

## NIMBUS ZINC SILVER PROJECT UPDATE

### HIGHLIGHTS

- The current global Mineral Resource estimate for Nimbus stands at:
  - 12.1Mt grading 52g/t Ag for 20.24Moz of silver and 0.9% Zn for 106kt zinc <sup>1</sup>
- A high-grade subset exists within this global resource immediately below the historical pits and has a Mineral Resource estimate of:
  - **260kt grading 774g/t Ag for 6.4Moz silver and 12.8% Zn for 33kt zinc** <sup>1</sup>
- Concept study has confirmed the optimal economic development pathway through mining of the higher-grade lodes and generation of a silver / zinc concentrate with more drilling required to increase overall tonnage and mine life <sup>2</sup>
- Silver currently trading at A\$42/oz and zinc at A\$4,000/t
- A Programme of Work (POW) has been approved by DEMIRS and drilling expected to be undertaken in the first half of 2025 to drill test the exploration target <sup>3</sup>
- Exploration Target defined below Nimbus to be tested.

Commenting on the Nimbus silver-zinc project, Horizon Managing Director and CEO Mr Grant Haywood said:

*“We see the potential to grow the higher-grade core within the Nimbus resource at depth down plunge and along strike. Whilst we are firmly focussed on delivering on gold production at Boorara and Phillips Find, the Company will continue working to develop a longer-term production profile at Nimbus. We look forward to undertaking drilling in 2025 with the aim of increasing the resource prior to re-instigating a feasibility study for the project”.*

#### Cautionary Statement – Exploration Target

The potential quantity and grade of the Exploration Target is conceptual in nature. There has been insufficient exploration to estimate a Mineral Resource and there is no certainty that further exploration work will result in the determination of mineral resources. See the basis of exploration target on pages 6 and 15-17, also Tables on pages 21-24, Competent Persons Statement on Pages 18.

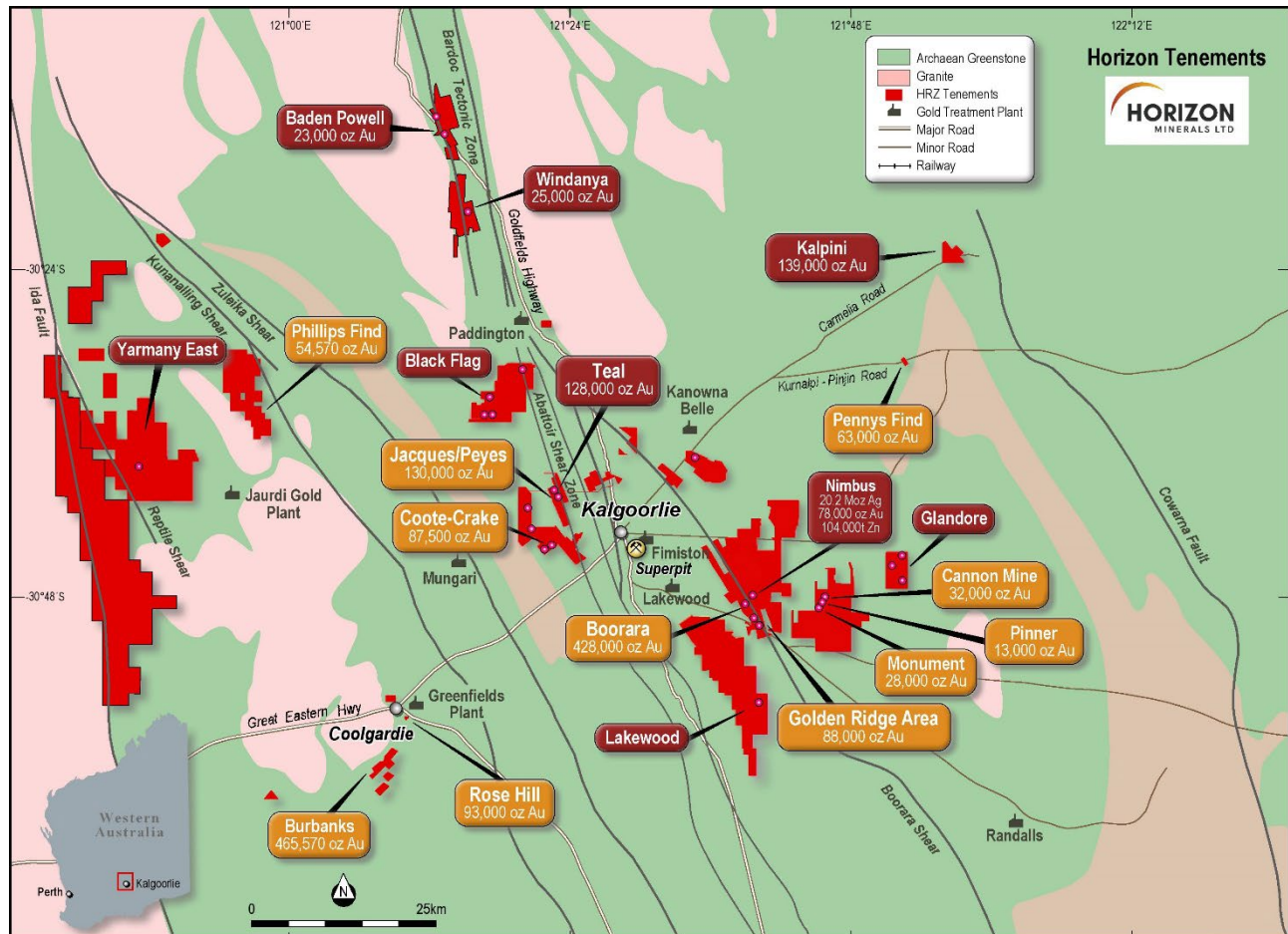
<sup>1</sup> See Resource Tables on pages 21-24, Competent Person’s statement on page 18 and JORC tables on page 26. <sup>2</sup> See Cautionary Statement – Exploration Target above. <sup>3</sup> See Forward Looking and Cautionary Statements on Page 25.

For personal use only

**ASX ANNOUNCEMENT**

**Overview**

Horizon Minerals Limited (ASX: HRZ) (“Horizon” or the “Company”) is pleased to provide an update on the Nimbus silver-zinc project, adjacent to the Boorara gold mine, 17km east-southeast of Kalgoorlie-Boulder in the goldfields of Western Australia (Figure 1).



**Figure 1: Kalgoorlie project area locations and surrounding infrastructure**

The Nimbus Project is situated 2km east of the Company’s cornerstone Boorara project and 6.5km north-northwest of Golden Ridge. Both Boorara and Golden Ridge are historic gold mining centres, with Boorara recommencing production activities.<sup>1</sup> The Nimbus mine site is on granted mining leases M26/490 and M26/598 and is easily accessed from the Kalgoorlie-Bulong Road via an unsealed haul road. The tenements are located within the Hampton Hill Pastoral Station (Figure 2).

The Nimbus Project was mined by Polymetals in two stages. Phase 1 (Jan 2004 – April 2005) concentrated on mining extremely weathered oxide material in the Discovery and East Pits. Phase 2 (Nov 2005 – May 2006) concentrated on mining remnant oxide and supergene material from the Discovery Pit. Ore treatment was undertaken at an onsite mill utilising a Merrill-Crowe circuit.

The Nimbus Silver-Zinc Project was placed on care and maintenance in 2007 after producing 3.6 Moz of silver from 318 kt of ore processed at a grade of 353 g/t Ag.

<sup>1</sup> As announced to the ASX on 29 July and 1 August 2024.

**ASX ANNOUNCEMENT**

MacPhersons Resource Limited (MRP) completed due diligence in August 2011 and purchased the Nimbus property on 8th September 2011 from Kalgoorlie Ore Treatment Company Pty Ltd (KOTC) in order to treat ore hauled from their proposed Coolgardie gold mining operations, some 55km to the west. MacPhersons fast tracked the development of the Nimbus project, securing financing and purchasing necessary plant infrastructure.

In June 2019 the former Intermin Resources Limited finalised its merger with MRP, becoming Horizon Minerals Ltd. The Nimbus project was put on hold pending review.



**Figure 2: Nimbus Aerial map showing existing pits and tenure**

## ASX ANNOUNCEMENT

Nimbus was classified as a contaminated site by the Department of Water and Environmental Regulation (DWER) in 2006 as Contaminated – Remediation Required under the Contaminated Sites Act from the historic mining and processing of ore which restricted some activities. Following the merger with MacPherson Resources in 2019, Horizon undertook a Mandatory Review Audit process under the Contaminated Sites Act to carry out cleanup works to reclassify the site. The Company completed the clean-up in 2022 and the MAR report is nearing completion to submit to DWER to reclassify the site. The old plant was removed and the area rehabilitated. The mine office and other infrastructure is still in place and operational and on grid power.

An independent review by Australian Mining Consultants (AMC) and Sedgmen was commissioned in 2022 to assess the historic data, mine optimisations and metallurgical work to evaluate the optimal pathway forward for the project.<sup>1</sup> The review highlighted the potential of the project through underground mining the fresh higher-grade ore below the historic Discovery pit and generating a silver and a zinc concentrate for sale to potential offtake partners. A gold concentrate was also assessed to improve overall life of mine given the need for additional tonnage to underpin a concentrator at site.

### Exploration Target Drilling Zones Identified

Given the drilling success to date along the Gretel-Nimbus-Brindabella trend and the potential for repeat high grade lenses at Nimbus deeps and along strike, a drilling campaign has been designed to commence in the first half of 2025 pending cashflows from gold mining operations.<sup>1</sup> Exploration Target drilling zones identified below the Nimbus pits which remain untested are show below (Figure 3 and 4).

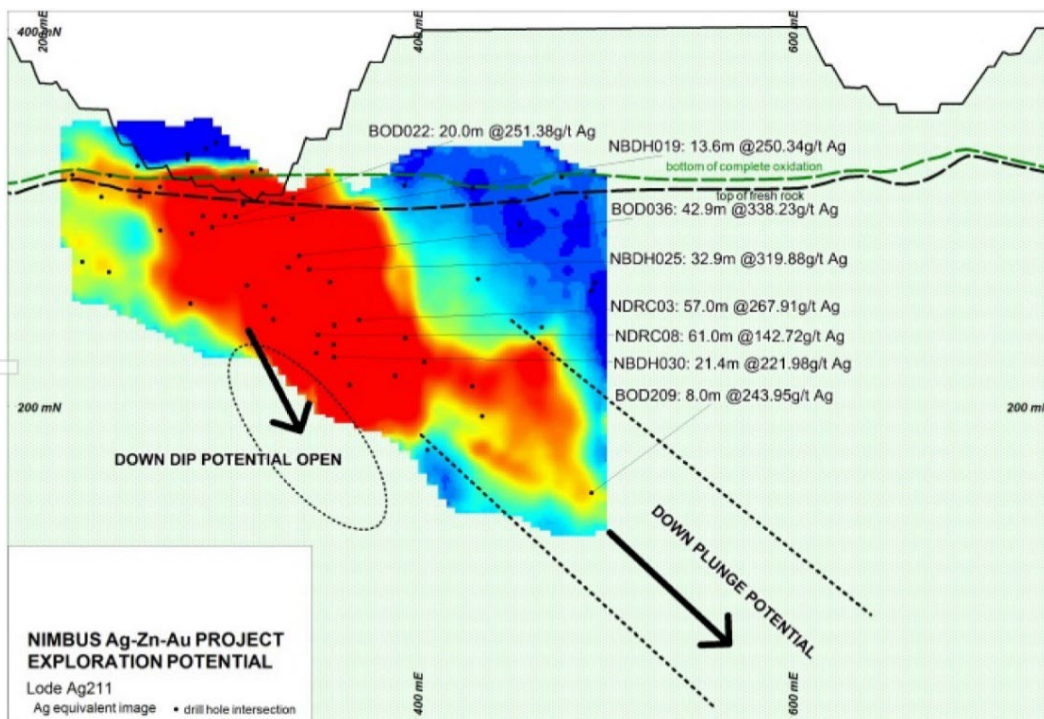
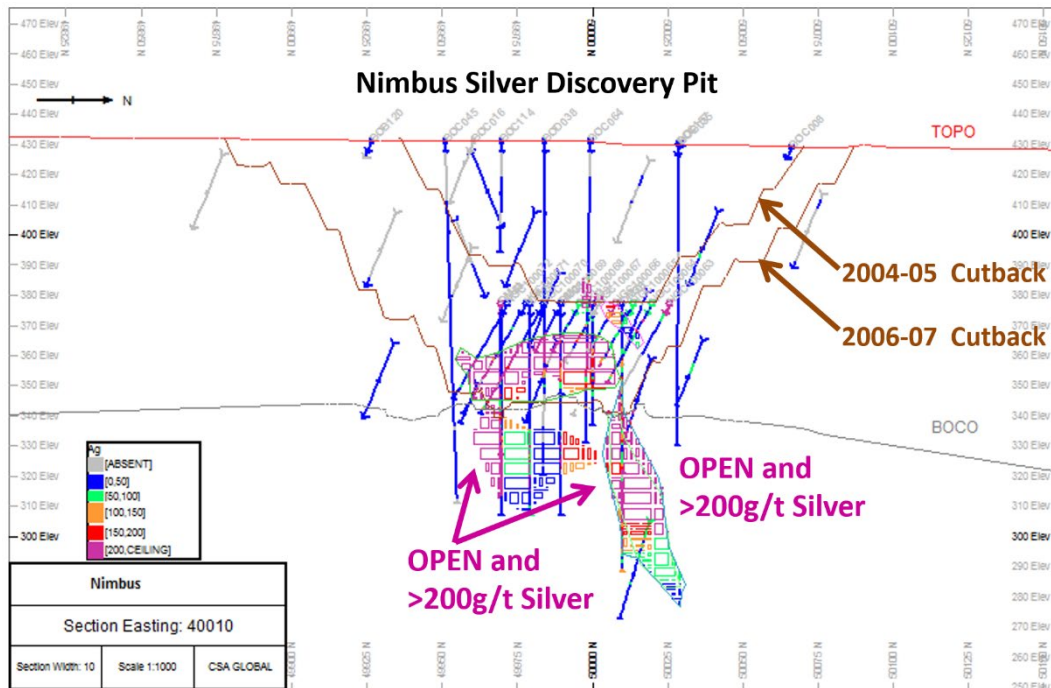


Figure 3: Long section through Ag Lode 211 showing down dip/plunge extension

<sup>1</sup> As announced to the ASX on 24 March 2022.

**ASX ANNOUNCEMENT**



**Figure 4: Long section through showing open zones down dip/plunge extension**

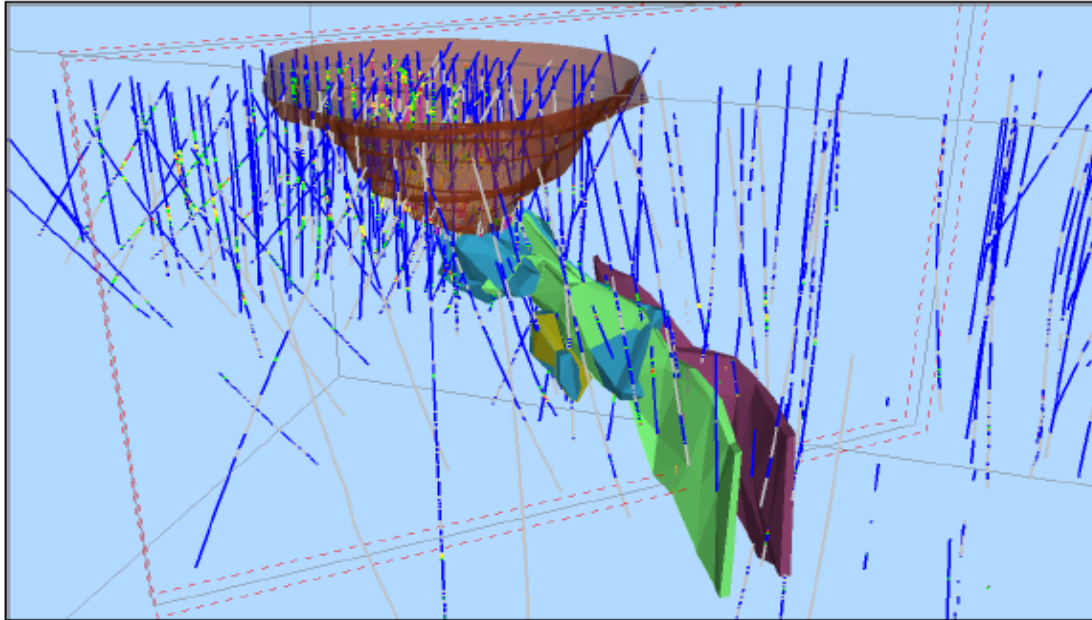
**Basis of Exploration Target**

Horizon has interpreted a steep south-east plunging shoot within the sulphide zone below the Discovery Pit, containing zinc and silver mineralisation, with minor lead, copper and gold. The mineralisation is associated with volcanogenic massive sulphide (VMS) style mineralisation. This shoot is open at depth, with the grade – tonnage model centred upon the available drilling results. Potential mineralisation domains have not been extrapolated to depth beyond the drilling. The exploration target ranges also include potential silver mineralisation in the transitional weathering zone, immediately below the Discovery and East pits. Lateral continuity of this target is believed to be limited to above the sulphide zone mineralised shoots. East – west trending faults have been mapped in the pit and may offset the mineralisation at depth. Potential faulting of the mineralised shoot has not yet been modelled. Insufficient deep drilling has taken place below the East Pit to determine if mineralised shoots are located there. Figure 5 depicts the Zn mineralised domains below the Discovery Pit.

Horizon has formed a view that there is a potential VMS (Zn – Ag – Pb) Exploration Target of between 550,000 tonnes and 700,000 tonnes with a grade range of 3.4 – 3.6% Zn, and 140 – 210g/t Ag, with minor Pb (0.45 – 0.65%). These tonnage and grade ranges are based upon the construction of a 3D grade – tonnage model, which have silver and zinc domains modelled. As measured density data were not available, Horizon has assumed a range of densities for both the oxide (1.6 – 2.35 t/m<sup>3</sup>) and sulphide (2.7 – 3.2 t/m<sup>3</sup>) domains. A weathering profile was used to differentiate between the oxide weathering domain and the fresh rock (sulphide) domains. Grades are based on very limited drilling and up-dip information. The potential quantity and grade the exploration target is conceptual in nature, there has been insufficient exploration to determine a Mineral Resource and there is no certainty that further exploration work will result in the determination of Mineral Resources.

## ASX ANNOUNCEMENT

This material remains an Exploration Target as it relates to mineralisation for which there has been insufficient exploration to estimate a Mineral Resource <sup>1,2</sup>.



**Figure 5: Discovery Primary Zone silver (blue) and zinc (green and purple) domains, plunging SE from below the Discovery Pit**

### Next Steps <sup>2</sup>

A Programme of Work (POW - Reg ID 120876) has been approved to drill the exploration target. Once cashflows from gold production at Boorara and Phillips Find are well advanced, in addition to drilling for gold extensional and new discovery drilling, funding will be directed to test the exploration target below the current high grade Nimbus ore zone.

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

### For further information, please contact:

Grant Haywood  
Managing Director and CEO  
Tel: +61 8 9386 9534  
[grant.haywood@horizonminerals.com.au](mailto:grant.haywood@horizonminerals.com.au)

Michael Vaughan  
Media Relations – Fivemark Partners  
Tel: +61 422 602 720  
[michael.vaughan@fivemark.com.au](mailto:michael.vaughan@fivemark.com.au)

Geology And Geological Interpretation

<sup>1</sup> See Tables, Competent Persons Statement on Pages 17, 21-24. <sup>2</sup> See Forward Looking and Cautionary Statements on Page 25.

## ASX ANNOUNCEMENT

### Regional

The Nimbus deposits are located within the uppermost felsic units of the Boorara Domain of the Archaean Kalgoorlie Terrain, a sequence of basal mafic to ultramafic metavolcanics, overlain by a package of felsic metavolcanic rocks and metasedimentary units of the Black Flag Beds. The volcanic and sedimentary rocks in the Nimbus area are bounded to the west and east by the northwest trending Boorara Shear Zone and Kanowna Shear Zone respectively. Rocks in the district have been subject to lower greenschist facies metamorphism.

### Deposit

Nimbus is defined as a shallow-water, low-temperature VHMS deposit with epithermal characteristics (i.e. a hybrid bimodal felsic deposit), which is consistent with its position near the margin of the Kalgoorlie Terrane.

The Nimbus deposit has a relatively unusual mineral association and is the only known deposit of its kind in the Eastern Goldfields of WA. The deposit consists of multiple zones of oxide silver/gold mineralisation, supergene silver/gold mineralisation and deeper primary silver/gold/zinc sulphide zones. The supergene-enriched oxide silver mineralisation overlies southeast plunging shoot/s of disseminated to massive Fe-Zn-Pb-As sulphides with associated elements including Ag, Sb, Bi and Cd, with high Hg content.

### Mineralisation

Mineralised shoots within the primary disseminated to massive sulphide zone are up to 80 metres wide and plunge 45° to grid SE. Host rocks to the primary mineralisation are autoclastic breccias, pyritic sediments, rhyolite-dacite volcanics, and carbonaceous sediments, cherts and intrusive andesites. The mineralisation comprises pyrite, sphalerite, galena, tetrahedrite, arsenopyrite, native silver, amalgam, chalcocopyrite, electrum and cinnabar.

Three types of sulphide mineralisation have been identified in the MRP drill core:

1. Semi-massive to massive sulphide mineralisation occurs as massive sphalerite-galena or as massive pyrite. The massive sulphide breccia represents widespread sulphide replacement of a pre-existing breccia zone and is characteristically thick and poddy, at 25 to 30 m true thickness. Massive sphalerite-galena zones are often associated with high silver and other base metal values.
2. Banded or stringer style sulphide mineralisation. The stringer zone mineralisation commonly surrounds the massive to semi-massive sulphide mineralisation.
3. Disseminated sulphide breccia mineralisation hosted in a highly brecciated siliceous unit with a chlorite matrix. Disseminated sulphide mineralisation surrounds the stringer style mineralisation.

## **ASX ANNOUNCEMENT**

### **2015 MRE Interpretation**

The Nimbus MRE in 2015 was modelled and estimated by David Williams (MAIG, MAusIMM) an employee of CSA Global Pty Ltd (CSA Global)

The Nimbus deposit is interpreted as being made up of four distinct styles of mineralization, being:

- High Grade Combined Silver and Zinc Lodes
- Silver Lodes
- Zinc Lodes
- Gold Lodes

Whilst the modelling has been successful in defining these different lodes, discrete areas within them will contain metal other than the primary mineralisation. Typically, less than 10% of the blocks contain any of the other metal.

Mineralisation models were prepared using Surpac software by MacPhersons geological staff for Ag, Zn and Au using lower cut-off grades of 12 ppm for Ag, 0.5% for Zn and 0.3 g/t for Au over a 2m down hole composite. The Mineral Resource model consists of 37 zones of Ag mineralisation, 34 zones of Zn mineralisation and 17 zones of Au mineralisation.

### **2016 High Grade Model Interpretation**

In 2016 Macphersons modelled a high-grade sub-set of the mineralisation. Modelling and estimation were done by Mark Rigby, Senior Project Geologist with MacPhersons.

Solids were generated by interpreted sectional or flitch polygons (strings) on the following basis:

- Ag on 500g/t Ag cut-off, minimum 2m drill width, a nominal 2m internal dilution, although more was included to accommodate mineralisation interpretation continuity, and
- Zn on 10% Zn cut-off, minimum 2m drill width

The 'high grade' interpretation remains consistent in orientation with the previous model.

Lodes were interpreted to the full lateral extents, including sub-grade drill intersections where anomalous material or geological continuity is interpreted. In the few instances where no continuity could be established, a half-way rule was used. Lateral extension was up to 20m, up and down dip (or plunge), and along strike. The up and down dip component was modified to allow for the 3D location of drilling in adjacent sections in an effort to create coherent solids. 12 high-grade lodes were defined. No flat lying supergene type mineralisation occurs in this high-grade model.



## **ASX ANNOUNCEMENT**

### **Drilling Techniques**

The Mineral Resource is based upon historical drill hole data, and drill hole data sourced from MacPhersons' drilling programmes between 2011 and late 2014. The historical data accounts for 336 Reverse Circulation (RC) holes (29,702 m) and 88 diamond drill holes (DDH) for 21,447 m. The Nimbus drill hole database consists of 243 RC holes (43,565 m) and 38 DDH (11,213 m).

Historical diamond drilling was carried out by Australian Contract Mining (ACM) (Kalgoorlie), using a Longyear LF90 diamond drill rig. Pre-collars were drilled using a tri-cone roller bit initially and later a blade bit. The pre-collar was followed by NQ-2 coring (51 mm). Significant difficulties maintaining directional control were often encountered during drilling. This resulted in many of the target positions were often difficult to achieve and, in some cases, targets were completely missed.

MacPhersons drilled 182 RC holes (NBRC series, 25,992m) and 200 Aircore holes (NBAC series 9,958m). Raglan Drilling (Kalgoorlie) completed the RC and Air Core program using two truck mounted 2008 Schramm T450WS RC drill rigs with 900/350 onboard compressors and a multi-purpose Schramm T685W RC, Aircore drill rig. RC drill holes have a 127mm or 143mm diameter. Diamond drilling used HQ3 triple tube cored from surface. Drill holes were orientated by electronic "Reflex Orientation Tool". Core lengths and orientations were checked daily by MRP geologists.

Aircore drilling was used to sample the TSF1 tailings. The TSF2 tails were drilled with an Edson MRA2 auger rig mounted on a Toyota Landcruiser. Auger flight rods were used to drill a 3.5 inch diameter hole. The holes were sampled at one metre intervals from surface to bottom of hole. The holes were vertical and drilled to blade refusal (floor of the pit). A total of 34 auger holes were drilled for 396 metres. In addition, two HQ diamond drill holes were drilled at the centre of the pit and sampled at one metre intervals. The drill rods were pushed through the tails without the need for using the drill bit, for 43.8m of sample.

The majority of drilling at Nimbus has been completed on a 20 m spaced section lines, with recent RC holes drilled 20 m apart on those section lines.

All MacPhersons drill hole collars were surveyed using a differential global positioning system (DGPS) by a licensed, locally based, surveyor. Many of the historical drill collars were destroyed by surface rehabilitation work prior to MacPhersons' ownership of the project, however collars that were located were re-surveyed by the same licensed surveyor. The new collar surveys validated the Local to MGA grid transformation carried out by MacPhersons.

## **ASX ANNOUNCEMENT**

### **Sampling And Sub-Sampling Techniques**

#### **Historical**

A standard length of one metre was used to collect samples both from diamond core samples and the RC samples passed through a riffle splitter. Diamond core was cut in half with half retained and half dispatched for analysis.

#### **2011 - 2012 Diamond Drilling**

Diamond core drilling was undertaken by HMR Drilling Services Pty Ltd, initially using a SDD1300 rig to complete the first two holes. The rig was swapped to a LF90D rig to complete the remaining 23 holes. Terra Drilling Pty Ltd, using a Boart Longyear KWL 1600H completed a four hole geotechnical program late in 2012.

The core was cut and sampled according to lithology with minimum lengths of 0.1m and maximum lengths of 1.2m. Samples were bagged and ticketed and transported to the ALS Ltd (ALS) Perth laboratory for sample preparation and analyses. The core was photographed then stacked for storage at the Nimbus mine site. All drill sites were rehabilitated, whereby holes were capped, sumps filled in and all rubbish removed.

#### **2011 - 2014 RC Drilling**

Reverse circulation drilling was undertaken by Raglan Drilling Pty Ltd Samples passed through a cyclone and over a wedge splitter with a 2kg split collected in pre-numbered calico bags and the remainder collected and stored in numbered green plastic bags. Samples were ticketed and transported to ALS Perth for sample preparation and analyses. All drill sites were rehabilitated, with holes capped and all rubbish removed.

#### **2011 - 2012 Aircore Drilling (TSF1)**

Aircore drilling was completed by Raglan Drilling (Kalgoorlie) using two truck mounted multi-purpose Schramm T685W RC Aircore drill rigs using 3m rods of 89mm diameter.

One metre samples were collected in green plastic bags, with the geologist carefully monitoring the chips for evidence of the drill bit entering and leaving the tails material. Samples for assaying were collected via spearing the sample bag. The samples were then dispatched to ALS (Perth) for sample preparation and analysis.

#### **QAQC**

Field QAQC procedures included the insertion of commercial standards for all sampling. Standards (including in house blanks) were inserted at a rate of about 1 every 30 samples. Field duplicates are collected from RC samples and inserted into sample string. No QAQC issues were reported.

70 samples were selected to represent the modelled mineralisation. The samples were submitted to Intertek Genalysis (Genalysis) for silver assay via 4AH/OE. Results were mostly acceptable with greater variability noted in the high-grade samples (600+ ppm Ag, 400+ ppm Hg).

## **ASX ANNOUNCEMENT**

### **Sample Analysis Method**

#### **Historical Database**

Aqua Regia digest was found to be inappropriate. >50ppmAg, Triple acid digest (HCL, HNO<sub>3</sub>, HClO<sub>4</sub>) was used with a 10x dilution for >500ppmAg. The usual analysis technique was inductively coupled plasma (ICP).

The suite of analysed elements was not consistent due to several exploration campaigns. The ICP analytical method provides a quantitative result.

#### **2011 – 2014 Database**

Pulverised core samples were analysed by processes determined by an initial analysis, and the logged percentage of sulphide in the core. ALS method ICP-61 (33 element scan) was used for weakly mineralised core; if Ag was > 100ppm then the sample was re-assayed by method OG62h.

Initially, if the subsequent recorded Ag assay was >1,500ppm, then the sample was again re-assayed using method OG46. OG46 was then considered the most appropriate method for sulphide hosted Ag mineralisation. More recent test work completed by ALS showed that the OG46 method was not suitable for silicate-hosted Ag mineralisation, and could underestimate the Ag values, particularly in the high-grade zones.

ALS then advised that OG62h was a suitable method for samples that returned grades greater than 1500ppmAg, and OG46 was dropped from the protocol, and OG62h used.

If Zn was >10,000ppm (or 1%) following ICP-61, then a re-assay using OG62h was required. Triggers of 10,000ppm for Pb and Cu were also set, with OG62 subsequently used for those samples.

### **Estimation Methodology**

#### **2013 MRE**

The 2013 Mineral Resource Estimation was undertaken by David Williams, MAIG, MAusIMM, an employee of CSA Global. As part of the full MRE, estimations were made for Tailings Storage Facility 1 and 2 (TSF1 and TSF2).

#### **TSF1**

A block model was created for TSF1 using wireframe surfaces depicting the top and bottom of the tailings material. The blocks were estimated with grade for Ag, Au, Hg, Pb and Zn based on results from 40 Aircore (AC) holes drilled into the dam during 2012. The wireframe surfaces were modelled based upon geological logs from these holes.

Silver, mercury and gold grades were estimated into the model using ordinary kriging (OK) and inverse distance weighting to the power 2 (IDS). The other grade variables were estimated by IDS. A minimum of 4 and maximum of 16 samples were used per block estimate. Search ellipse radii were based upon the short ranges of the variogram models. A flat discoid ellipse was used for the

## **ASX ANNOUNCEMENT**

estimation, based upon the depositional history of the tails. A maximum of three samples per drill hole were used in any one block estimation.

A density of 1.7t/m<sup>3</sup> was applied to the block model. The MRE was classified as Measured and Inferred. The regions where the AC holes were drilled provide strong sample support, and metal distribution was modelled with a high degree of confidence and classified as Measured. The regions away from the drilling are not supported by drill hole sampling, but the 'geological' model of the TSF is considered to be well established. These areas were classified as Inferred.

### **TSF2**

The Mineral Resource was estimated within the volume between the top of tails surface, and the open pit surveyed surface as at the end of open pit mining (April 2005). This volume is completely filled with consolidated tailings sands, with no known occurrence of solid rock rafting within the tails. The tailings were determined to be one mineralisation domain; therefore, no attempt was made to model high grade zones within the deposit.

Silver and mercury grades were estimated using ordinary kriging. A minimum of 8 and maximum of 24 samples were used per block estimate. Search ellipse radii were based upon variogram models. A flat discoid ellipse was used for both silver and mercury. The model has been classified as Measured.

### **2015 MRE**

Mineralisation models were prepared using Surpac software by MacPhersons geological staff for Ag, Zn and Au using lower cut-off grades of 12 ppm for Ag, 0.5% for Zn and 0.3 g/t for Au over a 2m down hole composite. Wireframes were created joining polygons based upon a geological model of the deposit derived from diamond drill core logs, geological logs of RC drill data, and geological observations on surface. The Mineral Resource model consists of 37 zones of Ag mineralisation, 34 zones of Zn mineralisation and 17 zones of Au mineralisation. Three weathering domains (oxide, transitional and fresh) were interpreted. Wireframed domains were extrapolated along strike or down plunge to half the section spacing or before this limit if a barren hole cut the plunge extension. The wireframes were imported into Datamine Studio where the Mineral Resource model was completed by CSA Global. The model parameters were used to recreate a rotated block model in Surpac which was used for final reporting of the Mineral Resource.

Top cuts were used to constrain extreme grade values if it was determined that the grades would potentially over-estimate local block estimates, either due to limited sample numbers, or if the individual assay result was considered too high compared to the rest of the domain's population. Top cuts vary according to the host mineralisation domain and were determined from an analysis of the non-composited data. All samples were composited to 1 m intervals based upon a review of sample length distribution. All diamond core and RC drill hole data were utilised in the grade interpolation, with the exception of selected holes from the historical database (DM series, and EM1) for which survey or analytical records could not be verified. Samples from RAB and other drill hole types were excluded.

## ASX ANNOUNCEMENT

A block model with a parent cell size of 10 m E by 4 m N by 5 m RL was constructed compared to a typical drill spacing of 20 m (northing) by 20 m (easting). Sample spacing widened considerably with increasing depth.

A statistical analysis of the Ag, Zn and Au populations by mineralisation domain, weathering domain, hole type, and a combination of these, was conducted on both the non-composited and composited drill data. Top cuts were determined from an analysis of the non-composited data. A variogram study was carried out on selected domains with the greatest data population for Ag, Zn and Au. Normal score variograms were modelled, and the back transformed parameters fed into the grade interpolation algorithm. The variogram studies showed the Nimbus mineralisation has a relatively low nugget effect, implying that a small sample population would be sufficient to interpolate a single block. A moderate plunge down the mineralisation domains was modelled.

Grade estimation was by Ordinary Kriging (OK) with Inverse Distance Squared (IDS) estimation concurrently run as a check estimate. A minimum of 8 and maximum of 24 composited (1m) samples were used in any one block estimate for Ag, Zn and Au mineralisation zones, with 4 to 24 samples used for the second pass grade interpolation. A maximum of 6 composited samples per drill hole were used in any one block estimate. Grade interpolation was run within the individual mineralisation domains, acting as hard boundaries. The base of complete oxidation (BOCO) weathering profile was also used to split the grade interpolation by weathering zone.

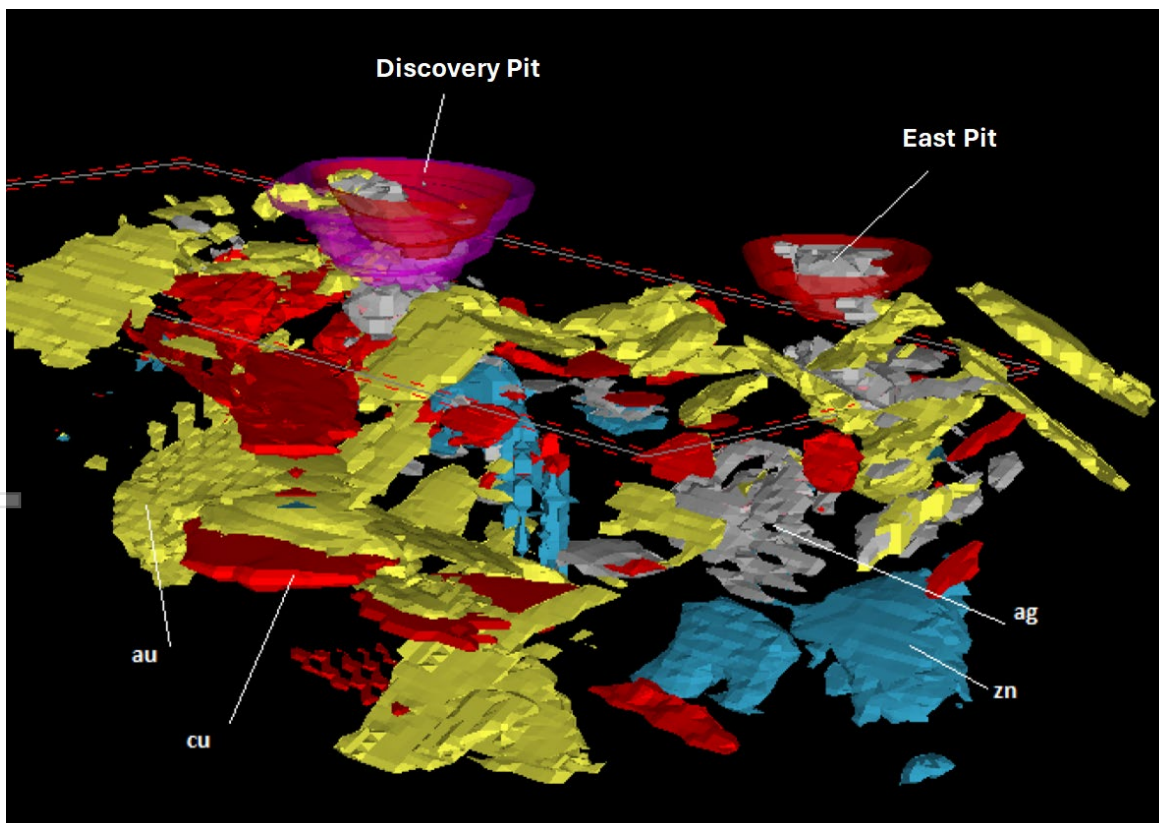


Figure 6 - All Interpreted Lodes

## ASX ANNOUNCEMENT

### 2016 HG Model

Due to the significant reduction in number of samples available for analysis, variography was not able to be adequately modelled for this resource estimation. This has meant that an Ordinary Kriged estimation cannot be completed with this resource data. As we are dealing with a higher grade sample sub-set of the original resource data it is difficult to justify the use of previous variogram models to be applied in an OK estimate with this resource data. Consequently, an Inverse Distance estimator ( $ID^2$ ) was used for the MRE.

A block model with parent cell sizes 10 m x 2 m x 2 m (Easting, Northing, RL) was constructed which was based on drill spacing and width of lodes.

Search ellipse orientations were based on the geometry of individual lodes. Search distances and ellipse dimensions were assumed for each of the two passes used in the estimation as well as sample numbers required to inform a block with grade. No restriction to number of samples selected per drill hole was applied.

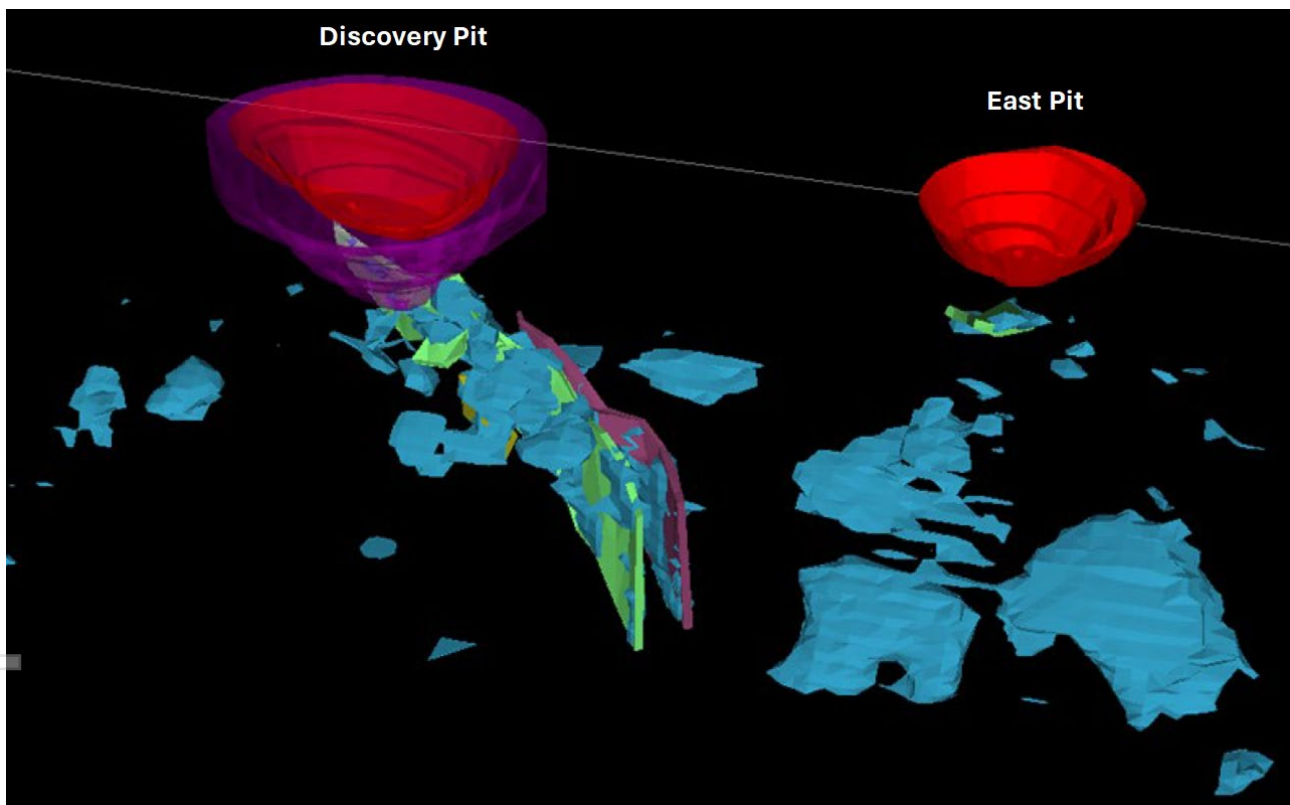


Figure 7 - High Grade Silver Lodes (blue) and High Grade Zn-Ag-Pb VHMS Lenses (green and magenta)

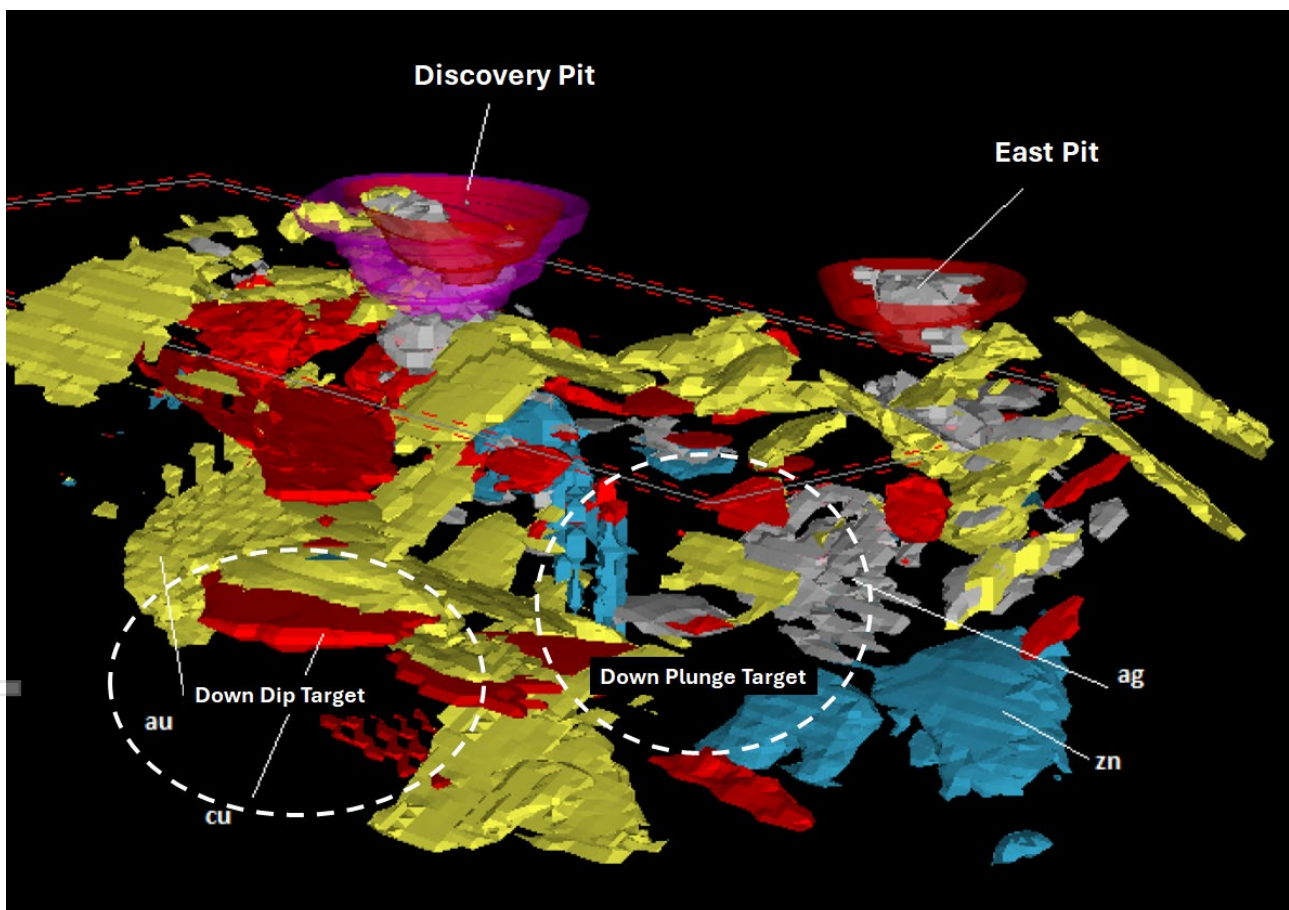
### Exploration Target

The Nimbus VHMS Ag, Zn, & Au lenses are open at depth (**Figure 3, Figure 4**). Understanding the stratigraphy at Nimbus is critical to future mine exploration success. Systematic re logging of historical diamond drill holes has been undertaken along with pit mapping of East Pit and Discovery Pit. This increased understanding of lithological units at Nimbus will be used to construct a new geology model.

**ASX ANNOUNCEMENT**

A number of the deeper lodes identified in 2012 (including Ag Lode 311) have not been drilled out to the surface and therefore present additional near-surface resource targets which could be mined out as pit cutbacks.

Horizon has interpreted a steep south-east plunging shoot within the sulphide zone below the Discovery Pit, containing zinc and silver mineralisation, with minor lead, copper and gold. The mineralisation is associated with volcanogenic hosted massive sulphide (VHMS) style mineralisation. This shoot is open at depth, with the grade – tonnage model centred upon the available drilling results. Potential mineralisation domains have not been extrapolated to depth beyond the drilling. The exploration target ranges also include potential silver mineralisation in the transitional weathering zone, immediately below the Discovery and East pits (Figure 8). Lateral continuity of this target is believed to be limited to above the sulphide zone mineralised shoots. East – west trending faults have been mapped in the pit and may offset the mineralisation at depth. Potential faulting of the mineralised shoot has not yet been modelled. Insufficient deep drilling has taken place below the East Pit to determine if mineralised shoots are located there.



**Figure 8 - Exploration Target Areas (Au lode Yellow; Cu Lodes Red; Ag Lodes Grey; Zn Lodes Blue)**

Horizon has reviewed and updated resource models and has formed a view that there is a potential VMS (Zn – Ag – Pb) Exploration Target of between 550,000 tonnes and 700,000 tonnes with a grade range of 3.4 – 3.6% Zn, and 140 – 210g/t Ag, with minor Pb (0.45 – 0.65%). These tonnage and grade ranges are based upon the construction of a 3D grade – tonnage model, which have silver

**ASX ANNOUNCEMENT**

and zinc domains modelled. Measured density data were not available; therefore, Horizon has assumed a range of densities for both the oxide (1.6 – 2.35 t/m<sup>3</sup>) and sulphide (2.7 – 3.2 t/m<sup>3</sup>) domains. A weathering profile was used to differentiate between the oxide weathering domain and the fresh rock (sulphide) domains.

The potential quantity and grade of the Exploration Target is conceptual in nature. There has been insufficient exploration to estimate a Mineral Resource and there is no certainty that further exploration work will result in the determination of mineral resources. This material remains an Exploration Target as it relates to mineralisation for which there has been insufficient exploration to estimate a Mineral Resource.

**Bulk Density**

In 2012 an independent study was completed by CSA Global, the study determined that ~68% of the density determinations were unreliable due to the use of an inappropriate determination method. The result was that 629 values were validated and used for the density determination in the previous estimate. The recent 2014 drilling has generated an additional 292 density determinations. Prior to estimating the final density, all determinations were analysed to look for obviously erroneous values, a total of 35 values or 4% of the population were excluded by this process. The CP is confident the densities assigned to the block model are appropriate for the rock type and associated intensity of weathering. Dry bulk density values applied to all the current MTEs are listed below.

|       |                   | <b>tm<sup>-3</sup></b> |
|-------|-------------------|------------------------|
| Ore   | <b>Oxide</b>      | 2.20                   |
|       | <b>Transition</b> | 2.40                   |
|       | <b>Fresh</b>      | 2.94                   |
| Waste | <b>Oxide</b>      | 2.09                   |
|       | <b>Transition</b> | 2.10                   |
|       | <b>Fresh</b>      | 2.77                   |

A density of 1.7tm<sup>-3</sup> was used for the modelled tailings sand material.



## **ASX ANNOUNCEMENT**

### **Competent Person**

#### **Mineral Resource Estimates**

The 2013 Estimation of TSF1 and TSF2 by Mr David Williams, MAIG, MAusIMM an employee of CSA Global.

The 2015 total Mineral Resource Estimate was undertaken by Mr David Williams, MAIG, MAusIMM an employee of CSA Global.

The 2016 Nimbus High Grade estimate was undertaken by Mark Rigby Senior Project Geologist, MacPhersons Resources Limited.

The Mineral Resource Estimates have been audited in detail by Mr Stephen Godfrey, Manager Resource Development with Horizon Minerals Limited. Mr Godfrey is a Fellow of the Australasian Institute of Mining and Metallurgy (FAusIMM #110542) and a Member of the Australian Institute of Geoscientists (MAIG #3993). Mr Godfrey has sufficient experience that is relevant to the style of mineralisation, type of deposit under consideration and to the activity that they are undertaking to qualify as a Competent Persons as defined in the 2012 edition of the 'Australasian Code for Reporting of Exploration, Results, Mineral Resource and Ore Reserves'. Mr Godfrey consents to the inclusion in this announcement of the matters based on their information in the form and context in which they appear.

The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements and that all material assumptions and technical parameters underpinning the estimates in those announcements continue to apply and have not materially changed.

#### **Exploration Target**

The Nimbus Exploration Target is based on conceptual modelling work done by Mr Haydn Hadlow and Ms Jacinta Ireland, employees of CSA Global, in 2011. The range of tonnes and grade were applied to the target by Horizon based on this work and the 2015 MRE.

The Exploration Target does not comprise any part of the Nimbus MRE being reported.

The Exploration Target modelling has been audited in detail by Mr Stephen Godfrey, Manager Resource Development with Horizon Minerals Limited. Mr Godfrey is a Fellow of the Australasian Institute of Mining and Metallurgy (FAusIMM #110542) and a Member of the Australian Institute of Geoscientists (MAIG #3993). Mr Godfrey has sufficient experience that is relevant to the style of mineralisation, type of deposit under consideration and to the activity that they are undertaking to qualify as a Competent Persons as defined in the 2012 edition of the 'Australasian Code for Reporting of Exploration, Results, Mineral Resource and Ore Reserves'. Mr Godfrey consents to the inclusion in this announcement of the matters based on their information in the form and context in which they appear.

## **ASX ANNOUNCEMENT**

### **Cut-Off Grade(s)**

#### **2013**

No cut of grades applied to the reported Tailings material. All material defined as tailings has been reported.

#### **2015**

The MRE was reported for all blocks where Ag  $\geq$  25g/t and / or Zn  $\geq$  1.0%, and / or Au  $\geq$  0.5g/t. The cut-off grade to apply to any particular block was determined by the domain encapsulating that block. A silver only domain used the Ag cut-off, a zinc only domain used the Zn cut-off, and where the Ag and Zn domains overlapped, Ag was reported in preference by its cut-off grade. Au was reported by its cut-off when no Ag or Zn domain existed. The cut-off grades were determined by MacPhersons.

#### **2016**

No cut off grades were applied. The MRE was reported for all blocks that were estimated within the mineralisation model. The resource has been reported for all blocks within the ore wireframe whether they are above the silver cut-off grade or not. All blocks are reported for zinc as a by-product from the silver resource. Lode 6 below the base of complete oxidation and all of Lode 12 were not reported in the preliminary MRE because of their low grades but are included in the final reporting.

### **Reasonable Prospectivity for Eventual Economic Extraction**

With proven mining and processing from previous operations no environmental impairments and an improving economic position the Prospectivity for Eventual Economic Extraction of a precious metal concentrate from the Nimbus deposit is very likely.

### **Mining**

It is anticipated that the remaining Nimbus resource will be mined using a combination of open pit cut-backs to recover the remaining near surface oxide and transitional ores, and underground mining to access the deeper ore down plunge and dip.

Although the Nimbus processing plant has been removed and the site rehabilitated, the office infrastructure still exists. The buildings are in good condition on mains power with a reliable water supply.

In 2021 financial analysis of the Nimbus resource the project did not make sufficient return (NPV \$10m) to justify the capital investment in a new underground operation. This analysis was done at a silver price of AUD\$33. Current spot price is AUD\$42 indicating the financial analysis should be revisited<sup>1</sup>.

## **ASX ANNOUNCEMENT**

### **Metallurgy**

The previous processing plant used the Merrill–Crowe Process, a separation technique for removing gold from the solution obtained by the cyanide leaching of gold ores. Other precious metals, silver, and base metals, like copper, will also precipitate, if present. The gold precipitate (mixed with zinc dust) is then filtered out of the solution, and the zinc dust and gold are mixed with sulfuric acid to dissolve the zinc. The solution is filtered, and the remaining solids are smelted to a gold doré bar. Refining recovers the other precipitate metals.

Project review has considered an alternative strategy to produce a high precious metal (silver) and zinc concentrate instead of metal bars. The production of a concentrate has the potential benefits of a simplified processing circuit resulting in reduced capex and opex. To that end the Company commenced an offtake process to obtain expressions of interest, indicative terms and potentially an offtake agreement for the sale of silver-zinc concentrate. Preliminary soundings have shown immediate interest from some traders, particularly due to the high silver content.

The recent concept study also evaluated the potential for the concentrate plant to process refractory gold ore, in particular the deeper fresh material from the Teal, Jacques Find and Peyes Farm projects below the oxide free milling supergene zone. The design of a flexible concentrator can provide an additional revenue stream improving the economics with significant interest to purchase a high value gold concentrate from potential offtake partners.

### **Environmental**

Nimbus was classified as a contaminated site by the Department of Water and Environmental Regulation (DWER) in 2006 as Contaminated – Remediation Required under the Contaminated Sites Act from the historic mining and processing of ore which restricted some activities. Following the merger with MacPherson Resources in 2019, Horizon undertook a Mandatory Review Audit process under the Contaminated Sites Act to carry out cleanup works to reclassify the site. The Company completed the clean-up in 2022 and the MAR report is nearing completion to submit to DWER to reclassify the site. The old plant was removed and the area rehabilitated. The mine office and other infrastructure is still in place and operational.

Nimbus has a clearing permit (CPS 6182-3) and approved Mining Proposal and Mine Closure Plan (Reg ID: 43836) in place, and also has a Category 5 Prescribed Premise Licence (L7910/2003/6) for Processing or beneficiation of metallic or non-metallic ore.

### **Classification**

#### **All MREs**

Classification of the Mineral Resource estimate was carried out taking into account the geological understanding of the deposit, QAQC of the samples, density data and drill hole spacing.

All available data was assessed and the Competent Person's relative confidence in the data was used to assist in the classification of the Mineral Resource.

<sup>1</sup> Nimbus Silver-Zinc Project Update 24 Mar 2022

## **ASX ANNOUNCEMENT**

The current classification assignment appropriately reflects the Competent Person's view of this model rather than the entire deposit.

### **2015 MRE**

The Mineral Resource is classified as a combination of Measured, Indicated and Inferred, with geological evidence sufficient to confirm geological and grade continuity for the Measured Mineral Resource

### **2016 High Grade MRE**

The Mineral Resource is classified as a combination of Indicated and Inferred, with geological evidence sufficient to confirm geological and grade continuity for the Indicated Mineral Resource. This is a change from Measured resource previously reported due to the low number of samples now being used to estimate the lodes.

### **TSF 1 and TSF 2**

The consistency and density and quality of sampling has led the tailings resource to be classified as Measured in the densely drilled areas. The peripheral areas of TSF1 where there is known tailings, but no sampling, are classified as Inferred.

For personal use only

## ASX ANNOUNCEMENT

### Mineral Resource Statement

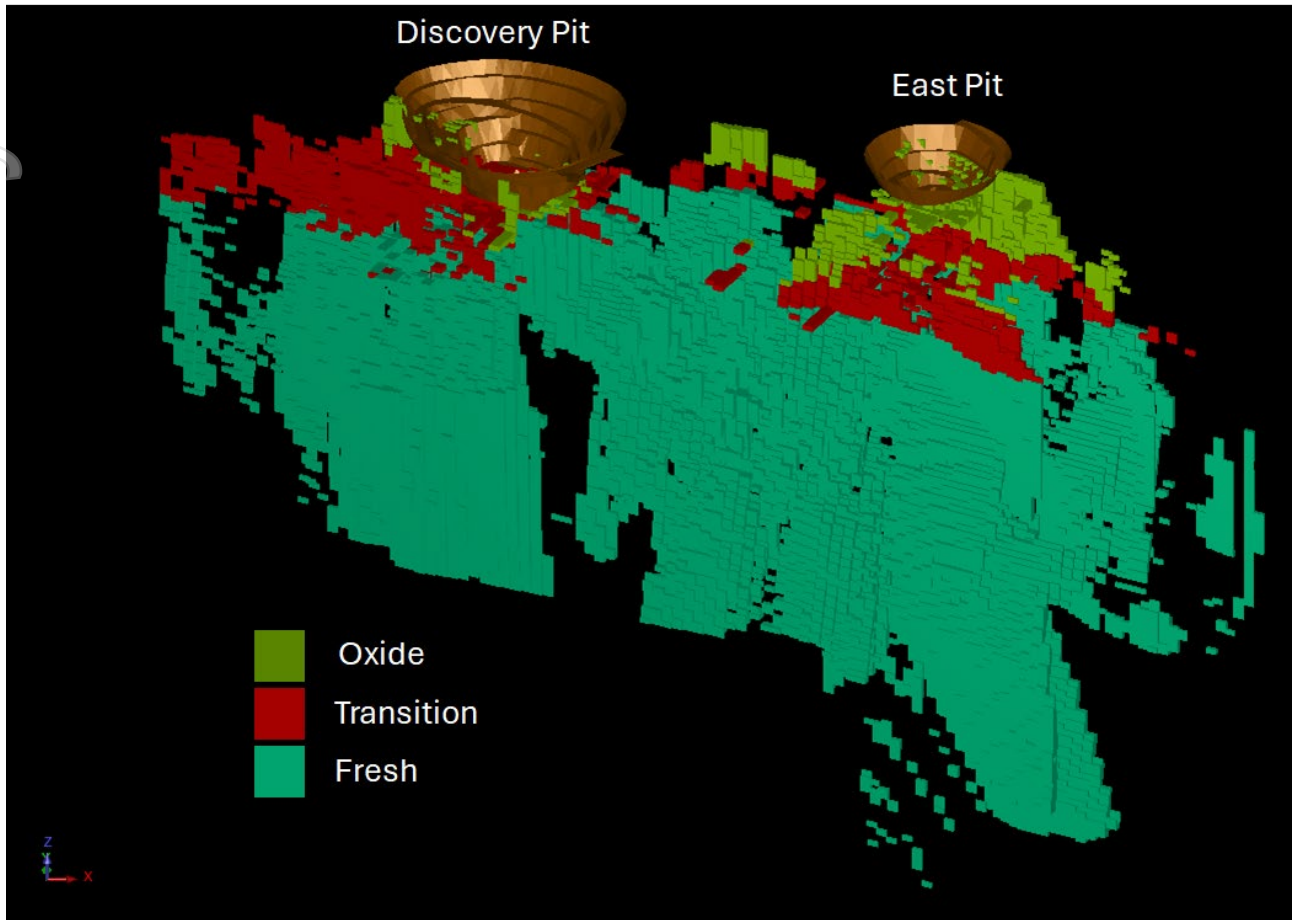
The Global Nimbus Mineral Resource is presented in the tables below. Estimations for TSF1 and TSF2 were completed in 2013. Estimation of the in-situ Mineral Resource was completed in 2015.

The Company confirms that it is not aware of any new information or data that materially affects the information included in the original mineral resource estimations and that all material assumptions and technical parameters underpinning the original estimates continue to apply and have not materially changed.

#### 2013/2015 MRE\*

| Material | Classification | Tonnes | Ag    | Au    | Zn   | Ag     | Au     | Zn     |
|----------|----------------|--------|-------|-------|------|--------|--------|--------|
|          |                | Mt     | (ppm) | (ppm) | (%)  | (MOzs) | (KOzs) | (Kt)   |
| oxide    | Measured       | 0.355  | 84    | 0.04  |      | 0.96   | 0.46   |        |
|          | Indicated      | 0.071  | 9     | 0.97  |      | 0.02   | 2.21   |        |
|          | Inferred       | 0.009  |       | 1.43  |      |        | 0.41   |        |
| trans    | Measured       | 0.614  | 83    | 0.13  |      | 1.64   | 2.57   |        |
|          | Indicated      | 0.270  | 62    | 0.40  |      | 0.54   | 3.47   |        |
|          | Inferred       | 0.006  |       | 1.25  |      |        | 0.24   |        |
| fresh    | Measured       | 2.428  | 113   | 0.08  | 1.80 | 8.82   | 6.24   | 43.70  |
|          | Indicated      | 2.841  | 47    | 0.17  | 1.10 | 4.29   | 15.53  | 31.25  |
|          | Inferred       | 5.142  | 20    | 0.27  | 0.60 | 3.31   | 44.64  | 30.85  |
| TSF1     | Measured       | 0.082  | 61    | 0.14  | 0.03 | 0.16   | 0.37   | 0.02   |
|          | Indicated      |        |       |       |      |        |        |        |
|          | Inferred       | 0.126  | 57    | 0.13  | 0.03 | 0.23   | 0.53   | 0.04   |
| TSF2     | Measured       | 0.133  | 63    | 0.05  | 0.15 | 0.27   | 0.21   | 0.20   |
|          | Indicated      |        |       |       |      |        |        |        |
|          | Inferred       |        |       |       |      |        |        |        |
| Total    | Measured       | 3.61   | 102   | 0.08  | 1.22 | 11.85  | 9.85   | 43.93  |
|          | Indicated      | 3.18   | 47    | 0.21  | 0.98 | 4.85   | 21.21  | 31.25  |
|          | Inferred       | 5.28   | 21    | 0.27  | 0.58 | 3.54   | 45.82  | 30.89  |
|          | Total          | 12.08  | 52    | 0.20  | 0.88 | 20.24  | 76.88  | 106.07 |

\*Note that the numeric precision presented in the table does not imply the precision of the resource estimation. Some rounding errors may be present in the tables.



**Figure 9 - Nimbus Global MRE Lodes by Material Type**

For personal use only

**ASX ANNOUNCEMENT**

**2016 High Grade MRE by Material Type and Lode\***

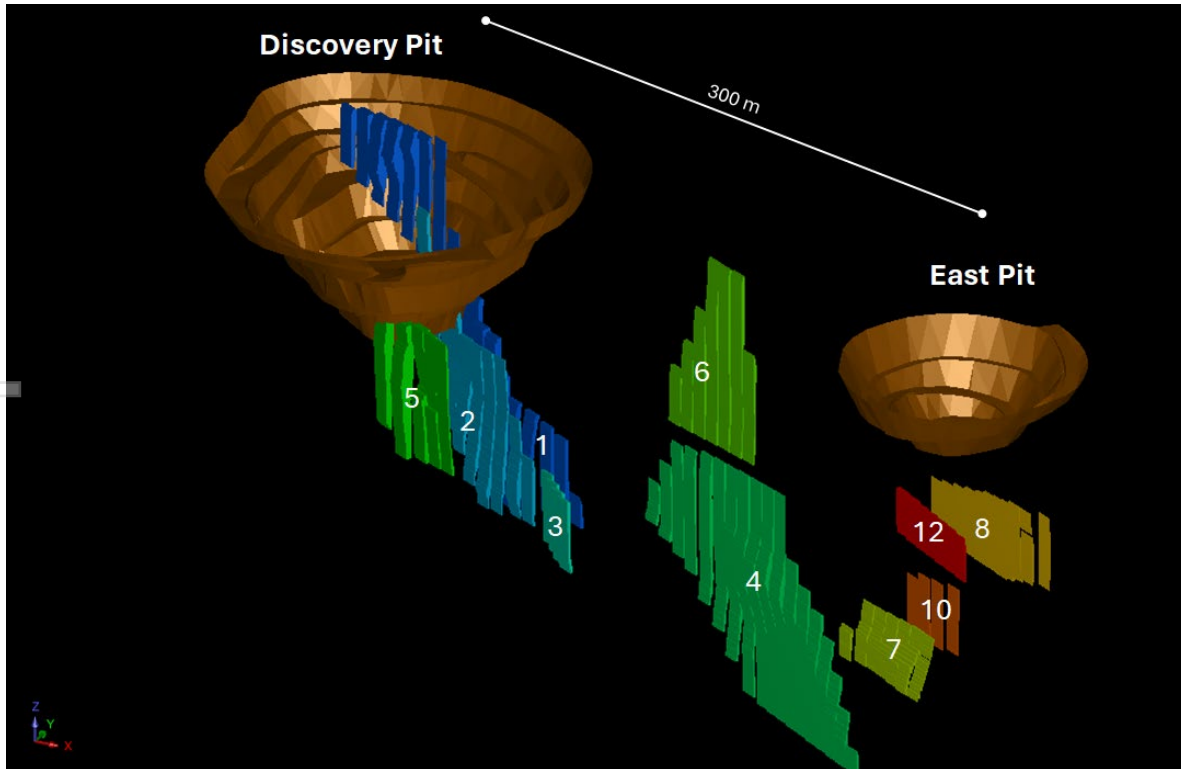
| Material           | Lode             | Mm3   | Mt    | ID Ag Cut (ppm) | ID ZnCut (%) | Ag MOzs Cut | Zn Kt Cut |
|--------------------|------------------|-------|-------|-----------------|--------------|-------------|-----------|
| <b>Oxide</b>       | 5                | 0.001 | 0.003 | 1056            | 0.00         | 0.11        | 0.00      |
|                    | 6                | 0.002 | 0.005 | 590             | 0.00         | 0.10        | 0.00      |
|                    | 8                | 0.001 | 0.002 | 775             | 0.00         | 0.05        | 0.00      |
| <b>SubTotal</b>    |                  | 0.005 | 0.011 | 770             | 0.00         | 0.26        | 0.00      |
| <b>Transition</b>  | 1                | 0.000 | 0.001 | 540             | 0.30         | 0.01        | 0.002     |
|                    | 5                | 0.001 | 0.003 | 1054            | 23.22        | 0.10        | 0.70      |
|                    | 8                | 0.002 | 0.006 | 660             | 1.25         | 0.12        | 0.07      |
|                    | <b>SubTotal</b>  |       | 0.004 | 0.009           | 780          | 8.31        | 0.23      |
| <b>Fresh</b>       | 1                | 0.015 | 0.045 | 672             | 9.08         | 0.96        | 4.06      |
|                    | 2                | 0.009 | 0.027 | 529             | 8.16         | 0.46        | 2.21      |
|                    | 3                | 0.003 | 0.008 | 894             | 23.34        | 0.24        | 1.95      |
|                    | 4                | 0.027 | 0.079 | 921             | 19.17        | 2.35        | 15.22     |
|                    | 5                | 0.010 | 0.029 | 980             | 20.17        | 0.93        | 5.94      |
|                    | 6                | 0.008 | 0.023 | 274             | 1.15         | 0.21        | 0.27      |
|                    | 7                | 0.003 | 0.009 | 1377            | 20.46        | 0.38        | 1.75      |
|                    | 8                | 0.004 | 0.011 | 616             | 1.70         | 0.22        | 0.19      |
|                    | 10               | 0.001 | 0.004 | 922             | 12.18        | 0.12        | 0.50      |
|                    | <b>Sub Total</b> |       | 0.081 | 0.236           | 774          | 13.59       | 5.87      |
| <b>Grand Total</b> |                  | 0.09  | 0.26  | 774             | 12.84        | 6.37        | 32.86     |

For personal use only

**ASX ANNOUNCEMENT**

**2016 High Grade MRE by Classification and Lode\***

| Classification     | Material     | Lode | Km3   | Kt    | ID Ag Cut (ppm) | ID ZnCut (%) | Ag KOzs Cut | Zn KT Cut |
|--------------------|--------------|------|-------|-------|-----------------|--------------|-------------|-----------|
| <b>Indicated</b>   | Oxide        | 8    | 0.89  | 1.96  | 775             | 0.00         | 49          | 0.00      |
|                    | Transition   | 1    | 0.24  | 0.58  | 540             | 0.30         | 10          | 0.002     |
|                    | Transition   | 8    | 2.39  | 5.74  | 660             | 1.25         | 122         | 0.07      |
|                    | Fresh        | 1    | 15.19 | 44.66 | 672             | 9.08         | 965         | 4.06      |
|                    | Fresh        | 2    | 9.21  | 27.08 | 529             | 8.16         | 461         | 2.21      |
|                    | Fresh        | 4    | 27.01 | 79.41 | 921             | 19.17        | 2351        | 15.22     |
|                    | Fresh        | 8    | 3.80  | 11.17 | 616             | 1.70         | 221         | 0.19      |
| <b>Indicated</b>   | <b>Total</b> |      | 59    | 171   | 762             | 12.75        | 4179        | 21.75     |
| <b>Inferred</b>    | Oxide        | 5    | 1.49  | 3.28  | 1056            | 0.00         | 111         | 0.00      |
|                    | Oxide        | 6    | 2.40  | 5.28  | 590             | 0.00         | 100         | 0.00      |
|                    | Transition   | 5    | 1.26  | 3.02  | 1054            | 23.22        | 102         | 0.70      |
|                    | Fresh        | 3    | 2.84  | 8.35  | 894             | 23.34        | 240         | 1.95      |
|                    | Fresh        | 5    | 10.02 | 29.46 | 980             | 20.17        | 928         | 5.94      |
|                    | Fresh        | 6    | 8.39  | 23.28 | 274             | 1.15         | 205         | 0.27      |
|                    | Fresh        | 7    | 2.91  | 8.56  | 1377            | 20.46        | 379         | 1.75      |
|                    | Fresh        | 10   | 1.39  | 4.09  | 922             | 12.18        | 121         | 0.50      |
| <b>Inferred</b>    | <b>Total</b> |      | 31    | 85    | 797             | 13.02        | 2187        | 11.11     |
| <b>Grand Total</b> |              |      | 89    | 256   | 774             | 12.84        | 6366        | 32.86     |



**Figure 10 - Nimbus High Grade Lodes Location and Number (re Tables page 23, page 24)**



## **ASX ANNOUNCEMENT**

### **Forward Looking and Cautionary Statements**

Some statements in this report regarding estimates or future events are forward looking statements. They include indications of, and guidance on, future earnings, cash flow, costs and financial performance. Forward looking statements include, but are not limited to, statements preceded by words such as “planned”, “expected”, “projected”, “estimated”, “may”, “scheduled”, “intends”, “anticipates”, “believes”, “potential”, “could”, “nominal”, “conceptual” and similar expressions. Forward looking statements, opinions and estimates included in this announcement are based on assumptions and contingencies which are subject to change without notice, as are statements about market and industry trends, which are based on interpretations of current market conditions. Forward looking statements are provided as a general guide only and should not be relied on as a guarantee of future performance. Forward looking statements may be affected by a range of variables that could cause actual results to differ from estimated results, and may cause the Company’s actual performance and financial results in future periods to materially differ from any projections of future performance or results expressed or implied by such forward looking statements. These risks and uncertainties include but are not limited to liabilities inherent in mine development and production, geological, mining and processing technical problems, the inability to obtain any additional mine licenses, permits and other regulatory approvals required in connection with mining and third party processing operations, competition for among other things, capital, acquisition of reserves, undeveloped lands and skilled personnel, incorrect assessments of the value of acquisitions, changes in commodity prices and exchange rate, currency and interest fluctuations, various events which could disrupt operations and/or the transportation of mineral products, including labour stoppages and severe weather conditions, the demand for and availability of transportation services, the ability to secure adequate financing and management’s ability to anticipate and manage the foregoing factors and risks. There can be no assurance that forward looking statements will prove to be correct.

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

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

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

**Code, 2012 Edition – Table 1 – Nimbus Ag Project**

**Section 1 Sampling Techniques and Data**

| CRITERIA                   | JORC CODE EXPLANATION   | COMMENTARY   |
|----------------------------|---|--|
| <p>Sampling techniques</p> | <p>1. <i>Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</i></p> | <p>This mineral resource estimation updates the previous estimate announced on 5<sup>th</sup> August 2013. This new estimate includes the results of an additional 12 diamond drill holes for 5,099.44m and 70 RC holes for 18,993m, and re-assaying of 4,486m of historic diamond core.</p> <p>The drilling programmes conducted by MacPhersons resulted in industry standard quality control of sampling. The drilling to date included in the Nimbus database is:</p> <ul style="list-style-type: none"> <li>• Historical - 336 RC holes 29,702m, 88 DDH 21,447m</li> <li>• MRP Core – 38 DDH holes 11,212.88m</li> <li>• MRP RC – 182 RC holes 25,992m</li> <li>• MRP Aircore – 200 AC 9,958m</li> </ul> |
|                            | <p>2. <i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i></p>  | <p>Diamond core was marked, logged, photographed and sawn in half and sampled according to lithology with minimum lengths of 0.3m and maximum lengths of 1.5m. For core, longer sample lengths over 1m are generally where there is a reduction in core recovery for various reasons.</p> <p>All RC drilling is sampled on a one metre interval basis. Geology is logged at one metre intervals and an estimate of sample recovery is also made to ensure that the sample is representative.</p>   |

personal use only

| CRITERIA                     | JORC CODE EXPLANATION  | COMMENTARY   |
|------------------------------|--|--|
|                              | <p>3. <i>Aspects of the determination of mineralisation that are Material to the Public Report.</i><br/> <i>In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g 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 (eg submarine nodules) may warrant disclosure of detailed information.</i></p> | <p>For both methods of drilling appropriate QAQC protocols were followed, including submission of commercial standards.</p> <p>All samples will be analysed by ALS method ME ICP-61 (33 element scan); if Ag was &gt; 100ppm then the sample is re-assayed by method OG62. If the Ag assay returned &gt;1,500ppm, the laboratory (ALS) will switch to analytical method OG46 or OG62h. If Zn was &gt;10,000ppm (or 1%) following ICP-61, then a re-assay using OG62h will be required. Triggers of 10,000ppm for Pb and Cu were also set, with OG62h subsequently used for those samples.</p> <p>Au is assayed by ALS method AA25 which is 50g fire assay.</p> |
| <p>Drilling techniques</p>   | <p>4. <i>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</i></p>   | <p>MRP Core – HQ3 triple tube cored from surface. Orientated by electronic “Reflex Orientation Tool” Core lengths and orientations checked daily by MRP geologist</p> <p>MRP RC Drilling have ranged between 127mm or 143mm hole diameter.</p>   |
| <p>Drill sample recovery</p> | <p>5. <i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></p>   | <p><b>Diamond core</b> recovery is logged and recorded in the database. Some core loss was recorded in NBGT005.</p> <p>Diamond core was reconstructed into continuous runs for orientation marking, depths being checked against the depth marked on the core blocks and rod counts are routinely carried out by the drillers. Core loss noted on core blocks &amp; drilling run sheets for each 1.5m or 3m</p>  |

personal use only

personal use only

| CRITERIA       | JORC CODE EXPLANATION   | COMMENTARY   |
|----------------|---|--|
|                |   | <p>run. Core loss checked daily by MRP by 1m measure/markings of core. Core loss noted by MRP as over-drill, loss, wash out, cavity.</p> <p>RC Drilling recovery is estimated for all one metre intervals and all sample weights from the laboratory are stored in the database.</p>   |
|                | <p>6. Measures taken to maximise sample recovery and ensure representative nature of the samples.</p>   | <p>MRP <b>Core</b> – HQ3 core drilled to increase sample size and maintain highest sample quality and recovery. Other methods used to ensure maximum recovery are triple tube equipment, shorter drill runs, slow drill rotation speed, pump/slide core from core barrel, use of key drill muds &amp; lubricants, regular change drill bits.</p> <p>For MRP RC drilling recoveries are generally very good (&gt;70%) with only rare occasions when groundwater may be encountered that sample recovery may be lower.</p> |
|                | <p>7. 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.</p>                                  | <p>Sample Recovery is generally very high within the mineralisation zone. No significant bias is expected, and any potential bias is not considered material at this stage of resource development.</p>  |
| <p>Logging</p> | <p>8. 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.</p> | <p>All drilling underwent detailed logging through the entire hole with record kept of colour, lithology, degree of oxidation, water table, sulphide content, alteration and veining etc.</p> <p>Diamond core was geotechnically logged for recovery and RQD. Structural (faults, fractures, veins) measurements collected by</p>  |

| CRITERIA | JORC CODE EXPLANATION   | COMMENTARY  |
|----------|---|---|
|          | <p>9. <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i></p> | <p>geological consultant using core frame logger as alpha &amp; beta and recorded in the database.</p> <p>Diamond core and RC chip trays are photographed as a permanent record.</p> <p>Diamond core has been stored at the project site for future reference and RC sample bags are bag “farmed” should any further samples be required.</p> <p>Logging is qualitative in nature, but for visual estimates of mineral percentages.</p> <p>A small amount of quantitative spectral logging has been performed to confirm visual logging (using an Olympus hand-held XRF device).</p> <p>All drill core is photographed prior to sampling, and some is photographed after sampling showing the half or quarter slice surface. Core trays are re-photographed when metallurgical samples are collected. RC Chip trays are also photographed for a visual record.</p> <p>MRP Logging:</p> <ul style="list-style-type: none"> <li>All core and RC chips from surface to EOH geologically logged qualitatively by MRP geologists. Structural and geotechnical logging of diamond core quantitative by its nature.</li> </ul> |

personal use only

| CRITERIA   | JORC CODE EXPLANATION  | COMMENTARY  |
|--|--|---|
|  |  | <p>All logs include records of lithology, oxidation state, colour, mineralisation, alteration and veining. All core and chips photographed in both dry and wet form.</p>  |
|  | <p><i>10. The total length and percentage of the relevant intersections logged.</i></p>                              | <p>All drill holes were logged in full.</p>   |
| <p><i>Sub-sampling techniques and sample preparation</i></p> | <p><i>11. If core, whether cut or sawn and whether quarter, half or all core taken.</i></p>                          | <p>MRP Core –half core sampled to lithological boundaries or a noted abundance or lack of sulphide mineralisation. Min length 0.3m &amp; max length 1.2m. (ave length 1m). Intervals marked with yellow paint marker. Intervals measured to 0.05m. Competent core cut using automated diamond saw. Broken crumbly core cut using mallet and chisel.</p> <p>Where metallurgical test samples required remaining core cut in half leaving quarter core.</p> |
|  | <p><i>12. If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i></p>      | <p>RC samples are collected every one metre with a split sample processed by a rig mounted cone splitter. Generally, if dry sample weights are sufficient, recoveries may be low for wet samples and so a spear sample may be collected to ensure enough sample for laboratory work</p>   |
|  | <p><i>13. For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></p> | <p>MRP drilling - sample preparation and analysis will completed by ALS in Perth.</p>   |

personal use only

| CRITERIA  | JORC CODE EXPLANATION  | COMMENTARY   |
|---|--|--|
|   | <p><i>14. Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></p> <hr/> <p><i>15. Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</i></p> <hr/> <p><i>16. Whether sample sizes are appropriate to the grain size of the material being sampled.</i></p> | <p>Sample preparation via code PREP-31 - logged in tracking system with bar code attached, wet samples dried through ovens, fine crushing to better than 70% passing 2mm, split sample using riffle splitter, split of up to 1000g pulverised to &gt;85% sample passing 75um.</p> <p>Field QAQC procedures included the insertion of commercial standards for all sampling. Standards (including in house blanks) were inserted at a rate of about 1 every 30 samples.</p> <p>Field duplicates for RC drilling only are inserted at an average rate slightly over 1 per hole.</p> <p>Diamond core is always pieced together and oriented as per ori-tool. The same half is always collected removing any sampling bias and similar process is applied to quarter-core.</p> <p>Field duplicates are collected from RC samples and inserted into sample string.</p> <p>Sample sizes are considered to be appropriate for the mineralisation present at Nimbus.</p> |
| <p>Quality of assay data and laboratory tests</p> | <p><i>17. The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></p>   | <p>Historical – Aqua Regia digest technique found to be in appropriate &gt;50ppmAg, Triple acid digest (HCL, HNO3, HClO4) used &gt;50ppmAg, 10x dilution for &gt;500ppmAg .</p>  |

personal use only

| CRITERIA | JORC CODE EXPLANATION  | COMMENTARY  |
|----------|--|---|
|          |  | <p>MRP - Silver &amp; Base Metals - Ag(0.5ppm), As(5ppm), Cr(1ppm), Cu(1ppm), Fe(0.01%), Ni(1ppm), Pb(2ppm), S(0.01%), Sb(5ppm), Zn(2ppm) 4 acid digest, HCl Leach (GEO-4ACID).</p> <p>Analysis - ME – ICP61 – AES, assays of &gt;100ppmAg, &gt;1%Zn, 1%Pb, 1%Cu 2nd charge from pulp and re-assayed at different dilutions (ME-OG62).</p> <p>Mercury - Hg(0.01ppm) Cold by Aqua Regia Digestion (GEO-AR01) Analysis (AAS).</p> <p>Gold - Au 30g charge by Fire Assay Fusion (FA-FUS01) (AAS). Assays &gt;2ppmAu – reassay by FA AAS. Assays &gt;5ppmAu a 2nd sample from coarse reject pulverised 30g charge analysed by FA AAS.</p> |
|          | <p><i>18. For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</i></p> | <p>Sampling techniques, other than drill hole samples already discussed, were not utilised as part of the 2013 MRE. However, an XRF instrument is used as a guide to confirm visual mineralisation and to do background checks on less visual mineralisation. It can also be useful to determine lithological changes not immediately apparent, as in the deeply weathered profile. The machine is calibrated on a regular schedule.</p>  |
|          | <p><i>19. Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</i></p>                     | <p>Field QAQC procedures included the insertion of field duplicates (RC samples) and commercial standards. The standards generally</p>  |

personal use only



| CRITERIA                                     | JORC CODE EXPLANATION  | COMMENTARY  |
|--|--|---|
|  |  | <p>performed well with results falling within prescribed two standard deviation limits.</p> <ul style="list-style-type: none"> <li>• Performance of standards for monitoring the accuracy, precision and reproducibility of the silver and zinc assay results received from ALS were monitored.</li> <li>• Certified Standards from commercial supplier are inserted on average 1 in every 30 samples. Standards reported for Ag &amp; Zn analysis and vary between 2.9ppm Ag to 389ppm Ag, &amp; from 210ppm Zn to 65,582ppm Zn.</li> <li>• Blank samples compiled from barren non-Nimbus RC holes. Blanks test for contamination within the sample preparation equipment at the lab.</li> <li>• Laboratory provide pulp duplicates from diamond core and RC samples.</li> </ul> |
| <p>Verification of sampling and assaying</p> | <p>20. <i>The verification of significant intersections by either independent or alternative company personnel.</i></p>                      | <p>At least two different company personnel visually verified intersections in both diamond core and RC drill chips.</p>  |
|  | <p>21. <i>The use of twinned holes.</i></p>  | <p>Recent drilling has not been designed to provide twin holes, but some of it is designed as resource infill drilling which aims to confirm the tenor and width of mineralisation encountered in previous resource drilling.</p>   |
|  | <p>22. <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></p> | <p>Drill hole data collected in the form of spread sheets, for drill hole collars, surveys, lithology, sample intervals and assays.</p> <p>All data verified and validated by MRP geologists imported into Gemcom GEMS™ (GEMS) database, licensed to MRP and maintained by MRP (Kalgoorlie).</p>  |

personal use only

| CRITERIA                              | JORC CODE EXPLANATION   | COMMENTARY   |
|---------------------------------------|---|--|
|                                       |   | <p>MRP are presently in the process of taking control of their Datashed database which has previously been managed by CSA Global in Perth.</p>   |
|                                       | <p><i>23. Discuss any adjustment to assay data.</i></p>   | <p>Assay values designated less than detection are assigned a value 0.5 x LTD limit value. Where the assay value is labelled as IS or NS (insufficient / no sample) the assay value is set to absent.</p>  |
| <p><i>Location of data points</i></p> | <p><i>24. Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</i></p> | <p>The diamond hole was surveyed by Reflex single shot and by Gyroscopic method. The Gyro method is given priority over the Reflex data in the database</p> <p>A Gyro Survey Instrument is used at drillhole completion to measure the dip and azimuth of the drillhole trace.</p> <p>The drill rig operated gyro has been validated by using an independent contractor to also survey several of the earlier drilled RC holes</p> |
|                                       | <p><i>25. Specification of the grid system used.</i></p>  | <p>All grid referencing is completed and managed in MGA GDA 94 Zone 51 co-ordinates.</p> <p>Elevation is recorded in AHD.</p>  |
|                                       | <p><i>26. Quality and adequacy of topographic control.</i></p>  | <p>Since 2011 - Fugro Spatial Solutions Pty Ltd detailed aerial photographic survey. Ortho-rectification and mosaicking performed</p>  |

personal use only

| CRITERIA  | JORC CODE EXPLANATION   | COMMENTARY   |
|---|---|--|
|   |   | <p>using Inpho Digital Photogrammetric Systems. Expected accuracy of detail within 0.8mm at the ortho-image map scale.</p> <p>Minecomp Pty Ltd and Cardno Ltd (Spectrum Surveys) carry out land pickups using DGPS and tied into historical databases, current surveys and Fugro aerial digital survey and confirmed all survey closures.</p>  |
| <p><i>Data spacing and distribution</i></p>                           | <p><i>27.Data spacing for reporting of Exploration Results.</i></p> <hr/> <p><i>28.Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</i></p> <hr/> <p><i>29.Whether sample compositing has been applied.</i></p> | <p>Drill holes are modelled and drilled at 20m grid line section spacing.</p> <p>The holes in the RC program are on sections drilled 20m apart.</p> <p>The data spacing and distribution is sufficient to demonstrate spatial and grade continuity to support the planned updated Mineral Resource estimate (MRE) under the 2012 JORC code.</p> <p>The holes reported in this program have not yet been incorporated into a reported Ore Reserve and Mineral Resource Statement.</p> <p>No sample compositing is undertaken. All RC drilling is sampled at 1m intervals which is standard for the industry. Diamond core is selectively sampled based on geological features with interval ranges from 0.3m to 1.5m.</p> |
| <p><i>Orientation of data in relation to geological structure</i></p> | <p><i>30.Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i></p>   | <p>The drillholes have been designed to test the MRE outlines orientated on a grid striking 035°, based upon an interpreted strike of mineralisation of 305°. A subtle change in strike to 325° was identified in the mineralised trend at depth at the south-eastern portion. The</p>   |

personal use only

| CRITERIA                        | JORC CODE EXPLANATION   | COMMENTARY   |
|---------------------------------|---|--|
|                                 | <p><i>31.If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</i></p> | <p>sampling is considered to be unbiased with respect to drillhole orientation versus strike and dip of mineralisation.</p> <p>Diamond drilling in the past has confirmed that drilling orientation did not introduce any bias regarding the orientation of the mineralised lodes.</p>   |
| <p><i>Sample security</i></p>   | <p><i>32.The measures taken to ensure sample security.</i></p>  | <p>Chain of Custody is managed by MacPhersons. Samples are stored on site and delivered to the assay laboratory in Perth by a contracted transporter. Whilst in storage, they are kept in locked premises. Samples submission sheets are in place to track the progress of sample batches and the laboratory provides a web based tracking system to monitor job progress.</p> |
| <p><i>Audits or reviews</i></p> | <p><i>33.The results of any audits or reviews of sampling techniques and data</i></p>   | <p>CSA and SRK have reviewed sampling procedures between 2011 and 2013 and ascertained the protocols to be to industry standard. Any recommendations made were of minor consequence and have not impacted upon the validity of earlier sampling programmes.</p>  |

personal use only

## ASX ANNOUNCEMENT

### JORC Code, 2012 Edition – Table 1- Nimbus Ag Project

#### Section 2 Reporting of Exploration Results

| CRITERIA                                | JORC CODE EXPLANATION  | COMMENTARY  |
|---|--|---|
| Mineral tenement and land tenure status | 34. Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. | <p>The Nimbus Project is located approximately 17km east-southeast of Kalgoorlie, 2km east of Boorara and 6.5km north-northwest of Golden Ridge. The Nimbus mine site is on the mining leases M26/490 and M26/598 accessed from the Kalgoorlie-Bulong Road via an unsealed haul road. The tenements are located within the Hampton Hill Pastoral Station.</p> <p>MacPhersons Resources (MRP) purchased the Nimbus property on 8<sup>th</sup> September 2011 from Kalgoorlie Ore Treatment Company Pty Ltd (KOTC). The tenements are held by KOTC, a wholly owned subsidiary of MacPhersons Resources Ltd.</p> |
|   | 35. 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 tenements are in good standing and no known impediments exist.  |
| Exploration done by other parties       | 36. Acknowledgment and appraisal of exploration and production by other parties.   | <p>Archaean Gold</p> <ul style="list-style-type: none"> <li>• Soil sampling - 200m x 40m spaced soil sampling.</li> <li>• Drilling - 32,538m of RAB, 18,449m of RC and 3,214m of diamond core.</li> <li>• Geophysics - Surface electromagnetic (EM) survey</li> </ul> <p>Polymetals</p> <ul style="list-style-type: none"> <li>• Mining - 331,283t of ore @ 348g/t Ag.</li> <li>• Processing – 318,992t of ore @ 352g/t Ag to produce 3,616,000 oz Ag</li> <li>• Various Resource estimates, and 2 open pit mining phases.</li> </ul>   |

| CRITERIA              | JORC CODE EXPLANATION   | COMMENTARY   |
|-----------------------|---|--|
| <p><i>Geology</i></p> | <p><i>37. Deposit type, geological setting and style of mineralisation.</i></p> | <p>Nimbus is hosted in felsic units of the Boorara Domain and is the only known silver – zinc deposit in the Eastern Goldfields. Mineralisation is associated with volcanic hosted massive sulphides. The deposit consists of multiple zones of oxide silver/gold mineralisation, supergene silver/gold mineralisation and deeper primary silver/gold/zinc sulphide zones. In addition eighteen primary zinc sulphide domains have been modelled. Supergene-enriched oxide silver mineralisation overlies southeast plunging shoots of disseminated to massive Fe-Zn-Pb-As sulphides with associated elements including Ag, Sb, Bi and Cd, and also with high Hg content. Although the genesis of the base metal mineralisation is a topic of much discussion it is thought by most workers that the Nimbus deposit to be a volcanogenic hosted massive sulphide (VHMS) style deposit.</p> |

personal use only

| CRITERIA               | JORC CODE EXPLANATION   | COMMENTARY   |         |              |               |         |            |             |         |         |           |            |        |        |     |     |         |           |            |        |        |     |     |         |           |            |        |        |     |     |         |           |            |        |        |     |     |         |           |            |        |        |     |     |
|------------------------|---|--|---------|--------------|---------------|---------|------------|-------------|---------|---------|-----------|------------|--------|--------|-----|-----|---------|-----------|------------|--------|--------|-----|-----|---------|-----------|------------|--------|--------|-----|-----|---------|-----------|------------|--------|--------|-----|-----|---------|-----------|------------|--------|--------|-----|-----|
| Drill hole Information | <p>38.A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:</p> <ol style="list-style-type: none"> <li>1. easting and northing of the drill hole collar</li> <li>2. elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>3. dip and azimuth of the hole</li> <li>4. down hole length and interception depth</li> <li>5. hole length.</li> </ol> <p>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</p> | <p>Drilling includes an historical (pre-MRP) drillhole database and a recent MRP database containing drillhole data from 2011 to present day. Both data sets are a mix of reverse circulation (RC) and diamond core drilling. The MRP database also contains aircore drill hole data, targeting TSF1, TSF2 and prospects to the north of the Nimbus project.</p> <p>The historical database has 336 RC holes (29,702m) including 97 grade control holes (3,108m) drilled within the Discovery Pit. A total of 88 diamond core holes (21,447m) were also drilled. Not all of these holes penetrated mineralisation. Most of the historical RC and diamond core drillhole data were considered to have reliable quality assurance to be included in the 2013 Mineral Resource Estimate (MRE). Rotary Air Blast (RAB), aircore and selected drillholes from RC and diamond core drilling were suppressed and not used in the MRE due to quality assurance (QAQC) concerns, where data was incomplete or due to sample quality. The MRP database contains 38 diamond holes for 11,212.88 metres of diamond core, 220 RC drill holes (35,284m) and 200 aircore drill holes (9,958m) at the time of database cut-off at 18/11/2014.</p> <p>All reports contain a table detailing hole collar location and downhole survey details. The entire database has previously been managed by CSA Global using Datashed and signed off as being in full agreement with the MRP GEMS / Surpac databases. CSA have maintained and validated the full database through to the August 2014 drilling.</p> |         |              |               |         |            |             |         |         |           |            |        |        |     |     |         |           |            |        |        |     |     |         |           |            |        |        |     |     |         |           |            |        |        |     |     |         |           |            |        |        |     |     |
|                        |   | holes reported here are as follows:-   |         |              |               |         |            |             |         |         |           |            |        |        |     |     |         |           |            |        |        |     |     |         |           |            |        |        |     |     |         |           |            |        |        |     |     |         |           |            |        |        |     |     |
|                        |   | <table border="1"> <thead> <tr> <th>HOLE ID</th> <th>Easting (mE)</th> <th>Northing (mN)</th> <th>RL (m)</th> <th>Length (m)</th> <th>Azimuth (°)</th> <th>Dip (°)</th> </tr> </thead> <tbody> <tr> <td>NBDH010</td> <td>371245.69</td> <td>6593081.78</td> <td>394.67</td> <td>921.10</td> <td>220</td> <td>-55</td> </tr> <tr> <td>NBDH011</td> <td>370910.49</td> <td>6593109.41</td> <td>399.00</td> <td>399.40</td> <td>215</td> <td>-60</td> </tr> <tr> <td>NBDH012</td> <td>370941.40</td> <td>6593116.48</td> <td>398.23</td> <td>429.20</td> <td>215</td> <td>-60</td> </tr> <tr> <td>NBDH013</td> <td>370991.25</td> <td>6593143.37</td> <td>397.95</td> <td>549.04</td> <td>215</td> <td>-60</td> </tr> <tr> <td>NBDH021</td> <td>370961.85</td> <td>6593100.90</td> <td>398.69</td> <td>450.10</td> <td>215</td> <td>-60</td> </tr> </tbody> </table>  | HOLE ID | Easting (mE) | Northing (mN) | RL (m)  | Length (m) | Azimuth (°) | Dip (°) | NBDH010 | 371245.69 | 6593081.78 | 394.67 | 921.10 | 220 | -55 | NBDH011 | 370910.49 | 6593109.41 | 399.00 | 399.40 | 215 | -60 | NBDH012 | 370941.40 | 6593116.48 | 398.23 | 429.20 | 215 | -60 | NBDH013 | 370991.25 | 6593143.37 | 397.95 | 549.04 | 215 | -60 | NBDH021 | 370961.85 | 6593100.90 | 398.69 | 450.10 | 215 | -60 |
| HOLE ID                | Easting (mE)  | Northing (mN)  | RL (m)  | Length (m)   | Azimuth (°)   | Dip (°) |            |             |         |         |           |            |        |        |     |     |         |           |            |        |        |     |     |         |           |            |        |        |     |     |         |           |            |        |        |     |     |         |           |            |        |        |     |     |
| NBDH010                | 371245.69   | 6593081.78   | 394.67  | 921.10       | 220           | -55     |            |             |         |         |           |            |        |        |     |     |         |           |            |        |        |     |     |         |           |            |        |        |     |     |         |           |            |        |        |     |     |         |           |            |        |        |     |     |
| NBDH011                | 370910.49   | 6593109.41   | 399.00  | 399.40       | 215           | -60     |            |             |         |         |           |            |        |        |     |     |         |           |            |        |        |     |     |         |           |            |        |        |     |     |         |           |            |        |        |     |     |         |           |            |        |        |     |     |
| NBDH012                | 370941.40   | 6593116.48   | 398.23  | 429.20       | 215           | -60     |            |             |         |         |           |            |        |        |     |     |         |           |            |        |        |     |     |         |           |            |        |        |     |     |         |           |            |        |        |     |     |         |           |            |        |        |     |     |
| NBDH013                | 370991.25   | 6593143.37   | 397.95  | 549.04       | 215           | -60     |            |             |         |         |           |            |        |        |     |     |         |           |            |        |        |     |     |         |           |            |        |        |     |     |         |           |            |        |        |     |     |         |           |            |        |        |     |     |
| NBDH021                | 370961.85   | 6593100.90   | 398.69  | 450.10       | 215           | -60     |            |             |         |         |           |            |        |        |     |     |         |           |            |        |        |     |     |         |           |            |        |        |     |     |         |           |            |        |        |     |     |         |           |            |        |        |     |     |

| CRITERIA | JORC CODE EXPLANATION | COMMENTARY |           |            |        |        |     |     |
|----------|-----------------------|------------|-----------|------------|--------|--------|-----|-----|
|          |                       | NBDH034    | 370981.94 | 6593087.06 | 399.25 | 501.50 | 215 | -60 |
|          |                       | NBDH035    | 370739.10 | 6593145.00 | 396.10 | 537.60 | 215 | -60 |
|          |                       | NBGT001    | 370670.69 | 6593195.72 | 394.57 | 300.50 | 200 | -70 |
|          |                       | NBGT002    | 370566.02 | 6592910.86 | 398.64 | 339.50 | 20  | -60 |
|          |                       | NBGT003    | 370999.72 | 6593068.94 | 399.51 | 190.80 | 200 | -60 |
|          |                       | NBGT004    | 370930.62 | 6592899.60 | 401.88 | 259.70 | 20  | -60 |
|          |                       | NBGT005    | 370939.05 | 6592908.39 | 401.61 | 221.00 | 36  | -56 |
|          |                       | NBRC125    | 370770.10 | 6593149.71 | 396.52 | 174.00 | 215 | -60 |
|          |                       | NBRC126    | 370785.38 | 6593169.96 | 396.26 | 210.00 | 215 | -60 |
|          |                       | NBRC127    | 370748.41 | 6593163.43 | 395.88 | 170.00 | 215 | -60 |
|          |                       | NBRC128    | 370763.63 | 6593184.38 | 395.59 | 210.00 | 215 | -60 |
|          |                       | NBRC129    | 370930.88 | 6593020.57 | 401.83 | 192.00 | 125 | -60 |
|          |                       | NBRC130    | 370728.76 | 6593177.83 | 395.52 | 170.00 | 215 | -60 |
|          |                       | NBRC131    | 370707.51 | 6593190.13 | 395.19 | 180.00 | 215 | -60 |
|          |                       | NBRC135    | 370188.32 | 6593319.97 | 396.20 | 198.00 | 215 | -60 |
|          |                       | NBRC136    | 370194.28 | 6593286.60 | 396.26 | 246.00 | 215 | -60 |
|          |                       | NBRC137    | 370193.15 | 6592473.27 | 402.80 | 156.00 | 35  | -60 |
|          |                       | NBRC138    | 371062.20 | 6593094.87 | 398.58 | 310.00 | 220 | -63 |

personal use only



| CRITERIA | JORC CODE EXPLANATION | COMMENTARY |           |            |        |        |     |     |
|----------|-----------------------|------------|-----------|------------|--------|--------|-----|-----|
|          |                       | NBRC139    | 371054.60 | 6593077.49 | 398.90 | 280.00 | 212 | -60 |
|          |                       | NBRC140    | 371042.00 | 6593063.65 | 399.55 | 240.00 | 218 | -62 |
|          |                       | NBRC141    | 371026.70 | 6593123.38 | 398.33 | 330.00 | 200 | -60 |
|          |                       | NBRC142    | 371046.44 | 6593108.77 | 398.55 | 340.00 | 204 | -60 |
|          |                       | NBRC143    | 371032.06 | 6593097.75 | 398.95 | 202.00 | 215 | -60 |
|          |                       | NBRC144    | 371018.61 | 6593078.34 | 399.51 | 240.00 | 217 | -60 |
|          |                       | NBRC145    | 370876.80 | 6593129.73 | 398.37 | 354.00 | 221 | -63 |
|          |                       | NBRC146    | 370860.22 | 6593157.20 | 397.16 | 270.00 | 215 | -64 |
|          |                       | NBRC147    | 370841.94 | 6593167.70 | 396.84 | 276.00 | 217 | -60 |
|          |                       | NBRC148    | 370834.13 | 6593157.41 | 397.02 | 402.00 | 219 | -62 |
|          |                       | NBRC149    | 370810.71 | 6593169.91 | 396.45 | 350.00 | 215 | -60 |
|          |                       | NBRC150    | 370804.96 | 6593155.94 | 396.80 | 310.00 | 212 | -60 |
|          |                       | NBRC151    | 370900.87 | 6592946.18 | 402.51 | 222.00 | 39  | -59 |
|          |                       | NBRC152    | 371100.54 | 6593010.97 | 399.61 | 240.00 | 211 | -60 |
|          |                       | NBRC153    | 371084.56 | 6592986.40 | 400.37 | 198.00 | 210 | -59 |
|          |                       | NBRC154    | 371112.78 | 6592987.49 | 399.61 | 198.00 | 214 | -59 |
|          |                       | NBRC155    | 370972.34 | 6592872.23 | 401.65 | 150.00 | 43  | -60 |
|          |                       | NBRC156    | 370967.73 | 6593047.55 | 400.71 | 198.00 | 208 | -61 |

personal use only

| CRITERIA | JORC CODE EXPLANATION | COMMENTARY |           |            |        |        |     |     |
|----------|-----------------------|------------|-----------|------------|--------|--------|-----|-----|
|          |                       | NBRC157    | 370963.27 | 6592902.64 | 401.03 | 150.00 | 41  | -60 |
|          |                       | NBRC158    | 371073.89 | 6593021.71 | 399.90 | 180.00 | 216 | -59 |
|          |                       | NBRC159    | 370766.26 | 6593059.11 | 398.11 | 180.00 | 210 | -61 |
|          |                       | NBRC160    | 370800.02 | 6593060.86 | 399.25 | 186.00 | 208 | -60 |
|          |                       | NBRC161    | 371055.32 | 6593029.48 | 400.12 | 200.00 | 206 | -60 |
|          |                       | NBRC162    | 371113.99 | 6592944.80 | 400.14 | 140.00 | 209 | -60 |
|          |                       | NBRC163    | 370995.27 | 6593121.82 | 398.34 | 390.00 | 205 | -61 |
|          |                       | NBRC164    | 371135.85 | 6592973.57 | 399.32 | 220.00 | 207 | -59 |
|          |                       | NBRC165    | 371092.39 | 6592956.59 | 400.50 | 126.00 | 213 | -60 |
|          |                       | NBRC166    | 371067.74 | 6592956.86 | 401.05 | 150.00 | 209 | -59 |
|          |                       | NBRC167    | 371002.73 | 6592872.22 | 400.85 | 204.00 | 211 | -59 |
|          |                       | NBRC224    | 370979.35 | 6593144.49 | 397.85 | 378.00 | 185 | -61 |
|          |                       | NBRC225    | 371033.36 | 6593044.68 | 400.30 | 210.00 | 217 | -60 |
|          |                       | NBRC226    | 371005.11 | 6593062.68 | 399.65 | 210.00 | 210 | -60 |
|          |                       | NBRC227    | 370911.30 | 6592960.97 | 402.77 | 162.00 | 38  | -60 |
|          |                       | NBRC228    | 370573.92 | 6592964.01 | 398.17 | 300.00 | 35  | -59 |
|          |                       | NBRC229    | 370590.17 | 6593308.63 | 394.93 | 210.00 | 35  | -60 |
|          |                       | NBRC230    | 370615.10 | 6593341.71 | 394.41 | 210.00 | 35  | -58 |

personal use only

| CRITERIA | JORC CODE EXPLANATION | COMMENTARY |           |            |        |        |     |     |
|----------|-----------------------|------------|-----------|------------|--------|--------|-----|-----|
|          |                       | NBRC231    | 370568.11 | 6593282.67 | 395.39 | 210.00 | 35  | -59 |
|          |                       | NBRC232    | 370560.93 | 6592971.49 | 398.29 | 280.00 | 35  | -56 |
|          |                       | NBRC233    | 370542.36 | 6592962.28 | 398.00 | 228.00 | 34  | -60 |
|          |                       | NBRC234    | 370718.73 | 6592946.69 | 400.62 | 258.00 | 30  | -61 |
|          |                       | NBRC235    | 371125.94 | 6593005.67 | 398.97 | 216.00 | 210 | -57 |
|          |                       | NBRC236    | 370694.47 | 6592867.54 | 400.04 | 402.00 | 20  | -60 |
|          |                       | NBRC237    | 370633.33 | 6592903.35 | 399.63 | 480.00 | 30  | -61 |
|          |                       | NBRC238    | 370736.00 | 6592839.98 | 400.82 | 444.00 | 25  | -62 |
|          |                       | NBRC239    | 370777.32 | 6592810.11 | 401.38 | 361.00 | 20  | -60 |
|          |                       | NBRC240    | 370814.71 | 6592778.95 | 401.75 | 396.00 | 20  | -55 |
|          |                       | NBRC241    | 370937.48 | 6592776.18 | 403.02 | 378.00 | 20  | -56 |
|          |                       | NBRC242    | 370890.03 | 6592804.66 | 403.47 | 400.00 | 20  | -55 |
|          |                       | NBRC243    | 370755.57 | 6592911.70 | 401.66 | 438.00 | 20  | -59 |
|          |                       | NBRC244    | 370884.84 | 6592835.62 | 403.90 | 390.00 | 20  | -56 |
|          |                       | NBRC245    | 370975.61 | 6592752.70 | 401.90 | 366.00 | 20  | -55 |
|          |                       | NBRC246    | 370932.33 | 6592809.90 | 403.21 | 323.00 | 20  | -55 |
|          |                       | NBRC247    | 370805.19 | 6592813.83 | 401.73 | 474.00 | 19  | -57 |
|          |                       | NBRC248    | 370906.85 | 6592866.41 | 403.00 | 168.00 | 20  | -55 |

personal use only

| CRITERIA | JORC CODE EXPLANATION | COMMENTARY |           |            |        |        |    |     |
|----------|-----------------------|------------|-----------|------------|--------|--------|----|-----|
|          |                       | NBRC248A   | 370907.85 | 6592867.41 | 403.00 | 231.00 | 20 | -55 |
|          |                       | NBRC249    | 370793.77 | 6592907.89 | 402.68 | 360.00 | 20 | -55 |
|          |                       | NBRC250    | 370958.82 | 6592855.94 | 402.11 | 360.00 | 21 | -56 |
|          |                       | NBRC251    | 371015.73 | 6592710.60 | 401.63 | 372.00 | 20 | -56 |
|          |                       | NBRC252    | 370945.68 | 6592739.67 | 401.64 | 396.00 | 20 | -56 |
|          |                       | NBRC253    | 370900.90 | 6592771.25 | 402.87 | 432.00 | 21 | -55 |

personal use only

personal use only

| CRITERIA                               | JORC CODE EXPLANATION  | COMMENTARY  |
|--|--|---|
| <p><i>Data aggregation methods</i></p> | <p><i>39. In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</i></p>   | <p>The purpose of this document is to report exploration results from recent drilling at Nimbus Deposit.</p> <p>No top cut grades are applied to the reporting of exploration results.</p> <p>Minimum reportable grade interval taken as 1m in consideration of a reasonable minimum mining width. Internal dilution of a maximum of two consecutive metres of waste grades are allowable for each intersection reported.</p> |
|  | <p><i>40. 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.</i></p> | <p>Mineralised intercepts above a certain lower cut off will be reported in their entirety and any high grade zones within that intercept will be reported separately .</p> <p>The MRE reporting does not use metal equivalent grades. Domains are reported with separate contained metal grades.</p>   |
|  | <p><i>41. The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></p>  | <p>Metal equivalent grades are not being reported.</p>  |

| CRITERIA   | JORC CODE EXPLANATION  | COMMENTARY   |
|--|--|--|
| <p><i>Relationship between mineralisation widths and intercept lengths</i></p> | <p><i>42. These relationships are particularly important in the reporting of Exploration Results.</i></p>  | <p>Cross sections of the deposit showing the relationship to drill hole azimuths and dips to the geological interpretations are presented in the document, and in ASX releases.</p>  |
|  | <p><i>43. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i></p>  | <p>.....</p> <p>The mineralisation is steeply dipping (-80°), striking 305°-125°</p> <p>Historical drilling is predominantly along 020° or 200° and are inclined between -40° and -90°</p> <p>MRP DD holes are along 020°-200°. MRP RC holes are along 035° or 215° at right angles to the mineralisation trend. Drill holes are inclined between -55° and -60°.</p> |
|  | <p><i>44. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</i></p>  | <p>All intercepts reported are down hole intercepts. The intersection angles for the drilling range from 40° – 60°. Therefore true width can be estimated and is approximately 2/3 the reported downhole intersections. Vertical holes will tend to exaggerate the intersection width.</p>   |
| <p><i>Diagrams</i></p>   | <p><i>45. 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. (NOTE: Any map, section, diagram, or other graphic or photo must be of high enough resolution to clearly be viewed, copied and read without distortion or loss of focus).</i></p> | <p>Numerous maps and sections included in the reporting and associated file documentation.</p> <p>There are two figures at the end of this section that show where the current drillholes are positioned with respect to the mineralisation.</p> <p>Figure 1: Plan of holes.</p>   |
| <p><i>Balanced reporting</i></p>   | <p><i>46. Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</i></p>  | <p>Exploration results reported here are all those significant intercepts received to date for the diamond and RC drilling programs from August 2014 onwards.</p>  |

personal use only

| CRITERIA                                  | JORC CODE EXPLANATION  | COMMENTARY   |
|---|--|--|
| <p>Other substantive exploration data</p> | <p>47. 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.</p> | <p>Geological features are identified in section 3.</p> <p>Deposit strongly oxidised down to 90m below surface. Composition of mineralisation in weathered zone is complex.</p> <p>At base of weathering (60-80m) a sub-horizontal supergene zone of massive pyrite often forms a cap on primary mineralisation.</p> <p>Mineralised shoots in primary disseminated to massive sulphide zone can be up to 80m wide and plunging 45° SE.</p> <p>Multi element assaying is conducted routinely on all samples.</p> <p>Geotechnical logging was carried out on the diamond drillhole for recovery, RQD and number of defects (per interval). Information on structure type, dip, dip direction, alpha angle, beta angle, texture, shape, roughness and fill material is stored in the structure table of the database.</p> |
| <p>Further work</p>                       | <p>48. The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</p>  | <p>The primary Ag-Zn-Au mineralisation remains open down plunge which some of the deeper RC holes are currently testing.</p> <p>Further deep drilling may be planned to examine further potential down-plunge extensions based on results from this reported drilling.</p> <p>Further to the deep drilling and extensional targets shown in the Figures 1 &amp; 2, drilling is planned to follow-up near surface mineralisation identified in auger soil sampling that may be associated with repetitions and extensions outside the current pit designs.</p>  |

personal use only

## ASX ANNOUNCEMENT

| CRITERIA            | JORC CODE EXPLANATION  | COMMENTARY  |
|---------------------|--|---|
| <p>Further work</p> | <p>49. <i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i><br/>           (NOTE: Any map, section, diagram, or other graphic or photo must be of high enough resolution to clearly be viewed, copied and read without distortion or loss of focus).</p> | <p>Progressive testing program of proposed extensions is shown in Figure 1 through continuation of the triangulations representing the existing mineralisation lenses at Nimbus Discovery and East Pit zones.</p> <p>There exists many other extensions to historical drillholes, however they do not form part of this program, as they would be classed as exploration whereas the purpose of this program is to increase mine inventory and to reclassify resources to reserves.</p> |

personal use only



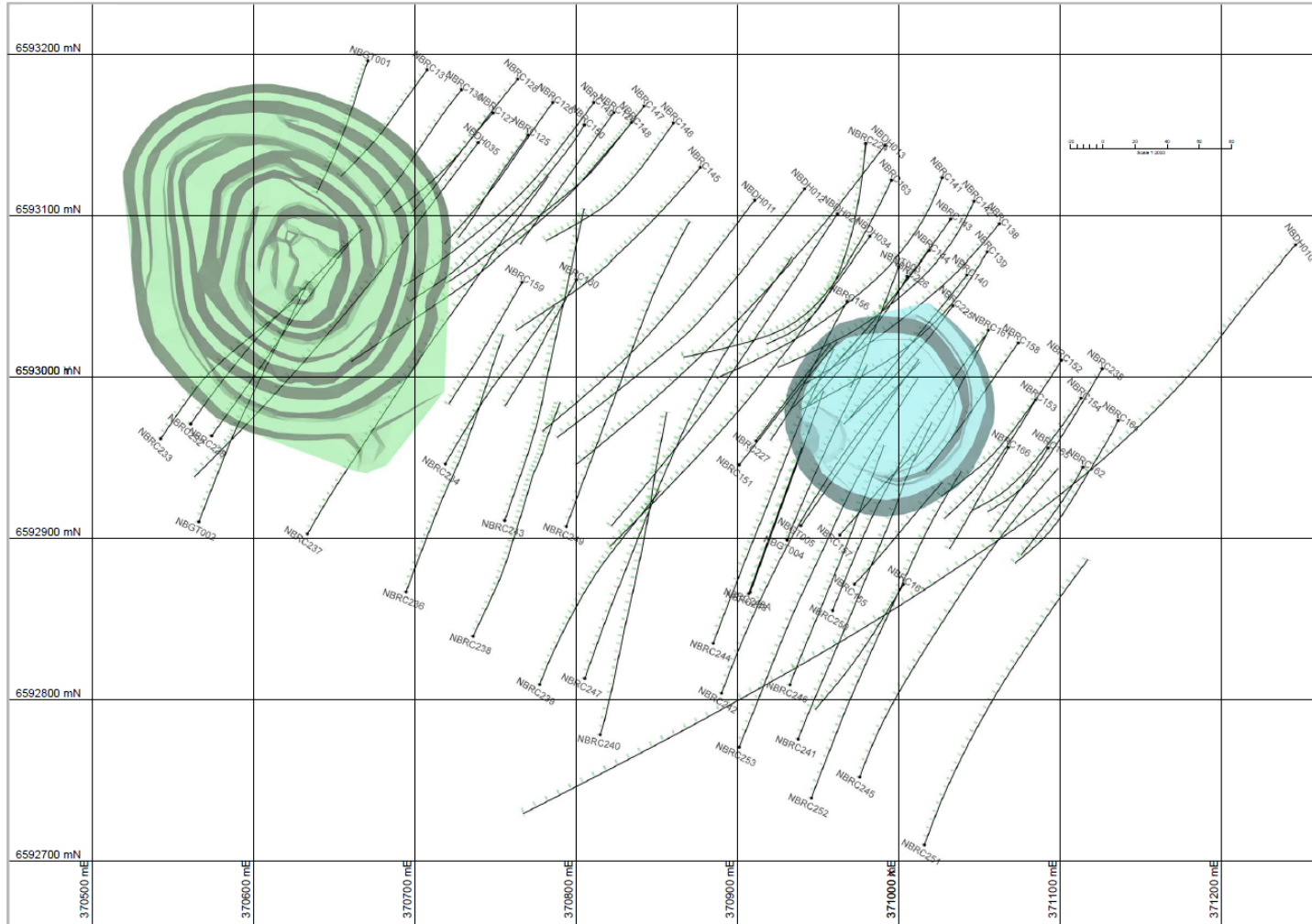


Figure 1: Plan of Drillholes

personal use only

## ASX ANNOUNCEMENT

### JORC Code, 2012 Edition – Table 1- Nimbus Ag Project

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

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

| Criteria                  | JORC Code explanation  | Commentary  |
|---------------------------|--|---|
| Database integrity        | <ul style="list-style-type: none"> <li>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.</li> <li>Data validation procedures used.</li> </ul>  | <ul style="list-style-type: none"> <li>MRP and pre-MRP data has been checked and validated to an acceptable standard, by MacPherson's staff and by independent geological consultancy group CSA Global.</li> <li>Validation methods would include review of drill logs and other hardcopy data and a review in 3D graphics to highlight any obvious errors.</li> <li>Randomly selected data files from the database (collars and assays) were cross checked against the original laboratory or survey certificates.</li> <li>Database scripts were run to check for missing data, abrupt down hole azimuth changes, sample depths greater than recorded hole depth, overlapping intervals.</li> </ul> |
| Site visits               | <ul style="list-style-type: none"> <li>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</li> <li>If no site visits have been undertaken indicate why this is the case.</li> </ul>  | <ul style="list-style-type: none"> <li>The Competent Person has visited the Nimbus site regularly since 2021, observing the general layout, topographic expression of the deposit and some historical and recent diamond core. The Competent Person has reviewed and is satisfied that the drilling and sampling procedures being followed by provided data that was of sufficient quality to be used in support of the Mineral Resource estimate.</li> </ul>   |
| Geological interpretation | <ul style="list-style-type: none"> <li>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</li> <li>Nature of the data used and of any assumptions made.</li> <li>The effect, if any, of alternative interpretations on Mineral Resource estimation.</li> <li>The use of geology in guiding and controlling Mineral Resource estimation.</li> <li>The factors affecting continuity both of grade and geology.</li> </ul> | <ul style="list-style-type: none"> <li>A lot of work has been completed on building a 3D geological model of the Nimbus Project, with a review of the geological interpretations supporting recent Mineral Resource estimates following a review of the structural measurements derived from diamond core. There is a high degree of confidence in the geological data, as conveyed in the Measured resource category.</li> <li>Drill hole intercept logging and assay results, and structural interpretations from drill core have formed the basis for the geological interpretation.</li> </ul>  |

| Criteria  | JORC Code explanation   | Commentary  |
|---|---|---|
|   |   | <ul style="list-style-type: none"> <li>Historical Mineral Resource estimates used alternative interpretations, from which the current Mineral Resource has developed, resulting in an increase in Mineral Resource tonnage and an increase in confidence, as reflected in the JORC Mineral Resource categories.</li> <li>The Nimbus Project is hosted within a package of bimodal volcanic rocks dominated by quartz – feldspar dacite with lesser basalt and volcanoclastic rocks. Mineralisation is hosted within the felsic volcanics.</li> <li>The Ag, Zn and Au mineralisation exhibit relatively low nugget affects, and along with drill assay results and interpreted geological domains, grade continuity has been verified for the Measured volumes of the Mineral Resource.</li> </ul> |
| <p><i>Dimensions</i></p>                          | <ul style="list-style-type: none"> <li><i>The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.</i></li> </ul>   | <ul style="list-style-type: none"> <li>The Mineral Resource extends for a strike length of nearly 1,300 m and with a vertical extent of 700 m. It varies in width from 2-5m up to 10-20m wide.</li> <li>The High-Grade mineralized Ag-Zn envelope extends for a strike length of nearly 600 m and with a vertical extent of 300 m. It varies in width from 1.5 - 5m. This high grade model becomes more discontinuous with the main lodes extending between 150 – 200m in length down plunge and are narrow in comparison to other models with a maximum true thickness of 5m.</li> </ul>   |
| <p><i>Estimation and modelling techniques</i></p> | <ul style="list-style-type: none"> <li><i>The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.</i></li> <li><i>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</i></li> <li><i>The assumptions made regarding recovery of by-products.</i></li> </ul> | <p><b>Global Mineral Resource Estimate</b></p> <ul style="list-style-type: none"> <li>The mineralisation and geological domains and weathering surfaces were constructed in Surpac by MacPhersons Resources staff. CSA Global used Datamine Studio 3 software for block modelling, grade interpolation, MRE classification and reporting. The model parameters were used to construct the final model in Surpac. GeoAccess Professional and Snowden Supervisor were used for geostatistical analyses of data. The Au domain interpretations were based upon a lower cut-off of 0.25 g/t Au, the Ag domains upon a 12 ppm lower cut-off, and</li> </ul>  |

personal use only

| Criteria | JORC Code explanation  | Commentary   |
|----------|--|--|
|          | <ul style="list-style-type: none"> <li>• <i>Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).</i></li> <li>• <i>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</i></li> <li>• <i>Any assumptions behind modelling of selective mining units.</i></li> <li>• <i>Any assumptions about correlation between variables.</i></li> <li>• <i>Description of how the geological interpretation was used to control the resource estimates.</i></li> <li>• <i>Discussion of basis for using or not using grade cutting or capping.</i></li> <li>• <i>The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</i></li> </ul> | <p>the Zn domains were modelled using a 0.5% Zn cut-off. The Mineral Resource can be considered to be three deposits, namely Ag, Zn and Au deposits. The Ag model consists of 37 zones of Ag mineralisation; the Zn model consists of 34 zones of Zn mineralisation; and the Au model consists of 17 zones of Au mineralisation.</p> <ul style="list-style-type: none"> <li>• Three weathering domains (oxide, transitional and fresh) were interpreted.</li> <li>• Mineralisation domains were encapsulated by means of 3D wireframed envelopes. Domains were extrapolated along strike or down plunge to half a section spacing or if a barren hole cut the plunge extension before this limit. The more strike and dip extensive domains were extrapolated to the -250 mRL, and where the wireframe volumes were supported by deep drilling intercepts, those volumes were reported as Mineral Resources. Some of the deeper wireframe volumes were considered by the Competent Person to have insufficient drill hole support and therefore were not classified as Mineral Resources.</li> <li>• Top cuts were used to constrain extreme grade values if it was determined that the extreme high grades would potentially over-estimate local block estimates, either due to limited sample numbers, or if the individual assay result was considered too high compared to the rest of the domain's population. Top cuts vary according to the host mineralisation domain. All samples were composited to 1m intervals based upon a review of sample length distribution. All diamond core and RC drill hole data were utilised in the grade interpolation; samples from RAB and other drill hole types were excluded. A Quality Assurance study of the historical drilling coupled with a due diligence twin drilling programme confirmed the historical drill hole database could be used as part of the grade interpolation.</li> <li>• A block model with parent cell sizes 10 m x 4 m x 5 m (Easting, Northing, RI) was constructed, compared to typical drill spacing of 10 m x 10 m within the volume classified as Measured and 20 m by 20 m within the Indicated volumes.</li> <li>• A statistical analysis of the Ag, Zn and Au populations by mineralisation domain, weathering domain, hole type, and a</li> </ul> |

personal use only

personal use only

| Criteria | JORC Code explanation | Commentary   |
|----------|-----------------------|--|
|          |                       | <p>combination of these, was conducted on both the non-composited and composited drill data. Top cuts were determined from an analysis of the non-composited data. A variogram study was carried out on selected domains with the greatest data population for Ag, Zn and Au. Normal score variograms were modelled, and the back transformed parameters fed into the grade interpolation algorithm. The variogram studies showed the Nimbus mineralisation has a relatively low nugget effect, implying that a small sample population would be sufficient to interpolate a single block. A moderate plunge down the mineralisation domains was modelled.</p> <ul style="list-style-type: none"> <li>• Grade estimation was by Ordinary Kriging (OK) with Inverse Distance Squared (IDS) estimation concurrently run as a check estimate. A minimum of 8 and maximum of 24 composited (1m) samples were used in any one block estimate for Ag, Zn and Au mineralisation zones, with 4 to 24 samples used for the second pass grade interpolation. A maximum of 6 composited samples per drill hole were used in any one block estimate. Grade interpolation was run within the individual mineralisation domains, acting as hard boundaries. The base of complete oxidation (BOCO) weathering profile was also used to split the grade interpolation by weathering zone.</li> <li>• Bulk density values were assigned by a matrix of values, according to mineralisation lode (Ag, Zn or Au), and the weathering profile (oxide, transition and fresh).</li> <li>• The current Mineral Resource was checked against the previously reported Mineral Resource (June 2013) and represents an increase in tonnages, and an increase in grade for Zn and Au. Note that the previous model used a different geological interpretation and associated cut-off grades, for both domain interpretation and reporting of Mineral Resources.</li> <li>• The Mineral Resource was depleted by the volume of the two open pits present in the area, which were incorporated into the topographic DTM. Two Mineral Resources of tailings deposits, located under the waste dump and within the East Pit, were separately modelled and reported.</li> </ul> |

personal use only

| Criteria | JORC Code explanation | Commentary  |
|----------|-----------------------|---|
|          |                       | <ul style="list-style-type: none"> <li>• No by products were modelled.</li> <li>• No selective mining units were assumed in this model.</li> <li>• The grade model was validated by 1) creating slices of the model and comparing to drill holes on the same slice; 2) swath plots comparing average block grades with average sample grades on nominated easting, northing and RL slices; and 3) mean grades per domain for estimated blocks and flagged drill hole samples. No reconciliation data exists to test the model.</li> </ul> <p><b>High Grade Mineral Resource Estimate</b></p> <ul style="list-style-type: none"> <li>• The mineralisation and geological domains and weathering surfaces were constructed in Surpac by MRP staff. The model parameters were used to construct the final mineralisation model in Surpac from which 1m composite sample data was extracted to be used for geostatistical analyses of data and for estimation. The Ag-Zn domains were modelled based upon a 500 ppm lower cut-off and a 10% Zn cut-off. The wireframe model consisted of 10 individual shapes. Domains were extrapolated along strike or down plunge to half a section spacing or if a barren drill hole cut the plunge extension before this limit.</li> <li>• The downfall of raising the cut-off grade is that there is a lot less data to work with when analysing the lodes statistically and geostatistically. This lowering of data reduces the confidence level in the estimation.</li> <li>• Three weathering domains (oxide, transitional and fresh) were interpreted. Zn is not estimated in the oxide horizon as it is typically depleted in the oxide material.</li> <li>• Mercury (Hg) was estimated as it occurs with the high grade silver and zinc and would most likely be recovered in any processing method as a by-product.</li> <li>• Top cuts were used to constrain extreme grade values if it was determined that the extreme high grades would potentially over-estimate local block estimates, either due to limited sample numbers, or if the individual assay result was considered too high compared to the rest of the domain's population. Diamond</li> </ul> |

personal use only

| Criteria | JORC Code explanation | Commentary   |
|----------|-----------------------|--|
|          |                       | <p>core and RC drill hole data were utilised in the grade interpolation; samples from RAB and other drill hole types were excluded as were some vertical holes drilled into vertical lodes. A Quality Assurance study of the historical drilling coupled with a due diligence twin drilling programme confirmed the historical drill hole database could be used as part of the grade interpolation.</p> <ul style="list-style-type: none"> <li>• A block model with parent cell sizes 10 m x 2 m x 2 m (Easting, Northing, RL) was constructed which was based on drill spacing and width of lodes.</li> <li>• No suitable variogram models were able to be modelled due to low levels of sample data in the lodes. Previous variogram models cannot be applied to this model due to the differences in sample population</li> <li>• Grade estimation was by Inverse Distance Squared (ID<sup>2</sup>) estimation. A minimum of 4 and maximum of 12 composited (1m) samples were used in any one block estimate for Ag and Zn mineralisation zones, with 2 to 8 samples used for the second pass grade interpolation. Grade interpolation was run within the individual mineralisation domains, acting as hard boundaries.</li> <li>• Average bulk density values were assigned based on data retrieved from MRP drill core samples and the weathering profile (oxide, transition and fresh).</li> <li>• The current Mineral Resource was checked against the previously reported Mineral Resource (April 2015) and represents a decrease in tonnages, and an increase in grade for Zn and Ag. Note that the previous model used a different geological interpretation and associated cut-off grades, for both domain interpretation and reporting of Mineral Resources and no meaningful comparisons can be made between the two.</li> <li>• The Mineral Resource was depleted by the volume of the two open pits present in the area, Discovery and East which have been incorporated into the topographic DTM.</li> <li>• No selective mining units were assumed in this model.</li> <li>• The grade model was validated by 1) creating slices of the model and comparing to drill holes on the same slice visually</li> </ul> |

| Criteria                      | JORC Code explanation   | Commentary   |
|-------------------------------|---|--|
|                               |   | <p>and 2) comparing wireframe volume with estimated block volume</p> <p><b>Nimbus Exploration Target</b></p> <ul style="list-style-type: none"> <li>The Nimbus Exploration Target is based on the same data set and assumptions as those used for the Global Mineral Resource.</li> <li>The range of tonnages reported reflects the uncertainty in the oxidation state and bulk density of the zone.</li> <li>The range of grades reported reflects the limited amount of drilling data informing the zone and the inherent uncertainty.</li> </ul>  |
| Moisture                      | <ul style="list-style-type: none"> <li>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</li> </ul>  | <ul style="list-style-type: none"> <li>Tonnages are estimated on a dry basis.</li> </ul>   |
| Cut-off parameters            | <ul style="list-style-type: none"> <li>The basis of the adopted cut-off grade(s) or quality parameters applied.</li> </ul>  | <p><b>Global Mineral Resource Estimate</b></p> <ul style="list-style-type: none"> <li>The MRE was reported for all blocks where Ag <math>\geq</math> 25g/t and / or Zn <math>\geq</math> 1.0%, and / or Au <math>\geq</math> 0.5g/t. The cut-off grade to apply to any particular block was determined by the domain encapsulating that block. A silver only domain used the Ag cut-off, a zinc only domain used the Zn cut-off, and where the Ag and Zn domains overlapped, Ag was reported in preference by its cut-off grade. Au was reported by its cut-off when no Ag or Zn domain existed. The cut-off grades were determined by MacPhersons.</li> </ul> <p><b>High Grade Mineral Resource Estimate</b></p> <ul style="list-style-type: none"> <li>The MRE was reported for all blocks that were estimated within the mineralisation model.</li> </ul> |
| Mining factors or assumptions | <ul style="list-style-type: none"> <li>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</li> </ul> | <ul style="list-style-type: none"> <li>It is assumed the project, particularly the high-grade portion, will be developed as an underground mining project, although mining studies are examining open pit opportunities.</li> </ul>  |

personal use only



| Criteria   | JORC Code explanation  | Commentary   |
|--|--|--|
| <p><i>Metallurgical factors or assumptions</i></p> | <p><i>methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.</i></p> <ul style="list-style-type: none"> <li><i>The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.</i></li> </ul> | <ul style="list-style-type: none"> <li>Metallurgical process route for the oxide portion is proven with previous recovery via the Merrill Crowe process during production period from 2003 to 2007. Testwork for the primary mineralisation has indicated good silver and zinc recoveries in flotation concentration and leaching of the sulphide concentrates to date.</li> </ul>   |
| <p><i>Environmental factors or assumptions</i></p> | <ul style="list-style-type: none"> <li><i>Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.</i></li> </ul>  | <ul style="list-style-type: none"> <li>The Nimbus Project is located in a mature gold mining district within 15 km of Kalgoorlie-Boulder. Mining and prospecting activity has occurred at staggered intervals over the past 100 years. There are no major water courses in the project area, although ephemeral streams do cut across the project. There are no known endangered flora or fauna populations.</li> <li>Previous Mineral Resource studies interpolated sulphur into the waste rock, and this information has been used to model waste rock land form parameters for scoped pit designs. This work confirms the net acid generating waste material can be contained without adverse environmental effects or operating cost.</li> </ul> |
| <p><i>Bulk density</i></p>                         | <ul style="list-style-type: none"> <li><i>Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.</i></li> <li><i>The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences</i></li> </ul>  | <ul style="list-style-type: none"> <li>In 2012 an independent study was completed by CSA Global, the study determined that ~68% of the density determinations were unreliable due to the use of an inappropriate determination method. The result was that 629 values were validated and used for the density determination in the previous estimate. The recent drilling has generated an additional 292 density determinations. Prior to estimating the final density, all determinations were analysed to look for obviously erroneous values, a total of 35 values or 4% of the population were excluded by this process.</li> </ul>   |

| Criteria              | JORC Code explanation   | Commentary   |
|-----------------------|---|--|
|                       | <p><i>between rock and alteration zones within the deposit.</i></p> <ul style="list-style-type: none"> <li>• <i>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</i></li> </ul>  | <p>The CP is confident the densities assigned to the block model are appropriate for the rock type and associated intensity of weathering.</p> <ul style="list-style-type: none"> <li>• The samples selected for density work are described geologically with some estimations of porosity and moisture made. Sub domaining on alteration zones has not been undertaken and so the densities selected are regarded as suitable for a global estimation based on host rock type and weathering type only. More density work may be undertaken if possible to determine the effects of alteration types.</li> </ul>  |
| <p>Classification</p> | <ul style="list-style-type: none"> <li>• <i>The basis for the classification of the Mineral Resources into varying confidence categories.</i></li> <li>• <i>Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).</i></li> <li>• <i>Whether the result appropriately reflects the Competent Person's view of the deposit.</i></li> </ul> | <p>Classification of the Mineral Resource estimate was carried out taking into account the geological understanding of the deposit, QAQC of the samples, density data and drill hole spacing</p> <p><b>Global Mineral Resource Estimate.</b></p> <ul style="list-style-type: none"> <li>• The Mineral Resource is classified as a combination of Measured, Indicated and Inferred, with geological evidence sufficient to confirm geological and grade continuity for the Measured Mineral Resource.</li> </ul> <p><b>High Grade Mineral Resource Estimate</b></p> <ul style="list-style-type: none"> <li>• The Mineral Resource is classified as a combination of Indicated and Inferred, with geological evidence sufficient to confirm geological and grade continuity for the Indicated Mineral Resource. This is a change from Measured resource previously reported due to the low amount of samples now being used to estimate the lodes.</li> </ul> <ul style="list-style-type: none"> <li>• All available data was assessed and the Competent Person's relative confidence in the data was used to assist in the classification of the Mineral Resource.</li> </ul> |

personal use only

| Criteria                                    | JORC Code explanation   | Commentary   |
|---|---|--|
| Audits or reviews                           | <ul style="list-style-type: none"> <li>The results of any audits or reviews of Mineral Resource estimates.</li> </ul>   | <ul style="list-style-type: none"> <li>The current classification assignment appropriately reflects the Competent Person’s view of this model rather than the entire deposit.</li> <li>Previous Mineral Resource models were reviewed by an independent consultancy group who found no material issues or fatal flaws in the modelling process. The current Mineral Resource broadly follows the modelling methodology used for the audited Mineral Resource models. The Mineral Resources were reviewed internally by MacPhersons and CSA Global.</li> <li>Horizon has reviewed and audited the mineral resource in detail and is confident the models accurately reflect the Nimbus Global Resource.</li> </ul>  |
| Discussion of relative accuracy/ confidence | <ul style="list-style-type: none"> <li>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.</li> <li>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.</li> <li>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</li> </ul> | <ul style="list-style-type: none"> <li>An ID<sup>2</sup> check estimation was done for the Global MRE.</li> <li>No other estimation method or geostatistical analysis has been performed.</li> <li>The Mineral Resource is a global estimate, whereby the global Mineral Resource is reported, with the tonnages and grade above the reporting cut-off grade appropriately reported.</li> <li>Relevant tonnages and grade above nominated cut-off grades for Ag, Zn and Au are provided in the introduction and body of this report. Tonnages were calculated by filtering all blocks above the cut-off grades and sub-setting the resultant data into bins by mineralisation domain. The volumes of all the collated blocks were multiplied by the dry density value to derive the tonnages. The contained metal for each block were calculated by multiplying the block grade by the block tonnage.</li> <li>No production data is available to reconcile results with.</li> </ul> |

personal use only