

# GROUP MINERAL RESOURCE AND ORE RESERVE STATEMENT

Aurelia Metals Limited (ASX:AMI) (**Aurelia** or the **Company** or the **Group**) is pleased to report the Group's annual Mineral Resource and Ore Reserve statement for its 100%-owned Peak, Federation and Dargues Mines, along with Mineral Resource Estimates (MREs) for its 95%-owned Nymagee Project in New South Wales (NSW).

The MREs and Ore Reserve estimates are reported in accordance with the guidelines of the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code 2012). Estimates are reported as at 30 June 2023.

Group MREs and Ore Reserve estimates are presented in Table 1 and Table 2. Estimates for each mine and deposit are summarised in Table 3 to Table 11.

#### **GROUP**

- Underlying increase of 8% in the Group Ore Reserve (after adjusting for the removal of Hera Mine) bringing Group Ore Reserve tonnage to 5.5Mt.
- Underlying decrease of only 1% of Group MRE tonnage of 27Mt after adjusting for the removal of the Hera Resource.
- Hera Mine was removed from the 2023 MRE and Ore Reserve estimate as the mining operation
  has ceased and the surface facilities were placed into planned care and maintenance during H1
  CY2023.

Table 1. Group Mineral Resource Estimate as at 30 June 2023.

Class	Tonnes (kt)	Cu (%)	Au (g/t)	Zn (%)	Pb (%)	Ag (g/t)
Measured	3,000	0.9	2.6	1.1	0.9	12
Indicated	15,000	1.4	1.1	2.8	1.8	8
Inferred	8,200	1.7	0.5	1.8	1.0	8
Total	27,000	1.4	1.0	2.2	1.4	8

Note: The MRE is reported inclusive of Ore Reserves. There is no certainty that Mineral Resources not included in Ore Reserves will be converted to Ore Reserves. The Group MRE utilises A\$120/t net smelter return (NSR) cut-off for mineable shapes that include internal dilution for Nymagee, Dargues, Federation and the majority of the Peak deposits with A\$135/t NSR for Perseverance, Peak and Kairos. NSR is an estimate of the net recoverable value per tonne including offsite costs, payables, royalties and metal recoveries. Values are reported to two significant figures which may result in rounding discrepancies in the totals.

	p Ore Reserve Estimate as at 30 June 2023.
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Class	Tonnes (kt)	NSR (A\$/t)	Cu (%)	Au (g/t)	Zn (%)	Pb (%)	Ag (g/t)
Proved	940	270	0.6	3.5	1.6	1.4	9
Probable	4,500	290	0.9	1.5	5.4	3.3	7
Total	5,500	290	0.9	1.8	4.7	3.0	7

Note: Values are reported to two significant figures which may result in rounding discrepancies in the totals.

#### PEAK

- Ore Reserve tonnage increased by 8% to 2.7Mt. Positive drilling results at Chesney and updated economic parameters (supporting greater MRE to Ore Reserve conversion) more than offset mining depletion.
- Peak transitioning to copper-dominant mining with copper ore now 74% of Ore Reserve tonnage.
   Great Cobar Ore Reserve tonnage increased by 43% to 1.1Mt, with further underground drilling planned.
- MRE tonnage maintained at 19.0Mt; includes 36% uplift in Chesney MRE to 2.1Mt (from successful near-mine exploration drilling) and maiden MRE declaration for Burrabungie discovery (2.1% Cu; located close to existing underground workings with strong potential to grow).
- Copper-focussed portfolio drilling ongoing and potential development pathways for Nymagee (MRE: 1.9Mt at 2.2% Cu) also under evaluation.

#### **FEDERATION**

- Ore Reserve tonnage increased by 9% to 2.4Mt. Infill drilling results improved geological confidence and delivered further MRE classification upgrades (allowing additional conversion to Ore Reserves).
- MRE tonnage reduced by 4% to 4.8Mt following application of more conservative metallurgical assumptions appropriate for the low-capital Peak plant process pathway (rather than the previously assumed purpose-built process facility for Federation).
- Excellent potential for further growth in MRE (and Ore Reserve) with planned future underground drilling at Federation.

#### **DARGUES**

 Ore Reserve tonnage reduced by 14%. Minor additions from incremental drilling success and model updates offset by mining depletion. Residual expected mine life of 12-15 months.

#### MINERAL RESOURCE ESTIMATES

Table 3. Peak Mine copper MRE as at 30 June 2023.

Class	Tonnes (kt)	Cu (%)	Au (g/t)	Zn (%)	Pb (%)	Ag (g/t)
Measured	1,600	1.3	2.0	0.1	0.1	7
Indicated	8,300	1.8	1.0	0.0	0.0	5
Inferred	6,100	2.1	0.5	0.1	0.0	7
Total	16,000	1.8	0.9	0.0	0.0	6

Note: The Peak Mine MRE is reported inclusive of Ore Reserves. The MRE utilises A\$135/t NSR cut-off for Perseverance, Peak & Kairos and A\$120/t NSR cut-off for all other deposits within mineable shapes that include internal dilution. Values are reported to two significant figures which may result in rounding discrepancies in the totals.

Table 4. Peak Mine zinc-lead MRE as at 30 June 2023.

Class	Tonnes	Zn	Pb	Cu	Au	Ag
Class	(kt)	(%)	(%)	(%)	(g/t)	(g/t)
Measured	1,000	3.3	2.6	0.7	2.8	24
Indicated	1,200	5.3	4.4	0.5	1.7	22
Inferred	840	5.0	2.5	1.0	0.5	23
Total	3,000	4.6	3.3	0.7	1.8	23

Note: The Peak Mine MRE is reported inclusive of Ore Reserves. The MRE utilises A\$135/t NSR cut-off for Perseverance, Peak & Kairos and A\$120/t NSR cut-off for all other deposits within mineable shapes that include internal dilution. Values are reported to two significant figures which may result in rounding discrepancies in the totals.

Table 5. Dargues Mine MRE as at 30 June 2023.

Class	Tonnes (kt)	Au (g/t)
Measured	350	5.0
Indicated	360	3.0
Inferred	140	3.4
Total	850	3.9

Note: The MRE is reported inclusive of Ore Reserves. The MRE utilises A\$120/t NSR cut-off mineable shapes that include internal dilution. Values are reported to two significant figures which may result in rounding discrepancies in the totals.

Table 6. Federation Mine MRE as at 30 June 2023.

Class	Tonnes (kt)	Zn (%)	Pb (%)	Cu (%)	Au (g/t)	Ag (g/t)
Indicated	3,700	9.0	5.4	0.3	1.1	6
Inferred	1,100	8.9	5.3	0.2	0.2	6
Total	4,800	9.0	5.4	0.3	0.9	6

Note: The Federation MRE utilises A\$120/t NSR cut-off mineable shapes that include internal dilution. Values are reported to two significant figures which may result in rounding discrepancies in the totals.

Table 7. Nymagee Project MRE as at 30 June 2023.

Class	Tonnes (kt)	Cu (%)	Au (g/t)	Zn (%)	Pb (%)	Ag (g/t)
Indicated	1,900	2.2	0.1	1.1	0.6	16
Inferred	50	2.2	0.1	0.5	0.2	11
Total	1,900	2.2	0.1	1.1	0.6	16

Note: The Nymagee Project MRE utilises A\$120/t NSR cut-off mineable shapes that include internal dilution. Values are reported to two significant figures which may result in rounding discrepancies in the totals.

The change in the Group's MRE relative to the prior (30 June 2022) published statement is depicted in Figure 1.

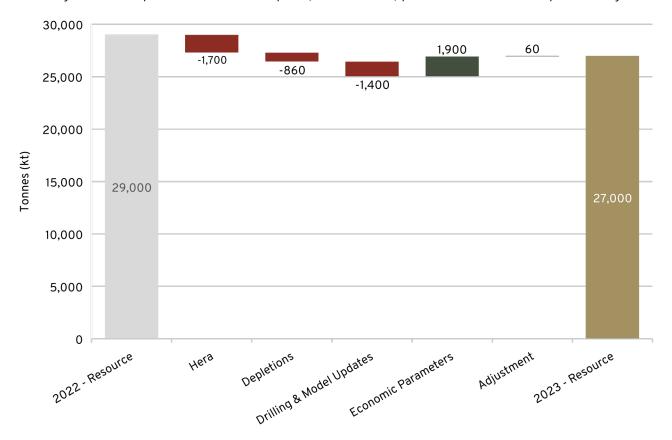


Figure 1. Change in Group Mineral Resource tonnage relative to 30 June 2022.

#### **ORE RESERVE ESTIMATES**

Table 8. Peak Mine copper Ore Reserve Estimate as at 30 June 2023.

Class	Tonnes (kt)	NSR (A\$/t)	Cu (%)	Au (g/t)	Zn (%)	Pb (%)	Ag (g/t)
Proved	350	270	1.3	3.0	0.1	0.1	6
Probable	1,600	230	1.9	1.5	0.0	0.0	5
Total	2,000	230	1.8	1.7	0.0	0.0	5

Note: The Peak copper Ore Reserve Estimate utilises A\$80/t NSR cut-off for development and A\$175-220/t NSR for stoping depending on mine area. Values are reported to two significant figures which may result in rounding discrepancies in the totals.

Table 9. Peak Mine zinc-lead Ore Reserve Estimate as at 30 June 2023.

Class	Tonnes (kt)	NSR (A\$/t)	Zn (%)	Pb (%)	Cu (%)	Au (g/t)	Ag (g/t)
Proved	290	340	5.1	4.3	0.5	3.6	21
Probable	420	280	6.8	5.7	0.4	1.8	23
Total	710	300	6.1	5.1	0.4	2.6	22

Note: The Peak zinc-lead Ore Reserve Estimate utilises A\$80/t NSR cut-off for development and A\$185-190/t NSR for stoping depending on mine area. Values are reported to two significant figures which may result in rounding discrepancies in the totals.

Table 10. Dargues Mine Ore Reserve Estimate as at 30 June 2023.

Class	Tonnes (kt)	NSR (A\$/t)	Au (g/t)
Proved	290	210	3.8
Probable	66	130	2.3
Total	360	190	3.5

Note: The Dargues Ore Reserve Estimate utilises A\$80/t NSR cut-off for development and A\$120/t NSR cut-off for stoping. Values are reported to two significant figures which may result in rounding discrepancies in the totals.

Table 11. Federation Mine Ore Reserve Estimate as at 30 June 2023.

Class	Tonnes (kt)	NSR (A\$/t)	Zn (%)	Pb (%)	Cu (%)	Au (g/t)	Ag (g/t)
Proved	0	0	0	0	0	0	0
Probable	2,400	350	9.0	5.3	0.3	1.4	6
Total	2,400	350	9.0	5.3	0.3	1.4	6

Note: The Federation Ore Reserve Estimate utilises A\$80/t NSR cut-off for development and A\$175/t NSR cut-off for stoping. Values are reported to two significant figures which may result in rounding discrepancies in the totals.

The change in the Group's Ore Reserve Estimate relative to the prior (30 June 2022) published statement is presented in Figure 2. Positive drilling results at Chesney supported Mineral Resource conversion to Ore Reserve which, along with updated economic parameters, have mostly offset mining depletion at a Group level.

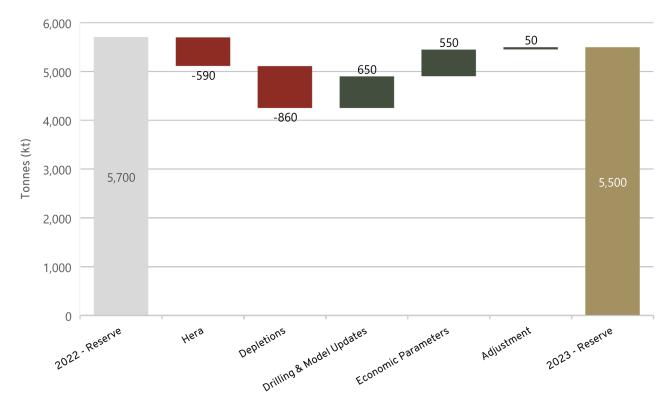


Figure 2. Change in Group Ore Reserve tonnage relative to 30 June 2022.

### This announcement has been approved for release by the Board of Directors of Aurelia Metals.

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#### **About Aurelia**

Aurelia Metals Limited (ASX: AMI) is an Australian mining and exploration company with a highly strategic landholding, and two operating mines in New South Wales (NSW). The Peak Mine is in the Cobar Basin in Western NSW, and the Dargues Mine is in southeastern NSW. The Hera mining operation, also located in the Cobar Basin, has ceased and the surface facilities have been placed into care and maintenance. In addition, Aurelia has two consented high grade development projects. The polymetallic Federation Project is currently under construction with development ore expected in 2024. The development of the Great Cobar copper deposit will follow.

In FY23, Aurelia produced 86 thousand ounces of gold at a Group all-in sustaining cost (AISC) of A\$2,315 per ounce. The Peak cost base benefits from substantial by-product revenue credits from base metal production (including zinc, lead and copper).

#### IMPORTANT INFORMATION

This report includes forward looking statements. Often, but not always, forward looking statements can be identified by the use of forward looking words such as "may", "will", "expect", "intend", "plan", "estimate", "anticipate", "continue", "outlook" and "guidance", or other similar words and may include, without limitation, statements regarding plans, strategies and objectives of the Company, anticipated production or activity commencement dates and expected costs or production outputs. Forward looking statements inherently involve known and unknown risks, uncertainties and other factors that may cause the Company's actual results, performance and achievements to differ materially from any future results, performance or achievements. Relevant factors may include, but are not limited to, changes in commodity prices, foreign exchange fluctuations and general economic conditions, increased costs of production inputs, the speculative nature of exploration and project development, including the risks of obtaining necessary licences and permits, and diminishing quantities or grades of reserves, political and social risks, changes to the regulatory environment, environmental conditions including extreme weather conditions, recruitment and retention of key personnel, industrial relations issues and litigation. Forward looking statements are based on the Company and management's good faith assumptions relating to the financial, market, regulatory and other relevant environments that will exist and affect the Company's business and operations in the future. The Company does not give any assurance that the assumptions on which forward looking statements are based will prove to be correct, or that the Company's business or operations will not be affected in any material manner by these or other factors not foreseen or foreseeable by the Company or management or beyond the Company's control. Although the Company attempts and has attempted to identify factors that would cause actual actions, events or results to differ materially from those disclosed in forward looking statements, there may be other factors that could cause actual results, performance, achievements or events not to be as anticipated, estimated or intended, and many events are beyond the reasonable control of the Company. Accordingly, readers are cautioned not to place undue reliance on forward looking statements. Forward looking statements in these materials speak only at the date of issue. Subject to any continuing obligations under applicable law, including any relevant stock exchange listing rules, in providing this information the Company does not undertake any obligation to publicly update or revise any of the forward looking statements or to advise of any change in events, conditions or circumstances on which any such statement is based.

#### **COMPETENT PERSONS STATEMENTS**

#### **Peak Mineral Resource Estimate**

Compilation of the drilling database, assay validation and geological interpretations for the Peak Mineral Resource Estimate were completed by Chris Powell, BSc, MAusIMM, who is a full-time employee of Peak Gold Mines Pty Ltd. The Mineral Resource Estimate has been prepared by Mr Powell who has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Powell consents to the inclusion in this report of the matters based on their information in the form and context in which it appears.

#### **Dargues Mineral Resource Estimate**

Compilation of the drilling database, assay validation and geological interpretations for the Dargues Mineral Resource Estimate was completed under the supervision of Timothy O'Sullivan, BSc (Hons), MAusIMM CP (Geo), who was a full-time employee of Aurelia Metals Limited during the relevant period. The Mineral Resource Estimate for Dargues was prepared by Mr O'Sullivan. Mr O'Sullivan has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as Competent Persons as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr O'Sullivan consents to the inclusion in this report of the matters based on their information in the form and context in which it appears.

#### **Federation Mineral Resource Estimates**

Compilation of the drilling database, assay validation and geological interpretations for the Federation Mineral Resource Estimates as well as the Federation Mineral Resource Estimates were prepared by Timothy O'Sullivan, BSc (Hons), MAusIMM CP (Geo), who was a full-time employee of Aurelia Metals Limited during the relevant period. Mr O'Sullivan has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which they are undertaking to qualify as Competent Persons as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr O'Sullivan consent to the inclusion in this report of the matters based on their information in the form and context in which it appears.

#### Nymagee Mineral Resource Estimate

Compilation of the drilling database, assay validation and geological interpretations for the Nymagee Mineral Resource Estimate was completed under the supervision of Timothy O'Sullivan, BSc (Hons), MAusIMM CP (Geo), who was a full-time employee of Aurelia Metals Limited during the relevant period. The Mineral Resource Estimate for Nymagee was prepared by Mr O'Sullivan. Mr O'Sullivan has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as Competent Persons as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr O'Sullivan consents to the inclusion in this report of the matters based on their information in the form and context in which it appears.

#### Ore Reserve Estimate - Peak, Dargues, Federation

The Ore Reserve Estimate was compiled by Justin Woodward, BEng (Mining), MAusIMM, who is a full-time employee of Aurelia Metals Limited. Mr Woodward has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity for which he is undertaking to qualify as Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Woodward consents to the inclusion in this report of the matters based on their information in the form and context in which it appears.

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#### 1.0 PEAK MINERAL RESOURCE AND ORE RESERVE STATEMENT

#### 1.1 SUMMARY

Aurelia has updated the MRE and Ore Reserve Estimate for its 100% owned Peak Mine in NSW. The estimate incorporates results from resource delineation drilling and mining depletion subsequent to 30 June 2022. The estimates are reported as at 30 June 2023 in accordance with the JORC Code 2012.

The updated MRE (Table 12 and Table 13) represents a 1% tonnage increase over the previous estimate. The change reflects mining depletion, updated NSR parameters and additional material identified from infill and extensional drilling programs at Chesney and the inclusion of the Burrabungie deposit.

Table 12. Peak Mine copper MRE as at 30 June 2023.

Class	Tonnes (kt)	Cu (%)	Au (g/t)	Zn (%)	Pb (%)	Ag (g/t)
Measured	1,600	1.3	2.0	0.1	0.1	7
Indicated	8,300	1.8	1.0	0.0	0.0	5
Inferred	6,100	2.1	0.5	0.1	0.0	7
Total	16,000	1.8	0.9	0.0	0.0	6

Note: The Peak Mine MRE is reported inclusive of Ore Reserves. The MRE utilises A\$135/t NSR cut-off for Perseverance, Peak & Kairos and \$120/t NSR cut-off for all other deposits, within mineable shapes that include internal dilution. Values are reported to two significant figures which may result in rounding discrepancies in the totals

Table 13. Peak Mine zinc-lead MRE as at 30 June 2023.

Class	Tonnes (kt)	Zn (%)	Pb (%)	Cu (%)	Au (g/t)	Ag (g/t)
Measured	1,000	3.3	2.6	0.7	2.8	24
Indicated	1,200	5.3	4.4	0.5	1.7	22
Inferred	840	5.0	2.5	1.0	0.5	23
Total	3,000	4.6	3.3	0.7	1.8	23

Note: The Peak Mine MRE is reported inclusive of Ore Reserves. The MRE utilises A\$135/t NSR cut-off for Perseverance, Peak & Kairos and \$120/t NSR cut-off for all other deposits, within mineable shapes that include internal dilution. Values are reported to two significant figures which may result in rounding discrepancies in the totals.

The 2023 Peak Ore Reserve Estimate, presented in Table 14 and Table 15, has been derived from the Peak Mine MRE using material from the Measured and Indicated classifications with the addition of mining dilution as appropriate for the mining methodology.

Class	Tonnes (kt)	NSR (A\$/t)	Cu (%)	Au (g/t)	Zn (%)	Pb (%)	Ag (g/t)
Proved	350	270	1.3	3.0	0.1	0.1	6
Probable	1,600	230	1.9	1.5	0.0	0.0	5
Total	2,000	230	1.8	1.7	0.0	0.0	5

Note: The Peak copper Ore Reserve Estimate utilises A\$80/t NSR cut-off for development and A\$175-A\$220/t NSR for stoping depending on mine area. Values are reported to two significant figures which may result in rounding discrepancies in the totals.

Table 15. Peak Mine zinc-lead Ore Reserve Estimate as at 30 June 2023.

Class	Tonnes (kt)	NSR (A\$/t)	Zn (%)	Pb (%)	Cu (%)	Au (g/t)	Ag (g/t)
Proved	290	340	5.1	4.3	0.5	3.6	21
Probable	420	280	6.8	5.7	0.4	1.8	23
Total	710	300	6.1	5.1	0.4	2.6	22

Note: The Peak zinc-lead Ore Reserve Estimate utilises A\$80/t NSR cut-off for development and A\$185-A\$190/t NSR for stoping depending on mine area. Values are reported to two significant figures which may result in rounding discrepancies in the totals.

#### 1.2 INTRODUCTION

Updated Mineral Resource and Ore Reserve estimates have been prepared for the Peak Mine located near Cobar, NSW. The updated total Measured, Indicated and Inferred Mineral Resource (Table 12 and Table 13) is reported using either a A\$120/t or A\$135/t NSR cut-off depending on the deposit. The MRE includes all blocks within the volumes produced by Deswik CAD Stope Optimiser (SO) software but excludes material mined or sterilised by nearby mining. The reported estimates include an internal dilution component.

The 2023 Mineral Resource and Ore Reserve estimates incorporate mining depletion, updated NSR parameters, additional material identified from infill and extensional drilling programs and current mine designs.

#### 1.3 MINERAL RESOURCE ESTIMATE

The Peak Mine deposits are considered epigenetic Cobar-style mineralisation that are controlled by major fault zones and subsequent spurs and splays. Mineralisation is hosted in metasediments and rhyolite. The economic minerals are contained within quartz stockworks and breccias. The deposits are polymetallic in nature with variable gold, copper, silver, zinc and lead mineralisation.

Mineralisation is defined by underground and surface diamond core and reverse circulation percussion (RC) drilling. Drill core has been sampled on nominal one metre intervals using both whole core and half core sampling. All samples from core are assayed in certified commercial laboratories. Samples are routinely assayed for up to 34 elements using ICP-AES with a three-acid partial digest. Gold is assayed using a 50g fire assay. Aurelia has maintained a detailed QA/QC system during its sampling and assaying processes.

Wireframes for Mineral Resource estimation are nominally constructed using a 0.1g/t Au and/or 0.1% Cu-Pb-Zn threshold. Locally, in mining areas, the wireframes are constructed to reflect the true width of the ore bearing structure. Samples are composited to one metre intervals.

Ordinary kriging (OK) is used for estimation of Cu, Pb, Zn, Ag, Bi, Fe and S. Multiple indicator kriging (MIK) is used where there is significant gold mineralisation and either a high co-efficient of variation (CV) or structural complexity. OK is used for gold in other domains. MIK is considered an appropriate estimation method for the gold grade distribution at Peak Mine because it accounts for changing spatial continuity at different grade ranges. The estimation is performed with three passes of increasing dimension that dictate the Measured, Indicated and Inferred Mineral Resource classifications. First pass search radii are typically between 3m x 15m x 15m and 3m x 20m x 25m in Easting, Northing and elevation respectively, depending on the style of mineralisation. Further details on the MRE are contained in JORC Table 1 in the Appendix to this statement.

A NSR value was calculated for each block after estimation. The NSR is used to assign an economic value to the polymetallic mineralisation. The NSR methodology (detailed under the Ore Reserve commentary) takes into account recoveries associated with each of the process streams, which include production of base metal concentrates and gold recovery through gravity and leaching processes. The estimate is also based on metal prices, exchange rates, freight, treatment charges, royalties and process recoveries. Metal price assumptions used in the NSR calculation are listed in Table 16. Metallurgical recovery and concentrate grade parameters are listed in Table 17.

Table 16. Metal price assumptions used for Mineral Resource and Ore Reserve estimates.

Commodity	Unit	Mineral Resource 2023	Ore Reserve 2023
Gold	US\$/oz	1,800	1,600
Silver	US\$/oz	23.0	21.5
Lead	US\$/t	2,094	1,984
Zinc	US\$/t	2,976	2,646
Copper	US\$/t	8,708	7,937
FX	US\$/A\$	0.73	0.73
Gold	A\$/oz	2,466	2,192
Silver	A\$/oz	31.5	29.5
Lead	A\$/t	2,868	2,718
Zinc	A\$/t	4,077	3,625
Copper	A\$/t	11,929	10,873

Table 17. Peak Mine metal recovery and concentrate grade parameters.

Parameter	Mineral Resource 2023	Ore Reserve 2023
Au Recovery - Gravity	30-43%	30-43%
Au Recovery - Total	80-95%	80-95%
Ag Recovery - Total	60-80%	60-80%
Pb Recovery	60-88%	60-88%
Zn Recovery	60-68%	60-68%
Cu Recovery	75-95%	75-95%
Cu Grade - Concentrate	23-25%	23-25%
Pb Grade - Concentrate	20-55%	20-55%
Zn Grade - Concentrate	45-52%	45-52%

Following Mineral Resource estimation, a series of mineable shapes were produced by Deswik's SO software. The SO shapes were used to constrain the reported MRE. The application of the smallest mineable unit (SMU) for the SO shapes is similar to the process detailed in the 2022 Peak Mineral Resource and Ore Reserve Statement. The reported MREs include internal dilution. The MRE by deposit is reported in Table 18 to Table 19. Long sections of the Mineral Resource model are shown in Figure 4 and Figure 3.

Table 18. Peak North Mine copper MRE reported by deposit and classification as at 30 June 2023.

Class	Deposit	Tonnes (kt)	Cu (%)	Au (g/t)	Zn (%)	Pb (%)	Ag (g/t)
	Chesney	620	1.5	1.5	0.0	0.0	6
Measured	New Cobar	390	0.9	2.2	0.1	0.1	6
Measureu	Jubilee	170	1.9	0.5	0.0	0.0	8
	Total Measured	1,200	1.4	1.6	0.0	0.0	6
	Chesney	1,200	1.7	1.1	0.0	0.0	6
	New Cobar	780	0.9	1.8	0.0	0.0	5
Indicated	Jubilee	340	1.9	0.5	0.1	0.1	9
illuicateu	Great Cobar	4,600	2.1	0.7	0.0	0.0	4
	Gladstone	160	2.2	0.0	0.0	0.0	8
	Total Indicated	7,100	1.9	0.9	0.0	0.0	5
	Chesney	300	1.5	0.8	0.0	0.0	5
	New Cobar	130	0.9	1.5	0.0	0.0	5
	Jubilee	69	1.8	0.3	0.0	0.1	10
Inferred	Great Cobar	3,800	2.1	0.5	0.1	0.0	6
illierred	Dapville	260	2.7	0.2	0.1	0.1	8
	Gladstone	890	2.4	0.0	0.0	0.0	8
	Burrabungie	220	2.1	0.0	0.0	0.0	4
	Total Inferred	5,700	2.1	0.4	0.1	0.0	6
	North Mine Copper	14,000	1.9	0.7	0.0	0.0	6

Note: Values are reported to two significant figures which may result in rounding discrepancies in the totals.

Table 19. Peak North Mine zinc-lead MRE reported by deposit and classification as at 30 June 2023.

Class	Deposit	Tonnes (kt)	Zn (%)	Pb (%)	Cu (%)	Au (g/t)	Ag (g/t)
	Great Cobar	690	5.4	2.5	1.1	0.3	25
Inferred	Dapville	15	4.0	3.4	1.7	0.1	29
	Total Inferred	700	5.3	2.6	1.1	0.2	25
Total – Peak North Mine zinc-lead		700	5.3	2.6	1.1	0.2	25

Note: Values are reported to two significant figures which may result in rounding discrepancies in the totals.

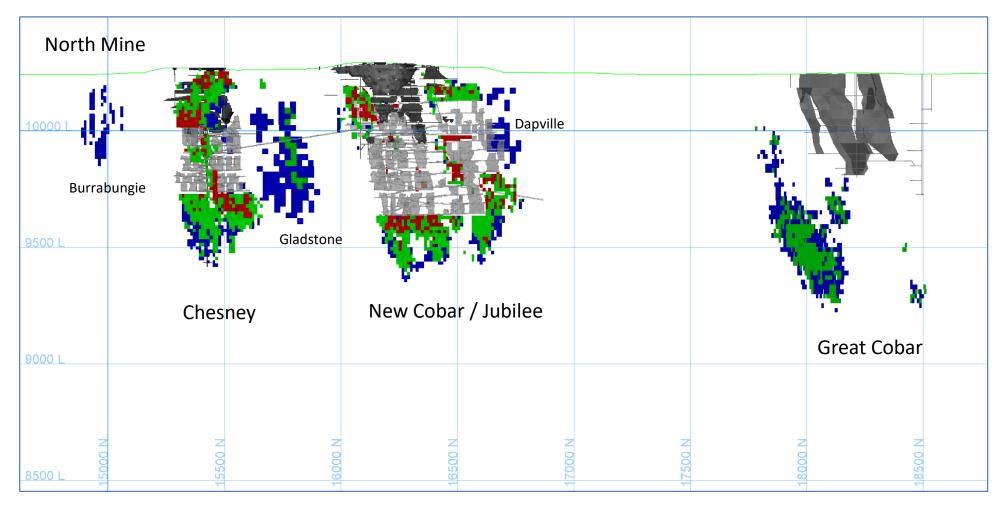


Figure 3. Long section facing west of the Peak North Mine showing the Measured (red), Indicated (green) and Inferred (blue) Mineral Resource classifications.

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Table 20. Peak South Mine copper MRE reported by deposit and classification as at 30 June 2023.

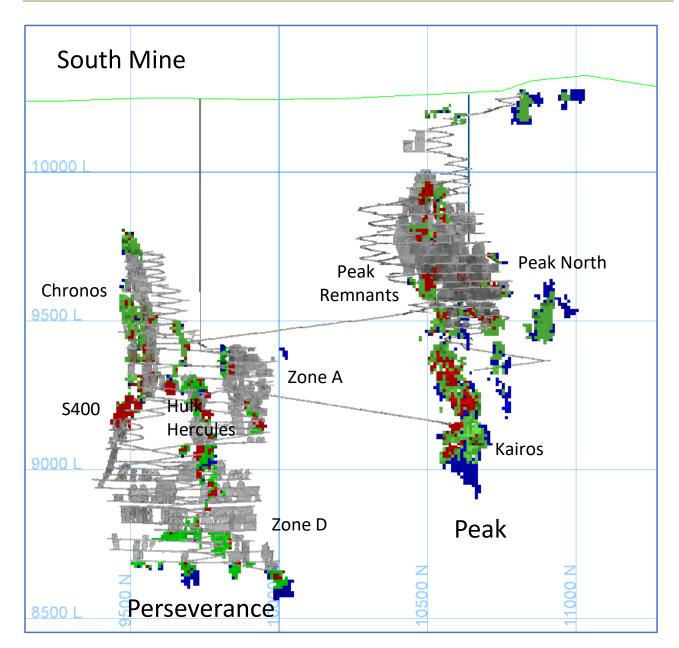
Class	Deposit	Tonnes (kt)	Cu (%)	Au (g/t)	Zn (%)	Pb (%)	Ag (g/t)
	Perseverance	220	1.1	2.6	0.2	0.2	9
Measured	Peak	130	0.5	4.0	0.1	0.2	4
Measureu	Kairos	98	1.1	2.6	0.2	0.2	9
	Total Measured	450	0.9	3.0	0.1	0.2	8
	Perseverance	470	1.0	2.5	0.1	0.1	6
Indicated	Peak	370	0.5	3.1	0.1	0.1	6
indicated	Kairos	390	1.9	0.5	0.1	0.3	10
	Total Indicated	1,200	1.1	2.0	0.1	0.2	7
	Perseverance	91	0.9	2.3	0.1	0.1	7
Inferred	Peak	140	0.3	3.0	0.1	0.1	3
illielled	Kairos	230	2.2	0.3	0.0	0.2	15
	Total Inferred	460	1.3	1.5	0.1	0.2	10
Total – Peak S	South Mine Copper	2,100	1.1	2.1	0.1	0.2	8

Note: Values are reported to two significant figures which may result in rounding discrepancies in the totals.

Table 21. Peak South Mine zinc-lead MRE reported by deposit and classification as at 30 June 2023.

Class	Deposit	Tonnes (kt)	Zn (%)	Pb (%)	Cu (%)	Au (g/t)	Ag (g/t)
	Perseverance	490	2.2	2.6	0.8	2.6	25
Measured	Peak	270	2.4	1.4	0.7	2.5	31
Measureu	Kairos	240	6.5	4.0	0.6	3.4	14
	Total Measured	1,000	3.3	2.6	0.7	2.8	24
	Perseverance	530	7.8	7.1	0.3	0.6	30
Indicated	Peak	320	2.0	1.2	0.5	2.8	19
Illuicateu	Kairos	320	5.0	3.4	0.8	2.6	14
	Total Indicated	1,200	5.3	4.4	0.5	1.7	22
	Perseverance	28	6.7	4.7	0.3	0.4	21
Inferred	Peak	60	0.7	0.7	0.3	3.4	7
illielled	Kairos	47	5.1	3.1	0.4	1.4	17
	Total Inferred	130	3.5	2.4	0.3	2.1	13
Total – Peak S	Total – Peak South Mine zinc-lead		4.3	3.2	0.5	2.2	20

Note: Values are reported to two significant figures which may result in rounding discrepancies in the totals.



**Figure 4.** Long section facing west of the Peak South Mine showing the Measured (red), Indicated (green) and Inferred (blue) Mineral Resource classifications.

#### 1.4 CHANGES FROM PRIOR MINERAL RESOURCE ESTIMATE

The 2023 MRE represents a minor increase in tonnage and a decrease in contained metal over the 2022 estimate as outlined in Table 22 and depicted in Figure 5. Several factors have contributed to the changes.

- Mining depletion of 490kt, predominantly from the New Cobar, Jubilee, Perseverance, and Kairos deposits.
- Chesney tonnage increased to 2.1Mt (36%) predominately from drilling.
- The addition of the Burrabungie deposit based on results from surface drilling.

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Revised NSR parameters based on operating conditions and updated economic assumptions.

- Updated geological models and estimations due to recent drilling results.
- Increasing the cut-off for Perseverance, Peak and Kairos from A\$120/t NSR to A\$135/t NSR.

Table 22. Tonnage and contained metal in the 2023 Peak Mine MRE and variance to the 2022 MRE.

Class	Tonnes (kt)	Cu (kt)	Au (koz)	Zn (kt)	Pb (kt)	Ag (koz)
Measured	2,600	30	190	30	30	1,100
Indicated	9,500	150	340	70	60	2,300
Inferred	7,000	130	110	50	20	2,000
Total	19,000	310	640	150	110	5,400
Variance to 2022 MRE	1%	0%	-20%	-19%	-17%	-16%

Note: Values are reported to two significant figures which may result in rounding discrepancies in the totals.

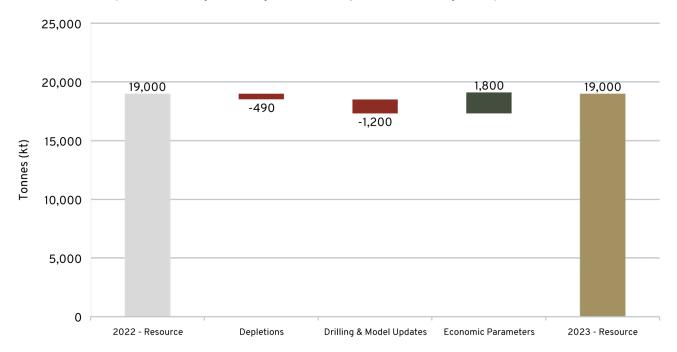


Figure 5. Change in Peak Mineral Resource tonnage relative to 30 June 2022.

#### 1.5 ORE RESERVE ESTIMATE

The Ore Reserve Estimate reported by copper and zinc-lead deposits for North Mine and South Mine is shown in Table 23 to Table 25.

Table 23. Peak South Mine copper Ore Reserve Estimate reported by deposit and classification as at 30 June 2023.

Class	Deposit	Tonnes (kt)	NSR (A\$/t)	Cu (%)	Au (g/t)	Zn (%)	Pb (%)	Ag (g/t)
	Perseverance	44	270	0.6	4.0	0.0	0.0	5
Proved	Peak	50	320	0.4	5.1	0.2	0.2	3
Floved	Kairos	36	300	0.5	4.7	0.2	0.2	3
	Total Proved	130	300	0.5	4.6	0.2	0.1	4
	Perseverance	40	280	0.9	3.8	0.1	0.2	7
Probable	Peak	98	260	0.4	4.0	0.1	0.1	3
Probable	Kairos	22	230	0.6	3.3	0.3	0.2	4
	Total Probable	160	260	0.5	3.9	0.1	0.1	4
Total – Pea	Total - Peak South Mine copper		280	0.5	4.2	0.1	0.1	4

Note: The Peak copper Ore Reserve Estimate utilises A\$80/t NSR cut-off for development and A\$185-220/t NSR for stoping depending on mine area. Values are reported to two significant figures which may result in rounding discrepancies in the totals.

Table 24. Peak North Mine copper Ore Reserve Estimate reported by deposit and classification as at 30 June 2023.

Class	Deposit	Tonnes (kt)	NSR (A\$/t)	Cu (%)	Au (g/t)	Zn (%)	Pb (%)	Ag (g/t)
	Chesney	200	260	1.7	2.3	0.0	0.0	6
Proved	Jubilee	26	230	2.4	0.9	0.0	0.1	11
	Total Proved	220	260	1.8	2.1	0.0	0.0	7
	Chesney	360	210	1.7	1.4	0.0	0.0	6
Probable	Jubilee	48	190	1.8	0.9	0.0	0.1	11
Flobable	Great Cobar	1,100	230	2.1	1.2	0.0	0.0	4
	Total Probable	1,500	220	2.0	1.2	0.0	0.0	5
Total – Pea	k North Mine copper	1,700	230	2.0	1.3	0.0	0.0	5

Note: The Peak copper Ore Reserve Estimate utilises A\$80/t NSR cut-off for development and A\$175-180/t NSR for stoping depending on mine area. Values are reported to two significant figures which may result in rounding discrepancies in the totals.

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Table 25. Peak South Mine zinc-lead Ore Reserve Estimate reported by deposit and classification as at 30 June 2023.

Class	Deposit	Tonnes (kt)	NSR (A\$/t)	Zn (%)	Pb (%)	Cu (%)	Au (g/t)	Ag (g/t)
	Perseverance	160	290	3.4	4.2	0.5	3.0	26
Proved	Peak	20	260	3.1	1.6	0.7	3.2	19
Proved	Kairos	110	430	7.7	4.8	0.5	4.5	14
	Total Proved	290	340	5.1	4.3	0.5	3.6	21
	Perseverance	210	260	8.0	7.7	0.2	0.8	30
Probable	Peak	38	250	4.4	1.9	1.2	2.6	29
Probable	Kairos	170	300	5.8	3.9	0.4	3.0	13
	Total Probable	420	280	6.8	5.7	0.4	1.8	23
Total – Peak	South Mine zinc-lead	710	300	6.1	5.1	0.4	2.6	22

Note: The Peak zinc-lead Ore Reserve Estimate utilises A\$80/t NSR cut-off for development and A\$185-190/t NSR for stoping depending on mine area. Values are reported to two significant figures which may result in rounding discrepancies in the totals.

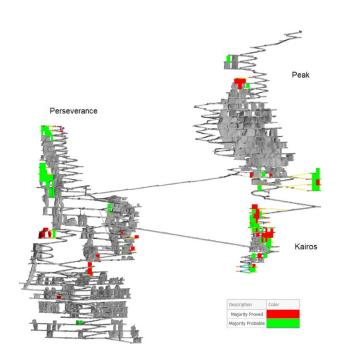
#### Ore Reserve Classification

The Mineral Resource classifications flagged in the geology block model formed the basis for the Ore Reserve Estimate. Mining shapes were developed from the geology block model before the quantity and grade of Measured, Indicated, Inferred and unclassified material within the mining shapes were reported. Mining shapes were included in the Ore Reserve Estimate if individual shapes contained more than 80% of Measured and Indicated material.

The Ore Reserve classification of the material within the mining shapes was aligned with the Mineral Resource classifications, such that the Measured Mineral Resource converted to Proved Ore Reserve and the Indicated classification was reported as Probable Ore Reserve.

The selected mining shapes may contain a minor portion of Inferred or unclassified material. The metal value corresponding to this tonnage was removed from the Ore Reserve Estimate while the tonnage remained in the Ore Reserve Estimate as internal dilution at zero grade. This dilution was prorated into the Proved and Probable classifications based on the relative tonnage.

A representation of the Ore Reserve is shown in Figure 6 and Figure 7 for the two Peak mining operations.



**Figure 6.** Long section facing west of the Peak South Mine showing Proved (red) and Probable (green) Ore Reserve classifications.



**Figure 7.** Long section facing west of the Peak North Mine showing Proved (red) and Probable (green) Ore Reserve classifications.

#### Mining Assumptions

The Peak Mine uses a combination of uphole and downhole stoping with rockfill, progressing in a bottom up sequence. This mining method and Peak's mine development design were used for the Ore Reserve Estimate.

Stope shapes are a combination of current mine design shapes and stope shapes created using SO software. The mine design shapes are used in preference and updated using the SO shapes if changes to the geology model caused significant changes to the stope shapes.

Settings used in the SO allowed for 0.5m hangingwall and footwall dilution with a minimum mining width of 3m. Stope strike lengths and heights vary across the operation and have been aligned with current mine designs.

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Additional mining dilution and recovery factors have been applied. Development has 15% mining dilution applied and 100% recovery. Downhole stoping has 5% mining dilution applied with 95% recovery. Uphole stoping has 2% mining dilution applied with 75% recovery. Sill pillar mining has 2% mining dilution applied with 60% recovery.

Stope shapes that are current mine design shapes have recovery and dilution parameters applied by deposit as shown in Table 26.

Table 26. Peak Mine mining factors by deposit.

Deposits	Recovery (%)	Dilution (%)
Chesney, Great Cobar, Peak	90	10
Chronos, Hinge, Hulk	90	14
Kairos	92	18
Perseverance	92	16
Jubilee	92	14
S400	92	12

#### Net Smelter Return

Peak Mine is a polymetallic operation producing copper, gold, zinc, lead and silver hence a NSR methodology has been used to calculate the economic value of a tonne of mineralised rock net of all off site costs. This calculation includes road freight, port storage, ship loading, sea freight, treatment charges and royalties. The revenue from the smelter is also net of payable metal and smelter penalties.

The NSR (A\$/t) was calculated using the following formula:

 $NSR = [metal \ grade \ x \ expected \ metallurgical \ recovery \ x \ expected \ payables \ x \ metal \ price] - [transport \ and \ treatment \ charges, \ penalties \ and \ royalties]$ 

Metal price assumptions used in the NSR calculation are listed in Table 16. Metal prices have been based on consensus forecasts. Metallurgical recoveries and concentrate grades are outlined in Table 17.

Metallurgical recoveries are based on operating experience and near-term operating targets. The metallurgical recoveries for the Ore Reserve Estimate are consistent with existing performance at the Peak Mine.

Aurelia uses established transportation networks to export concentrate from the Peak Mine. Concentrate sales contracts are renewable on standard commercial terms. Gold and silver doré products are transported to a receiving mint for refining under a commercial agreement. Appropriate royalties have been applied.

#### **Cut-off Values**

A NSR cut-off of A\$80/t was applied for mineralised development material. The stoping cut-off varies by deposit to reflect the relative complexity of the different mining areas. The economic viability of the NSR cut-off values has been demonstrated through cashflow modelling completed for the Peak Life of Mine (LOM) plan and budget.

Table 27. Stoping NSR cut-off values by ore type and deposit.

Ore Type	Deposit	NSR Cut-off (A\$/t)
Zinc-lead	Chronos	190
Zilic-lead	All others	185
Copper	Great Cobar	175
	Jubilee, Chesney	180
	Perseverance Deeps	220
	All Others	185

#### 1.6 CHANGES FROM PRIOR ORE RESERVE ESTIMATE

Economic assumptions were updated for the preparation of the Ore Reserve Estimate. Positive adjustments due to price assumptions outweighed negative adjustments due to updated metallurgical assumptions, concentrate sales terms and cut-off values. Drilling and model updates incorporate the results of drilling programs across the mining operation with Chesney being the key contributor to the positive adjustment. Mining depletion also represents a key change from the 2022 Ore Reserve Estimate as shown in the waterfall chart in Figure 8.

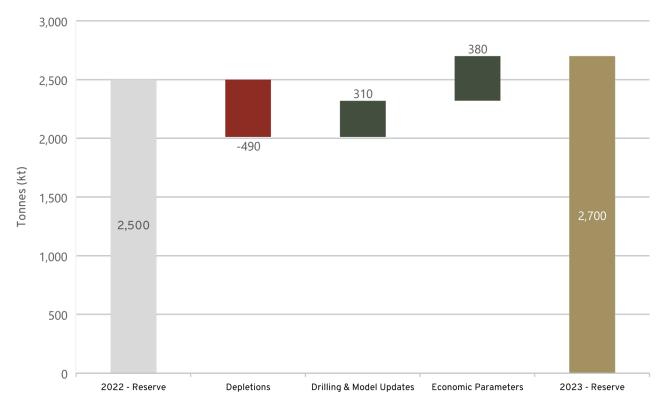


Figure 8. Change in Peak Ore Reserve tonnage relative to 30 June 2022.

#### 2.0 DARGUES MINERAL RESOURCE AND ORE RESERVE STATEMENT

#### 2.1 SUMMARY

Updated Mineral Resource and Ore Reserve estimates were prepared for the Dargues Mine in NSW (Table 28 and Table 29). The estimates incorporate results from infill and extensional drilling subsequent to 30 June 2022, operating experience and depletion since the commencement of mining. The estimates are reported as at 30 June 2023 in accordance with the JORC Code 2012.

Table 28. Dargues Mine MRE as at 30 June 2023.

Class	Tonnes (kt)	Au (g/t)	Au (koz)
Measured	350	5.0	57
Indicated	360	3.0	34
Inferred	140	3.4	15
Total	850	3.9	106

Note: The MRE is reported inclusive of Ore Reserves. The MRE utilises A\$120/t NSR cut-off mineable shapes that include internal dilution. Values are reported to two significant figures which may result in rounding discrepancies in the totals.

The 2023 Dargues Ore Reserve Estimate has been derived from the Dargues Mine MRE using material from the Measured and Indicated classifications, with the addition of mining dilution as appropriate for the mining methodology.

Table 29. Dargues Mine Ore Reserve Estimate as at 30 June 2023.

Class	Tonnes (kt)	NSR (A\$/t)	Au (g/t)	Au (koz)
Proved	290	210	3.8	35
Probable	66	130	2.3	5
Total	360	190	3.5	40

Note: The Dargues Ore Reserve Estimate utilises A\$80/t NSR cut-off for development and A\$120/t NSR cut-off for stoping. Values are reported to two significant figures which may result in rounding discrepancies in the totals.

#### 2.2 INTRODUCTION

An updated MRE has been completed for the Dargues Reef deposit at Majors Creek, located 60 kilometres southeast of Canberra and 12 kilometres south of Braidwood. The updated MRE is reported with Measured, Indicated and Inferred classifications at an A\$120/t NSR cut-off value. The MRE includes all blocks within the volumes produced by Deswik's SO software and excludes material that has been mined or sterilised by mining. The reported estimates include an internal dilution component.

The 2023 Dargues Ore Reserve Estimate has been derived from the Dargues Mine MRE using material from the Measured and Indicated classifications with the addition of mining dilution as appropriate for the mining methodology.

#### 2.3 MINERAL RESOURCE ESTIMATE

The Dargues Reef deposit is located within the Early Devonian Braidwood Granodiorite in the Eastern Lachlan Fold Belt. The Lachlan Fold Belt traverses eastern Australia from Tasmania to Queensland. It is

described as a composite orogenic belt which has been subjected to four episodes of folding, strong compression and uplift.

Mineralisation occurs in numerous discrete, fracture-controlled sulphide lodes situated within intense zones of phyllic alteration. The lodes are steeply dipping (80-90°) and have a variable strike from E-W to ENE-WSW. The main zones of mineralisation occur on the northern side of a parallel diorite dyke with some minor mineralisation sporadically developed on the southern margin. The mineralisation and dyke appear to be disrupted by an interpreted fault, or set of faults, one of which is situated in the position of a N-S trending water course.

For most mineralised zones within the deposit, the wireframes have been used as hard boundaries for the interpolation of gold grades. This is to ensure only gold grades within each wireframe were used to estimate the block inside that wireframe. Domain 8a and 8b used soft boundaries allowing samples from both domains to inform the estimate. The OK method was used for the estimation of Au, Ag, Cu, S, Bi and As grades. A total of three interpolation passes were used to populate the block model.

The search ellipse distance and orientation were selected for each domain based on the variograms. The orientation of the search ellipse and variogram models were controlled by coding the block model with local anisotropy to best reflect the local orientation of the mineralised structures.

The Mineral Resource has been classified into three categories using a combination of drill density, search pass and geological interpretation confidence. To avoid generating a "spotted dog" classification, wireframes have been created for each domain that use the preceding assumptions as a guide to produce workable volumes. A breakdown of the Mineral Resource by classification is shown in Table 28. The assigned Mineral Resource classifications along the deposit are depicted in Figure 9.

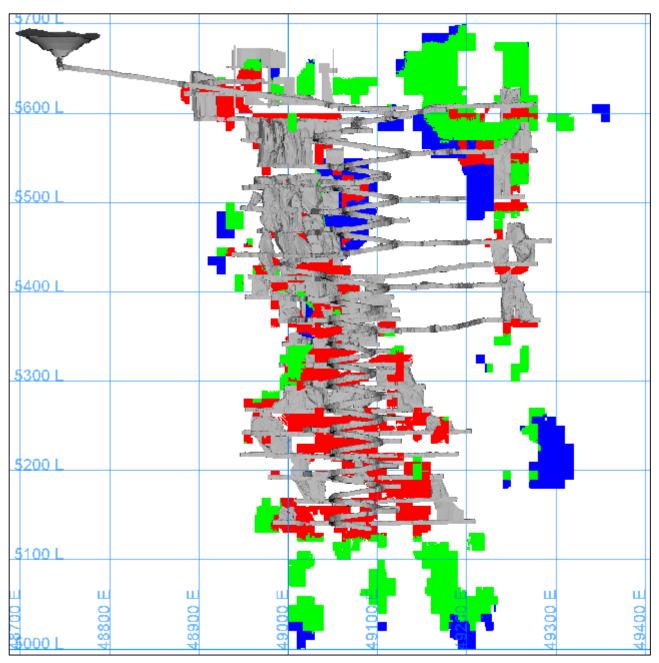
The Dargues MRE utilises a A\$120/t NSR cut-off within mineable shapes that include internal dilution and the assumed metallurgical recoveries and concentrate grades in Table 30 and Table 31.

**Table 30.** Metal price assumptions used for Mineral Resource and Ore Reserve estimates.

Commodity	Unit	Mineral Resource 2023	Ore Reserve 2023
Gold	US\$/oz	1,800	1,600
FX	A\$/US\$	0.73	0.73
Gold	A\$/oz	2,466	2,192

**Table 31.** Dargues Mine metal recovery and concentrate grade parameters.

Parameter	Mineral Resource 2023
Au fixed tail grade	0.2 g/t
Au recovery	80-98%
S concentrate grade	43%
Au concentrate grade	>30 g/t



**Figure 9.** Long section looking north showing the Measured (red), Indicated (green) and Inferred (blue) Mineral Resource.

#### 2.4 CHANGES FROM PRIOR MINERAL RESOURCE ESTIMATE

The 2023 MRE represents a decrease in tonnage and contained metal over the published 2022 estimate as outlined in Table 32 and presented graphically in Figure 10. Changes to the reported MRE include:

- Depletion of 370kt due to mine production and sterilisation.
- A reduction in tonnage arising from improvements in the geological models as a result of infill and extensional drilling programs.
- Promotion of previous Inferred material to the higher confidence Indicated and Measured classifications from the result of drill programs.
- An increase in tonnage due to metal price assumptions.

Table 32. Tonnage and contained metal in the 2023 Dargues Mine MRE and variance to the 2022 MRE.

Class	Tonnes (kt)	Au (g/t)	Au (koz)
Measured	350	5.0	57
Indicated	360	3.0	34
Inferred	140	3.4	15
Total	850	3.9	106
Variance to 2022 MRE	-37%		-45%

Note: Values are reported to two significant figures which may result in rounding discrepancies in the totals.

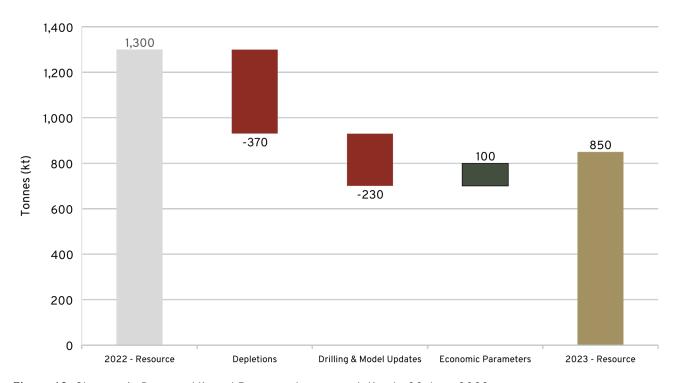


Figure 10. Changes in Dargues Mineral Resource tonnage relative to 30 June 2022.

#### 2.5 ORE RESERVE ESTIMATE

The Ore Reserve Estimate is shown in Table 29.

#### Ore Reserve Classification

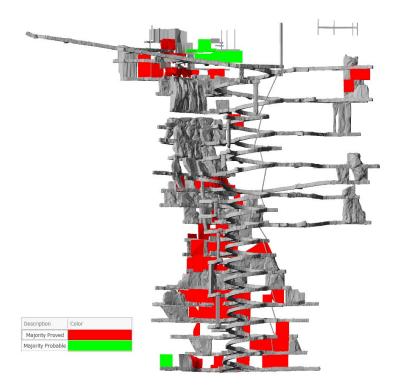
The Mineral Resource classifications flagged in the geological block model formed the basis for the Ore Reserve Estimate. Mining shapes were developed from the geological block model before the quantity and grade of Measured, Indicated, Inferred and unclassified material within the mining shapes was reported. Mining shapes were included in the Ore Reserve Estimate if individual shapes contained more than 80% of Measured and Indicated material.

The Ore Reserve classification of the material within the mining shapes was aligned with the Mineral Resource classifications, such that the Measured Mineral Resource converted to the Proved Ore Reserve and the Indicated classification was reported as the Probable Ore Reserve.

A number of shapes included high confidence ore material as well as low confidence waste material. In instances where the low confidence waste material had a value of less than \$1/t NSR that material was treated as dilution and given the higher classification of the ore material. This was necessary to ensure that the Proved classification ore grades were not artificially elevated.

The selected mining shapes may contain a minor portion of Inferred or unclassified material. The metal value corresponding to this tonnage was removed from the Ore Reserve Estimate while the tonnage remained in the Ore Reserve Estimate as dilution at zero grade. This dilution was prorated into the Proved and Probable classifications based on the relative tonnage.

A graphical representation of the Ore Reserve is shown in Figure 11.



**Figure 11.** Long section facing north of the Dargues Mine showing Proved (red) and Probable (green) Ore Reserve classifications.

#### Mine Design and Assumptions

The Dargues Mine uses a combination of uphole and downhole stoping methods with hydraulic backfill, progressing in a bottom up sequence. This mining method and Dargue's mine development design was used for the Ore Reserve Estimate.

Detailed stope design has been completed for the LOM Plan with these shapes used preferentially. Mining dilution and recovery estimates for the various stoping types were applied, based on the stoping method. These include remnant stoping (30% mining dilution, 70% recovery), longitudinal stoping (20% mining dilution, 95% recovery), transverse stoping (10% mining dilution, 95% recovery) and narrow stoping (25% mining dilution, 95% recovery).

In addition, the geology model was assessed by creating stope shapes using Deswik's SO software. Parameters included 0.5m hangingwall and footwall dilution allowances, with stope strike length of 20m and a minimum mining width of 2m. These shapes are used where new drilling and modelling updates weren't captured by the LOM planning process. Mining dilution and recovery factors applied to these shapes includes downhole stopes (2% mining dilution with 95% recovery), uphole stopes (2% mining dilution with 90% recovery), and sill pillar mining (10% mining dilution with 85% recovery).

Development designs have 15% mining dilution applied with 100% recovery.

#### Net Smelter Return

A NSR calculation was used to assign an economic value to the mineralisation. The NSR was calculated as:

NSR = [metal grade x expected metallurgical recovery x expected payability x metal price] - [transport and treatment charges, penalties and royalties]

Metal price assumptions used in the NSR calculation are listed in Table 30. Metal prices were based on consensus forecasts. The metallurgical recoveries and concentrate grades in Table 31 are based on operating experience and near-term operating targets. The metallurgical recoveries for the Ore Reserve Estimate are consistent with existing performance at the Dargues Mine.

#### **Cut-off Values**

A NSR cut-off value of A\$120/t was applied for material to be extracted by stoping methods and A\$80/t for development. The economic viability of the cut-off value has been demonstrated through cashflow modelling completed for the Dargues LOM plan and budget.

#### 2.6 CHANGES FROM PRIOR ORE RESERVE ESTIMATE

Economic assumptions were updated for the 2023 Ore Reserve Estimate, including price assumptions and NSR cut-off values. Drilling conducted during the year resulted in a positive adjustment to the estimate. The most significant change to the Ore Reserve Estimate is due to mining depletion shown in Figure 12.

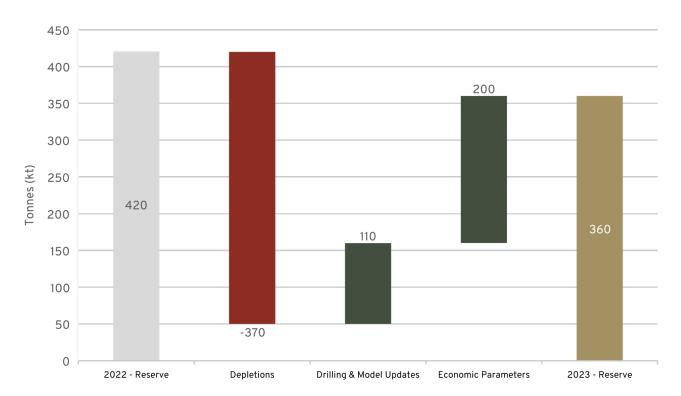


Figure 12. Change in Dargues Ore Reserve tonnage relative to 30 June 2022.

## 3.0 FEDERATION MINERAL RESOURCE AND ORE RESERVE STATEMENT

#### 3.1 SUMMARY

The Federation deposit is located 15 kilometres south of the township of Nymagee, NSW. The 30 June 2023 MRE (Table 33) is reported in accordance with the guidelines of the JORC Code 2012 and incorporates the results available from an intensive program of infill and extensional drilling subsequent to 30 June 2022. The estimates are reported as at 30 June 2023 in accordance with the JORC Code 2012.

Table 33. Federation Deposit MRE as at 30 June 2023.

Class	Tonnes (kt)	Zn (%)	Pb (%)	Cu (%)	Au (g/t)	Ag (g/t)
Indicated	3,700	9.0	5.4	0.3	1.1	6
Inferred	1,100	8.9	5.3	0.2	0.2	6
Total	4,800	9.0	5.4	0.3	0.9	6

Note: Federation Deposit MRE utilises A\$120/t NSR cut-off mineable shapes that include internal dilution. Values are reported to two significant figures which may result in rounding discrepancies in the totals.

The 2023 Federation Ore Reserve Estimate has been derived from the Federation Mine MRE using material from the Measured and Indicated classifications, with the addition of mining dilution as appropriate for the mining methodology. The Ore Reserve for the Federation deposit is reported using the basis of the Federation Feasibility Study, updated with modelling, planning and economic assumptions.

Table 34. Federation Mine Ore Reserve Estimate as at 30 June 2023.

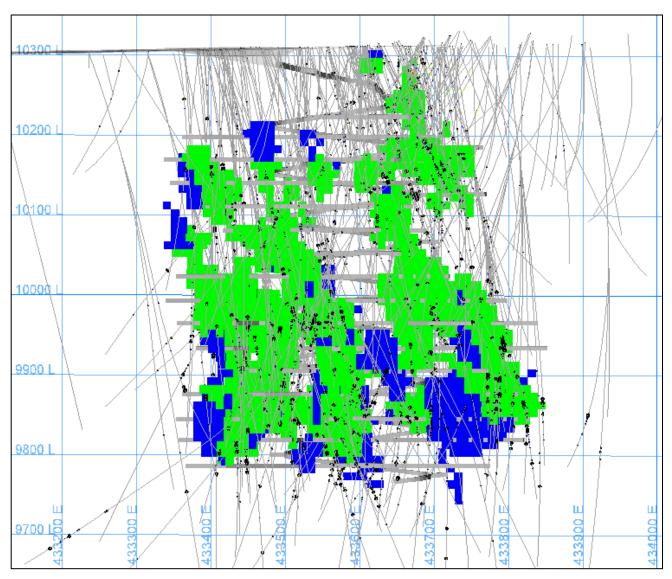
Class	Tonnes (kt)	NSR (A\$/t)	Zn (%)	Pb (%)	Cu (%)	Au (g/t)	Ag (g/t)
Proved	0	0	0	0	0	0	0
Probable	2,400	350	9.0	5.3	0.3	1.4	6
Total	2,400	350	9.0	5.3	0.3	1.4	6

Note: The Federation Ore Reserve Estimate utilises A\$80/t NSR cut-off for development and A\$175/t NSR cut-off for stoping. Values are reported to two significant figures which may result in rounding discrepancies in the totals.

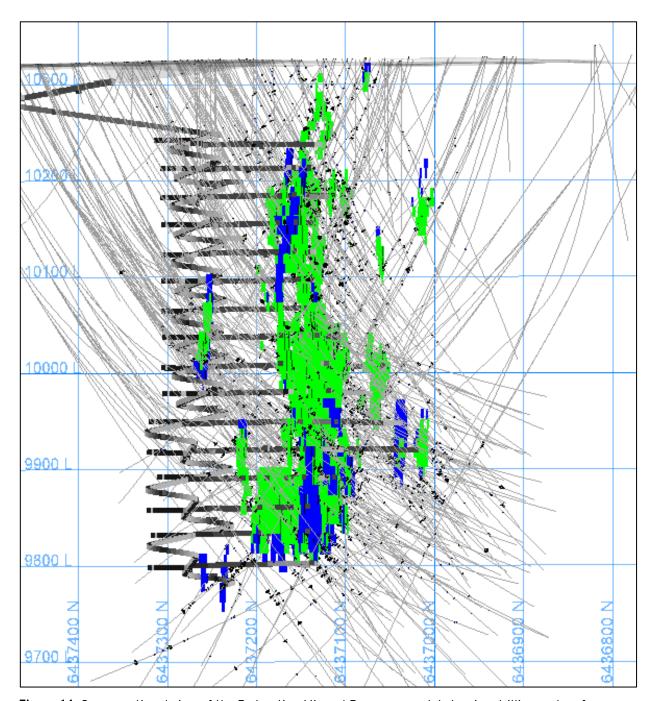
#### 3.2 INTRODUCTION

The updated Indicated and Inferred MRE is reported at an A\$120/t NSR cut-off. The focus of the drilling since the 2022 MRE was to increase the confidence of the MRE and to test the known limits of the mineralisation. The additional drilling information converted 520kt of Inferred material to Indicated while the extension al drilling confirmed that high grade mineralisation is still open to the Northeast while grade drop off to the Southwest. The MRE is based on data from 297 diamond and reverse circulation (RC) drill holes, totalling over 152,000m.

Long-sectional and cross-sectional views of the Federation Mineral Resource model are shown in Figure 13 and Figure 14.



**Figure 13.** Long sectional view of the Federation Mineral Resource model showing drilling and surface topography and Indicated (green) and Inferred (blue) Mineral Resource classifications.



**Figure 14.** Cross sectional view of the Federation Mineral Resource model showing drilling and surface topography and Indicated (green) and Inferred (blue) Mineral Resource classifications.

The 2023 Federation Ore Reserve Estimate has been derived from the Federation MRE using material from the Indicated classification, with the addition of mining dilution as appropriate for the mining methodology.

#### 3.3 MINERAL RESOURCE ESTIMATE

The Federation deposit is located 15km south of the historic copper mining town of Nymagee in central western NSW. Mineralisation at Federation is epigenetic and structurally controlled with several steeply dipping vein breccia/massive sulphide lenses developed in the centre of a broad NE-SW striking corridor of quartz-sulphide vein stockwork mineralisation. The mineralisation is hosted by fine-grained sedimentary rocks and is best developed within open upright anticline closures in areas of strong rheology contrast imposed by early stratiform alteration.

Massive sulphide and sulphide breccia base metal mineralisation is typically zinc-rich and associated with intense cross-cutting black chlorite alteration in the lower parts of the known deposit, with silicasulphide dominant infill in the upper parts. Moderate to high grade gold mineralisation is best developed in a steeply plunging shoot in the northeast of the deposit, with recent drilling also highlighting localised high gold grade in other parts of the deposit. Late bedding-parallel faults have been identified that may have caused some brittle offset within the system. These structures possibly started as extensional faults and could have focused hydrothermal fluids during alteration and mineralisation.

Geological and structural interpretation of the Federation deposit has been updated based on new information gained from recent drilling programs. The interpretation is based on drill core logging that captures lithology, alteration, mineralisation style and orientation, weathering and major structures.

Several broad wireframes were produced for the purposes of the estimation. The boundaries between these zones were based on a combination of geology, structure, mineralisation orientation and weathering. Exploratory data analysis (EDA) was then performed on these wireframed domains to optimise the number of domains used in the estimation process. The final domains used the best representation of mineralisation orientation, structures and weathering as well as limiting the extrapolation of very high zinc, lead and gold grades into zones of lower grade background mineralisation.

The block model was set up on a rotated grid to honour the main mineralisation orientation. Parent block dimensions are  $2 \times 10 \times 10 \text{m}$  (X, Y, vertical respectively). The 10 m Y and vertical block dimensions were chosen to reflect drill hole spacing and to provide adequate definition for mine design. The shorter 2 m X dimension was used to reflect the narrow mineralisation width and down hole data spacing. Discretisation was set to  $2 \times 5 \times 5 \text{m}$  (X, Y, vertical respectively).

Samples were composited to nominal 1.0m intervals whilst honouring the domain wireframes. The minimum composite length was set to 0.5m.

Variography was carried out using the software program Isatis.neo on the 1.0m composites. Each domain was estimated separately using only data from within that domain. The orientation of the search ellipse and variogram models were controlled by coding the block model with local anisotropy to best reflect the local orientation of the mineralised structures.

The concentrations of Zn, Pb, Cu, Au, Ag, Fe, S and Sb were estimated on density weighted values to better reflect the contained metal within each interval.

All estimates were carried out using dynamic interpolation so that the orientation of the search ellipse and variogram models was aligned parallel to the local mineralisation orientation.

The density weighted concentration of gold was estimated using the MIK method. MIK is considered an appropriate estimation method for the gold grade distribution because it specifically accounts for the changing spatial continuity at different grades through a set of indicator variograms at a range of grade thresholds. It also reduces the need to use the practice of top cutting.

The density weighted concentrations of Zn, Pb, Cu, Ag, Fe, S and Sb were estimated using the OK method. Density was also estimated using OK on drill hole data. OK is considered appropriate because the grades are reasonably well structured spatially. Vulcan software was used for both the MIK and OK dynamic estimates.

Each block was assigned as either fresh or oxidised based on a base of complete oxidation (BOCO) surface created from the drill hole logs and assay data.

A three pass search strategy was used for estimation. Each pass used a search ellipse with four radial sectors. The maximum number of samples per sector was set to four with a maximum of six data per sector for each pass. Additional search parameters were:

- Pass 1: 5 x 35 x 50m search, 8-24 samples, minimum 3 drill holes used, maximum 10 data per
- Pass 2: 10 x 70 x 100m search, 8-24 samples, minimum 2 drill holes used, maximum 10 data per hole.
- Pass 3: 15 x 100 x 150m search, 4-24 samples, minimum 1 drill holes used, maximum 10 data per hole.

Minimal grade cutting was applied to Zn, Pb, Cu, Ag and As on a domain-by-domain basis in order to reduce the influence of extreme values on the estimates. The top cut values were chosen by assessing the high-end distribution of the grade population within each domain and selecting the value at which the distribution became erratic.

Following the estimation of Zn, Pb, Au, Ag and Cu grades, a Vulcan software script was run to calculate the NSR value for each cell in the block model. Deswik's SO software was used to generate shapes representing mineable areas. A vertical stope orientation method was used with orientation in the XZ plane. The optimisation region has been aligned to the block model. Section length was set at 5m, level height 10m, no hangingwall or footwall dilution, 2m minimum stope width and 8m stope pillars. The cell centreline evaluation method was used targeting a constant cut-off of \$120/t NSR. The NSR is a value field that allows the software to seek to maximise the total value within the mining shape above the nominated cut-off value. Mining shapes having a value greater than the cut-off NSR value were considered to have reasonable prospects for eventual economic extraction economic and were therefore reported in the MRE. The resulting MRE is reported in Table 33.

#### Metallurgical, Metal Price and Equivalency Assumptions

The Federation MRE was reported using a NSR cut-off value to determine the proportion of the deposit having reasonable prospects for eventual economic extraction. The NSR methodology is used at Aurelia's operating mines in the region and considers metallurgical recoveries assumed with each of the product streams, along with metal prices, payabilities, exchange rates, freight, treatment charges and royalties.

The formula for calculating the NSR is as follows:

 $NSR = [metal\ grade\ x\ expected\ metallurgical\ recovery\ x\ expected\ payability\ x\ metal\ price] - [transport\ and\ treatment\ charges,\ penalties\ and\ royalties]$ 

Metal prices and exchange rates adopted for the NSR calculations are shown in Table 35.

Table 35. Metal price assumptions used for the Mineral Resource and Ore Reserve Estimates.

Commodity	Unit	Mineral Resource June 2023	Ore Reserve June 2023
Gold	US\$/oz	1,800	1,600
Silver	US\$/oz	23.0	21.5
Lead	US\$/t	2,094	1,984
Zinc	US\$/t	2,976	2,646
Copper	US\$/t	8,708	7,937
FX	\$US/\$A	0.73	0.73
Gold	A\$/oz	2,466	2,192
Silver	A\$/oz	31.5	29.5
Lead	A\$/t	2,868	2,718
Zinc	A\$/t	4,077	3,625
Copper	A\$/t	11,929	10,873

Mineralogical analysis and metallurgical test work programs have been performed on drill core samples from the Federation deposit to evaluate the potential for flotation of copper, zinc and lead minerals to produce saleable concentrates and to confirm gold deportment to doré and base metal concentrates.

Mineralogical analysis of Federation drill core samples has shown a very similar sulphide mineralogy to Hera, dominated by iron bearing sphalerite and galena with lesser chalcopyrite, pyrrhotite and pyrite. Gold is also similar in occurrence to Hera, tending to be irregularly distributed and present as discrete (often visible) grains not uniquely associated with any specific sulphide phase.

Recent metallurgical test work results, performed as part of the Feasibility Study, confirmed the viability of producing saleable base metal concentrates from samples of Federation mineralisation. No concentrate penalty elements were identified. The recovery and concentrate parameters adopted in the Federation NSR calculations are shown in Table 36.

**Table 36.** Federation Mine metal recovery and concentrate grade parameters.

Parameter	Value
Copper Recovery to Lead Concentrate	87%
Zinc Recovery to Zinc Concentrate	87%
Lead Recovery to Lead Concentrate	87%
Gold Recovery to Doré	37%
Gold Recovery to Leach	15%
Gold Recovery to Lead Concentrate	25%
Gold Recovery to Zinc Concentrate	15%
Silver Recovery to Doré	5%
Silver Recovery to Leach	15%
Silver Recovery to Lead Concentrate	61%
Silver Recovery to Zinc Concentrate	15%
Copper Grade in Lead Concentrate	3%
Zinc Grade in Zinc Concentrate	53%
Lead Grade in Lead Concentrate	52.5%

Very minor near surface oxide and transitional mineralisation is present at Federation and is included in the MRE. Metallurgical recoveries for gold and silver in these zones was assumed to be 85%, consistent with other operations in the area. Further metallurgical test work is required to improve the understanding of metallurgical recoveries from mineralisation in the oxide zone. It has been assumed that no base metals will be economically recoverable from the oxide zone.

Table 37. Federation Deposit MRE reported by oxidation type and classification.

		Tonnes	Grade				Contained Metal					
Weathering	Class	(kt)	Zn (%)	Pb (%)	Cu (%)	Au (g/t)	Ag (g/t)	Zn (kt)	Pb (kt)	Cu (kt)	Au (koz)	Ag (koz)
	Indicated	36				2.5	1				2	1
Oxide	Inferred	7				0.9	0				0	0
	Total	43				2.2	1				2	1
	Indicated	3,700	9.0	5.4	0.3	1.1	6	330	200	13	130	730
Fresh	Inferred	1,100	8.9	5.3	0.2	0.2	6	100	60	3	7	220
	Total	4,800	9.0	5.4	0.3	0.9	6	430	260	15	140	950
	Indicated	3,700	9.0	5.4	0.3	1.1	6	330	200	13	130	730
Total	Inferred	1,100	8.9	5.3	0.2	0.2	6	100	60	3	7	220
	Total	4,800	9.0	5.4	0.3	0.9	6	430	260	15	140	950

Note: Federation Deposit MRE utilises A\$120/t NSR cut-off mineable shapes that include internal dilution. Values are reported to two significant figures which may result in rounding discrepancies in the totals. Estimates may not sum due to rounding. Zn, Pb and Cu are not reported for oxide material as they are unlikely to be recoverable.

#### Mineral Resource Classification

The MRE classification is based on drilling density, estimation passes and confidence in the geological interpretation.

Material drilled on a nominal 25m spacing and estimated in the first estimation pass has been classified as Indicated. Material that has a nominal drill hole spacing of less than 50m, estimated in either pass 1 or 2 and not meeting the criteria for Indicated has been reported with an Inferred classification. All remaining blocks are coded as unclassified. At this stage no mineralisation has been classified as Measured.

#### Mining Method and Cut-off Value

The Company has adopted an A\$120/t NSR value as an appropriate cut-off value based on the potential for underground mining using a stope and backfill method similar to that employed at the Company's operating Hera and Peak Mines. MREs for the Company's operations at Hera and Peak are reported at comparable cut-off values. It is anticipated that mineralisation would be processed initially through existing facilities at the Hera and Peak Mines.

#### Other Modifying Factors Considered in the Mineral Resource Estimate

#### Study status

- In 2022 the Company completed a Feasibility Study into the mining and processing of material from the Federation deposit.
- The Feasibility Study considered a range of factors related to a potential mine development at the
  Federation site including (but not limited to) site access and layout, mining methods, mine design,
  production schedules, mineralogy and metallurgical test work, minerals processing flowsheets,
  tailings management, power supply, human resources, project approvals and capital
  requirements. These considerations have informed the MRE.

#### **Cut-off parameters**

- The NSR cut-off value used in the MRE is based on extensive operational experience at the Company's mining operations, particularly the nearby Hera Mine.
- The NSR cut-off value considers sustaining capital, development, stoping, haulage, processing
  and administration expenditure and realisation charges that include metal content payability,
  concentrate transport, penalties and royalties.

#### Mining factors and assumptions

- The method of extraction assumed for the Federation deposit is long hole stoping over a range of sub-levels from 20 - 30m. Stope backfilling using paste fill was assumed.
- Geotechnical studies conducted as a part of the Feasibility Study have indicated similar geotechnical conditions to those at the Hera Mine. Minimum stoping widths of 2m have been assumed.
- The MRE contains internal dilution.

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# Metallurgical factors and assumptions

 Metallurgical test work has included XRD mineralogical analysis, optical mineralogy, gold deportment by MLA, Bond Abrasion Index (BAI) determinations, SMC tests, Bond Ball Mill Work Index determinations, bulk rougher and cleaner flotation test work, sequential copper-lead-zinc flotation test work, concentrate specification tests and gravity gold test work.

- Metallurgical samples were taken from several locations across the Federation deposit to improve representivity.
- A process flowsheet with crushing, grinding, gravity gold and sequential flotation producing gold doré and separate zinc and lead concentrates has been demonstrated by this test work.
- The process flowsheet is similar to the beneficiation techniques used for ores at the Hera and Peak Mines.
- Process recovery and concentrate grade assumptions are listed in Table 36.
- Test work to date has not identified any deleterious elements that would cause a penalty in the sale of the concentrate products.

#### Environment

- The Company has conducted baseline environmental monitoring and test work at the Federation site which has informed an environmental impact assessment that was submitted to support NSW regulatory approval for a full mine development.
- Waste rock storage and characterisation has been considered as a part of the Feasibility Study.

#### Infrastructure

- The Feasibility Study proposed a site layout that included a box cut and portal, haul roads, ROM and waste rock stockpiles, workshop and offices, water management structures and other supporting infrastructure.
- Processing of material from the Federation deposit is expected to leverage the existing infrastructure at the Hera and Peak Mines where ore processing and tailings facilities are established.

# Tenure

- The Federation prospect is located within Exploration Licence 6162 held by Hera Resources Pty.
   Ltd. (a wholly owned subsidiary of Aurelia Metals Limited). At the time of reporting there were no known impediments to operating in the project area.
- Development consent was granted during 2023 and the Company has applied for a mining lease.

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## 3.4 CHANGES FROM PRIOR MINERAL RESOURCE ESTIMATE

The June 2023 MRE represents a decrease in overall tonnage and contained metal compared to the June 2022 estimate (Table 38).

Table 38. Tonnage and contained metal in the June 2023 Federation Deposit MRE and variance to the 2022 MRE.

Class	Tonnes (kt)	Zn (kt)	Pb (kt)	Cu (kt)	Au (koz)	Ag (koz)
Indicated	3,700	330	200	13	130	730
Inferred	1,100	100	60	3	7	220
Total	4,800	430	260	15	140	950
Variance to 2022 MRE	-5%	-5%	-5%	-5%	-8%	-7%

Note: Values are reported to two significant figures which may result in rounding discrepancies in the totals.

The tonnage reported in the 2023 MRE has decreased, because of metallurgical assumption due to proposed processing of the Federation ore through the Peak processing facility rather than the designed Federation processing facility. New information has improved the geological understanding of the deposit, identified areas of continuous mineralisation and supported conversion of previously Inferred material to the Indicated classification.

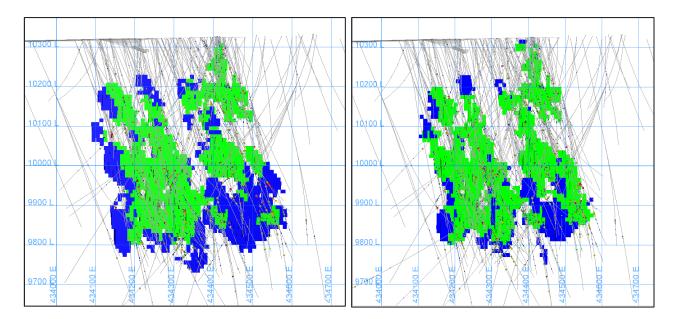


Figure 15. Classification comparisons between the 2022 (left) and 2023 (right) MRE.

Figure 16 illustrates the classification changes between the 2022 and 2023 MRE.

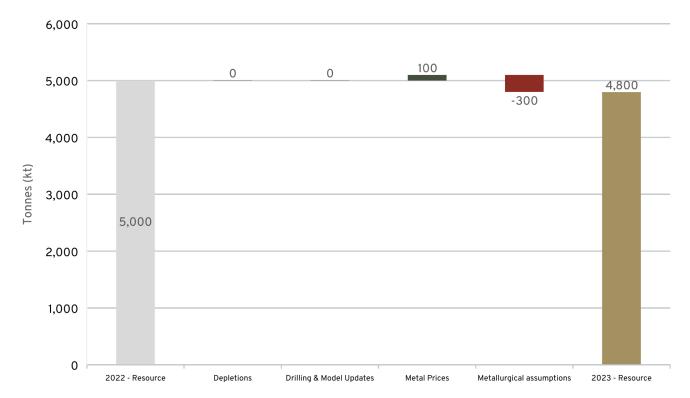


Figure 16. Change in Federation Mineral Resource tonnage relative to 30 June 2022.

## 3.5 ORE RESERVE ESTIMATE

The Ore Reserve Estimate is shown in Table 34.

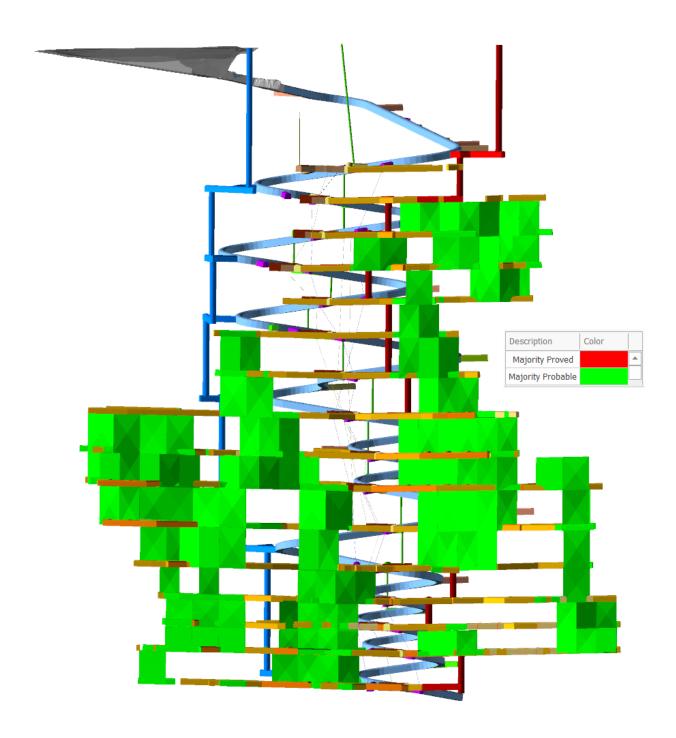
## Ore Reserve Classification

The Mineral Resource classifications flagged in the geological block model formed the basis for the Ore Reserve Estimate. Mining shapes were developed from the geological block model before the quantity and grade of Indicated, Inferred and unclassified material within the mining shapes was reported. Mining shapes were included in the Ore Reserve Estimate if individual shapes contained more than 80% Indicated material.

The Ore Reserve classification of the material within the mining shapes was aligned with the Mineral Resource classifications, such that the Indicated classification was reported as the Probable Ore Reserve. The MRE contained no material having the Measured classification hence no Proved Ore Reserve was reported.

The selected mining shapes may contain a minor portion of Inferred or unclassified material. The metal value corresponding to this tonnage was removed from the Ore Reserve Estimate while the tonnage remained in the Ore Reserve Estimate as dilution at zero grade.

A graphical representation of the Ore Reserve is shown in Figure 17.



**Figure 17.** Long section facing north of the Federation Mine showing Proved (red) and Probable (green) Ore Reserve classifications.

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## Mine Design and Assumptions

The Federation Mine design uses a combination of uphole and downhole stoping methods with rockfill, cemented rockfill and paste backfill, progressing in a bottom up sequence.

The geology model has been assessed by creating stope shapes using Deswik's SO software. Parameters used include 0.5m hangingwall and footwall dilution allowances, with stope strike length of up to 25m and a minimum mining width of 3.0m. Mining dilution and recovery factors applied to these shapes includes downhole stopes (5% mining dilution with 95% recovery), uphole stopes (5% mining dilution with 90% recovery), and sill pillar mining (10% mining dilution with 85% recovery).

Development designs had 15% mining dilution applied with 100% recovery.

#### Net Smelter Return

A NSR calculation was used to assign an economic value to the mineralisation. The NSR was calculated as:

 $NSR = [metal\ grade\ x\ expected\ metallurgical\ recovery\ x\ expected\ payability\ x\ metal\ price] - [transport\ and\ treatment\ charges,\ penalties\ and\ royalties]$ 

Metal price assumptions used in the NSR calculation are listed in Table 35. Metal prices were based on consensus forecasts. The metallurgical recoveries and concentrate grades in Table 36 are based on metallurgical test work results performed during the Scoping Study and Feasibility Study programs.

#### Cut-off Values

A NSR cut-off value of A\$175/t was applied for material to be extracted by stoping methods and A\$80/t for development. The economic viability of the cut-off value has been demonstrated through cashflow modelling completed for the Feasibility Study.

The Ore Reserve portion of the Federation mine design has been assessed and deemed economically viable on the basis of ore being processed through the Peak and Hera process plants. The economic analysis returned a positive NPV and IRR which supports the development and extraction of the Federation deposit.

# Regulatory Approvals

The Federation Project is an active exploration prospect located approximately 10km to the south of the Hera Mine. Exploration activities at the site are approved via Activity Approvals issued by the state government, including the exploration decline, ventilation infrastructure and surface works appropriate to undertake those activities.

Development consent was issued by the NSW Government during 2023. Hera Resources reasonably expects to receive a mining lease and associated approvals from the NSW Government to enable commercial production.

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## 3.6 CHANGES FROM PRIOR ORE RESERVE ESTIMATE

A positive adjustment due to drilling and model updates reflect the infill drilling programs that have elevated the geological confidence of the orebody and resulted in additional conversion of Mineral Resource to Ore Reserve. Economic parameters were updated including price assumptions, metallurgical assumptions, offtake agreements and cut-off values resulting in a minor decrease. The changes have resulted in an increase to the Ore Reserve Estimate as shown in the waterfall chart in Figure 18.

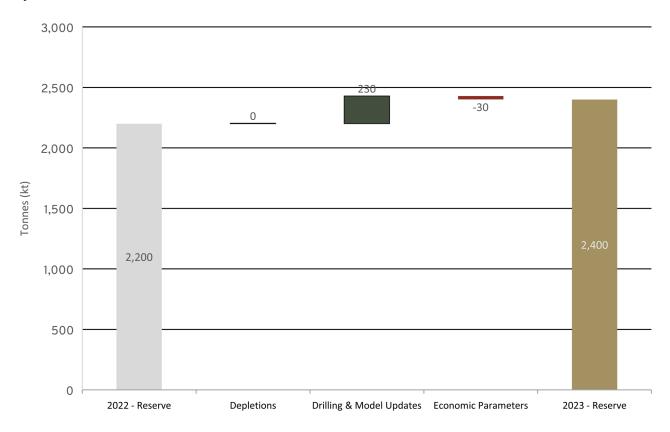


Figure 18. Change in Federation Ore Reserve tonnage relative to 30 June 2022.

## 3.7 FEASIBILITY STUDY FINDINGS

The Ore Reserve Estimate for the Federation deposit is based on the findings of the Federation Feasibility Study. The Feasibility Study evaluated the development of the Federation deposit as a greenfield underground mine with minerals processing to recover saleable base metals concentrates and gold doré. The Feasibility Study involved:

- Geological drilling and data collection
- Geological modelling for mine planning
- Mine geotechnical data collection and assessment
- Mining method selection, access optimisation, mine design and production schedule development
- Mine infrastructure design and reticulation (power, dewatering, ventilation and communications)

Mineralogical and metallurgical test work

 Design of a new processing facility and evaluation of processing through Aurelia's existing Cobar Basin facilities

- Tailings storage capacity assessment and design
- Surface infrastructure design
- Development of an operational organisational structure
- Project approvals scope and process
- Project implementation strategy
- Capital and operating cost estimates
- Financial analysis
- Consideration of environmental, social and governance matters
- Risk assessment.

Metallurgical test work results indicate that concentrates produced from Federation ore will have low deleterious elements and should not attract significant smelter penalty charges.

The mining inventory will be processed using proven crushing, grinding, gravity concentration, flotation and dewatering circuits. The mine development will leverage existing infrastructure at the Hera Mine.

The mineralogy of the Federation deposit is amenable to treatment through Aurelia's Cobar Basin process plants to produce:

- Gold doré and lead-zinc concentrate at the Hera facility.
- Gold doré and separate zinc and lead-copper concentrates at the Peak facility.

Use of the existing process plants enables an accelerated mine production ramp-up and reduces upfront capital expenditure and project implementation risk.

It is expected base metal concentrates will be transported by road and rail haulage, prior to being shipped to overseas markets. Doré will be securely transported to a domestic refinery.

Filtered tailings will be used in cemented pastefill to backfill stope voids. The remaining tailings will be stored within the established Hera and/or Peak tailings storage facilities. The Hera TSF will require at least one embankment raise to accommodate the remaining tailings generated from the Hera Mine and tailings generated from Federation ore that is not used for backfill.

Power will be supplied from islanded liquid natural gas generators supplemented by a solar farm and battery energy storage system. The hybrid power solution will target a 25% reduction in carbon dioxide (CO<sub>2</sub>) emissions relative to an exclusively gas fired power station.

Project development will be implemented over three main phases including enabling works, mine development and plant construction. The Hera accommodation village was expanded in late 2021. The boxcut and portal have been installed, and underground development commenced. Development was suspended in 2022 pending financing. Re-mobilisation of the mining contractor for development of the exploration decline is now underway with development to recommence in Q1FY24. These activities are occurring under the exploration licence.

# 4.0 NYMAGEE MINERAL RESOURCE ESTIMATE

#### 4.1 SUMMARY

An updated Mineral Resource was prepared for the Company's 95% owned Nymagee Project in NSW. The estimate is based on the previous 2022 estimate and uses updated economic parameters. The Nymagee Project MRE was completed in accordance with the guidelines of the JORC Code 2012 and is reported as at 30 June 2023. Full details for the Nymagee Project MRE are contained in the JORC Table 1 of the 2019 Mineral Resource and Ore Reserve Statement (released to the ASX on 22 July 2019). A summary of the MRE is given in Table 39.

Table 39. Nymagee Project MRE as at 30 June 2023.

Class	Tonnes (kt)	Cu (%)	Au (g/t)	Zn (%)	Pb (%)	Ag (g/t)
Indicated	1,900	2.2	0.1	1.1	0.6	16
Inferred	50	2.2	0.1	0.5	0.2	11
Total	1,900	2.2	0.1	1.1	0.6	16

Note: The Nymagee Project MRE utilises A\$120/t NSR cut-off mineable shapes that include internal dilution. Net Smelter Return (NSR) is an estimate of the net recoverable value per tonne including offsite costs, payables, royalties and process recoveries. Values are reported to two significant figures which may result in rounding discrepancies in the totals.

#### 4.2 INTRODUCTION

An updated MRE has been completed for the Nymagee Project, located proximal to the town of Nymagee, NSW. The updated MRE is reported with Indicated and Inferred classifications at an A\$120/t NSR cut-off value. The MRE includes all blocks within the volumes produced by Deswik's SO software. The reported estimates include an internal dilution component.

# 4.3 MINERAL RESOURCE ESTIMATE

Nymagee is considered a structurally controlled Cobar-style deposit. Mineralisation comprises copper, zinc, lead and iron sulphides hosted in altered Devonian-age metasediments. The deposits are polymetallic in nature with variable copper, zinc, lead, silver and minor gold.

Mineralisation is defined by underground and surface diamond and reverse circulation percussion (RC) drilling. Drill core has been sampled on nominal one metre intervals using a half-core sampling regime. RC drill chips are sub-sampled using a riffle splitter at one metre intervals. All samples are assayed in certified commercial laboratories. Samples are routinely assayed for Cu, Zn, Pb, Ag, S, Fe and As. Gold is assayed using a 30g fire assay. Aurelia has maintained a detailed QA/QC system during its sampling and assaying processes.

Net Smelter Return (NSR) values were applied to each block after estimation. The NSR is used to assign a dollar value to the polymetallic mineralisation. The NSR calculation takes into account assumed recoveries associated with an updated Nymagee metallurgical model. This model assumes copper, zinc, lead and silver would be recovered by flotation to various concentrate streams. The calculation is also based on metal prices, exchange rates, freight, treatment charges and royalties. Metal price assumptions and metallurgical parameters used in the estimate presented in Table 40 and Table 41.

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Table 40. Metal price and exchange rate assumptions used for the 2023 Nymagee MRE.

Commodity	Unit	Mineral Resource 2023
Silver	US\$/oz	23.0
Lead	US\$/t	2,094
Zinc	US\$/t	2,976
Copper	US\$/t	8,708
FX	\$US/\$A	0.73
Silver	A\$/oz	31.5
Lead	A\$/t	2,868
Zinc	A\$/t	4,077
Copper	A\$/t	11,929

Table 41. Nymagee Project metallurgical parameters used for the 2023 MRE.

Metallurgical domains	2023 Assumptions			
	93-96% recovery for copper			
Copper deminant mineralisation	0% recovery for lead			
Copper dominant mineralisation	0% recovery for zinc			
	64% recovery for silver			
	59% recovery of copper			
Dalum etellia mineralization	88% recovery for lead			
Polymetallic mineralisation	89% recovery for zinc			
	77% recovery for silver			

The 2023 MRE is based on the previous 2022 estimation with updated economic assumptions used in the NSR calculation. The estimation has then been reported above a \$120 NSR cut-off using the new NSR calculations.

The assigned Mineral Resource classifications along the deposit are depicted in Figure 19.

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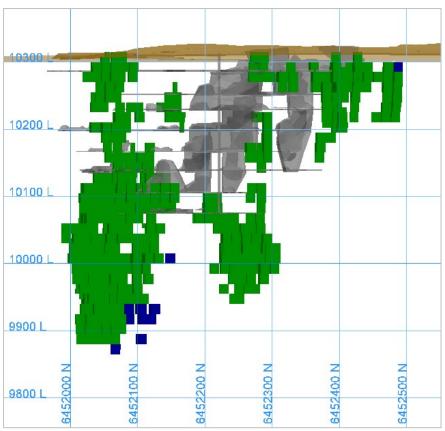


Figure 19. Long section looking north showing the Indicated (green) and Inferred (blue) Mineral Resource.

# 4.4 CHANGES FROM PRIOR MINERAL RESOURCE ESTIMATE

The 2023 MRE represents an increase in tonnage over the published 2022 estimate as outlined in Table 42 and Figure 20. Changes to the reported MRE include:

• An increase in tonnage due to metal price assumptions.

Table 42. Tonnage and contained metal in the 2023 Nymagee MRE and variance to the 2022 MRE.

Class	Tonnes (kt)	Cu (kt)	Au (koz)	Zn (kt)	Pb (kt)	Ag (koz)
Measured						
Indicated	1,900	41	5.4	22	12	970
Inferred	50	1	0.2	0	0	18
Total	1,900	42	5.6	22	12	990
Variance to 2022 MRE	11%	7%	0%	-2%	-2%	4%

Note: Values are reported to two significant figures which may result in rounding discrepancies in the totals.

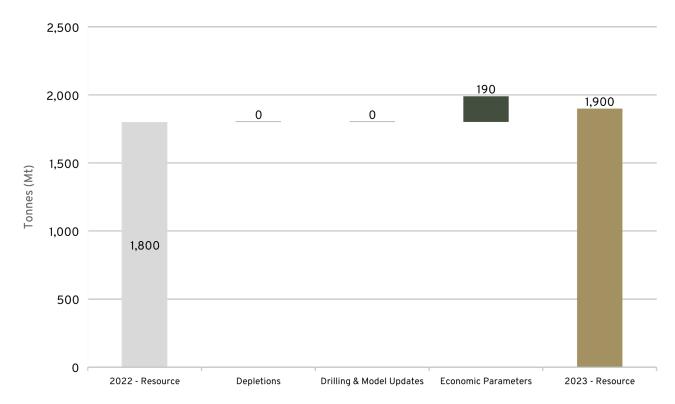


Figure 20. Changes in Nymagee Mineral Resource tonnage relative to 30 June 2022.

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APPENDIX 1 - PEAK JORC Code 2012 (Table 1) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves.

Section 1 Peak Sampling Techniques and Data (Criteria in this section apply to all succeeding sections)

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <li>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.</li> </ul>	The Mineral Resources are predominantly based on diamond drill holes in fresh rock with 100% recovery.  Infill core is mostly BQ or LTK48 over the measured and indicated portions and is whole core sampled at metre intervals. NQ2 core is used for underground exploration and evaluation and is half core sampled in metre intervals. The remaining half core is quartered if metallurgical samples are required.  Recently (2023) Peak Gold Mines (PGM) has employed Mitchell drilling services after utilising Swick Mining Services since 2008. Going forward infill core will be NQ3 with whole core sampling.
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	A continuous series of pre-numbered bags is employed so that duplication of sample numbers is not likely. Computer control of core yard systems for ledger generation and specific gravity. All samples are analysed for specific gravity. Sample weights show consistency with regards to core recovery. Standards are submitted at a frequency of 1 in 20 with every submission. A blank is submitted at the beginning of every batch. Silica flushes are used between samples around visible gold observations. Standard fails are subject to re-assay. A selection of pulps is taken yearly from the ore intervals for re-assay at another lab as a comparison of repeatability and lab precision. The core saw equipment is regularly inspected and aligned so the core is cut in even halves. Recently (2022) the Access database has been exchanged for Geobank (a product of Micromine) for increased auditability.

Criteria	JORC Code explanation	Commentary
	<ul> <li>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.</li> </ul>	Up to 100% of the core can be sampled but is generally restricted to all intervals which have alteration, mineralisation or shearing. Sampling is continuous and across the strike of the lodes reported.  The entire metre of whole or half core is completely crushed with a 3kg split being pulverised to 85-90% passing 75 microns. All gold assays are 50g fire assay (Method Au – AA26) with a detection level of 0.01ppm. Base metals method has been variable between 2, 3 and 4 acid digest methods(ME-ICP41, 41A and 61) with associated detection levels of: Ag, Cu, Pb, Bi, Zn, S, & Fe. Over limit analysis is by the appropriate method at ALS laboratories. Every core sample submitted for assay is submitted for specific gravity analysis at PGM by wet balance method (Archimedes method). The SG process is checked with a standard 1 in 20, and water temperature is also recorded.
Drilling techniques	<ul> <li>Drill type (eg. core, reverse circulation, openhole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (eg. core diameter, triple or standard tube, depth of diamond tails, facesampling bit or other type, whether core is oriented and if so, by what method, etc.).</li> </ul>	The majority of samples are core samples using a variety of sizes (LTK48, BQ, NQ2 and HQ) depending on drill hole spacing, depth, angle of hole or program. The holes are surveyed every 30m with a 15m and end of hole survey. The majority of diamond holes are drilled from underground with preference for carrier mounted diamond rigs. RC drilling is used on surface. Surface and exploration diamond drilling core is orientated. Generally PGM is using the best in industry standard with respect to survey and orientation tools as technology advances.
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>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.</li> </ul>	Drillers record core loss while drilling with core blocks in the run. Location of loss is recorded on a sample submission sheet and during RQD measurement. Sample weights of the assayed intervals are assessed to give quantitative estimate of recovery.  Overall, it is expected that 98% recovery should be achieved in difficult drilling. In good drilling 100% recovery is expected.  Core loss in diamond core is usually in extremely fractured or sheared rock. Where these conditions exist around or within ore zones there is potential for grade loss however such conditions are not confined to ore zones. The relationship between sample recovery and grade has not been assessed as core loss is minimal.  In RC drilling efforts are made to reduce the amount of fines lost.

Criteria	JORC Code explanation	Commentary
Logging	<ul> <li>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.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.</li> </ul>	Lithological information is gathered to 10cm intervals into tables defining lithology, mineralisation, alteration and shear. The mineralisation, alteration and shear tables have some means of quantifying the observed geology. Accurate orientation is restricted to exploration core as mine infill programs are not oriented. Structural measurements can be taken in relation to the regional foliation which is, considered to be, constantly orientated. Broader stratigraphical, structural and lens identification is captured in an interpretation table. Lens identification can be used broadly for domain construction.  Exploration core is oriented so structural measurements can be taken.
	<ul> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	Rock mass quality information, to support engineering considerations, are logged and Q primed is estimated. Further to rock mass quality data, rock strength data is gathered for mining studies. Metallurgical samples are initially recovered as part of exploration or evaluation programmes from either half or quarter core.
		All core is photographed. The core is photographed using a mobile frame over individual trays ensuring that light and focus conditions remain constant. All core and underground faces are photographed wet.
		Structural measurements are taken against the dominant regional S2 foliation based on quality of observation.
		Visual estimates of minerals in percent are checked against assay data.
		Magnetic susceptibility is recorded for specific intervals during exploration programs. Three equidistant measurements at 0.2, 0.5 and 0.8m along each metre are averaged.
Sub-sampling techniques and sample	quarter, half or all core taken.  • If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.  • For all sample types, the nature, quality and appropriateness of the sample preparation	LTK48 and BQ core is whole sampled so no subsampling is done on delineation drilling.  NQ2 and HQ core is half core sampled and cut with an Almonte automatic saw leaving the other half of the core for possible re-assay or metallurgical use.
preparation		RC drill holes were sampled in 1, 2 and 4 metre composites depending on the purpose of the hole. An exploration RC hole would normally be sampled initially in 4m composites and followed up with 1m samples for anomalous intervals. Both riffle splitting and spear sampling techniques have been used in these subsampling instances.
	technique.	For the New Cobar pit the RC drilling was sampled at 1m and 2m intervals using a riffle splitter through the ore and had four meter composites in waste zones. All samples were dry sampled.

<ul> <li>Quality control procedures adopted for all subsampling stages to maximise representivity of samples.</li> <li>The amount of Mineral Resource attributed to areas dominated by RC drilling is mined usually omitted from the Mineral Resource by exclusion.</li> <li>For a sample of core being assayed for grade the same regime is followed as explain.</li> </ul>	
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.  Whether sample sizes are appropriate to the grain size of the material being sampled.  Whether sample sizes are appropriate to the grain size of the material being sampled.  Waility of assay data and laboratory test  The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.  For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.  Nature of quality control procedures adopted (eg. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.  Measures to ensure sample representivity are outlined under sampling techniques. The laboratory exploration program variable the system currently employed.  Measures to ensure sample representivity are outlined under sampling techniques. The laboratory exploration program variable than specific or est and used for least of drill core is adequate to capture gold at the size range. The ore bodies with the higher CV's are drilled at a closer spacing to minimal backs and second half core sampling has been done during early exploration program. Variability and nugget effects produce complications when sampling techniques. The holes and second half core sampling has been done during early exploration program variables of whether the samples in experiments are profited with the higher CV's are drilled at a closer spacing to minimal provided the save range. The ore bodies with the higher CV's are drilled at a closer spacing to minimal provided the save range and the sampling for coarse gold been address by PGM. The sample size of drill core is adequate to	

Criteria	JORC Code explanation	Commentary
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data</li> </ul>	Extreme high grades (>100ppm Au) are repeated as a matter of course. The database is used by all geologists and engineers on the PGM site. A third party audit is performed annually and includes analysis of the data. During annual pulp checks certain intersections are repeated in full.  Physical and electronic copies exist of drill designs, downhole surveys and assay data. Raw laboratory data is filed as it comes from the lab. The assay file from the lab was manipulated by an excel add-in routine to suit the Access load query, but is now imported directly into Geobank through SQL routines. QAQC occurs before the assays are used. Both databases have verification processes which check end of holes and overlapping intervals. All data entry procedures are documented. Historic hard copies are stored in a fire proof room. Electronic backups occur regularly.  Default low grades are used for unassayed intervals in the estimation composite.
Location of data points	<ul> <li>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.</li> <li>Specification of the grid system used</li> <li>Quality and adequacy of topographic control.</li> </ul>	Surface drill hole collars are initially located using hand held GPS to ±5m. Upon completion collars are located with differential GPS to ±5cm. Underground collars are picked up by the mine surveyor (collar position and dip/azimuth) using a Total station Theodolite. Downhole surveys are taken using a reflex camera. Eastman single shot cameras were phased out in 2007. Readings with abnormal magnetics are flagged unreliable in the database. The reflex camera is used for multi shot where required and giro cameras ore used in highly magnetic ground. Check surveys are done weekly in a test bed on surface. Reliability is graphed in Excel. A resurvey is done if out of limits.  PGM uses a metric mine grid that is -15° 31' 38.72201 degrees to MGA grid. There is an additional 10,000.4m added to the AHD.
		The PGM grid was aligned with the state MGA grid in Feb 2009. Existing surface survey control consists of two baselines each with two high order stations registered with SCIMS on both the Peak and New Cobar leases. All exploration holes and topographic features are fixed using RTK GPS.
Data spacing and distribution	Data spacing for reporting of Exploration Results.	Underground drill hole spacing for Mineral Reserves is between 10m and 30m spacing depending on the type and complexity of the mineralisation. Surface exploration results are replaced by delineation drilling as the mine progresses to depth. Drill spacing away from the main mineralised lodes is generally wider spaced and dependent on the stage of exploration. Regional exploration projects are not included in PGM's Mineral Resource inventory.

Criteria	JORC Code explanation	Commentary
	sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation	The classification scheme is based on the estimation search pass for gold in the case of gold deposits and copper or zinc-lead for base metal deposits. Generally, Pass 1 = Measured; Pass 2 = Indicated; Pass 3 = Inferred. This scheme is effectively an index of local data density.  The classification is considered to take appropriate account of all relevant factors, including the relative confidence in tonnage and grade estimates, confidence in the continuity of geology
	Whether sample compositing has been applied.	and metal values, and the quality, quantity and distribution of the data. QAQC ensures that data quality is consistently high and holes with unreliable data are removed for resource estimation.
		The classification appropriately reflects the Competent Person's view of the deposits and is considered consistent with the 2012 JORC code. The majority of the drill holes were sampled at one metre intervals. Recently (2020) sampling intervals are geology based. Compositing is at 1m intervals.
Orientation of data in relation to Geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>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.</li> </ul>	All ore bodies are near vertical. The drill hole orientation is designed to be across the width of the lode. This is adequate where the mineralised structures are sub-parallel to the regional foliation.  Underground mapping has located some structures that are sub-parallel to the drilling direction. The drilling density off-sets any bias associated with such intercepts and additional drilling from other directions has been done. These structures are generally secondary to the main lode and of short strike length and not considered material.
Sample security	The measures taken to ensure sample security	Core is stored in a lockable yard within the Peak site. The Peak site has 24 hour manned gates and requires swipe card access given only to Peak personnel. Samples are placed in tied calico bags with sample numbers that provide no information on the location of the sample.
Audits or reviews	The results of any audits or reviews of sampling techniques and data	H&S Consultants audited PGMs core yard in 2008. No concerning issues arose in regard to the procedures of core mark up, photography, RQD measurement, cutting, core density, packaging and dispatch. Continuous improvements have been made by PGM with the implementation of roller racks, air conditioned sampling sheds, re-plumbing of water supply to the racks and the introduction of blue metal as a blank check.

# Section 2 Peak 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	<ul> <li>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.</li> </ul>	encompassed all of claimable, so explo has been extinguisl within EL5933 (Wri	Peak Gold Mines mineral ten ration has been delayed over ned or if an access agreemen ghtville Common & Kaloogle	nination of native title was made in one ments. Legal advice indicated that this land tenure until it can be estably with the claimants will be required guy Regeneration Ore Reserve) and ments held in full or part by PGM.	Crown land may be blished if native title . This effects areas
	The security of the tenure held at the time of	Tenement No	Name	Ownership	
	reporting along with any known impediments to	CML6	Fort Bourke Hill	PGM 100%	
	obtaining a licence to operate in the area.	CML7	Coronation/Beechworth	PGM 100%	
		CML8	Peak to Occidental	PGM 100%	
		CML9	Queen Bee	PGM 100%	
		ML1483	Fort Bourke Hill	PGM 100%	
		MPL854	Dam	PGM 100%	
		EL5933	Peak	PGM 100%	
		EL6149	Mafeesh	PGM 100%	
		EL6401	Rookery East	PGM 100%	
		EL7355	Nymagee East	PGM 100%	
		EL8060	Nymagee North	PGM 100%	
		EL8523	Margaret vale	PGM 100%	
		EL8548	Narri	PGM 100%	
		EL8567	Kurrajong	PGM 100%	
		EL5982	Norma Vale	PGM 75%, Zintoba 25%	
		EL6127	Rookery South	PGM 100%	
			•	nent ownership, including reporting nt permitting and rehabilitation. All	

Criteria	JORC Code explanation	Commentary
Exploration done by other parties	<ul> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	Exploration has been ongoing since early 1900. No holes pre 1960 remain selected for the current Mineral Resource estimate. Such holes were drilled by the New Occidental Mining Company and the like.
		All exploration holes left in the Mineral Resource selection were drilled during CRA, Wheaton River, Goldcorp, Newgold and Aurelia ownership which is concurrent with the modern era of mining and hence there is greater confidence in directional techniques in drilling and analytical techniques for assaying.
Geology	Deposit type, geological setting and style of mineralisation.	The deposits fall under the group of epigenetic "Cobar Style" mineralisation and are controlled structurally by major fault zones (Rookery Fault System) and subsequent spurs and splays. The faults are within the Devonian-Nurri Group of sedimentary units displaying lower green schist facies alteration. The economic minerals are contained within quartz stockworks and breccias. The breccia matrix are combinations of quartz, sediment, rhyolite and sulphide. The deposits are often polymetallic with copper, gold, zinc, lead and silver occurring in parallel lenses to the fault zones within the PGM leases.
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:</li> </ul>	For the purpose of reporting Ore Reserves and Mineral Resources this section is not applicable.  Information of this nature can be obtained on request.
	easting and northing of the drill hole collar	
	elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar	
	dip and azimuth of the hole	
	down hole length and interception depth	
	• hole length.	
	<ul> <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>	

Criteria	JORC Code explanation	Commentary
Data aggregation methods	<ul> <li>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.</li> </ul>	For the purpose of reporting Ore Reserves and Mineral Resources this section is not applicable.
	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.	
	<ul> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	
Relationship between	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> </ul>	For the purpose of reporting Ore Reserves and Mineral Resources this section is not applicable.
mineralisation widths and intercept lengths	<ul> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> </ul>	
	<ul> <li>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').</li> </ul>	
Diagrams	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	For the purpose of reporting Ore Reserves and Mineral Resources this section is not applicable.

Criteria	JORC Code explanation	Commentary
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>	For the purpose of reporting Ore Reserves and Mineral Resources this section is not applicable.
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	For the purpose of reporting Ore Reserves and Mineral Resources this section is not applicable.
Further work	<ul> <li>The nature and scale of planned further work (eg. 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>	For the purpose of reporting Ore Reserves and Mineral Resources this section is not applicable.

Section 3 Peak Estimation and Reporting of Mineral Resources (Criteria listed in section 1, and where relevant in section 2, also apply to this section)

Criteria	JORC Code explanation	Commentary
Database integrity	<ul> <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>	In 2022 the PGM database was fully migrated into Geobank.  Samples are dispatched in a pre-numbered series of calico bags and database programming prevents duplication of sample numbers. All data is now collected and stored in Geobank. Table fields are selected from drop down menus. Data transfer from logging software to the main database is electronic and data is extracted from the database to mine design software (Vulcan) digitally.  Validation for overlapping intervals and end of hole checks is part of the database function for all tables and all errors are reported. Visual inspection of data is performed in Vulcan mine software and checks such as univariate statistics are analysed for meaningful ranges consistent with the assay returns.
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>	Prior to Aurelia metals ownership of PGM, H&S Consultants performed visits and annual resource audits on site. During these visits, the core yard and mine areas were inspected and discussions were held with PGM personnel about the geology and mineralisation of the deposits. The Competent Person concluded that data collection and management were being performed in a professional manner. Chris Powell is a full-time employee of PGM and has worked there since 2006; he has occupied the role of Resource Geologist at PGM for the last eight years. The processes of sample taking, processing and auditing has not changed since. The recruitment of senior personnel to head office and site has added to the expertise of the group and positive opinion of the processes adopted by PGM has been reinforced.
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>	There is a high degree of confidence in the geological interpretation of the deposits within the mineral resources at PGM because these are generally well drilled and have good underground access. The majority of data is interpreted from diamond drill with underground mapping incorporated into the interpretation.  There is limited scope for alternative interpretations in a few areas; these alternatives could have a significant effect locally but are unlikely to impact the global resources.  Geology guides and controls Mineral Resource estimation in a number of ways. All deposits have visual indications of mineralisation, including quartz veining, chlorite alteration, brecciation, silica flooding, and presence of sulphide minerals. Domains for estimation are defined by these visual parameters in combination with grade thresholds that define structures. Internal waste is carried in some domains. There is generally a more defined contact to mineralisation on western side of the lenses and a gradational boundary on the eastern side and along strike. There is also a strong correlation between the regional foliation and orientation of mineralised structures. Mineralisation in the Peak Mine corridor occurs in narrow, steeply dipping ore shoots with a general north-south strike to mine grid. These are often associated with lithological contacts, such as the rhyolite-shale contact at Perseverance.

Criteria	JORC Code explanation	Commentary
		Factors affecting the continuity both of grade and geology include the steep north-south regional foliation, local and regional faults, and lithology. Metal grades have much lower continuity than the host stratigraphy and this suggests that specific combinations of geological features are required to produce economic metal accumulations. There is, however, a tendency for multiple metal deposits to form along favourable geological trends.
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 Resources at PGM have the following dimensions, in terms of strike length, average plan width and depth respectively. For Perseverance, Peak, New Cobar and Chesney the lode dimensions best describe the extent as there is mineral resource across the extents of the ore zone.  • Perseverance – various lenses including Chronos, S400 and Zone D - 600x12x900m, starting at 660m below surface
		Peak - various lenses including North, Uppers and Remnants - 400x15x800m from surface
		Kairos – 200x10x400m, starting at 800m below surface and mineralogical continuity with Peak remnants.
		New Cobar/Jubilee - 600x9x1000 from surface
		Chesney - various lenses including main and Eastern Gold - 500x10x1000 from surface
		Great Cobar - 800x20x1000 from surface
		• Gladstone – 600x10x700 from surface
		Dapville - 200x10x500 from surface
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, maximum distance of extrapolation from data points.</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> </ul>	<ul> <li>Estimation techniques applied are multiple indicator kriging (MIK) and ordinary kriging (OK). MIK has been used for gold where there is significant gold mineralisation and a highly skewed grade distribution. Presently the direction is for OK for all elements.</li> <li>OK is considered appropriate with appropriate cutting and domaining. More detailed models are produced for mining purposes. MIK was considered appropriate for gold at PGM because it deals with highly skewed grade distributions and reduces the need for grade cutting but added a level of unnecessary detail.</li> <li>Domains generally have soft boundaries between mineralisation and hard boundaries against waste.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul> <li>The assumptions made regarding recovery of by-products.</li> <li>Estimation of deleterious elements or other non-grade variables of economic significance (eg. sulphur for acid mine drainage characterisation).</li> <li>In the case of block model interpolation, the block size in relation to the average sample</li> </ul>	<ul> <li>All estimates used a fixed estimation search and variogram model orientations, although dynamic interpolation has recently been considered. Density weighting was implemented for the Great Cobar and Kairos estimates.</li> <li>Estimation proceeds using multiple search passes, with initial search radii typically between 3x15x15m and 3x20x25m in Easting, Northing and elevation respectively, depending on the style of mineralisation. Sample requirements for the initial search are between 8-24 and 16-32 samples, with octant constraints. Search radii are expanded and sample requirements reduced in subsequent passes.</li> </ul>
	<ul> <li>spacing and the search employed.</li> <li>Any assumptions behind modelling of selective mining units.</li> <li>Any assumptions about correlation between variables.</li> <li>Description of how the geological interpretation was used to control the</li> </ul>	<ul> <li>Model block size and search radii are related to average sample spacing. In the plane of mineralisation, block size is no less than half the sample spacing in the better drilled areas. Blocks are typically 2x10x10m for the gold deposits, where hole spacing approximates 15m. For the base metal deposits, blocks are up to 2x25x25m for a nominal hole spacing of 20 to 25m. Most models have sub-blocks at half the parent block dimensions. Where structures are oblique to block direction the first pass dimensions are adjusted to enclose the parent block.</li> <li>Maximum extrapolation distances (inferred Mineral Resource) range from 60m for the gold deposits up to 95m for base metal deposits for inferred categories; in most cases the domain</li> </ul>
	<ul> <li>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>Estimates were generated using Vulcan software.</li> <li>While gold is the main commodity of interest at PGM, economic quantities of copper, silver, zinc and lead are recovered as by-products. All these elements are estimated and included in NSR calculations, so their value is accounted for in the Mineral Resource estimates.</li> <li>A number of potentially deleterious elements are estimated, including bismuth, sulphur and iron. Sulphur estimates are used as a guide to sulphide dust ignition during blasts, while bismuth can be a contaminant in sulphide concentrates. Sulphur and iron could be used in the characterisation of acid mine drainage. Zinc and lead can be penalties in copper concentrates but are usually blended out during processing.</li> <li>Mineral Resource estimates are reported within mineable shapes generated from an SSO run in Deswik. The minimum mineable unit is the block size of the respective model with a 10% dilution factor applied. Single blocks without adjacent support are selectively taken out of resource.</li> </ul>

Criteria	JORC Code explanation	Commentary
		<ul> <li>No specific assumptions are made regarding the correlation of variables during estimation as each element is estimated independently. Some elements do show moderate to strong correlation and is the basis for SG weighting. Bismuth, gold and copper, and zinc, lead and silver usually display good correlations. The similarity in variogram models effectively guarantees that this correlation is preserved in the estimates.</li> </ul>
		<ul> <li>The geological interpretation controls the resource estimates through the estimation domain boundaries, which incorporate the relevant geological features.</li> </ul>
		<ul> <li>Models are validated by visual and statistical comparisons of block and drill hole grades, examination of grade-tonnage data, swath plots, comparison with previous models and reconciliation against mine production. Models are reconciled against mine production on a monthly and, more recently, campaign basis and against previous estimates annually, so the Mineral Resource estimates do take appropriate account of this data.</li> </ul>
Moisture	<ul> <li>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</li> </ul>	Tonnages are estimated on a dry weight basis. Moisture content has not been determined because oven drying of the samples is not performed as part of the density measurement process. The samples are all fresh rock samples with very low porosity and permeability. Samples are air dried and moisture content is considered negligible.
Cut-off parameters	The basis of the adopted cut-off grade(s) or quality parameters applied.	The cut-off grade is a Net Smelter Return (NSR) value, which is used to assign a dollar value to the complex polymetallic mineralisation. An NSR cut-off of AUD\$135 per tonne was chosen to define Mineral Resources in the South mine and AUD\$120 in the North Mine because this value is considered to have reasonable prospects of economic extraction in the medium term. The North Mine does not carry the cost of the shaft. The Peak Mine is an operating mine and the NSR calculation is well developed and informed. All elements included in the NSR calculation are currently being recovered and sold. Full details on the NSR parameters are contained within the body of the report.

Criteria	JORC Code explanation	Commentary
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.	PGM has been successfully operating for more than 20 years so the mining methods and parameters are well established. The mining methods are a combination of long hole stope retreat with loose rock fill, modified Avoca mining, and transverse sequential mining with cement and loose rock fill.  The block model estimates include any internal dilution within each block. The Mineral Resource mineable shapes are the effective minimum selective mining unit and can include some subeconomic as additional internal dilution. The minimum selective mining unit is 10m long, 10m high, and 2m wide.  Additional external dilution and recovery factors are incorporated into the Ore Reserve conversion process, based on mining technique and local ground conditions.
Metallurgical factors or assumptions	The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	PGM has been successfully operating for more than 20 years so the metallurgical methods and parameters are based on actual processing performance. PGM ore bodies are largely free milling ore types. Metallurgical samples are submitted as part of all feasibility studies. Further metallurgical samples have been tested during the mine life to update recoveries and grinding indexes. Well known recovery factors, concentrate factors, commodity prices and refining and freight costs are built into the NSR formulas.

Criteria	JORC Code explanation	Commentary
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.	As a mine operating for over 20 years, all necessary environmental approvals are in place for the current mining operations at PGM. Regulatory approvals for the Great Cobar project are in progress.  All waste and process residues will continue to be disposed of in a responsible manner in existing facilities and in accordance with the mining license conditions.  Most waste rock is used to fill underground voids except that needed for surface projects. Where waste rock is used for surface projects all efforts are made to ensure it is of low sulphide bearing rock and thus of low acid drainage potential. PGM has procured testing for acid producing potential in the past on waste samples.
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 estimates used in the evaluation process of the different materials.</li> <li>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials</li> </ul>	Every sample that is assayed at PGM also has density determined by the Archimedes method. Most of the measurements are performed on one metre intervals of whole core (LTK48 or BQ), ie. the entire assay sample. Therefore, the density measurements are completely representative of the assay intervals.  The samples are all fresh rock samples with very low porosity and permeability. Samples are air dried and moisture content is considered negligible.  Density standards are used at the start of every sampling run and at intervals of one per thirty samples during the sampling run to check for any drift in the procedure.  Bulk density is directly estimated into the models from sample data in the same ways as metal grades and using the same parameters. Estimation method is ordinary kriging.

Criteria	JORC Code explanation	Commentary
Classification	<ul> <li>The basis for the classification of the Mineral Resources into varying confidence categories.</li> </ul>	The classification scheme is based on the estimation search pass for gold in the case of gold deposits and copper or zinc-lead for base metal deposits. Generally, Pass 1 = Measured; Pass 2 = Indicated; Pass 3 = Inferred. This scheme is effectively an index of local data density.
	<ul> <li>Whether appropriate account has been taken of all relevant factors (ie. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).</li> </ul>	The classification is considered to take appropriate account of all relevant factors, including the relative confidence in tonnage and grade estimates, confidence in the continuity of geology and metal values, and the quality, quantity and distribution of the data. QAQC ensures that data quality is consistently high and holes with unreliable data are removed for resource estimation.  The classification appropriately reflects the Competent Persons' view of the deposits.
	<ul> <li>Whether the result appropriately reflects the Competent Person's view of the deposit.</li> </ul>	
Audits or reviews	The results of any audits or reviews of Mineral Resource estimates.	Until recently, H&S Consultants audited all PGM resource estimates on an annual basis from 2012. In most cases, these audits found no obvious material issues with the PGM models. PGM has been proactive in implementing recommendations during the audit process.  Log and script files are available, documenting all aspects of the Vulcan estimation process and
		form an audit trail.
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	The relative accuracy and confidence level in the Mineral Resource estimates are considered to be in line with the generally accepted accuracy and confidence of the nominated JORC Mineral Resource categories. This has been determined on a qualitative, rather than quantitative, basis, and is based on the estimator's experience with a number of deposits at PGM and similar deposits elsewhere. The main factors that affect the relative accuracy and confidence of the estimate are the drill hole spacing and the style of mineralisation.
	procedures to quantify the relative accuracy of the Mineral Resource within stated confidence limits, or, if such an approach is not deemed appropriate, a	The estimates are local, in the sense that they are localised to model blocks of a size considered appropriate for local grade estimation. The tonnages relevant to technical and economic analysis of the Ore Reserves are those classified as Measured and Indicated Mineral Resources only.
	qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.	Data for reconciliation between the resource model and mine production is available from 2010. The resource is evaluated by intersecting the models with the final surveyed stope shapes, while mine production is the reconciled mill performance. This comparison takes into account factors such as dilution, under-break, over-break and development.

Criteria	JORC Code explanation	Commentary
	<ul> <li>The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.</li> </ul>	Reconciled tonnes and grades from monthly and, more recently, campaign reconciliations show the resource models to be conservative in grade. This is due to low grade cut-offs used on drill hole intercepts. Tonnage is regulated by exclusion shapes taking into account historic geotechnical conditions and rehabilitation costs.
	<ul> <li>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</li> </ul>	

Section 4 Peak Estimation and Reporting of Ore Reserves (Criteria listed in section 1, and where relevant in sections 2 & 3, also apply to this section)

Criteria	JORC Code explanation	Commentary		
Mineral Resource estimate for conversion to Ore	<ul> <li>Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.</li> <li>Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.</li> </ul>	The Ore Reserve estimate is prepared from the Mineral Resource Estimate reported at 30 <sup>th</sup> June 2023.		
		The block models used as the basis for the Ore Reserve Estimate are shown in Table 43.		
Reserves		Table 43. Block models	used as the basis for the Ore Reserve	Estimate
		Deposits	Block Model	
		Chesney	CHS_RR_202306_v2	
		Great Cobar	GCmod_202306_v3	
		Jubilee	NC_RR_202306_v2	
		Perseverance		
		(includes Chronos and S400)	permod_202306_rce_v3	
		Peak	Pkmmod 202306 rce v3	
		Kairos	F KIIIIII04_202300_106_43	
			stimate is inclusive of the Ore Reserve	
Site visits	<ul> <li>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</li> </ul>	The Ore Reserve Estimate was completed by Adriaan Engelbrecht who is the Senior Mining Engineer for Aurelia Metals based in the Cobar region, and reviewed and reported by Justin Woodward who is the Group Manager Technical Services at Aurelia Metals and is regularly onsite at Peak Mine.		
	<ul> <li>If no site visits have been undertaken indicate why this is the case.</li> </ul>			
Study status	The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.	The mine is currently in operation.  The operation has undergone a Life-of-Mine Plan process, and a Budget process. All matters relating to the ongoing operation of the Peak Mine have been considered during these processes.		

Criteria	JORC Code explanation	Commentary			
	The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.	The Great Cobar Pre-Feasibility Study has been completed (refer to the announcement "Great Cobar PFS outcomes & Peak Ore Reserve increase" released on 27 January 2022 which is available to view on www.aureliametals.com.au and www.asx.com.au).			
Cut-off parameters	The basis of the cut-off grade(s) or quality parameters applied.	A NSR cut-off of A\$80/t was applied for development material. The stoping cut-off varies by mine area, with the intent of reflecting the relative complexity of the different mining areas. The economic viability of the NSR cut-off values has been demonstrated through cashflow modelling completed for the Peak Life of Mine plan and budget.  These are marginal cut-off values assessed during the Life of Mine Planning process. Cut-off values consider the full cost of development, stoping, haulage and processing. Costs beyond the mine gate including concentrate haulage, port facilities, shipping, treatment charges, penalties and royalties are netted from revenues of gold and concentrates and form the NSR estimates.  Table 44. Stoping NSR Cut-offs by ore type and deposit			
		Ore Type	Deposit	NSR Cut-off (A\$/t)	
		Zinc-lead	Chronos	190	
			All others	185	
			Great Cobar	175	
		Copper	Chesney, Jubilee	180	
			Perseverance Deeps	220	
			All others	185	

Criteria	JORC Code explanation	Commentary				
Mining factors or assumptions	The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an	Peak is an operating mine. The Life-of-Mine and Budget processes include Inferred Mineral Resource. The inclusion of the Inferred material is not material to the financial viability of the operation.				
	Ore Reserve (ie. either by application of appropriate factors by optimisation or by preliminary or detailed design).	The Peak Mine uses a combination of uphole and downhole stoping with rockfill, progressing in a bottom up sequence. This mining method and Peak's mine development design were used for the Ore Reserve Estimate.				
	<ul> <li>The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.</li> </ul>	Stope shapes are a combination of current mine design shapes and stope shapes created using stope optimiser (SO) software. The mine design shapes are used in preference and updated using the SO shapes if changes to the geology model caused material changes to the stope shapes.  Settings used in the SO included 0.5m hangingwall and footwall dilution with a minimum mining width of 3m. Stope strike lengths and heights vary across the operation and have been aligned with current mine designs.  Additional mining dilution and recovery factors have been applied. Development has 15% mining dilution applied and 100% recovery. Downhole stoping has 5% mining dilution applied with 95% recovery. Uphole stoping has 2% mining dilution applied with 75% recovery. Sill pillar mining has 2% mining dilution applied with 60% recovery.  Stope shapes that are current mine design shapes have recovery and dilution parameters applied by deposit as shown in Table 45.  Table 45. Mining Factors by deposit.				
	<ul> <li>The assumptions made regarding geotechnical parameters (eg. pit slopes, stope sizes, etc), grade control and pre-</li> </ul>					
	<ul> <li>production drilling.</li> <li>The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).</li> </ul>					
	The mining dilution factors used.					
	The mining recovery factors used.					
	Any minimum mining widths used.	Deposits	Recovery (%)	Dilution (%)		
	The manner in which Inferred Mineral Resources are utilised in mining studies and	Chesney, Great Cobar, Peak	90	10		
	the sensitivity of the outcome to their inclusion.	Chronos, Hinge, Hulk	90	14		
	The infrastructure requirements of the	Kairos	92	18	•	
	selected mining methods.	Perseverance	92	16	•	
		Jubilee	92	14		
		S400	92	12	•	

Criteria	JORC Code explanation	Commentary
		The mining methods selected are consistent with those currently used at the operation. As such the infrastructure requirements are largely in place, and well understood. These include orebody access, ventilation, pumping, power, water, communications and 2 <sup>nd</sup> means of egress.
		The Great Cobar PFS documented the additional infrastructure required for the extraction of Great Cobar, inclusive of a twin decline access, a return air rise, an underground primary fan installation and dewatering of the Great Cobar historic workings (refer to the announcement "Great Cobar PFS outcomes & Peak ore Reserve increase" released on 27 January 2022 which is available to view on www.aureliametals.com.au and www.asx.com.au).
Metallurgical factors or assumptions	<ul> <li>The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.</li> </ul>	Ore is to be processed through the Peak Gold processing facility at a nominal throughput rate of 800ktpa. The processing facility incorporates a gravity gold recovery circuit, a two-stage flotation circuit and a CIL circuit to produce a gold-silver doré and separate copper, zinc and lead concentrate.
	Whether the metallurgical process is well- tested technology or novel in nature.	Gold (and silver) is recovered in a gravity circuit via Knelson concentrators. The gravity concentrate is leached in an In-line Leach Reactor with the precious metals recovered from solution by electrowinning and smelting to produce gold-silver doré bars.
	<ul> <li>The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining</li> </ul>	When treating copper ore any floatable gold and silver not recovered in the gravity circuit is recovered with copper to a copper concentrate utilising a single stage flotation circuit.
	<ul><li>applied and the corresponding metallurgical recovery factors applied.</li><li>Any assumptions or allowances made for</li></ul>	When treating zinc and lead ore any floatable gold and silver not recovered in the gravity circuit is recovered with lead to a lead concentrate and with zinc to a zinc concentrate as part of a two-stage flotation circuit.
	<ul> <li>deleterious elements.</li> <li>The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the</li> </ul>	Flotation tailings are processed in a conventional CIL circuit to leach any remaining cyanide leachable gold and silver. Gold and silver in solution is recovered via carbon adsorption with the loaded carbon then recovered, stripped and the high grade gold/silver solution subjected to electrowinning and smelted to produce gold doré bars.
	<ul> <li>orebody as a whole.</li> <li>For minerals that are defined by a specification, has the Ore Reserve estimation been based on the appropriate mineralogy to meet the specifications</li> </ul>	The main deleterious elements present at the Peak Mine deposits are Silica (SiO2), Iron (Fe), Sulphur (S) and Bismuth (Bi). Iron is present in varying proportions of pyrite and pyrrhotite in the sulphides treated and are both diluents in all of the concentrates. Bismuth is a penalty in copper concentrate when high levels are present in the ore deposits. Metallurgical recovery assumptions are based on current site operating ranges and are shown in Table 46.

Criteria	JORC Code explanation	Commentary			
		Table 46. Peak Mine metal recovery and	Fable 46. Peak Mine metal recovery and concentrate grade parameters.		
		Parameter			
		Au Recovery - Gravity	30-43%		
		Au Recovery - Total	80-95%		
		Ag Recovery - Total	60-80%		
		Pb Recovery	60-88%		
		Zn Recovery	60-68%		
		Cu Recovery	75-95%		
		Cu Grade - Concentrate	23-25%		
		Pb Grade - Concentrate	20-55%		
		Zn Grade - Concentrate	45-52%		
The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.		are several development consents and n development consents are supported by mining and processing operations. The eauthorities and the community and mitted these stakeholders.  Waste rock generated at peak is stored at there are legacy waste rock emplaceme acid forming and non-acid forming resid these impacts. The facilities are approve approvals.  Peak has numerous environmental monitorial m	diary of Aurelia Metals Ltd) own and operate the Peak Mine. There nining leases that govern the operation of the Peak Mine. The environmental assessments that identify the potential impacts of environmental assessments have been shared with regulatory gating actions developed and implemented in consultation with and managed in waste rock emplacements onsite. In addition, ents and process residue storages. The facilities contain potentially ues and/or waste rock. The facilities are designed to mitigate and via various development consents and other regulatory ditoring requirements including air quality, greenhouse gas moise, blasting, meteorological and biodiversity. A range of		
		techniques including real-time monitori	ng are utilised in assessing potential impact.		

Criteria	JORC Code explanation	Commentary
Infrastructure	<ul> <li>The existence of appropriate infrastructure: availability of land for plant development,</li> </ul>	As an operating mine, most of the surface infrastructure required for the extraction of the Ore Reserve is in place. Including:
	power, water, transportation (particularly for bulk commodities), labour, accommodation;	Peak boxcut and portal
	or the ease with which the infrastructure can	New Cobar boxcut and portal
	be provided, or accessed.	Shaft and headframe
		Primary vent fan installations
		Emergency facilities
		ROM Pad
		Processing Facility
		Process water dams
		Concentrate Storage Facility
		Maintenance Facility
		• Store
		All weather access roads
		Office facilities
		Waste rock dumps
		The Tailings Storage Facility (TSF) has recently completed the Stage 5 raise. This gives the TSF 6 years of capacity, sufficient for the processing of the Ore Reserve. Life of Asset planning has been completed to 2035, with Stage 6 and Stage 7 at concept design stage.
		The Great Cobar PFS documented the additional infrastructure required for the extraction of Great Cobar, inclusive of a twin decline access, a return air rise, an underground primary fan installation and dewatering of the Great Cobar historic workings (refer to the announcement "Great Cobar PFS outcomes & Peak ore Reserve increase" released on 27 January 2022 which is available to view on www.aureliametals.com.au and www.asx.com.au).
		Ongoing sustaining capital and infrastructure underground including declines, level accesses, escapeways, vent accesses and rises are required for the full extraction of the Ore Reserve Estimate. These works have been included in the Life-of-Mine Plan and Budget processes.

Criteria	JORC Code explanation	Commentary				
Costs	<ul> <li>The derivation of, or assumptions made, regarding projected capital costs in the study.</li> </ul>	Capital and Operating costs have been estimated based on historical actual costs, and forecast costs, as part of the Life-of-Mine and Budgeting process. Contracts are in place for transport costs, treatment costs and refining costs, including penalties that may be applicable.				
	<ul> <li>The methodology used to estimate operating costs.</li> </ul>	The Great Cobar PFS used cost estimates supplied by contractors, consultants, equipment manufacturers and suppliers to a ±25% accuracy.				
	<ul> <li>Allowances made for the content of deleterious elements.</li> </ul>	No allowance has been made for deleterious elements. All deleterious elements are expected to remain within tolerances and no penalties have been applied to cash flow estimations.				
	<ul> <li>The derivation of assumptions made of metal or commodity price(s), for the principal minerals and co- products.</li> </ul>	Metal Price and exchange rate assumptions have been benchmarked against industry peers and informed by consensus forecasts.				
	<ul> <li>The source of exchange rates used in the study.</li> </ul>	Allowances have been made for NSW State Government Royalty payable at 4% on the assessable value of metals.				
	• Derivation of transportation charges.					
	<ul> <li>The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.</li> </ul>	г				
	<ul> <li>The allowances made for royalties payable, both Government and private.</li> </ul>					
Revenue factors	The derivation of, or assumptions made	Table 47. Peak Mine metal price and exchange rate Assumptions				
	regarding revenue factors including head grade, metal or commodity price(s) exchange	Metal Unit USD				
	rates, transportation and treatment charges,	Gold oz 1,600				
	penalties, net smelter returns, etc.	Silver oz 21.5				
	<ul> <li>The derivation of assumptions made of metal or commodity price(s), for the principal</li> </ul>	Copper t 7,937				
	metals, minerals and co-products.	Lead t 1,984				
		Zinc t 2,646				
		AUD/USD 0.73				

Criteria	JORC Code explanation	Commentary
Market assessment	<ul> <li>The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.</li> <li>A customer and competitor analysis along with the identification of likely market windows for the product.</li> <li>Price and volume forecasts and the basis for these forecasts.</li> <li>For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.</li> </ul>	The Peak Mine has in place all necessary logistics arrangements for the transportation of concentrate to customers. From 1 January 2024, a long term offtake agreement with Trafigura Pty Ltd is in place for zinc, lead and copper concentrates.  Gold and silver doré products produced on site are transported to a refinery under a refining agreement and the refined metals are either delivered into hedge book commitments and contracts or sold directly into the spot gold market.
Economic	<ul> <li>The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.</li> <li>NPV ranges and sensitivity to variations in the significant assumptions and inputs.</li> </ul>	Peak is an operating mine. The Life of Mine Plan, and Budgeting process includes the completion of cash flow models. Inputs to these models are based on a combination of historical actual costs and forecast future costs. The cash flow models demonstrate a positive Net Present Value.
Social	The status of agreements with key stakeholders and matters leading to social licence to operate.	Peak is in full operation with agreements in place. Peak has a Voluntary Planning Agreement in place with the local council to support community enhancement projects.  During FY23 Peak negotiated an Access and Compensation Agreement with Crown Lands for land underlying the mining leases.  Peak negotiates access agreements as required (e.g. for exploration activities).
Other	To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:	The Peak Mine is governed by various development consents and mining leases. The Development Consent for the Peak mining complex and all associated mining, processing and auxiliary infrastructure and activities was granted on 22 February 1990 (T3-4 CD:TB). The Development Consent for the New Cobar opencut was granted on 4 July 2000 (LDA99/00:022). The

Criteria	JORC Code explanation	Commentary
	<ul> <li>Any identified material naturally occurring risks.</li> <li>The status of material legal agreements and marketing arrangements.</li> <li>The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the Ore Reserve is contingent.</li> </ul>	Development Consent for the New Cobar underground was granted on 19 July 2004 (2004/LDA-00003). All Development Consents have been granted for ongoing operations and do not expire. There are various other development consents relating to specific activities not listed here.  Regulatory approvals for the construction of an exploration decline to the Great Cobar project have been granted. A State Significant Development Consent to mine the Great Cobar deposit was granted on 22 April 2022.  PGM currently holds several mining leases including Consolidated Mining Leases (CML) 6, 7, 8 and 9, ML 1483 and ML 1805 and Mining Purposes Lease (MPL) 854. The mining lease areas include land not owned by PGM. CML 6 expires in 2034. CML 7 expires in 2025. CML 8 expires in 2033. CML 9 expires in 2027. ML 1483 expires in 2029. ML 1805 expires in 2041. MPL 854 expires in 2043.
Classification	<ul> <li>The basis for the classification of the Ore Reserves into varying confidence categories.</li> <li>Whether the result appropriately reflects the Competent Person's view of the deposit.</li> <li>The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).</li> </ul>	The Mineral Resource classifications flagged in the geology block model formed the basis for the Ore Reserve Estimate. Mining shapes were developed from the geological block model then the quantity and grade of Measured, Indicated, Inferred and unclassified material within the mining shapes was reported. Mining shapes were included in the Ore Reserve Estimate if individual shapes contained more than 80% of Measured and Indicated material.  The Ore Reserve classification of the material within the mining shapes was aligned with the Mineral Resource classifications, such that the Measured Mineral Resource converted to Proved Ore Reserve, and the Indicated classification was reported as the Probable Ore Reserve.  The selected mining shapes may contain a minor portion of Inferred or unclassified material. The metal value corresponding to this tonnage was removed from the Ore Reserve estimate while the tonnage remained in the Ore Reserve Estimate as dilution at zero grade. This dilution was prorated into the Proved and Probable classifications based on the relative tonnage. The result appropriately reflects the Competent Person's view of the deposit.
Audits or reviews	The results of any audits or reviews of Ore Reserve estimates.	No external audit or review of this Ore Reserve Estimate has been completed.  Aurelia engages consultants for external review of the process used to estimate the Ore Reserves.  This review focuses on the process as it leads into the updated estimate. The review is conducted on a selected orebody from across the company's operations. Recommendations from these

Criteria	JORC Code explanation	Commentary			
				re Estimates, as the processes have strong gues, and Federation. No fatal flaws have	
Discussion of relative accuracy/ confidence	relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the	The Peak Ore Reserve Estimate has a high level of confidence and accuracy.  The operating history gives confidence that the factors used to determine the Ore Reserve Estimate are well understood.  Table 48. Ore Reserve Estimate – Reliance on others			
	application of statistical or geostatistical procedures to quantify the relative accuracy	Area of Expertise	Expert Person	Aurelia Position Title	
	of the reserve within stated confidence limits, or, if such an approach is not deemed	Mineral Resource Estimate	Timothy O'Sullivan	Principal Resource Geologist	
	appropriate, a qualitative discussion of the	Mining	Adriaan Engelbrecht	Senior Mining Engineer	
	factors which could affect the relative accuracy and confidence of the estimate.  The statement should specify whether it	Processing	Robert Bresca	Senior Metallurgist	
		Marketing	Leigh Collins	Group Manager - Commercial	
	relates to global or local estimates, and, if	Economic Assessment	Dan Zagorskis	Senior Business Analyst	
	local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedure used.  Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.  It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.				

## APPENDIX 2 - DARGUES JORC Code 2012 (Table 1) - Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves

Section 1 Dargues Sampling Techniques and Data (Criteria in this section apply to all succeeding sections)

Criteria	JORC Code explanation	Commentary
Sampling techniques	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 Dargues deposit has been historically sampled from diamond drillholes and RC holes. Drill spacing between 20m and 50m defined the mineralisation which extended to 80m on the deposit margins.  Recent underground exploration and resource definition uses NQ2 diamond core. Recent surface diamond drilling is undertaken at HQ and NQ core sizes. Core is logged and processed in a built for purpose undercover facility. Half core is sampled in intervals greater than 0.2 metres to a maximum of 1 metre in length. HMR Drilling Services is the underground drilling contractor and Mitchell Services is the surface diamond drilling contractor.
	<ul> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> </ul>	Sample intervals for diamond core are determined by trained Geologists with checks in place within logging software to prevent sample interval overlap or sample number duplication. Intervals are defined by the presence of sulphides or alteration assemblage. When half-core is sampled, the same side of core is always sampled, to avoid potential bias from the core saw operator. Core-block errors determined during core mark-up are corrected by the drilling contractor. Pulps are retained to conduct re-assay at umpire laboratories as a comparison of repeatability to the preferred laboratory. Certified blank material is inserted every 20th sample. Core shed processes and procedures are constantly refreshed and reviewed to ensure consistent logging and sampling among individual staff.

Criteria	JORC Code explanation	Commentary
	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.	Historically, RC samples were collected as 1 m or 2 m composite spear samples. Mineralised zones were sampled at 1 m intervals from a rig mounted riffle splitter. Core samples were taken at 1 m intervals or at geological boundaries. The majority of sample preparation and analysis for CRC and Unity Mining was by ALS Chemex's laboratory in Orange, NSW, with three batches of samples going through the SGS laboratory in West Wyalong, NSW. MOL samples were assayed by ALS Chemex's lab in Orange. Umpire assays had been analysed by Genalysis, Perth. All samples were assayed using the Fire Assay technique with a 50g charge (Au-AA26) and AAS finish.  Recent diamond drilling was half-core sampled in intervals greater than 0.2 metres to a maximum of 1 metre in length to ensure sufficient sample size, but also show variability across broad mineralised intervals. The samples were prepared and assayed at On Site Laboratory Services, Bendigo, Victoria. The laboratory is registered under ISO 9001:2015 and operates in accordance with ISO/IEC17025 under the National Association of Testing Authorities, Australia (NATA). All samples were assayed using the Fire Assay technique with a 25g charge (PE01S) and AAS finish.
Drilling techniques	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, facesampling bit or other type, whether core is oriented and if so, by what method, etc.).	Historically, RC drilling utilised a 47/8 inch face-sampling bit. Diamond drilling by CRC and Unity Mining used HQ core from surface to fresh rock and then oriented NQ2 core to end of hole. Historic core drilling used either NQ or BQ core (DDH1-9), BQ core (DRU1-10) or HQ from surface to fresh rock with NQ to end of hole (DRS1-8).  Recent underground exploration and resource definition uses NQ2 diamond core, core is orientated by Reflex ACTIII Ori Tool. Recent surface diamond used HQ core from surface to fresh rock and then oriented NQ core to end of hole, surface diamond core is orientated by a Reflex Orientation Tool.
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> </ul>	Core recoveries are noted by the drilling contractor and then confirmed by the logging geologist, core loss is recorded in the logging software. All core was routinely checked by the logging geologist using core blocks and rod counts to determine the depth. There were no major issues. Information from the diamond drilling does not suggest that there is a correlation between recoveries and grade. Diamond drill core from this deposit generally has a high recovery.

Criteria	JORC Code explanation	Commentary
	<ul> <li>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.</li> </ul>	
Logging	<ul> <li>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.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	All historic holes were logged for a combination of geological and geotechnical attributes. All holes were logged by qualified geologists. Lithology, mineralisation, texture, veining, weathering and alteration information were recorded. The total length of all holes was logged in detail.  Recent underground and surface diamond drill holes are logged for the entire length of holes, capturing lithological information and alteration type, defining the boundaries of each rock type and alteration type. Zones of sulphide mineralisation are recorded, estimating mineral species and quantity through these zones. Core is orientated, alpha and beta angles are captured on structures where possible, if an alpha or beta angle cannot be captured, the character and down hole depth of the structure is recorded. Rock quality designation (RQD) is recorded for all diamond drill holes.  Diamond drill core is photographed in a built for purpose photography station.
Sub-sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether Quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> </ul>	Historically, diamond drill core was ½ split using a core saw and generally sampled at 0.5 to 1 m intervals within defined geological (mineralised) boundaries. For RC holes, 1m samples were collected in a plastic bag through a properly designed cyclone. A 1 m or 2 m length composite sample was collected by using a trowel or ridged plastic spear and submitted for analysis. Upon receipt of assay results the original composite sample was re-split and submitted for repeat analysis.  Quality control standards, blanks and duplicates were routinely included with the drilling samples by the CRC Exploration Team.  The QAQC protocols implemented for the CRC and Unity Mining drilling programs included: Insertion of a reference sample (commercial batch standards) for every 25 samples.  Insertion of a blank at the start of every hole submitted, as well as at the end of strongly mineralised intervals as determined by the controlling geologist.  Pulp repeats sent to umpire laboratory.

Criteria	JORC Code explanation	Commentary
	Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field	Field duplicate sampling was completed by passing the bulk reject sample from the plastic bag through a riffle splitter. In addition, ¼ core was routinely submitted. Duplicate sample intervals were designated by the geologist.
	duplicate/second- half sampling.	Recent diamond drill core was half- split using an Almonte core saw and generally sampled at 0.2 metre to 1 metre intervals within defined geological (mineralised) boundaries.
	<ul> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	Quality control standards, blanks and duplicates are routinely included with the drilling samples by the Dargues mine geologists.
		The QAQC protocols implemented include:
		Insertion of a certified reference sample for every 20 samples.
		Insertion of a blank for every 20 samples.
		Pulp repeats sent to umpire laboratory.
		<ul> <li>Standards and Blanks are inserted on every 20th sample, standard fails may result in re-assay.</li> <li>Standards and blank materials are supplied by Geostats Pty Ltd.</li> </ul>
Quality of assay data and	The nature, quality and appropriateness of the assaying and	Historically, Analysis for Au was completed using Fire Assay (Au-AA26) with AAS finish. Analysis for Ag, As, Bi, Cu, Mo, Pb, S, and Zn was completed using the aqua regia technique (ICP-AES).
laboratory test	laboratory procedures used and whether the technique is considered partial or total.	Recent samples are oven dried for a minimum of 12 hours at >100 degrees Celsius. Samples are crushed, then pulverised to >90% passing 75 micron. Analysis for Au was completed using 25gm Fire Assay (PE01S) with AAS finish. Analysis for S was completed using LECO (IR-01S).
	<ul> <li>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.</li> </ul>	Historically, 17 standards were reported in the database. All standards were sourced from Ore Research and Exploration (ORE) Pty. Ltd with exception of G908-3 which was sourced from Geostats Pty. Ltd. Standards were inserted into a calico sample bag at every 25th sample submitted resulting in a sufficient amount data collected to ensure quality control of the samples. Historically, blank standard was produced from using unaltered granite material from RC chips and core. As stated by Runge 2010 "This presents a problem in that the accuracy of the standard cannot be relied upon with the vast majority of the 54 assays returning values less than 2 standard deviations. Runge considers these results to be acceptable, however without a properly certified standard it is difficult to make definitive conclusions".
		The majority of standards submitted by Dargues report within the required grade range. Duplicate sample analyses show good correlation with the original analysis.

Criteria	JORC Code explanation	Commentary						
	Nature of quality control procedures adopted (eg. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	Recent Standards and Blanks are inserted on every 20th sample, standard fails may result in re-assay. Standards and blank materials are supplied by Geostats Pty Ltd.  Standards and blanks are done by On Site Laboratory Services every 5-25 samples. Replicates are done by On Site Laboratory Services on assays of elevated gold and duplicates are done every 5-25 samples.  Recent CRMs				plicates are		
		G913-9 G914-10 G307-4 54Pa Blank	Target Grade 4.91 10.26 1.4 2.9	0.17 0.38 0.06 0.11	+1 StDev 5.08 10.64 1.46 3.01	+2 StDev 5.25 11.02 1.52 3.12 0	-1 StDev 4.74 9.88 1.34 2.79	-2 StDev 4.57 9.5 1.28 2.68
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data</li> </ul>	review was con holes was con adjacent mine of assays with identified. Prir was then impo Conarco and a Recent drill ho within the com Recent hole lo original hole to and external s documents are documents are	nducted during ducted by CRC ralised intersection ary data was reed into the direction pany. Twinned and geologiervers. Hole ple filed and store scanned and data from the	y was complete collected eithe atabase. All locate be of a high sistematical database a ans exist as bored within a seciled as an elected by ware and ansected as an elected by ware and	y Runge. No ar ature of drilling g as close as 4 ed by Runge an r as paper logs gging and samp standard. viewed by site deemed to be r mat and transf re backed up of th an electroni ure part of the tronic backup i filed electronic	nomalies were g fans from sin m at shallow do do Conarco with or as generic loling methods were do the geologists and regular interic and physical geology depart foot already do cally and backet	discovered. No agle locations repths. Qualitate no major discologging prograwas reviewed by a principal levente control infections, both to o copy. Physical tement. All phylone so. Labora	twinning of esults in ive verification repancies mme. This data by Runge and I geologists ill holes.  ase. Both the n site servers copies of

Criteria	JORC Code explanation	Commentary
Location of data points	<ul> <li>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.</li> <li>Specification of the grid system used</li> <li>Quality and adequacy of topographic control.</li> </ul>	Historic drillhole collars have been accurately surveyed in MGA94 grid by licensed surveyors, Bradley Surveying and Design Pty Ltd. Where possible historical collars were also located and surveyed by Bradley, although numerous drillholes had been rehabilitated and therefore could not be surveyed. Previously DGPS surveyed coordinates transformed into MGA94 grid were used for these holes. Recent underground and surface drill hole collars are accurately surveyed by qualified site surveyors using a Total Station Theodolite, collars are surveyed in mine grid which are converted to MGA94 grid.  Historic drillholes have been downhole surveyed using Eastman camera or Gyro instruments. Diamond holes were originally surveyed every 30m or 50m by single shot Eastman camera, whilst RC holes were only surveyed for dip at bottom of hole and halfway down hole (with an assumed azimuth at the collar based on the rig set-up).  Downhole Surveys Pty Ltd has resurveyed all Cortona Resources (CRC) diamond core holes (DREX038-043 and DREX083-085) using a Flexit Gyrosmart tool and has re-entered the RC holes (DREX045-082 and DREX086-118) where possible. Historic holes up to DREX014 generally have nominal surveys although some have a single Eastman survey at the end of hole. Recent underground and surface diamond drill holes are downhole surveyed using a Reflex survey instrument in 30m increments until end-of-hole, where a final survey is taken. Surveys with high magnetic readings may be discarded, however is rarely an issue within and around the deposit.  DGM uses a mine grid that is determined by:  Easting MGA minus 700,000  Northing MGA minus 6,000,000  Elevation AHD plus 5,000  The topography was generated using LIDAR data.  A wireframe of the historic underground workings has been produced from historic mapping, shaft surveys and drillhole intersections. As-built mine working wireframes are produced by the mine surveyor.
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>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.</li> </ul>	Drill spacing is between 20 m and 50 m for the majority of the deposit and up to 80 m on the margins of the deposit. The data spacing and the distribution is sufficient to determine geological and grade continuity as determined by the JORC code 2012. Data density is also sufficient for well-structured variograms for the defined mineralised domains. A composite length of 1m was selected after analysis of the raw sample lengths.

Criteria	JORC Code explanation	Commentary
	<ul> <li>Whether sample compositing has been applied.</li> </ul>	
Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have</li> </ul>	The orientation of the drilling is approximately perpendicular to the strike and dip of the mineralisation and therefore should not be biased.  There are no known biases caused by the orientation of the drill holes.
	introduced a sampling bias, this should be assessed and reported if material.	
Sample security	The measures taken to ensure sample security	Drill core is kept on site and sampling and dispatch of samples is conducted as per on-site procedures.  Transport is either by the company employee's or by a registered transport company. The Dargues  Mine site is a secured, 24-hour operation with access requiring an escort or swipe-card provided by  Dargues Mine.
Audits or reviews	The results of any audits or reviews of sampling techniques and data	Runge reviewed original laboratory assay files and compared them with the database. Minor errors were found.

## Section 2 Dargues Reporting of Exploration Results (Criteria listed in the preceding section also apply to this section)

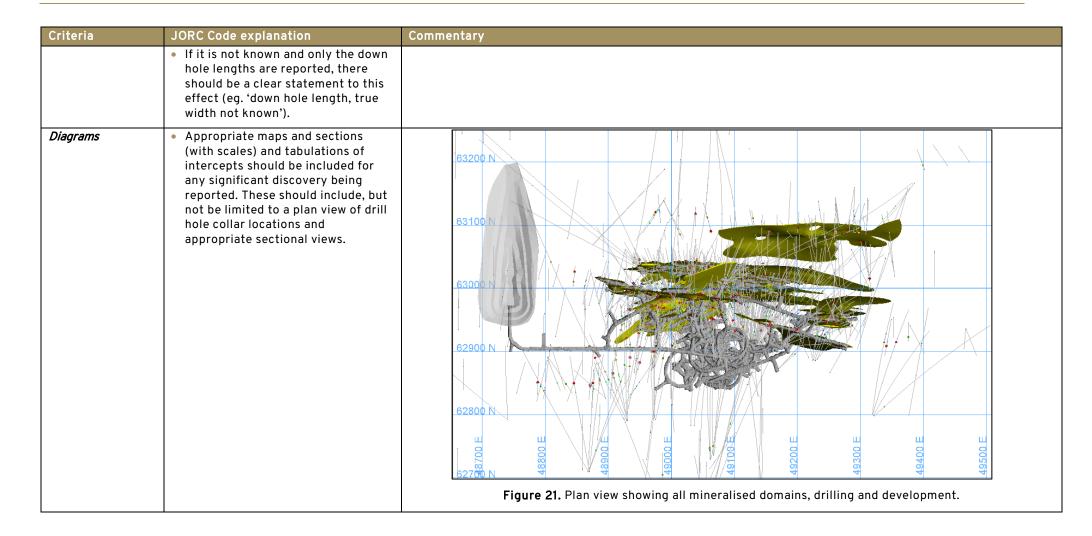
Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> </ul>	The Dargues deposit is located wholly within ML1675 which lies entirely within EL8372. These licences are 100% owned by Big Island Mining Pty Ltd, a wholly owned subsidiary of Aurelia Metals. The Mining Lease (ML1675) is due for expiry on 12th April 2045 while EL8372 is due for expiry on 20th May 2027.  The tenements are currently in good standing and there are no known impediments to operating in the area.
	<ul> <li>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.</li> </ul>	
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	Other companies to have held the project include Diversified Minerals Pty Ltd, Unity Mining, Cortona Resources, Moly Mines Limited (MOL), Hibernia Gold Pty Ltd, Horizon Pacific Limited, Amdex Mining Limited, Ominco Mining NL, Otter Exploration NL, Esso Exploration and Production Australia Inc. and Broken Hill South Limited.
Geology	Deposit type, geological setting and style of mineralisation.	The Braidwood Granodiorite intrudes the Silurian Long Flat Volcanics to the west and Ordovician sediments to the east. Cutting the Braidwood Granodiorite are numerous major structures trending ESE and SE which are clearly visible on regional aeromagnetic images of the area. These linear structures are represented by much of the drainage. The placer alluvial Au mineralisation occurs in the sediments deposited in these drainage systems.
		The known primary Au mineralisation in the bedrock occurs in mostly E, NE and ESE trending sub-vertical quartz reefs within the roof of the granodiorite pluton (Gordon, Feb 2006).
		The unaltered granodiorite is a light coloured, equigranular granodiorite containing plagioclase, k-feldspar, quartz, hornblende, minor chlorite-altered biotite and accessory magnetite, apatite, sphene, zircon and trace pyrite.
		Mineralisation at Dargues occurs as a number of discrete, fracture-controlled sulphide lodes situated within intense zones of phyllic alteration (silica-chlorite and lesser epidote and sericite). The lodes are steeply dipping (80 - 90 degrees) and have a variable strike from E-W to ENE-WSW. The main zones of mineralisation (commonly referred to as the Big Blow and Main Lode) occur on the northern side of a parallel diorite dyke with some minor

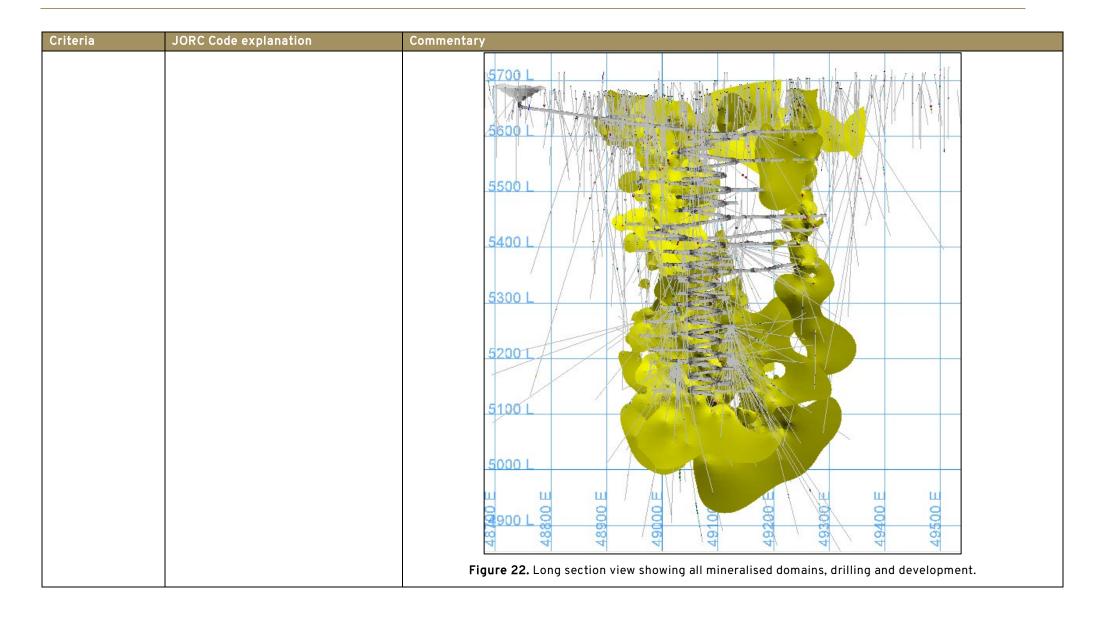
Criteria	JORC Code explanation	Commentary					
		the dominant fault the SSE.  The sulphide lodes distinctive zonal al pyrite+/-chlorite-s lodes. The main sul present. Gold value small inclusions of	are generally teration assen ericite-silica- phide mineral es are directly native gold in	f the region, an E 0.5 m to 10 m windlage. The lodes carbonate with the is pyrite, although linked to pyrite of pyrite or along the	de (true width) sare generally ne alteration as gh chalcopyrite content (rangin he pyrite grain	and up to 200 m comprised of poto semblage extend , sphalerite and o g from 5% to 30% boundaries. Rare	and dyke are synonymous wile-WSW set, dipping steeply long and display a assium felspar-albiteing up to 60 m from the ther sulphides are also %). The gold grains occur as occurrences of visible gold of up to 538g/t over a
Drill hole Information	<ul> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following</li> </ul>		he number of l	noles in the Darg			ts in the Braidwood region. umber of holes used in the
	information for all Material drill holes:  - easting and northing of the drill hole collar  - elevation or RL (Reduced Level - elevation above sea level in	Tubic Tyr Cummu	•	roject	In Re	source	
		Hole Type	No. Holes	No. Meters	No. Holes	No. Meters	
		Diamond (DD)	349	89,054	321	80,979	
		RC	263	31,357	143	18,908	
	metres) of the drill hole collar	RC/DD	2	880	2	880	
	,	Total	614	121,291	466	100,767	
	<ul> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul>	made between diar 30 g/t gold. This is that both types of l	nond and perc within a good holes should b	ussion holes. A C portion of the ex e used for the Mi	)-Q plot shows xpected mine g RE. The data als	there is good corr rade and confirms so suggests that a	rison of the assays was relation between 0.5 and s there is little bias and at grades below 0.5 g/t rger sample size. At grades

considered material to the MRE.

above 30 g/t gold, diamond drilling samples have higher grades which is also expected due to core samples having a smaller size and therefore greater flexibility where the sample is taken. These points are not

Criteria	JORC Code explanation	Commentary
	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.	
Data aggregation methods	<ul> <li>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</li> </ul>	All intersection grades have been length weighted.  Small high grade results within a broader mineralised zone have been reported as included intervals.  Metal equivalent values have not been used for reporting exploration results.
	<ul> <li>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.</li> </ul>	
	<ul> <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</li> </ul>	The Dargues deposit is generally sub-vertical with an east-west strike direction. Angled holes drilled from the north and the south have limited the apparent width of the orebody. The orientation of the orebody and individual lodes is well understood, enabling true widths to be estimated.
mercept lenguis	mineralisation with respect to the drillhole angle is known, its nature should be reported.	





Criteria	JORC Code explanation	Commentary
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>	For the purpose of reporting Ore Reserves and Mineral Resources this section is not applicable.
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	For the purpose of reporting Ore Reserves and Mineral Resources this section is not applicable.
Further work	<ul> <li>The nature and scale of planned further work (eg. 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>	There are possible extensions to Main Lode and also to Plums Lode with both lodes open at depth and along strike.  Further drilling would be required to identify this potential.

Section 3 Dargues Estimation and Reporting of Mineral Resources (Criteria listed in section1, and where relevant in section 2, also apply to this section)

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>	Geological data was previously stored electronically into an access database. During 2022 all the geological data has been migrated to a Geobank database. During the migration several minor errors were identified and corrected. The new Geobank database has improved validation & auditing tools, QAQC reporting capabilities and security protocols over the previous database.  The drill hole database is exported as csv files prior to the estimation process. Adjustments, such as compositing and top cutting, were carried out programmatically so a transcript of any changes is recorded and has been checked.  Basic drill hole database validation completed include:  Intervals were assessed and checked for duplicate entries, sample overlaps, intervals beyond end of hole depths and unusual assay values.
		<ul> <li>Downhole geological logging was also checked for interval overlaps, intervals beyond end of hole depths and inconsistent data.</li> </ul>
Site visits	Comment on any site visits     undertaken by the Competent Person     and the outcome of those visits.	Timothy O'Sullivan, who takes responsibility for the estimated grades, tonnages and classification, has conducted regular site visits to review data collection, drilling procedures and to discuss interpretation and domaining.
	• If no site visits have been undertaken indicate why this is the case.	
Geological interpretation	Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.	There is strong confidence in the geological interpretation. This is based on the relatively close spaced drill holes which exhibit continuity of structure as well as grade.
	Nature of the data used and of any	Geological mapping and drilling have confirmed clear geological structure resulting in generally continuous, robust wireframes.
	<ul> <li>The effect, if any, of alternative interpretations on Mineral Resource estimation.</li> </ul>	The deposit is comprised of multiple sub-vertical ore lenses. Minor variations may occur but is not considered material. The lithology model for this deposit is well defined and consistent.
		The use of geological information obtained from drill core and RC logging was paramount to the creation of ore domains.
	<ul> <li>The use of geology in guiding and controlling Mineral Resource estimation.</li> </ul>	The majority of the orebody comprises relatively low variation of gold grades. This is with exception of the bonanza lode which was sub-domained and utilised a higher top-cut gold grade.

Criteria	JORC Code explanation	Commentary
	<ul> <li>The factors affecting continuity both of grade and geology.</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.	The Dargues Reef Au deposit extends for approximately 400m in an E-W direction. The mineralisation extends from surface to a maximum vertical depth of 590m below the surface. True width of the mineralisation varies from 2m up to approximately 12m.
Estimation and	The nature and appropriateness of	The deposit mineralisation was constrained by wireframes constructed in LeapFrog and are based on a
modelling techniques	the estimation technique(s) applied and key assumptions, including treatment of extreme grade values,	combination of alteration, structures and sulphur grades. The wireframes were applied as hard boundaries in the estimate. The concentrations of gold, silver, copper, iron, sulphur, arsenic and bismuth were estimated withing in these domains.
	domaining, interpolation parameters, and maximum distance of extrapolation from data points.	All estimates were carried out using dynamic interpolation so that the orientation of the search ellipse and variogram models were aligned parallel to the local mineralisation orientation.
	<ul> <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> </ul>	Gold was estimated using Multiple Indicator Kriging (MIK). The gold grades at Dargues exhibit a highly positively skewed distribution with a high coefficients of variation within several domains. The gold estimation therefore show sensitivity to a small number of high grades. MIK is considered an appropriate estimation method for the gold grade distribution because it specifically accounts for the changing spatial continuity at different grades through a set of indicator variograms at a range of grade thresholds. It also reduces the need to use the practice of top cutting.
	<ul> <li>The assumptions made regarding recovery of by-products.</li> </ul>	Silver, copper, iron, sulphur, arsenic and bismuth were estimated using Ordinary Kriging. Ordinary Kriging is considered appropriate because the grades are reasonably well structured spatially.
	Estimation of deleterious elements or other non-grade variables of	Vulcan software was used for both the MIK and Ordinary Kriging dynamic estimates.
	economic significance (eg. sulphur for acid mine drainage characterisation).  In the case of block model interpolation, the block size in	Only the gold estimate is considered to have economic significance, however the sulphur estimation is significant as a pyrite concentrate is the main product produced and an understanding of the sulphur distribution and gold/sulphur ratio is required to estimate volumes of concentrate produced. The silver, copper, iron, sulphur, arsenic and bismuth estimates are not considered to have economic significance, with arsenic and bismuth being potentially deleterious.
	relation to the average sample spacing and the search employed.	Samples were composited to nominal 1.0 m intervals, whilst honouring the domain wireframes. The minimum composite length was set to 0.5 m.
		Statistical analysis and variography was carried out using the software program Isatis.neo on the one metre composited. Each domain was estimated separately using only data from within that domain. The orientation of

Criteria	JORC Code explanation	Commentary
	<ul> <li>Any assumptions behind modelling of selective mining units.</li> </ul>	the search ellipse and variogram models were controlled by coding the block model with local anisotropy to best reflect the local orientation of the mineralised structures.
	<ul> <li>Any assumptions about correlation between variables.</li> <li>Description of how the geological interpretation was used to control</li> </ul>	Parent block size of 10 m (E) X 5 m (N) X 10 m (RL) (E) with subcells of 1 m by 0.5 m by 1 m. The parent block size was selected on the basis of 50% of the average drill hole spacing and geological domain geometry. Kriging neighbourhood analysis assisted with the determination of the optimum block size by analysing the kriging efficiencies, slope of regression and negative kriging weights.
	the Mineral Resource estimates.  • Discussion of basis for using or not	A three pass search strategy was used for estimation. Each pass used a dynamic search ellipse. Additional search parameters are given below:
	using grade cutting or capping.	• Pass 1: 35x35x5m search, 8-24 samples, maximum 6 data points per hole
	• The process of validation, the	Pass 2: 70x70x10m search, 8-24 samples, maximum 6 data points per hole
	checking process used, the comparison of model data to drill	• Pass 3: 150x150x25m search, 4-24 samples, maximum 6 data points per hole
	hole data, and use of reconciliation data if available.	Minimal grade cutting was applied to silver, copper, iron, sulphur, arsenic and bismuth on a domain by domain basis in order to reduce the influence of extreme values on the estimates. The top-cut values were chosen by assessing the high end distribution of the grade population within each domain.
		Following estimation, a series of optimised wireframe designs were produced using SO. The SO designs were used to constrain the reported MRE by identifying mineralisation that may have reasonable prospects for eventual economic extraction. The smallest unit for the SO shapes was 5m long and 10m high with a minimum width of 2m. Each shape was required to have at least an average A\$120/t NSR for inclusion in the MRE. Mineralisation outside these shapes was unclassified as it was considered unlikely to meet the criterion of eventual economic extraction.
		The estimation was compared against the prior estimate performed by Conarco Consulting in March 2017. The comparison illustrated that, with the increased drill density, mineralisation variability has been better reflected in the new estimation. The comparison also illustrated that the grade tonnage profile has improved. The current estimate is considered to be an improvement on the previous estimation.
		The final block model was reviewed visually and it was concluded that the block model fairly represents the grades observed in the drill holes. The estimation was also validated statistically using histograms, scatter plots, swath plots and summary statistics.

Criteria	JORC Code explanation	Commentary
Moisture	Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	Tonnages and grades were estimated on a dry in situ basis. No moisture values were reviewed.
Cut-off parameters	<ul> <li>The basis of the adopted cut-off grade(s) or quality parameters applied.</li> </ul>	The Mineral Resource has been reported at a A\$120/t NSR cut-off inside mineable shapes that include internal dilution and geological continuity.
Mining factors or assumptions	Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It may not always be possible to make assumptions regarding mining methods and parameters when estimating Mineral Resources. Where no assumptions have been made, this should be reported.	The chosen mining method for Dargues is sublevel open stoping with hydraulic and unconsolidated backfill. The reported MRE is limited to blocks that lie within volumes generated by SO software. The smallest mining shape was set at 5m long and 10m high with a minimum width of 1.8m.  The chosen mining method is sublevel open stoping.  The reported MRE includes all estimated blocks that lie within the mining shapes and therefore include internal dilution. Additional external dilution may be incurred during mining.
Metallurgical factors or assumptions	The basis for assumptions or predictions regarding metallurgical amenability. It may not always be possible to make assumptions regarding metallurgical treatment processes and parameters when reporting Mineral Resources. Where no assumptions have been made, this should be reported.	It is assumed that conventional processing methods will have a recovery rate of between 80-98% based on a fixed tail grade of 0.2 g/t Au. The plant design comprises of three stage crushing; grinding circuit was a ball mill; rougher and cleaner flotation; and concentrate thickening and filtration. There will be no cyanide leaching at site. The plant will produce 355 ktpa of ore and produce on average 28,000 wet metric tons annually of gold silver pyrite concentrate for export via Port Kembla.

Criteria	JORC Code explanation	Commentary
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 project has been assessed under both the NSW Environmental Planning and Assessment Act 1979 (EP&A Act) and the Commonwealth Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act). State and Commonwealth approval have both been granted.  The waste rock and process tailings will be stored in an appropriate storage facility on surface, some of which will be used as backfill.
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> </ul>	The in situ bulk density was assigned to various domains based on 2,452 results obtained from representative drill core using the Water Immersion method. The results from the individual domains are listed below.  Table 50: Number of Density Samples  Type

Criteria	JORC Code explanation	Commentary
	Discuss assumptions for bulk density	All samples are measured for their bulk density which has resulted in 2.55 t/m3 for transitional material,
	estimates used in the evaluation process of the different materials.	2.70 t/m3 from fresh waste, 2.79 t/m3 for fresh ore and 2.77 t/m3 for mineralised diorite. These values were then applied to the relevant domains.
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, 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>	Mineral Resources were classified in accordance with the Australasian Code for the Reporting of Identified Mineral Resources and Ore Reserves (JORC, 2012).  The classification of Measured, Indicated and Inferred was made on the basis of continuity of structure, drill spacing, surface mapping and statistics within each mineralised domain.  The Mineral Resource classification has taken into consideration drill density, search pass (distance and quantity of samples) and the slope of regression within the estimate (quality and distribution of data). These are listed below.  • Material drilled on a nominal 15m spacing, estimated in the first estimation pass and has supporting face sample data, has been classified as Measured.  • Material drilled on a nominal 25m spacing, estimated in the first estimation pass, and does not meet the criteria for Measured has been classified as Indicated.  • Material that has a nominal drill hole spacing of less than 50m, estimated in either pass 1 or 2 and does not meet the criteria for Measured or Indicated has been reported with an Inferred classification.  • All remaining blocks are coded as unclassified.  • A geological interpretation confidence was overlayed on these classifications which may have downgraded the classification in a number of the domains.  The estimation was then constrained within the SO designs to report the MRE by selecting mineralisation that may have reasonable prospects for eventual economic extraction.  The Competent Person considers this classification approach appropriate for the Dargues deposit.
Audits or reviews	The results of any audits or reviews of Mineral Resource estimates.	Aurelia engaged SRK to independently validate the interim Federation estimation in 2022. Aurelia required a fatal flaw assessment, primarily focusing on the modelling and estimation processes.  The review included a site visit by SRK during March and April 2023  The review included an analysis and a review of:  Sampling and assaying, including

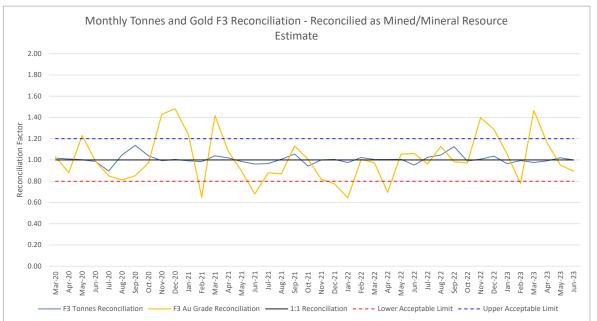
Criteria	JORC Code explanation	Commentary
		<ul> <li>Nature of sampling</li> </ul>
		<ul> <li>Sub-sampling techniques</li> </ul>
		<ul> <li>Assay methods</li> </ul>
		Quality assurance and quality control of assay and location data
		Database integrity
		Domain concepts and methods, including incorporation of a recently generated Leapfrog structural model
		Variography, estimation and search parameters, including grade capping
		Boundary analysis
		Estimation methodology and implementation
		Mineral resource classification scheme.
		Items excluded from the review were:
		- Assay laboratory audits
		<ul> <li>Economic parameters used in the NSR calculations</li> </ul>
		<ul> <li>Mineral resource cut-off grade determination.</li> </ul>
		The review found that in general the quality of geological information collected and the methods used for interpretation are of reasonable to high standard. The MIK estimation method is an appropriate choice of method for estimating the MRE.
		The biggest challenge for the MRE is determining the orientation and limits of the gold lodes.
		SRK has made several recommendations to improve the MRE and Aurelia is in the process of addressing all of the recommendations

Criteria JORC Code explanation Commentary Discussion of Where appropriate a statement of the relative relative accuracy and confidence level in the Mineral Resource accuracv/ confidence 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 Mineral Resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could and development. 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 1.80 relevant tonnages, which should be relevant to technical and economic 1.60 evaluation. Documentation should 1.40 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.

The relative accuracy and confidence level in the Mineral Resource estimates are considered to be in line with the generally accepted accuracy and confidence of the nominated JORC Mineral Resource categories. This has been determined on a qualitative, rather than quantitative, basis, and is based on the estimator's experience with several similar deposits elsewhere. The main factors that affect the relative accuracy and confidence of the estimate are the drill hole spacing and the style of mineralisation and confidence in interpretation.

The estimates are local, in the sense that they are localised to model blocks of a size considered appropriate for local grade estimation. The tonnages relevant to technical and economic analysis of the Ore Reserves are those classified as Measured and Indicated Mineral Resources only.

Data for reconciliation between the resource model and mine production is available from April 2020. The resource is evaluated by intersecting the models with the final surveyed stope shapes, while mine production is the reconciled mill performance. This comparison considers factors such as dilution, under-break, over-break and development.



Section 4 Dargues Estimation and Reporting of Ore Reserves (Criteria listed in section 1, and where relevant in sections 2 & 3, also apply to this section)

Criteria	JORC Code explanation	Commentary
Mineral	Description of the Mineral Resource	The Ore Reserve estimate is prepared from the Mineral Resource Estimate reported as at 30th June 2023.
Resource estimate for	estimate used as a basis for the conversion to an Ore Reserve.	The block model used as the basis for the Ore Reserve Estimate is DGM2305MRE.
conversion to Ore Reserves	<ul> <li>Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.</li> </ul>	The Mineral Resource Estimate is inclusive of the Ore Reserve Estimate.
Site visits	<ul> <li>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</li> </ul>	The Ore Reserve Estimate was completed by Justin Woodward who is the Group Manager Technical Services at Aurelia Metals and is regularly onsite at Dargues.
	<ul> <li>If no site visits have been undertaken indicate why this is the case.</li> </ul>	
Study status	The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.	The mine is currently in operation.  The operation has undergone a Life-of-Mine Plan process, and a Budget process. All matters relating to the ongoing operation of the Dargues Mine have been considered during these processes.
	<ul> <li>The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.</li> </ul>	
Cut-off parameters	<ul> <li>The basis of the cut-off grade(s) or quality parameters applied.</li> </ul>	A NSR cut-off of A\$120/t was applied for material to be extracted by stoping methods and A\$80/t for development. The economic viability of the cut-off value has been demonstrated through cashflow modelling completed for the Dargues Life of Mine plan and budget.

Criteria	JORC Code explanation	Commentary
		These are marginal cut-off values assessed during the Life of Mine Planning and budget process. Cut-off values consider full operating costs which include development, stoping, haulage, processing and administration. Costs beyond the mine gate including concentrate haulage, port facilities, shipping, treatment charges, penalties and royalties are netted from revenues of gold and concentrates and form the NSR estimates.
Mining factors or assumptions	<ul> <li>The method and assumptions used as reported in the Pre- Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (ie. either by application of appropriate factors by optimisation or by preliminary or detailed design).</li> <li>The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.</li> <li>The assumptions made regarding geotechnical parameters (eg. pit slopes, stope sizes, etc.), grade control and pre- production drilling.</li> <li>The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).</li> <li>The mining dilution factors used.</li> <li>The mining recovery factors used.</li> <li>Any minimum mining widths used.</li> </ul>	Dargues is an operating mine. The Life-of-Mine and Budget processes include Inferred Mineral Resource. The inclusion of the Inferred material is not material to the financial viability of the operation.  Dargues uses a combination of uphole and downhole stoping with hydraulic fill, progressing bottom up. This mining method and Dargue's mine development design was used for the Ore Reserve Estimate.  Detailed stope design has been completed for the Life of Mine Plan, and these shapes have been used as a preference. Mining dilution and recovery estimates for the various stoping types are applied. These include remnant stoping (30% mining dilution, 70% recovery), longitudinal stoping (20% mining dilution, 95% recovery), transverse stoping (10% mining dilution, 95% recovery) and narrow stoping (25% mining dilution, 95% recovery).  In addition, the geology modelling has been assessed by creating stope shapes using Deswik's SO software. Parameters used include 0.5m hangingwall and footwall dilution allowances, with stope strike length of 20m and a minimum mining width of 2.0m mining width. These shapes are used where new drilling and modelling updates haven't been captured by the LOM process. Mining dilution and recovery factors applied to these shapes includes downhole stopes (2% mining dilution with 95% recovery), uphole stopes (2% mining dilution with 90% recovery), and sill pillar mining (10% mining dilution with 85% recovery).  Development has 15% mining dilution applied with 100% recovery.  The mining methods selected are consistent with those currently used at the operation. As such the infrastructure requirements are largely in place, and well understood. These include orebody access, ventilation, pumping, power, water, communications and 2nd means of egress.

Criteria	JORC Code explanation	Commentary				
	The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.  The inferent metals are religious and the sensitivity of the sen					
	<ul> <li>The infrastructure requirements of the selected mining methods.</li> </ul>					
Metallurgical factors or assumptions	<ul> <li>The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.</li> </ul>	Ore is processed through the Dargues processing facility at a nominal throughput rate up to 415ktpa. The processing facility incorporates a single stage flotation circuit producing a gold-rich pyrite concentrate. The concentrate is filtered and transported off-site where further gold extraction occurs (by others).				
	Whether the metallurgical process is	All deleterious elements are expected to remain within tolerances.				
	well-tested technology or novel in nature.	Metallurgical recovery assumptions are based on current site operating ranges and are shown in Table 51.				
	<ul> <li>The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.</li> </ul>	Table 51. Dargues Mine metal recovery assumptions  Metal Recovery  Gold 90-98%				
	<ul> <li>Any assumptions or allowances made for deleterious elements.</li> </ul>					
	<ul> <li>The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole.</li> </ul>					
	<ul> <li>For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications</li> </ul>					

Criteria	JORC Code explanation	Commentary			
• The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.		Big Island Mining Pty Ltd (BIM) (a subsidiary of Aurelia Metals Ltd) own and operate the Dargues Gold Mine. There is a development consent and a mining lease that governs the operation of the Dargues Gold Mine. The development consent is supported by environmental assessments that identify the potential impacts of mining and processing operations. The environmental assessments have been shared with regulatory authorities and the community and mitigating actions developed and implemented in consultation with these stakeholders.  The Dargues Gold Mine has active waste rock emplacements and process residue storages. The facilities contain potentially acid forming and/or non-acid forming residues and/or waste rock. The facilities are designed to mitigate these impacts. The facilities are approved via development consent and other regulatory approvals.			
		Dargues Gold Mine has numerous environmental monitoring requirements including air quality, greenhouse gas emissions, groundwater, surface water, noise, blasting, meteorological and biodiversity. A range of techniques including real-time monitoring are utilised in assessing potential impact.			
Infrastructure	The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour,	All surface infrastructure required for the full extraction of the Ore Reserve is in place. This includes, but is not limited to:			
		Boxcut and portal			
		Primary vent fan installation			
	accommodation; or the ease with which the infrastructure can be	Emergency facilities			
	provided, or accessed.	ROM Pad			
		Processing Facility			
		Process water dams			
		Concentrate Storage Facility			
		Maintenance Facility			
		• Store			
		All weather access roads			
		Office facilities			
		Waste rock dumps			
		The Tailings Storage Facility (TSF) has sufficient capacity for the processing of the current Life of Mine. A Stage 4 lift has a detailed design and approval for construction.			

Criteria	JORC Code explanation	Commentary
		Ongoing sustaining capital and infrastructure underground including declines, level accesses, escapeways, vent accesses and rises are required for the full extraction of the Ore Reserve Estimate. These works have been included in the Life-of-Mine Plan and Budget processes.
Costs	The derivation of, or assumptions made, regarding projected capital costs in the study.	Capital and Operating costs have been estimated based on historical actual costs, and forecast costs, as part of the Life-of-Mine Plan and budgeting process. Contracts are in place for transport costs, treatment costs and refining costs, including penalties that may be applicable.
	<ul> <li>The methodology used to estimate operating costs.</li> </ul>	No allowance has been made for deleterious elements. All deleterious elements are expected to remain within tolerances and no penalties have been applied to cash flow estimations.
	<ul> <li>Allowances made for the content of deleterious elements.</li> </ul>	Metal Price and exchange rate assumptions have been benchmarked against industry peers and are informed by consensus forecasts.
	<ul> <li>The derivation of assumptions made of metal or commodity price(s), for the principal minerals and co- products.</li> </ul>	Allowance has been made for NSW State Government royalty payable at 4% on the assessable gold revenue. In addition, allowance has been made for a perpetual third party royalty payable to Triple Flag Precious Metals Group. The Triple Flag royalty is paid at a rate of 5.5% of gross gold revenue until cumulative production reaches 170koz; it then increases to 9.9% until 305koz; and thereafter reduces to 5.0%.
	• The source of exchange rates used in the study.	
	• Derivation of transportation charges.	
	<ul> <li>The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.</li> </ul>	
	<ul> <li>The allowances made for royalties payable, both Government and private.</li> </ul>	

Criteria	JORC Code explanation	Commentary			
Revenue factors	The derivation of, or assumptions made regarding revenue factors	Table 52. Dare	gues Mine me	etal price and	exchange rate assumptions
	including head grade, metal or	Metal	Unit	USD	
	commodity price(s) exchange rates, transportation and treatment	Gold	OZ	1,800	
	charges, penalties, net smelter returns, etc.	AUD/USD		0.70	
	The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and coproducts.				
Market assessment	The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.		e offtake agı	reement was	ecessary approvals for the transportation of concentrate to customers. put in place in June 2021 for a term of two years and has recently been
	<ul> <li>A customer and competitor analysis along with the identification of likely market windows for the product.</li> </ul>				
	<ul> <li>Price and volume forecasts and the basis for these forecasts.</li> </ul>				
	<ul> <li>For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.</li> </ul>				

Criteria	JORC Code explanation	Commentary	
Economic	<ul> <li>The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.</li> <li>NPV ranges and sensitivity to variations in the significant assumptions and inputs.</li> </ul>	Dargues is an operating mine. The Life of Mine Plan, and Budgeting process includes the completion of cash flow models. Inputs to these models are based on a combination of historical actual costs and forecast future costs. The cash flow models demonstrate a positive Net Present Value.	
Social	<ul> <li>The status of agreements with key stakeholders and matters leading to social licence to operate.</li> </ul>	Dargues is in full operation with agreements in place. Big Island Mining Pty Ltd (BIM) (a subsidiary of Aurelia Metals Ltd) has a Voluntary Planning Agreement in place with the local council for community development projects, maintenance and upgrades of local roads.	
Other	<ul> <li>To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:</li> <li>Any identified material naturally occurring risks.</li> <li>The status of material legal agreements and marketing arrangements.</li> </ul>	Big Island Mining Pty Ltd (BIM) (a subsidiary of Aurelia Metals Ltd) own and operate the Dargues Gold Mine. There is a development consent and a mining lease that governs the operation of the Dargues Gold Mine. The development consent is supported by environmental assessments that identify the potential impacts of mining and processing operations. The environmental assessments have been shared with regulatory authorities and the community and mitigating actions developed and implemented in consultation with these stakeholders.  The Dargues deposit is located on ML 1675. ML 1675 is a granted mining lease that expires in 2045.	

Criteria	JORC Code explanation	Commentary
Classification	<ul> <li>The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the Ore Reserve is contingent.</li> <li>The basis for the classification of the Ore Reserves into varying confidence categories.</li> <li>Whether the result appropriately reflects the Competent Person's view of the deposit.</li> <li>The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).</li> </ul>	The Mineral Resource classifications flagged in the geological block model formed the basis for the Ore Reserve Estimate. Mining shapes were developed from the geological block model then the quantity and grade of Measured, Indicated, Inferred and unclassified material within the mining shapes was reported. Mining shapes were included in the Ore Reserve Estimate if individual shapes contained more than 80% of Measured and Indicated material.  The Ore Reserve classification of the material within the mining shapes was aligned with the Mineral Resource classifications, such that the Measured Mineral Resource converted to the Proved Ore Reserve and the Indicated classification was reported as the Probable Ore Reserve.  A number of shapes included high confidence ore material as well as low confidence waste material. In instances where the low confidence waste material had a value of less than \$1/t NSR that material was treated as dilution and given the higher classification of the ore material. This was necessary to ensure that the Proved classification ore grades were not artificially elevated.  The selected mining shapes may contain a minor portion of Inferred or unclassified material. The metal value corresponding to this tonnage was removed from the Ore Reserve estimate while the tonnage remained in the Ore Reserve Estimate as dilution at zero grade. This dilution was prorated into the Proved and Probable classifications based on the relative tonnage.

Criteria	JORC Code explanation	Commentary				
Audits or reviews	The results of any audits or reviews of Ore Reserve estimates.	No external audit or review of this Ore Reserve Estimate has been completed.  Aurelia engages consultants for external review of the process used to estimate the Ore Reserves. This review focuses on the process as it leads into the updated estimate. The review is conducted on a selected orebody from across the company's operations. Recommendations from these reviews are given consideration for all Aurelia Ore Reserve Estimates, as the processes have strong similarities. Most recent reviews were conducted on Dargues, and Federation. No fatal flaws have been identified.				
relative accuracy/ confidence  relative accuracy and con level in the Ore Reserve e using an approach or prodeemed appropriate by the Competent Person. For exapplication of statistical of geostatistical procedures the relative accuracy of the within stated confidence is such an approach is not disappropriate, a qualitative of the factors which could relative accuracy and conthe estimate.  The statement should spewhether it relates to globe estimates, and, if local, startlevant to nages, which relevant to technical and evaluation. Documentation	Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve 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 reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion	The Dargues Ore Reserve Estimate has a moderate level of confidence and accuracy.  Dargues is an operating mine that has achieved full process plant throughput. The factors used to estimate this Ore Reserve are being used for scheduling, forecasting and budgeting purposes and are supported by production results. A portion of the Ore Reserve Estimate includes remnant mining areas, which have had an increased allowance applied in the dilution and recovery factors. There is a reasonable level of confidence in the mining factors and processes.  The Ore Reserve Estimate is dependent on the accuracy and confidence in the Mineral Resource Estimate. Drilling and model updates have been unfavourable in the past period.  Table 53. Ore Reserve Estimate – Reliance on others				
	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	Area of Expertise  Mineral Resource Estimate  Processing  Marketing  Economic Assessment	Expert Person Timothy O'Sullivan Nicholas Brown Leigh Collins Dan Zagorskis	Aurelia Position Title Principal Resource Geologist Production Metallurgist - Dargues Group Manager - Commercial Senior Business Analyst		

Criteria	JORC Code explanation	Commentary
	<ul> <li>Accuracy and confidence discussions</li> </ul>	
	should extend to specific discussions	
	of any applied Modifying Factors that	
	may have a material impact on Ore	
	Reserve viability, or for which there	
	are remaining areas of uncertainty at	
	the current study stage.	
	<ul> <li>It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</li> </ul>	

## APPENDIX 3 - FEDERATION JORC Code 2012 (Table 1) - Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves.

Section 1 Federation Sampling Techniques and Data (Criteria in this section apply to all succeeding section)

Criteria	JORC Code explanation	Commentary
Sampling techniques	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.	RC percussion and diamond core drilling at Federation has been undertaken by Budd Exploration Drilling Pty Limited and Mitchell Services Limited.  Chip samples were collected using a rotary cone or riffle splitter directly off the drill rig. All samples were collected on a dry basis.  Core samples were defined by Aurelia geologist during logging to honour, geological and mineralogical boundaries, cut in half by diamond saw, with half core sent to external laboratories.
	<ul> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> </ul>	Sampling and QAQC procedures are carried out using Aurelia Metal's protocols as per industry best practice.  Drilling is oriented perpendicular to the strike of the mineralisation as much as possible to ensure a representative sample is collected.
	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.	RC drilling was used to obtain representative samples of 1 metre length. Diamond drilling was used to obtain core samples of a nominal 1 metre length. RC chips were sub-sampled off the rig with a rotary cone or riffle splitter to produce samples of between 2 to 4 kg. Core and RC samples are dried, crushed and pulverised to 85% passing 75 microns.  This is considered to appropriately homogenise the sample. Gold analysis is by 30g fire assay with AAS finish, (method Au – AA25) with a detection level of 0.01ppm. For base metals a 0.5g charge is dissolved using aqua regia digestion (Method ICP41-AES) with detection levels of: Ag-0.2ppm, As-2ppm, Cu-1ppm, Fe-0.01%, Pb-2ppm, S-0.01%, Zn-2ppm. Overlimit analysis is by 0G46 - aqua regia digestion with ICP-AES finish. Gold samples greater than 0.2g/t are re-assayed by screen fire assay using the entire sample to improve accuracy, especially where coarse gold is present.  During 2023 the gold assay method changed to Au-AA26 which is a 50g fire assay method.

JORC Code explanation	Commentary
<ul> <li>Drill type (eg. core, reverse circulation, openhole 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.).</li> </ul>	Drilling by triple tube diamond coring generally commences as PQ core until fresh rock is reached. The PQ rods are left as casing then HQ coring is employed. NQ coring is also used (particularly in wedge holes). Reverse circulation percussion (RC) methods used in this program utilised a face sampling 143 millimetre bit. Pre-collars with RC down to between 100 and 350 metres below surface are also employed at Federation.
<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> </ul>	Chip recoveries are generally monitored visually at the rig by the size of the individual bags. Any low recoveries will be noted by the geologist at the rig. Recoveries for core are generally greater than 95% once in fresh rock.  Measures taken to maximise recovery include triple tube drilling in soft or broken rock and slower drilling rates in poor ground.
<ul> <li>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.</li> </ul>	The relationship between sample recovery and grade has been assessed for diamond core samples through the use of conditional expectation plots and scatter plots. No obvious relationship exists and sample bias due to the preferential loss or gain of material is not considered to be significant to the resource estimate. The relationship between sample recovery and grade for RC sampling has not been assessed.
<ul> <li>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.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul> <li>Systematic geological and geotechnical logging is undertaken. Data collected includes:</li> <li>Nature and extent of lithologies</li> <li>Relationship between lithologies</li> <li>Amount and mode of occurrence of ore minerals</li> <li>Location, extent and nature of structures such as bedding, cleavage, veins, faults etc. (core only)</li> <li>Structural data (alpha &amp; beta) are recorded for orientated core (core only)</li> <li>Geotechnical data such as recovery, RQD, fracture frequency, qualitative IRS, microfractures, veinlets and number of defect sets. For some geotechnical holes the orientation, nature of defects and defect fill are recorded (core only)</li> <li>Bulk density by Archimedes principle at regular intervals (core only)</li> </ul>
	<ul> <li>Drill type (eg. core, reverse circulation, openhole 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.).</li> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>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.</li> <li>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.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.</li> <li>The total length and percentage of the</li> </ul>

Criteria	JORC Code explanation	Commentary
		Both qualitative and quantitative data is collected
		100% of all recovered core is geologically and geotechnically logged, 100% of all recovered chips are geologically logged.
		The geological and geotechnical logging is considered to have been carried out at a sufficient level of detail to support Mineral Resource estimation.
Sub-sampling techniques and	If core, whether cut or sawn and whether Quarter, half or all core taken.	Core is sawn with half core submitted for assay. Sampling is consistently on one side of the orientation line so that the same part of the core is sent for assay. PQ core is ¼ sampled.
sample preparation	<ul> <li>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</li> </ul>	All RC samples were split using a rotary cone or riffle sampler directly off the drilling rig. Two samples were collected for every metre to allow for duplicate samples to be taken at any interval. All sampling was on a dry basis.
	Quality control procedures adopted for all sub-sampling stages to maximise	Samples are dried, crushed and pulverised to 85% passing 75 microns. This is considered to appropriately homogenise the sample to allow subsampling for the various assay techniques.
	<ul> <li>representivity of samples.</li> <li>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.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	Certified Standard Reference Materials and blanks are inserted at least every 25 samples to assess the accuracy and reproducibility. The results of the standards are to be within ±10% variance, or 2 standard deviations, from known certified result. If greater than 10% variance the standard and up to 10 samples each side are re-assayed. ALS conduct internal check samples every 20 samples for Au and every 20 for base metals. Assay grades are occasionally compared with mineralogy logging estimates. If differences are detected a re-assay can be carried out using the bulk reject or the assay pulp.
	gram size of the material being sampled.	Systematic duplicate sampling was employed during the Federation RC program. A regular duplicate was taken at predetermine sample intervals (averaging 1:25 samples). Further, samples occurring in mineralised zones are duplicated, increasing the duplicate rate to one sample every 15-20 samples.
		Sample sizes are considered appropriate for the material being sampled.
Quality of assay data and laboratory test	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> </ul>	Standard assay procedures performed by a reputable assay lab (ALS Group) were undertaken. Gold assays are by 30g fire assay with AAS finish, (method Au-AA25). Ag, As, Cu, Fe, Pb, S, Zn are digested in aqua regia then analysed by ICP-AES (method ME-ICP41). Comparison with 4 acid digestion indicate that the technique is considered total for Ag, As, Cu, Pb, S, Zn. Fe may not be totally digested by aqua regia but near total digestion occurs. A small number of samples from Federation were also assayed by Intertek Genalysis in Townsville using comparable methods.

Criteria	JORC Code explanation	Commentary
	handheld XRF instruments, etc., the	Gold samples greater than 0.2g/t were re-assayed by screen fire assay using the entire sample to improve accuracy.
		During 2023 the gold assay method changed to Au-AA26 which is a 50g fire assay method.
	reading times, calibrations factors applied and their derivation, etc.	No geophysical tools were used in the determination of assay results. All assay results were generated by an independent third-party laboratory as described above.
	Nature of quality control procedures adopted (eg. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	Certified reference material or blanks are inserted at least every 25 samples. Standards are purchased from Certified Reference Material manufacture companies: Ore Research and Exploration, Gannet Holdings Pty Ltd and Geostats Pty Ltd. Standards were purchased in foil lined packets of between 60g and 100g. Different reference materials are used to cover high grade, medium grade and low grade ranges of elements: Au, Ag, Pb, Zn Cu, Fe, S and As. The standard names on the foil packages were erased before going into the pre-numbered sample bag and the standards are submitted to the lab blind.
Verification of	The verification of significant intersections by	All significant drilling intersection are verified by multiple Company personnel.
sampling and assaying	either independent or alternative company personnel.	Drill hole data including meta data, any gear left in the drill hole, lithological, mineral, survey, sampling and occasionally magnetic susceptibility is collected and entered directly into the
	The use of twinned holes.	Geobank database using drop down codes.
	<ul> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> </ul>	Assay data is provided by ALS via .csv spreadsheets. The data is validated using the results received from the known certified reference material. Using an SQL based query the assay data is merged into the database.
	Discuss any adjustment to assay data.	
Location of data points	Accuracy and quality of surveys used to locate drill holes (collar and down-hole	Drill hole collars are initially located using hand held GPS to ±5m. Upon completion collars are located with differential GPS to ±5cm picked up by the mine surveyors.
	surveys), trenches, mine workings and other locations used in Mineral Resource estimation.	Drill holes are downhole-surveyed from collar to the end of hole by drilling personnel using downhole survey tool (Reflex).
	<ul> <li>Specification of the grid system used</li> <li>Quality and adequacy of topographic control.</li> </ul>	Downhole north-seeking gyroscopic survey instruments have also been regularly employed at Federation to improve survey accuracies. Drill holes are surveyed by single shot camera during drilling at intervals ranging between 6-30m. All survey data for every hole is checked and
		validated by Aurelia Metals personnel before being entered into the database.
		All coordinates are based on Map Grid Australia zone 55H
		Topographic control is considered adequate as it is based on a high precision Lidar survey

Criteria	JORC Code explanation	Commentary
		completed over the area in 2019.
Data spacing and distribution	Data spacing for reporting of Exploration Results.	As the prospect discussed represents a relatively new discovery, data spacing is extremely variable. Drill hole spacing at Federation ranges from 25 to 125 metres.
	<ul> <li>Whether the data spacing and distribution is sufficient to establish the degree of</li> </ul>	The drill spacing is considered appropriate to support the predominantly Inferred classification for the Federation MRE.
	geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications	Additional closer spaced drilling will be required in the future to upgrade the resource to higher classifications.
	applied.	Sample compositing is not applied.
	<ul> <li>Whether sample compositing has been applied.</li> </ul>	
Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>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.</li> </ul>	Drilling is orientated to cross the interpreted, steeply dipping mineralisation trend at moderate to high angles. Holes are drilled from both the footwall and hangingwall of the mineralisation where possible.  No known bias has been introduced due to drilling orientation.
Sample security	The measures taken to ensure sample security	Chain of custody is managed by Aurelia Metals. Samples are placed in tied calico bags with sample numbers that provide no information on the location of the sample. Samples are transported from site to the assay lab by courier or directly delivered by Aurelia Metals personnel.
Audits or reviews	The results of any audits or reviews of sampling techniques and data	No audit or review of the sampling regime at Federation has been directly completed. However, an audit and review of the sampling regime at Hera, which uses identical sampling procedures, was undertaken by H&S Consultants in November 2015. Recommendations from this review form part of the current sampling practices at Hera and regionally.

## Section 2 Federation 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	<ul> <li>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.</li> </ul>	The Federation prospect is located within Exploration Licence 6162, owned 100% by Hera Resources Pty. Ltd. (a wholly owned subsidiary of Aurelia Metals Limited). EL6162 is due for expiry on the 26 <sup>th</sup> November 2024.  At the time of reporting there were no known impediments to operating in these areas
	<ul> <li>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.</li> </ul>	
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	The area has a 50 year exploration history involving reputable companies such as Cyprus Mines, Buka, ESSO Minerals, CRAE, Pasminco, Triako Resources and CBH Resources. Previous exploration data has been ground-truthed where possible. Historic drill hole collars have been relocated and surveyed. YTC Resources completed a total of four, relatively shallow RC drill holes at the Federation prospect in 2013, prior to the discovery of high grade mineralisation in 2019.
Geology	Deposit type, geological setting and style of mineralisation.	All known mineralisation in the area is epigenetic "Cobar" style. Deposits are generally structurally controlled quartz + sulphide matrix breccias grading to massive sulphide. In a similar fashion to the other Cobar deposits, the Federation prospect occurs to the west of the Rookery Fault, a major regional structure with over 300km strike length. The deposits are near the boundary of the Devonian Lower Amphitheatre Group and the underlying Roset Sandstone. Both units show moderate to strong ductile deformation with tight upright folding coincident with greenschist facies regional metamorphism. A well-developed sub vertical cleavage is present.
		Mineralisation at Federation occurs in several steeply dipping vein breccia/massive sulphide lenses developed in the centre of a broad NE-SW striking corridor of quartz-sulphide vein stockwork mineralisation. The mineralisation is hosted by fine-grained sedimentary rocks and is best developed within open upright anticline closures in areas of strong rheology contrast imposed by early stratiform alteration.
		Sulphide mineralisation identified at Federation include sphalerite-galena±chalcopyrite-pyrrhotite- pyrite in veins and breccias. Gold distribution tends to be nuggetty, often present as visible gold grains up to four millimetres in size. The majority of high grade gold mineralisation at Federation

Criteria	JORC Code explanation	Commentary
		(to date) is present in steeply plunging, short strike-length zones.
Drill hole Information	A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:	For the purpose of reporting Ore Reserves and Mineral Resources this section is not applicable.
	<ul> <li>easting and northing of the drill hole collar</li> </ul>	
	<ul> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> </ul>	
	<ul> <li>dip and azimuth of the hole</li> </ul>	
	<ul> <li>down hole length and interception depth</li> </ul>	
	- hole length.	
	<ul> <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>	
Data aggregation methods	<ul> <li>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.</li> </ul>	For the purpose of reporting Ore Reserves and Mineral Resources this section is not applicable.
	<ul> <li>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.</li> </ul>	

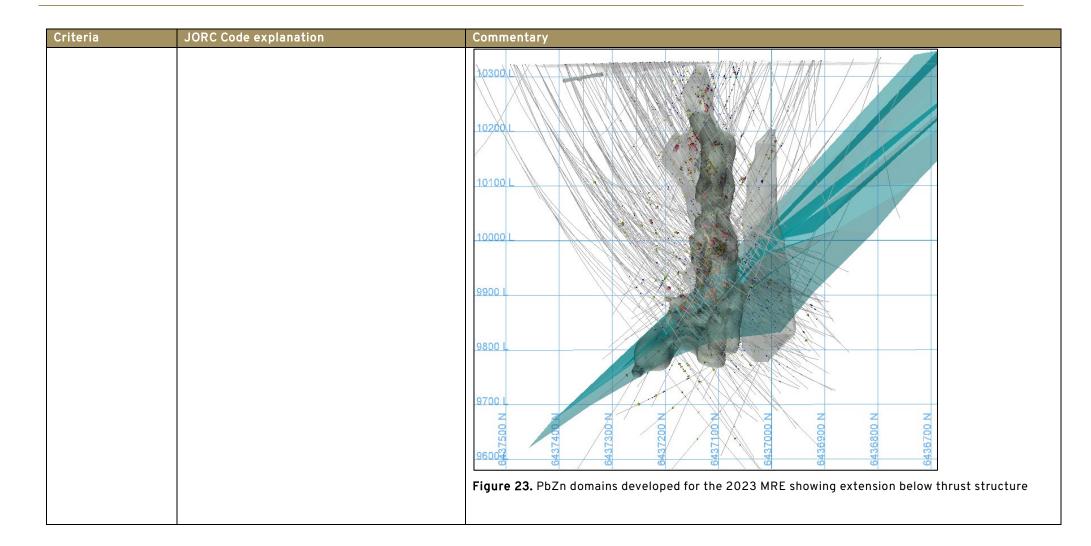
Criteria	JORC Code explanation	Commentary
	<ul> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	
Relationship between mineralisation widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drillhole angle is known, its nature should be reported.</li> </ul>	For the purpose of reporting Ore Reserves and Mineral Resources this section is not applicable.
	<ul> <li>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').</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>	For the purpose of reporting Ore Reserves and Mineral Resources this section is not applicable.
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>	For the purpose of reporting Ore Reserves and Mineral Resources this section is not applicable.

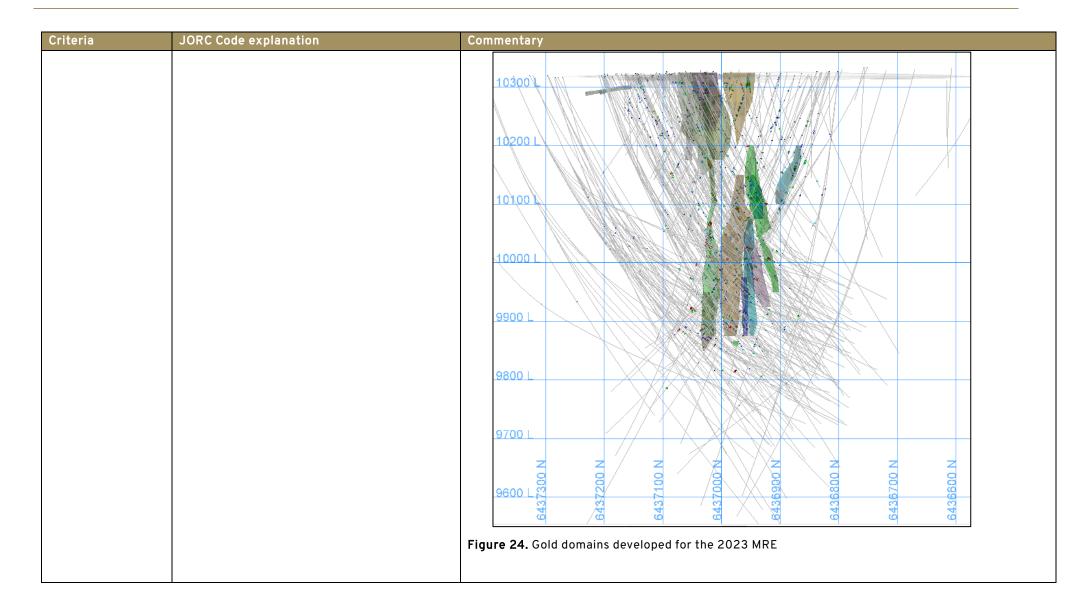
Criteria	JORC Code explanation	Commentary
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	For the purpose of reporting Ore Reserves and Mineral Resources this section is not applicable.
Further work	<ul> <li>The nature and scale of planned further work (eg. 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>	For the purpose of reporting Ore Reserves and Mineral Resources this section is not applicable.

Section 3 Federation Estimation and Reporting of Mineral Resources (Criteria listed in section 1, and where relevant in section 2, also apply to this section)

Criteria	JORC Code explanation	Commentary
Database integrity	<ul> <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> </ul>	Geological data was previously stored electronically into a secure offsite database, managed by Maxwell Geoservices. During 2022 all the geological data has been migrated to a Geobank database. During the migration several minor errors were identified and corrected. The new Geobank database has improved validation & auditing tools, QAQC reporting capabilities and security protocols over the previous database.
	Data validation procedures used.	The drill hole database is exported as csv files prior to the estimation process. Adjustments, such as compositing and top cutting, were carried out programmatically so a transcript of any changes is recorded and has been checked.
		Basic drill hole database validation completed include:
		• Intervals were assessed and checked for duplicate entries, sample overlaps, intervals beyond end of hole depths and unusual assay values.
		<ul> <li>Downhole geological logging was also checked for interval overlaps, intervals beyond end of hole depths and inconsistent data.</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>	Timothy O'Sullivan, who takes responsibility for the data underpinning the Mineral Resource Estimate, worked full time at Aurelia Metals and has visited the site on numerous occasions during the relevant period. Mr O'Sullivan has a thorough understanding of the geology and data on which the Mineral Resource Estimate is based.  Timothy O'Sullivan, who takes responsibility for the estimated grades, tonnages and classification, has conducted regular site visits to review data collection, drilling procedures and to discuss
		interpretation and domaining.
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</li> </ul>	A better understanding of the lithology and structural framework has developed from higher drill density. This improved knowledge has allowed the construction and update of a geological model for the Federation deposit. It is expected that further drilling will improve geological knowledge and lead to continual improvement and refinement of the geological model.
	<ul> <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> </ul>	The host rocks of the mineralisation at Federation are predominantly interbedded fine-grained quartz-feldspar-mica sandstones and siltstones of the lower Amphitheatre Group.  The zinc, lead, copper, gold and silver mineralisation at Federation appears to be structurally controlled and is associated with shearing, brecciation, quartz veining and massive sulphide mineralisation. The style of mineralisation at Federation is similar to other Cobar-style deposits

Criteria	JORC Code explanation	Commentary
Criteria	<ul> <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>	such as the nearby Hera Mine.  The mineralisation at Federation is interpreted as tabular bodies that strike northwest-southeast and dip almost vertically. The reported MRE is hosted in several of these tabular bodies. The highest grade areas, in the northeast of the deposit, are hosted by massive sulphide mineralisation, which appears to plunge steeply to the northeast.  The orientation of the mineralisation is supported reasonably by drill hole assay data with closer spaced drilling expected to improve confidence in the MRE.
		Drill hole logging indicates that a paleo-channel composed of transported material covers a portion of the deposit. The drill hole logging was used as a basis to create a wireframe surface representing the base of the paleo-channel. This surface appears to be predictable and there is a relatively high level of confidence in its interpretation. Blocks above this surface were excluded from the MRE.
		Base of complete oxidation (BOCO) and top of fresh rock (TOFR) surfaces were created based on a combination of drill hole logging and sulphur assay data for the purposes of metallurgical assessment. These oxidation surfaces were also utilised to assign blocks to weathering domains (complete, moderate and fresh) for the purposes of assigning block densities to the moderate and completely weathered material. In this updated MRE only gold and silver have been assumed to be recoverable in the oxide zone, through either gravity or leaching as the base metals will most likely not be amenable to sulphide processing through facilities at either the Hera or Peak Mines. Future metallurgical test work may indicate that some of this material may be recoverable and will then be included in the resource. The depths of the BOCO and TOFR surfaces are reasonably variable and additional drilling may lead to modifications, although this is unlikely to significantly impact the Resource Estimate of the fresh material in the MRE.
		Several major structures have been identified in the diamond drill core with a predictable orientation, however the displacement and impact on mineralisation is still not well understood. Numerous smaller cross structures have been interpreted to offset mineralisation on a local scale however these structures have not been regularly intersected in drilling and as a result have not been included in the estimation process.
		An updated geological model is currently being developed using LeapFrog software. The PbZn domains developed for the 2023 MRE were constructed in LeapFrog based on the mineralised breccia logging. Updated gold domains are still being developed in LeapFrog.





Criteria	JORC Code explanation	Commentary
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 reported MRE is constrained by mineable optimised shapes created using Deswik's Stope Optimiser (SO) software. The resource model extends over a length of around 580m and consist of several echelon volumes that dip very steeply to the northeast. The entire resource occurs within a width of 230m and is composed of shapes varying in width from 2 to 25m wide. The resource model extends to a depth of 550m below surface.
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.</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 (eg. sulphur for acid mine drainage characterisation).</li> <li>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</li> </ul>	The concentrations of zinc, lead, copper, gold, silver, iron, sulphur, arsenic and antimony were estimated on density weighted values to better reflect the contained metal within each interval.  All estimates were carried out using dynamic interpolation so that the orientation of the search ellipse and variogram models were aligned parallel to the local mineralisation orientation.  The density weighted concentration of gold was estimated using Multiple Indicator Kriging (MIK). The gold grades at Federation exhibit a highly positively skewed distribution with coefficients of variation within each domain of over 4.9. The gold estimation therefore show sensitivity to a small number of high grades. MIK is considered an appropriate estimation method for the gold grade distribution because it specifically accounts for the changing spatial continuity at different grades through a set of indicator variograms at a range of grade thresholds. It also reduces the need to use the practice of top cutting.  The density weighted concentrations of zinc, lead, copper, silver, iron, sulphur, arsenic and antimony were estimated using Ordinary Kriging. Density was also estimated using Ordinary Kriging on drill hole data. Ordinary Kriging is considered appropriate because the grades are reasonably well structured spatially.  Vulcan software was used for both the MIK and Ordinary Kriging dynamic estimates.  The zinc, lead, copper, gold and silver estimates are considered to have economic significance. The iron, sulphur, arsenic and antimony estimates are not considered to have economic significance, with sulphur, arsenic and antimony being potentially deleterious.
	<ul> <li>Any assumptions behind modelling of selective mining units.</li> <li>Any assumptions about correlation between variables.</li> </ul>	Several broad wireframes were produced for the purposes of the estimation. The boundaries between these zones were based on a combination of geology, structure, mineralisation orientation and weathering. Exploratory data analysis (EDA) was then performed on all these domains to optimise the number of domains used in the estimation. The final domains used the best representation of mineralisation orientation, structures and weathering as well as limiting the extrapolation of very high zinc, lead and gold grades into zones of lower grade background mineralisation.

Criteria	JORC Code explanation	Commentary
	Description of how the geological interpretation was used to control the	Samples were composited to nominal 1.0 m intervals, whilst honouring the domain wireframes. The minimum composite length was set to 0.5 m.
	<ul> <li>Discussion of basis for using or not using</li> </ul>	A three pass search strategy was used for estimation. Each pass used a search ellipse with four radial sectors. The maximum number of samples per sector was set to four with a maximum of six data per sector for each pass. Additional search parameters are given below:
	The process of validation, the checking	• Pass 1: 5x35x50m search, 8-24 samples, minimum 3 drill holes used, maximum 10 data per hole
	process used, the comparison of model data to drill hole data, and use of reconciliation	• Pass 2: 10x70x100m search, 8-24 samples, minimum 2 drill holes used, maximum 10 data per hole
	data if available.	• Pass 3: 15x100x150m search, 4-24 samples, minimum 1 drill holes used, maximum 10 data per hole
		Minimal grade cutting was applied to zinc, lead, copper, silver and arsenic on a domain by domain basis in order to reduce the influence of extreme values on the estimates. The top-cut values were chosen by assessing the high end distribution of the grade population within each domain and selecting the value at which the distribution became erratic.
		Following estimation, a series of optimised wireframe designs were produced using SO. The SO designs were used to constrain the reported MRE by identifying mineralisation that may have reasonable prospects for eventual economic extraction. The smallest unit for the SO shapes was 5m long and 10m high with a minimum width of 2m. The weighted average NSR values within each shape was required to be at least A\$120 for inclusion in the MRE. Mineralisation outside these shapes was unclassified as it was considered unlikely to meet the criterion of eventual economic extraction. A similar approach has been adopted for Mineral Resource reporting at Aurelia's other operating mines and projects in the region.
		Drill hole spacing at Federation does not occur on a regular grid pattern. Nominal drill hole spacing is around 25m along strike and down dip in the tighter drilled areas and increases to 50m elsewhere. Composite length is 1m. The block model was set up on a rotated grid to honour the main mineralisation orientation. Parent block dimensions are 2x10x10m (X, Y, Z respectively). The 10m Y and vertical block dimensions were chosen to reflect drill hole spacing and to provide definition for mine design. The shorter two metre X dimension was used to reflect the narrow mineralisation and down hole data spacing. Discretisation was set to 2x5x5m (X, Y, vertical respectively).
		No assumptions were made regarding the correlation of variables during estimation as each element is estimated independently.
		Variography was carried out using the software program Isatis.neo on the one metre composited. Each domain was estimated separately using only data from within that domain. The orientation of

Criteria	JORC Code explanation	Commentary
		the search ellipse and variogram models were controlled by coding the block model with local anisotropy to best reflect the local orientation of the mineralised structures.
		The estimation was compared against the prior estimate released in February 2022. The comparison illustrated that, with the increased drill density, mineralisation variability has been better reflected in the new estimation. The comparison also illustrated that the grade tonnage profile has improved. The current estimate is considered to be an improvement on the previous estimation. No mining has occurred at Federation so production data are unavailable for comparison.
		The final block model was reviewed visually and it was concluded that the block model fairly represents the grades observed in the drill holes. The estimation was also validated statistically using histograms, scatter plots, swath plots and summary statistics.
Moisture	<ul> <li>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</li> </ul>	Tonnages are estimated on a dry weight basis.
Cut-off parameters	The basis of the adopted cut-off grade(s) or quality parameters applied.	A NSR cut-off was adopted for the polymetallic mineralisation to represent reasonable prospects for eventual economic extraction. The calculation of the NSR considers relative metallurgical recoveries to each of the potential product streams, along with metal prices, payabilities, exchange rates, freight, treatment charges and royalties. Table 35 and Table 36 show the price and metallurgical assumptions adopted for the Federation NSR calculation.
		A NSR cut-off of A\$120 was selected, consistent with a potential underground stope and fill operation. MREs for the Company's operations at Hera and Peak are currently reported on a comparable basis.
		Minor near surface oxide and transitional mineralisation is present at Federation and is included in the MRE. Metallurgical recovery in these zones was assumed to be 85% which is consistent with other operations in the area. Further metallurgical test work is underway to improve the understanding of the recoveries in the oxide material.

Criteria	JORC Code explanation	Commentary	
Mining factors or assumptions	Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It may not always be possible to make assumptions regarding mining methods and parameters when estimating Mineral Resources. Where no assumptions have been made, this should be reported.	The reported MRE includes all estimated blocks that lie within the mining shapes and therefor include internal dilution. Additional external dilution may be incurred during mining.	
Metallurgical factors or assumptions	The basis for assumptions or predictions regarding metallurgical amenability. It may not always be possible to make assumptions regarding metallurgical treatment processes and parameters when reporting Mineral Resources. Where no assumptions have been made, this should be reported.	Mineralogical analysis and metallurgical test work programs have been designed to evaluate the potential for sequential flotation of copper, lead and zinc minerals to produce separate concentrates and to confirm gold deportment to doré and base metal concentrates.  Mineralogical analysis on material from Federation has shown a very similar sulphide mineralogy to Hera, dominated by iron-bearing sphalerite and galena with lesser chalcopyrite, pyrrhotite and pyrite. Gold at Federation is also similar in occurrence to Hera, tending to be irregularly distributed and present as discrete (often visible) grains not uniquely associated with any specific sulphide phase.  The metallurgical test work results confirm the production of saleable zinc, lead and copper concentrates with no identified penalty elements. Given the results of the test work programs, the NSR and zinc equivalency calculations for Federation have been developed using a process flowsheet with crushing, grinding, gravity gold and sequential flotation producing gold doré and separate copper, zinc and lead concentrates.	

Criteria	JORC Code explanation	Commentary	
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.		
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 estimates used in the evaluation process of the different materials.</li> </ul>	Dry bulk density is measured on-site using an immersion method (Archimedes principle) on selected core intervals for full 1.0 m assay samples. A total of 11,321 density measurements have been taken from drill core at the Federation deposit.  Measured density values show that the density of rock at Federation varies significantly. The density variations are largely due to the presence of sulphide mineralisation that has the effect of increasing density. Aurelia calculated the density values for drill hole intervals that had not been subjected to density measurements by calculating the normative mineralogy of each sample, and then species weighting the density calculation. This approach takes into account the density differences between galena, sphalerite, chalcopyrite, pyrrhotite and gangue and compares well with the actual measurements. This approach does not take voids into account.	
Classification	The basis for the classification of the Mineral Resources into varying confidence categories.	The MRE classification is based on drilling density, estimation passes and confidence in the geological interpretation.  The estimation was constrained within the SO designs to report the MRE by selecting mineralisation that may have reasonable prospects for eventual economic extraction. Material drilled on a nominal 25m spacing and estimated in the first estimation pass, has been classified as	

Criteria	JORC Code explanation	Commentary
	<ul> <li>Whether appropriate account has been taken of all relevant factors (i.e., relative confidence in tonnage/grade estimations,</li> </ul>	Indicated. Material that has a nominal drill hole spacing of less than 50m, estimated in either pass 1 or 2 and does not meet the criteria for Indicated has been reported with an Inferred classification. All remaining blocks are coded as unclassified.
	confidence in continuity of geology and metal values, quality, quantity and	At this stage, no mineralisation has been classified as Measured.
	distribution of the data).	The Competent Person considers this classification approach appropriate for the Federation
	Whether the result appropriately reflects the Competent Person's view of the deposit.	deposit.
Audits or reviews	The results of any audits or reviews of	No external review of the Federation estimation has taken place since the SD2 review in 2021.
	Mineral Resource estimates.	Aurelia engaged SD2 to independently validate the interim Federation estimation in 2021. Aurelia required a fatal flaw assessment, primarily focusing on the modelling and estimation processes. The scope included investigations into:
		Domain modelling
		Geostatistical analysis and conclusions
		Estimation methodology and implementation
		Domain boundary treatment
		mineral resource classification scheme.
		Excluded from the validation was:
		Data acquisition and sample preparation
		Assay quality assessment and laboratory performance
		Economic parameters used in the NSR calculation
		Cut-off value derivation.
		SD2 was provided with the Federation data set including all drill hole samples and logging, a set of three-dimensional (3D) sample points flagged according to the estimation domain, the model used to prepare the September estimation model, a series of geological and domain wireframes, the topographical surface, six Vulcan scripts used during post-processing, and a set of documents describing the estimation approach and results.

Criteria	JORC Code explanation	Commentary
		The audit was conducted in December 2021 and January 2022 with the final report issued in February 2022.
		The review was performed on an interim model so that all recommendations could be actioned prior to the generation of the 2022 MRE.
		AMI addressed all recommendations made by SD2 and incorporated these into the 2022 MRE. Further refinement of the domains is continuing with a Leapfrog model being generated in the second half of 2022. The aim of the Leapfrog model is to build a local geological and structural model focusing on bedding plains, breccias and major structures. Grade domains will be built in Leapfrog for gold and base metals based on SD2's recommendations.
		<u>Domaining</u>
		New sulphide-based domains were developed to replace the 2021 domains. These 2022 domains were constructed based on a combined PbZn grade of greater than 3%, as per SD2's domaining recommendation. Multiple new gold domains were constructed to better represent the known gold distribution. Further refinements to both the PbZn and Au domains have been undertaken using the Leapfrog software's implicit modelling functions. A similar approach is being assessed at Hera with very positive initial results.
		The 2022 sulphide domains have been replaced with LeapFrog developed mineralised breccia domains and are a further improvement to the original domains as recommended by SD2.
		MIK Indicator
		A revision of the gold indicator thresholds was undertaken using the 2022 gold domains. This resulted in a better distribution of the indicators.

Criteria	JORC Code explanation	Commentary
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 Mineral Resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.</li> <li>The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.</li> <li>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</li> </ul>	The relative accuracy and confidence level in the MRE is considered to be in line with the generally accepted accuracy and confidence of the nominated JORC Mineral Resource classifications. This has been determined on a qualitative, rather than quantitative, basis and is based on Aurelia Metals experience with a number of similar deposits in the Cobar region. The main factor that affects the relative accuracy and confidence of the MRE is sample data density.  A significant proportion the reported Mineral Resource is classified as Inferred for which quantity and grade are estimated on the basis of limited geological evidence and sampling. Drill hole data and an understanding of the mineralisation style is sufficient to imply but not verify geological and grade continuity. It is considered reasonable to expect that the majority of Inferred Mineral Resources would be upgraded to Indicated Mineral Resources with continued infill and exploration drilling.  The estimates are global. The tonnages relevant to technical and economic analysis are limited to those classified as Indicated Mineral Resource.

Section 4 Federation Estimation and Reporting of Ore Reserves (Criteria listed in section 1, and where relevant in sections 2 & 3, also apply to this section)

Criteria	JORC Code explanation	Commentary	
Mineral Resource estimate for conversion to Ore	Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.	The Ore Reserve estimate is prepared from the Mineral Resource Estimate reported as at 30 June 2023.  The block model used as the basis for the Ore Reserve Estimate is FED2305MRE.	
Reserves	Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.	The Mineral Resource Estimate is inclusive of the Ore Reserve Estimate.	
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>	The Ore Reserve Estimate was completed by Adriaan Engelbrecht who is the Senior Mining Engineer for Aurelia Metals based in the Cobar region, and reviewed and reported by Justin Woodward who is the Group Manager Technical Services at Aurelia Metals. The most recent site visit was in June 2023.	
Study status	The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.	A Feasibility Study (FS) evaluation of the Federation deposit was completed in August 2022, and updated in April 2023. The FS has determined a detailed mine plan that is technically achievable, including consideration of material modifying factors. The FS demonstrates an economically viable outcome.	
	The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.	<ul> <li>The FS evaluated the development of the Federation deposit as a greenfield underground mine with minerals processing to recover saleable base metals concentrates and gold doré. The FS involved:</li> <li>Geological drilling and data collection</li> <li>Geological modelling for mine planning</li> <li>Mine geotechnical data collection and assessment</li> <li>Mining method selection, access optimisation, mine design and production schedule development</li> <li>Mine infrastructure design and reticulation (power, dewatering, ventilation and communications)</li> <li>Mineralogical and metallurgical test work</li> <li>Design of a new processing facility and evaluation of processing through Aurelia's existing Cobar Basin facilities</li> </ul>	

Criteria	JORC Code explanation	Commentary
		<ul> <li>Tailings storage capacity assessment and design</li> <li>Surface infrastructure design</li> <li>Development of an operational organisational structure</li> <li>Project approvals scope and process</li> <li>Project implementation strategy</li> <li>Capital and operating cost estimates</li> <li>Financial analysis</li> <li>Risk assessment.</li> </ul>
Cut-off parameters	The basis of the cut-off grade(s) or quality parameters applied.	A NSR cut-off value of A\$175/t was applied for material to be extracted by stoping methods and A\$80/t for development. The economic viability of the cut-off value has been demonstrated through cashflow modelling completed for the Feasibility Study.  The Ore Reserve portion of the Federation mine design has been assessed and deemed economically viable based on ore being processed through the Peak and Hera process plants. The economic analysis returned a positive NPV and IRR which supports the development and extraction of the Federation deposit.
Mining factors or assumptions	<ul> <li>The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).</li> <li>The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.</li> </ul>	The Federation Mine design uses a combination of uphole and downhole stoping methods with rockfill, cemented rockfill and paste backfill, progressing in a bottom up sequence. The uphole and downhole stoping methods are consistent with the mining method used at the nearby Peak mining operation and is considered appropriate for the Federation orebody. Longitudinal retreat longhole stoping where the deposit is narrow, and transverse longhole stoping where the deposit is wider.  Geotechnical assessment for the Federation FS resulted in selection of level spacing, offset distances to capital infrastructure and a ground support regime. Various level spacings and stope strike lengths were adopted to account for variable ground conditions and dominant geological structures. The typical stope height is 30 metres (m) floor to floor with a 25m stope strike length. In areas of identified weaker rock mass conditions, stope heights of 20m or 25m and a stope strike length of 20m were adopted to promote excavation stability and effective mining operations.  The geology model has been assessed by creating stope shapes using Deswik's SO software. Parameters used include 0.5m hangingwall and footwall dilution allowances, with stope strike length of up to 25m and a minimum mining width of 3.0m. Mining dilution and recovery factors applied to these shapes

Criteria	JORC Code explanation	Commentary
	<ul> <li>The assumptions made regarding geotechnical parameters (eg. pit slopes, stope sizes, etc), grade control and pre- production drilling.</li> </ul>	includes downhole stopes (5% mining dilution with 95% recovery), uphole stopes (5% mining dilution with 90% recovery), and sill pillar mining (10% mining dilution with 85% recovery).  Development designs had 15% mining dilution applied with 100% recovery.
	<ul> <li>The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).</li> <li>The mining dilution factors used.</li> <li>The mining recovery factors used.</li> <li>Any minimum mining widths used.</li> <li>The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.</li> <li>The infrastructure requirements of the selected mining methods.</li> </ul>	<ul> <li>The FS considered important elements of the mine design, equipment and support services that included:</li> <li>Decline and lateral development for level access</li> <li>Vertical development for fresh air, return air and secondary egress</li> <li>Ore stockpiles and waste rock dumps</li> <li>Pastefill system and associated underground reticulation</li> <li>Fixed infrastructure including shotcrete batch plant, ventilation fans, dewatering pumps and pipes, raw water pipes, underground substations, and high voltage (HV) power supply.</li> </ul>
Metallurgical factors or assumptions	<ul> <li>The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.</li> <li>Whether the metallurgical process is well-tested technology or novel in nature.</li> <li>The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.</li> <li>Any assumptions or allowances made for deleterious elements.</li> </ul>	Federation ore is intended to be processed through both the Peak and Hera processing facilities with higher grade ore prioritised through the Peak facility. Crushed ore will be transported to the process plants by road train.  Where Federation Ore is processed through the Peak processing facility it will be at a nominal throughput rate of 100t/h. The processing flowsheet will be similar to that for Peak ore treatment and incorporates a gravity gold recovery circuit, a two-stage flotation circuit and a CIL circuit to produce a gold-silver doré, a lead-copper bulk concentrate, and a zinc concentrate.  Gold (and silver) recovered in the gravity circuit will be leached in an In-line Leach Reactor with the precious metals recovered from solution by electrowinning and smelting to produce gold-silver doré bars.  When treating Federation ore any floatable gold and silver not recovered in the gravity circuit is recovered with lead-copper to a lead-copper bulk concentrate and with zinc to a zinc concentrate as part of a two-stage flotation circuit.  Flotation tailings are processed in a conventional CIL circuit to leach any remaining cyanide leachable gold and silver. Gold and silver in solution is recovered via carbon adsorption with the loaded carbon

Criteria	JORC Code explanation	Commentary		
	The existence of any bulk sample or pilot scale test work and the degree to which such	then recovered, strip to produce gold doré		ution subjected to electrowinning and smelted
	samples are considered representative of the orebody as a whole.		assumptions for processing through n performance (where appropriate) a	Peak are based on laboratory testwork and and shown in Table 54.
	<ul> <li>For minerals that are defined by a specification, has the Ore Reserve estimation been based on the appropriate</li> </ul>	Table 54. Federation	Mine – Peak plant processing metal r	recovery assumptions
	mineralogy to meet the specifications	Metal	Recovery	
		Gold	60-95%	
		Silver	60-80%	
		Copper	75-95%	
		Zinc	80-95%	
		Lead	80-95%	
		rate of 340ktpa. The		ssing facility it will be at a nominal throughput that for Hera ore treatment and incorporates a circuit to produce a bulk zinc-lead
		precious metals reco	ered from solution by electrowinning be received for gold and silver in the l	hed in an In-line Leach Reactor with the and smelting to produce gold-silver doré bulk concentrate and is therefore excluded
			assumptions for processing through n performance (where appropriate) a	Hera are based on laboratory test-work and nd shown in Table 55.
		Table 55. Federation	Mine – Hera plant processing metal r	ecovery assumptions
		Metal	Recovery	
		Zinc	90-95%	
		Lead	90-95%	
		Gold	10-25%	
		Silver	3-10%	
	1	L		

Criteria	JORC Code explanation	Commentary
		All deleterious elements are expected to remain within accepted ranges.
Environmental	The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and	Hera Resources Pty Ltd (Hera Resources, a subsidiary of Aurelia Metals Limited) owns and operates the Federation Project. There is a development consent and exploration licences that govern the operation of the Federation Project. The development consent for the project was granted during 2023. The development consent application was supported by environmental assessments that identify the potential impacts of mining operations. The environmental assessments have been shared with regulatory authorities and the community and mitigating actions developed and implemented in consultation with these stakeholders.
	waste dumps should be reported.	The Federation Project is an active exploration prospect. It has active waste rock emplacements. The facilities contain potentially acid forming and/or non-acid forming residues and/or waste rock. The facilities are designed to mitigate these impacts. The facilities are approved via development consent and other regulatory approvals.
		The Federation Project has numerous environmental monitoring requirements including air quality, greenhouse gas emissions, groundwater, surface water, noise, blasting, meteorological and biodiversity. A range of techniques are utilised in assessing the potential impacts.
		There are no process residue storages at Federation.
Infrastructure	• The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed.	The mineralogy of the Federation deposit is amenable to treatment through Aurelia's Cobar Basin process plants. Use of the existing process plants enables an accelerated mine production ramp-up and reduces upfront capital expenditure and project implementation risk.
		Filtered tailings will be used in cemented pastefill to backfill stope voids. The remaining tailings will be stored within the established Hera and/or Peak tailings storage facilities. The Hera TSF will require at least one embankment raise to accommodate tailings generated by Federation ore that is not used for backfill.
		Power will be supplied from islanded liquid natural gas generators supplemented by a solar farm and battery energy storage system. The hybrid power solution will target a 25% reduction in carbon dioxide (CO2) emissions relative to an exclusively gas fired power station.
		Project development will be implemented over three main phases including enabling works, mine development and plant construction. The Hera accommodation village was expanded in late 2021 while work underway at the Federation site includes surface clearing and drainage works, boxcut excavation, building construction and mobilisation of the mining contractor for development of the exploration decline. These activities are occurring under the exploration licence. Aurelia has received development

Criteria	JORC Code explanation	Commentary
		consent for the Federation Project and reasonably expects to receive a mining lease and associated approvals from the NSW government to enable commercial production.
Costs	<ul> <li>The derivation of, or assumptions made, regarding projected capital costs in the study.</li> <li>The methodology used to estimate operating costs.</li> <li>Allowances made for the content of deleterious elements.</li> <li>The derivation of assumptions made of metal or commodity price(s), for the principal minerals and co- products.</li> <li>The source of exchange rates used in the study.</li> <li>Derivation of transportation charges.</li> <li>The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.</li> <li>The allowances made for royalties payable, both Government and private.</li> </ul>	The Federation Project's capital cost estimates are based on scope options described in the Feasibility Study. The estimates include direct costs which are based on quantities and pricing, engineering, common distributable charges, temporary construction facilities, freight, management and Owner's costs. Updated costs have been included as part of the Life-of-Mine Plan and budgeting process.  Operating costs for the Federation Project are estimated over the life of mine using first principles derivation of mining, processing and haulage costs, market rates for third party provision of power and crushing activities, actual costs for consumables and first principles build-up of salaries.  Operating cost estimates were developed in Australian dollars (\$). Contract rates and from Aurelia's Hera and Peak Mines have been used for:  Concentrate transport and port operations  LNG supply  Consumables (diesel, grinding media, mill reagents)  Current market rates were obtained for:  Power supply  Primary and secondary crushing.  Salaries not included in contract rates have been built up from first principles.  Operating unit costs have been benchmarked with Aurelia's existing operations in the Cobar basin.  No allowance has been made for deleterious elements. All deleterious elements are expected to remain within tolerances and no penalties have been applied to cash flow estimations.  Metal Price and exchange rate assumptions have been benchmarked against industry peers and are informed by consensus forecasts.  Allowance has been made for NSW State royalty paid at a rate of 4.0% on assessable gold revenue and the outstanding balance of the 4.5% royalty payable to CBH Resources Ltd over the first 250,000 ounces of gravity gold recovered through the Hera process plant.

Criteria	JORC Code explanation	Commentary
Revenue factors	<ul> <li>The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.</li> <li>The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.</li> </ul>	Table 56. Federation metal price and exchange rate assumptions
Market assessment	<ul> <li>The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.</li> <li>A customer and competitor analysis along with the identification of likely market windows for the product.</li> <li>Price and volume forecasts and the basis for these forecasts.</li> <li>For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract</li> </ul>	Federation expects to be able to use existing contractual arrangements or supply chains for the transportation of concentrate.  Concentrates produced from Federation ore are expected to be sold under long term offtake agreements.
Economic	<ul> <li>The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.</li> <li>NPV ranges and sensitivity to variations in the significant assumptions and inputs.</li> </ul>	The Feasibility Study includes the economic analysis of the project, which was undertaken using discounted cash flow analysis. The analysis returns a positive post-tax NPV. Key economics inputs include:  Inflation: Modelling is completed in \$real terms  Discount rate: 7% real post-tax discount rate  The Ore Reserve portion of the Federation mine design has been assessed and deemed economically viable based on ore being processed through the Hera and Peak process plants. The economic analysis returned a positive NPV and IRR which supports the development and extraction of the Federation deposit.

Criteria	JORC Code explanation	Commentary
Social	The status of agreements with key stakeholders and matters leading to social licence to operate.	Federation is currently being actively explored, including the installation of an exploration decline, with ventilation infrastructure and surface works appropriate to undertake those activities.  Federation is fully encompassed by land owned by a private landholder. A Land Access and Compensation Agreement is in place granting Hera Resources full access to Federation.  Hera Resources has also reached in-principle agreement with two local councils to establish Voluntary Planning Agreements. These include a community enhancement fund and funding for maintenance and upgrades of local roads.
Other	<ul> <li>To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:</li> </ul>	The Federation Project is an active exploration prospect located approximately 10km to the south of the Hera Mine. Exploration activities at the site are approved via Activity Approvals issued by the state government, including the installation of a boxcut, exploration decline, ventilation infrastructure and surface works appropriate to undertake those activities.
	<ul> <li>Any identified material naturally occurring risks.</li> <li>The status of material legal agreements and marketing arrangements.</li> </ul>	Development consent was issued by the NSW Government during 2023. Hera Resources reasonably expects to receive a mining lease and associated approvals from the NSW government to enable commercial production.
	<ul> <li>The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the Ore Reserve is contingent.</li> </ul>	
Classification	<ul> <li>The basis for the classification of the Ore Reserves into varying confidence categories.</li> <li>Whether the result appropriately reflects the Competent Person's view of the deposit.</li> </ul>	The Mineral Resource classifications flagged in the geological block model formed the basis for the Ore Reserve Estimate. Mining shapes were developed from the geological block model before the quantity and grade of Indicated, Inferred and unclassified material within the mining shapes was reported. Mining shapes were included in the Ore Reserve Estimate if individual shapes contained more than 80% Indicated material.

Criteria	JORC Code explanation	Commentary
	The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).	The Ore Reserve classification of the material within the mining shapes was aligned with the Mineral Resource classifications, such that the Indicated classification was reported as the Probable Ore Reserve. The MRE contained no material having the Measured classification hence no Proved Ore Reserve was reported.
		The selected mining shapes may contain a minor portion of Inferred or unclassified material. The metal value corresponding to this tonnage was removed from the Ore Reserve Estimate while the tonnage remained in the Ore Reserve Estimate as dilution at zero grade.
		The result appropriately reflects the Competent Person's view of the deposit.
Audits or reviews	The results of any audits or reviews of Ore	No external audit or review of this Ore Reserve Estimate has been completed.
	Reserve estimates.	Aurelia engages consultants for external review of the process used to estimate the Ore Reserves. This review focuses on the process as it leads into the estimate. The review is conducted on a selected orebody from across the company's operations. Recommendations from these reviews are given consideration for all Aurelia Ore Reserve Estimates, as the processes have strong similarities. Most recent reviews were conducted on Dargues, and Federation. No fatal flaws have been identified.
Discussion of relative accuracy/ confidence	relative accuracy and confidence level in the	The Federation Ore Reserve Estimate is based on work completed during the Feasibility Study. Mining factors have been estimated based upon geotechnical assessment, and experience at nearby mining operations. No mining production has been completed at Federation to use as a baseline for the mining factors.
		The Mineral Resource has no Measured class material. The Ore Reserve Estimate has no Proved class material. This appropriately represents the geological confidence of the orebody. It is expected that much will be learned regarding the deposit when development of the orebody commences.
	limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative	Capital and Operating costs have been estimated as a part of the Feasibility Study. As the operation gets underway, these costs will be updated with actual costs which may lead to an adjustment in the cut-off values. The Federation Ore Reserve Estimate has a moderate level of confidence and accuracy.
	accuracy and confidence of the estimate.	Table 57. Ore Reserve Estimate – Reliance on others
	<ul> <li>The statement should specify whether it relates to global or local estimates, and, if</li> </ul>	Area of Expertise Expert Person Aurelia Position Title
	local, state the relevant tonnages, which	Mineral Resource Estimate Timothy O'Sullivan Principal Resource Geologist
	should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedure used.	Processing Robert Bresca Senior Metallurgist
		Marketing Leigh Collins Group Manager - Commercial
		Economic Assessment Dan Zagorskis Senior Business Analyst

Criteria	JORC Code explanation	Commentary
	<ul> <li>Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.</li> </ul>	
	<ul> <li>It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</li> </ul>	

## APPENDIX 5 - NYMAGEE JORC Code 2012 (Table 1) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves

Section 1 Nymagee Sampling Techniques and Data (Criteria in this section apply to all succeeding sections)

Criteria	JORC Code explanation	Commentary
Sampling techniques	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.	Sampling is by sawn half core where samples were defined during logging to honour geological and mineralogical boundaries. Nominally sample intervals are 1m with a range from 0.5m to 1.5m. Samples cut in half by diamond saw, with half core sent to external laboratories.
	<ul> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> </ul>	Sampling and QAQC procedures are carried out using Aurelia Metal's protocols as per industry best practice. Drilling is oriented perpendicular to the strike of the mineralisation as much as possible to ensure a representative sample is collected.
	<ul> <li>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.</li> </ul>	Core samples are cut in half, dried, crushed and pulverised to 85% passing 75 microns. This is considered to appropriately homogenise the sample. Au was assayed by 30g fire assay with AAS finish, (Method Au - AA25) with a detection level of 0.01ppm. For base metals a 0.5g charge is dissolved using Aqua Regia Digestion (Method ICP41-AES) with detection levels of: Ag-0.2ppm, As-2ppm, Cu-1ppm, Fe-0.01%, Pb-2ppm, S-0.01%, Zn-2ppm. Over limit analysis is by 0G46- Aqua Regia Digestion with ICP-AES finish. Since April 2016, whole core is used as a representative sample and the determination of the mineralisation in the material is as above. Coarse gold samples greater than 0.2g/t are re-assayed by screen fire assay (method Au-SCR22AA) to improve representivity of gold assays.  The method used is:  For samples up to 2kg screen the entire sample  For samples between 2-4kg screen with 1 riffle split  For samples > 4kg samples screen with 2 riffle splits

Criteria	JORC Code explanation	Commentary
		The sub-splits from the pulp residue are split using a riffle splitter to obtain the most representative sub-split possible. As the splitters generate a 50:50 split, the exact weight of sample used is based on the starting weight of the sample.
Drilling techniques	<ul> <li>Drill type (eg. core, reverse circulation, openhole 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.).</li> </ul>	Drilling is by diamond coring. Surface holes generally commence as PQ core until fresh rock is reached. The PQ rods are left as casing then HQ or NQ coring is employed. Underground holes are LTK60 or NQ-sized drill core from collar.
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> </ul>	Measured core recovery against intervals drilled is recorded as part of geotechnical logging. Recoveries are greater than 95% once in fresh rock.
	<ul> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> </ul>	Surface holes use triple tube drilling to maximise recovery.
	<ul> <li>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.</li> </ul>	The relationship between sample recovery and grade has not been assessed.
Logging	Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral	Systematic geological and geotechnical logging is undertaken. Data collected includes:
	Resource estimation, mining studies and metallurgical studies.  • Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.  • The total length and percentage of the relevant intersections logged.	Nature and extent of lithologies.
		Relationship between lithologies.
		Amount and mode of occurrence of ore minerals.
		Location, extent and nature of structures such as bedding, cleavage, veins, faults etc.
		Structural data (alpha & beta) are recorded for orientated core.
		<ul> <li>Geotechnical data such as recovery, RQD, fracture frequency, qualitative IRS, microfractures, veinlets and number of defect sets. For some geotechnical holes the orientation, nature of defects and defect fill are recorded.</li> </ul>

Criteria	JORC Code explanation	Commentary
		Bulk density by Archimedes principle at regular intervals.
		<ul> <li>Magnetic susceptibility recorded at 1m intervals for some holes as an orientation and alteration characterisation tool.</li> </ul>
		Both qualitative and quantitative data is collected. All core is digitally photographed
		• 100% of all recovered core is geologically and geotechnically logged.
Sub-sampling techniques and	If core, whether cut or sawn and whether Quarter, half or all core taken.	Core is sawn with half core submitted for assay. Sampling is consistently on one side of the orientation line so that the same part of the core is sent for assay. PQ core is ¼ sampled.
sample preparation	If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or	Since April 2016, entire cores have been sent for assay to improve representivity, especially for gold.
	dry.  • For all sample types, the nature, quality and	Samples are dried crushed and pulverised to 85% passing 75 microns. This is considered to appropriately homogenise the sample to allow subsampling for the various assay techniques.
	appropriateness of the sample preparation technique.	Certified Standard Reference Materials and blanks are inserted at least every 15 samples to assess the accuracy and reproducibility. Silica flush samples are employed after each
	<ul> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> </ul>	occurrence of visible gold. The results of the standards are to be within ±10% variance, or a standard deviations, from known certified result. If greater than 10% variance the standard and up to 10 samples each side are re-assayed. ALS conduct internal check samples every a samples for Au and every 20 for base metals. These are checked by Aurelia employees. Ass
	<ul> <li>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.</li> </ul>	grades are compared with mineralogy logging estimates. If differences are detected a reassay can be carried out by either: ¼ core of the original sample interval, re-assay using bulk reject, or the assay pulp. Submission of pulps, and coarse rejects to a secondary laboratory (Genalysis, Intertek, Perth) to assess any assay bias.
	Whether sample sizes are appropriate to the grain size of the material being sampled.	Second-half sampling is occasionally undertaken. Core samples are cut in ½ for downhole intervals of 1m, however, intervals can range from 0.5-1.5m. This is considered representative of the in-situ material. The sample is crushed and pulverised to 85% passing 75 microns. This is considered to appropriately homogenise the sample. Rejects are occasionally re-assayed to for variability.
		Sample sizes are considered appropriate. If visible gold is observed in surface drilling, gold assays are undertaken by both a 30g fire assay and a screen fire assay using a larger portion of the sample (up to several kg).

Criteria	JORC Code explanation	Commentary
Quality of assay data and laboratory test	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>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.</li> <li>Nature of quality control procedures adopted (eg. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</li> </ul>	Standard assay procedures performed by a reputable assay lab (ALS Group) were undertaken. Gold assays are initially by 30g fire assay with AAS finish, (method Au-AA25). Ag, As, Cu, Fe, Pb, S, Zn are digested in aqua regia then analysed by ICPAES (method ME-ICP41). Comparison with 4 acid digestion indicate that the technique is considered total for Ag, As, Cu, Pb, S, Zn. Fe may not be totally digested by aqua regia but near total digestion occurs.  Not applicable as no geophysical tools were used in the determination of assay results. All assay results were generated by an independent third party laboratory as described above.  Certified reference material or blanks are inserted at least every 15 samples. Standards are purchased from Certified Reference Material manufacture companies: Ore Research and Exploration, Gannet Holdings Pty Ltd and Geostats Pty Ltd. Standards were purchased in foil lined packets of between 60g and 100g. Different reference materials are used to cover high grade, medium grade and low grade ranges of elements: Cu, Zn, Pb, Au, Ag, Fe, S and As. The standard names on the foil packages were erased before going into the pre numbered sample bag and the standards are submitted to the lab blind.
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data</li> </ul>	The raw assay data forming significant intercepts are examined by at least two company personnel.  Twinned holes have been used in various sections of the Hera orebody to establish grade variability.  Drill hole data including meta data, any gear left in the drill hole, lithological, mineral, survey, sampling and occasionally magnetic susceptibility is collected and entered directly into a Geobank database using drop down codes.  Assay data is provided by ALS via .csv spreadsheets. The data is validated using the results received from the known certified reference material. Using an SQL based query the assay data is merged into the database. Hard copies of the assay certificates are stored with drillhole data such as drillers' plods, invoices and hole planning documents.
Location of data points	<ul> <li>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.</li> </ul>	Surface drill hole collars are initially located using hand held GPS to ±5m. Upon completion collars are located with differential GPS to ±5cm. All underground drill holes are picked up by the mine surveyor using a Total Station Theodolite (TST).  Drill holes are downhole-surveyed from collar to the end of hole by drilling personnel using downhole survey tools which include: Eastman, Proshot, Ranger, Reflex, Pathfinder and EZ-Trac. Drill holes are surveyed by single shot camera during drilling at intervals ranging

Criteria	JORC Code explanation	Commentary
	<ul><li>Specification of the grid system used.</li><li>Quality and adequacy of topographic control.</li></ul>	between 15-30m. Surface holes, and select underground holes, are further surveyed after drilling by mulitshot camera at approximately 6m intervals. All survey data for every hole is checked and validated by Aurelia Metals personnel before entered into database.
		All coordinates are based on Map Grid Australia zone 55H.
		Topographic control is considered adequate. There is no substantial variation in topography in the area with a maximum relief of 50m present. Local control within the Hera and Nymagee Mine areas is based on accurate mine surveys.
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate</li> </ul>	Final drill spacing for stope definition drilling ranges between 10-20m spacing within the mineralised structures. Drill spacing away from the main mineralised lodes is generally wider spaced and dependent on the stage of exploration.  The mineralised lodes reported are currently classified as Inferred, Indicated and Measured
	for the Mineral Resource and Ore Reserve	consistent with the number of drill holes intersecting the lode and with the classifications applied under the 2012 JORC code.
	estimation procedure(s) and classifications applied.	Sample compositing is not applied.
	Whether sample compositing has been applied.	
Orientation of data in relation to geological	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> </ul>	Drilling is orientated to cross the interpreted, steeply dipping mineralisation trend at moderate to high angles. Holes are drilled from both the footwall and hangingwall of the mineralisation. The use of orientated core allows estimates of the true width and orientation of the mineralisation to be made.
structure	<ul> <li>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.</li> </ul>	No sample bias due to drilling orientation is known.
Sample security	The measures taken to ensure sample security	Chain of custody is managed by Aurelia Metals. Samples are placed in tied calico bags with sample numbers that provide no information on the location of the sample. Samples are transported from site to the assay lab by courier or directly delivered by Aurelia metals personnel

Criteria	JORC Code explanation	Commentary
Audits or	<ul> <li>The results of any audits or reviews of</li> </ul>	An audit and review of the sampling regime at Hera, which includes Nymagee and Federation,
reviews	sampling techniques and data	was undertaken by H&S Consultants in November 2015. Recommendations from this review
		form part of the current sampling practices at Hera.

## Section 2 Nymagee 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	<ul> <li>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.</li> </ul>	The Nymagee Mine and surrounding exploration leases are held in joint venture between Aurelia Metals Limited and Ausmindex Pty Ltd. Aurelia Metals Limited is the manager of the Nymagee Joint Venture Project and currently holds a 95% interest. The Nymagee Joint Venture includes ML53, ML90, ML5295, ML5828, PLL847, EL4243 and EL4458, which cover both the historic Nymagee Copper Mine as well as the Hera-Nymagee corridor.
	<ul> <li>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.</li> </ul>	
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	The area has a 50-year exploration history involving reputable companies such as Cyprus Mines, Buka, ESSO Minerals, CRAE, Pasminco, Triako Resources, CBH Resources and YTC Resources. Previous exploration data has been ground truthed where possible. Historic drill hole collars have been relocated and surveyed. Most of the drill core has been relocated and re-examined and resampled. This is particularly the case in older drilling where Au assays were sparse or non-existent.
Geology	Deposit type, geological setting and style of mineralisation.	All known mineralisation in the area is epigenetic "Cobar" style. Deposits are structurally controlled quartz + sulphide matrix breccias grading to massive sulphide. In a similar fashion to the Cobar deposits, the Nymagee deposits are located 1km to 3km to the west of the Rookery Fault, a major regional structure with over 300km strike length. The deposits are about the boundary of the Devonian Lower Amphitheatre Group and the underlying Roset Sandstone. Both units show moderate to strong ductile deformation with tight upright folding coincident with greenschist facies regional metamorphism. A well-developed sub vertical cleavage is present.
		The deposits are located in high strain zones. Metal ratios are variable but there is a general tendency for separate Pb+Zn+Ag±Au±Cu and Cu+Ag±Au ore bodies. These are often in close association with the Pb+Zn lenses lying to the west of the Cu lenses. At Hera Zn is usually more abundant than Pb.
		Formation temperatures are moderate to high. At Hera the presence of Fe-rich sphalerite, non-magnetic pyrrhotite and cubanite indicates formation temperatures between 350°C and 400°C. Recognised at Hera are quartz + K-feldspar veins, scheelite, and minor skarn mineralogy which suggest a possible magmatic input. Deposit timing is enigmatic. The main mineralisation occurs

Criteria	JORC Code explanation	Commentary
		as brittle sulphide matrix breccias with silicification grading to ductile massive sulphides that crosscut both bedding and cleavage. Recent age dating on micas and galena gives an age of ~385Ma for the Hera deposit.
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:</li> </ul>	For the purpose of reporting Ore Reserves and Mineral Resources this section is not applicable.
	<ul> <li>easting and northing of the drill hole collar</li> </ul>	
	<ul> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> </ul>	
	<ul> <li>dip and azimuth of the hole</li> </ul>	
	<ul> <li>down hole length and interception depth</li> </ul>	
	- hole length.	
	<ul> <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>	
Data aggregation methods	<ul> <li>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.</li> </ul>	For the purpose of reporting Ore Reserves and Mineral Resources this section is not applicable.

Criteria	JORC Code explanation	Commentary
	<ul> <li>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.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	
Relationship between mineralisation	These relationships are particularly important in the reporting of Exploration Results.	For the purpose of reporting Ore Reserves and Mineral Resources this section is not applicable.
widths and intercept lengths	<ul> <li>If the geometry of the mineralisation with respect to the drillhole angle is known, its nature should be reported.</li> </ul>	
	<ul> <li>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').</li> </ul>	
Diagrams	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	For the purpose of reporting Ore Reserves and Mineral Resources this section is not applicable.
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	For the purpose of reporting Ore Reserves and Mineral Resources this section is not applicable.

Criteria	JORC Code explanation	Commentary
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	For the purpose of reporting Ore Reserves and Mineral Resources this section is not applicable.
Further work	<ul> <li>The nature and scale of planned further work (eg. 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>	For the purpose of reporting Ore Reserves and Mineral Resources this section is not applicable.

Section 3 Nymagee Estimation and Reporting of Mineral Resources (Criteria listed in section1, 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.	Geological data was previously stored electronically into a secure offsite database, managed by Maxwell Geoservices. During 2022 all the geological data has been migrated to a Geobank database. During the migration several minor errors were identified and corrected. The new Geobank database has improved validation & auditing tools, QAQC reporting capabilities and security protocols over the previous database.
	Data validation procedures used.	The drill hole database is exported as csv files prior to the estimation process. Adjustments, such as compositing and top cutting, were carried out programmatically so a transcript of any changes is recorded and has been checked.
		Basic drill hole database validation completed include:
		<ul> <li>Intervals were assessed and checked for duplicate entries, sample overlaps, intervals beyond end of hole depths and unusual assay values.</li> </ul>
		Downhole geological logging was also checked for interval overlaps, intervals beyond end of hole depths and inconsistent data.
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>	Timothy O'Sullivan, who takes responsibility for the data underpinning the Mineral Resource Estimate, worked full time at Aurelia Metals and has visited the site on numerous occasions during the relevant period. Mr O'Sullivan has a thorough understanding of the geology and data on which the Mineral Resource Estimate is based.
		Timothy O'Sullivan, who takes responsibility for the estimated grades, tonnages and classification, has conducted regular site visits to review data collection, drilling procedures and to discuss interpretation and domaining.
Geological interpretation		Aurelia has developed a new interpretation of the Nymagee deposit based on total sulphide volume, derived from chemical assays. Six lodes were interpreted, comprising a Main lens with 3 footwall lenses in the north an 1 footwall lens in the south, as well as Noth Lens located around 600m north of the Main group.
		Statistical analysis identified a bimodal Pb+Zn distribution within Main lens, with a small highergrade population. Therefore, an attempt was made to separate the higher grade Pb-Zn mineralisation within Main lens. A nominal threshold of 0.5% Pb+Zn was used, guided by an indicator model at this threshold. This resulted in six narrow sub-zones, which tended to occur towards the footwall, hangingwall or centre of Main lens, often around inflections in the overall lens.

Criteria	JORC Code explanation	Commentary
	The use of geology in guiding and controlling Mineral Resource estimation.	Mineralisation at Nymagee is hosted by monotonous sequence of sediments with no obvious marker horizons or structures, so sulphide content is the best available indicator of mineralisation.
	<ul> <li>The factors affecting continuity both of grade and geology.</li> </ul>	Surfaces for the base of complete oxidation and top of fresh rock were also provided by Aurelia and a base of soil/slag was also developed; these surfaces are based on geological logging.
		The current mineralised domain modelling strategy is based on experience with a similar style of polymetallic mineralisation at the nearby Hera Mine.
		A reasonable degree of confidence can be attributed to the interpretation of mineralisation.
		A number of possible alternative interpretation approaches were examined, including indicator models of sulphide volume and copper grade. This exercise highlighted a number of areas that could be included within the mineralisation wireframes based on available data and assumed orientation. It also suggests that some areas within the wireframes do not strictly meet the stated criteria. It is unclear if these changes would have a significant impact on the resource estimate at economic cutoff grades, but it does suggest possible alternative interpretations in some areas.
		Geology guides and controls the Mineral Resource estimate through the use of sulphide envelopes. The sulphide envelopes define a coherent shear couple system, which controls the continuity of geology and grade.
Dimensions	The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below	The Mineral Resource for Main lens and associated footwall lodes occur within a volume of:  • 540m along strike
	surface to the upper and lower limits of the	<ul> <li>170m maximum plan width, with individual stopes varying from 2 to 22m</li> </ul>
	Mineral Resource.	425m in depth from surface
		The Mineral Resource occurs discontinuously within this volume, with the largest continuous zone having a maximum dimension of 175 x 22 x 300m in strike, width and depth.
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	The current Mineral Resource has not been re-estimated since the previous estimation in 2019. The following description describes how the 2019 estimation was developed. The new Mineral Resource uses the 2019 estimation and then has had new economic parameters applied to generate new mining shapes in which the Mineral Resource has been quoted.
	parameters, and maximum distance of extrapolation from data points.	Only diamond core and reverse-circulation percussion holes were used in the Mineral Resource estimate, including some historical underground core holes.

Criteria	JORC Code explanation	Commentary
	<ul> <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> </ul>	All elements were estimated by ordinary kriging with density weighting. This is considered appropriate because the coefficients of variation (CV = standard deviation/mean) were generally low to moderate, and the grades are reasonably well structured spatially. Existing variography was used because the recent drilling only contributed 13% more samples to Mains lens, which was not considered likely to significantly change the current variography.  Estimates were generated for Cu, Zn, Pb, Au, Ag, Fe, S, As and density.
	<ul> <li>Estimation of deleterious elements or other non-grade variables of economic significance (eg. sulphur for acid mine drainage characterisation).</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 behind modelling of selective mining units.</li> <li>Any assumptions about correlation between variables.</li> <li>Description of how the geological interpretation was used to control the Mineral 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>	Minimal grade cutting was applied to the elements with more skewed grade distributions, namely Cu, Zn, Pb, Au, Ag and As. Top-cuts were based on the global 99.95 <sup>th</sup> percentile, but varied by domain as appropriate.  Samples were composited to nominal 1.0m intervals within each lode for data analysis and resource estimation.  A three-pass search strategy was used for estimation:  1. 4x30x30m search, 16-32 samples, minimum 4 octants informed 2. 8x60x60m search, 16-32 samples, minimum 4 octants informed 3. 16x120x120m search, 8-32 samples, minimum 4 octants informed Each lode was estimated separately, and dynamic interpolation was implemented, with the orientation of the search ellipsoid and variogram model varying locally based on the mid-point surface of each lode. The higher grade Pb+Zn sub-zones within Main lens were also estimated separately.  The maximum extrapolation distances is difficult to quantify because of the requirement for 4 octants to be informed; this means that at least 2 holes must be used, so the maximum extrapolation distance will be somewhat less than the maximum search radii. Maximum extrapolation distance is around 100m  Due to the low number of samples in the oxide zones (complete and partial), a methodology was developed to factor the grades from adjacent zones in the absence of local data. This factoring was based on the relative depletion/enrichment ratios between the zones for each element.  The resource model was depleted using the wireframe model of historical underground mining voids. It is assumed that separate copper and bulk metal concentrates will be produced, with Ag recovered as a by-product. All elements have been estimated independently for each domain.
		A few potential deleterious elements have also been estimated, namely As and S.

Criteria	JORC Code explanation	Commentary
		Density was estimated directly into the model from the drill hole samples, using a similar methodology to the other elements.
		The resource model block size is 2x15x15. The drill hole spacing is highly variable but the nominal drill hole spacing is approximately 30x60 in the plane of mineralisation. So, the block size is one half to one quarter the hole spacing, which is considered appropriate.
		The Mineral Resource estimate is reported within minable shapes. The minimum mineable shape size is 5m long, 25m high and 3m wide, which is the effective minimum selective mining unit.
		The general strike direction of mineralisation is 330°, so the data and block model were rotated 30° clockwise for estimation to align the blocks with the strike of the deposit. The final model was then rotated back to real space.
		No assumptions were made regarding the correlation of variables during estimation as each element is estimated independently. Some elements do show moderate to strong correlation in the drill hole samples, and the similarity in variogram models more or less guarantees that this correlation is preserved in the estimates.
		The geological interpretation controls the Mineral Resource estimate through the use of total sulphide envelopes defining each lode, which were used as hard boundaries during estimation.
		The model was validated in a number of ways:
		Visual comparison of block and drill hole grades,
		Statistical analysis,
		Examination of grade-tonnage data, and
		Comparison with the previous model.
		All the validation checks suggest that the grade estimates are reasonable when compared to the composite grades, allowing for data clustering. No recent mining has occurred at Nymagee, so no production data is available.
		On an equivalent cut-off grade basis, the model is quite similar to the previous version.
Moisture	<ul> <li>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</li> </ul>	Tonnages are estimated on a dry weight basis. Moisture content has been determined for some of the density samples, by comparing sample weights before and after oven drying.

Criteria	JORC Code explanation	Commentary			
Cut-off parameters	The basis of the adopted cut-off grade(s) or quality parameters applied.	polymetallic mir combination of t for a bulk metal and Ag as displa a block-by-block A NSR cut-off of to have reasona	neralisation in ord two net smelter r concentrate. The yed below. The fo basis. AUD\$120 was so ble prospects of	er Return (NSR) value, which is used der to simplify reporting. The cut-off eturn (NSR) formulas, one for a coppese formulas are based on metal pricormula with the higher value is taker elected by Aurelia. Material at this cuextraction in the medium term.	grade for Nymagee is a per concentrate and the other es and recoveries for Cu, Zn, Pb n as the preferred NSR value on ut-off is considered by Aurelia
		Commodity	Unit	Mineral Resource 2023	l .
		Silver	US\$/oz	20.45	
		Lead	US\$/t	2,080	_
		Zinc	US\$/t	3,100	_
		Copper	US\$/t	7,520	<del>-</del>
		FX	\$US/\$A	0.73	<del>-</del>
		Silver	A\$/oz	28	<del>-</del>
		Lead	A\$/t	2,849	<del>-</del>
		Zinc	A\$/t	4,247	<del>-</del>
		Copper	A\$/t	10,301	<del>-</del> -
Mining factors or assumptions	Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It may not always be possible to make assumptions regarding mining methods and parameters when estimating Mineral Resources. Where no assumptions have been made, this should be reported.	Deswik's Stope S mining width of The reported Mi	Shape Optimiser. 3m. neral Resource in	ee has been restricted to minable sh The minimum minable shape size is nclude all estimated blocks that lie w n. Additional external mining dilution	5m long, 25m high, with a rithin the minable shapes and

Criteria	JORC Code explanation	Commentary
Metallurgical factors or assumptions	The basis for assumptions or predictions regarding metallurgical amenability. It may not always be possible to make assumptions regarding metallurgical treatment processes and parameters when reporting Mineral Resources. Where no assumptions have been made, this should be reported.	The NSR calculations assumes material from Nymagee would be treated through the Hera or Peak mills. The recovery for each metal is based on available metallurgical testwork and knowledge gained through treatment of the similar ores at Hera and Peak.
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</li> </ul>	It assumed that process residue disposal will continue to take place in existing facilities at Hera Mine, which are currently licensed for this purpose.  Waste rock will continue to be utilised at Nymagee as stope fill. Any remaining waste will be added to surface dumps.
	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.	All waste and process residue disposal will continue to be done in a responsible manner and in accordance with the mining license conditions.
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</li> </ul>	Dry bulk density is measured on-site using an immersion method (Archimedes principle) on selected core intervals for full 1.0 m assay samples. The Nymagee database contains 2,047 measurements from 85 drill holes. The frequency of measurements is quite erratic, samples are concentrated in mineralised zones but there is no regular pattern; sometimes the entire zone, sometimes irregular groups of samples and occasionally one in four or five samples were tested. The density measurements are completely representative of the assay intervals tested.
	been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.	Samples are weighed before and after oven drying overnight at 110°C to determine dry weight and moisture content.  Measured density values show that the density of the rock at Hera varies significantly. The density variations are largely due to sulphide mineralisation which has the effect of increasing density.

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	<ul> <li>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</li> </ul>	Aurelia estimated the density data for drillhole intervals that had not been subjected to density measurements by calculating the normative mineralogy of each sample, and then species weighting the density estimation. This approach takes into account the density differences between galena, sphalerite, chalcopyrite, pyrrhotite and gangue and compares well with the actual measurements.
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, 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>	The MRE classification is based on drilling density, estimation passes and confidence in the geological interpretation.  The classification scheme is based on the estimation search pass for copper, where pass 1&2 = Indicated and pass 3 = Inferred.  The estimation was constrained within the SO designs to report the MRE by selecting mineralisation that may have reasonable prospects for eventual economic extraction.  This scheme is considered to take appropriate account of all relevant factors, including the relative confidence in tonnage and grade estimates, confidence in the continuity of geology and metal values, and the quality, quantity, and distribution of the data.  The Competent Person considers this classification approach appropriate for the Nymagee deposit.
Audits or reviews	The results of any audits or reviews of Mineral Resource estimates.	This Mineral Resource estimate has not been externally reviewed.  The modelling process is based on the modelling process implemented by H&S Consultants.
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 Mineral 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> </ul>	The relative accuracy and confidence level in the Mineral Resource estimates are considered to be in line with the generally accepted accuracy and confidence of the nominated JORC Mineral Resource categories. This has been determined on a qualitative, rather than quantitative, basis, and is based on experience with a number of similar deposits in the Cobar region. The main factor that affects the relative accuracy and confidence of the Mineral Resource estimate is sample data density due to the high variability in gold grades.  The estimates are local, in the sense that they are localised to model blocks of a size considered appropriate for local grade estimation. The tonnages relevant to technical and economic analysis are those classified as Measured and Indicated Mineral Resources.  No production data is available for the small part of the deposit that was mined historically.

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	<ul> <li>The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.</li> <li>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</li> </ul>	