NIMBUS SILVER – ZINC PROJECT UPDATE

HIGHLIGHTS

- Independent data review and concept study completed on the 100% owned Nimbus silver-zinc project, located 15km east of Kalgoorlie-Boulder in Western Australia
- Silver currently trading at A$34/oz and zinc at A$5,200/t with increasing demand forecast from the production of electronic devices, electricity transmission and photovoltaic cells used in electric vehicles and solar panels in addition to traditional wealth storage and galvanising
- The current global Mineral Resource estimate for Nimbus stands at:
    - 12.1Mt grading 52g/t Ag for 20.2Moz of silver and 0.9% Zn for 104kt zinc [1]
- A high-grade lode exists within this resource immediately below the historic Discovery pit and has a Mineral Resource estimate of:
    - **260kt grading 774g/t Ag for 6.4Moz silver and 12.8% Zn for 33kt zinc [1]**
- **Exploration Target** beneath the Nimbus pits inclusive of oxide silver and primary **Zn-Ag-Pb sulphide mineralisation, 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%) [2]**
- Concept study confirmed the optimal economic pathway through mining the higher-grade lodes and producing a silver and zinc concentrate with more drilling required to increase overall tonnage and mine life [2]
- A gold concentrate from the Company's existing refractory ore at Teal Deeps, Jacques Find and Peyes Farm was also assessed which improved the life of mine and economics
- Indicative term sheets received from several potential offtake partners in Europe capable of smelting the complex metallurgy of the concentrate
- Approval now given to advance the project to the next level of study and drill testing for additional high-grade tonnage at depth and along the Gretel-Nimbus-Brindabella trend
- Drilling planned for the June and September Quarter pending works approvals with the completion of a revised Definitive Feasibility Study expected in the March Quarter 2023 [3]

Commenting on the Nimbus silver-zinc project, Horizon Managing Director Mr Jon Price said:

"With silver and zinc showing sustained price increases, we see the potential to grow the higher-grade core within the Nimbus resource at depth and along strike. The Company will continue working to develop a longer-term production profile underpinning a concentrator at site and look forward to further drilling success and the completion of the Definitive Feasibility Study."

[1] As announced to the ASX by subsidiary MRP on 26 February 2015, 30 April 2015 and 10 May 2016, [2] The potential quantity and grade of the Exploration Target is conceptual in nature. There has been insufficient exploration to estimate a Mineral Resource. It is uncertain if further exploration will result in the estimation of a Mineral Resource. See the basis of exploration target on page 13, also Appendix 1, Tables, Competent Persons Statement and Confirmation on Pages 6 and 15-16. [3] see Forward Looking and Cautionary Statements on Page 17.

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, 15km east of Kalgoorlie-Boulder in the goldfields of Western Australia (Figure 1).

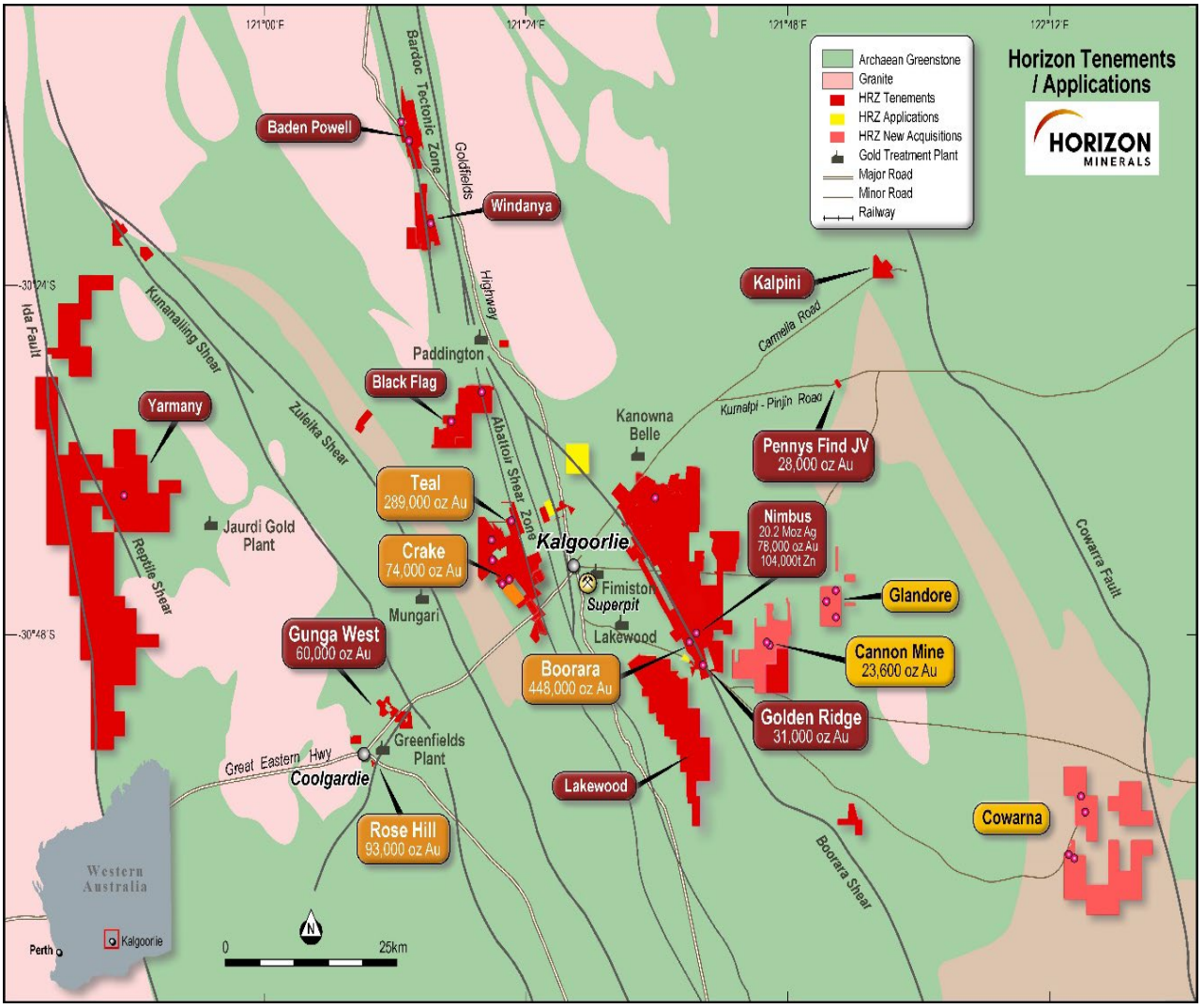

Figure 1: Horizon's Project area location, resources and surrounding infrastructure

The Company completed a strategic review of the Nimbus silver-zinc project in 2021 and elected to retain the project on a 100% basis. An independent review by consultancy firm Australian Mining Consultants (AMC) and Sedgmen was commissioned to assess the historic data, mine optimisations and metallurgical work to evaluate the optimal pathway forward for the project. 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.

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 focussed drilling campaign has been planned and will commence in the June Quarter 2022. Exploration Target drilling zones identified below the Nimbus pits are show below (Figure 2 and 3).

Exploration Target Drilling Zones Identified

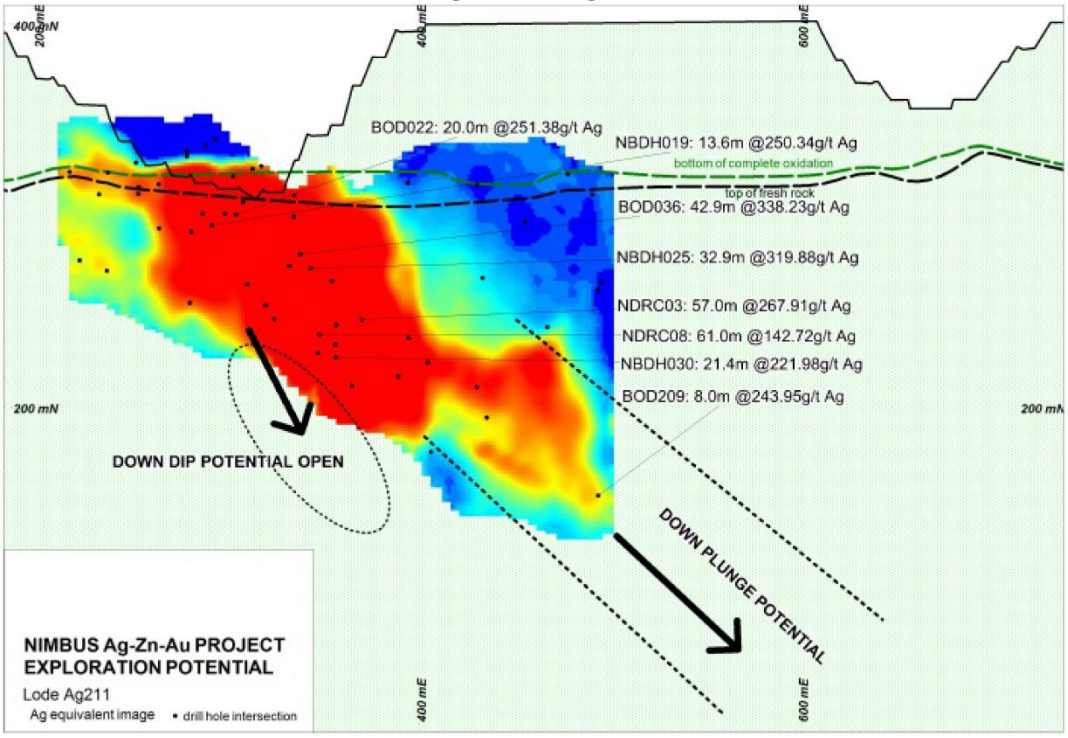

Figure 2: Long section through Ag Lode 211 showing down dip/plunge extension

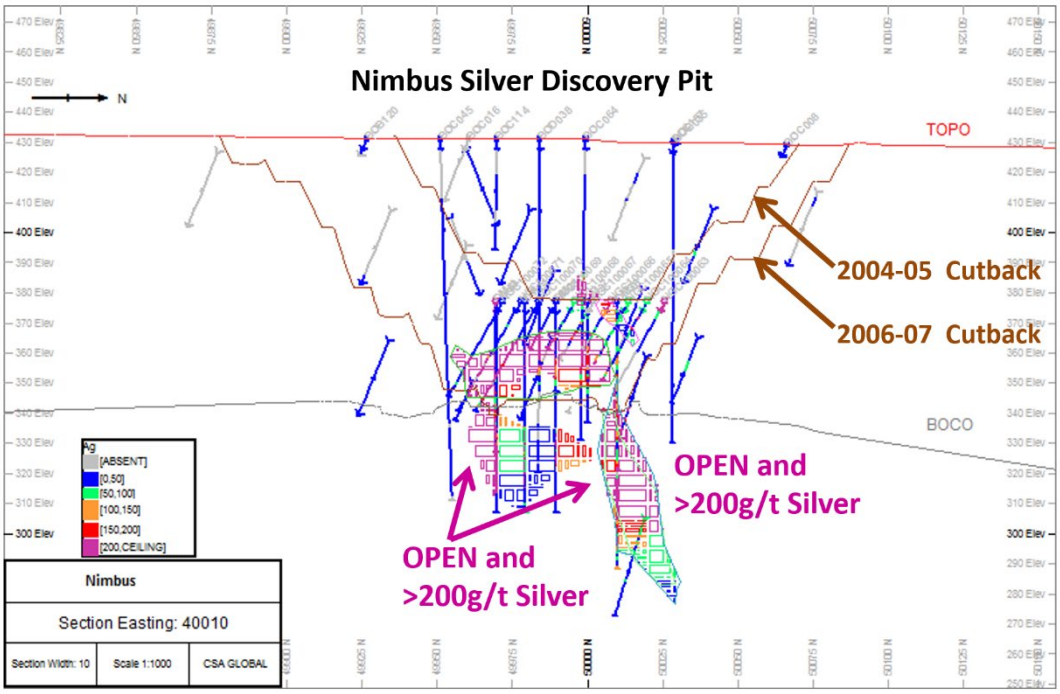

Figure 3: Long section through showing open zones down dip/plunge extension

Horizon has reviewed and updated resource models and has formed a view that there is a potential VHMS (Zn – Ag – Pb) Exploration Target, inclusive of oxide silver and primary Zn-Ag-Pb sulphide mineralisation, 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%) [1]. To date these Exploration Targets have not been drilled.

Figure 4 below shows the existing high-grade silver and zinc-silver-lead VHMS lenses previously identified under the Nimbus Discovery and East pits.

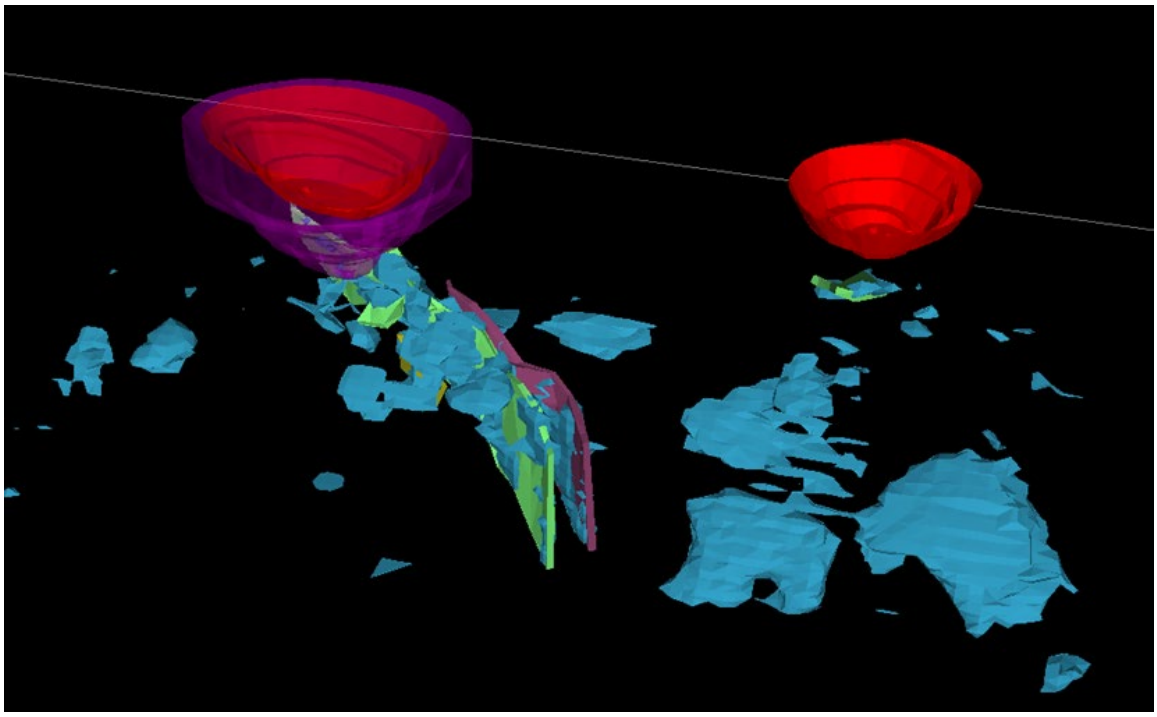

Figure 4: Nimbus Discovery and East pits showing high grade silver deposits (blue) and high grade zinc-silver-lead VHMS lenses in green and magenta.

Previous studies on the Nimbus project

Up until 2017, a significant amount of geological, metallurgical and engineering work had been completed on the Nimbus Project with the completion of the comprehensive DFS put on hold due to depressed commodity prices.

This included a partial DFS completed by Sedgman in 2015 when the Nimbus Project was held by MacPhersons Resources Limited. The focus of this study was on capital and operating costs only, including plant design and flow sheets. Several ore processing options were reviewed based on extensive laboratory test work.

The original strategy included a process to leach the silver to produce silver bars. The current review considered an alternative strategy to produce a high precious metal (silver) and zinc concentrate instead of silver bars. The production of a concentrate has potential benefits of a simplified processing circuit resulting in reduced capex and opex and to that end the Company commenced

[1] The potential quantity and grade of the Exploration Target is conceptual in nature. There has been insufficient exploration to estimate a Mineral Resource. It is uncertain if further exploration will result in the estimation of a Mineral Resource. See the basis of exploration target on page 13, also Appendix 1, Tables, Competent Persons Statement and Confirmation on Pages 6 and 15-16. [2] see Forward Looking and Cautionary Statements on Page 17.

an offtake process to obtain expressions of interest, indicative terms and potentially an offtake agreement for the sale of a silver-zinc concentrate. Preliminary soundings have shown immediate interest from some traders and smelters, particularly due to the high silver content and indicative terms were received.

On the basis of achieving commercially viable terms, the Company will now move to advance the revised DFS with expected completion in the March Quarter 2023.

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 Deeps, 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.

Nimbus is located adjacent to the Boorara Gold Project which creates potential synergies in a complementary development scenario in the future.

CSA Global has completed various due diligence, geological and mining studies between 2011 and 2015, and concluded in their August 2011 report that *"…there is potential for future development of both oxide silver and primary sulphide zinc-silver projects, from the known mineralised zones around and below the existing pits and their extensions, and from discovery of new zones."*

About the Nimbus Silver-Zinc Project

The project is located 15km east of the City of Kalgoorlie-Boulder, Western Australia, covers approximately 170km^2 and is situated on Mining Leases, Exploration Licences and Prospecting Licences and include the Boorara gold project area.

Project highlights include:

- High grade silver resource of 260kt @ 774g/t Ag and 12.8% Zn contained in JORC 2012 Resources of 12.1Mt @ 52g/t Ag, 0.9% Zn and 0.2g/t Au [1]
- Deposit remains open at depth and along strike with significant potential to increase existing silver-zinc resources with further drilling (Figures 7 and 8) [2]
- Significant regional exploration potential to find additional silver and other base metal deposits [2]
- Close proximity to the mining centre of Kalgoorlie-Boulder and existing infrastructure
- Historical production of 3.6Moz of high-grade silver (352g/t)

[1] As announced to the ASX by subsidiary MRP on 26 February, 30 April 2015 and 10 May 2016, see also Appendix 1, Tables, Competent Persons Statement and Confirmation on Pages 6 and 15-16. [2] see Forward Looking and Cautionary Statements on Page 17.

Mineral Resource summary

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

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

Nimbus high grade silver zinc resource (500g/t Ag bottom cut and 2,800g/t Ag top cut)

Category	Tonnes	Grade	Grade	Ounces	Tonnes
	Mt	Ag (g/t)	Zn (%)	Ag (Moz's)	Zn (k'000)
Measured Resource	**0**	**0**	**0**	**0**	**0**
Indicated Resource	**0.17**	**762**	**12.8**	**4.2**	**22**
Inferred Resource	**0.09**	**797**	**13.0**	**2.2**	**11**
Total Resource	**0.26**	**774**	**12.8**	**6.4**	**33**

*Competent Person Statement

The information in this table that relates to Mineral Resources is based on information compiled by Mr David O'Farrell. Mr O'Farrell is a Member of the Australasian Institute of Mining and Metallurgy and is a full-time employees of Horizon Minerals Ltd. The information was prepared under the JORC Code 2012. Mr O'Farrell has sufficient experience that is relevant to the style of mineralisation, type of deposit under consideration and to the activity that he is undertaking to qualify as a Competent Person as defined in the 2012 edition of the 'Australasian Code for Reporting of Exploration, Results, Mineral Resource and Ore Reserves'. Mr O'Farrell consents to the inclusion in this report of the matters based on their information in the form and context in which they appear. The Company confirms that the form and context of the Competent Person's findings in relation to those Mineral Resources estimates have not been materially modified from the original market announcements.

Regional geology

The Project lies within the major belt of greenstones which extends from Norseman to Wiluna in the Eastern Goldfields Province of the Archaean Yilgarn Craton. The Eastern Goldfields Province consists of elongate north-north-west trending greenstone belts and granitic rocks. Major fold axes and faults have a similar overall trend, although in detail the faults are generally anastomosing.

The Nimbus Project is found in the Kalgoorlie Terrane (Figure 2) adjacent to the terrane boundary between the Kalgoorlie and Kurnalpi Terranes. The Kalgoorlie Terrane is approximately coincident with the rift phase of the greenstones of Groves and Batt (1984) and the Kurnalpi Terrane closely coincides with calc-alkaline volcanic arc of Barley et al (1989).

The Kalgoorlie Terrane is characterised by a regional stratigraphy (Figure 3) comprising (from the base upwards) of a lower basalt unit, a komatiite unit, an upper basalt unit, a felsic volcanic/sedimentary unit and locally a coarse clastic rock unit. Included are layered and differentiated mafic-ultramafic sills at various stratigraphic levels.

The Kalgoorlie Terrane is divided into two structural-stratigraphic units called the Kambalda and Boorara Domains, separated by the Boorara Shear. The Nimbus Project is found within the Boorara Domain.

Figure 5: Nimbus location and underlying geology

Project geology

Nimbus is a shallow-water and 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 (Figures 5 and 6).

The local stratigraphy (Figure 6) comprises a NW-trending and steeply dipping bimodal-felsic package of volcanic rocks (i.e. quartz-feldspar porphyritic dacite and lesser basalt, plus their autoclastic equivalents) with subordinate carbonaceous mudstone, tuff, polymict conglomerates and

volcanic breccias. Komatiite flows, volcanic sandstones/siltstones, carbonaceous mudstone, basalt and dolerite were intersected in a distal drill hole (Hollis 2016).

Economic VHMS mineralisation in the Archaean Yilgarn Craton of Western Australia is largely restricted to two main zones of juvenile crust as revealed through regional (Nd, Pb) isotope variations. One of these zones runs north- south through the central Eastern Goldfields Superterrane and is associated with the high-grade Teutonic Bore, Jaguar and Bentley deposits, plus sub-economic VHMS mineralisation further south at Anaconda and Erayinia (Hollis 2016).

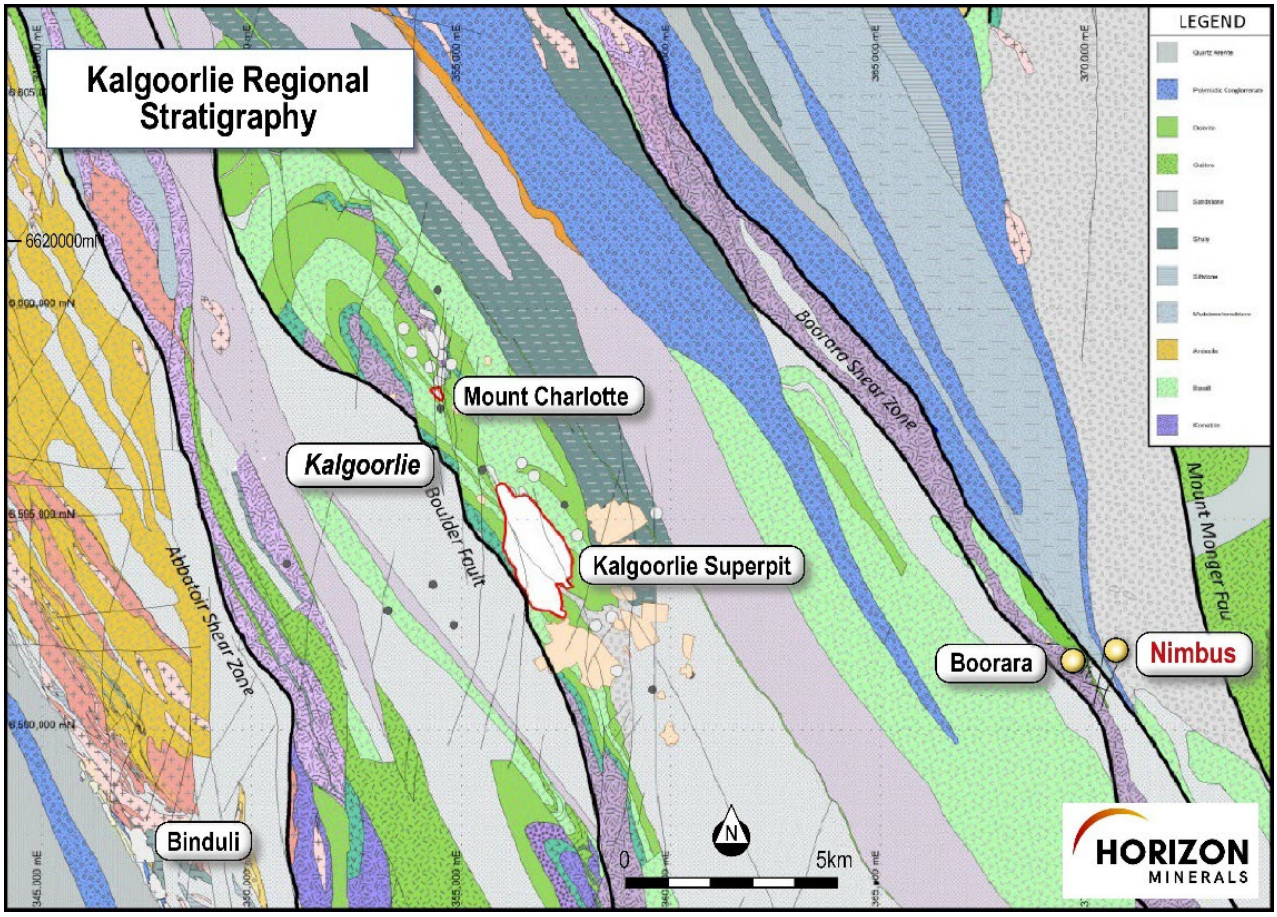

Figure 6: Nimbus regional and local geology

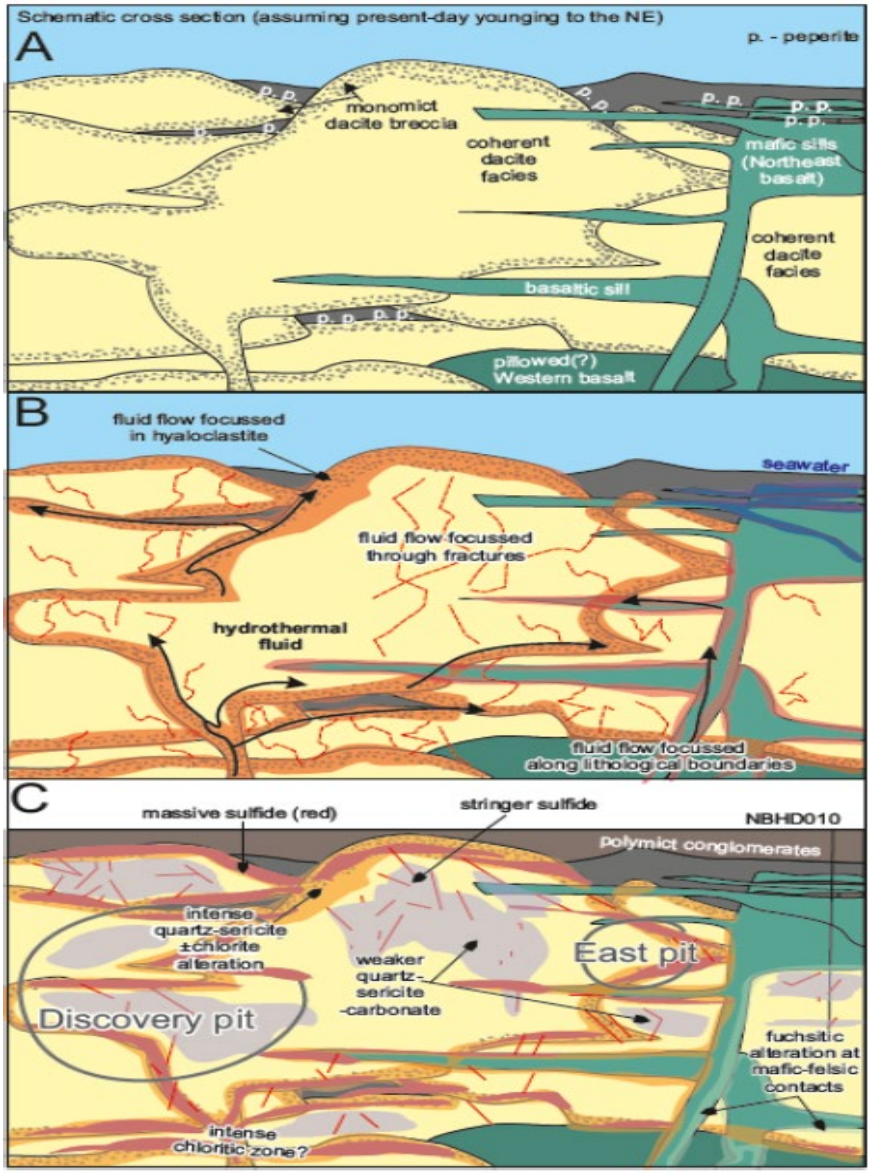

Figure 7: Nimbus VHMS model

Mineralisation

Nimbus primary sulfide resources occur as a series of stacked plunging lenses, overlying mined supergene and oxide mineralisation.

In the primary sulfide zone, early well-developed massive pyrite is underlain by:

1) Semi-massive, stringer and breccia-type Ag-Zn±Pb(Cu-Au) sulfides (including: pyrite, low- and high-iron sphalerite, galena, pyrargyrite, marrite, boulangerite, arsenopyrite, chalcopyrite, Ag-bearing tetrahedrite) associated with the autoclastic facies of thick units of dacite; and

2) Stringer and disseminated sulfides (dominated by pyrite and sphalerite) in coherent pseudo-brecciated dacite at depth. Hydrothermal alteration is characterised by intense and pervasive quartz-sericite-carbonate±Cr-V mica, with chlorite predominantly associated with mafic units.

Hydrothermal alteration is characterised by extensive and pervasive quartz-sericite-carbonate which becomes more intense towards mineralisation. Compared to other VHMS occurrences in the Yilgarn Craton, the Nimbus deposit is unusual in terms of its tectono-stratigraphic position, the geochemistry of its host sequence (i.e. FI affinity felsic rocks, ocean-plateau like low-Th basalts), mineralogy (e.g. low Cu-Au through most of the deposit, abundance of Ag and Sb sulphosalts) and alteration assemblages (e.g. lack of chlorite, presence of kaolinite at depth, fuchsite).

Nimbus primary sulfide resources occur as a series of stacked plunging lenses, overlying mined supergene and oxide mineralisation. The mineralogy is complex and includes the presence of mercury in the oxide and transition zones.

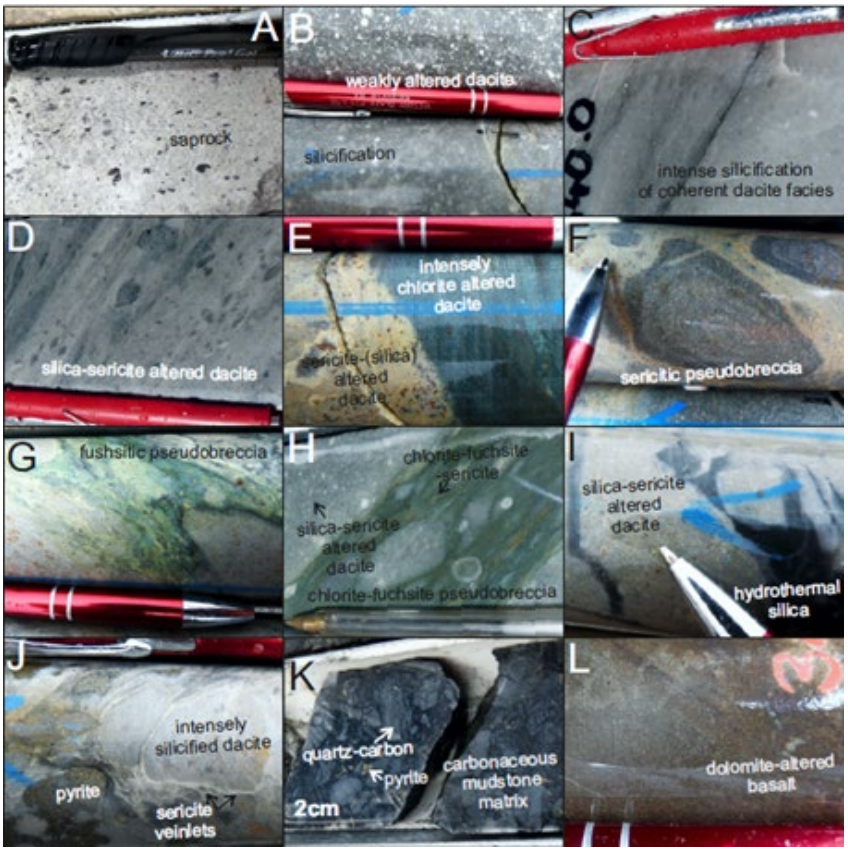

Figure 8: Nimbus lithologies and alteration in drill core

Three main zones of mineralisation have been defined, Western, Discovery and Eastern. Only the Discovery zone (oxide and transition mineralisation) and Eastern zone (oxide mineralisation) have been mined.

Other zones of mineralisation have been intersected but the data available makes interpretation of these somewhat difficult (Figure 9). The intersections themselves are significant nevertheless with thin zones of semi-massive sphalerite occurring along with high silver grades in excess of 500g/t.

The Discovery and Eastern zones are distinct bodies trending around 320 degrees, dipping steeply to the southwest and plunging moderately to the southeast.

The Discovery zone appears to be truncated by a fault (Figure 10), Fault Z (FTZ) within the Discovery Pit trending at about 290-300 degrees dipping at 60-70 degrees to the NE. Oxide zone mineralisation (steeply dipping with a SE plunge) was mined in the hanging wall of FTZ and the rock mass although extremely weathered suggests a distinct lithological change across this structure, with few lithological variations in the hanging wall as opposed to the footwall. The upper contact of the oxide zone appears to be truncated by a fault of similar orientation to FTZ which may be a splay of FTZ.

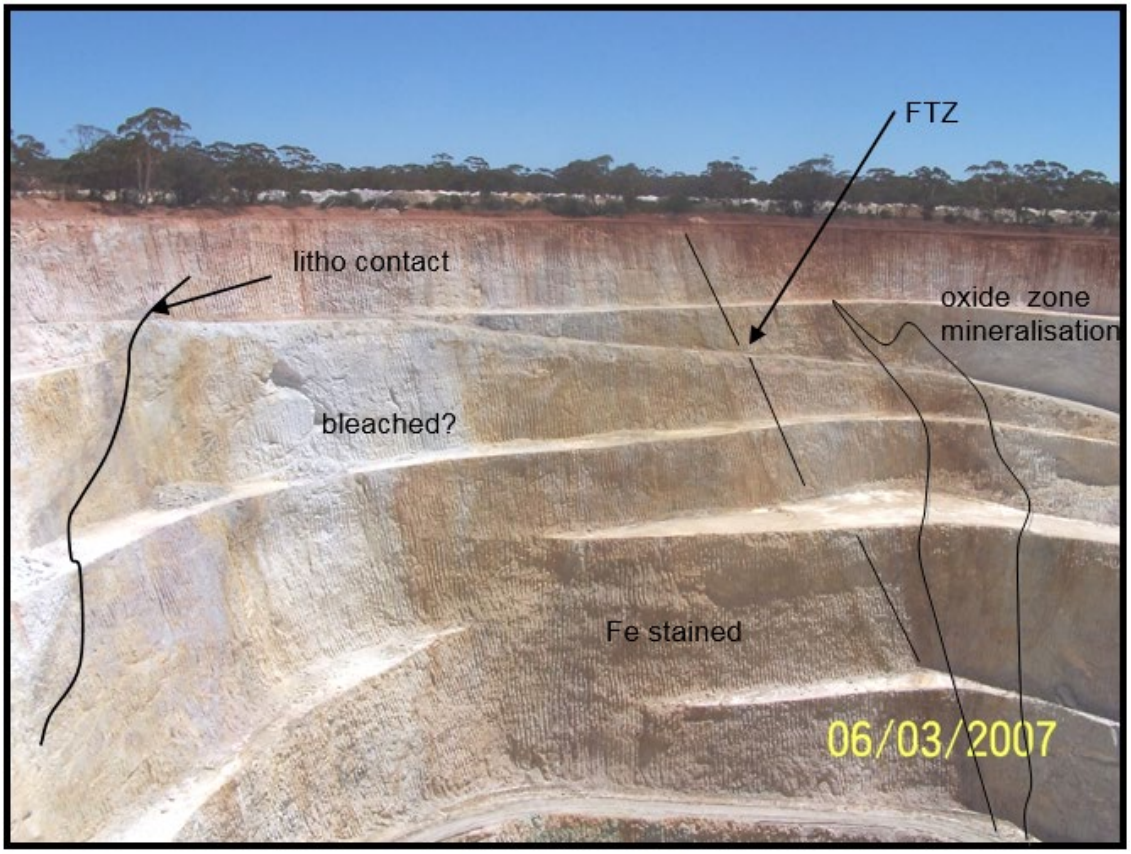

Figure 9: Discovery pit looking NW toward FTZ

Lithological contacts in the Discovery Pit are rarely recognised but in the footwall of FTZ litho contacts trend at 065 and dip about 40 SE based on limited measurements, photographs (Figure 10). The intersection of this orientation and FTZ yields a plunge of 40/130 which is similar to the plunge of the Discovery primary mineralisation. Distant from FTZ the lithological contacts trend around 320 - 330 and dip steeply SW conforming with the regional trend. Contacts are complex, modified by cross cutting structures as well as structures with movements parallel or sub parallel to a contact.

The rock below the lithological contact is interpreted as one unit, unaltered (purple), bleached (white), pyritic (Fe stained) and strongly mineralised (red-black-orange) despite the colour variations. Cherty bands were observed in this zone and it is most likely in reality a mixture of felsic volcanics, with variable composition and interbedded sediments comprising carbonaceous shales and fine grained

siliceous cherts. A siliceous pyritic zone can also be observed within this unit below the Fe stained (pyritic) zone and above the supergene zone.

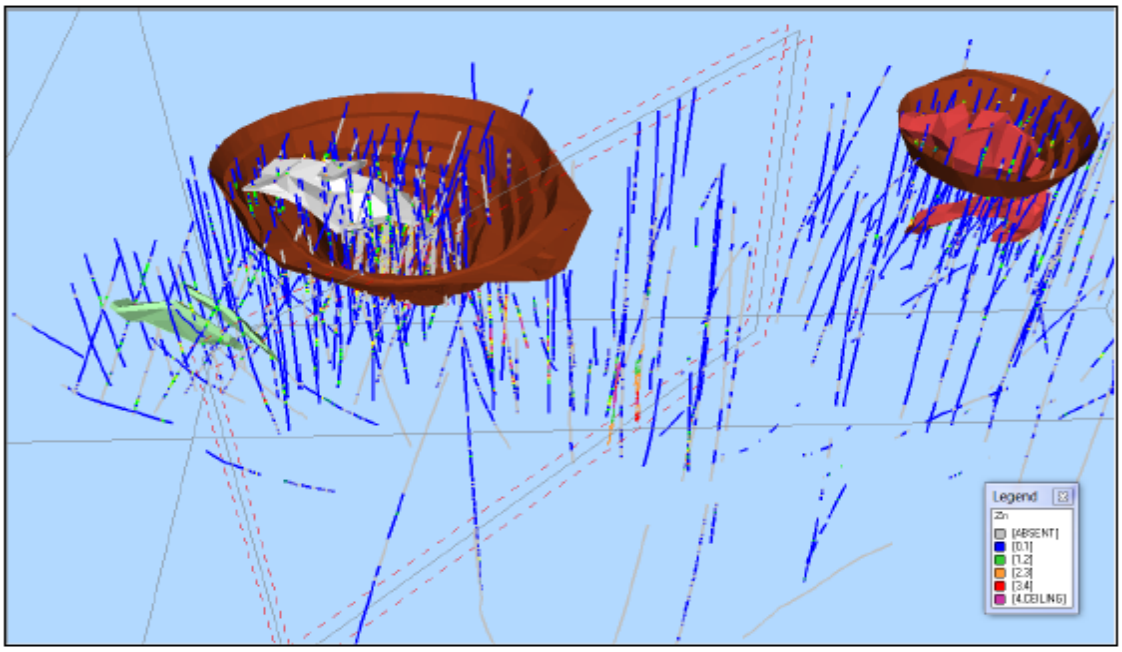

Figure 10. Silver - oxide domain (white) inside Discovery Pit, Western Zone domain (green) and East Pit domain (red)

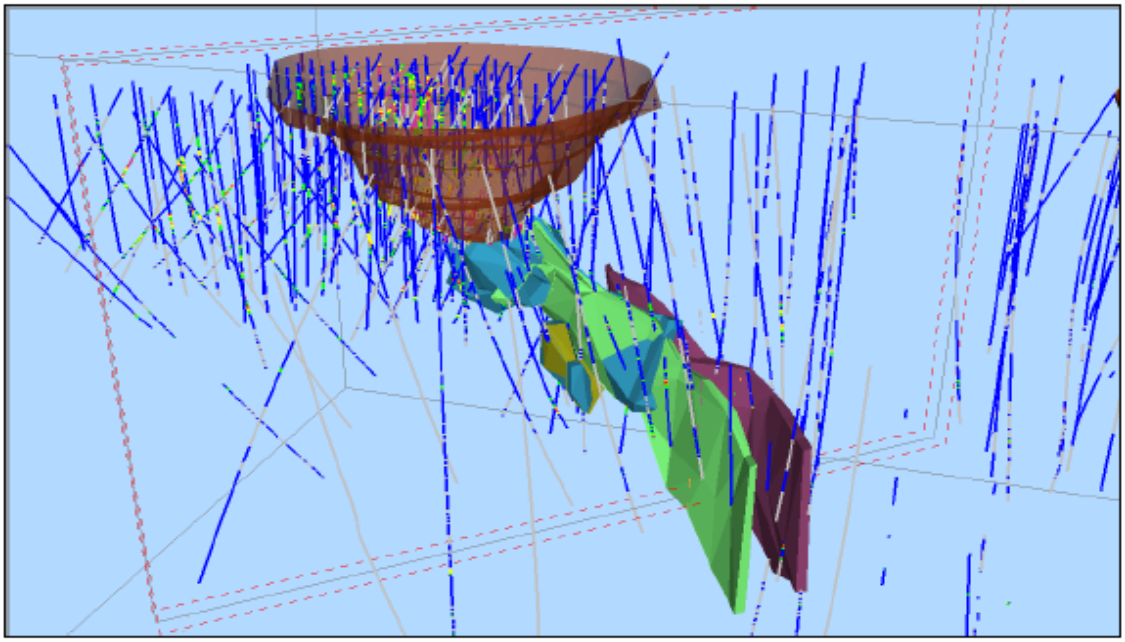

Figure 11. Discovery Primary Zone silver (blue) and zinc (green and purple) domains, plunging SE from below the Discovery Pit

Extensive drilling has been conducted at Nimbus to date (Figures 10-12) identifying broad zones of mineralisation with high grade lenses in multiple domains. Further drilling will target extensions and repeats of these high-grade lenses at depth and along the Gretel-Nimbus-Brindabella mineralised trend.

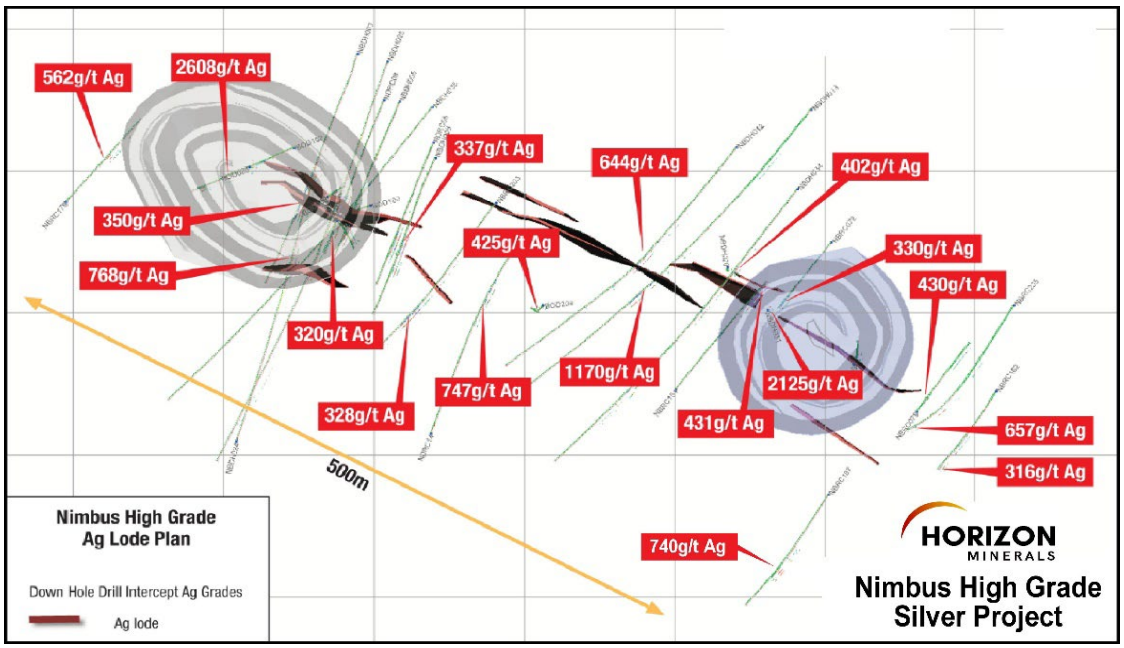

Figure 12: Nimbus high grade silver zinc lodes and historic drilling results

Basis of Exploration Target

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 and zinc domains modelled. Recorded density data were not available, therefore Horizon has assumed a range of densities for both the oxide (1.6 – 2.35 t/m^3) and sulphide (2.7 – 3.2 t/m^3) domains. A weathering profile was used to differentiate between the oxide weathering domain and the fresh rock (sulphide) domains [1] [2].

Horizon has interpreted a steep south-east plunging shoot within the suphide 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. 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

[1] The potential quantity and grade of the Exploration Target is conceptual in nature. There has been insufficient exploration to estimate a Mineral Resource. It is uncertain if further exploration will result in the estimation of a Mineral Resource. See Appendix 1, Tables, Competent Persons Statement and Confirmation on Pages 6 and 15-16. [2] see Forward Looking and Cautionary Statements on Page 17.

below the East Pit to determine if mineralised shoots are located there. Figure 11 depicts the Zn mineralised domains below the Discovery Pit.

Next Step

The independent data review and concept study has highlighted the potential to generate concentrates from both Nimbus Silver-Zinc Project and the Company's refractory gold ore at depth in the Teal project, Jacques Find and Peyes Farm project areas. Significant offtake interest has been received enabling a pathway to market providing confidence in advancing the project.

The focus will be on the high-grade lenses of silver-zinc ore below the historic pits and drill testing below the current mineralised envelope to grow the tonnage inventory to underpin a concentrator at site or within close proximity. Drilling will commence in the June Quarter 2022 (subject to environmental and drilling approvals) in parallel with further evaluation of the gold concentrate potential, process flowsheet design and economic evaluation in conjunction with potential offtake partners.

With both silver and zinc experiencing sustained increases in prices and increased demand for both metals for new energy applications in solar panels, batteries and new technology industries, the Company sees the potential of Nimbus to become part of this new supply chain.

Authorised for release by the Board of Directors

For further information, please contact:

Jon Price
Managing Director
Tel: +61 8 9386 9534
jon.price@horizonminerals.com.au

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

Horizon Minerals Limited – Summary of Gold Mineral Resources

Project	Cut-off grade (g/t)	Measured			Indicated			Inferred			Total Resource		
		Mt	Au (g/t)	Oz	Mt	Au (g/t)	Oz	Mt	Au (g/t)	Oz	Mt	Au (g/t)	Oz
Boorara OP	0.5	1.28	1.23	50,630	7.19	1.27	294,140	2.56	1.26	103,470	11.03	1.26	**448,240**
Kalpini	0.8				1.40	2.43	108,000	0.47	2.04	31,000	1.87	2.33	**139,000**
Jacques - Peyes	0.8				0.97	2.59	81,000	0.77	1.98	49,000	1.74	2.32	**130,000**
Teal	1.0				1.01	1.96	63,680	0.80	2.50	64,460	1.81	2.20	**128,140**
Crake	0.8				1.33	1.47	63,150	0.08	1.27	3,300	1.42	1.46	**66,450**
Cannon UG	1.0				0.19	4.8	28,620	0.05	2.30	3,450	0.23	4.29	**32,070**
Rose Hill OP	0.5	0.19	2.00	12,300	0.09	2	6,100				0.29	2.00	**18,400**
Rose Hill UG	2.0				0.33	4.5	47,100	0.18	4.80	27,800	0.51	4.60	**74,900**
Pennys Find (50%)	1.5				0.09	5.71	17,500	0.03	3.74	3,500	0.13	5.22	**21,000**
Gunga West	0.6				0.71	1.6	36,440	0.48	1.50	23,430	1.19	1.56	**59,870**
Golden Ridge	1.0				0.47	1.83	27,920	0.05	1.71	2,800	0.52	1.82	**30,720**
TOTAL		**1.47**	**1.33**	**62,930**	**13.78**	**1.75**	**773,650**	**5.48**	**1.77**	**312,210**	**20.73**	**1.72**	**1,148,790**

Confirmation

The information in this report that relates to Horizon's Mineral Resources estimates is extracted from and was originally reported in Horizon's ASX announcements "Intermin's Resources Grow to over 667,000 Ounces" dated 20 March 2018, "Rose Hill firms as quality high grade open pit and underground gold project" dated 8 December 2020, "Updated Boorara Mineral Resource Delivers a 34% Increase In Gold Grade" dated 27 April 2021, "Penny's Find JV Resource Update" dated 14 July 2021, "Updated Crake Resource improves in quality" dated 7 September 2021, "Jacques Find-Peyes Farm Mineral Resource update" dated 15 September 2021 and "Kalpini Gold Project Mineral Resource Update" dated 28 September 2021, each of which is available at www.asx.com.au. The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements and that all material assumptions and technical parameters underpinning the estimates in those announcements continue to apply and have not materially changed. The Company confirms that the form and context of the Competent Person's findings in relation to those Mineral Resources estimates or Ore Reserves estimates have not been materially modified from the original market announcements.

Horizon Minerals Limited – Summary of Vanadium / Molybdenum Mineral Resources

Project	Cut-off grade (%)	Tonnage (Mt)	Grade			Metal content (Mt)		
			V_2O_5 (%)	Mo (ppm)	Ni (ppm)	V_2O_5	Mo	Ni
Rothbury (Inferred)	0.30	1,202	0.31	259	151	**3.75**	0.31	0.18
Lilyvale (Indicated)	0.30	430	0.50	240	291	**2.15**	0.10	0.10
Lilyvale (Inferred)	0.30	130	0.41	213	231	**0.53**	0.03	0.03
Manfred (Inferred)	0.30	76	0.35	369	249	**0.26**	0.03	0.02
TOTAL		**1,838**	**0.36**	**256**	**193**	**6.65**	**0.46**	**0.36**

Horizon Minerals Limited – Summary of Silver / Zinc Mineral Resources

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

Category	Tonnes	Grade	Grade	Grade	Ounces	Ounces	Tonnes
	Mt	**Ag (g/t)**	**Au (g/t)**	**Zn (%)**	**Ag (Moz's)**	**Au (k'000)**	**(k'000)**
Measured Resource	**3.62**	**102**	**0.09**	**1.2**	**11.9**	**10**	**45**
Indicated Resource	**3.18**	**48**	**0.21**	**1.0**	**4.9**	**21**	**30**
Inferred Resource	**5.28**	**20**	**0.27**	**0.5**	**3.4**	**46**	**29**
Total Resource	**12.08**	**52**	**0.20**	**0.9**	**20.2**	**77**	**104**

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

Category	Tonnes	Grade	Grade	Ounces	Tonnes
	Mt	**Ag (g/t)**	**Zn (%)**	**Ag (Moz's)**	**(k'000)**
Measured Resource	**0**	**0**	**0**	**0**	**0**
Indicated Resource	**0.17**	**762**	**12.8**	**4.2**	**22**
Inferred Resource	**0.09**	**797**	**13.0**	**2.2**	**11**
Total Resource	**0.26**	**774**	**12.8**	**6.4**	**33**

Confirmation

The information is this report that relates to Horizon's Mineral Resources estimates on the Richmond Julia Creek vanadium project and Nimbus Silver Zinc Project is extracted from and was originally reported in Intermin's and MacPhersons' ASX Announcement "Intermin and MacPhersons Agree to Merge – Creation of a New Gold Company Horizon Minerals Ltd" dated 11 December 2018 and in MacPhersons' ASX announcements "Quarterly Activities Report" dated 25 October 2018, "Richmond – Julia Creek Vanadium Project Resource Update" dated 16 June 2020, "New High Grade Nimbus Silver Core Averaging 968 g/t Ag" dated 10th May 2016 and "Nimbus Increases Resources" dated 30th April 2015, each of which is available at www.asx.com.au. The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements and that all material assumptions and technical parameters underpinning the estimates in those announcements continue to apply and have not materially changed. The Company confirms that the form and context of the Competent Person's findings in relation to those Mineral Resources estimates have not been materially modified from the original market announcements.

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.

Appendix 1 – Nimbus Silver-Zinc Project JORC Code (2012) Table 1, Section 1, 2 and 3

Mr David O'Farrell, Exploration Manager compiled the information in Section 1, section 2 and section 3 of the following JORC Table 1 and is the Competent Person for those sections. The following Table and Sections are provided to ensure compliance with the JORC Code (2012 edition) requirements for the reporting of Mineral Resources. For further detail, please refer to the announcements made to the ASX by MacPhersons Resources Limited (2011-2019), Intermin Resources Ltd and Horizon Minerals Ltd (2019-2021) relating to the Nimbus Silver-zinc project area.

Section 1 Sampling Techniques and Data

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
Sampling techniques	1. *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.*	The Nimbus database comprises Historical RC drill and drilling programmes conducted by MacPhersons Resources Limited (MRP). No drilling has been undertaken since the merger of MacPhersons with Intermin Resources Limited (becoming Horizon Minerals Limited - HRZ). The drilling to date included in the Nimbus database is: • Historical - 336 RC holes 29,702m, 88 DDH 21,447m • MRP Core – 38 DDH holes 11,212.88m • MRP RC – 220 RC holes 35,284m • MRP Aircore – 200 AC 9,958m
	2. *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.*	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. 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. For both methods of drilling appropriate QAQC protocols were followed, including submission of commercial standards.

Appendix 1 – Nimbus Silver-Zinc Project JORC Code (2012) Table 1, Section 1, 2 and 3

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
	3. *Aspects of the determination of mineralisation that are Material to the Public Report.* *In cases where 'industry standard' work has been done this would be relatively simple (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.*	All samples were analysed by ALS method ME ICP-61 (33 element scan); if Ag was > 100ppm then the sample is re-assayed by method OG62. If the Ag assay returned >1,500ppm, the laboratory (ALS) will switch to analytical method OG46 or OG62h. If Zn was >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. Au is assayed by ALS method AA25 which is 50g fire assay.
Drilling techniques	4. *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).*	MRP Core – HQ3 triple tube cored from surface. Orientated by electronic "Reflex Orientation Tool" Core lengths and orientations checked daily by MRP geologist MRP RC Drill holes have ranged between 127mm or 143mm hole diameter.
Drill sample recovery	5. *Method of recording and assessing core and chip sample recoveries and results assessed.*	**Diamond core** recovery is logged and recorded in the database. Some core loss was recorded in NBGT005. 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 & drilling run sheets for each 1.5m or 3m run. Core loss checked daily by the site geologist by 1m measure/marking of core. Core loss noted by geologist as over-drill, loss, wash out, cavity. RC Drilling recovery is estimated for all one metre intervals and all sample weights from the laboratory are stored in the database.
	6. *Measures taken to maximise sample recovery and ensure representative nature of the samples.*	MRP **Core** – 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 & lubricants, regular change drill bits. For RC drilling recoveries are generally very good (>70%) with only rare occasions when groundwater may be encountered that sample recovery may be lower.

Appendix 1 – Nimbus Silver-Zinc Project JORC Code (2012) Table 1, Section 1, 2 and 3

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
	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.*	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.
Logging	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.*	All drilling underwent detailed logging through the entire hole with records kept of colour, lithology, degree of oxidation, water table level, sulphide content, alteration and veining etc. Diamond core was geotechnically logged for recovery and RQD. Structural (faults, fractures, veins) measurements collected by geological consultant using core frame logger, as alpha & beta angles, and recorded in the database. Diamond core and RC chip trays are photographed as a permanent record. Diamond core has been stored at the project site for future reference and RC sample bags were bag "farmed" for secondary sampling if required.
	9. *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.*	Historical Logging Logging is qualitative in nature, with visual estimates of mineral percentages. A small amount of quantitative spectral logging has been performed to confirm visual logging (using an Olympus hand-held XRF device). 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. MRP Logging: All core and RC chips from surface to EOH geologically logged qualititatively by MRP geologists. Structural and geotechnical logging of diamond core quantitative by its nature. All logs include records of lithology, oxidation state, colour, mineralisation, alteration and veining. All core and chips photographed in both dry and wet form.
	10. *The total length and percentage of the relevant intersections logged.*	All drill holes were logged in full.

Appendix 1 – Nimbus Silver-Zinc Project JORC Code (2012) Table 1, Section 1, 2 and 3

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
Sub-sampling techniques and sample preparation	11. *If core, whether cut or sawn and whether quarter, half or all core taken.*	MRP Core Half core sampled to lithological boundaries or a noted abundance or lack of sulphide mineralisation. Min length 0.3m & 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. Where metallurgical test samples required remaining core cut in half leaving quarter core.
	12. *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.*	RC samples were 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
	13. *For all sample types, the nature, quality and appropriateness of the sample preparation technique.*	MRP drilling Sample preparation and analysis will completed by ALS in Perth. 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 >85% sample passing 75um.
	14. *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.*	Field QAQC procedures included the insertion of commercial standards (CRMs) for all sampling. Standards (including in house blanks) were inserted at a rate of about 1 every 30 samples. Field duplicates for RC drilling only are inserted at an average rate slightly over 1 per hole.
	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.*	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. Field duplicates are collected from RC samples and inserted into sample string.
	16. *Whether sample sizes are appropriate to the grain size of the material being sampled.*	Sample sizes are considered to be appropriate for the mineralisation present at Nimbus.

Appendix 1 – Nimbus Silver-Zinc Project JORC Code (2012) Table 1, Section 1, 2 and 3

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
Quality of assay data and laboratory tests	*17. The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.*	Historical Aqua Regia digest technique found to be in appropriate >50ppmAg, Triple acid digest (HCL, HNO3, HClO4) used >50ppmAg, 10x dilution for >500ppmAg . MRP Silver & 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). Analysis ME – ICP61 – AES, assays of >100ppmAg, >1%Zn, 1%Pb, 1%Cu 2nd charge from pulp and re-assayed at different dilutions (ME-OG62). Mercury - Hg(0.01ppm) Cold by Aqua Regia Digestion (GEO-AR01) Analysis (AAS). Gold - Au 30g charge by Fire Assay Fusion (FA-FUS01) (AAS). Assays >2ppmAu – reassay by FA AAS. Assays >5ppmAu a 2nd sample from coarse reject pulverised 30g charge analysed by FA AAS.
	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.	Sampling techniques, other than drill hole samples already discussed, were not utilised. However, an XRF instrument was 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 in the deeply weathered profile. The machine is calibrated on a regular schedule.
	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.	Field QAQC procedures included the insertion of field duplicates (RC samples) and commercial standards. The standards generally performed well with results falling within two standard deviations of the expected value. • Performance of standards for monitoring the accuracy of the silver and zinc assay results received from ALS were monitored. • Certified Standards from commercial supplier are inserted on average 1 in every 30 samples. Standards reported for Ag & Zn analysis and vary between 2.9ppm Ag to 389ppm Ag, & from 210ppm Zn to 65,582ppm Zn. • Blank samples compiled from barren non-Nimbus RC holes. Blanks test for contamination within the sample preparation equipment at the lab. • The laboratory provides pulp duplicates from diamond core and RC samples.

Appendix 1 – Nimbus Silver-Zinc Project JORC Code (2012) Table 1, Section 1, 2 and 3

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
		Field duplicates are collected during RC sampling. Duplicates verify the precision of the laboratory analyses.
Verification of sampling and assaying	20. *The verification of significant intersections by either independent or alternative company personnel.*	At least two different company personnel visually verified intersections in both diamond core and RC drill chips.
	21. *The use of twinned holes.*	No twin holes have been intentionally drilled, but some holes were designed as resource infill drilling which aims to confirm the tenor and width of mineralisation encountered in previous resource drilling.
	22. *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.*	Drill hole data collected in the form of spread sheets, for drill hole collars, surveys, lithology, sample intervals and assays. All data was verified and validated by MRP geologists imported into a Gemcom GEMS™ (GEMS) database, licensed and maintained by MRP (Kalgoorlie). MRP are presently in the process of taking control of their Datashed database which has previously been managed by CSA Global in Perth.
	23. *Discuss any adjustment to assay data.*	Assay values less than the analysis detection limit are assigned a value 0.5 x the lower limit value. Where the assay value is labelled as IS or NS (Insufficient, or No Sample) the assay value is set to absent.
Location of data points	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.*	The diamond holes were surveyed by Reflex single shot and by Gyroscopic method. The Gyroscopic method is given priority over the single shot data in the database A Gyroscopic Survey Instrument is used at drillhole completion to measure the dip and azimuth of the drillhole. The drill rig operated Gyroscopic Device has been validated by using an independent contractor to re- survey several of the earlier drilled RC holes.
	25. *Specification of the grid system used.*	All grid referencing is completed and managed in MGA GDA 94 Zone 51 co-ordinates. Elevation is recorded in AHD.

Appendix 1 – Nimbus Silver-Zinc Project JORC Code (2012) Table 1, Section 1, 2 and 3

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
	26. Quality and adequacy of topographic control.	Since 2011, Fugro Spatial Solutions Pty Ltd have provided detailed aerial photographic survey. Ortho-rectification and mosaicking performed using Inpho Digital Photogrammetric Systems. The expected accuracy of detail is within 0.8mm at the ortho-image map scale. 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.
Data spacing and distribution	*27. Data spacing for reporting of Exploration Results.*	Drill holes are modelled and drilled at 20m grid line section spacing. The holes in the RC program are on sections drilled 20m apart.
	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.	The data spacing and distribution is sufficient to demonstrate spatial and grade continuity to support the Mineral Resource estimate (MRE) under the 2012 JORC guidelines.
	29. Whether sample compositing has been applied.	No sample compositing is undertaken. All RC drilling is sampled at 1m intervals which is generally standard for the industry. Diamond core is selectively sampled based on geological features with interval ranging from 0.3m to 1.5m.
Orientation of data in relation to geological structure	*30. Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.*	The drillholes have been designed to test the resource 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 sampling is considered to be unbiased with respect to drillhole orientation versus strike and dip of mineralisation.
	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.	Diamond drilling in the past has confirmed that drilling orientation did not introduce any bias regarding the orientation of the mineralised lodes.
Sample security	*32. The measures taken to ensure sample security.*	Chain of Custody is managed by the operator. Samples were 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 tracked the

Appendix 1 – Nimbus Silver-Zinc Project JORC Code (2012) Table 1, Section 1, 2 and 3

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
		progress of sample batches and the laboratory provided a web based tracking system to monitor job progress.
Audits or reviews	*33. The results of any audits or reviews of sampling techniques and data*	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 affected the validity of earlier sampling programmes.

Appendix 1 – Nimbus Silver-Zinc Project JORC Code (2012) Table 1, Section 1, 2 and 3

Section 2 Reporting of Exploration Results

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

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
Mineral tenement and land tenure status	1. *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.*	The 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 on the Hampton Hill Pastoral Station. MacPhersons Resources (MRP) purchased the Nimbus property on 8th September 2011 from Kalgoorlie Ore Treatment Company Pty Ltd (KOTC). The tenements are held by KOTC, a wholly owned subsidiary of Horizon Minerals Limited.
	2. *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 classified as Contaminated - remediation required. Remediation is currently in progress.
Exploration done by other parties	3. *Acknowledgment and appraisal of exploration and production by other parties.*	Archaean Gold • Soil sampling - 200m x 40m spaced soil sampling. • Drilling - 32,538m of RAB, 18,449m of RC and 3,214m of diamond core. • Geophysics - Surface electromagnetic (EM) survey Polymetals • Mining - 331,283t of ore @ 348g/t Ag. • Processing – 318,992t of ore @ 352g/t Ag to produce 3,616,000 oz Ag • Various Resource estimates, and 2 open pit mining phases.

Appendix 1 – Nimbus Silver-Zinc Project JORC Code (2012) Table 1, Section 1, 2 and 3

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
Geology	*4. Deposit type, geological setting and style of mineralisation.*	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.

Appendix 1 – Nimbus Silver-Zinc Project JORC Code (2012) Table 1, Section 1, 2 and 3

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
Drill hole Information	*5. 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:* *1. easting and northing of the drill hole collar* *2. elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* *3. dip and azimuth of the hole* *4. down hole length and interception depth* *5. hole length.* *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.*	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 (DD). The database also contains aircore drill hole data, targeting TSF1, TSF2 and prospects to the north of the Nimbus project. 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 Mineral Resource Estimate (MRE). Rotary Air Blast (RAB), aircore and selected drillholes from RC and diamond core drilling were not used in the MRE due to quality assurance (QAQC) concerns, where data was incomplete or sample quality questionable. The 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. 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 August 2014. From August 2014 to June 2019 MRP managed the database in GEMS. From 2019 to 2022 HRZ have maintained the database which is now stored as a Geobank™ SQL database.

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
Data aggregation methods	6. *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.*	Exploration results are not being reported.
	7. *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.*	Metal equivalents are not being reported.

Appendix 1 – Nimbus Silver-Zinc Project JORC Code (2012) Table 1, Section 1, 2 and 3

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
Relationship between mineralisation widths and intercept lengths	*8. These relationships are particularly important in the reporting of Exploration Results.*	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.
	9. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.	The mineralisation is steeply dipping (-80^0), striking 305^0-325^0 Historical drilling is predominantly along 020^0 or 200^0 and are inclined between -40^0 and -90^0 DD holes are oriented along 020^0-200^0. RC holes are oriented along 035^0 or 215^0 at right angles to the mineralisation trend. Drill holes are inclined between -55^0 and -60^0.
	10. 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').	Any intercepts reported are down hole intercepts. The intersection angles for the drilling range from 40^0 – 60^0. Therefore true width can be estimated and is approximately 2/3 the reported downhole intersections. Vertical holes will tend to exaggerate the intersection width.
Diagrams	*11. 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).*	Maps and sections are included in the reporting and associated file documentation. There are two figures at the end of this section that show where the current drillholes are positioned with respect to the mineralisation. Figure 1: Plan of holes.
Balanced reporting	*12. Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	Exploration results reported here are all those significant intercepts received to date for the diamond and RC drilling programs from August 2014 onwards.

Appendix 1 – Nimbus Silver-Zinc Project JORC Code (2012) Table 1, Section 1, 2 and 3

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
Other substantive exploration data	13. *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.*	Geological features are identified in section 3. Deposit strongly oxidised down to 90m below surface. Composition of mineralisation in weathered zone is complex. At base of weathering (60-80m) a sub-horizontal supergene zone of massive pyrite often forms a cap on primary mineralisation. Mineralised shoots in primary disseminated to massive sulphide zone can be up to 80m wide and plunging 45° SE. Multi element assaying is conducted routinely on all samples. 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.
Further work	14. *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).*	The primary Ag-Zn-Au mineralisation remains open down plunge which some of the deeper RC holes are currently testing. Further deep drilling may be planned to examine further potential down-plunge extensions based on the existing drilling and resource modelling. Further to the deep drilling and extensional targets defined by modelling, drilling may be used to follow-up near surface mineralisation identified in auger soil sampling that are possibly associated with repetitions and extensions outside the current pit designs.
	15. *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.* *(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).*	Diagrams are included in the main document.

Appendix 1 – Nimbus Silver-Zinc Project JORC Code (2012) Table 1, Section 1, 2 and 3

Section 3 Estimation and Reporting of Mineral Resources

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

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
Database integrity	• *Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.* • *Data validation procedures used.*	• 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. • Validation methods would include review of drill logs and other hardcopy data and a review in 3D graphics to highlight any obvious errors. • Randomly selected data files from the database (collars and assays) were cross checked against the original laboratory or survey certificates. • Database scripts were run to check for missing data, abrupt down hole azimuth changes, sample depths greater than recorded hole depth, overlapping intervals.
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits have been undertaken indicate why this is the case.*	• The Competent Person visits the Nimbus site on a regular basis and is very familiar with the general layout, topographic expression of the deposit and has reviewed some historical and recent diamond core. The Competent Person was satisfied that the procedures followed by MacPhersons and contract staff provided data that was of sufficient quality to be used in support of the Mineral Resource estimate.
Geological interpretation	• *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.* • *Nature of the data used and of any assumptions made.* • *The effect, if any, of alternative interpretations on Mineral Resource estimation.* • *The use of geology in guiding and controlling Mineral Resource estimation.* • *The factors affecting continuity both of grade and geology.*	• A significant amount of work was undertaken in the building of a 3D geological model of the Nimbus Project, from the geological interpretations. There is a high degree of confidence in the geological data, as conveyed in the Measured resource category. • Drill hole intercept logging and assay results, and structural interpretations from drill core have formed the basis for the geological interpretation. • Historical Mineral Resource estimates used alternative interpretations, from which the current Mineral Resource has developed. • The Nimbus Project is hosted within a package of bimodal volcanic rocks dominated by quartz – feldspar dacite with lesser basalt and volcaniclastic rocks. Mineralisation is hosted within the felsic volcanics. • The Ag, Zn and Au mineralisation exhibit relatively low nugget affects,

Appendix 1 – Nimbus Silver-Zinc Project JORC Code (2012) Table 1, Section 1, 2 and 3

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
		and along with drill assay results and interpreted geological domains, grade continuity has been verified for the Measured volumes of the Mineral Resource.
Dimensions	• *The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	• The Mineral Resource extends for a strike length of nearly 1,300m and with a vertical extent of 700m. It varies in width from 2-5m up to 10-20m wide.
Estimation and modelling techniques	• *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.* • *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.* • *The assumptions made regarding recovery of by-products.* • *Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).* • *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.* • *Any assumptions behind modelling of selective mining units.* • *Any assumptions about correlation between variables.* • *Description of how the geological interpretation was used to control the resource estimates.* • *Discussion of basis for using or not using grade cutting or capping.* • *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.*	• 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 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. • Three weathering domains (oxide, transitional and fresh) were interpreted. • 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 to have insufficient drill hole support and therefore were not classified as Mineral Resources. • 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

Appendix 1 – Nimbus Silver-Zinc Project JORC Code (2012) Table 1, Section 1, 2 and 3

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
		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. • 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. • 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. • 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). • 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

Appendix 1 – Nimbus Silver-Zinc Project JORC Code (2012) Table 1, Section 1, 2 and 3

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
		associated cut-off grades, for both domain interpretation and reporting of Mineral Resources. • 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. • Only grades for Ag, Zn and Au were modelled. • No selective mining units were assumed in this model. • 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.
Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	• Tonnages are estimated on a dry basis.
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	The MRE was reported for all blocks where Ag >= 25g/t and / or Zn >=1.0%, and / or Au>= 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.
Mining factors or assumptions	• *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.*	• It is assumed the project will be developed as an underground mining project, although mining studies are examining open pit opportunities.
Metallurgical factors or assumptions	• *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to*	• Metallurgical process route for the oxide portion is proven with previous recovery via the Merrill Crowe process during production period from 2003 to 2007. Test work indicated good silver and zinc

Appendix 1 – Nimbus Silver-Zinc Project JORC Code (2012) Table 1, Section 1, 2 and 3

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
	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.	recoveries in flotation concentration and leaching of the sulphide concentrates to date.
Environmental factors or assumptions	• *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.*	• 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. • 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.
Bulk density	• *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.* • *The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.* • *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	• 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. The CP is confident the densities assigned to the block model are appropriate for the rock type and associated intensity of weathering. • 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, 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.
Classification	• *The basis for the classification of the Mineral Resources into varying confidence categories.* • *Whether appropriate account has been taken of all relevant factors (ie*	• 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.

Appendix 1 – Nimbus Silver-Zinc Project JORC Code (2012) Table 1, Section 1, 2 and 3

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
	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). • *Whether the result appropriately reflects the Competent Person's view of the deposit.*	• 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. • All available data was assessed and the Competent Persons' relative confidence in the data was used to assist in the classification of the Mineral Resource. • The current classification assignment appropriately reflects the Competent Person's view of the deposit.
Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	• No audits have been undertaken on the current Mineral Resource, although 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 Resource was reviewed internally by MacPhersons and CSA Global. The Mineral resource has been reviewed in detail by HRZ personnel as part of the company merger due diligence, and in ongoing studies since.
Discussion of relative accuracy/ confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.* • *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.* • *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	• An inverse distance estimation algorithm was used in parallel with the ordinary Kriged interpolation, with results very similar to the Kriged results. • No other estimation method or geostatistical analysis has been performed. • The Mineral Resource is a global estimate, with the tonnages and grade above the reporting cut-off grade appropriately reported. • 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.