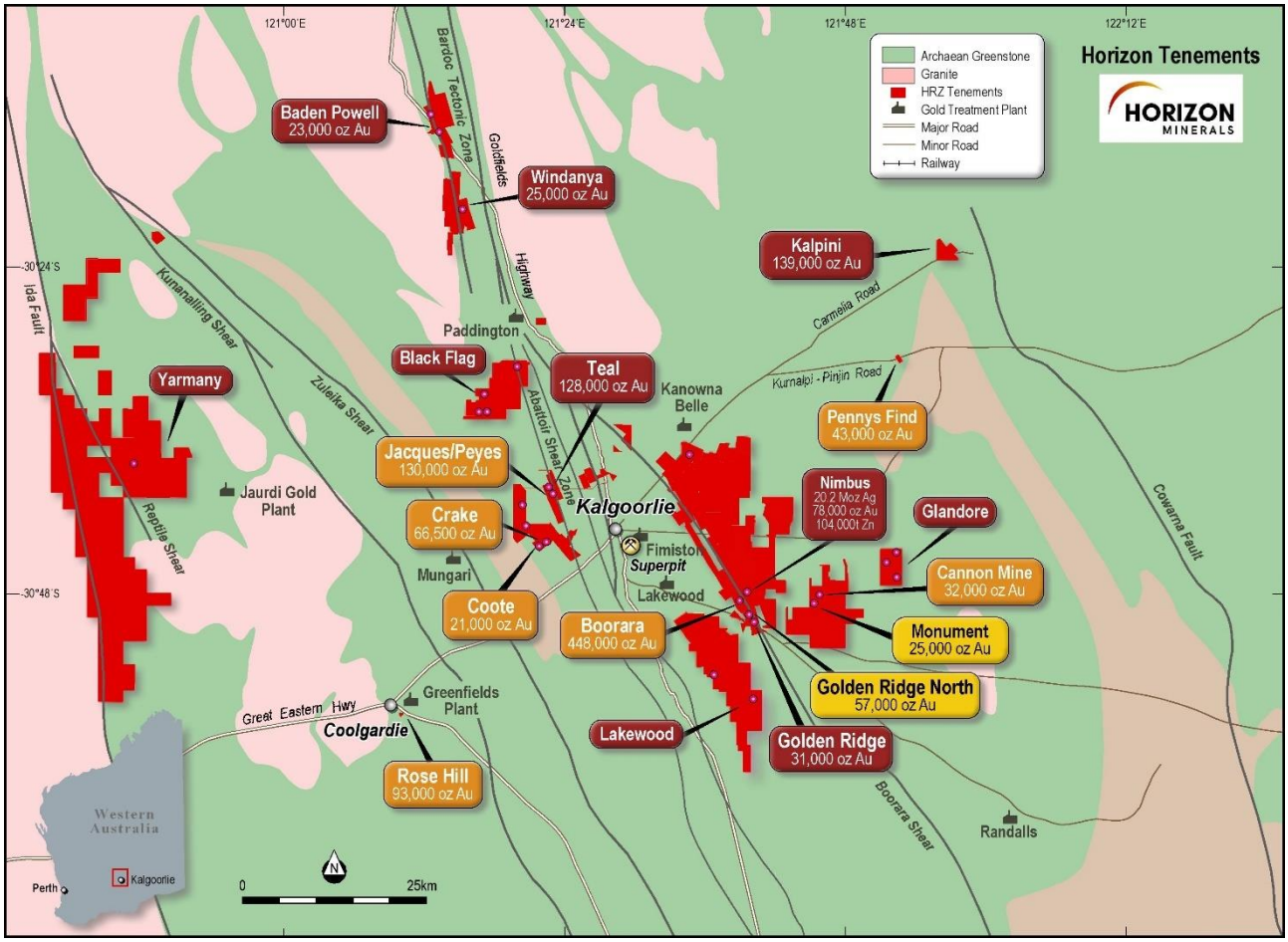


**Figure 1: Horizon's Project area location, resources and surrounding infrastructure**

Golden Ridge North, along with the 31koz Golden Ridge deposit, was acquired from Northern Star Resources in 2019 [1]. Following the acquisition, Horizon has conducted several drilling programs at Golden Ridge North, including one downhole EM survey and detailed mapping at Golden Ridge.

Monument is located about 1km southwest of Cannon and was part of the Cannon-Glandore package purchased from Aurenne Group Holdings Pty Ltd in October 2021 [2]. There has been no previous mining at Monument.

## Cannon and Monument Prospect Geology Overview

The Cannon deposit (Figure 1) is located 30km east-southeast of Kalgoorlie in the Eastern Goldfields region of Western Australia on granted mining leases ML25/333 and ML25/357. The Cannon mine and surrounding area is dominated by mafic to ultramafic rocks of the Bulong Complex overlain by a sequence of felsic volcanics, volcaniclastics and sediments. Lithologies

[1] As announced to the ASX on 20 December 2019. [2] As announced to the ASX on 19 October 2021.

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 Monument deposit differs and consists of two main zones of mineralisation in the north and south and a smaller central zone within a faulted region near the middle of the deposit. In the northern zone, the lodes are NNW and dip steeply to the west. In the south the lodes are N-S trending and also dip steeply to the west.

The best intersections occur within or on the margins of felsic intrusive units that run the length of the 700m long deposit. Evidence from the last round of Horizon drilling also suggests that the northern margin of the mineralisation is plunging moderately to the NNW.

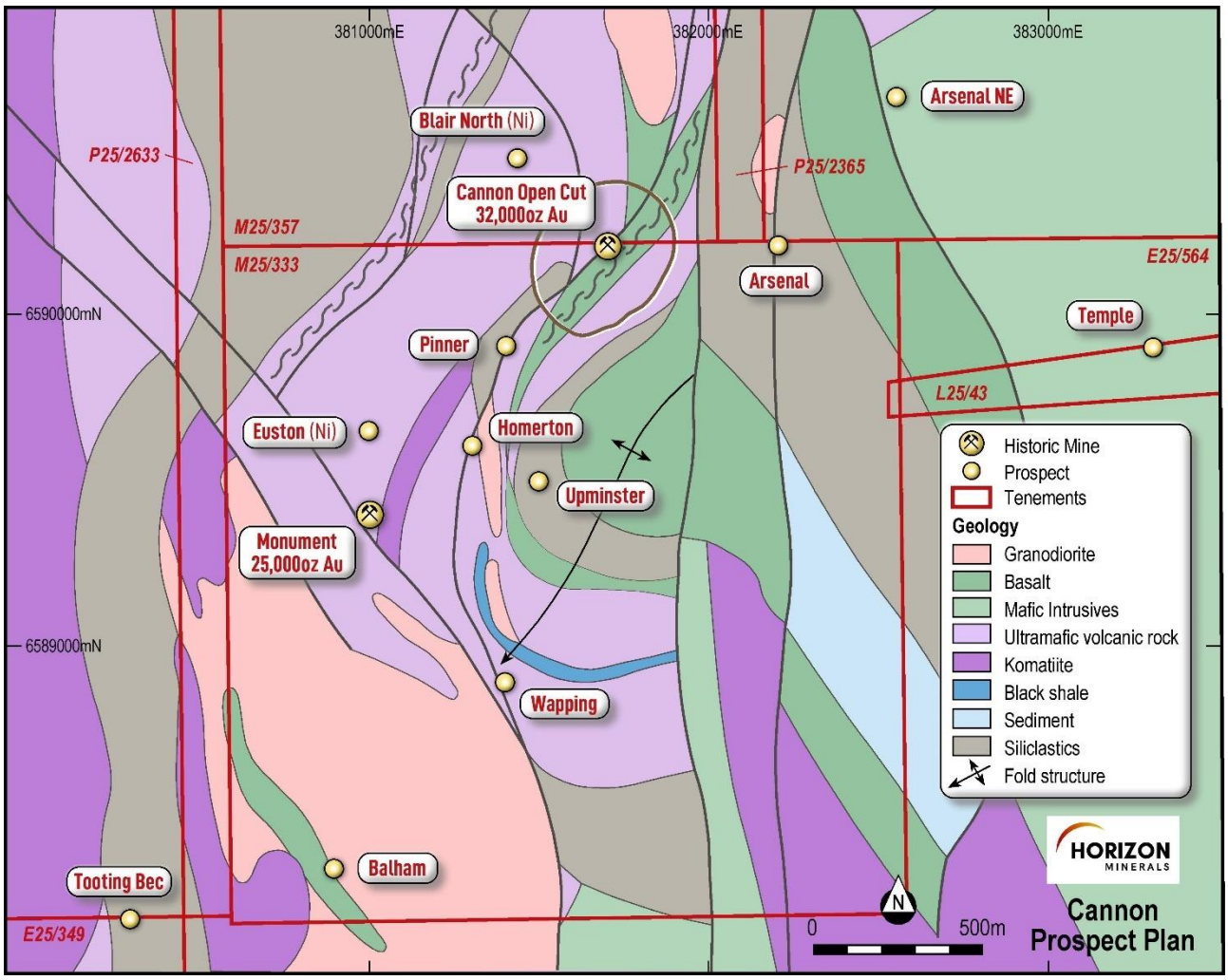


**Figure 2: Cannon Project area showing surrounding prospects**

## Golden Ridge Prospect Geology Overview

The historic Golden Ridge Underground Gold Mine was first developed from 1901-1927 when 249,356t @ 17.1g/t Au for 139,546oz was mined to an underground depth of 174m. More recent open cut mining from 1998-2004 produced 1.78Mt @ 1.98g/t Au for 113,520oz for a total of 253,000oz Au. The current depleted resource at Golden Ridge is 31,000oz at 1.82g/t [1] with most of the ore beneath the historical pit. The Golden Ridge North deposit was mined by Blue Tiger Mines Pty Ltd in 2018 who extracted 32,476t at a recovered grade of 1.38g/t Au for 1,444oz Au.

Gold mineralisation at Golden Ridge is associated with the north-south trending, sub vertical quartz-feldspar porphyry located between shales and cherts to the west and ultramafic (talc-carbonate) sequences to the east. Mineralisation is similar to Boorara where gold is observed in flat lying vein arrays and thicker, steeper dipping contact style lodes. The flat lodes are the most dominant. The regional Boorara shear appears to control a number of prospects in the Boorara-Golden Ridge corridor.

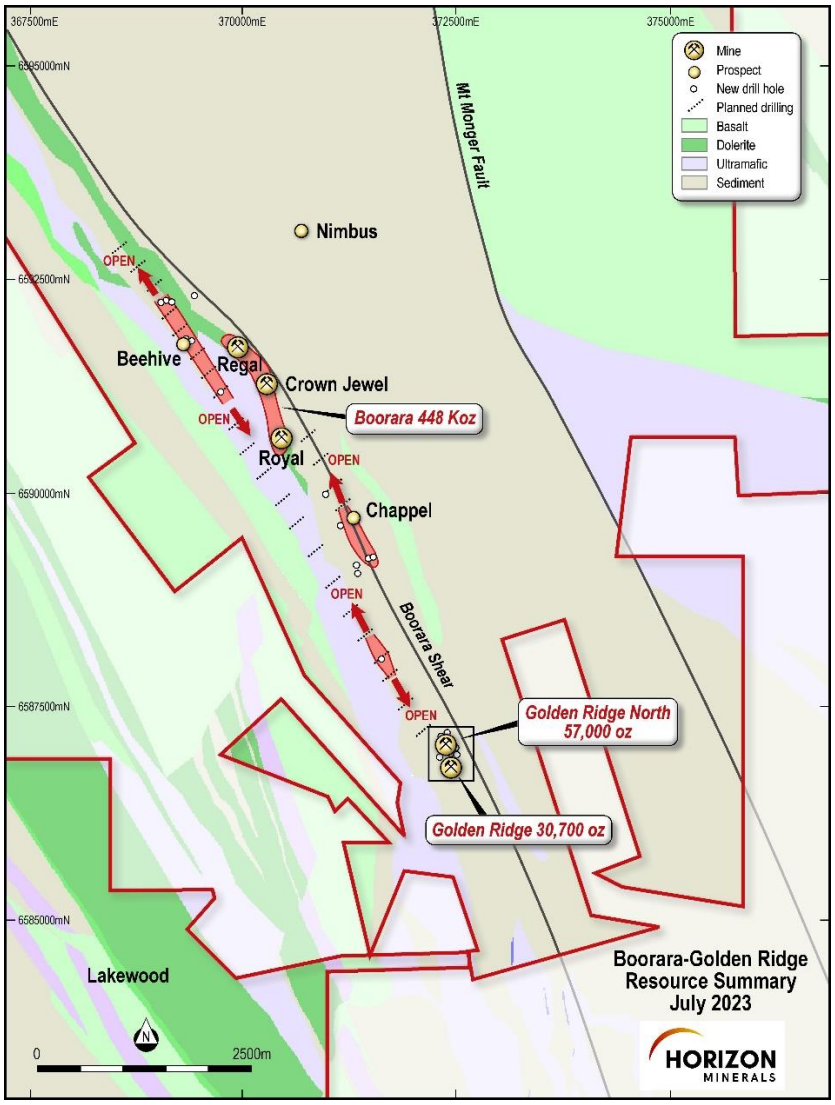


**Figure 3: Boorara-Golden Ridge Project area showing surrounding prospects**

## Next Steps

Infill drilling has commenced at both the Monument and Pinner prospects and is scheduled for completion this quarter [1]. Two new Mineral Resource Estimates will be completed for the deposits. Following this, a study will then examine the economics of open pit mining and ore treatment at FMR Investments' Greenfields plant in Coolgardie.

No further drilling is planned for Golden Ridge North this year. A scoping study will also assess the economics of an open cut mining operation. In addition, Horizon has taken over 380 samples of truck dumps, perimeter bunds and ROM pads at Golden Ridge. Many of the samples returned encouraging grades >1.0 g/t Au and highlight the potential for a simple haulage and processing operation. [1]

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[1] As announced to the ASX on 12 July 2023

## 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.

## 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 | 1.28 | 1.23 | 50,630 | 7.19 | 1.27 | 294,140 | 2.6 | 1.3 | 103,470 | 11.03 | 1.26 | **448,240** |
| **Golden Ridge** | 1.0 | | | | 0.47 | 1.83 | 27,920 | 0.1 | 1.7 | 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 | | | | 0.19 | 4.80 | 28,620 | 0.1 | 2.3 | 3,450 | 0.23 | 4.29 | **32,070** |
| **Monument** | 0.8 | | | | | | | 0.39 | 1.97 | 25,000 | 0.39 | 1.97 | **25,000** |
| **Pennys Find** | 1.5 | | | | 0.20 | 5.45 | 35,000 | 0.1 | 3.6 | 8,000 | 0.27 | 4.99 | **43,000** |
| **Kalpini** | 0.8 | | | | 1.40 | 2.43 | 108,000 | 0.5 | 2.0 | 31,000 | 1.87 | 2.33 | **139,000** |
| **Rose Hill UG** | 2.0 | | | | 0.33 | 4.50 | 47,100 | 0.2 | 4.8 | 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 | 0.8 | 2.0 | 49,000 | 1.74 | 2.32 | **130,000** |
| **Teal** | 1.0 | | | | 1.01 | 1.96 | 63,680 | 0.8 | 2.5 | 64,460 | 1.81 | 2.20 | **128,140** |
| **Crake** | 0.8 | | | | 1.33 | 1.47 | 63,150 | 0.1 | 1.3 | 3,300 | 1.42 | 1.46 | **66,450** |
| **Coote** | 1.0 | | | | | | | 0.4 | 1.5 | 21,000 | 0.42 | 1.54 | **21,000** |
| **Capricorn** | 0.5 | | | | | | | 0.7 | 1.2 | 25,500 | 0.70 | 1.20 | **25,500** |
| **Baden Powell** | 0.5 | | | | | | | 0.6 | 1.2 | 23,000 | 0.60 | 1.20 | **23,000** |
| **Total** | | **1.47** | **1.33** | **62,930** | **13.83** | **1.75** | **779,000** | **8.16** | **1.60** | **420,120** | **23.22** | **1.69** | **1,262,000** |

### Competent Person Statement

"The information in the report to which this statement is attached that relates to the Estimation and Reporting of Gold Mineral Resources at the Golden Ridge North and Monument deposits is based on information compiled by Mr Stephen Godfrey, a Competent Person, who is a current Fellow of the Australian Institute of Mining and Metallurgy (FAusIMM 110542) and Member of the Australian Institute of Geoscientists (MAIG 3993).

Mr Godfrey is the Resource Development Manager for 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 Godfrey consents to the inclusion in the report of matters based on the information in the form and context in which it appears."

## Listing Rule 5.8.1 Disclosures for Golden Ridge

### Geology and Geological Interpretation

The Golden Ridge orebody is situated on the Boorara Shear within a lenticular northwest-southeast trending sub vertical quartz-feldspar porphyry unit, which is assumed to be the lateral equivalent to felsic schists which also host gold mineralisation in the Boorara area, further to the north. The porphyry unit is fault bounded to the east by a package of chloritic serpentinised sheared ultramafic and to the west by metasediments (shale, graphitic shale and chert). The porphyry is thought to be intrusive in the immediate vicinity of the mine area but extrusive (flow textures visible) to the north towards Boorara.

The quartzo-feldspathic felsic porphyry unit is host to the mineralisation at Golden Ridge. When heavily oxidised it is reduced to kaolin clays with varying amounts of ferruginous minerals, usually limonite and goethite. Increased amounts of ferro-manganiferous deposits are localised around remaining quartz veining and faults/shears. Within the fresh material any textural features have been obliterated by strong pervasive sericite ± silica alteration giving the rock a general 'smooth' pale green appearance.

The Boorara Shear is a regional scale structure, which is likely to have had a long history of remobilisation. It is generally unmineralised, but is the essential structure required for the origin and emplacement of the gold. The differing competency contrasts between the local lithologies produced brittle fracturing within the porphyry intrusive/extrusive during remobilisation along the Boorara Shear. The resulting phases of quartz infill produced conjugate massive reefs and stockwork vein sets which host the bulk of the mineralisation at Golden Ridge.

### Drilling Techniques

Historical drilling used RC and Diamond techniques. RC drilling used a 5½" face sampling hammer bit. Diamond core was predominantly NQ with minor HQ. Diamond drilling comprises ~8% of the data in the resource model. All drillholes have been collar and down hole surveyed. Historically drill holes were located on a local grid. These have been translated to MGA94 zone 51 for the current resource. All HRZ drilling was done in MGA.

Drillholes are located at a 20 m spacing with a 40 m burden over the resource area with holes in the pit area at the south of the resource closed up to a 20 m burden.

### Sampling and Sub-Sampling Techniques

Historically RC samples were collected via cyclone and split with a 3-tier riffle splitter to produce approximately 3 kg of sample per metre. Horizon Drilling used a cyclone with cone splitter to produce approximately 3 kg of sample per metre.

RC drill samples were taken and assayed initially as 4 m composite samples. If anomalous gold was present the individual one metre samples for the interval were assayed.

Diamond core was sawed in half and one half geologically sampled at 0.4 to 1.5 m intervals. In geologically consistent zones 1 m samples were taken.

**Sample analysis method**

Historically a 30g Fire Assay with AAS finish was used for analysis. HRZ used a 50g Fire Assay with AAS finish. Analyses were for gold only.

Duplicate and Standard QAQC samples regularly submitted by operator in addition to routine laboratory QA samples.

**Estimation methodology**

Three dimensional mineralised wireframes were used to domain the mineralised data. Sample data was composited to 1m down hole lengths using the 'best fit' method. Intervals with no assays were excluded from the estimates. Construction of mineralised wireframes was based on a combination of gold grades, lithological units and geological structures. Where grade continuity was unclear, geological and structural data was used to guide the wire-framing. Refer to Figure 4-8.

Exploratory Data Analysis indicated the sample populations of the oxide, transition and fresh zones were sufficiently different to require separate modelling.

Variographic analysis provided adequate structure to enable Ordinary Kriging to be used to estimate the Au grades in the model.

A block model was generated in Surpac v6.6, using topographic and oxidation surfaces & mineralised domain wireframes as constraints. The model was depleted for the existing open pit at the south end.

Primary block dimensions used was 10m (X) x 10m (Y) x 5m (Z) with sub-blocking to 2.5m (X) x 2.5m (Y) x 1.25m (Z)). The final model is a combination of the different block dimensions. Estimation was made into the parent block. No assumptions were made on selective mining units.

An orientated 'ellipsoid' search was used to select data for each domain and was based on the observed lode geometry. The search ellipses were orientated to the average strike, plunge, and dip of the domain. First pass search parameters with an ellipse of to 40 m x 33 m x 16 m and minimum and maximum number of composites of 4 and 32. Subsequent estimation passes increased the search ellipse size and decreased the minimum samples required. All domain and oxidation boundaries were treated as hard boundaries during the estimation.

High grade cuts were used in the estimation of the Golden Ridge North resource due to the presence of outliers in the gold assays. Statistical analysis of the 1m composite data determined an individual top cut for each lode and material type.

No metallurgical assessment has been made. Mined material from the pits immediately to the south, and the similar Boorara deposit 5km along strike has been successfully processed in previous years.

The model has been reported at a 0.8 g/t Au cut off. This assumes the resource, if economic, will be mined by open pit methods. This cut off grade is comparable that used for similar deposits in the area.

**Classification**

The Golden Ridge North resource is classified as Indicated and Inferred. Indicated material is located below the open pit and south of ~6 587 050 mN. This area is well informed with drilling on ~20 m x 20 m centres. Oxide ore has been mined from the southern half of the Indicated zone down to 340 mRL (~50 m below surface).

Inferred material is everything north of the open pit and ~6 587 050 mN. The wider drill spacing (20 m x 40 m) makes the interpretation and estimate less certain. Lodes 8 and 10 are classified as Inferred due to their lack of continuity, implying a less certain interpretation.

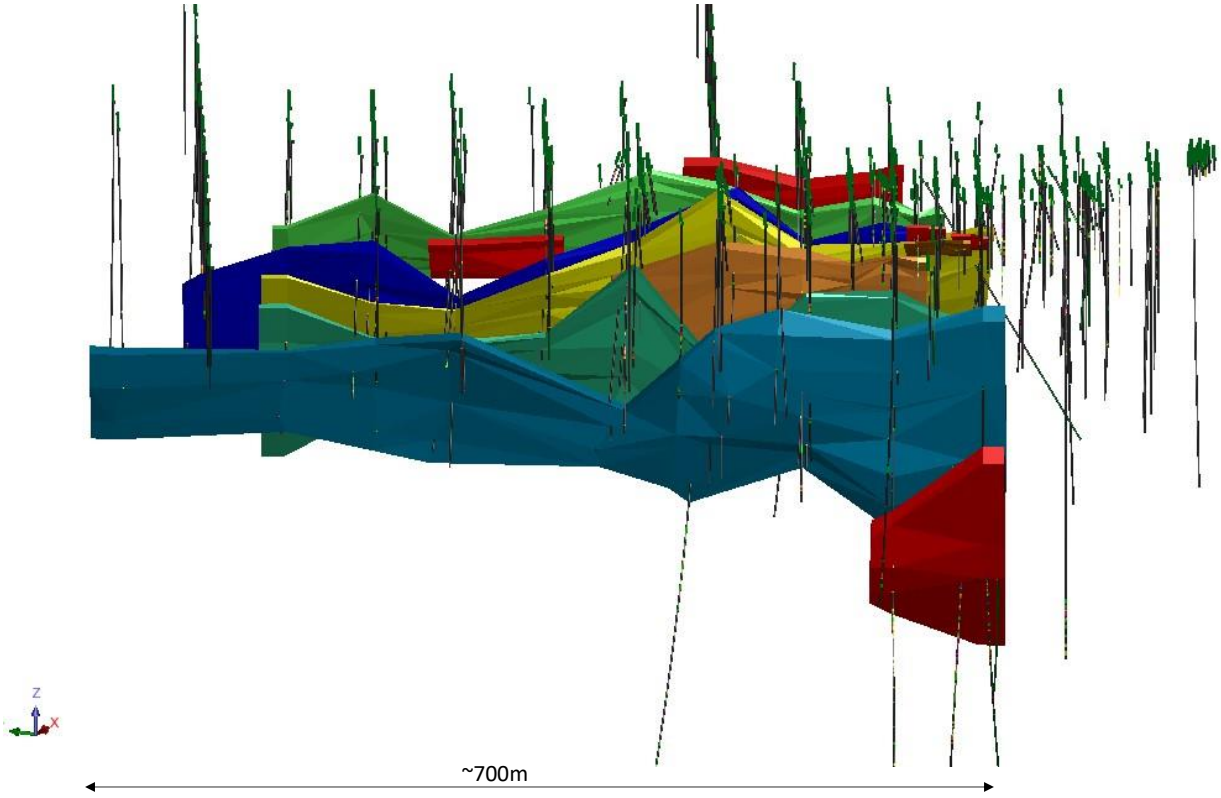



Figure 4. Golden Ridge Domains Looking North East

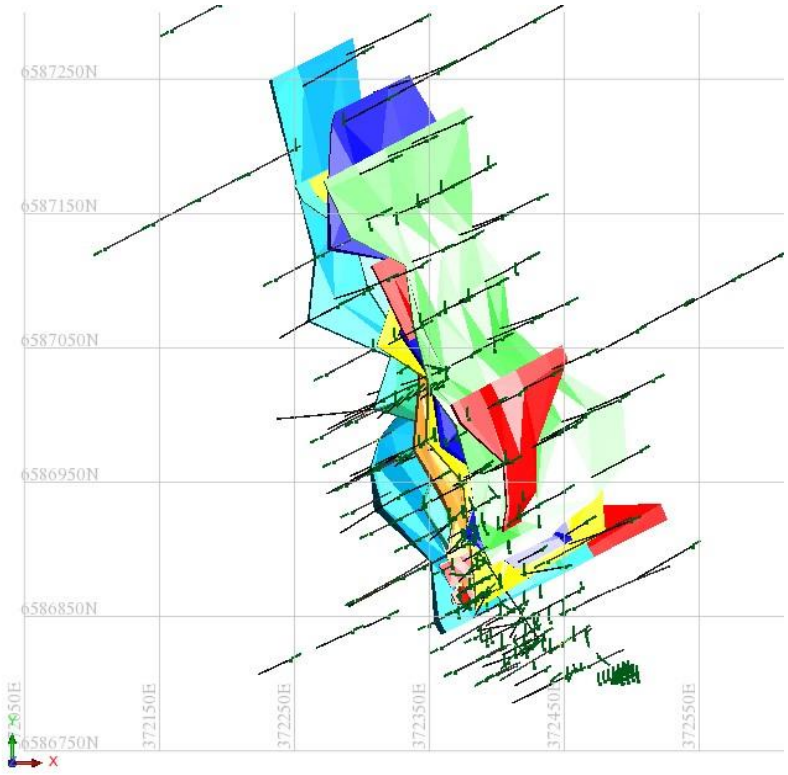



Figure 5. Golden Ridge Domains and Drilling

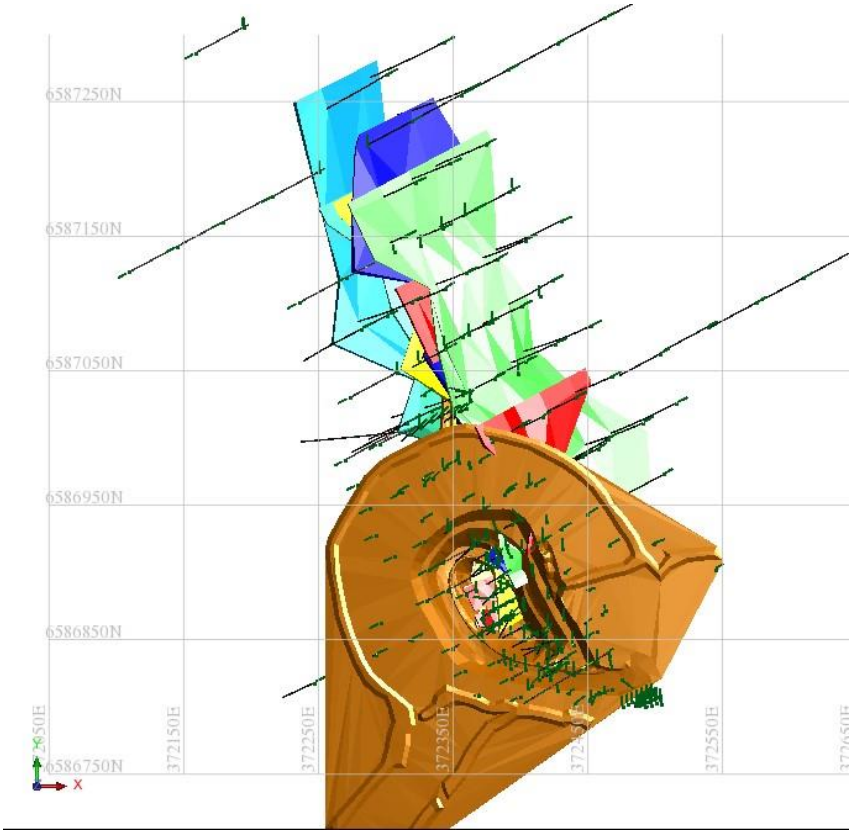



Figure 6. Golden Ridge Domains, Drilling and Topography Plan View

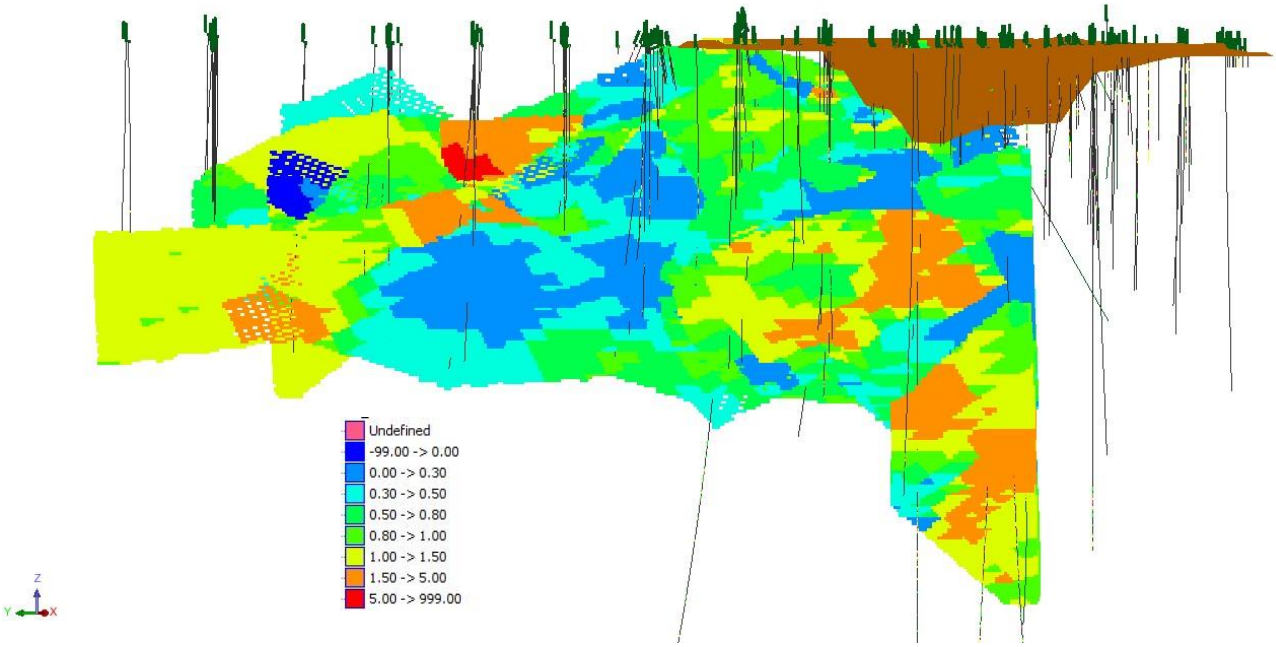



Figure 7. Golden Ridge Long Section Showing Block Model

## Listing Rule 5.8.1 Disclosures for Monument

**Geology and Geological Interpretation**

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.

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 M 25/333.

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 in the north and south and a smaller zone within a faulted region near the middle of the deposit. In the northern zone, the lodes are NNW and dip steeply to the west. In the south the lodes are N-S trending and dip steeply to the west.

The best intersections occur within or on the margins of felsic intrusive units that run the length of the deposit. Anomalous intercepts are also associated with other felsic units and the interpreted cross-cutting NE trending faults.

**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 data and 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 to 4m composites. Samples were taken dry.

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 intervals no greater than 1.3m and no less than 0.15m. 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.

**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 2kg. 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 25g, 40g or 50g charge for fire assay with AAS finish. Selected samples from some programs were submitted for multi element analysis.

**Estimation methodology**

The monument mineralisation trend North-North-West and dips at approximately 60° to West-South-West. The mineralisation dip continuity was initially interpreted in Geovia Surpac in section and then in 3D to determine strike continuity between sections. This defined 12 domains which were used to flag the drill hole database. The flagged domains were wireframed using Micromine's implicit modelling tools.

Block model construction and grade estimation was done in Geovia Surpac.

Grade estimation for the Monument 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 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 50 m x 25 m x 12.5 m. Pass 2 expanded the sample search to 75 m and pass 3 to 100 m. Pass 4 used a minimum sample requirement of 1. See figures below.

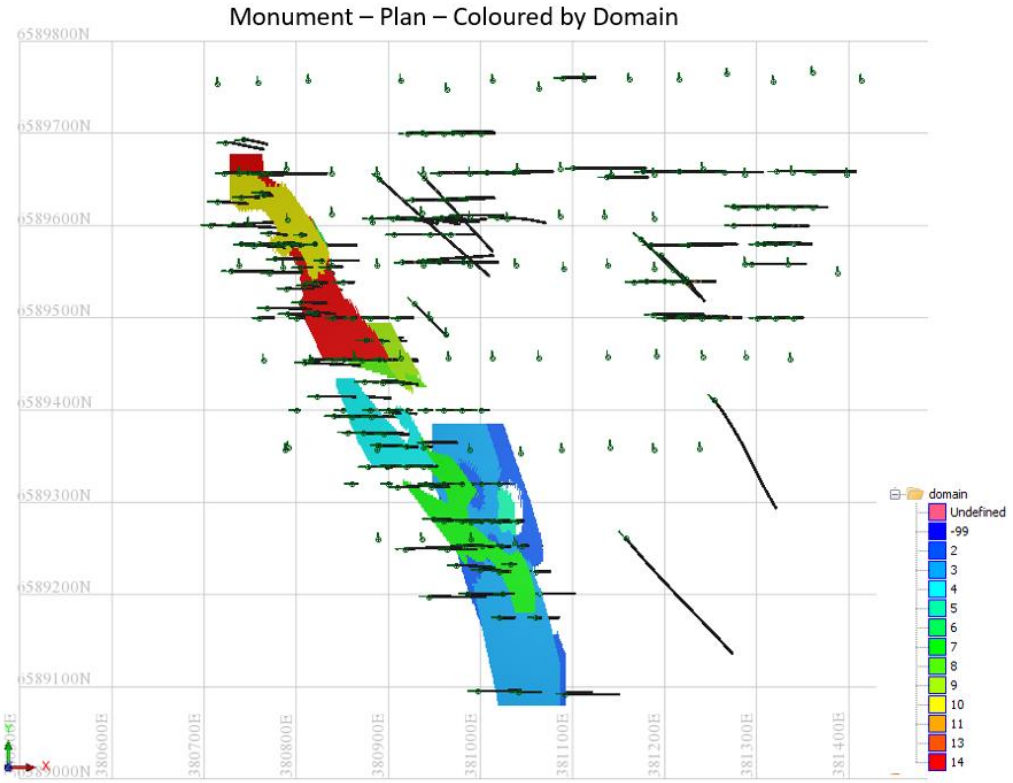
82% of blocks were estimated by the first estimation pass; 12% by the second; 5% in passes 3 and 4. 2% of blocks remain un-estimated.

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

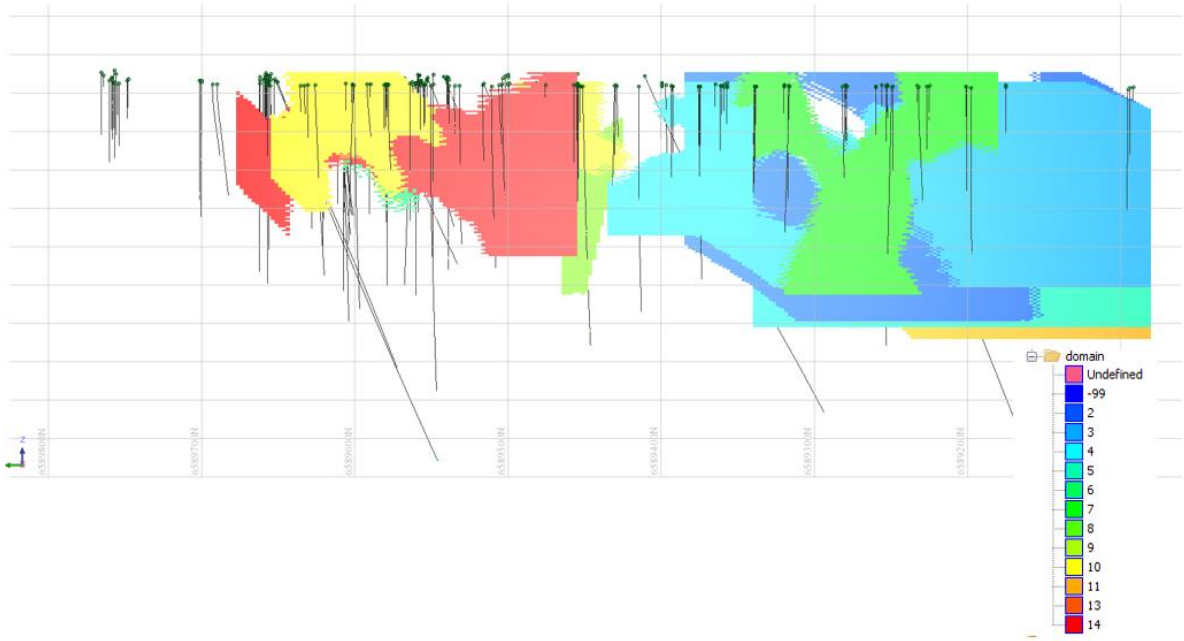
The model and grade estimation were validated by visual inspection of the blocks compared to the drilling, and statistically comparing average domain composite grades to model grades.

**Classification**

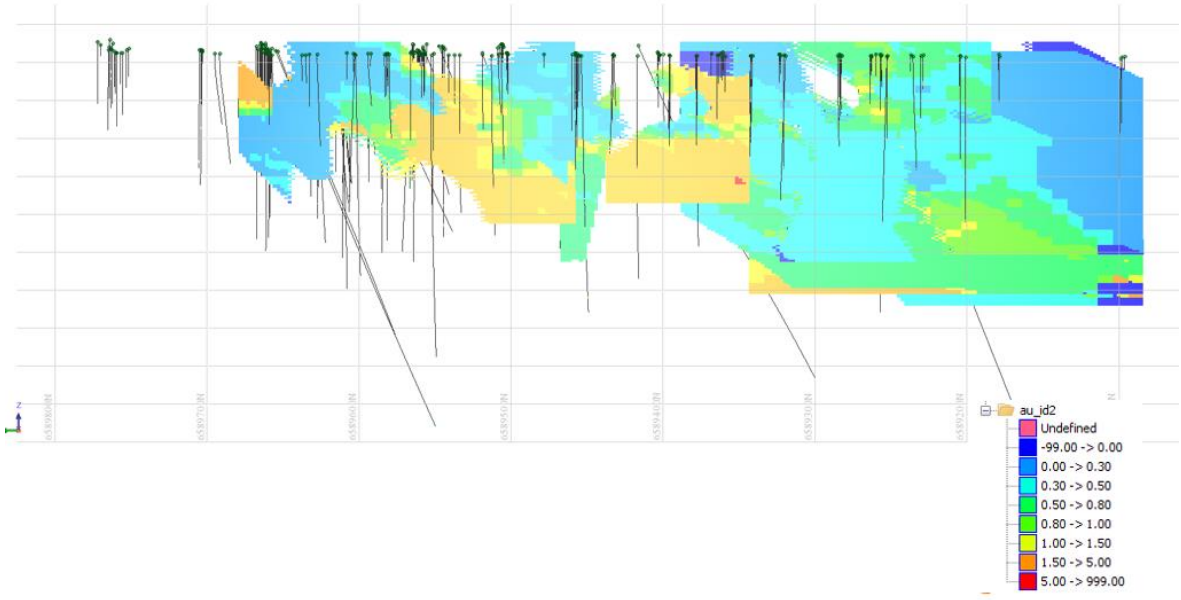
Estimation Pass 1 in the current resource is classified as Inferred. The other passes are unclassified. The drill hole spacing is adequate to confirm geological continuity, but closer spaced drilling is required to confirm grade continuity has been modelled correctly. More work is required on local bulk density values.



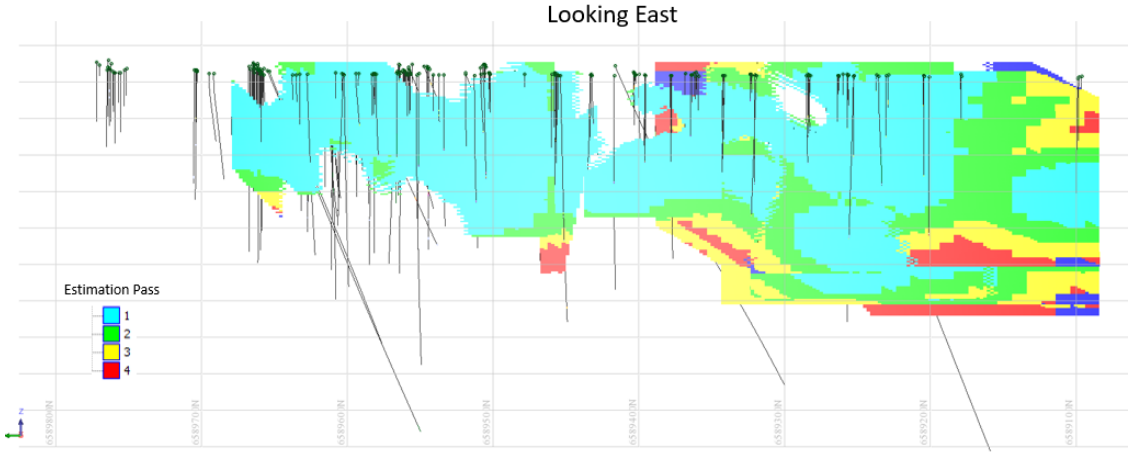
Monument – Long Section – Coloured by Domain
Looking East

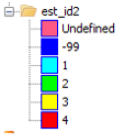



Monument – Long Section – Coloured by Au
Looking East



Monument – Long Section – Coloured by Estimation Pass
Looking East




Anything beyond pass one is unclassified

# Appendix 1 – Golden Ridge and Golden Ridge North Prospect
# 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* | |
|---|---|---|
| ***Sampling techniques*** | *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.*<br>*Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* | • WGX (Western Gold and Historical Explorers)<br>• Chips from the RC drilling face-sampling hammer are collected for assaying. Sample return lines are cleaned with compressed air each metre and the cyclone sample collector is cleaned following each rod. Samples are riffle split through a three-tier splitter with a split ~3kg sample (generally at 1m intervals) pulverised to produce a 30g charge analysed via fire assay.<br>• Diamond drill-core is geologically logged and then sampled according to geology (minimum sample length of 0.4 m to maximum sample length of 1.5 m) – where consistent geology is sampled, a 1m length is used for sampling the core. The core is sawn half-core with one half sent off for analysis.<br>• Samples have been collected from numerous other styles of drilling at SKO, including but not limited to RAB, aircore, blast-hole, sludge drilling and face samples.<br>• of between 60 – 120m, followed by a diamond tail. The majority of these holes have been drilled at NQ2 size with minor HQ sized core. All diamond holes were surveyed during drilling with downhole cameras, and then at end of hole using a Gyro Inclinometer at 5 or 10 m intervals. Drillhole collars were surveyed by onsite mine surveyors.<br>• Sample recovery is generally good, and there is no indication that sampling presents a material risk for the quality of the evaluation of any deposit at SKO.<br>• HRZ (Horizon Minerals)<br>• HRZ used RC drill chip sampling to evaluate the deposit. |
| | *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.* | |

| Criteria | JORC Code explanation | |
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| | | • 4m composite samples taken with a hand size aluminium scoop being thrust into samples piles on the ground. 1m single splits taken off rig with cone splitter and later submitted to lab if 4m composite returns >0.1g/t. Average sample weights are about 1.5-2.5kg.<br>• For RC drilling regular air and manual cleaning of cyclone is used to remove hung up clays where present.<br>• Standards & replicate assays taken by the laboratory. Based on statistical analysis of these results, there is no evidence to suggest the samples are not representative.<br>• RC drilling was used to obtain 1m samples from which approximately 1.5-3kg was pulverised to produce a 50 g charge for fire assay. RC chips were geologically logged over 1m intervals, initially sampled over 4m composite intervals and then specific anomalous intervals were sampled over 1m intervals. Depending on the final hole depth, the maximum composite interval was 4m and minimum was 1m. Samples were assayed for Au only for this program. Assays were determined by Fire Assay with checks routinely undertaken. Drilling of mainly oxide and transitional mafics with gold contained in oxidised sulphides and quartz. |
| ***Drilling Techniques*** | *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).* | WGX<br>• Historical data includes DD, RC, RAB and aircore holes drilled between 1984 and 2010. Not all the historical drilling programmes at SKO are documented and many historical holes are assigned a drill type of 'unknown'. Over 4,000 km of drilling has been completed on the tenure.<br>• Drilling by the previous owners (Alacer Gold Corporation) has predominantly been RC, with minor DD and aircore drilling.<br>• RC drilling is used predominantly for defining and testing for near-surface mineralisation and utilises a face sampling hammer with the sample being collected on the inside of the drill-tube. RC drillholes utilise downhole single or multi shot cameras. Drillhole collars were surveyed by onsite mine surveyors.<br>• Diamond drilling is used for either testing / targeting deeper mineralised systems or to define the orientation of the host |

| Criteria | JORC Code explanation | | |
|---|---|---|---|
| | | HRZ | geology. Many of these holes had RC pre-collars generally to a depth<br>• Reverse Circulation (RC) drilling with a 5 ¼" hammer bit. |
| ***Drill sample recovery*** | *Method of recording and assessing core and chip sample recoveries and results assessed.*<br>*Measures taken to maximise sample recovery and ensure representative nature of the samples.*<br>*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.* | Historical<br>HRZ | • No specific recovery comments in records<br>• RC recovery and meterage was assessed by comparing drill chip volumes (sample bags) for individual meters. Estimates of sample recoveries were recorded. Routine checks for correct sample depths are undertaken every RC rod (6m). The cyclone was routinely cleaned ensuring no material build up.<br>• Due to the generally good/standard drilling conditions around sample intervals (dry) the geologist believes the samples are representative, some bias would occur in the advent of poor sample recovery which was logged where rarely encountered. Some wet drilling was observed.<br>• No sample bias has been identified to date. |

| Criteria | JORC Code explanation | |
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| **Logging** | *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.*<br>*Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.*<br>*The total length and percentage of the relevant intersections logged.* | WGX<br>• Westgold surface drill-holes are all orientated and have been logged in detail for geology, veining, alteration, mineralisation and orientated structure. Westgold underground drill-holes are logged in detail for geology, veining, alteration, mineralisation and structure. Core has been logged in enough detail to allow for the relevant mineral resource estimation techniques to be employed.<br>• Surface core is photographed both wet and dry and underground core is photographed wet. All photos are stored on the companies servers, with the photographs from each hole contained within separate folders.<br>• Development faces are mapped geologically.<br>• RC, RAB and Aircore chips are geologically logged.<br>• Sludge drilling is logged for lithology, mineralisation and vein percentage.<br>• Logging is quantitative in nature.<br>• All holes are logged completely, all faces are mapped completely.<br>HRZ<br>• Drill chip logging and core was completed on one metre or selected intervals at the rig by the geologist. The log was recorded onto standard excel logging sheets, and later transferred into Micromine and Geobank software once back at the office.<br>• Logging was qualitative in nature.<br>• All intervals logged for RC drilling. |

| Criteria | JORC Code explanation | |
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| **Sub-sampling techniques and sample preparation** | *If core, whether cut or sawn and whether quarter, half or all core taken.*<br>*If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.*<br>*For all sample types, the nature, quality and appropriateness of the sample preparation technique.*<br>*Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.*<br>*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.*<br>*Whether sample sizes are appropriate to the grain size of the material being sampled.* | WGX<br>• NQ2 and HQ diameter core is sawn half core using a diamond-blade saw, with one half of the core consistently taken for analysis. Smaller sized core (LTK48 and BQ) are whole core sampled. The un-sampled half of diamond core is retained for check sampling if required.<br>• SKO staff collect the sample in pre-numbered calico sample bags which are then submitted to the laboratory for analysis. Delivery of the sample is by a SKO staff member.<br>• RC samples are collected at 1m intervals with the samples being riffle split through a three-tier splitter. The samples are collected by the RC drill crews in pre-numbered calico sample bags which are then collected by SKO staff for submission.<br>• Delivery of the sample to the laboratory is by a SKO staff member.<br>• Upon delivery to the laboratory, the sample numbers are checked by the SKO staff member against the sample submission sheet. Sample numbers are recorded and tracked by the laboratory using electronic coding.<br>• Sample preparation techniques are considered appropriate for the style of mineralisation being tested for – this technique is industry standard across the Eastern Goldfields.<br><br>HRZ<br>• 4m composite and 1m RC samples taken.<br>• Single splits were automatically taken by off the rig, 4m composites were taken by HRZ geologists. Samples collected in mineralisation were all dry except for some at depth and these were recorded on logs.<br>• For Horizon samples, no duplicate 4m composites were taken in the field. 4m and 1m samples were analysed by Jinnings Laboratories and SGS (Kalgoorlie).<br>• Samples were consistent and weighed approximately 1.5-2.0kg and sampling procedures are constantly monitored |

| Criteria | JORC Code explanation | |
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| | | • Once samples arrived in Kalgoorlie, further work including duplicates and QC was undertaken at the laboratory. Horizon has determined that there is sufficient drill data density to calculate a updated Mineral Resource Estimate at the present time. This will be undertaken in 2022.<br>• Mineralisation is located in weathered and fresh porphyry and volcanic sediments. The sample size is standard practice in the WA Goldfields to ensure representivity. |

| Criteria | JORC Code explanation | |
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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.*<br>*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.*<br>*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.* | WGX<br>• Only nationally accredited laboratories are used for the analysis of the samples collected at SKO.<br>• The laboratory dry and if necessary (if the sample is >3kg) riffle split the sample, which is then jaw crushed and pulverised (the entire 3kg sample) in a ring mill to a nominal 90% passing 75 microns. All recent RC and Diamond core samples are analysed via Fire Assay, which involves a 30g charge (sub-sampled after the pulverisation) of the analytical pulp being fused at 1050°C for 45 minutes with litharge. The resultant metal pill is digested in aqua regia and the gold content determined by atomic adsorption spectrometry – detection limit is 0.01 ppm Au.<br>• Quality Assurance and Quality Control (QA/QC) samples are routinely submitted by SKO staff and comprise standards, blanks, assay pills, field duplicates, lab duplicates and repeat analyses. The results for these QA/QC samples are routinely analysed by Senior Geologists with any discrepancies dealt with in conjunction with the laboratory prior to the analytical data being imported into the database.<br>• There is limited information available on historic QA/QC procedures. WGX generally accepted the available data at face value and carry out data validation procedures as each deposit is re-evaluated.<br>• The analytical techniques used are considered appropriate for the style of mineralisation being tested for – this technique is industry standard across the Eastern Goldfields.<br>• Ongoing production data generally confirms the validity of prior sampling and assaying of the mined deposits to within acceptable limits of accuracy.<br><br>HRZ<br>• The 1m RC samples were assayed by Fire Assay (FA50) by accredited Lab Jinnings Laboratories and SGS (Kalgoorlie) for gold only.<br>• No geophysical assay tools were used. |

| Criteria | JORC Code explanation | |
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| | | • Laboratory QA/QC involves the use of internal lab standards using certified reference material, blanks, splits and replicates as part of the in-house procedures. QC results (blanks, duplicates, standards) were in line with commercial procedures, reproducibility and accuracy.<br>• Horizon submit Standards (CRM) with the 4m composite samples and Standards, Blanks and Field Duplicates with the 1m split samples.<br>• No issues with precision or accuracy have been noted. |

| Criteria | JORC Code explanation | |
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| **Verification of sampling and assaying** | *The verification of significant intersections by either independent or alternative company personnel.*<br>*The use of twinned holes.*<br>*Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.*<br>*Discuss any adjustment to assay data.* | WGX<br>• No independent or alternative verifications are available.<br>• Virtual twinned holes have been drilled in several instances across all sites with no significant issues highlighted. Drillhole data is also routinely confirmed by development assay data in the operating environment.<br>• Primary data is collected utilising LogChief. The information is imported into a SQL database server and verified.<br>• All data used in the calculation of resources and reserves are compiled in databases (underground and open pit) which are overseen and validated by senior geologists.<br>• No adjustments have been made to any assay data.<br>HRZ<br>• Work was supervised by senior Jinnings and SGS staff experienced in metals assaying. QC data reports confirming the sample quality are supplied.<br>• No independent sampling/assaying has been undertaken to date<br>• No twin holes have been intentionally drilled.<br>• Data storage as PDF/XLSX files on company PC in Perth office.<br>• No data were adjusted. |
| **Location of data points** | *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.*<br>*Specification of the grid system used.*<br>*Quality and adequacy of topographic control.* | WGX<br>• Collar coordinates for surface RC and diamond drill-holes were generally determined by either RTK-GPS or a total station survey instrument. Underground drill-hole locations (Mount Marion and HBJ) were all surveyed using a Leica reflector-less total station.<br>• Recent surface diamond holes were surveyed during drilling with down-hole single shot cameras and then at the end of the hole by Gyro-Inclinometer at 5 or 10mm intervals. Holes not gyro-surveyed were surveyed using Eastman single shot cameras at 20m intervals. RC drill-holes utilised down-hole single shot camera surveys spaced every 15 to 30m down- hole. |

| Criteria | JORC Code explanation | | |
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| | | | • Down-hole surveys for underground diamond drill-holes were taken at 15 – 30m intervals by several methods including multi-shot downhole EMS, single shot downhole survey and North-seeking gyro survey.<br>• The orientation and size of the project determines if the resource estimate is undertaken in local or MGA 94 grid. Each project has a robust conversion between local, magnetic and an MGA grid which is managed by the SKO survey department.<br>• Topographic control is generated from RTK GPS. This methodology is adequate for the resources in question.<br>• Hole coordinates are in Local Mine Grid |
| | | HRZ | • All drill collar locations were initially pegged and surveyed using a handheld Garmin GPS, accurate to within 3-5m. The holes are normally accurately surveyed using an RTK-DGPS system at a later date. Holes were drilled on a regular spacing as per Table 1 collar details. All reported coordinates are referenced to a local grid. The topography is flat at the location of the drilling.<br>• Down hole surveys were taken.<br>• Topography is very flat, small differences in elevation between drill holes will have little effect on mineralisation widths on initial interpretation.<br>• Hole coordinates are surveyed in MGA94 Zone 51. |
| ***Data spacing and distribution*** | *Data spacing for reporting of Exploration Results. Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. Whether sample compositing has been applied.* | WGX | • RC drilling was undertaken on 20 m spacing and a 20 - 40 m burden.<br>• Grade control drilling in transitional and fresh material has been conducted on a 5m x 5m pattern. In the oxide material grade control was undertaken with ditch-witching over a 5m line spacing.<br>• The data spacing and distribution is deemed sufficient to establish geological and grade continuity appropriate for the Mineral Resource estimation procedure and classifications applied. |
| | | HRZ | • Holes were variably spaced. |

| Criteria | JORC Code explanation | |
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| | | • The hole spacing was determined by Horizon to be sufficient when combined with confirmed historic drilling results to adequately define the mineralisation in preparation for a JORC Mineral Resource estimate/update. |
| ***Orientation of data in relation to geological structure*** | *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.*<br>*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.* | WGX/HRZ<br>• Drilling intersections are nominally designed to be normal to the orebody as far as underground infrastructure constraints / topography allows.<br>• Development sampling is nominally undertaken normal to the various orebodies.<br>• Where drilling angles are sub optimal the number of samples per drill hole used in the estimation has been limited to reduce any potential bias.<br>• It is not considered that drilling orientation has introduced an appreciable sampling bias. |
| ***The measures taken to ensure sample security*** | *The measures taken to ensure sample security.* | WGX<br>• For samples assayed at on-site laboratory facilities, samples are delivered to the facility by Company staff. Upon delivery the responsibility for sample security and storage falls to the independent third-party operators of these facilities.<br>• For samples assayed off-site, samples are delivered to a third-party transport service, who in turn relay them to the independent |

| Criteria | JORC Code explanation | | |
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| | | | laboratory contractor. Samples are stored securely until they leave site. |
| | | HRZ | • Samples were collected on site under supervision of the responsible geologist. The work site is on a destocked pastoral station. Visitors need permission to visit site. Once collected samples were bagged and transported to Kalgoorlie for analysis. Dispatch and consignment notes were delivered and checked for discrepancies. |
| ***Audits or reviews*** | *The results of any audits or reviews of sampling techniques and data.* | WGX | • Site generated resources and reserves and the parent geological data is routinely reviewed by the Westgold Corporate technical team. |
| | | HRZ | • An internal audit was completed with satisfactory results. |

## Section 2 Reporting of Exploration Results

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

| *Criteria* | *JORC Code explanation* | |
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| **Mineral tenement and land tenure status** | Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.<br>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. | • M26/534, M26/41. Haoma Mining are the registered owners of M26/534 and have a small royalty payable upon any commercial production.<br>• The tenements are in good standing and no known impediments exist.<br>• A State Royalty of 2.5% of revenue applies to all tenements. |
| **Exploration done by other parties** | Acknowledgment and appraisal of exploration by other parties. | • The SKO tenements have an exploration and production history in excess of 100 years.<br>• Italian woodcutters servicing Kalgoorlie discovered Golden Ridge (originally named Waterfall) in 1898. Initial small-scale mining continued up until The Golden Ridge Gold Mining Company purchased the Waterfall leases in 1907, which continued to operate until 1927. Historic underground production is reported as 310,000t at 17g/t for 170,000oz (although some of this may have come from the neighbouring Boorara field). Recent exploration begun in 1978, but consolidation of the tenement holdings did not occur until New Hampton (then Copperfield Gold NL) acquired the leases.<br>• 1998: New Hampton Goldfields Ltd. (NHG) commenced open pit production at Golden Ridge on the 7th September 1998 with final ore being removed on the 4th May 2000. Total ore processed during this time was 1,309,537t at 2.07g/t at a recovery rate of 94% for a total of 81,932oz.<br>• 2002: Harmony Gold Australia recommenced open pit mining on 25th October 2002 with final ore being removed 18th February 2004. The stage 2 Golden Ridge pit was designed to remove the in-pit saddle |

| Criteria | JORC Code explanation | |
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| | | left behind after the stage 1 pit was completed and thus allowing access to deeper ore. Total ore processed from the stage 2 cutback was 469,968t at 2.09g/t for a total of 31,520oz.<br>• 2007: Harmony Gold sold the South Kalgoorlie assets to Dioro Exploration.<br>• 2010: After a bidding war between Avoca Resources and Ramelius Resources; Avoca gained control of Dioro Exploration.<br>• 2011: Avoca Resources merged with Anatolia Minerals Development Ltd to form Alacer Gold.<br>• 2013: Alacer sold their Australian gold assets to Metals X; In 2016 Metals X demerged their gold assets into Westgold Resources.<br>• 2018: Westgold Resources sell the South Kalgoorlie assets to Northern Star Resources Limited.<br>• 2019: Golden Ridge was acquired by HRZ as part of an asset swap with Northern Star. |
| **Geology** | Deposit type, geological setting and style of mineralisation. | • The Golden Ridge orebody is situated on the Boorara Shear within a lenticular northwest-southeast trending sub vertical quartz-feldspar porphyry unit, which is assumed to be the lateral equivalent to felsic schists which also host gold mineralisation in the Boorara area, further to the north. The porphyry unit is fault bounded to the east by a package of chloritic serpentinised sheared ultramafic and to the west by metasediments (shale, graphitic shale and chert). The porphyry is thought to be intrusive in the immediate vicinity of the mine area but extrusive (flow textures visible) to the north towards Boorara.<br>• The quartzo-feldspathic felsic porphyry unit is host to the mineralisation at Golden Ridge. When heavily oxidised it is reduced to kaolin clays with varying amounts of ferruginous minerals, usually limonite and goethite. Increased amounts of ferro-manganiferous deposits are localised around remaining quartz veining and faults/shears. Within the fresh material any textural features have been obliterated by strong pervasive sericite ± silica alteration giving the rock a general ‘smooth’ pale green appearance.<br>• The Boorara Shear is a regional scale structure, which is likely to have had a long history of remobilisation. It is generally unmineralised, but is the essential structure required for the origin |

| Criteria | JORC Code explanation | |
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| | | and emplacement of the gold. The differing competency contrasts between the local lithologies produced brittle fracturing within the porphyry intrusive/extrusive during remobilisation along the Boorara Shear. The resulting phases of quartz infill produced conjugate massive reefs and stockwork vein sets which host the bulk of the mineralisation at Golden Ridge. |
| **Drill hole Information** | A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:<br>• easting and northing of the drill hole collar<br>• elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar<br>• dip and azimuth of the hole<br>• down hole length and interception depth<br>• hole length. | • No exploration drillhole data is being reported.<br>• No relevant information is excluded. |
| | 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. | |

| *Criteria* | *JORC Code explanation* | |
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| **Data aggregation methods** | 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.<br>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.<br>The assumptions used for any reporting of metal equivalent values should be clearly stated. | • No weighting average techniques or grade aggregations have been reported in this release in relation to Exploration Results.<br>• Only Au is being reported. No metal equivalent values have been reported. |
| **Relationship between mineralisation widths and intercept lengths** | These relationships are particularly important in the reporting of Exploration Results.<br>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.<br>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'). | • No exploration drillhole data is being reported.<br>• Given the nature of RC drilling, the minimum width and assay is 1m. The true thickness of the downhole intercepts is not known however the downhole intercepts appear to represent very close to true width given the orientation of the drilling.<br>• Mineralisation appears to occur as a stockwork with the east dipping component being dominant. Drilling is generally oriented to give a representive intersection of these lodes. |
| **Diagrams** | Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be | • Relevant figures are included in report. |

| *Criteria* | *JORC Code explanation* | |
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| | limited to a plan view of drill hole collar locations and appropriate sectional views | |
| **Balanced reporting** | Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results. | • No exploration drillhole data is being reported. |
| **Other substantive exploration data** | Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances. | • No exploration drillhole data is being reported.<br>• Comprehensive metallurgical work and mine processing has been completed at both Boorara and Golden Ridge (in the past) with acceptable results.<br>• See details from previous ASX releases from Horizon Minerals Limited (ASX; HRZ and IRC). These can be accessed via the internet. |
| **Further work** | The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).<br>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. | • Open pit optimisation of Golden Ridge North.<br>• Infill drill areas of data paucity proximal to the open pit. This will increase resource confidence and resultant classifications. |

## 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 | |
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| ***Database integrity*** | *Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.*<br><br>*Data validation procedures used.* | WGX<br>• The historical Westgold database was available to HRZ.<br>• HRZ validated the data in this database against available WAMEX records.<br>HRZ<br>• All logging data recorded on filed logs was input to a digital template.<br>• All digital data has been validated using standard database checks.<br>• Data validation was conducted at the time of transfer of information from log sheets to digital files and again on entry of the digital data into the database. Assay data is imported directly from the lab CSV files into the database |
| ***Site visits*** | *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.*<br>*If no site visits have been undertaken indicate why this is the case.* | Historical<br>• Information is not available from older resource documentation regarding site visits.<br>• Golden Ridge, immediately south of Golden Ridge North, was an active minesite.<br>HRZ<br>• The Competent Person (CP) has visited the site on a number of occasions, including during the last drilling campaign.<br>• The CP has reviewed and approved all drilling and sampling procedures.<br>• Selected drill hole locations were independently verified by the CP. |

| Criteria | JORC Code explanation | |
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| ***Geological interpretation*** | *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.*<br>*Nature of the data used and of any assumptions made.*<br>*The effect, if any, of alternative interpretations on Mineral Resource estimation.*<br>*The use of geology in guiding and controlling Mineral Resource estimation.*<br>*The factors affecting continuity both of grade and geology.* | • The deposit is interpreted as a conjugate set of veins/shears dipping east and west forming a stockwork. Drilling and sampling have defined the east dipping lodes quite well. The west dipping lodes are poorly represented.<br>• Only the east dipping lodes were modelled. Modelling of the west dipping lodes as well risks overestimating the volume of mineralised material.<br>• The CP has reasonable confidence in the interpretation.<br>• RC drilling, sampling and Au assays have defined the lodes. Records of the mining of the open pits immediately south of the model have contributed to the interpretation.<br>• Modelling both lode orientations risks overestimating the mineralised volume. |
| ***Dimensions*** | *The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.* | • Six main lodes and several smaller subparallel lodes were modelled.<br>  • 430 m of strike.<br>  • 170 m across strike.<br>  • 200 m maximum down dip extension.<br>  • 260 m below surface. |
| ***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* | • This is a maiden resource for the Golden Ridge North area.<br>• A resource was not reported for the area mined.<br>• Golden Ridge proper was last modelled in 2003 and validated and re-reported in 2017.<br>• Three dimensional mineralised wireframes were used to domain the mineralised data. Sample data was composited to 1m down hole lengths |

| Criteria | JORC Code explanation | |
|---|---|---|
| | *method was chosen include a description of computer software and parameters used.*<br>*The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.*<br>*The assumptions made regarding recovery of by-products.*<br>*Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).*<br>*In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.*<br>*Any assumptions behind modelling of selective mining units.*<br>*Any assumptions about correlation between variables.*<br>*Description of how the geological interpretation was used to control the resource estimates.*<br>*Discussion of basis for using or not using grade cutting or capping.*<br>*The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.* | using the 'best fit' method. Intervals with no assays were excluded from the estimates.<br>• The influence of extreme grade values was addressed by reducing high outlier values by applying high grade cuts to the data. These cut values were determined through statistical analysis (histograms, log probability plots, coefficients of variation).<br>• An orientated 'ellipsoid' search was used to select data for each domain and was based on the observed lode geometry. The search ellipses were orientated to the average strike, plunge, and dip of the domain.<br>• Construction of mineralised wireframes was based on a combination of gold grades, lithological units and geological structures. Where grade continuity was unclear, geological and structural data was used to guide the wire-framing.<br>• Exploratory Data Analysis indicated the sample populations of the oxide, transition and fresh zones were sufficiently different to require separate modelling.<br>• Variographic analysis provided adequate structure to enable Kriging to be used to estimate the Au grades in the model.<br>• First pass search parameters with an ellipse of to 40 m x 33 m x 16 m and minimum & maximum number of composites of 4 and 32. Subsequent estimation passes increased the search ellipse size and decreased the minimum samples required.<br>• All domain and oxidation boundaries were treated as hard boundaries during the estimation.<br>• A block model was generated in Surpac v6.6, using topographic and oxidation surfaces & mineralised domain wireframes as constraints. The model was depleted for the existing open pit at the south end.<br>• Primary block dimensions used was 10m (X) x 10m (Y) x 5m (Z) with sub-blocking to 2.5m (X) x 2.5m (Y) x 1.25m (Z)). The final model is a combination of the different block dimensions. Estimation was made into the parent block. No assumptions were made on selective mining units.<br>• High grade cuts were used in the estimation of the Golden Ridge North resource due to the presence of outliers in the gold assays. Statistical analysis of the 1m composite data determined an individual top cut for each lode/oxide.<br>• The modelled data was validated by: |

| Criteria | JORC Code explanation | |
|---|---|---|
| | | • A qualitative assessment was completed by slicing sections through the block model in positions coincident with drilling.<br>• A quantitative assessment of the estimate was completed by comparing the average grades of the composite file input against the block model output for all the resource objects.<br>• An uncut Ordinary Kriged and a cut Inverse Distance estimate were run for comparison and validation of the OK estimate. |
| ***Moisture*** | *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.* | • The tonnages are estimated on a dry basis |
| ***Cut-off parameters*** | *The basis of the adopted cut-off grade(s) or quality parameters applied.* | • The reporting cut off grade of 0.8 g/t Au was selected based on comparison to similar deposits in the area. |
| ***Mining factors or assumptions*** | *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding 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.* | • It is assumed the upper part of the deposit will be mined using an open pit method.<br>• No other mining related factors such as dilution have been applied at this stage. |
| ***Metallurgical factors or assumptions*** | *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters* | • No other metallurgical assumptions have been applied to the resource. |

| Criteria | JORC Code explanation | |
|---|---|---|
| | *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.* | |
| ***Environmental factors or assumptions*** | *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.* | • It is assumed that Golden Ridge will be processed under a toll treatment style with processing residues placed into appropriate storage facilities by the process operator.<br>• It is assumed mining waste will either be placed locally to the deposit or transported to the adjacent mine waste heaps.<br>• Based on the experience of the adjacent Golden Ridge, waste material is expected be non-acid producing. |
| ***Bulk density*** | *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.* | • Bulk densities were adopted from the 2003 Golden Ridge modelling.<br>  • Oxide – 1.8 $tm^{-3}$<br>  • Transition – 2.25 $tm^{-3}$<br>  • Fresh – 2.75 $tm^{-3}$ |
| | *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.* | |

| Criteria | JORC Code explanation | |
|---|---|---|
| | *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.* | • Bulk density was assigned by the interpreted oxidation state (material type). |
| ***Classification*** | *The basis for the classification of the Mineral Resources into varying confidence categories.*<br>*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).*<br>*Whether the result appropriately reflects the Competent Person's view of the deposit.* | • The Golden Ridge North resource is classified as Indicated and Inferred.<br>• Indicated material is located below the open pit and south of ~6 587 050 mN. This area is the best informed and understood. Only lodes 1 to 7 are Indicated.<br>• Inferred material is everything north of the open pit and ~6 587 050 mN. The wider drill spacing (20x40m) makes the interpretation and estimate less certain. Lodes 8 and 10 are all Inferred.<br>• The classification reflects the competent persons confidence in the resource. |
| ***Audits or reviews*** | *The results of any audits or reviews of Mineral Resource estimates.* | • No other independent review or audits have been undertaken on this mineral resource estimate. |

| Criteria | JORC Code explanation | |
|---|---|---|
| ***Discussion of relative accuracy/ confidence*** | *Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the 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.*<br>*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.*<br>*These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.* | • 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.<br>• This estimate is a global resource estimate for the Golden Ridge North Deposit<br>• There is no production data to compare the estimate against. |

# Appendix 2 Monument Prospect

## 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 | |
|---|---|---|
| ***Sampling techniques*** | *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.* | • Pre-collars were sampled using face sampling reverse circulation (RC) percussion drilling. Diamond tails were HQ core.<br>• 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 to 4m composites.<br>• Diamond core was sampled at intervals no greater than 1.3m and no less than 0.15m. Sampling did not cross lithological boundaries.<br>• 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.<br>• Each sample was completely pulverised, to produce a 25g, 40g or 50g charge for fire assay, and with selected samples from some programs submitted for submitted for multi element analysis. |

| Criteria | JORC Code explanation | |
|---|---|---|
| | *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.*<br><br>*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.* | |
| ***Drilling Techniques*** | *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).* | • Face sampling reverse circulation percussion drilling and HQ diamond core were the drilling techniques used.<br><br>• Holes were surveyed using an Eastman single shot system or an EMS tool, by the relevant drill contractor. |

| Criteria | JORC Code explanation | |
|---|---|---|
| ***Drill sample recovery*** | *Method of recording and assessing core and chip sample recoveries and results assessed.*<br><br>*Measures taken to maximise sample recovery and ensure representative nature of the samples.*<br><br>*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.* | • Sampling intervals during RC drilling were routinely checked by comparing the position of the drill rod against the sample bag being filled. Diamond core recovery was reconciled using a tape measure and driller's markings.<br><br>• 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.<br><br>• Sample loss was kept to a minimum by good drilling practices.<br><br>• Cone splitting or riffle splitting of RC holes and informed sampling of diamond core provided good representation of the intervals sampled.<br><br>• 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. Core recovery was very close to 100%.<br><br>• No relationship has been noted between sample recovery and grade. Overall, sample recoveries were very high and did not present a problem. |

| Criteria | JORC Code explanation | |
|---|---|---|
| ***Logging*** | *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.*<br><br>*Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.*<br><br>*The total length and percentage of the relevant intersections logged.* | • All drill holes have been geologically logged by Company geologists using a standard format over the whole 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.<br><br>• Geological logging recorded factual data (e.g. colour, grain size, percentage of identifiable minerals present) and interpretative data (e.g. lithology).<br><br>• 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 near the Company's head office in Adelaide. Diamond core was sampled as half core with the remaining half stored at the company's facilities in Kalgoorlie. |

| Criteria | JORC Code explanation | |
|---|---|---|
| ***Sub-sampling techniques and sample preparation*** | *If core, whether cut or sawn and whether quarter, half or all core taken.*<br><br>*If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.*<br><br>*For all sample types, the nature, quality and appropriateness of the sample preparation technique.*<br><br>*Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.*<br><br>*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.*<br><br>*Whether sample sizes are appropriate to the grain size of the material being sampled.* | • 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.<br><br>• Samples were taken dry.<br><br>• Sample size presented for analysis was approximately 2kg.<br><br>• Preparation and analysis of samples was undertaken by either Genalysis or Minanalytical.<br><br>• Samples were pulverised to 85% passing 75 micron, or 90% at 106 micron in the 2013-2016 programs.<br><br>• Field duplicates were collected at every 20th metre mark on each hole. |

| Criteria | JORC Code explanation | |
|---|---|---|
| ***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.*<br><br>*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.*<br><br>*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 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 sample 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.<br><br>• 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 suite with detection by mass spectrometer or optical emission spectral methods (19 elements MA40OES & MS).<br><br>• No data from geophysical tools were used to determine grade control assay results.<br><br>• 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.<br><br>• Field duplicates were collected at every 20th metre mark and stored onsite for assay if required. |

| Criteria | JORC Code explanation | |
|---|---|---|
| | | 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. |
| ***Verification of sampling and assaying*** | *The verification of significant intersections by either independent or alternative company personnel.* | • Significant intersections were visually inspected and verified by the Competent Person (Mr Ian Blucher).<br>• Twinned holes have not been drilled.<br>• All sampling data is recorded on computer spreadsheets or by hand onto logging sheets and re-checked before submission to the lab. Data is then entered into digital form and stored on the Company database after validation. Original logging sheets are filed in the Company's Head Office in Adelaide.<br>• The assay database is stored securely on the Company's server which is backed up routinely both on and offsite.<br>• No adjustments are made to the assay data after review of QAQC measures as stated above. |
| | *The use of twinned holes.* | |
| | *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* | |

| Criteria | JORC Code explanation | |
|---|---|---|
| | *Discuss any adjustment to assay data.* | |
| ***Location of data points*** | *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.*<br><br>*Specification of the grid system used.*<br><br>*Quality and adequacy of topographic control.* | • Drill hole collar positions have been surveyed by Differential GPS to an accuracy of +/- 0.1m.<br><br>• Holes were surveyed using either a Eastman single shot or a EMS tool (Reflex EZ Shot).<br><br>• 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).<br><br>• Topographic control in the area is provided by SRTM data and mine site surveying. |

| Criteria | JORC Code explanation | |
|---|---|---|
| ***Data spacing and distribution*** | *Data spacing for reporting of Exploration Results.*<br><br>*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.*<br><br>*Whether sample compositing has been applied.* | • The drill hole spacing was approximately 20m east-west lines. With north-south line spacing ranging from 15 to 40m.<br><br>• The drill spacing and distribution is considered sufficient to establish the geological and grade continuity for an IDW resource calculation of an inferred mineral resource.<br><br>• Sample compositing has been applied with all RC and Diamond core Au Assays composited to 1m. |
| ***Orientation of data in relation to geological structure*** | *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.*<br><br>*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.* | • Oriented core measurements show that drilling is at a high enough angle to lithological boundaries and structural trends to indicate that sampling is unbiased by the direction of drilling. |
| ***The measures taken to ensure sample security*** | *The measures taken to ensure sample security.* | • 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.<br><br>• The geologist places the calicos bags containing the samples into polyweave bags and transports them to the sample preparation laboratory where a sample submission form is completed. The details entered onto the sample submission form are the means by which the samples are tracked through the laboratory. |

| Criteria | JORC Code explanation | |
|---|---|---|
| | | • The laboratory provides the Company with a reconciliation of samples submitted compared to samples received. |
| ***Audits or reviews*** | *The results of any audits or reviews of sampling techniques and data.* | • No external audits or reviews were undertaken for the historical drilling. |

**Section 2 Reporting of Exploration Results**
(Criteria listed in section 1 also apply to this section.)

| *Criteria* | *JORC Code explanation* | |
|---|---|---|
| **Mineral tenement and land tenure status** | Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.<br><br>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area. | • The Monument Gold Resource is secured by M25/333 and is located ca. 30 km East of Kalgoorlie, WA.<br><br>• The tenement is held by Black Mountain Gold Limited, a fully owned subsidiary of Horizon Minerals Ltd.<br><br>• There are no material issues with third parties.<br><br>• There are no known impediments to obtaining a licence to operate |
| **Exploration done by other parties** | Acknowledgment and appraisal of exploration by other parties. | • The Monument Gold Resource was discovered and initially drilled out to Resource stage by Southern Gold Ltd. HRZ has drilled 23 RC resource definition holes.<br><br>• Results of earlier widely spaced RAB programs by Cyprus Gold and Acacia Resources failed to identify significant mineralisation. |
| **Geology** | Deposit type, geological setting and style of mineralisation. | • The deposit consists of narrow, steeply dipping low to medium grade lodes of Au associated with felsic intrusive and the greenstone units of the area. |

| *Criteria* | *JORC Code explanation* | |
|---|---|---|
| **Drill hole Information** | A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:<br>• easting and northing of the drill hole collar<br>• elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar<br>• dip and azimuth of the hole<br>• down hole length and interception depth<br>• hole length.<br><br>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. | • Exploration Results are not being reported. |
| **Data aggregation methods** | 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. | • Exploration Results are not being reported.<br><br>• No weighting average techniques or grade aggregations have been reported in this release in relation to Exploration Results.<br><br>• No metal equivalent values have been reported. |

| Criteria | JORC Code explanation | |
|---|---|---|
| | 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.<br><br>The assumptions used for any reporting of metal equivalent values should be clearly stated. | |
| **Relationship between mineralisation widths and intercept lengths** | These relationships are particularly important in the reporting of Exploration Results.<br><br>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.<br><br>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'). | • Exploration Results are not being reported.<br><br>• Structural measurements indicate drill direction is at a high enough angle to lithological contacts and structural trends as to provide non-biased sampling. |
| **Diagrams** | Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views | • Relevant figures are included in report. |

| *Criteria* | *JORC Code explanation* | |
|---|---|---|
| **Balanced reporting** | Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results. | • Exploration Results are not being reported. |
| **Other substantive exploration data** | Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances. | • All relevant observations have been noted in the report. |
| **Further work** | The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).<br><br>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. | • Further infill drilling is planned to confirm grade and continuity of the defined lodes.<br><br>• Drilling along strike (north and south) is required to confirm the extent of the deposit. |

## 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 | |
|---|---|---|
| ***Database integrity*** | *Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.*<br><br>*Data validation procedures used.* | • 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.<br><br>• HRZ drill logs are entered into Geobank Mobile and imported into the main Geobank database (GB_HORIZON_DATA). Data must be valid prior to export. Data is imported via buffers and must be valid for import to the main tables. |

| Criteria | JORC Code explanation | |
|---|---|---|
| ***Site visits*** | *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.*<br><br>*If no site visits have been undertaken indicate why this is the case.* | Historical<br><br>• The competent Person (Mr Ian Blucher, Southern Gold) has visited the site on a number occasions and has seen samples from key intersections.<br><br>• The Competent person has a very good knowledge of procedures used by SAU during drilling and sampling and is happy these are fit for purpose.<br><br>HRZ<br><br>• The Competent Person has visited the site on several occasions, including during the last drilling campaign.<br><br>• The CP has reviewed and approved all drilling and sampling procedures.<br><br>• Selected drill hole locations were independently verified by the CP. |

| Criteria | JORC Code explanation | |
|---|---|---|
| ***Geological interpretation*** | *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.*<br><br>*Nature of the data used and of any assumptions made.*<br><br>*The effect, if any, of alternative interpretations on Mineral Resource estimation.*<br><br>*The use of geology in guiding and controlling Mineral Resource estimation.*<br><br>*The factors affecting continuity both of grade and geology.* | • 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 in most holes.<br><br>• The data used in the geological interpretation, includes lithological, alteration, and mineralogical information.<br><br>• The association of gold mineralisation with some of the felsic intrusives was used to guide the wire-framing of cross-sectional polygons in the production of the mineralisation model, thus controlling the interpretation and estimation of the resource.<br><br>• The 2 main mineralized zones in the north and south of the deposit, are continuous for about 1/3 the deposit strike length, and are separated by at least 2 NE trending faults, with small number of minor pods interpreted within this faulted zone. Thickness and grade are variable within most lodes. |
| ***Dimensions*** | *The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface* | • The monument lodes have a strike extent of 700 m; a plan width of 80 m; and extend 180 m down dip. Lodes have a maximum thickness of ~8 m. |

| Criteria | JORC Code explanation | |
|---|---|---|
| | *to the upper and lower limits of the Mineral Resource.* | |
| ***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.*<br><br>*The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.*<br><br>*The assumptions made regarding recovery of by-products.*<br><br>*Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).*<br><br>*In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.*<br><br>*Any assumptions behind modelling of selective mining units.* | • Grade estimation for the Monument deposit was carried out using linear estimation methods. A multi-pass estimation plan was used for all estimation domains.<br><br>• An Inverse Distance algorithm using a power of two (ID2) was used to estimate Au only. Waste domains were not estimated.<br><br>• 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.<br><br>• High-grade outlier samples were managed with top cutting.<br><br>• 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.<br><br>• 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 50 m x 25 m x 12.5 m. Pass 2 expanded the sample search to 75 m and pass 3 to 100 m. Pass 4 used a minimum sample requirement of 1.<br><br>• 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.<br><br>• 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. An ID3 check estimate was |

| Criteria | JORC Code explanation | |
|---|---|---|
| | *Any assumptions about correlation between variables.*<br><br>*Description of how the geological interpretation was used to control the resource estimates.*<br><br>*Discussion of basis for using or not using grade cutting or capping.*<br><br>*The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.* | run on a separate block model. This check estimate produced similar results with slightly higher tonnes and grade producing less than 1% more ounces. |
| ***Moisture*** | *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.* | • The tonnages are estimated on a dry basis |
| ***Cut-off parameters*** | *The basis of the adopted cut-off grade(s) or quality parameters applied.* | • The reporting cut off grade of 0.8 g/t Au was selected based on comparison to similar deposits in the area. |
| ***Mining factors or assumptions*** | *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the* | • It is assumed the upper part of the deposit will be mined using an open pit method.<br><br>• No other mining related factors such as dilution have been applied at this stage. |

| Criteria | JORC Code explanation | |
|---|---|---|
| | *case, this should be reported with an explanation of the basis of the mining assumptions made.* | |
| ***Metallurgical factors or assumptions*** | *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.* | • It has been assumed that the mineralisation at Monument will be produce similar recoveries to the adjacent Cannon Gold Mine, when processed by a similar method.<br>• No other metallurgical assumptions have been applied to the resource. |
| ***Environmental factors or assumptions*** | *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered* | • 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.<br>• It is assumed mining waste will either be placed locally to the deposit or transported to the adjacent Cannon mine waste heaps.<br>• Based on the experience of the adjacent Cannon Mine, waste material is expected be non-acid producing. |

| Criteria | JORC Code explanation | |
|---|---|---|
| | *this should be reported with an explanation of the environmental assumptions made.* | |
| ***Bulk density*** | *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.*<br><br>*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.*<br><br>*Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.* | • Bulk density is based on values used for the adjacent Cannon resource (2020).<br><br>• A bulk density of 2.7 $tm^{-3}$ has been used for the fresh mineralised material.<br><br>• A bulk density of 2.9 $tm^{-3}$ has been used for the fresh un-mineralised material.<br><br>• A bulk density of 2.3 $tm^{-3}$ has been used for the Transitional material, and 1.80 $tm^{-3}$ for Oxide material. |

| Criteria | JORC Code explanation | |
|---|---|---|
| ***Classification*** | *The basis for the classification of the Mineral Resources into varying confidence categories.*<br><br>*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).*<br><br>*Whether the result appropriately reflects the Competent Person's view of the deposit.* | • Due to the narrow and variable grade nature of the monument resource, a classification of inferred is considered most appropriate.<br><br>• This 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.<br><br>• This classification is in line with the CP's view of the deposit. |
| ***Audits or reviews*** | *The results of any audits or reviews of Mineral Resource estimates.* | • No other independent review or audits have been undertaken on this mineral resource estimate. |

| Criteria | JORC Code explanation | |
|---|---|---|
| ***Discussion of relative accuracy/ confidence*** | *Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the 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.*<br><br>*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.*<br><br>*These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.* | • 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.<br><br>• This estimate is a global resource estimate for the Monument Deposit<br><br>• There is no production data to compare the estimate against. |