

# Increase in Contained Gold and Silver at Pearse North

Updated open pit mineral resource estimate at Mineral Hill

### Highlights

- MRE for Pearse North increased for gold and silver by 30% and 67% respectively to 292kt @ 3.2 g/t Au and 34 g/t Ag for 30 koz of gold and 318 koz of silver.
- **Greater confidence in the deposit's continuity:** Review of the orientation of mineralisation shows greater spatial continuity than previously modelled.
- **Optimising the mine plan for current gold prices:** The planned pit design is being re-optimised to take advantage of current gold prices.

Kingston Resources Limited (ASX:**KSN**) ("Kingston', or '**The Company**') is pleased to announce an updated JORC 2012 Mineral Resource Estimate (**MRE**) for the Pearse North of 292kt @ 3.2 g/t Au and 34 g/t Ag for 30,000 oz of gold and 318,000 oz of silver. This update is supported by additional drilling data that was acquired in 2023 and the refinement of the geological interpretation.

In comparison to the 2022 MRE for Pearse North, contained gold and silver has increased 30% and 67% respectively. This update presents a significant opportunity to take advantage of recent momentum in the gold price. Mining at Pearse North is scheduled to commence in the current quarter.

An update of the pit optimisation and mine design with this MRE is currently underway. Gold and silver production from the Pearse pits is expected to have a material impact on Kingston's balance sheet. Further updates will be provided when the updated mining schedule is finalised. The refurbishment of the processing plant is progressing on time and budget in readiness for treatment of the gold ore from the Pearse deposits.

Classification	Tonnes kt	Grade Au g/t	Grade Ag g/t	Metal Au koz	Metal Ag koz
Indicated	270	3.2	34.2	28	297
Inferred	22	2.9	29.1	2	21
Total	292	3.2	33.9	30	318

Table 1: Pearse North M	Vineral Resource Estimate	e at 1.0g/t Au Cut Off
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\* Due to rounding to appropriate significant figures, minor discrepancies may occur, tonnages are dry metric tonnes.

### Kingston Resources Managing Director, Andrew Corbett, comments:

"We are excited about the transition from tailings mining to open pit mining at our Pearse North Project. This shift will allow us to significantly expand our gold production over the coming year, while also increasing operating cash flow. The high-grade nature of the pits and the momentum in the gold price provide a strong backdrop for maximising margins from this highly lucrative resource.

The entire technical team has done a fantastic job ensuring the Project has access to high-quality Mineral Resources and Ore Reserves necessary to support a successful Mine Plan."



ASX: KSN Shares on Issue: 633.7M Market Cap: A\$42.5M Cash: (8 April 2024) A\$10.7m 202/201 Miller Street, North Sydney, NSW 2060 +61 2 8021 7492 info@kingstonresources.com.au www.kingstonresources.com.au





#### **Mineral Resource Estimate**

The Pearse North deposit at Mineral Hill is interpreted to be a stacked set of shear-hosted gold-silver (Au-Ag) lodes within the Late Silurian to Early Devonian Mineral Hill Volcanics. The sulphide mineralisation, comprising predominantly pyrite, arsenopyrite and stibnite, is typically disseminated within quartz-mica (sericite) schist.

The modelling of the mineralisation at Pearse North has been revised, using the drill hole data acquired by Kingston in the 2023 geotechnical drilling program. The significant intercepts in this round of drilling showed that the lodes have a steeper dip and greater continuity along strike than previously interpreted.

The geometry of mineralisation was interpreted by creating 3D wireframe models using a 0.5g/t Au lower cutoff (previously 2g/t) leading to a better defined lode model and associated significant increase in tonnage and contained metal. Grade estimation was undertaken using ordinary kriging estimate methodology into a 3D block model.



Figure 1: Plan view of the Pearse North mineralisation wireframes.



Classification of the MRE into confidence categories has been completed based on distance to samples and the average slope of regression. Indicated portions have a distance to the nearest sample of <25m and a slope of regression > 0.7, while Inferred portions have an average distance to samples > 30m and slope of regression < 0.6. Mineral Resources are reported at a 1.0g/t Au cut off within a Whittle optimisation shell using metal pricing of AUD\$3200/oz for gold, AUD\$37/oz for silver, and cost and recovery data sourced from the operation at Mineral Hill.

Drilling methods in the dataset comprise reverse circulation (RC) and diamond core (DDH). Reverse circulation drilling samples were collected at 1m intervals directly from the rig cyclone (with a cone splitter attached). The diamond core was cut and sampled, with half core sample lengths ranging from 0.3m to 1.0m.

Samples were analysed at SGS laboratory using Multi element 4-acid digest and gold by Fire Assay technique with an Atomic Absorption Spectrometry (AAS) instrument finish. KSN utilised QAQC in the form of standards, blanks and duplicates to ensure all data was of suitable quality for inclusion in the estimate. No specific metallurgical assumptions were made in the preparation of this MRE.

Pearse North is scheduled to be mined in parallel with Pearse South, which also contains a high grade gold and silver resource. The Mineral Resources for Pearse South are shown in **Error! Reference source not found.**.

Classification	Tonnes kt	Grade Au g/t	Grade Ag g/t	Metal Au koz	Metal Ag koz
Indicated	164	4.1	85.3	22	451
Inferred	40	2.4	5.0	3	6
Total	204	3.8	69.0	25	457

Table 2 Pearse South Mineral Resource Estimate at 1.0g/t Au Cut Off (see KSN Announcement 15 March 2023).



\* Due to rounding to appropriate significant figures, minor discrepancies may occur, tonnages are dry metric tonnes.

Figure 2: Cross section looking northwest (+-10m section window). Updated mineralisation wireframes (green) versus the previous wireframes (hatched red).

Information relating to the MRE is consistent with ASX Listing Rule 5.8.1 & 5.9.1 requirements. Further details are provided in JORC Table 1, which is included as Appendix A.





Figure 3: Pearse North plan view at 290mRL (+-10m section window).



### **ABOUT KINGSTON RESOURCES**

Kingston Resources is currently producing gold from its Mineral Hill gold and copper mine in NSW and is developing the 3.8Moz Misima Gold Project in PNG. The Company's objective is to establish itself as a midtier gold and base metals company with multiple producing assets.



#### Mineral Hill Mine, NSW (100%)

- Mine plan out to the end of 2027: Open pit and underground mining.
- **Significant upside:** Current life of mine only utilises 22% of the current 8.9Mt of Mineral Resources.
- Infrastructure excellence: Extensive existing infrastructure with all permits and approvals in place.
- **Exploration potential**: Exceptional upside within current Mining Leases (ML) and Exploration Licenses (EL).
- **Current Focus:** Completion of the Tailings Project gold production, transitioning to open pit mining at Pearse and production of concentrate for sale.



#### Misima Gold Project, PNG (100%)

- **DFS Validation:** potential for a robust, scalable, and low-cost open pit operation.
- **Production Potential:** Anticipated gold production of ~2.4Moz over a 20-Year Mine Life (Avg. 128kozpa).
- Strong Financial Viability: Pre-Tax Net Present Value (NPV) of A\$956 Million (based on a US\$1,800/oz Gold Price).
- **Gold Price Upside:** Highly leveraged to the upside of the gold price, amplifying potential returns.
- Current Focus: Prioritising ESIA reports, strategic funding & development strategies.

Mineral Hill is a gold and copper mine located in the Cobar Basin of NSW. In June 2023, the company updated its life of mine plan, including both open pit and underground mining until 2027. The processing plant currently operates a CIL, and work is well advanced to recommission the existing crushing, grinding and flotation circuits for copper, lead and zinc concentrate production. In addition to current production, the company is focused on meeting near mine production targets located on the existing MLs. The aim is to extend the mine's life through organic growth and consider regional deposits that could be processed at Mineral Hill's processing plant.

Misima hosts a JORC Resource of 3.8Moz Au and an Ore Reserve of 1.73Moz. Placer Pacific operated Misima as a profitable open pit mine between 1989 and 2001, producing over 3.7Moz before it was closed when the gold price was below US\$300/oz. The Misima Project also offers great potential for additional resource growth through exploration success targeting extensions and additions to the current Resource base.

For further information regarding the Misima Mineral Resource and Ore Reserve estimate, see ASX announcements on 24 November 2020 and 15 September 2021 and 6 June 2022. Further information is included within the original announcements.

The Mineral Hill Mineral Resource estimate outlined below was released in ASX announcements on 18 November 2021 (TSF), 15 March 2023 (Pearse South and Pearse North), 24 November 2022 (Southern Ore Zone), 21 March 2023 (Jack's Hut) and 13 September 2011 (Parkers Hill by KBL). The Ore Reserve estimate outlined below was released in ASX announcements on 18 November 2021 (TSF), 15 March 2023 (Pearse South and Pearse North). Further information is included within the original announcements.

Kingston is not aware of any new information or data that materially affects the information included in this announcement. All material assumptions and technical parameters underpinning the Mineral Resources and Ore Reserve estimates continue to apply and have not materially changed.



This release has been authorised by the Kingston Resources Limited Board. For all enquiries, please contact Managing Director, Andrew Corbett, on +61 2 8021 7492.

#### MINERAL RESOURCES AND ORE RESERVES

#### Misima JORC 2012 Mineral Resource & Ore Reserve summary table

Resource Category	Cut-off (g/t Au)	Tonnes (Mt)	Gold Grade (g/t Au)	Silver Grade (g/t Ag)	Au (Moz)	Ag (Moz)
Indicated	0.3	97.7	0.79	4.3	2.5	13.4
Inferred	0.3	71.3	0.59	3.8	1.4	8.7
Total	0.3	169	0.71	4.1	3.8	22.1
Reserve	Cut-off (g/t Au)	Tonnes (Mt)	Gold Grade (g/t Au)	Silver Grade (g/t Ag)	Au (Moz)	Ag (Moz)
Probable	0.3	75.6	0.79	4.2	1.73	4.1

#### Mineral Hill JORC 2012 & JORC 2004 Mineral Resource & Ore Reserve summary table

Bessures	Tennes	Gold	Silver								
Category	(kt)	(g/t)	(g/t)	Cu %	Pb %	Zn %	Au (koz)	Ag (koz)	Cu (kt)	Pb (kt)	Zn (kt)
Measured	228	2.11	11	1.3%	0.5%	0.3%	15	80	3	1.2	0.7
Indicated	4,893	1.08	28	1.2%	1.7%	1.1%	169	4,361	47	70	42
Inferred	3,098	1.17	23	0.7%	1.4%	1.2%	117	2,253	22	42	38
Total	8,220	1.14	27	1.0%	1.6%	1.1%	302	6,693	72	113	81
Reserve Category	Tonnes (kt)	Gold Grade (g/t)	Silver Grade (g/t)	Cu %	Pb %	Zn %	Au (koz)	Ag (koz)	Cu (kt)	Pb (kt)	Zn (kt)
Proved	-	0.00	0				-	0			
Probable	697	1.95	57				44	470			
Total	697	1.95	57				44	470			

1. Due to rounding to appropriate significant figures, minor discrepancies may occur, tonnages are dry metric tonnes.

2. Probable Ore Reserves are derived from Indicated Mineral Resources.

3. The Ore Reserves do not include, or depend upon, Inferred Mineral Resources.

4. The Ore Reserves form part of the Mineral Resources.

5. Total Mineral Resources account for mining depletion of the Tailings Project as at 23 April 2024

#### **Competent Persons Statement and Disclaimer**

The information in this report that relates to Exploration Results and Mineral Resources is based on information compiled by Mr. Stuart Hayward BAppSc (Geology) MAIG, a Competent Person who is a member of the Australian Institute of Geoscientists. Mr. Hayward is an employee of the Company. Mr. Hayward has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr. Hayward confirms that the information in the market announcement provided is an accurate representation of the available data and studies for the material mining project and consents to the inclusion in this report of the matters based upon the information in the form and context in which it appears.

The Competent Person signing off on the overall Misima Ore Reserves Estimate is Mr John Wyche BE (Min Hon), of Australian Mine Design and Development Pty Ltd, who is a Fellow of the Australasian Institute of Mining and Metallurgy and who has sufficient relevant experience in operations and consulting for open pit metalliferous mines. Mr Wyche consents to the inclusion in this report of the information pertaining to the Misima Ore Reserve in the form and context in which it appears.

The Competent Person signing off on the overall Pearse Opencut Ore Reserves Estimate is Mr John Wyche BE (Min Hon), of Australian Mine Design and Development Pty Ltd, who is a Fellow of the Australasian Institute of Mining and Metallurgy and who has sufficient relevant experience in operations and consulting for open pit metalliferous mines. Mr Wyche consents to the inclusion in this report of the information pertaining to the Pearse Opencut Ore Reserve in the form and context in which it appears.



# **Section 2 Reporting of Exploration Results**

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

Criteria	JORC Code explanation	Con	nmentary					
Mineral	• Type, reference name/number, location	Tenement	Holder	Grant Date	Expiry Date	Туре	Title Area	
tenement and	ement and and ownership including agreements or	ML5240	MINERAL HILL PTY LTD	14/03/1951	14/03/2033	ML	32.37 HA	
land tenure	material issues with third parties such as	EL1999	MINERAL HILL PTY LTD	4/03/1983	4/03/2023	EL	17 UNITS	1
status	status joint ventures, partnerships, overriding	ML5267	MINERAL HILL PTY LTD	22/06/1951	14/03/2033	ML	32.37 HA	
	royalties, native title interests, historical	ML5278	MINERAL HILL PTY LTD	13/08/1951	14/03/2033	ML	32.37 HA	ł
	sites, wilderness or national park and	EL8334	MINERAL HILL PTY LTD	23/12/2014	23/12/2022	EL	100 UNITS	
	environmental settings.	ML332	MINERAL HILL PTY LTD	15/12/1976	14/03/2033	ML	22.36 HA	
	• The security of the tenure held at the time	ML333	MINERAL HILL PTY LTD	15/12/1976	14/03/2033	ML	28.03 HA	
	of reporting along with any known	ML334	MINERAL HILL PTY LTD	15/12/1976	14/03/2033	ML	21.04 HA	
	impediments to obtaining a licence to	ML335	MINERAL HILL PTY LTD	15/12/1976	14/03/2033	ML	24.79 HA	
	operate in the area.	ML336	MINERAL HILL PTY LTD	15/12/1976	14/03/2033	ML	23.07 HA	
		ML337	MINERAL HILL PTY LTD	15/12/1976	14/03/2033	ML	32.27 HA	1
		ML338	MINERAL HILL PTY LTD	15/12/1976	14/03/2033	ML	26.3 HA	1
		ML339	MINERAL HILL PTY LTD	15/12/1976	14/03/2033	ML	25.09 HA	
		ML340	MINERAL HILL PTY LTD	15/12/1976	14/03/2033	ML	25.79 HA	1
		ML1695	MINERAL HILL PTY LTD	7/05/2014	7/05/2035	ML	8.779 HA	1
		ML1712	MINERAL HILL PTY LTD	28/05/2015	28/05/2036	ML	23.92 HA	1
		ML1778	MINERAL HILL PTY LTD	7/12/2018	28/05/2036	ML	29.05 HA	
		ML5499	MINERAL HILL PTY LTD	18/11/1955	14/03/2033	ML	32.37 HA	
		ML5621	MINERAL HILL PTY LTD	12/03/1958	14/03/2033	ML	32.37 HA	1
		ML5632	MINERAL HILL PTY LTD	25/07/1958	14/03/2033	ML	27.32 HA	
		ML6329	MINERAL HILL PTY LTD	18/05/1972	14/03/2033	ML	8.094 HA	
		<ul> <li>ML6365</li> </ul>	MINERAL HILL PTY LTD	20/12/1972	14/03/2033	ML	2.02 HA	L
		<ul> <li>Quintana Mineral H</li> </ul>	holds a 2% Net S Iill Mine.	melter Re	turn (NSR)	royal	ty over pr	oduction at the
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	Coincide discover drilling a intercept served to a Resou modellin	ent Au-As soil anor ed at Pearse Nortl t the prospect by T ts of significant Au to better define a n rce and Reserve in g.	malism an h by Triako Triako duri grade. Fo umber of l n 2016 inc	d low-grade o Resource ng the peri illow-up dri nigh grade corporating	e Au-A es Ltd od 19 Iling b Iense new o	Ag minera in the 19 99-2005 y KBL Mi s at the p drill result	lisation was 90s. 50m+ spaced included several ning Ltd in 2010 rospect. KBL released s and geology



Criteria	JORC Code explanation	Commentary
Geology	<ul> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	• The Pearse North deposit at Mineral Hill is interpreted to be a shear-hosted Au-Ag within the Late Silurian to Early Devonian Mineral Hill Volcanics, a pile of proximal rhyolitic volcaniclastic rocks with minor reworked volcaniclastic sedimentary rocks. The sulphide mineralisation, comprising predominantly pyrite, arsenopyrite and stibnite, is typically disseminated within quartz-mica (sericite) schist. At the Pearse deposit to the south, analysis by Laser Ablation ICP-MS has found that fine-grained gold is mostly concentrated in arsenopyrite and fine-grained 'spongy' (melnikovite) pyrite with lower concentrations of gold hosted by crystalline pyrite. Petrological analysis of drill core confirms that mineralisation at Pearse North has similar characteristics to that at Pearse South.
Drill hole Information	<ul> <li>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:         <ul> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>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.</li> </ul>	<ul> <li>Drill hole information previously reported in KSN Release 2023.09.05 High Grade results PN Drilling</li> <li>Exploration results not being reported</li> </ul>
Data aggregation methods	<ul> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>Where aggregate intercepts incorporate short lengths of high grade results and</li> </ul>	Exploration results not being reported



Criteria	JORC Code explanation	Commentary
	<ul> <li>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.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	
Relationship between mineralisation widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').</li> </ul>	<ul> <li>98% of drilling was approximately perpendicular to the overall strike of mineralisation.</li> <li>Geotechnical drill holes were orientated at oblique angles to the mineralised trend but normal to potential pit wall design orientations.</li> <li>Exploration results not being reported</li> </ul>
Diagrams	<ul> <li>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.</li> </ul>	<ul> <li>See the body of reports for maps, diagrams, and tabulations.</li> </ul>
Balanced reporting	<ul> <li>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.</li> </ul>	Exploration results not being reported
Other substantive exploration data	<ul> <li>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         <ul> <li>size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or</li> </ul> </li> </ul>	<ul> <li>Arsenic, Antimony and Sulphur are deleterious elements at Pearse North. These values are consistent with those previously reported and within the current Resource Estimate and have not been reported as they are deemed immaterial for the purpose of this release.</li> </ul>



Criteria	JORC Code explanation	Commentary
	contaminating substances.	
Further work	<ul> <li>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	Exploration results not being reported



# Section 3 Estimation and Reporting of Mineral Resources – Pearse North

Criteria	JORC Code explanation	Commentary
Database integrity	<ul> <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> <li>Database is maintained by KSN who compile and validate all data files on the project.</li> <li>Cube completed validation checks on the database including checks for overlapping sample intervals, checks on minimum and maximum assays, depths, azimuths, dips and co-ordinates for consistency. No material errors were identified.</li> </ul>
Site visits	<ul> <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> <li>The Competent Person for the Mineral Resource estimate is Stuart Hayward who has conducted site visits on multiple occasions and reviewed drill core from Pearse North.</li> <li>The resource geologist conducting the mineral resource estimation (Andrew White) has conducted multiple site visits.</li> </ul>
Geological interpretation	<ul> <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> <li>The geological confidence is considered to be moderate to high.</li> <li>The mineralised volume at Pearse North has been based on a drill section interpretation of mineralisation defined by a lower limit gold grade of 0.2 g/t Au, along with the observed close association between mineralisation and the structural interpretations.</li> <li>Nine mineralisation domains have been defined including a low-grade domain defined by all Au assay values above a 0.2 g/t cut-off. Internal to this domain are eight high-grade domains included Au values above a 0.5 g/t cut-off. These domains represent clearly defined breaks in the mineralisation and represent the spatial geometry and continuity of mineralised structures.</li> <li>Drill hole spacing within the main resource area was mostly completed on a 20 metre by 20 metre drill pattern.</li> <li>The factors affecting continuity both of grade and geology are most likely to be associated with structural controls and local complexity. The broad approach to the mineralisation modelling is an attempt to model an unbiased interpretation.</li> <li>The geological model has improved since the 2022 MRE through a process of implicit modelling of Au-As-Sb and other associated elements, that was conditioned by geological mapping, drill core observations, and orientated structures in drill core; followed by explicit modelling/domain interpretation. A greater degree of confidence has been achieved.</li> </ul>
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.	<ul> <li>The high grade gold mineralisation identified varies from 5 m to 50 m in width and goes to a depth of 150 m below surface along the 225 m strike length drilled to date. The zone strikes 5° to the north-east and dips steeply to the west.</li> </ul>



Criteria	JORC Code explanation	Commentary
Estimation and modelling techniques	<ul> <li>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.</li> <li>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</li> <li>The assumptions made regarding recovery of by- products.</li> <li>Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterization).</li> <li>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</li> <li>Any assumptions about correlation between variables.</li> <li>Description of how the geological interpretation was used to control the resource estimates.</li> <li>Discussion of basis for using or not using grade cutting or capping.</li> <li>The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</li> </ul>	<ul> <li>Grade estimation for Gold, Silver, Arsenic, Sulphur and Antimony were completed using Micromine software. Geostatistical analysis and variography were completed using Snowden's Supervisor v8 software.</li> <li>Using parameters derived from modelled variograms Au, Ag, As, S and Sb grade data were interpolated into 10 mE x 10 mN x 5 mRL sized panels using Ordinary Kriging (OK). Surpac software was used for the estimations. Three dimensional mineralised wireframes were used to domain the data. Sample data was composited to 1 m down hole lengths using the best fit method.</li> <li>The influence of extreme grade values was addressed by reducing high outlier values by applying top-cuts to the data and constraining their influence to 15m during estimation. These top-cut values were determined through statistical analysis (histograms, log probability plots, coefficients of variation and summary multi-variate and bi-variate statistics). A visual 3D inspection of the relative location of grade outliers and higher-grade samples was conducted.</li> <li>Down hole and directional variograms were modelled using normal score transformations of the skewed data sets for each element. Nuggets were low to moderate. Variogram analysis was comfleet to the main lodes with parameters applied to adjacent lodes and search ellipse parameters adjusted to match the individual lode geometry.</li> <li>Scatter plots and regression analysis was completed on the main domains to review the relationship between the Au and Ag, As, S and Sb variables. Due to the low-to-moderate correlation Cube has used separate variograms for the variables for each domain; however, the search parameters are the same to ensure some level of consistency between Au, Ag, As, S and Sb interpolations.</li> <li>Work was undertaken in the previous estimate using kriging neighbourhood analysis (KNA) on several test areas within the domains to determine the optimal parent block size and number of informing samples for estimation. A minimum of 8 and maximum of 16 sa</li></ul>



Criteria	JORC Code explanation	Commentary
		completed by slicing sections through the block model in positions coincident with drilling. A quantitative assessment of the estimate was completed by comparing the average grades of the declustered composite file input against the block model output for all the resource objects. A trend analysis was completed by comparing the interpolated blocks to the sample composite data within the main lodes. This analysis was completed for strike, cross-strike and elevations across the main lodes at each deposit. Validation plots showed good correlation between the composite grades and the block model grades.
Moisture	• Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	<ul> <li>Tonnages and grades were estimated on a dry in situ basis. No moisture values were reviewed.</li> </ul>
Cut-off parameters	<ul> <li>The basis of the adopted cut-off grade(s) or quality parameters applied.</li> </ul>	<ul> <li>A nominal lower cut-off grade of 0.2 g/t Au was used to define the mineralised envelope that encompasses the complete mineralised distribution and produce a model that reduces the risk of conditional bias that could be introduced where the constraining interpretation and data selection is based on a significantly higher grade than the natural geological grade cut-off.</li> <li>The cut-off grade for reporting (above 1.0 g/t Au) was used in line with the previous resource reporting and is based on the results of Whittle optimisation shells using cost and recovery data sourced from the operation at Mineral Hill.</li> <li>Open pit mining optimisation studies currently underway support 1.0g/t Au as being appropriate for Mineral Resource reporting.</li> <li>A Whittle optimisation shell using site operational costs, a gold price of AUD\$3,200/ounce and a silver price of AUD\$37/ounce has been used to limit the MRE to that with reasonable expectations of economic extraction.</li> </ul>
Mining factors or assumptions	<ul> <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 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</li> </ul>	<ul> <li>The shallow occurrence of the mineralisation indicates that open pit mining is appropriate for Pearce North in line with other deposits in the area.</li> <li>Ore Reserve Estimation (ORE) in March 2023 and subsequent open pit mining optimisation studies confirm that Open Mining is appropriate and applicable to extracting the Pearse North Mineral Resource. The Pearse North ORE has not been updated based on this new model.</li> </ul>



Criteria	JORC Code explanation	Commentary
	of the mining assumptions made.	
Metallurgical factors or assumptions	<ul> <li>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.</li> </ul>	<ul> <li>No specific assumptions were made regarding metallurgical factors for this estimate.</li> <li>Metallurgical testwork and previous operations for nearby deposits have shown the resource would be economically treated using standard crush-grind-float concentration and carbon-in-leach cyanidation technology installed in the existing processing plant.</li> </ul>
Environmental factors or assumptions	<ul> <li>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 green fields 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.</li> </ul>	<ul> <li>Operations at Mineral Hill will utilise the existing infrastructure (including waste dumps and tailings storage facilities).</li> <li>Existing development and environmental approvals are in place and will be extended.</li> </ul>
Bulk density	<ul> <li>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.</li> <li>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.</li> <li>Discuss assumptions for bulk density</li> </ul>	<ul> <li>Bulk density values for Pearce North have been measured based on the Archimedean Principle using the immersion method for individual core samples. A total of 201 density measurements were available for use, with the majority (134) of these being in fresh rock. This data has been used as the basis of the block model bulk density.</li> <li>A default bulk density of 2.37 t/m3 was assigned to the oxide material, 2.52 t/m3 assigned to transitional and 2.65 t/m3 assigned to fresh rock.</li> </ul>



Criteria	JORC Code explanation	Commentary
	estimates used in the evaluation process of the different materials.	
Classification	<ul> <li>The basis for the classification of the Mineral Resources into varying confidence categories.</li> <li>Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).</li> <li>Whether the result appropriately reflects the Competent Person's view of the deposit.</li> </ul>	KSN has considered all the relevant criteria and has applied a classification to the estimated Mineral Resources of Indicated and Inferred. The portions of the April 2024 MRE classified as Indicated have been flagged by medium to high quality estimation parameters, an average distance to nearest sample of less than 25m and an average slope of regression (true to estimated block) of > 0.7. The drill spacing within the Indicated portion of the resource is relatively close, at a nominal 20 m drill spacing on 20 m sections. The portions of the April 2024 MRE classified as Inferred represent the domain to the south of the main orebody. In these portions geological continuity is present but not consistently confirmed by 20 m x 20 m drilling. The Inferred portions of the MRE are defined by lower quality of estimation parameters, an average slope of regression (true to estimated block) of < 0.6 and an average distance to composites used of > 30 m. Classification criteria and application to the model have been reviewed by the resource geologist, and KSN Competent Person. The Mineral Resource estimate appropriately reflects the Competent Person's view of the deposit.
Audits or reviews	<ul> <li>The results of any audits or reviews of Mineral</li> <li>Resource estimates.</li> </ul>	No external reviews have been completed, although the work has been peer reviewed internally by KSN.
Discussion of relative accuracy/ confidence	<ul> <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 to technical and economic evaluation. Documentation should include</li> </ul>	This is addressed in the relevant paragraph on Classification above. The Mineral Resource relates to global tonnage and grade estimates. No mining has previously taken place at Pearse North



Criteria	JORC Code explanation	Commentary
	<ul> <li>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>	

## **Section 4 Estimation and Reporting of Ore Reserves**

(Criteria listed in section 1, and where relevant in sections 2 and 3, also apply to this section.)

Ore Reserves are NOT being reported in this announcement.