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MINERAL RESOURCE AND ORE RESERVE STATEMENT – JUNE 2019

Group

- **Increase in Group Mineral Resources by 21% to 17.7Mt**
- **Increase to Group Ore Reserves by 19% to 4.4Mt**

Hera

- **Upgrade in Mineral Resource with 94% in Measured and Indicated classification**
- **Hera Ore Reserve increased by 460kt after mining depletion**

Peak

- **Maiden resource at Kairos (Peak Deeps) of 1Mt high grade Mineral Resource that is open at depth**
- **Lead and zinc dominant Mineral Resources increased by 51%**
- **Mineral Resource upside from infill and extensional drilling at Chronos and Kairos completed subsequent to 2019 Mineral Resource Estimate; an update for these areas will be reported in FY 2020**
- **Peak Ore Reserve increased by 259kt after mining depletion**

SUMMARY

Aurelia Metals Limited ("Aurelia" or the "Company") is pleased to report an update to the Mineral Resource Estimate and Ore Reserves Estimate. This summary outlines Mineral Resource and Ore Reserves for its 100% owned Peak Gold Mines, Hera Mine and 95% owned Nymagee Project in NSW. This summary also outlines Production Targets for Peak Gold Mines and Hera Mine. The Mineral Resource Estimate and Ore Reserve Estimate have been completed in accordance with the guidelines of the JORC Code (2012 Edition). Estimates are reported as at 30 June 2019. The following tables summarise Group Mineral Resource, Ore Reserves and Production Targets.

***Table 1**. Aurelia Group Mineral Resource Estimate as at 30 June 2019*

Class	Tonnes (kt)	NSR (A$/t)	Au (g/t)	Cu (%)	Pb (%)	Zn (%)	Ag (g/t)
Measured	2,896	215	1.8	0.9	1.3	1.9	15
Indicated	9,769	217	1.3	1.3	1.3	1.6	15
Inferred	5,055	207	1.3	1.6	0.6	0.9	8
Total Resources	**17,720**	**214**	**1.4**	**1.3**	**1.1**	**1.5**	**13**

Note: The Aurelia Group Mineral Resource Estimate utilises A$120/tonne 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 metal recoveries. Tonnage estimates have been rounded to nearest 1,000 tonnes.

***Table 2**. Aurelia Group Ore Reserve Estimate as at 30 June 2019*

Class	Tonnes (kt)	NSR (A$/t)	Au (g/t)	Cu (%)	Pb (%)	Zn (%)	Ag (g/t)
Proved	376	181	1.2	1.7	0.3	0.6	11
Probable	4,034	227	2.0	0.6	2.4	3.0	23
Total Reserves	**4,410**	**223**	**1.9**	**0.7**	**2.2**	**2.8**	**22**

Note: When comparing Mineral Resources to Ore Reserves, it should be noted that Ore Reserves are estimated using lower metals price assumptions and higher NSR cut-off values. The Ore Reserve Estimate utilises an A$150/tonne NSR cut-off for Peak, Perseverance, Great Cobar and an A$130/tonne NSR for Chesney, New Cobar, Jubilee and the Hera Mine. Metal price assumptions are contained in the body of this report. Tonnage estimates have been rounded to nearest 1,000 tonnes.

MINERAL RESOURCE ESTIMATES

Table 3. *Peak Gold Mines Mineral Resource Estimate as at 30 June 2019*

Class	Tonnes (kt)	NSR (A$/t)	Au (g/t)	Cu (%)	Pb (%)	Zn (%)	Ag (g/t)
Measured	1,919	204	1.7	1.3	0.6	0.7	11
Indicated	7,402	219	1.6	1.3	1.1	1.3	10
Inferred	4,889	207	1.3	1.6	0.5	0.8	7
Total	**14,210**	**213**	**1.5**	**1.4**	**0.9**	**1.1**	**9**

Note: The Peak Gold Mines Mineral Resource Estimate utilises A$120/tonne NSR cut-off mineable shapes that include internal dilution. Tonnage estimates have been rounded to nearest 1,000 tonnes.

Table 4. *Hera Mine Mineral Resource Estimate as at 30 June 2019*

Class	Tonnes (kt)	NSR (A$/t)	Au (g/t)	Pb (%)	Zn (%)	Ag (g/t)
Measured	977	238	2.2	2.8	4.2	23
Indicated	957	216	1.4	2.9	4.4	44
Inferred	126	215	2.3	1.6	2.8	39
Total	**2,061**	**227**	**1.8**	**2.8**	**4.2**	**34**

Note: The Hera Mine Mineral Resource Estimate utilises A$120/tonne NSR cut-off mineable shapes that include internal dilution. Tonnage estimates have been rounded to nearest 1,000 tonnes.

Table 5. *Nymagee Project Mineral Resource Estimate as at 30 June 2019*

Class	Tonnes (kt)	NSR (A$/t)	Cu (%)	Pb (%)	Zn (%)	Ag (g/t)
Indicated	1,410	207	2.3	0.8	1.5	18
Inferred	40	131	1.6	0.2	0.5	10
Total	**1,450**	**205**	**2.2**	**0.8**	**1.4**	**18**

Note: The Nymagee Project Mineral Resource Estimate utilises A$120/tonne NSR cut-off mineable shapes that include internal dilution. Tonnage estimates have been rounded to nearest 1,000 tonnes.

ORE RESERVE ESTIMATES

The Ore Reserve Estimate is derived from only the Measured and Indicated categories within the Mineral Resource Estimate.

Table 6. *Peak Gold Mines Ore Reserve Estimate as at 30 June 2019*

Class	Tonnes (kt)	NSR (A$/t)	Au (g/t)	Cu (%)	Pb (%)	Zn (%)	Ag (g/t)
Proved	376	181	1.2	1.7	0.3	0.6	11
Probable	2,458	232	2.1	1.0	2.0	2.1	16
Total	**2,834**	**225**	**2.0**	**1.1**	**1.8**	**1.9**	**15**

Note: The Peak Gold Mines Ore Reserve Estimate utilises an A$150/tonne NSR cut-off for Peak, Perseverance, Great Cobar and an A$130/tonne NSR for Chesney, New Cobar and Jubilee. Tonnage estimates have been rounded to the nearest 1,000 tonnes.

Table 7. *Hera Mine Ore Reserve Estimate as at 30 June 2019*

Class	Tonnes (Kt)	NSR (A$/t)	Au (g/t)	Pb (%)	Zn (%)	Ag (g/t)
Proved	0	0	0	0	0	0
Probable	1,577	218	1.9	3.0	4.5	34
Total	**1,577**	**218**	**1.9**	**3.0**	**4.5**	**34**

Note: The Hera Mine Ore Reserve Estimate utilises an A$130/tonne NSR cut-off. Tonnage estimates have been rounded to the nearest 1,000 tonnes.

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PRODUCTION TARGETS

A Production Target is an estimation of potentially mineable tonnes based on applying mining modifying factors. Assumptions used are detailed under Ore Reserves section of this report, including mining cost assumptions, metal prices, metallurgical recoveries and other inputs used in the NSR calculation for the purpose of Ore Reserve estimation against Measured, Indicated and Inferred Mineral Resources. In preparation of the Production Target, the Company has been guided by ASX Listing rules Chapter 5.16-5.19.

The following cautionary statement in relation to confidence in the estimation of Production Targets, which incorporate inferred resources:

> *There is a low level of geological confidence associated with Inferred Mineral Resources and there is no certainty that further exploration work will result in the determination of Indicated Mineral Resources or that the Production Target itself will be realised. The stated Production Target is based on the Company's current expectations of future results and events, and should not be solely relied upon by investors when making investment decisions.*

Peak

At Peak Gold Mines, a Production Target of 3,989kt (Table 8) has been estimated from the 2019 Mineral Resource Estimate of 14,210Kt. This represents a conversion of 28% of the Mineral Resource to the Production Target. The Ore Reserve proportion (based on Measured and Indicated Mineral Resources) of the Production Target is 71%, with the balance being converted from the Inferred Mineral Resource. It should be noted that while the total Great Cobar Indicated and Inferred Mineral Resource of 5,327kt at 0.6 g/t Au, 2.1% Cu, 0.1 % Pb, 0.4% Zn and 6 g/t Ag is not included in the Production target at this time, further work planned to be undertaken this year is targeted to allow inclusion of a significant component at the next major Ore Reserve and Mineral Resource update.

***Table 8**. Peak Gold Mines Production Target at 30 June 2019*

Class	Tonnes (kt)	NSR (A$/t)	Au (g/t)	Cu (%)	Pb (%)	Zn (%)	Ag (g/t)
Ore Reserve portion of Production Target (Cu/Au/Pb)	2,012	221	2.5	1.4	0.5	0.3	10
Ore Reserve portion of Production Target (Au/Pb/Zn)	822	235	0.7	0.2	5.1	5.7	26
Inferred portion of Production Target (Cu/Au/Pb)	596	247	3.3	0.9	1.4	1.1	11
Inferred portion of Production Target (Au/Pb/Zn)	559	345	3.8	0.4	3.9	5.3	14
Production Target	**3,989**	**245**	**2.4**	**0.9**	**2.0**	**2.2**	**14**

Note: The Peak Gold Mines Production Target Estimate utilises an A$150/tonne NSR cut-off for mine areas Peak, Perseverance and an A$130/tonne NSR for mine areas Chesney, New Cobar and Jubilee. Tonnage estimates have been rounded to the nearest 1,000 tonnes.

Hera

At Hera Mine, a Production Target of 1,724Kt (Table 9) has been estimated from the 2019 Mineral Resource Estimate of 2,061Kt. This represents a conversion of 84% of the Mineral Resource to the Production Target. The Ore Reserve proportion (based on Measured and Indicated Resources) of the Production Target is 91%, with the balance being converted from the Inferred Mineral Resource.

***Table 9**. Hera Production Target as at 30 June 2019 with NSR $130/t Cut-Off*

Class	Tonnes (kt)	NSR (A$/t)	Au (g/t)	Pb (%)	Zn (%)	Ag (g/t)
Ore Reserve portion of Production Target	1,577	218	1.9	3.0	4.5	34
Inferred portion of Production Target	147	193	1.8	1.9	3.5	48
Production Target	**1,724**	**216**	**1.9**	**2.9**	**4.4**	**35**

Note: The Hera Mine Production Target utilises an A$130/tonne NSR cut-off. Tonnage estimates have been rounded to the nearest 1,000 tonnes.

The Aurelia Group Mineral Resource and Ore Reserve summary is supported by detailed Mineral Resource and Ore Reserve Statements contained in this document. The relevant JORC Tables are provided as an appendix to this document.

COMPETENT PERSONS STATEMENTS

Hera Mineral Resource Estimate

Compilation of the drilling database, assay validation and geological interpretations for the Mineral Resource update were completed by Adam McKinnon, BSc (Hons), PhD, MAusIMM, who is a full time employee of Aurelia Metals Limited. The Mineral Resource estimate has been prepared by Rupert Osborn, BSc, MSc, MAIG, who is an employee of H&S Consultants Pty Ltd. Both Dr McKinnon and Mr Osborn have 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'. Dr McKinnon and Mr Osborn consent to the inclusion in this report of the matters based on their information in the form and context in which it appears.

Hera Ore Reserve Estimate

The Ore Reserve Estimate was compiled by Givemore Kamupita, Senior Mining Engineer at Hera Mine. Mr Kamupita has worked at polymetallic mines including Olympic Dam. He has also worked at KCGM and several mines in Africa. Mr Kamupita is a mining engineer with a BE Mining Eng. obtained at the University of Newcastle Upon Tyne (UK), MSc Mining Engineering (UNSW), Master of Business Administration (UNISA) and is completing a Masters in Geostatistics with Adelaide University. Mr Kamupita has worked in underground hard rock mines since 1984 with 35 years' experience.

Mr Kamupita has sufficient experience which is relevant to the style of mineralisation, type of deposit and mining method under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Kamupita is a member of the AusIMM with whom he recently completed a Professional Certificate JORC Code Reporting course and also holds both NSW and WA Underground Mining Engineering Manager Certificates.

Anthony Allman, from ANTCIA Consulting Pty Ltd, has assisted Hera Mine in the preparation of the stope designs, mine designs, sensitivity analysis and scheduling of the 2019 Hera Mine Ore Reserve Estimate. Mr Allman is a mining engineer with a BE Min Eng. obtained at the University of NSW and has worked in underground hard rock mines for nearly 30 years. Mr Allman is a Chartered Professional and member of the AusIMM. The Ore Reserve Estimate was produced by Mr Kamupita, who is site based, with assistance from Mr Allman.

Peak Mineral Resource Estimate

Compilation of the drilling database, assay validation and geological interpretations for the Mineral Resource update were completed by Chris Powell, BSc, MAusIMM, who is a full time employee of Aurelia Metals Limited. The Mineral Resource estimate has been prepared by Chris Powell and Arnold van der Heyden, who is the Director of H & S Consultants Pty Ltd. Both Mr Powell and Mr van der Heyden have 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 Powell and Mr Van der Heyden consent to the inclusion in this report of the matters based on their information in the form and context in which it appears.

Peak Ore Reserve Estimate

The Ore Reserves were compiled by Brett Fowler, who is a full time employee of Peak Gold Mines Pty Ltd. Mr Fowler has over +30 years' experience in both underground hard rock and surface mines since 1983 and has worked at underground operations including Nifty Copper Mine, Otter Juan, Coronet, Miitel and Mariners Nickel mines and Higginsville Gold Mine and Kalgoorlie Consolidated Gold Mine in Western Australia. Mr Fowler is a dual qualified mining engineer and mining geologist with a Graduate Diploma (Mining) and a Bachelor of Applied Science (Mining Geology) obtained at Curtin University (WA School of Mines) and also holds a Graduate Diploma in Computing (Murdoch University) and Masters of Business Administration (Curtin University).

Mr Fowler has sufficient experience which is relevant to the style of mineralisation, type of deposit and mining method under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Fowler is a member of the AusIMM and also holds a WA First Class Mine Managers Certificate of Competency and a NSW Practising Certificate Engineering Manager Underground Mines.

Anthony Allman, from ANTCIA Consulting Pty Ltd, has assisted Peak Gold Mines in the preparation of the stope designs, mine designs, sensitivity analysis and scheduling of the 2019 Peak Gold Mines Ore Reserve Estimate. Mr Allman is a mining engineer with a BE Min Eng. obtained at the University of NSW and has worked in underground hard rock mines for nearly 30 years. Mr Allman is a Chartered Professional and member of the AusIMM. The Ore Reserve Estimate was produced by Mr Fowler, who is site based, with assistance from Mr Allman.

Nymagee Mineral Resource Estimate

Compilation of the drilling database, assay validation and geological interpretations for the Mineral Resource update were completed by Adam McKinnon, BSc (Hons), PhD, MAusIMM, who is a full time employee of Aurelia Metals Limited. The Mineral Resource estimate has been prepared by Arnold van der Heyden, BSc, MAusIMM (CPGeo), MAIG, who is an employee of H&S Consultants Pty Ltd. Both Dr McKinnon and Mr van der Heyden have 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'. Dr McKinnon and Mr van der Heyden consent 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 HERA MINERAL RESOURCES AND ORE RESERVES STATEMENT

1.1 SUMMARY

Aurelia Metals Limited ("Aurelia" or the "Company") is pleased to report an update to the Mineral Resource Estimate and Ore Reserves Estimate for its 100% owned Hera gold-lead-zinc-silver project. The updated Mineral Resource and Ore Reserve Estimates include results from infill and extensional drilling and are inclusive of mining depletion during the period. The Mineral Resource Estimate and Ore Reserve Estimate have been completed in accordance with the guidelines of the JORC Code (2012 Edition) and are reported as at 30 June 2019.

Table 10. *Hera Mineral Resource Estimate as at 30 June 2019*

Class	Tonnes (kt)	NSR (A$/t)	Au (g/t)	Pb (%)	Zn (%)	Ag (g/t)
Measured	977	238	2.2	2.8	4.2	23
Indicated	957	216	1.4	2.9	4.4	44
Inferred	126	215	2.3	1.6	2.8	39
Total Mineral Resource	**2,061**	**227**	**1.8**	**2.8**	**4.2**	**34**

Note: The Hera Mineral Resource Estimate utilises A$120/tonne 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 mill recoveries. Tonnage estimates have been rounded to nearest 1,000 tonnes.

The 2019 Hera Ore Reserve Estimate has been derived from the Hera Mineral Resource Estimate using ore classified in the Measured and Indicated classifications only.

Table 11. *Hera Ore Reserve Estimate as at 30 June 2019*

Class	Geological lenses	Tonnes (kt)	NSR (A$/t)	Au (g/t)	Pb (%)	Zn (%)	Ag (g/t)
Probable	Far West	498	212	1.9	2.9	4.8	18
	Far West Lower	229	200	2.3	2.3	3.4	16
	Hays North	26	175	2.4	1.7	2.4	6
	Main North	68	171	2.3	1.5	2.7	7
	North Pod	756	234	1.7	3.4	4.8	54
Total Probable Ore Reserve		**1,577**	**218**	**1.9**	**3.0**	**4.5**	**34**

Note: The Hera Ore Reserve Estimate utilises an A$130/tonne NSR cut-off. Tonnage estimates have been rounded to the nearest 1,000 tonnes.

The 2019 Ore Reserve Estimate represents a 41% increase in tonnage against the previous Ore Reserve including mining depletion in the reporting period. The updated Ore Reserve Estimate represents a 13% decrease in contained gold, a 47% increase in contained lead, a 45% increase in contained zinc and a 112% increase in contained silver. The increase in contained lead, zinc and silver in the Ore Reserve has resulted from conversion of the Upper North Pod Mineral Resource from Inferred to Indicated.

1.2 INTRODUCTION

An updated Mineral Resource Estimate has been completed for the Hera Project, located five kilometres south of Nymagee, New South Wales. The updated total Measured, Indicated and Inferred Mineral Resources, based on an A$120/t Net Smelter Return (NSR) cut-off, are summarised in Table 10. The stated Mineral Resources include all blocks within the volumes produced by Deswik's Stope Shape Optimiser (SSO) but does not include material that has been mined or sterilised by nearby mining. The reported estimates include an internal dilution component (see below for details). Data compilation and validation for the Mineral Resource Estimate has been completed by Adam McKinnon, MAusIMM, Group Manager – Geology for Aurelia. The Mineral Resource Estimate has been prepared by Rupert Osborn, MAIG, of H&S Consultants.

The updated Ore Reserve Estimate at Hera, based on an A$130/t NSR cut-off, is summarised in Table 11. The stated Ore Reserve is based only on Measured and Indicated Mineral Resources and has been prepared by Givemore

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Kamupita, MAusIMM, Senior Mining Engineer at the Hera Mine. Anthony Allman, from ANTCIA Consulting Pty Ltd, has assisted in the preparation of the stope designs, mine designs, sensitivity analysis and scheduling of the 2019 Ore Reserve Estimate. Mr Allman is a mining engineer, Chartered Professional and member of the AusIMM.

1.3 MINERAL RESOURCE ESTIMATE

The Hera deposit is structurally controlled, closely associated with en-echelon shear zones. Mineralisation is relatively narrow with a NNW-SSE orientation and is hosted in altered metasediments. The economic minerals are contained within quartz stockworks, breccias and skarns. The deposit is polymetallic in nature with variable gold, lead, zinc, silver and copper.

Mineralisation is defined by underground and surface diamond drilling. Samples are taken as either whole or half core and are sampled on nominal one metre intervals. All samples are assayed in certified commercial laboratories. Samples are routinely assayed for Pb, Zn, Ag, Cu, S, Fe, Sb and As by ICP-AES. Gold is assayed using a 30g fire assay. Aurelia has maintained a detailed QA/QC system during its sampling and assaying processes.

Aurelia provided H&S Consultants with data including the drillhole database, a series of 12 wireframed solids representing mineralised volumes over $2/t NSR and a series of wireframed solids representing mined stopes and development. Samples were composited to one metre intervals within each zone with a minimum composite length of 0.5m. In order to better reflect the contained metal within each interval, estimates were carried out on density-weighted values.

Variography was carried out within eight mineralised domains including Main North, Main South, Hays South, Hays North, Far West, North Pod, East South and Western Pb-Zn. Variography for each element showed relatively high continuity along-strike and down dip but poor continuity in the orientation perpendicular to these. Five metre north-south and vertical block dimensions were chosen to reflect drill hole spacing and to provide definition needed for mine planning. Sub-blocking with minimum dimensions of 1m x 2.5m x 2.5m was permitted.

Ordinary Kriging (OK) was used to estimate concentrations of Pb, Zn, Ag, Cu, Fe, S, Sb and density. Multiple Indicator Kriging (MIK) was used to estimate gold and arsenic. Limited top-cutting was applied to density-weighted values of Au, Pb, Zn, Ag, Cu, and As. Further details on the Mineral Resource Estimate are contained in JORC Table 1 in the Appendix to this statement.

A net smelter return (NSR) value was applied to each block after estimation. The NSR is used to assign a dollar value to the polymetallic mineralisation. The NSR estimate (detailed under Ore Reserves) takes into account recoveries associated with each of the process streams. The estimate is also based on metal prices, exchange rates, freight, treatment charges, royalties and mill recoveries. Metal price parameters used in the NSR estimation are listed in Table 12. Metallurgical recoveries and concentrate grades are given in Table 13.

Table 12. *Metal price parameters used in the Hera Mineral Resource and Ore Reserve Estimates*

Commodity	Unit	Mineral Resources June 2018	Mineral Resources June 2019	Ore Reserves June 2018	Ore Reserves June 2019
Gold	US$/oz	1,400	1,400	1,220	1,188
Silver	US$/oz	18.80	18.80	17.00	16.10
Lead	US$/t	2,280	2,280	2,280	2,160
Zinc	US$/t	2,600	2,600	2,600	2,463
FX	AUD/USD	0.74	0.74	0.76	0.72
Gold	A$/oz	1,892	1,892	1,605	1,650
Silver	A$/oz	25.00	25.00	22.00	22.00
Lead	A$/t	3,081	3,081	3,000	3,000
Zinc	A$/t	3,514	3,514	3,421	3,421
Copper	A$/t	9,459	9,459	8,553	8,553

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Table 13. Process recoveries and concentrate grades used in the 2019 Hera NSR estimations

Parameter	2018 Recovery	2019 Recovery
Au Recovery - Gravity	60%	60%
Au Recovery - Leach	30%	30%
Ag Recovery - Dore	10%	10%
Ag Recovery - Concentrate	80%	80%
Pb Recovery - Concentrate	91%	91%
Zn Recovery - Concentrate	90%	90%
Pb + Zn Grade - Concentrate	55%	55%

Following Mineral Resource Estimation, a series of mineable shapes were produced by Deswik's Stope Shape Optimiser (SSO). The SSO shapes were used to constrain the reported Mineral Resource Estimate. The application of the smallest mineable unit (SMU) for the SSO shapes is similar to the process detailed in the Hera Resource and Reserve Estimate 2018. The reported Mineral Resource estimates include internal dilution.

The Mineral Resource Estimate is reported in Table 14. The small quantity of material that is inside the SSO shapes but outside the mineralised domain wireframes has been included in the 'Outside' category.

Table 14. Mineral Resource Estimate for Hera by classification

Class	Zone	Tonnes (kt)	NSR (A$/t)	Au (g/t)	Pb (%)	Zn (%)	Ag (g/t)
Measured	Main North	31	152	1.6	2.2	1.6	18
	Hays North	62	169	1.9	1.8	2.3	7
	Far West	423	232	1.7	3.1	5.2	19
	Far West Deeps	131	240	2.5	2.6	3.9	17
	North Pod	323	272	2.9	2.8	3.7	35
	Outside	7	4	0.0	0.1	0.1	1
Indicated	Main North	80	196	2.4	1.7	2.6	8
	Main South	17	210	2.5	2.1	2.8	9
	Hays North	4	202	2.8	1.8	1.8	7
	Far West	162	195	1.8	2.2	3.7	15
	Far West Deeps	140	187	2.0	2.0	2.7	14
	North Pod	538	240	1.0	3.7	5.6	68
	Outside	16	4	0.0	0.1	0.1	1
Inferred	Main North	11	273	3.8	1.7	2.7	8
	Main South	51	259	4.1	1.0	1.8	5
	North Pod	61	179	0.7	2.1	3.9	74
	Outside	3	5	0.0	0.1	0.1	2
Total		**2,061**	**227**	**1.8**	**2.8**	**4.2**	**34**

Classifications were predominately based on the search passes used to estimate the blocks. This nominally equates to a drill hole spacing of 15x15m for Measured, 30x30m for Indicated and 60x60m for Inferred. A data location accuracy factor was also used to inform block classifications. To ensure coherency in the Mineral Resource classification, some individual isolated Inferred shapes were upgraded to Indicated and isolated Indicated shapes were downgraded to Inferred. The classification of certain areas in Main South was downgraded due to poor reconciliation of adjacent mined stopes.

A long section of the Mineral Resource Estimate coloured by classification is shown in Figure 1.

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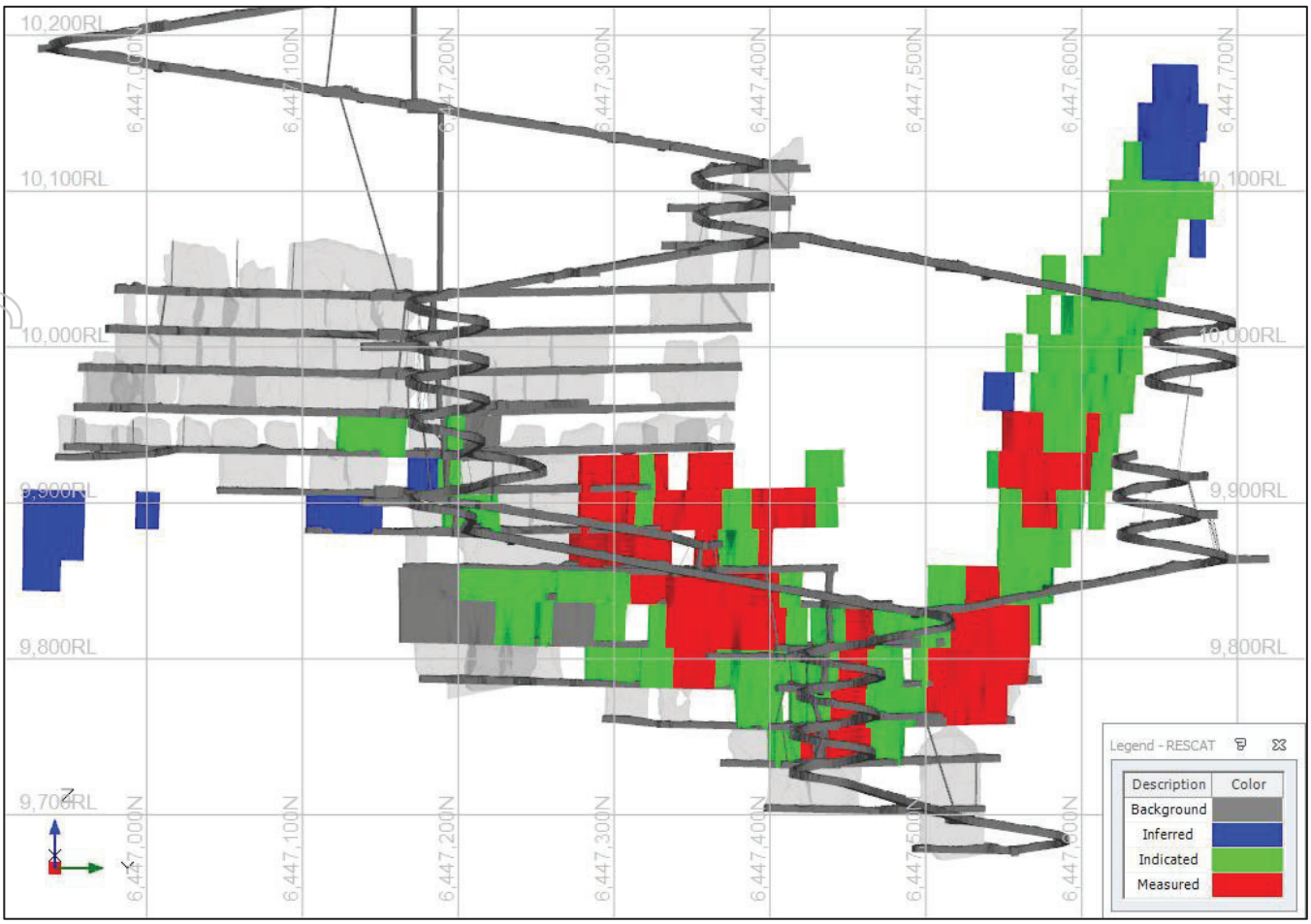

***Figure 1**. Long section showing the distribution of Measured (red), Indicated (green) and Inferred (blue) Mineral Resources.*

1.4 CHANGES FROM HERA MINERAL RESOURCE ESTIMATE 2018

The updated Mineral Resource Estimate represents a decrease in tonnage and contained metal over the previous estimate in 2018 (due largely to mining depletion) as outlined in Table 15.

A number of changes have occurred in the Mineral Resource Estimate including;

- **Increased confidence in classifications**: Proportion of Measured and Indicated has increased from 78% to 94% of the total Mineral Resource Estimate (Table 15).
- **North Pod:** An infill and extensional program targeting Upper North Pod was completed in this period. This program resulted in additional resource tonnages.
- **Ore depletion:** Ore tonnage has decreased by 18% (representing 486kt) as a result of mining depletion (Table 15).

***Table 15.** Ore tonnes and contained metal in Mineral Resource Estimate 2019 and variance to 2018 Mineral Resource Estimate*

Class	Ore Tonnes (kt)	Au (koz)	Pb (kt)	Zn (kt)	Ag (koz)
Measured	977	69	27	41	729
Indicated	957	43	28	42	1,348
Inferred	126	9	2	4	156
Total	**2,061**	**121**	**58**	**87**	**2,232**
Variance to 2018 Mineral Resource Estimate	-18%	-39%	-13%	-12%	+7%

1.5 ORE RESERVE ESTIMATE

The Ore Reserve Estimate is shown in Table 16 and by Mine Level in Table 17.

***Table 16**. Ore Reserve Estimate by zone as at 30 June 2019*

Class	Zone	Tonnes (kt)	NSR (A$/t)	Au (g/t)	Pb (%)	Zn (%)	Ag (g/t)
Probable	Far West	498	212	1.9	2.9	4.8	18
	Far West Lower	229	200	2.3	2.3	3.4	16
	Hays North	26	175	2.4	1.7	2.4	6
	Main North	68	171	2.3	1.5	2.7	7
	North Pod	756	234	1.7	3.4	4.8	54
Total Probable Reserve		**1,577**	**218**	**1.9**	**3.0**	**4.5**	**34**

Note: The Hera Ore Reserve Estimate utilises an A$130/tonne NSR cut-off. Tonnage estimates have been rounded to the nearest 1,000 tonnes.

***Table 17**. Ore Reserve Estimate by Mine Level as at 30 June 2019*

Mine Level	Tonnes (kt)	NSR (A$/t)	Au (g/t)	Pb (%)	Zn (%)	Ag (g/t)
210	5	250	0.4	3.8	7.0	123
235	42	248	0.3	3.9	7.4	113
260	39	265	0.2	4.7	8.5	100
285	55	237	0.2	4.8	7.1	80
310	60	218	0.5	4.6	6.0	67
335	61	205	0.8	3.9	5.1	57
360	62	205	0.7	3.8	5.3	64
385	63	219	1.7	3.2	4.4	51
410	47	258	2.8	3.3	3.8	43
435	170	169	1.4	2.5	3.8	21
460	140	204	1.8	2.8	4.2	24
485	181	221	2.3	2.7	4.1	19
510	268	221	2.6	2.2	3.9	17
535	195	221	2.4	2.6	4.1	21
560	127	263	3.1	3.0	4.1	25
585	62	196	2.1	2.6	3.5	17
Total	**1,577**	**218**	**1.9**	**3.0**	**4.5**	**34**

The Ore Reserve Estimate is based on the Measured and Indicated Mineral Resources. All 2019 Ore Reserves have been classified as Probable. The Competent Person considers this classification to be appropriate. A long section of the Ore Reserves is shown in Figure 2.

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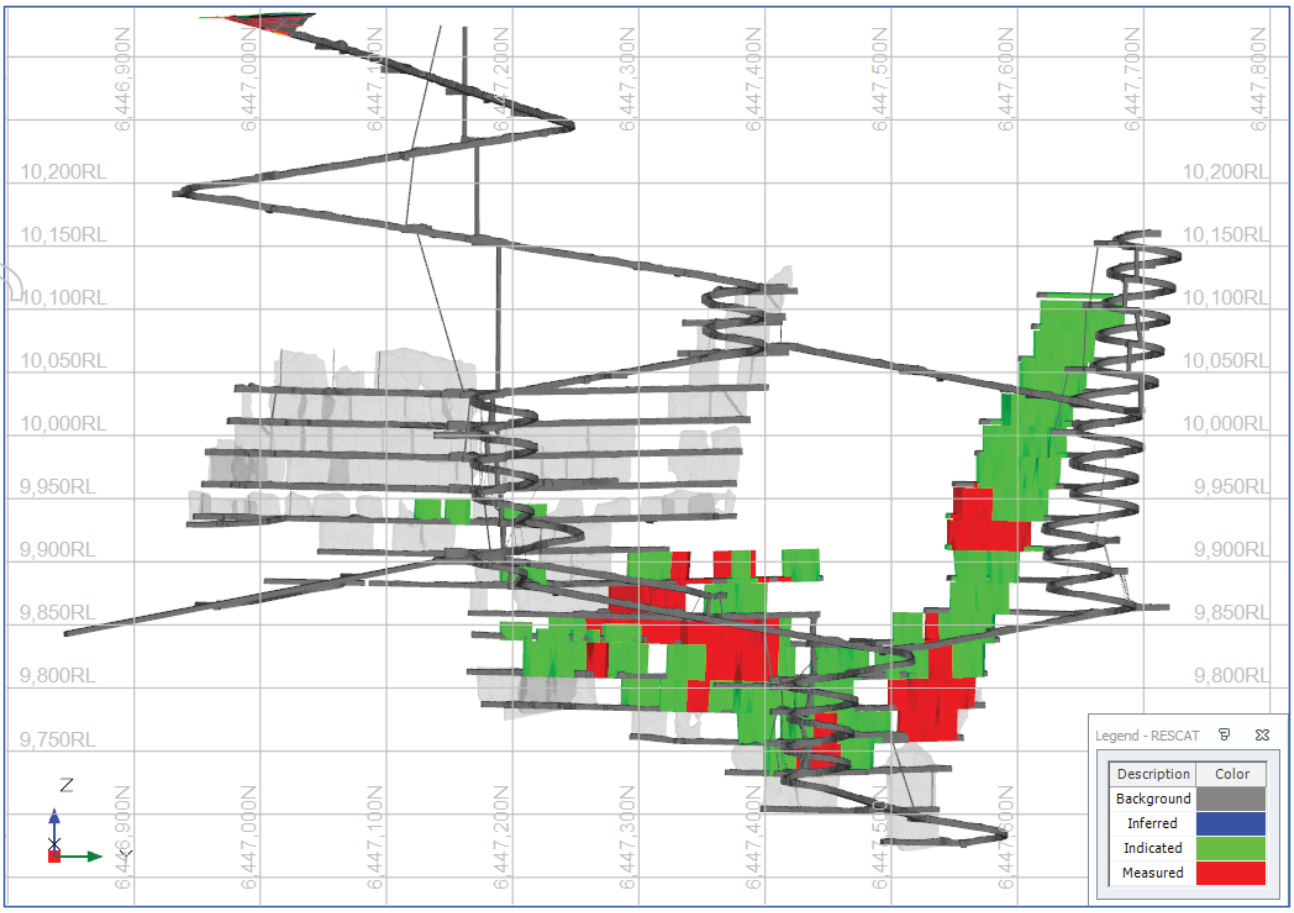

***Figure 2**. Long Section of 2019 Hera Mine Ore Reserve*

Mining Assumptions

The mining method assumed in the 2019 Ore Reserve Estimate is bench and fill stoping progressing bottom up, consistent with the current mining method at Hera. This mining method is detailed in the Hera Resource and Reserve Estimate 2018.

A 0.5 metre dilution assumption has been used for east and west walls in the 2019 Ore Reserve Estimate. This is supported by a review of data from the Cavity Monitoring System (CMS) over the past 12 months. Strategies have been established to minimise stoping dilution.

Additional strategies have also been put in place to minimise the risk of loss to fired ore. Under operating conditions at Hera, the expected ore loss is estimated to be approximately 5% or a recovery of ore of 95% for bench stopes. A 90% recovery factor has been applied to the crown pillar extraction, once the unrecoverable crown and rib pillars have been subtracted, due to the nature of the ore recovery method employed.

The stopes were created by applying SSO software in Deswik CAD to the 2019 Mineral Resource model which was completed by H&S Consultants under guidance by Adam McKinnon. This approach is consistent with the methodology detailed in the Hera Resource and Reserve Estimate 2018. Hanging wall and footwall dilution applied to the stopes represent approximately 169kt (11%) of low grade material in the Ore Reserve. A total of 15kt (1%) of rockfill floor and rockfill end wall dilution was included in the stopes as part of the recoverable stope tonnages created.

Net Smelter Return

As outlined under Mineral Resource Estimate, a NSR estimation is used to assign a dollar value to the polymetallic mineralisation. This estimation takes into account recoveries associated with each of the process streams. The NSR also takes account of metal prices, exchange rates, freight and treatment charges, royalties and mill recoveries.

The NSR is estimated using the following formula:

NSR = [metal grade x expected metallurgical recovery x expected payability x metal price] – [concentrate freight and treatment charges, penalties and royalties]

Metal price parameters used in the NSR estimation are listed in Table 13. Metal prices have been based on consensus forecasts. Metallurgical recoveries and concentrate grades are given in Table 14. Metal recoveries have been taken from operating experience and near term operating targets. The metallurgical recoveries for the Ore Reserve Estimate are consistent with existing performance at Hera Mine.

Cut-off Values

The Hera Mine uses three main cut-off values. The full breakeven cut-off value includes sustaining capital, all mine operating costs including development, drill and blast, bogging, haulage, filling, processing and site administration. The incremental stoping cut-off value includes drill, blast, loading, haulage (including backfill), processing and site administration. The development cut-off value includes processing and site administration. The costs were based on the average of the year to date FY2019 costs. The description of each of the cut-off values for stoping and development ore are described below in Table 18.

***Table 18**. Cut-off values used to estimate the Hera Ore Reserve*

Activity	Description	2018 Cut-off Value (A$/t)	2019 Cut-off Value (A$/t)
Full Cut-off Stopes	All stopes are evaluated to this full cut-off ensuring that the average diluted head grade of each stope pays for the full site costs on a unit basis.	$160 NSR	$130 NSR
Incremental Cut-off Stopes	All stopes are designed to this incremental cut-off ensuring that most ore pays for the full site costs excluding development.	$160 NSR	$120 NSR
Development	Send to ROM as ore, equal to Stope ore.	>$160 NSR	>$130 NSR
	If development is required regardless of grade, between these cut-off values, it will be stockpiled underground or a separate finger on the ROM pad for treatment at the end of the mine life.	$80 - $160 NSR	$80 - $130 NSR
	Treated as waste and sent to surface, an UG stockpile or directly into a stope void and used as back fill	<$80 NSR	<$80 NSR

1.6 PRODUCTION TARGET

A Production Target is an estimation of potentially mineable tonnes based on applying mining the modifying factors. Assumptions used are detailed under Ore Reserves section of this report, including mining cost assumptions, metal prices, metallurgical recoveries and other inputs used in the NSR calculation for the purpose of Ore Reserve estimation against Measured, Indicated and Inferred Mineral Resources. In preparation of the Production Target, the Company has been guided by ASX Listing rules Chapter 5.16-5.19.

A Production Target of 1,724kt has been estimated from the Mineral Resource Estimate 2019 of 2,061kt. A total of 1,577kt is contributed from Measured and Indicated Mineral Resources, representing 91% of ore tonnes in the Production Target (9% classified as Inferred Mineral Resources).

Investors are encouraged to read the following cautionary statement in respect to the Production Target at Hera Mine:

There is a low level of geological confidence associated with Inferred Mineral Resources and there is no certainty that further exploration work will result in the determination of Indicated Mineral Resources or that the Production Target itself will be realised.

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The tonnage conversion rate of Mineral Resources to the Production Target is 84%. The 2019 Life of Mine (LOM) design based on the Production Target with a NSR cut-off value of $130/t is shown in Table 19 and Figure 3.

***Table 19**. Hera Mine Production Target as at 30 June 2019 with NSR A$130/t cut-Off*

Class	Tonnes (kt)	NSR (A$/t)	Au (g/t)	Pb (%)	Zn (%)	Ag (g/t)
Ore Reserve portion of Production Target	1,577	218	1.9	3.0	4.5	34
Inferred portion of Production Target	147	193	1.8	1.9	3.5	48
Production Target	**1,724**	**216**	**1.9**	**2.9**	**4.4**	**35**

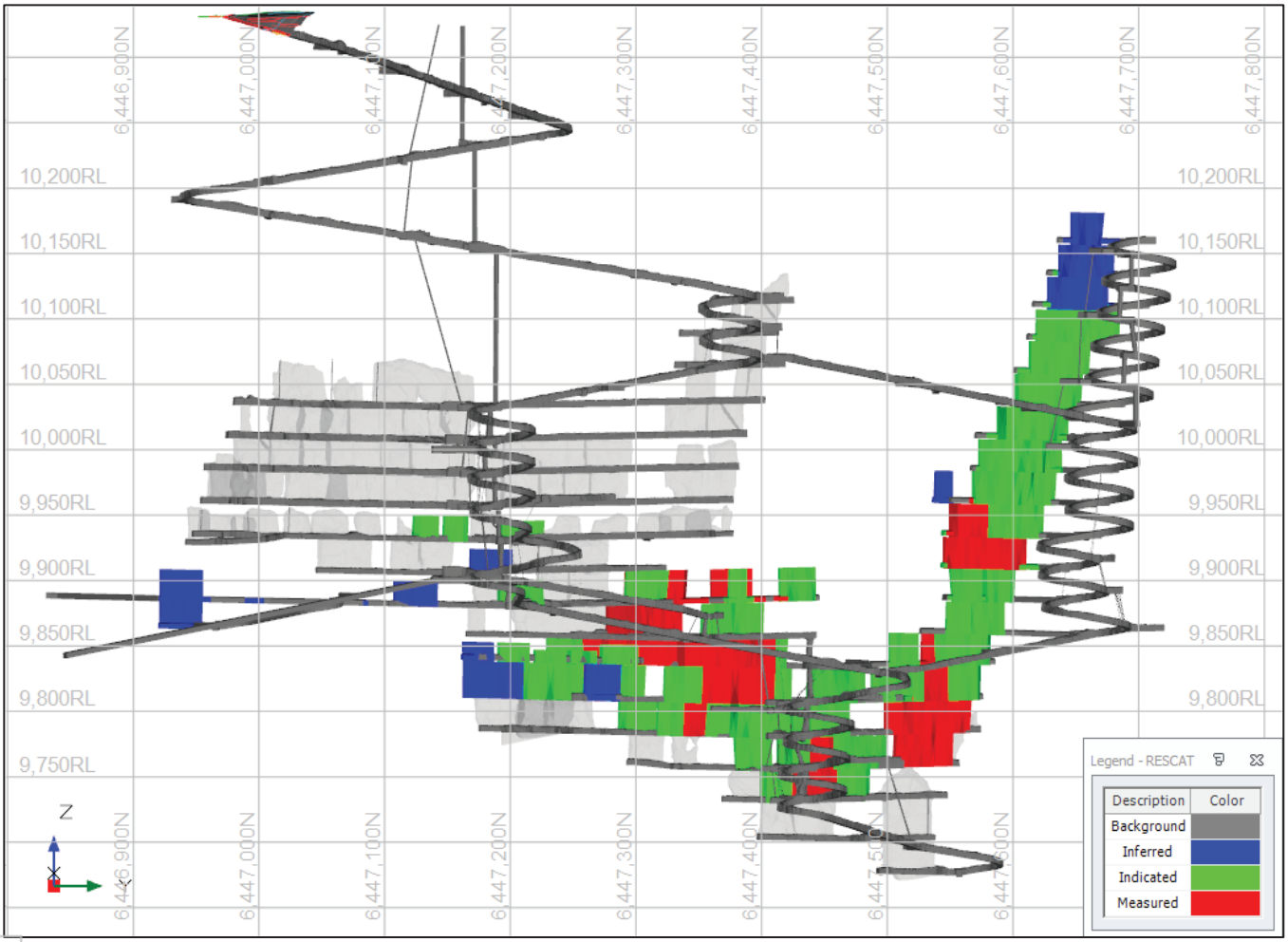

***Figure 3**. Life of Mine design based on the 2019 Production Target at $130/t NSR cut-off*

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1.7 CHANGES FROM HERA ORE RESERVE ESTIMATE 2018

A comparison was completed between the 2019 and 2018 Ore Reserves. Changes include:

- 486kt mined between the 2018 Ore Reserve statement and the 2019 Ore Reserve statement (depletion)
- AUD gold price assumption has increased by 3% (see Table 13)
- Negotiations with customers have reduced the bulk treatment charges from US$250 to US$190 per dry metric tonne for the 2019 Ore Reserves
- The 2019 Ore Reserve cut-off has reduced from A$160/t NSR to A$130/t NSR due to the increase in the processing throughput as well as the reduction in sustaining capital and operating development.

A comparison between the 2019 Ore Reserve, including mining depletion in the reporting period, and the 2018 Ore reserve shows the following changes:

- 41% increase in tonnage
- 13% decrease in contained gold ounces
- 112% increase in contained silver ounces
- 47% increase in contained lead tonnes
- 45% increase in contained zinc tonnes

The impacts of these changes are shown in the waterfall graphs below.

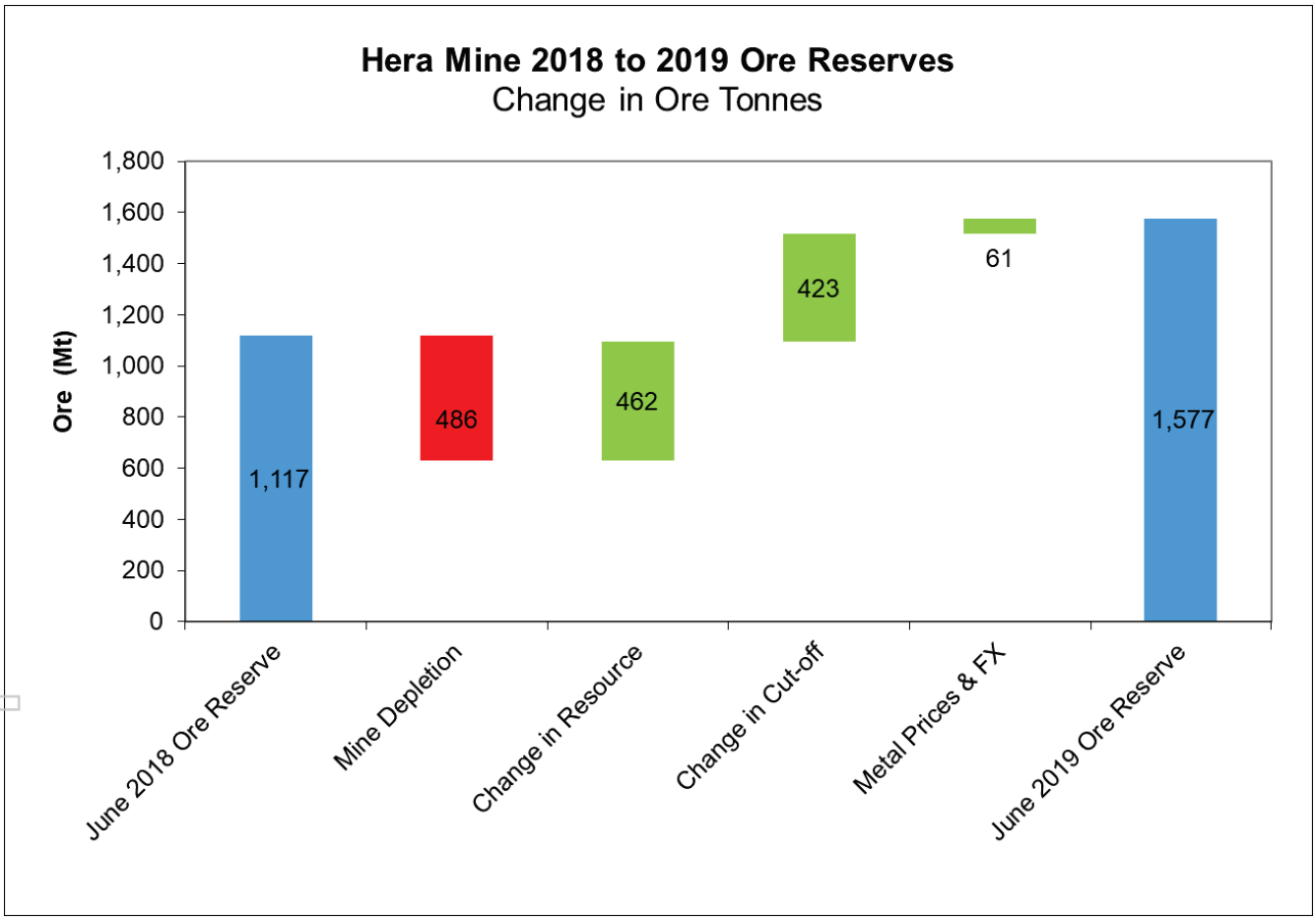

***Figure 4**. 2018 to 2019 Ore Reserves – change in ore tonnes*

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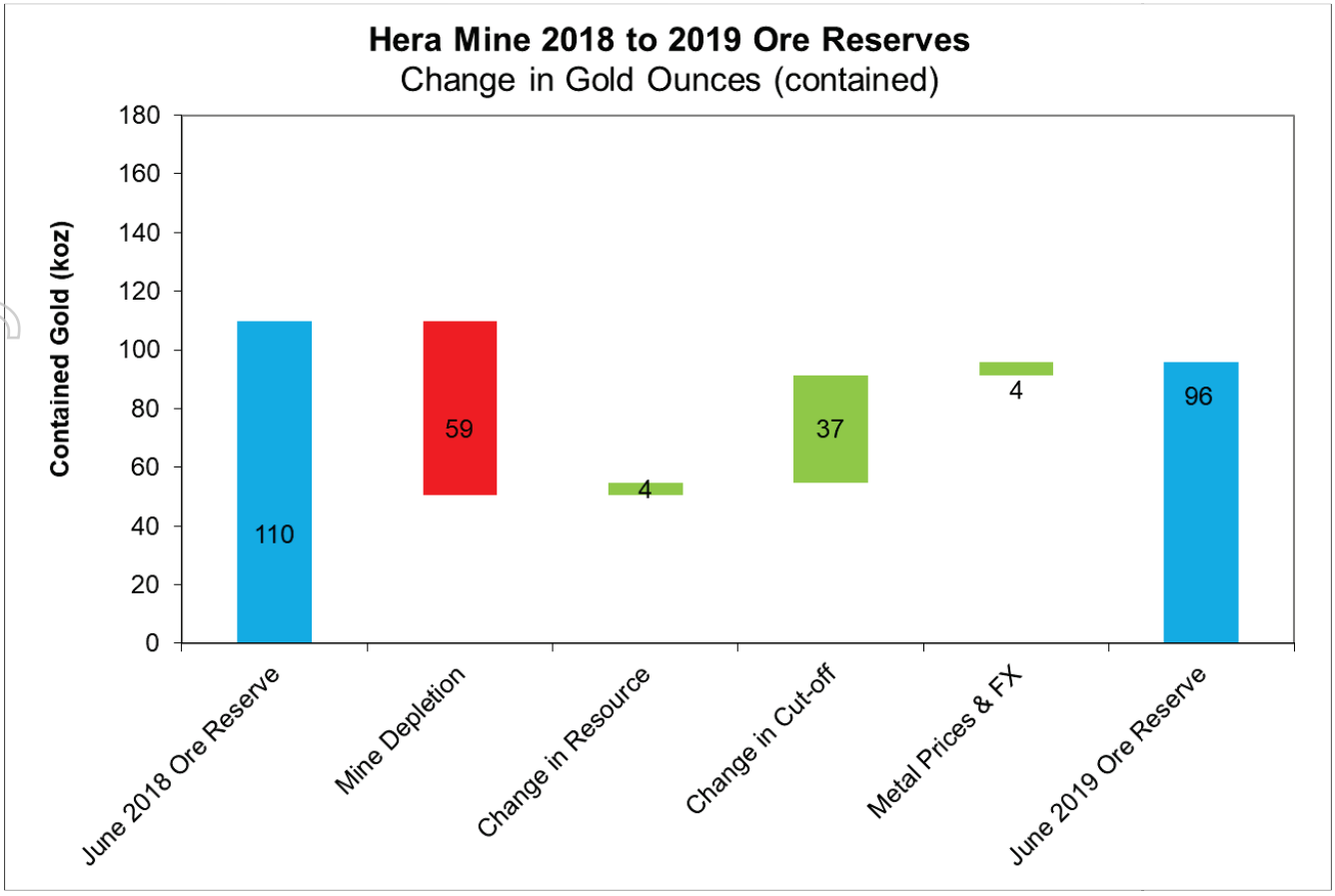

Figure 5. *2018 to 2019 Ore Reserves – change in gold ounces (contained)*

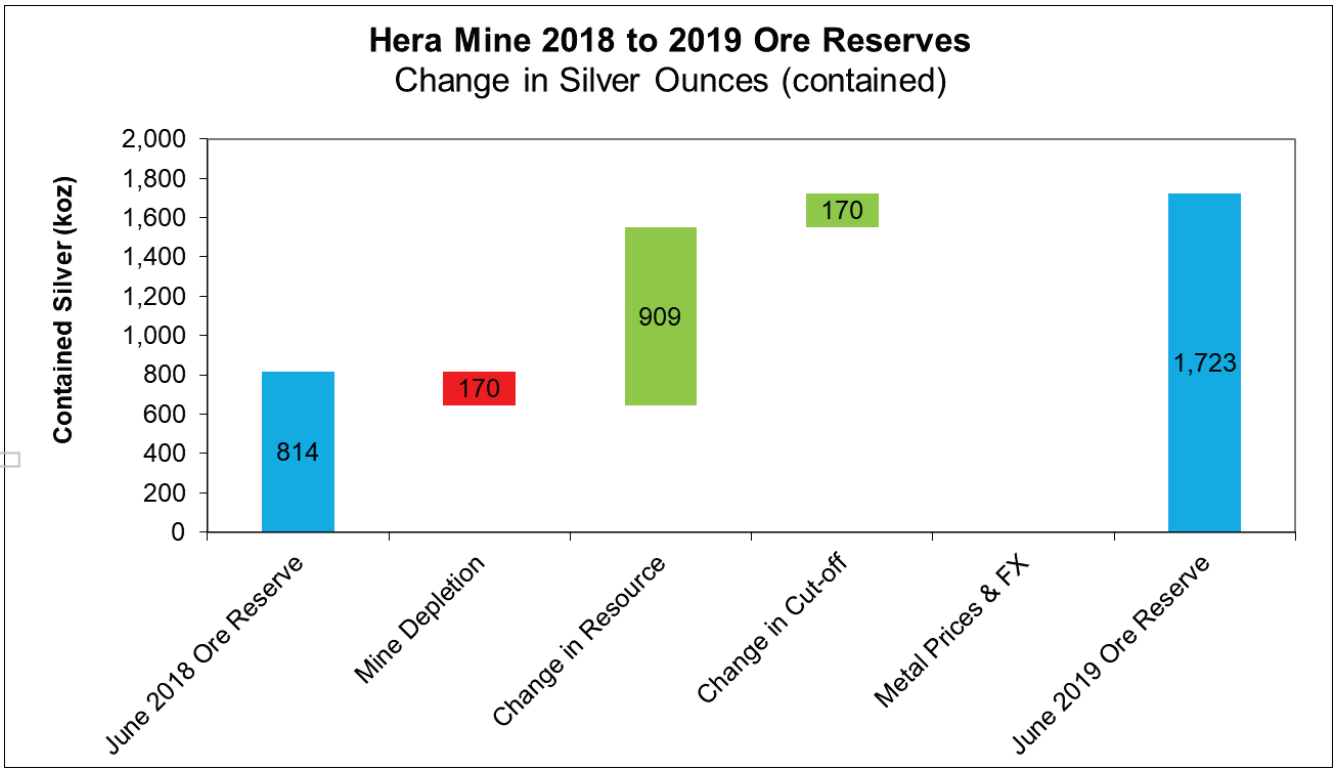

Figure 6. *2018 to 2019 Ore Reserves – change in silver ounces (contained)*

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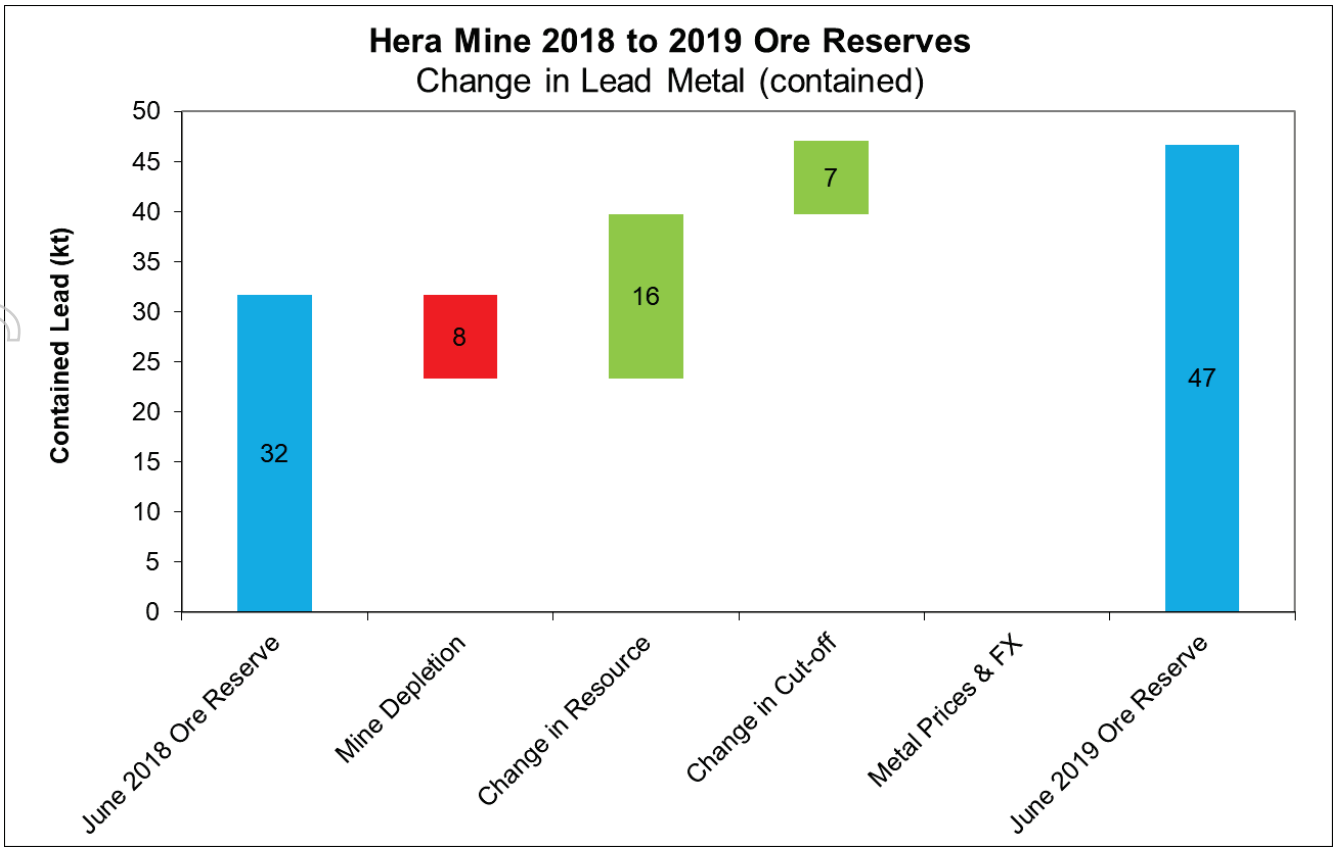

Figure 7. *2018 to 2019 Ore Reserves – change in lead tonnes (contained)*

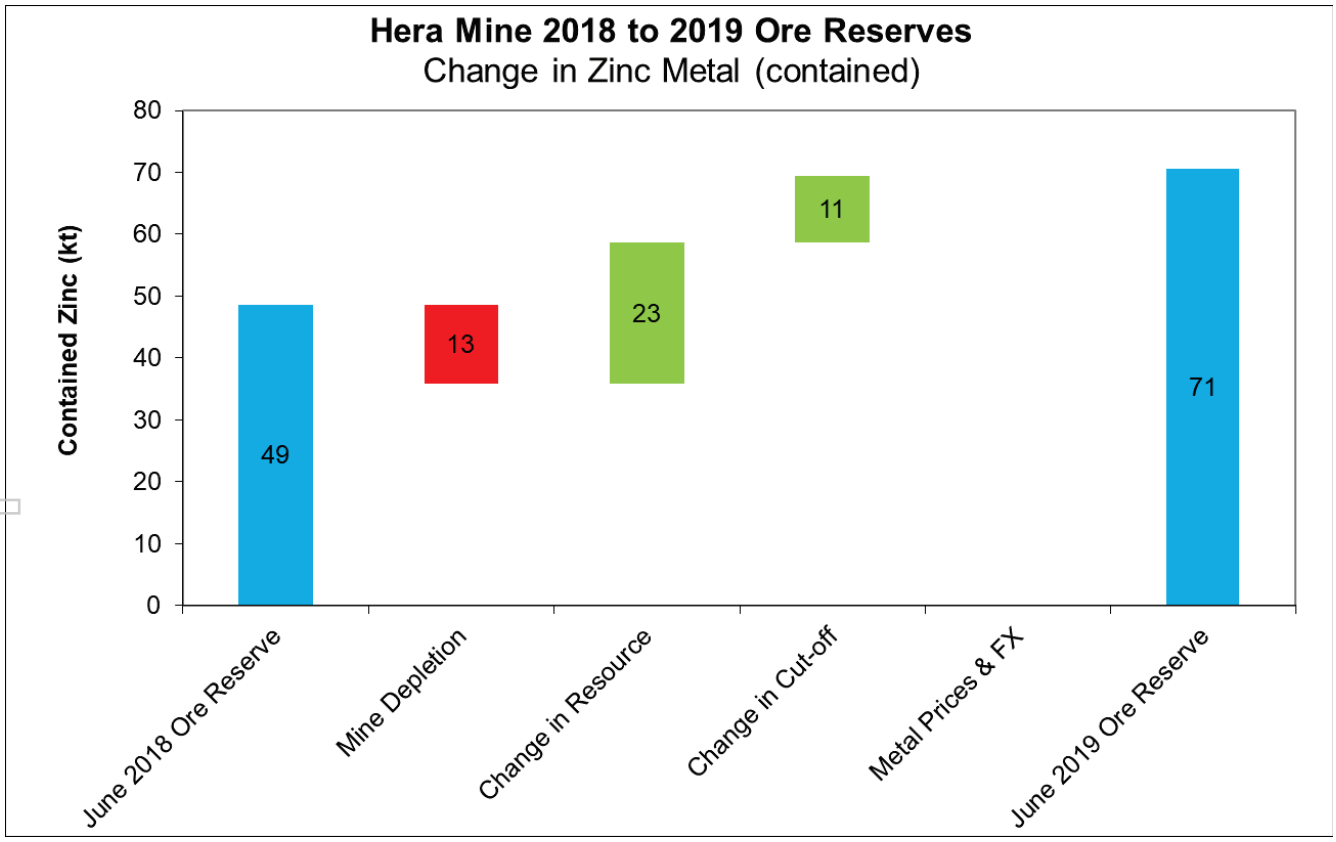

Figure 8*. 2018 to 2019 Ore Reserves – change in zinc tonnes (contained)*

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2.0 PEAK MINERAL RESOURCES AND ORE RESERVES STATEMENT

2.1 SUMMARY

Aurelia Metals Limited ("Aurelia" or the "Company") is pleased to report an update to the Mineral Resource Estimate and Ore Reserves Estimate for its 100% owned Peak Gold Mines in NSW. The updated Peak Gold Mines Mineral Resources and Ore Reserves have included resource delineation drilling undertaken over the past year and assumes completion of a mill upgrade to cater for lead and zinc processing in early 2020. The Mineral Resource Estimate and Ore Reserve Estimates has been completed in accordance with the JORC Code (2012 Edition) and are reported as at 30 June 2019.

***Table 20**. Peak Gold Mines Mineral Resource Estimate as at 30 June 2019*

Class	Tonnes (kt)	NSR (A$/t)	Au (g/t)	Cu (%)	Pb (%)	Zn (%)	Ag (g/t)
Measured	1,919	204	1.7	1.3	0.6	0.7	11
Indicated	7,402	219	1.6	1.3	1.1	1.3	10
Inferred	4,889	207	1.3	1.6	0.5	0.8	7
Total	**14,210**	**213**	**1.5**	**1.4**	**0.9**	**1.1**	**9**

Note: The Peak Gold Mines Mineral Resource Estimate utilises A$120/tonne 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 mill recoveries. Tonnage estimates have been rounded to nearest 1,000 tonnes.

The updated Mineral Resource Estimate represents an increase in tonnage over the previous estimate, allowing for mining depletion. A number of factors have contributed to changes in the Mineral Resource Estimate, which include:

- The discovery of additional high grade mineralization at Kairos (Peak Deeps) and Chronos, and
- Updated NSR parameters to align with current metallurgical performance.

The Ore Reserve Estimate has been derived from the Mineral Resource models using ore classified in the Measured and Indicated categories only. The 2019 Ore Reserve Estimate represents an increase in tonnage over the previous estimate (allowing for mining depletion) of 259kt (10% increase). This increase includes the addition of 180kt in Ore Reserves from Kairos, 103kt from Chesney, 198kt from Chronos Pb/Zn and 45kt from Peak Pb/Zn.

***Table 21**. Peak Gold Mines Ore Reserve Estimate as at 30 June 2019*

Class	Tonnes (kt)	NSR (A$/t)	Au (g/t)	Cu (%)	Pb (%)	Zn (%)	Ag (g/t)
Proved	376	181	1.2	1.7	0.3	0.6	11
Probable	2,458	232	2.1	1.0	2.0	2.1	16
Total	**2,834**	**225**	**2.0**	**1.1**	**1.8**	**1.9**	**15**

Note: The Peak Gold Mines Ore Reserve Estimate utilises an A$150/tonne NSR cut-off for Peak, Perseverance and Great Cobar and an A$130/tonne NSR for Chesney, New Cobar and Jubilee. Tonnage estimates have been rounded to the nearest 1,000 tonnes.

POTENTIAL MINERAL RESOURCE EXTENSION

Potential for Mineral resource upside exists at Chronos and Kairos (Peak Deeps), where drilling results were received after commencement of the process for the 2019 Mineral Resource estimate.

- **Chronos:** a total of 24 additional holes were drilled into the upper section of the Chronos orebody, with 16 reported to date (ASX Release 27 May 2019). All holes reported were mineralised. Assay results from these holes are not included in the 2019 Mineral Resource Estimate.

- **Kairos:** (Peak Deeps) – seven additional holes drilled into the Kairos orebody were reported to the ASX on 16 May 2019. A further 16 infill drill holes have been completed and are awaiting results. Assays from these holes were not received in time to be included in the 2019 Mineral Resource Estimate.

An updated Mineral Resource Estimate for Chronos and Kairos will be reported in FY20.

2.2 INTRODUCTION

Peak operates two distinct underground mines, each with a number of separate deposits as shown in Figure 9. Jubilee and New Cobar Ore Reserves have been reported as one orebody this year.

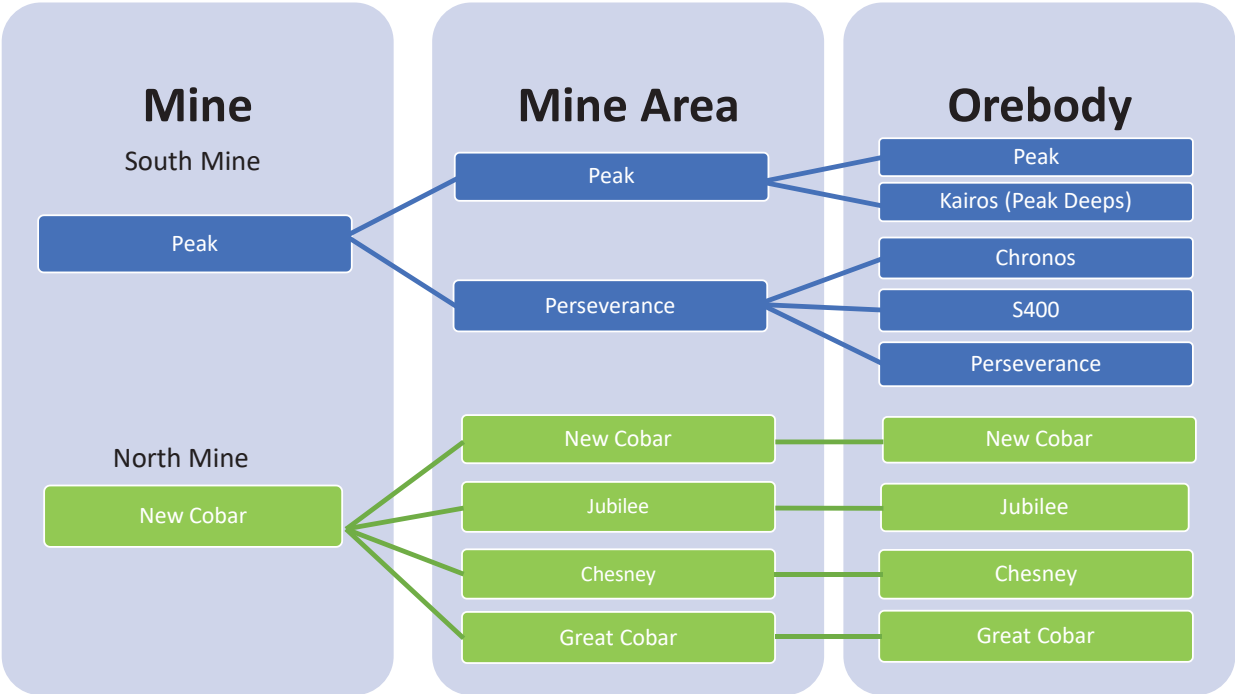

Figure 9. *Peak Group mine areas and orebodies*

The Peak Group Mineral Resources are estimated from independent models including Chronos, Perseverance, Peak, Kairos (Peak Deeps), Chesney, New Cobar–Jubilee and Great Cobar.

The updated total Measured, Indicated and Inferred Mineral Resources are based on an A$120/t NSR cut-off, summarised in Table 3. The Mineral Resource Estimate include all blocks within the volumes produced by Deswik Stope Shape Optimiser (SSO) but do not include material mined or sterilised by nearby mining. The Mineral Resource Estimates include internal dilution (detailed below).

The updated Ore Reserve Estimate, based on an A$130/t NSR cut-off for Jubilee, Chesney and New Cobar and A$150/t NSR cut-off for Perseverance, Peak and Great Cobar, is summarised in Table 6. The stated Ore Reserve is based on Measured and Indicated Mineral Resource only.

2.3 MINERAL RESOURCE ESTIMATE

The 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, lead and zinc.

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 both whole core and half core sampling. All samples from core are assayed in certified commercial laboratories. Samples are routinely assayed for 34 elements using ICP-AES with a four-acid 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 constructed using a 0.1g/t Au and/or 0.1% Cu-Pb-Zn threshold. Samples are composited to one metre intervals.

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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 a high co-efficient of variation (CV). OK is used for gold in other domains. MIK is considered an appropriate estimation method for the gold grade distribution at Peak Gold Mines because it accounts for changing spatial continuity at different grades ranges. The estimation is performed with three passes of increasing dimension that dictates the Mineral Resource classification into Measured, Indicated and Inferred. First pass search radii are typically between 3x15x15m and 3x20x25m in Easting, Northing and elevation respectively, depending on the style of mineralisation. Further details on the Mineral Resource Estimate are contained in JORC Table 1 in the Appendix to this statement.

A NSR value was applied to each block after estimation. The NSR is used to assign a dollar value to the polymetallic mineralisation. The NSR estimate (detailed under Ore Reserves) takes into account recoveries associated with each of the process streams, which include production of base metal concentrates and recovery of gold through gravity and leaching. The estimate is also based on metal prices, exchange rates, freight, treatment charges, royalties and mill recoveries. Metal price parameters used in the NSR estimation are listed in Table 22. Metallurgical recoveries and concentrate grades are provided in Table 23.

Table 22. *Metal price assumptions used for the purpose of Mineral Resource and Ore Reserves 2019*

Commodity	Unit	Mineral Resources June 2018	Mineral Resources June 2019	Ore Reserves June 2018	Ore Reserves June 2019
Gold	US$/oz	1,400	1,400	1,220	1,188
Silver	US$/oz	18.80	18.80	17.00	16.10
Lead	US$/t	2,280	2,280	2,280	2,160
Zinc	US$/t	2,600	2,600	2,600	2,463
Copper	US$/t	7,000	7,000	6,500	6,158
FX	AUD/USD	0.74	0.74	0.76	0.72
Gold	A$/oz	1,892	1,892	1,605	1,650
Silver	A$/oz	25.00	25.00	22.00	22.00
Lead	A$/t	3,081	3,081	3,000	3,000
Zinc	A$/t	3,514	3,514	3,421	3,421
Copper	A$/t	9,459	9,459	8,553	8,553

Table 23*. Metal recoveries and concentrate grades*

Peak Physical Assumptions	2018 Mineral Resources	2019 Mineral Resources	2018 Ore Reserve	2019 Ore Reserve
Gravity gold recovery	28%	42%	28%	42%
Total gold recovery	94%	94%	94%	94%
Total silver recovery	0%	92%	0%	92%
Lead recovery	80%	72%	80%	72%
Zinc recovery	0%	70%	0%	70%
Copper recovery	90%	90%	90%	90%
Copper concentrate grade	25%	25%	25%	25%
Lead concentrate grade	40%	49%	40%	49%
Zinc concentrate grade	0%	54%	0%	54%

Following Mineral Resource Estimation, a series of mineable shapes were produced by Deswik's SSO. The SSO shapes were used to constrain the reported Mineral Resource Estimate. The application of the smallest mineable unit (SMU) for the SSO shapes is similar to the process detailed in the Peak Resource and Reserve Estimate 2018. The reported Mineral Resource estimates include internal dilution. The Mineral Resource Estimate by deposit is reported in Table 24 and a long section of the Mineral Resource is shown in Figure 10.

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Table 24. *Mineral Resource Estimate for Peak Group 2019 by classification (blue shaded areas related to dominant Au-Pb-Zn mineralisation).*

Class	Deposit	Tonnes (kt)	NSR (A$/t)	Au (g/t)	Cu (%)	Pb (%)	Zn (%)	Ag (g/t)
Measured	Perseverance	207	246	3.4	0.9	0.0	0.0	5
	S400	30	210	3.2	0.5	0.5	0.4	11
	Peak	301	178	2.2	0.8	0.6	0.5	7
	Kairos (Peak Deeps)	76	223	3.3	0.6	0.3	0.5	4
	Chesney	556	186	0.7	2.0	0.0	0.0	7
	New Cobar	147	169	1.9	0.9	0.1	0.1	7
	Jubilee	310	219	0.9	2.2	0.0	0.0	11
	Chronos (Au/Pb/Zn)	90	307	2.2	0.3	5.5	4.4	28
	Peak Pb/Zn	167	200	1.6	0.5	1.9	4.2	43
	Kairos (Peak Deeps Au/Pb/Zn)	35	183	2.6	0.1	1.4	1.8	5
	Total Measured	**1,919**	**204**	**1.7**	**1.3**	**0.6**	**0.7**	**11**
Indicated	Perseverance	644	270	4.0	0.8	0.1	0.1	6
	S400	575	228	3.0	0.9	0.6	0.4	17
	Peak	119	226	3.4	0.5	0.3	0.4	10
	Kairos (Peak Deeps)	174	224	3.4	0.6	0.3	0.4	4
	Chesney	782	168	0.9	1.6	0.0	0.0	5
	New Cobar	347	170	1.8	1.0	0.0	0.0	4
	Jubilee	865	186	0.6	2.0	0.0	0.0	9
	Great Cobar	2,225	193	0.7	2.1	0.0	0.0	4
	Chronos (Au/Pb/Zn)	1,267	250	1.0	0.2	5.2	5.4	25
	Peak (Pb/Zn)	80	170	1.1	0.4	1.8	4.2	39
	Kairos (Peak Deeps Au/Pb/Zn)	245	518	6.3	0.6	4.0	5.7	12
	Great Cobar (Pb/Zn)	80	171	0.2	0.3	2.0	7.0	13
	Total Indicated	**7,402**	**219**	**1.6**	**1.3**	**1.1**	**1.3**	**10**
Inferred	Perseverance	100	317	4.8	0.8	0.3	0.3	9
	S400	1	161	2.9	0.1	0.5	0.8	2
	Peak	381	173	2.6	0.5	0.1	0.1	3
	Kairos (Peak Deeps)	212	179	3.0	0.3	0.4	0.7	3
	Chesney	426	149	0.8	1.5	0.0	0.0	5
	New Cobar	228	181	1.9	1.1	0.1	0.1	6
	Jubilee	84	168	0.2	2.1	0.1	0.1	10
	Great Cobar	2,822	201	0.6	2.2	0.0	0.1	7
	Chronos (Au/Pb/Zn)	153	356	2.7	0.1	7.2	5.7	29
	Kairos (Peak Deeps Au/Pb/Zn)	281	343	4.3	0.4	2.6	4.0	9
	Great Cobar (Pb/Zn)	200	197	0.2	0.4	2.6	7.3	19
	Total Inferred	**4,889**	**207**	**1.3**	**1.6**	**0.5**	**0.8**	**7**
Peak Group Au-Cu Total		**11,612**	**198**	**1.4**	**1.6**	**0.1**	**0.1**	**6**
Peak Group Au-Pb-Zn Total		**2,598**	**280**	**2.0**	**0.3**	**4.3**	**5.3**	**23**
Total		**14,210**	**213**	**1.5**	**1.4**	**0.9**	**1.1**	**9**

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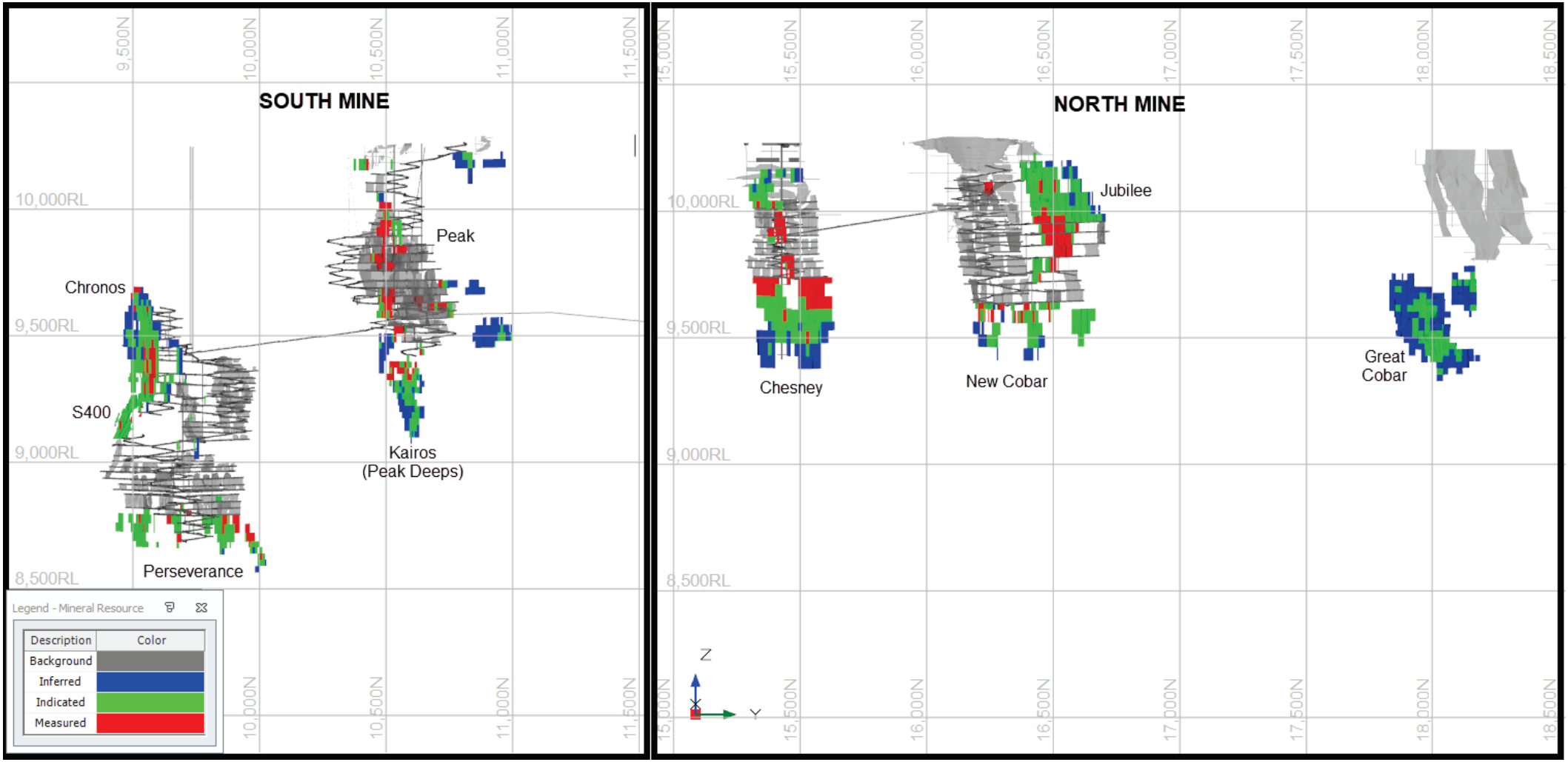

Figure 10. *Peak Mineral Resource long section by classification*

The Mineral Resource Estimate, broken down by deposit, is reported in Table 25 and the contained metal is shown in Table 26.

***Table 25**. Mineral Resource Estimate 2019 for Peak Group by deposit (for all classes)*

Deposit	Tonnes (kt)	NSR (A$/t)	Au (g/t)	Cu (%)	Pb (%)	Zn (%)	Ag (g/t)
Perseverance	951	270	3.9	0.8	0.1	0.1	6
Chronos	1,510	265	1.3	0.2	5.4	5.4	26
S400	607	227	3.0	0.8	0.6	0.4	16
Peak	1,047	184	2.3	0.6	0.7	1.2	14
Kairos (Peak Deeps)	1,024	316	4.2	0.4	1.9	2.8	7
Chesney	1,763	169	0.8	1.7	0.0	0.0	6
New Cobar	722	173	1.8	1.0	0.1	0.0	5
Jubilee	1,259	193	0.7	2.1	0.0	0.0	10
Great Cobar	5,327	197	0.7	2.1	0.1	0.4	6
Total	**14,210**	**213**	**1.5**	**1.4**	**0.9**	**1.1**	**9**

***Table 26**. Contained metal in Mineral Resource Estimate 2019 and variance to 2018 Mineral Resource Estimate*

Deposit	Ore Tonnes (kt)	Au (koz)	Cu (kt)	Pb (kt)	Zn (kt)	Ag (koz)
Measured	1,919	102	25	11	14	700
Indicated	7,402	376	95	84	97	2,442
Inferred	4,889	204	78	26	40	1,174
Total	**14,210**	**681**	**198**	**121**	**151**	**4,317**
Variance to 2018 Mineral Resource Estimate	+31%	+18%	+22%	+16%	+33%	+22%

2.4 CHANGES FROM PEAK MINERAL RESOURCES ESTIMATE 2018

The updated Mineral Resource Estimate represents an increase in tonnage and contained metal over the previous estimate in 2018 (allowing for mining depletion). A number of factors have contributed to these changes, as outlined below.

Mineral Resource Additions

- **Kairos (Peak Deeps)**: The discovery of high grade Au-Pb-Zn mineralisation at Kairos has contributed to an increase to 1.0Mt at 4.2g/t Au, 4.7% Pb + Zn and 0.4% Cu in the Mineral Resource.

- **Chronos**: Successful extensional drilling at Chronos has replaced depleted tonnes mined, albeit at a lower gold grade.

- **Great Cobar**: Updated NSR parameters have been applied to the Great Cobar Mineral Resource. These parameters are consistent with metallurgical performance of similar ores currently being treated at Peak. Together with changes to the Mineral Resource reporting methodology discussed below, this change has resulted in an additional 1.6Mt tonnes, representing a 43% increase.

- **Mineral Resource Reporting:** Changes to Mineral Resource reporting methodology to more accurately represent mineable shapes (inclusive of internal dilution) have been adopted for all deposits in 2019. Aurelia considers this practice to be consistent with the intent of the JORC Code 2012. The reporting method aligns with established Group-wide practices that includes the Hera Mine, and has the effect of increasing tonnage and decreasing grade.

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2.5 ORE RESERVES ESTIMATE

The Ore Reserve Estimate by Gold/Copper and Gold/Lead/Zinc orebodies are shown in Table 27 and Table 28. The total Ore Reserve is shown in Table 29.

***Table 27**. Ore Reserve Estimate by orebody as at 30 June 2019 for Au/Cu ores*

Category	Mine Area	Tonnes (kt)	NSR (A$/t)	Au (g/t)	Cu (%)	Pb (%)	Zn (%)	Ag (g/t)
Proved	Chronos	1	844	14.3	0.9	6.4	2.2	62
	Perseverance	8	406	7.6	0.8	0.1	0.0	5
	S400	2	237	4.3	0.5	0.4	0.2	15
	Peak	13	180	1.7	1.5	0.1	0.3	7
	Kairos (Peak Deeps)	12	177	3.2	0.4	0.6	0.9	4
	Chesney	236	170	0.6	2.1	0.0	0.0	7
	Jubilee	59	178	1.8	1.4	0.0	0.0	5
Proved		**331**	**180**	**1.2**	**1.9**	**0.1**	**0.1**	**7**
Probable	Chronos	78	621	7.7	0.3	8.3	4.8	41
	Perseverance	303	261	4.6	0.7	0.0	0.0	4
	S400	377	232	3.4	1.0	0.5	0.4	18
	Peak	32	179	3.3	0.4	0.4	0.3	5
	Kairos (Peak Deeps)	121	215	4.0	0.4	0.3	0.4	3
	Chesney	304	170	0.9	1.9	0.0	0.0	6
	Jubilee	466	187	0.9	2.1	0.0	0.0	10
Probable		**1,681**	**229**	**2.7**	**1.3**	**0.5**	**0.4**	**11**
Total Au/Cu Ore Reserves		**2,012**	**221**	**2.5**	**1.4**	**0.5**	**0.3**	**10**

***Table 28**. Ore Reserve Estimate by orebody as at 30 June 2019 for predominant Au/Pb/Zn ores*

Category	Mine Area	Tonnes (kt)	NSR (A$/t)	Au (g/t)	Cu (%)	Pb (%)	Zn (%)	Ag (g/t)
Proved	Chronos	1	252	0.9	0.7	7.8	3.3	52
	Peak	43	186	1.3	0.7	2.2	4.6	42
	Kairos (Peak Deeps)	1	154	2.2	0.2	1.9	1.7	9
Total Proved		45	188	1.3	0.7	2.3	4.5	42
Probable	Chronos	728	227	0.3	0.1	5.4	6.0	26
	Peak	1	130	0.9	0.7	1.9	3.2	41
	Kairos (Peak Deeps)	46	399	6.5	0.3	2.5	2.9	8
Total Probable		776	237	0.7	0.2	5.2	5.8	25
Total Au/Pb/Zn Ore Reserves		**822**	**235**	**0.7**	**0.2**	**5.1**	**5.7**	**26**

***Table 29**. Ore Reserve Estimate as at 30 June 2019 (Combined Cu/Au and Au/Pb/Zn ore)*

Category	Tonnes (kt)	NSR (A$/t)	Au (g/t)	Cu (%)	Pb (%)	Zn (%)	Ag (g/t)
Proved	376	181	1.2	1.7	0.3	0.6	11
Probable	2,458	232	2.1	1.0	2.0	2.1	16
Total Ore Reserves	**2,834**	**225**	**2.0**	**1.1**	**1.8**	**1.9**	**15**

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MINING ASSUMPTIONS

The mining method assumed in the 2019 Ore Reserve Estimate is a combination of open stoping and bench and fill stoping progressing bottom up, consistent with the current mining method at Peak. This mining method is detailed in the Peak Resource and Reserve Estimate 2018.

Hanging wall and footwall dilution assumptions have been used for each mining area in the 2019 Ore Reserve Estimate and summarised in Table 30. This is supported by a review of data from the Cavity Monitoring System (CMS) over the past 12 months. Strategies have been established to minimise stoping dilution.

***Table 30**. External dilution parameters*

Peak Group Overbreak Summary			
	West Wall (m)	East Wall (m)	Comments
Chronos	0.3	0.7	
Perseverance	0.6	0.3	
Chesney	0.4	0.4	
New Cobar/Jubilee	0.2	0.6	
Peak	0.4	0.4	Similar to Chesney
S400	0.3	0.7	Similar to Chronos
Great Cobar	0.4	0.5	Average

Additional strategies have also been put in place to minimise the risk of loss to fired ore. Under operating conditions at Peak, the expected ore loss is estimated to be approximately 5% or a recovery of ore of 95% for open stopes and bench stopes. A 90% recovery factor has been applied to the crown pillar extraction, once the unrecoverable crown and rib pillars have been subtracted, due to the nature of the ore recovery method employed.

The stopes were created by applying SSO software in Deswik CAD to the 2019 Mineral Resource models. This approach is consistent with the methodology detailed in the Peak Resource and Reserve Estimate 2018. Hanging wall and footwall dilution applied to the stopes represent approximately 397kt (11%) of low grade material in the Ore Reserve. A total of 11kt (<1%) of rockfill floor and rockfill end wall dilution was included in the stopes as part of the recoverable stope tonnages created.

NET SMELTER RETURN

Since Peak Gold Mine is a polymetallic operation producing gold, copper, silver, lead and zinc, a net smelter return (NSR) in A$/t has been used to estimate the value of the ore net of all costs after it leaves site. This 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 ($/t) is estimated using the following formula:

NSR = [metal grade x expected metallurgical recovery x expected payables x metal price] – [concentrate freight and treatment charges, penalties and royalties]

Metal price parameters used in the NSR estimation are listed in Table 22. Metal prices have been based on consensus forecasts. Metallurgical recoveries and concentrate grades are outlined in Table 23.

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 Peak.

Aurelia has in place the necessary contracts and approvals for the transportation of concentrate. The contracts are renewable on standard commercial terms. Appropriate royalties have been applied and the gold and silver doré products are shipped to a receiving mint for refining under a refining agreement.

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CUT-OFF GRADE ESTIMATION

The following cut-off values were applied in the June 2019 Mineral Resource and Ore Reserve Estimate.

- Mineral Resources - A$120/t for all sources.
- Ore Reserves – South Mine - A$150/t (Peak and Perseverance)
- Ore Reserves – North Mine - A$130/t (New Cobar, Jubilee and Chesney)

ORE RESERVE CLASSIFICATION

The Ore Reserve Estimate is based on the Mineral Resource classification of Measured and Indicated only. Material classified as Measured and Indicated Mineral Resource is converted to a Proved and Probable Ore Reserve. It is the Competent Person's view that the classification used for the Ore Reserve Estimate is appropriate.

The 2019 Ore Reserve of 2,834kt is contributed from 9,321kt Measured and Indicated Mineral Resources. Tonnage conversion rates of Measured and Indicated Mineral Resources to the Ore Reserve is 30%. The three key components for the Mineral Resource to Ore Reserve conversion rates are:

1. The Mineral Resource Estimate uses higher metal prices than the Ore Reserve Estimate
2. The Mineral Resource Estimate uses a lower cut-off value than the Ore Reserve Estimate
3. The derivation of the Mineral Resource classifications to individual 5m shapes along strike compared to the derivation of the Ore Reserve classifications applied to individual combined stope shapes

2.6 PRODUCTION TARGET

A Production Target is an estimation of potentially mineable tonnes based on applying mining modifying factors. Assumptions used are detailed under Ore Reserves section of this report, including mining cost assumptions, metal prices, metallurgical recoveries and other inputs used in the NSR calculation for the purpose of Ore Reserve estimation against Measured, Indicated and Inferred Mineral Resources. In preparation of the Production Target, the Company has been guided by ASX Listing rules Chapter 5.16-5.19.

A Production Target of 3,989kt (Table 8) has been estimated from the 2019 Mineral Resource Estimate of 14,210Kt. This represents a conversion of 28% of the Mineral Resource to the Production Target. The Ore Reserve proportion (based on Measured and Indicated Mineral Resources) of the Production Target is 71%, with the balance being converted from the Inferred Mineral Resource. It should be noted that while the total Great Cobar Indicated and Inferred Mineral Resource of 5,327kt at 0.6 g/t Au, 2.1% Cu, 0.1 % Pb, 0.4% Zn and 6 g/t Ag is not included in the Production target at this time, further work planned to be undertaken this year is targeted to allow inclusion of a significant component at the next major Ore Reserve and Mineral Resource update.

Investors are encouraged to read the following cautionary statement in respect to the Production Target at Peak:

> *There is a low level of geological confidence associated with Inferred Mineral Resources and there is no certainty that further exploration work will result in the determination of Indicated Mineral Resources or that the Production Target itself will be realised. The stated Production Target is based on the Company's current expectations of future results and events, and should not be solely relied upon by investors when making investment decisions.*

***Table 8**. Peak Gold Mines Production Target at 30 June 2019*

Class	Tonnes (kt)	NSR (A$/t)	Au (g/t)	Cu (%)	Pb (%)	Zn (%)	Ag (g/t)
Ore Reserve portion of Production Target (Cu/Au/Pb)	2,012	221	2.5	1.4	0.5	0.3	10
Ore Reserve portion of Production Target (Au/Pb/Zn)	822	235	0.7	0.2	5.1	5.7	26
Inferred portion of Production Target (Cu/Au/Pb)	596	247	3.3	0.9	1.4	1.1	11
Inferred portion of Production Target (Au/Pb/Zn)	559	345	3.8	0.4	3.9	5.3	14
Production Target	**3,989**	**245**	**2.4**	**0.9**	**2.0**	**2.2**	**14**

Note: The Peak Gold Mines Production Target Estimate utilises an A$150/tonne NSR cut-off for mine areas Peak, Perseverance and an A$130/tonne NSR for mine areas Chesney, New Cobar and Jubilee. Tonnage estimates have been rounded to the nearest 1,000 tonnes.

PEAK LIFE OF MINE LONG SECTIONS

Long sections (looking west) of the Peak Gold Mine by orebody and Ore Reserve classification, including Production Target, are shown in Figure 11 to Figure 18.

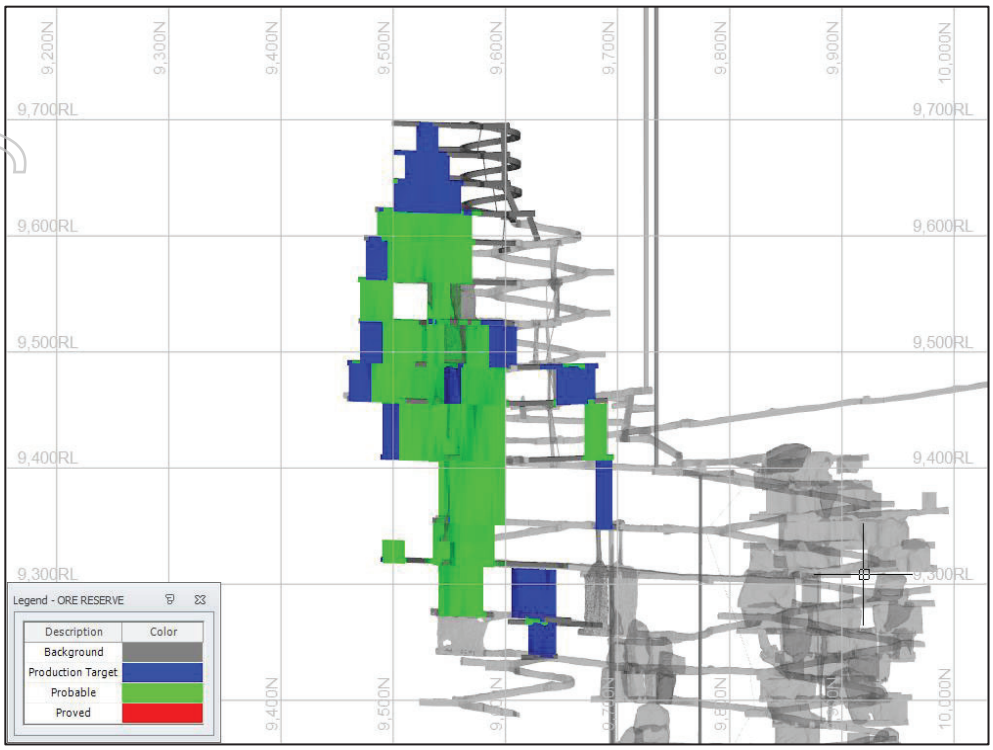

Figure 11. *Chronos Ore Reserve June 2019 long section*

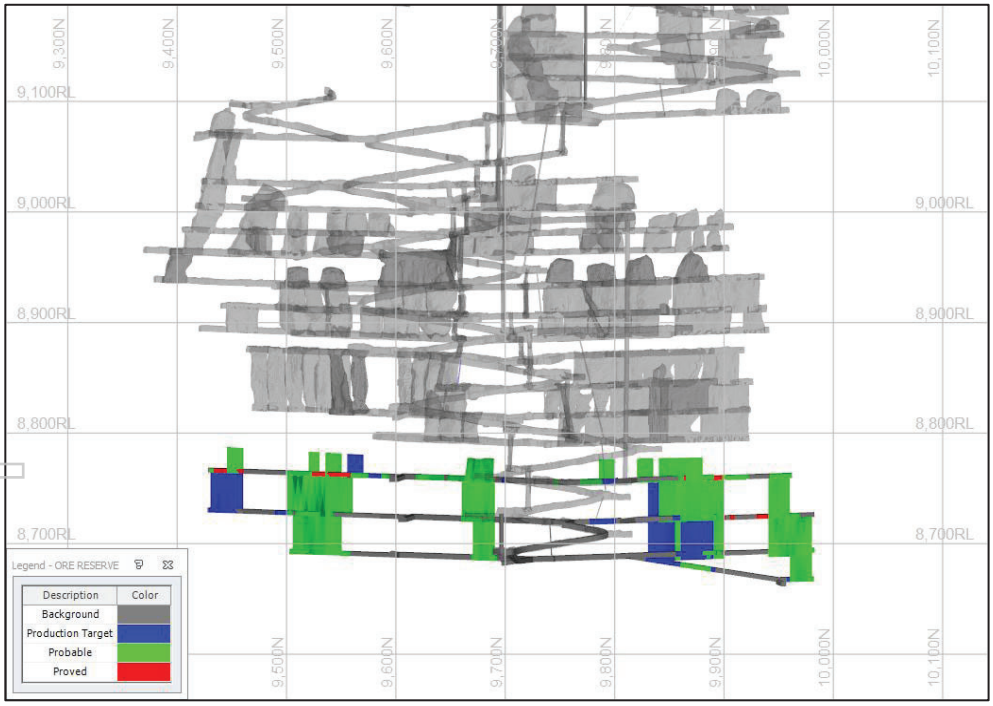

Figure 12. *Perseverance Ore Reserve June 2019 long section*

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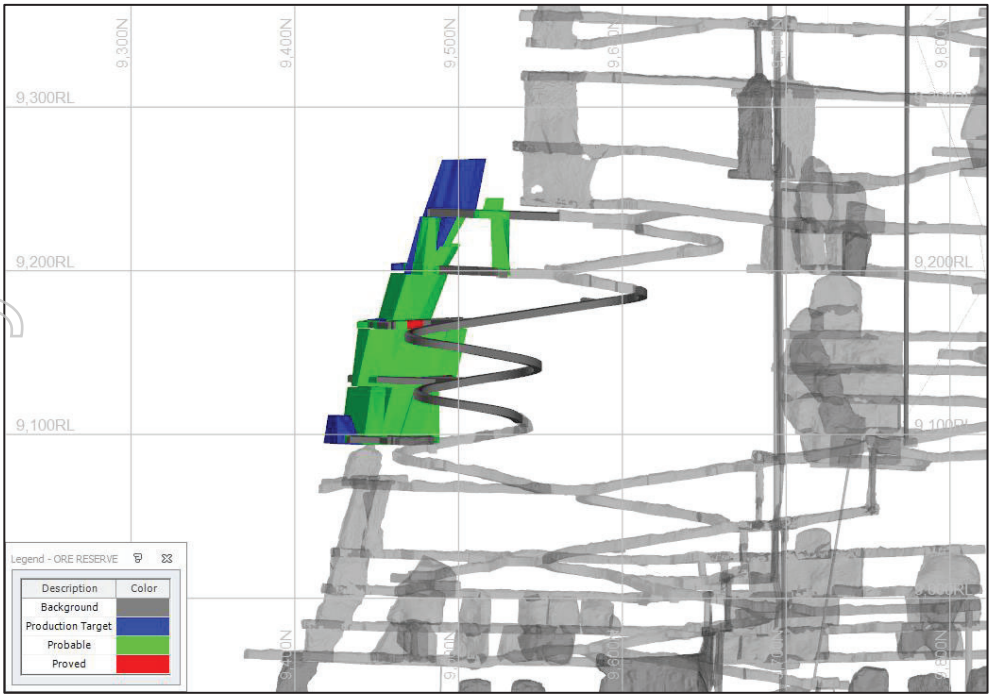

***Figure 13**. S400 Ore Reserve June 2019 long section*

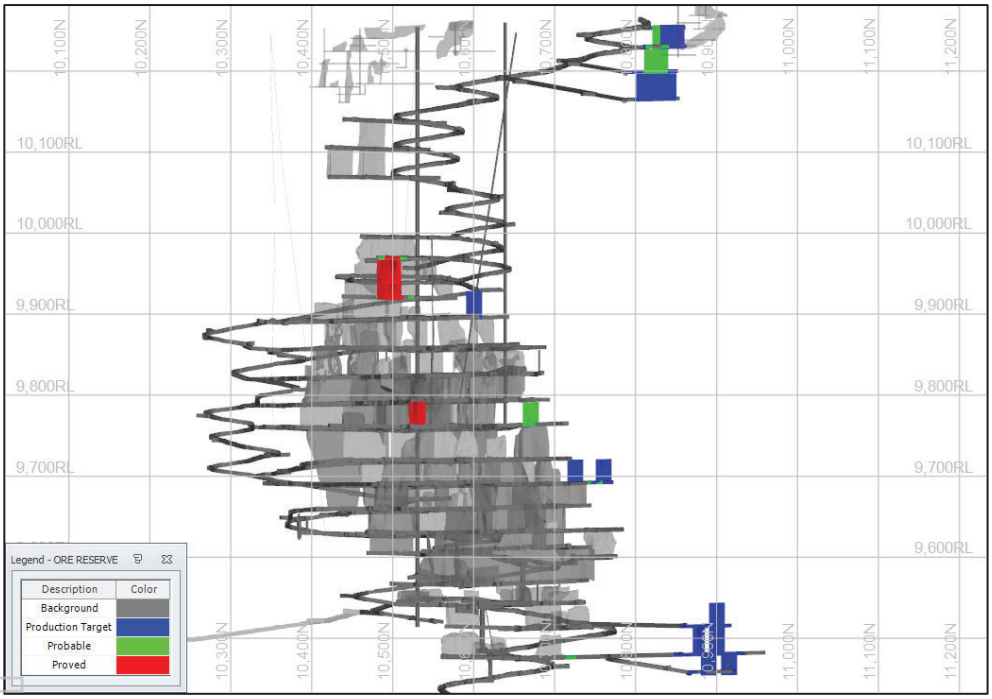

***Figure 14**. Peak Ore Reserve June 2019 long section*

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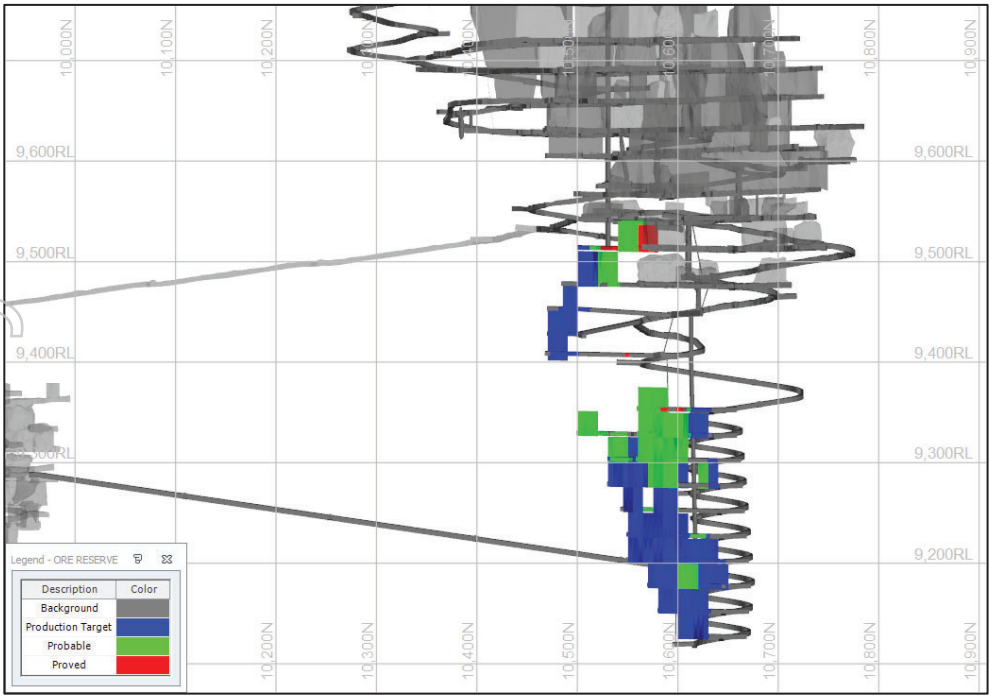

***Figure 15**. Kairos (Peak Deeps) Ore Reserve June 2019 long section*

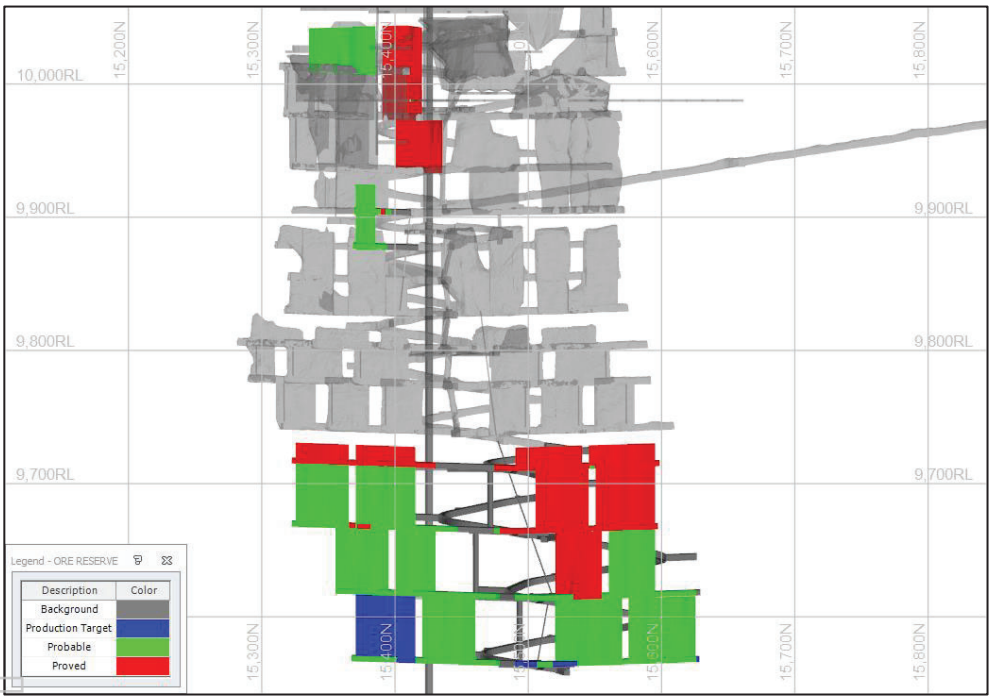

***Figure 16.** Chesney Ore Reserve June 2019 long section*

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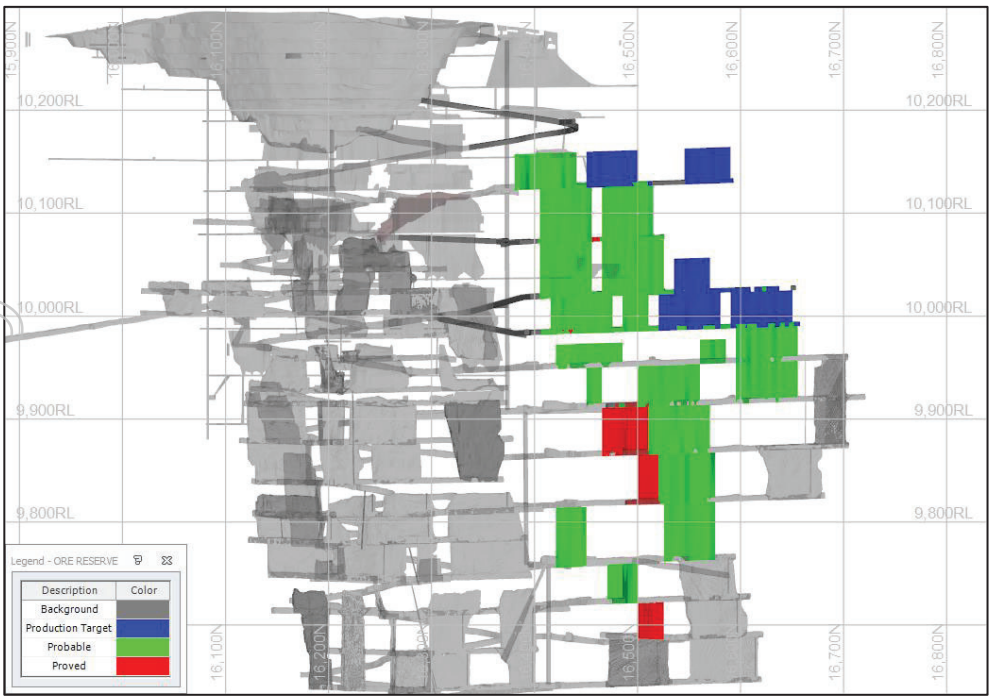

***Figure 17**. Jubilee Ore Reserve June 2019 Long Section*

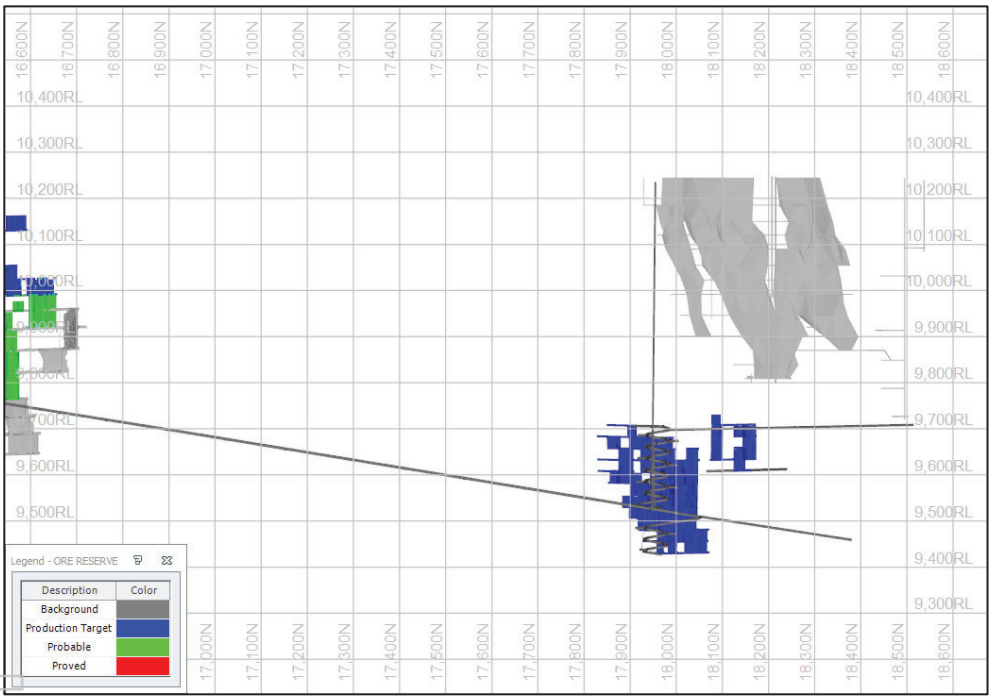

***Figure 18.** Great Cobar Production Target June 2019 long section*

2.7 CHANGES FROM PEAK ORE RESERVE ESTIMATE 2018

A comparison has been completed between the 2019 and 2018 Ore Reserves. Changes include:

- 463kt mined between the 2018 Ore Reserve statement and the 2019 Ore Reserve statement (depletion).
- AUD gold price per ounce assumption has increased by 3%.

The Ore Reserve Estimate represents an increase in tonnage over the previous estimate (allowing for mining depletion), reporting a 259kt (10%) increase in tonnage against the 2018 Ore Reserve. This increase includes the addition of 180kt from Kairos, 103kt from Chesney, 198kt from Chronos and 45kt from Peak. The net impact of these changes is shown in the waterfall graphs below (Figures 19 – 24).

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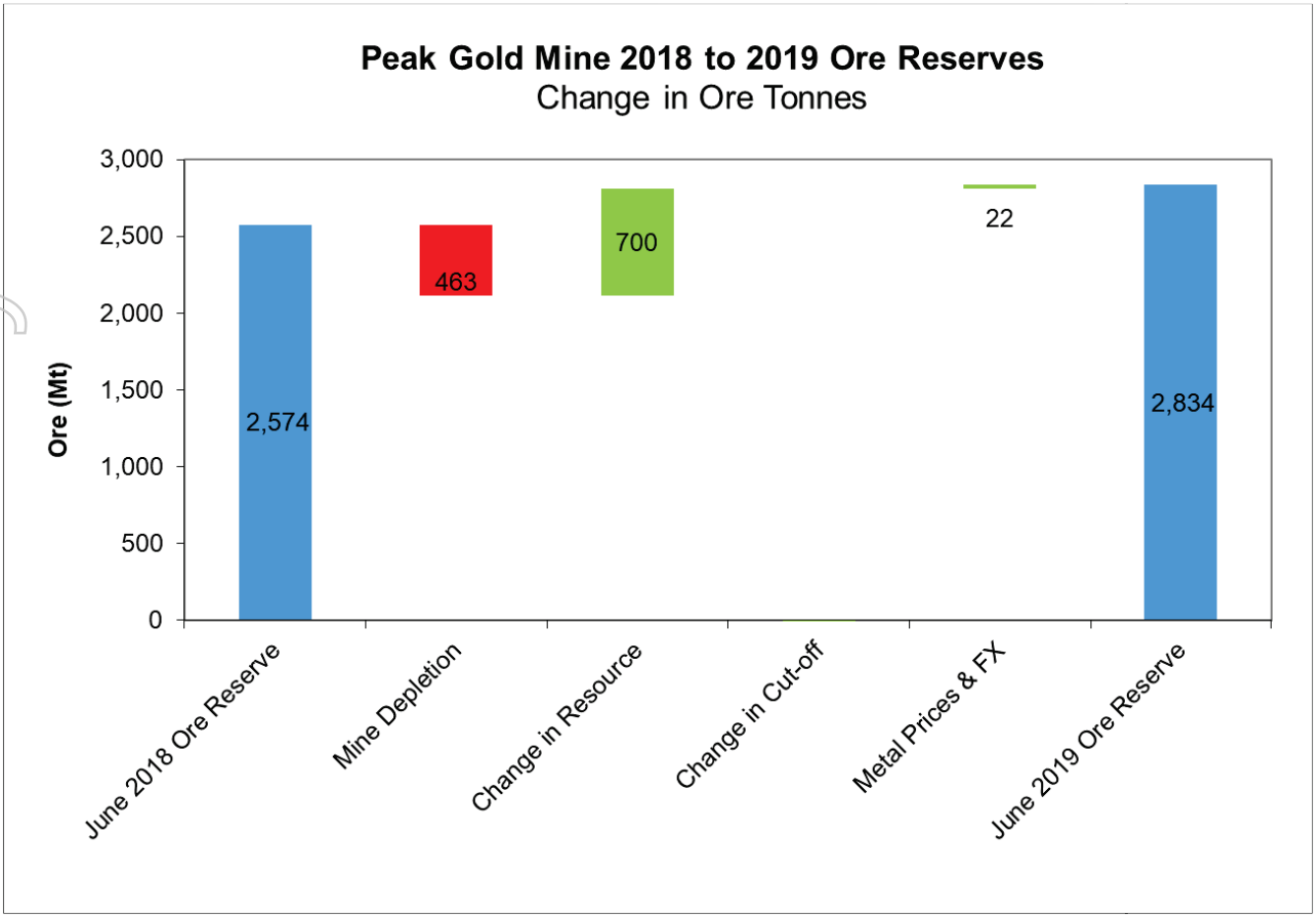

***Figure 19**. 2018 to 2019 Ore Reserves – change in ore tonnes*

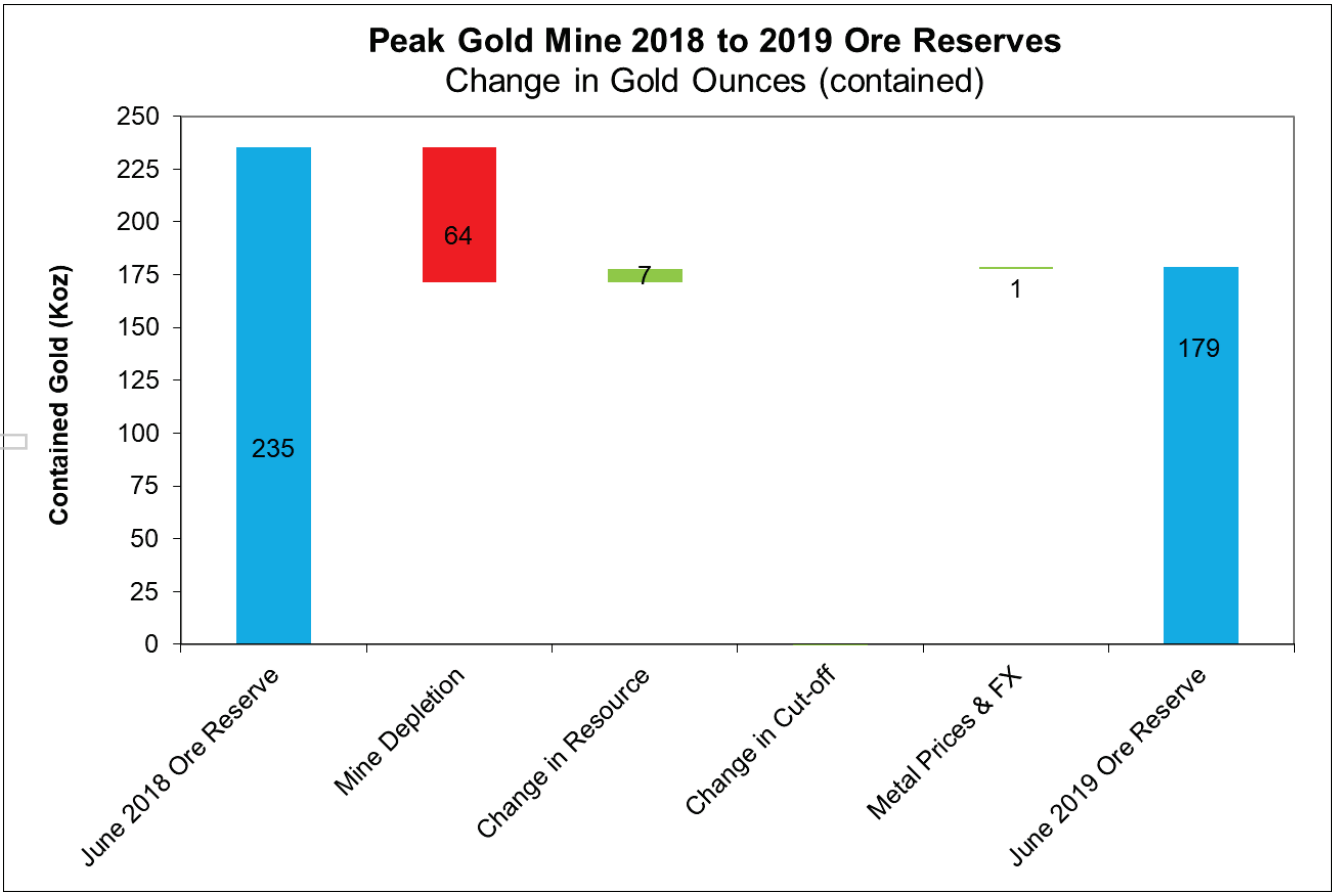

***Figure 20**. 2018 to 2019 Ore Reserves – change in gold ounces (contained)*

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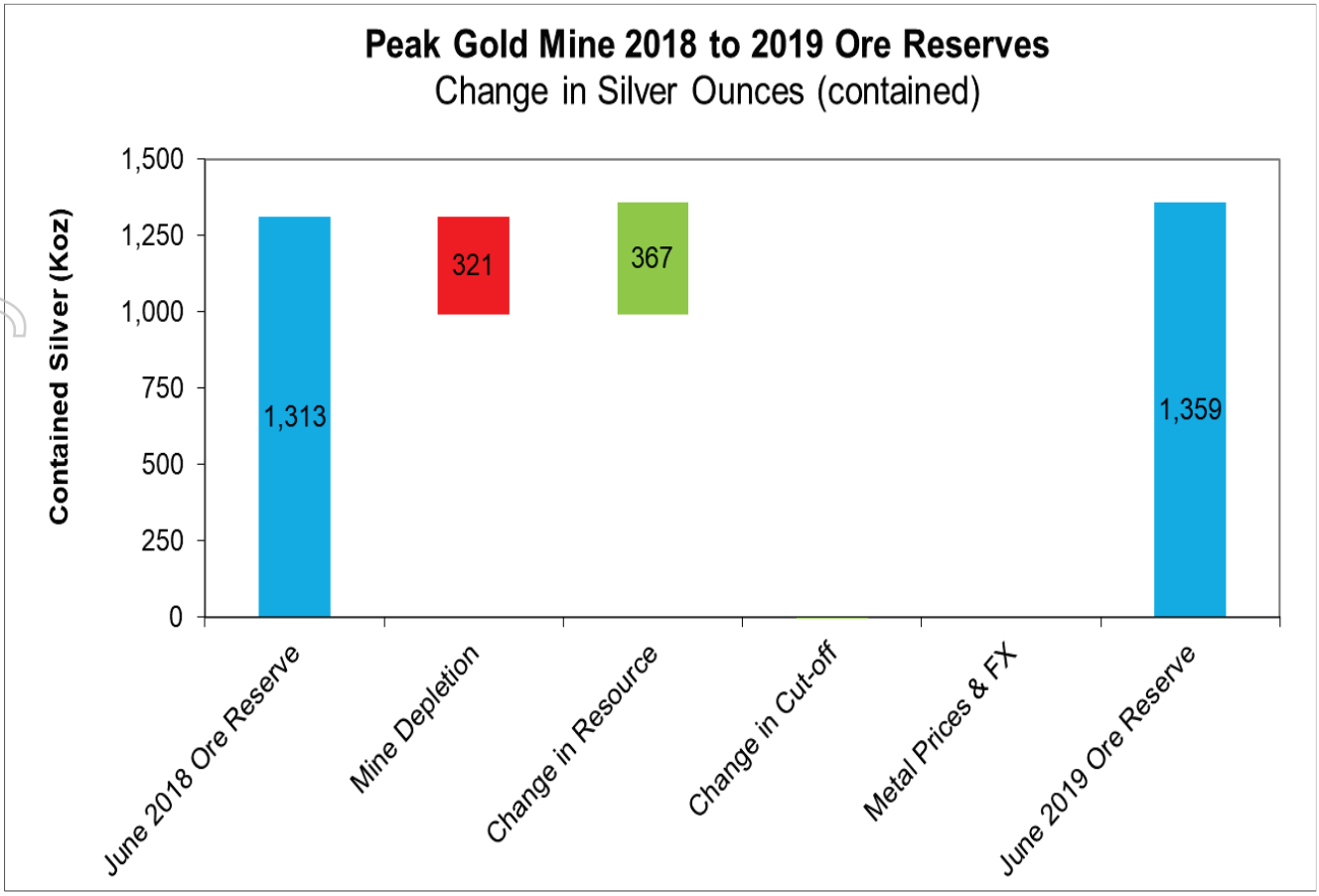

***Figure 21**. 2018 to 2019 Ore Reserves – change in silver ounces (contained)*

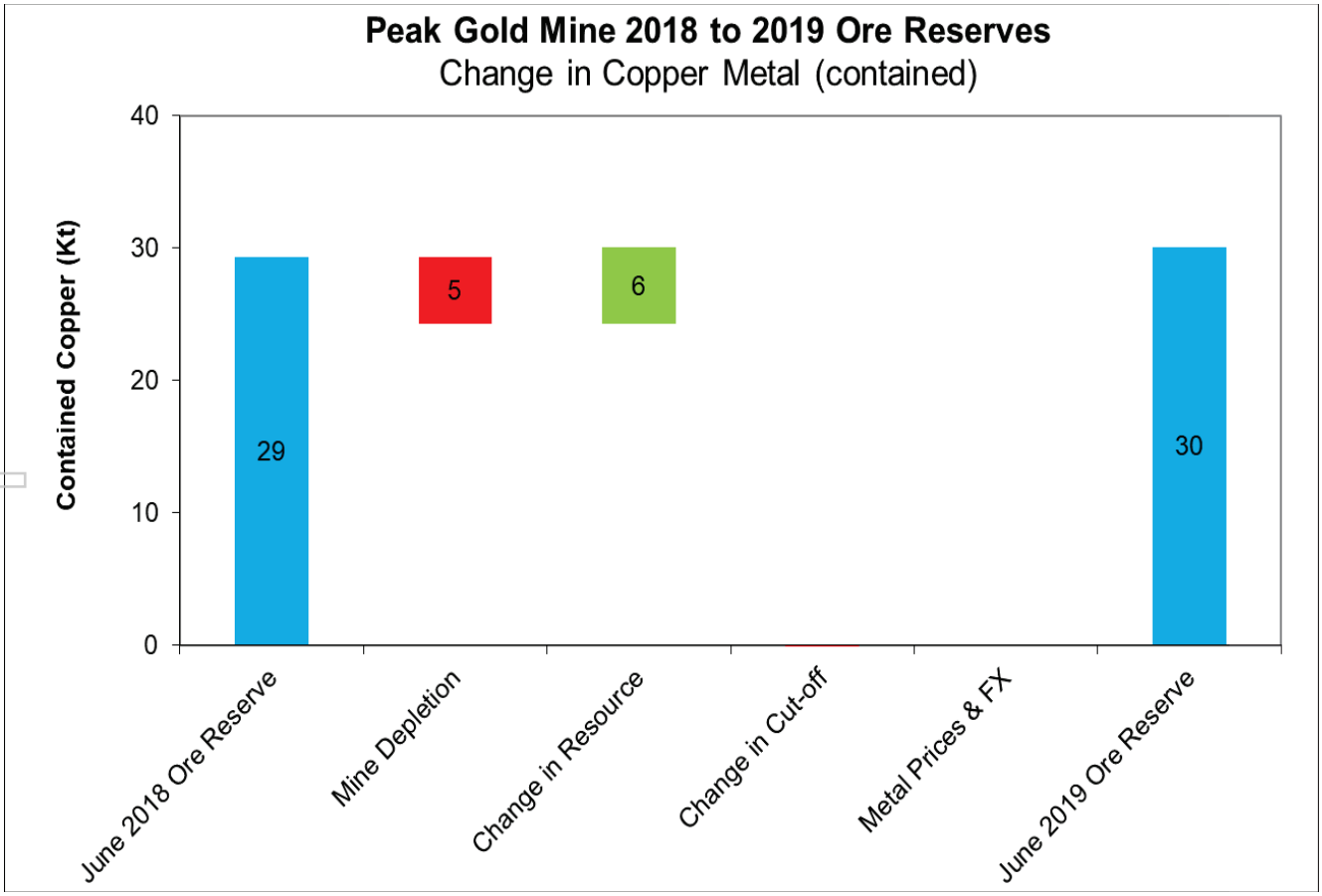

***Figure 22**. 2018 to 2019 Ore Reserves – change in copper tonnes (contained)*

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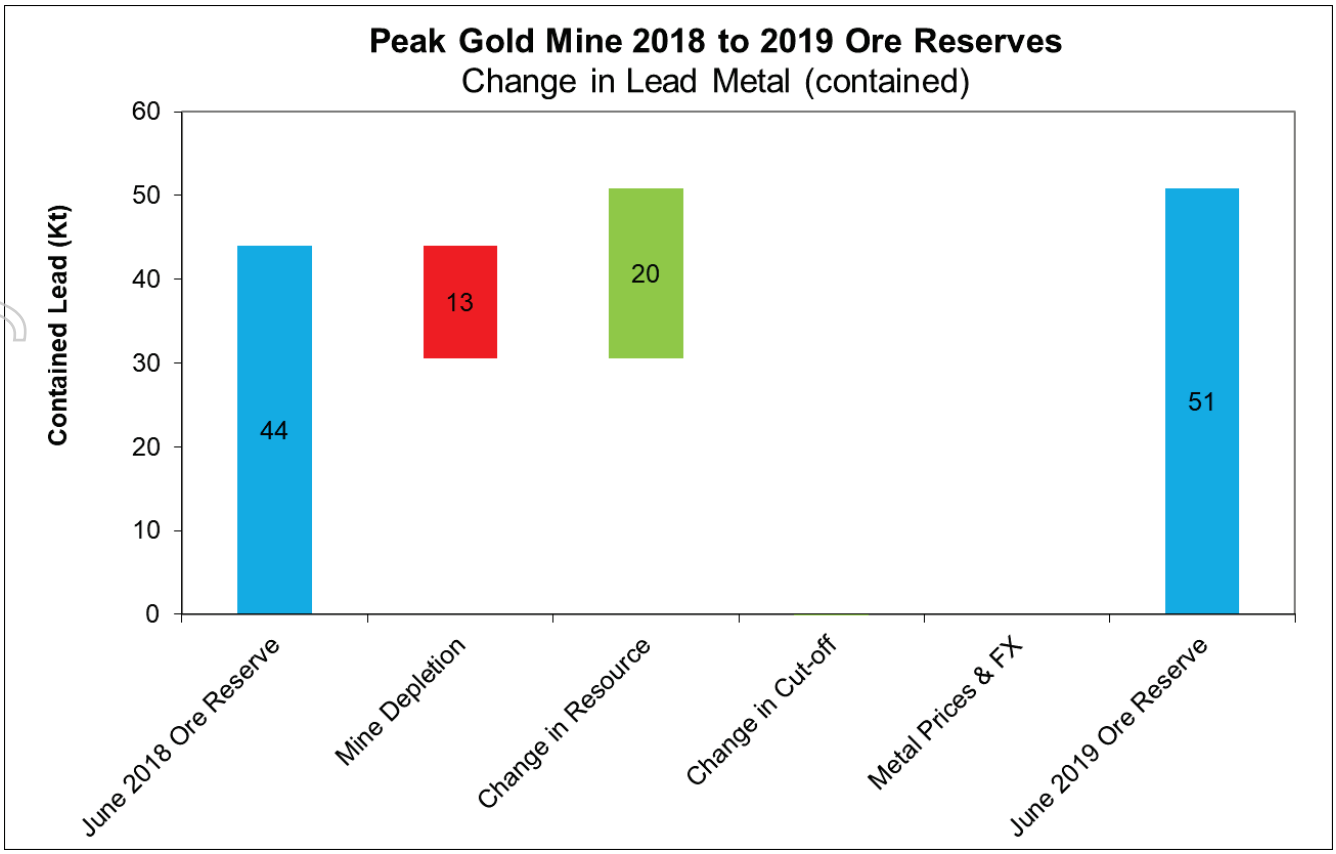

***Figure 23**. 2018 to 2019 Ore Reserves – change in lead tonnes (contained)*

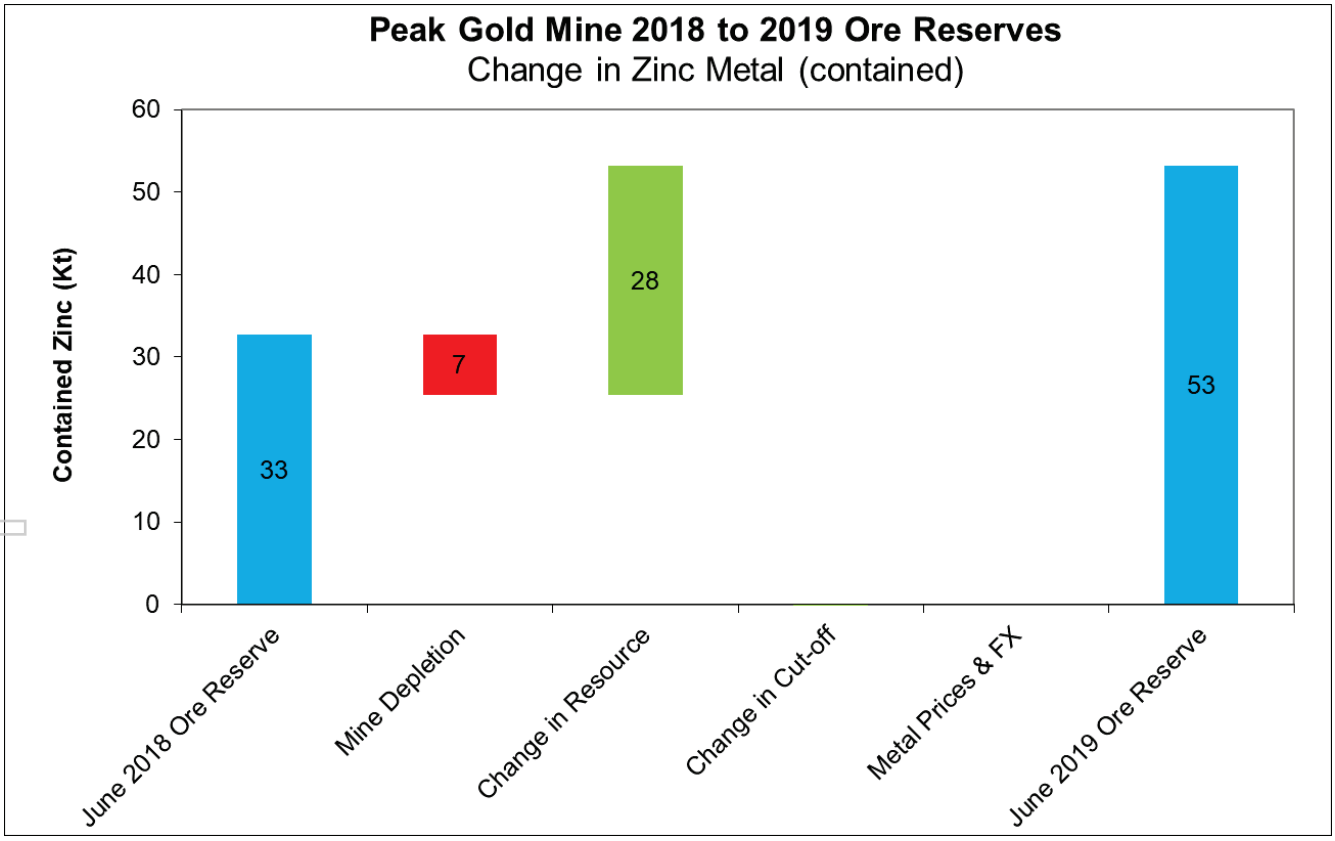

***Figure 24**. 2018 to 2019 Ore Reserves – change in zinc tonnes (contained)*

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3.0 NYMAGEE MINERAL RESOURCE ESTIMATE

Aurelia Metals Limited ("Aurelia" or the "Company") reports an update to the Mineral Resource Estimate for its 95% owned Nymagee Project in NSW. The Nymagee Resource Estimate includes results from additional drilling and metallurgical test work studies undertaken over the past year. The Nymagee Mineral Resource Estimate has been completed in accordance with the guidelines of the JORC Code (2012 Edition) and is reported as at 30 June 2019.

Table 32. *Nymagee Mineral Resource Estimate as at 30 June 2019*

Class	Tonnes (kt)	NSR (A$/t)	Cu (%)	Pb (%)	Zn (%)	Ag (g/t)
Indicated	1,411	207	2.3	0.8	1.5	18
Inferred	42	131	1.6	0.2	0.5	10
Total	**1,454**	**205**	**2.2**	**0.8**	**1.4**	**18**

Note: The updated Nymagee Resource Estimate utilises A$120/tonne 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 mill recoveries. Tonnage estimates have been rounded to nearest 1,000 tonnes.

Nymagee is considered a structurally controlled Cobar-style deposit located five kilometres north-east of the Company's Hera Mine. Mineralisation comprises copper, lead, zinc and iron sulphides hosted in altered Devonian-age metasediments. The deposits are polymetallic in nature with variable copper, lead, zinc, 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 Pb, Zn, Ag, Cu, 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.

Aurelia provided H&S Consultants with data including the drill hole database and wireframed solids based on a 1% sulphide volume threshold. High Pb-Zn sub-zone wireframes were created by H&S Consultants. Samples were composited to one metre intervals within each zone with a minimum composite length of 0.5 metres. In order to better reflect the contained metal within each interval, estimates were carried out on density-weighted values.

Ordinary Kriging (OK) was used to estimate concentrations of Cu, Pb, Zn, Ag, Fe, S, As and density. Top cutting was selectively applied as appropriate. The classification of the Mineral Resources are based on increasing search passes, where pass 1 and 2 are Indicated and pass 3 is Inferred. Pass 1 and 2 (Indicated) are based on search radii of 4x30x30m and 8x60x60m respectively, while Pass 3 (Inferred) is based on a search radii of 16x120x120m.Further details on the Mineral Resource Estimate are contained in JORC Table 1 in the Appendix to this statement.

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, developed since the previous Mineral Resource Estimate in 2018. This model assumes copper, lead, zinc 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 and metallurgical parameters used in the NSR calculation are listed in Table 33.

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Table 33. *Price assumptions used in 2019 Mineral Resource Estimate*

Commodity	Unit	Mineral Resources June 2018	Mineral Resources June 2019
Silver	US$/oz	18.80	18.80
Lead	US$/t	2,280	2,280
Zinc	US$/t	2,600	2,600
Copper	US$/t	7,000	7,000
FX	AUD/USD	0.74	0.74
Silver	A$/oz	25.00	25.00
Lead	A$/t	3,081	3,081
Zinc	A$/t	3,514	3,514
Copper	A$/t	9,459	9,459

Metallurgical Test Work

Following the receipt of metallurgical test work assumed recoveries associated with the Nymagee metallurgical model have changed. This test work characterised the mineralisation into two domains, as outlined below:

1. Copper-dominant mineralisation, and
2. Polymetallic mineralisation.

Table 34 summarises assumed metallurgical parameters used in the 2019 Mineral Resource Estimate. As a result of these changes, resource modelling reflects a reduction in potential value of some mineralisation types.

Table 34. *Nymagee assumed metallurgical parameters used in 2019 Mineral Resource Estimate*

Metallurgical domains	2019 Assumption
Copper dominant mineralisation	93-96*% recovery for copper 0% recovery for lead 0% recovery for zinc 64% recovery for silver
Polymetallic mineralisation	59% recovery of copper 88% recovery for lead 89% recovery for zinc 77% recovery for silver

**per grade-recovery curve.*

Cut-off grade

In addition to changes to the NSR parameters, metallurgical test work results support a cut-off grade of A$120/t, which the Competent Person considers appropriate for the ore types at Nymagee. This is an increase from the A$80/t cut off used in the 2018 Mineral Resource Estimate and is consistent with the cut-off grade used at Hera.

A comparison between the 2018 Mineral Resource Estimate and the 2019 Estimate shows a 62% reduction in Mineral Resource tonnes, a 35% reduction in contained copper metal, a 63% reduction in contained lead metal and a 67% reduction in contained zinc metal.

Production Target

No production target has been estimated for Nymagee.

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4.0 RESOURCES & RESERVES – OTHER MATERIAL INFORMATION SUMMARY

A summary of other material information pursuant to ASX Listing Rules 5.8 and 5.9 and JORC Code 2012 is provided below for each of the Company's Mineral Resource and Ore Reserve Estimates. The Company's Mineral Resources and Ore Reserve Estimates are material in the context of the overall business operations or financial results of Aurelia Metals Ltd.

The Assessment and Reporting Criteria in accordance with JORC Code 2012 for each of the Company's material mining projects is presented in Appendix 1-3 to this announcement.

4.1 Hera Mine

Mineral Resource Estimate

Geology and Geological Interpretation

The Hera deposit is structurally controlled, closely associated with en-echelon shear zones. Mineralisation is relatively narrow with a NNW-SSE orientation and is hosted in altered metasediments. The economic minerals are contained within quartz stockworks, breccias and skarns. The deposit is polymetallic in nature with variable gold, lead, zinc, silver and copper.

Sampling and Sub-sampling

Mineralisation is defined by underground and surface diamond drilling. Samples are taken as either whole or half core and are sampled on nominal one metre intervals.

Sample Analysis Method

Samples are taken as either whole or half core and are sampled on nominal one metre intervals. All samples are assayed in certified commercial laboratories. Samples are routinely assayed for Pb, Zn, Ag, Cu, S, Fe, Sb and As by ICP-AES. Gold is assayed using a 30g fire assay. Aurelia has maintained a detailed QA/QC system during its sampling and assaying processes.

Drilling Techniques

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.

Estimation Methodology

Aurelia provided H&S Consultants with data including the drillhole database, a series of 12 wireframed solids representing mineralised volumes over $2/t NSR and a series of wireframed solids representing mined stopes and development. Samples were composited to one metre intervals within each zone with a minimum composite length of 0.5m. In order to better reflect the contained metal within each interval, estimates were carried out on density-weighted values.

Variography was carried out within eight mineralised domains including Main North, Main South, Hays South, Hays North, Far West, North Pod, East South and Western Pb-Zn. Variography for each element showed relatively high continuity along-strike and down dip but poor continuity in the orientation perpendicular to these. Five metre north-south and vertical block dimensions were chosen to reflect drill hole spacing and to provide definition needed for mine planning. Sub-blocking with minimum dimensions of 1m x 2.5m x 2.5m was permitted.

Ordinary Kriging (OK) was used to estimate concentrations of Pb, Zn, Ag, Cu, Fe, S, Sb and density. Multiple Indicator Kriging (MIK) was used to estimate gold and arsenic. Limited top-cutting was applied to density-weighted values of Au, Pb, Zn, Ag, Cu, and As.

A net smelter return (NSR) value was applied to each block after estimation. The NSR is used to assign a dollar value to the polymetallic mineralisation. The NSR estimate (detailed under Ore Reserves) takes into account recoveries associated with each of the process streams. The estimate is also based on metal prices, exchange rates, freight, treatment charges, royalties and mill recoveries. Metal price parameters used in the NSR estimation are listed in Table 12. Metallurgical recoveries and concentrate grades are given in Table 13 of this report.

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Following Mineral Resource Estimation, a series of mineable shapes were produced by Deswik's Stope Shape Optimiser (SSO). The SSO shapes were used to constrain the reported Mineral Resource Estimate. The application of the smallest mineable unit (SMU) for the SSO shapes is similar to the process detailed in the Hera Resource and Reserve Estimate 2018. The reported Mineral Resource estimates include internal dilution. The small quantity of material that is inside the SSO shapes but outside the mineralised domain wireframes has been included in the 'Outside' category.

Resource Classification

Classifications were predominately based on the search passes used to estimate the blocks. This nominally equates to a drill hole spacing of 15x15m for Measured, 30x30m for Indicated and 60x60m for Inferred. A data location accuracy factor was also used to inform block classifications. To ensure coherency in the Mineral Resource classification, some individual isolated Inferred shapes were upgraded to Indicated and isolated Indicated shapes were downgraded to Inferred. The classification of certain areas in Main South was downgraded due to poor reconciliation of adjacent mined stopes.

Cut-off Grade

The Mineral Resource Estimate utilises a A$120/tonne Net Smelter Return (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 mill recoveries.

Mining and Metallurgical Methods and Parameters and other modifying factors considered to date

The Mineral Resource Estimate is based on standardised and current mine operational parameters used at the Hera Mine and a gold price of A$1,892/oz, a silver price of A$25/oz, a lead price of A$3,081/t and a zinc price of A$3,514/t.

Metallurgical recoveries used to determine the NSR cut-off for the Mineral Resource Estimate have been based on current operating experience at the Hera Mine and are detailed in Table 13 of this report.

Ore Reserve Estimate

Material Assumptions for Ore Reserve

The following material assumptions apply to the Hera Ore Reserve Estimate:

- Gold price of A$1,650/oz, a silver price of A$22/oz, a lead price of A$3,000/t and a zinc price of A$3,421/t.
- As outlined under Mineral Resource Estimate, a NSR (Net Smelter Return) estimation is used to assign a dollar value to the polymetallic mineralisation. This estimation considers recoveries associated with each of the process streams. The NSR also takes account of metal prices, exchange rates, freight and treatment charges, royalties and mill recoveries. The full cut-off for stoping is A$130/t NSR.
- No allowance for growth capital was made in the Ore Reserve Estimate. The economic analysis, upon which cut-off grade assumptions have been determined, is based on site costs which include sustaining capital only.
- Current operating cost structure.
- Current operational mining and metallurgical performance.
- Current geotechnical and hydrogeological conditions.

Ore Reserve Classification

The classification of the Hera Ore Reserve has been carried out in accordance with the recommendations of the JORC Code 2012. It is based on the density of drilling, estimation methodology, the orebody experience and the mining method employed.

All Proven and Probable Ore Reserves have been derived from Measured and Indicated Mineral Resources respectively.

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Mining Method

The mining method assumed in the 2019 Ore Reserve Estimate is bench and fill stoping progressing bottom up, consistent with the current mining method at Hera. This mining method is detailed in the Hera Resource and Reserve Estimate 2018.

A 0.5 metre dilution assumption has been used for east and west walls in the 2019 Ore Reserve Estimate. This is supported by a review of data from the Cavity Monitoring System (CMS) over the past 12 months. Strategies have been established to minimise stoping dilution.

Additional strategies have also been put in place to minimise the risk of loss to fired ore. Under operating conditions at Hera, the expected ore loss is estimated to be approximately 5% or a recovery of ore of 95% for bench stopes. A 90% recovery factor has been applied to the crown pillar extraction, once the unrecoverable crown and rib pillars have been subtracted, due to the nature of the ore recovery method employed.

The stopes were created by applying SSO software in Deswik CAD to the 2019 Mineral Resource model which was completed by H&S Consultants under guidance by Adam McKinnon. This approach is consistent with the methodology detailed in the Hera Resource and Reserve Estimate 2018. Hanging wall and footwall dilution applied to the stopes represent approximately 169kt (11%) of low grade material in the Ore Reserve. A total of 15kt (1%) of rockfill floor and rockfill end wall dilution was included in the stopes as part of the recoverable stope tonnages created.

Processing Method

The existing Hera crushing, grinding, flotation and CIL circuit will be utilised to treat the Ore Reserve. Assumed metallurgical recoveries utilised in the Ore Reserve Estimate are based on feasibility testwork, actual data and testwork since the commencement of production at the Hera Mine. Assumed metallurgical recoveries are tabulated in Table 13 of this report.

Cut-off Grade

The Hera Mine uses three main cut-off values. The full breakeven cut-off value (A$130/t) includes sustaining capital, all mine operating costs including development, drill and blast, bogging, haulage, filling, processing and site administration. The incremental stoping cut-off value (A$120/t) includes drill, blast, loading, haulage (including backfill), processing and site administration. The development cut-off value (A$80 to A$130/t) includes processing and site administration. The costs were based on the average of the year to date, 2019 Financial Year costs.

Estimation Methodology

Refer to Mineral Resource Section of this report.

Material Modifying Factors

There are no material modifying factors that need to be highlighted with the Ore Reserve. Hera is an operating mine. All regulatory leasing, approvals, licensing, agreements and current infrastructure are in place, which considers this estimation of higher confidence than that of a feasibility study.

4.2 Peak Mine

Mineral Resource Estimate

Geology and Geological Interpretation

Peak operates two distinct underground mines, each with a number of separate deposits. The 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, lead and zinc.

Sampling and Sub-sampling

The Mineral Resources are predominantly based on diamond drill holes in fresh rock with 100% recovery. The 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.

Sample Analysis Method

All samples from core are assayed in certified commercial laboratories. Samples are routinely assayed for 34 elements using ICP-AES with a four-acid digest. Gold is assayed using a 50g fire assay. Aurelia has maintained a detailed QA/QC system during its sampling and assaying processes.

Drilling Techniques

The majority of samples are core samples using a variety of sizes (LTK48, BQ, NQ2 and HQ) depending on drill hole spacing, depth and angle of hole. The holes are surveyed every 30m with a 15m and end of hole survey. The holes are drilled with a jumbo mounted LM90 diamond rig supplied by SMS drilling. A proportion of near surface drilling is RC, with the proportion of surface drilling making up the Mineral Resource is low.

Estimation Methodology

Wireframes for Mineral Resource estimation are constructed using a 0.1g/t Au and/or 0.1% Cu-Pb-Zn threshold. Samples are composited to one metre intervals. Ordinary kriging (OK) is used for estimation of copper, lead, zinc, silver, bismuth, iron and sulphur. Multiple indicator kriging (MIK) is used where there is significant gold mineralisation and a high co-efficient of variation (CV). OK is used for gold in other domains.

A NSR value was applied to each block after estimation. The NSR is used to assign a dollar value to the polymetallic mineralisation. The NSR estimate (detailed under Ore Reserves) considers recoveries associated with each of the process streams, which include production of base metal concentrates and recovery of gold through gravity and leaching. The estimate is also based on metal prices, exchange rates, freight, treatment charges, royalties and mill recoveries. Metal price parameters used in the NSR estimation are listed in Table 22. Metallurgical recoveries and concentrate grades are provided in Table 23 of this report.

Following Mineral Resource Estimation, a series of mineable shapes were produced by Deswik's SSO. The SSO shapes were used to constrain the reported Mineral Resource Estimate. The application of the smallest mineable unit (SMU) for the SSO shapes is similar to the process detailed in the Peak Resource and Reserve Estimate 2018. The reported Mineral Resource estimates include internal dilution.

Resource Classification

The classification scheme is based on the estimation search pass for gold in the case of gold deposits and copper or lead-zinc 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 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.

Cut-off Grade

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 A$120 per tonne was chosen to define Mineral Resources because this value is considered to have reasonable prospects of economic extraction in the medium term. Peak Gold Mines 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.

Mining and Metallurgical Methods and Parameters and other modifying factors considered to date

Peak has been successfully operating for more than 20 years so the mining methods and parameters are well established. The Mineral Resources utilise standardised and current mine operational parameters used at the Peak Mine and a gold price of A$1,892/oz, a silver price of A$25/oz, a lead price of A$3,081/t and a zinc price of A$3,514/t.

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Peak 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.

Ore Reserve Estimate

Material Assumptions for Ore Reserve

The following material assumptions apply to the Peak Ore Reserve Estimate:

- Gold price of A$1,650/oz, a silver price of A$22/oz, a lead price of A$3,000/t and a zinc price of A$3,421/t.
- As outlined under Mineral Resource Estimate, a NSR (Net Smelter Return) estimation is used to assign a dollar value to the polymetallic mineralisation. This estimation considers recoveries associated with each of the process streams. The NSR also takes account of metal prices, exchange rates, freight and treatment charges, royalties and mill recoveries.
- No allowance for growth capital was made in the Ore Reserve Estimate. The economic analysis, upon which cut-off grade assumptions have been determined, is based on site costs which include sustaining capital only.
- Current operating cost structure.
- Current operational mining and metallurgical performance.
- Current geotechnical and hydrogeological conditions.

Ore Reserve Classification

The classification of the Peak Ore Reserve has been carried out in accordance with the recommendations of the JORC Code 2012. It is based on the density of drilling, estimation methodology, the orebody experience and the mining method employed.

All Proven and Probable Ore Reserves have been derived from Measured and Indicated Mineral Resources respectively.

Mining Method

The mining method assumed in the 2019 Ore Reserve Estimate is a combination of open stoping and bench and fill stoping progressing bottom up, consistent with the current mining method at Peak.

Hanging wall and footwall dilution assumptions have been used for each mining area in the 2019 Ore Reserve Estimate and summarised in Table 30. This is supported by a review of data from the Cavity Monitoring System (CMS) over the past 12 months. Strategies have been established to minimise stoping dilution.

Processing Method

The current Peak crushing, grinding, flotation and CIL circuit will be utilised to treat the Ore Reserve. The plant is undergoing a major capital spent to retro-fit the existing plant to treat high grade lead and zinc mineralisation at high throughput rates. Assumed metallurgical recoveries utilised in the Ore Reserve Estimate are based on feasibility testwork, actual data and testwork since the commencement of production at the Peak Mine. Assumed metallurgical recoveries are tabulated in Table 23 of this report.

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Cut-off Grade

The following cut-off values were applied for the June 2019 Mineral Resource and Ore Reserve Estimate.

- Mineral Resources - A$120/t for all sources.
- Ore Reserves – South Mine - A$150/t (Peak and Perseverance)
- Ore Reserves – North Mine - A$130/t (New Cobar, Jubilee and Chesney)

Estimation Methodology

Refer to Mineral Resource Section of this report.

Material Modifying Factors

There are no material modifying factors that need to be highlighted with the Ore Reserve. Peak has an operating history of over 20 years. All regulatory leasing, approvals, licensing, agreements and current infrastructure are in place, which considers this estimation of higher confidence than that of a feasibility study.

4.3 Nymagee Project

Mineral Resource Estimate

Geology and Geological Interpretation

Nymagee is considered a structurally controlled Cobar-style deposit located five kilometres north-east of the Company's Hera Mine. Mineralisation comprises copper, lead, zinc and iron sulphides hosted in altered Devonian-age metasediments. The deposits are polymetallic in nature with variable copper, lead, zinc, silver and minor gold.

Sampling and Sub-sampling

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.

Sample Analysis Method

All samples are assayed in certified commercial laboratories. Samples are routinely assayed for Pb, Zn, Ag, Cu, 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.

Drilling Techniques

Mineralisation is defined by underground and surface diamond and reverse circulation percussion (RC) drilling.

Estimation Methodology

Aurelia provided H&S Consultants with data including the drill hole database and wireframed solids based on a 1% sulphide volume threshold. High Pb-Zn sub-zone wireframes were created by H&S Consultants. Samples were composited to one metre intervals within each zone with a minimum composite length of 0.5 metres. In order to better reflect the contained metal within each interval, estimates were carried out on density-weighted values.

Ordinary Kriging (OK) was used to estimate concentrations of Cu, Pb, Zn, Ag, Fe, S, As and density. Top cutting was selectively applied as appropriate. The classification of the Mineral Resources are based on increasing search passes, where pass 1 and 2 are Indicated and pass 3 is Inferred. Pass 1 and 2 (Indicated) are based on search radii of 4x30x30m and 8x60x60m respectively, while Pass 3 (Inferred) is based on a search radii of 16x120x120m. Further details on the Mineral Resource Estimate are contained in JORC Table 1 in the Appendix to this statement.

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 considers assumed recoveries associated with an updated Nymagee metallurgical model, developed since the previous Mineral Resource Estimate in 2018. This model assumes copper, lead, zinc 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 and metallurgical parameters used in the NSR calculation are listed in Table 33 and 34 of this report.

Resource Classification

The classification scheme is based on the estimation search pass for copper, where Pass 1&2 = Indicated and Pass 3 = Inferred. 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.

Cut-off Grade

In addition to changes to the NSR parameters, metallurgical test work results support a cut-off grade of A$120/t, which the Competent Person considers appropriate for the ore types at Nymagee. This is an increase from the A$80/t cut off used in the 2018 Mineral Resource Estimate and is consistent with the cut-off grade used at Hera.

Mining and Metallurgical Methods and Parameters and other modifying factors considered to date

The Mineral Resources utilise standardised operating parameters for an underground mine of similar scale and nature to the nearby Hera Mine. Detailed metallurgical testwork was utilised to inform the metal recoveries used in the estimation of NSR cut-offs. The assumed metallurgical recoveries are detailed in Table 34 of this report.

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

Section 1 Hera 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 (e.g. cut channels, random chips or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.*	Sampling is by sawn half core of HQ, NQ, LTK60 core or quarter PQ core. Nominal sample intervals are 1m with a range from 0.5m to 1.5m. Samples are transported to ALS Geochemistry Orange for preparation and assay. Since April 2016, a whole core sampling regime has been employed for many of the underground infill holes for larger sample sizes and improved accuracy, particularly for gold.
	• *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.*	Assay standards or blanks are inserted at least every 15 samples. Silica flush samples are employed after each occurrence of visible gold. During Mineral Resource drill out programmes duplicate splits of the coarse reject fraction of the crushed core are assayed every 20 samples
	• *Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.*	Diamond drilling was used to obtain core samples of nominally 1m, but with a range between 0.5-1.5m. 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 OG46- Aqua Regia Digestion with ICP-AES finish. Where specified, coarse gold samples greater than 0.5g/t were reassayed by screen fire assay (Method Au-SCR22AA) using the entire sample. 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 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	• *Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).*	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	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to*	Measured core recovery against intervals drilled is recorded as part of geotechnical logging. Recoveries are greater than 95% once in fresh rock. No detailed assessment of RC chip recovery has been conducted. Surface holes use triple tube drilling to maximise recovery. Underground LTK60/NQ core is double tube drilling. The relationship between sample recovery and grade has not been assessed.

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	preferential loss/gain of fine/coarse material.	
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.* • *The total length and percentage of the relevant intersections logged.*	Systematic geological and geotechnical logging is undertaken. Data collected includes: • 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. • 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. • Bulk density by Archimedes principle at regular intervals. • Magnetic susceptibility recorded at 1m intervals for some holes as an orientation and alteration characterisation tool. • 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 sample preparation	• *If core, whether cut or sawn and whether 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 technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *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.*	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. Since April 2016, entire cores have been sent for assay to improve representivity, especially for gold. RC chips have generally been dry riffle split 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. 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 occurrence of visible gold. 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. These are checked by Aurelia employees. Assay grades are compared with mineralogy logging estimates. If differences are detected a re-assay 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. 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).
Quality of assay data and laboratory test	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is*	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-

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	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 (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.*	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: 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 sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.*	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 but have not been in the reported area as this work is intended to test areas not previously explored. Drill hole data including meta data, orientation methods, any gear left in the drill hole, lithological, mineral, structural, geotechnical, density, survey, sampling and occasionally magnetic susceptibility is collected and entered directly into an excel spread sheet using drop down codes. When complete the spreadsheet is emailed to the geological database administrator, the data is validated and uploaded into an SQL database. 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	• *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.* • *Specification of the grid system used* • *Quality and adequacy of topographic control.*	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 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	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.*	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 consistent with the number of drill holes intersecting the lode and with the classifications applied under the 2012 JORC code.

	• *Whether sample compositing has been applied.*	Sample compositing is not applied.
Orientation of data in relation to Geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *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.*	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. 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
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data*	An audit and review of the sampling regime at Hera was undertaken by H&S Consultants in November 2015. Recommendations from this review form part of the current sampling practices at Hera

Section 2 Hera 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	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	The Hera Deposit along with the Hebe, Zeus and Athena Prospects are located on ML1686. The land comprising ML1686 is part of "The Peak" property which is a perpetual lease held by Hera Resources Pty Ltd (a wholly owned subsidiary of Aurelia Metals). Production of the first 250,000 ounces of gold from the Hera Deposit is subject to a 4.5% royalty payable to CBH Resources Ltd. as part of the purchase of the project. North Pod extends onto ML1746. ML1746, has a surface exclusion of 100m, is directly north and adjoins ML1686. ML1746 is currently granted to Hera Resources Pty Ltd. EL6162, exploration lease surrounding both ML1686 and ML1746, is granted to Hera Resources Pty Ltd. ML1686 is a granted mining lease that expires in 2034; ML1746 is a granted mining lease with a 100m surface exclusion, which expires December 2037.

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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 surveyedc. 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 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	• *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:* ○ *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.* • *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.*	For the purpose of reporting Ore Reserves and Mineral Resources this section is not applicable.
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.* • *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the*	For the purpose of reporting Ore Reserves and Mineral Resources this section is not applicable.

	procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drillhole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').*	For the purpose of reporting Ore Reserves and Mineral Resources this section is not applicable.
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.
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	• *The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	For the purpose of reporting Ore Reserves and Mineral Resources this section is not applicable.

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Section 3 Hera 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.* • *Data validation procedures used.*	All geological data is stored electronically with limited automatic validation prior to upload into a database, managed off site by Maxwell GeoServices. The master drill hole database is located on an SQL server, which is backed up on a daily basis. The drill hole database was provided to H&S Consultants as a series of excel files. H&S Consultants did not modify these tables and any adjustments, such as compositing, were carried out programmatically so a transcript of any changes was recorded and checked. Basic drill hole database validation completed by H&S Consultants include: • Intervals were assessed and checked for duplicate entries, sample overlaps, intervals beyond end of hole depths and unusual assay values • Downhole geological logging was also checked for interval overlaps, intervals beyond end of hole depths and inconsistent data.
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits have been undertaken indicate why this is the case.*	Dr McKinnon, who takes responsibility for the data underpinning the Mineral Resource Estimate, works full time at the Hera Mine and has therefore visited the site on numerous occasions. Dr McKinnon has a thorough understanding of the geology and data on which the Mineral Resource Estimate is based. Rupert Osborn, who takes responsibility for the estimated grades, tonnages and classification has not visited the Hera Mine due to time and cost constraints. Arnold van der Heyden, the Managing Director of H&S Consultants, worked closely with Rupert Osborn throughout this Mineral Resource Estimate and acted as H&S Consultant's internal reviewer. Arnold van der Heyden visited the Hera Mine in November 2015, April 2016 and September 2016. The purposes of these visits were to review and calibrate existing Mineral Resource estimates.
Geological interpretation	• *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.* • *Nature of the data used and of any assumptions made.* • *The effect, if any, of alternative interpretations on Mineral Resource estimation.* • *The use of geology in guiding and controlling Mineral Resource estimation.* • *The factors affecting continuity both of grade and geology.*	A purely geological model of the Hera deposit has not been produced as there are no obvious lithological marker units to allow a lithology/stratigraphy model to be constructed. The mineralisation at Hera, indicated by elevated gold, silver, lead, zinc and sulphur grades, appears to be structurally controlled and is associated with shearing, brecciation and quartz veining. Aurelia produced a total of 12 wireframe solids that represent volumes of mineralisation over AUD$2 NSR. These zones form coherent, sub-parallel, nominally tabular bodies and are well supported by drilling. The highest metal grades tend to occur in the core of each lode with generally gradational boundaries to the country rock; sharp boundaries appear to be uncommon. There is a broad envelope of alteration associated with the mineralisation, which includes the development of sericite, chlorite, silica and pyrrhotite. The low value boundary was suggested to Aurelia by H&S Consultants following a review of an in-house estimate at the end of 2015. H&S Consultants believe that it is important that the threshold for mineralisation is at least one order of magnitude below the economic cut-off grade because otherwise the estimates are likely to be conditionally biased. The twelve solid wireframes representing mineralised domains were treated as hard boundaries during estimation of all elements except arsenic. This means that blocks inside a particular domain were estimated using only data from inside that domain. Blocks and data that lie outside of all of the mineralised domain wireframes were treated as a single additional domain. Variogram models were produced for each of the domains with sufficient data and search ellipse orientations were defined for each domain individually.

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		Arsenic mineralisation appears antithetic to gold, silver, lead, zinc mineralisation. A single wireframe solid was created, encompassing the North Pod mineralised zone, to define a zone of enriched arsenic mineralisation. This wireframe was treated as a hard boundary whilst estimating arsenic. Small local variations in the interpretation of the continuity of individual domains are possible but are unlikely to significantly impact the global Mineral Resource estimate as the interpretation of the domains is well supported by drill hole data and the domain boundary was set at a relatively low grade. Recent work indicates that the mineralisation may be concentrated within a skarn horizon although H&S Consultants is not fully aware of the evidence to support this. This alternative interpretation of the geology is very unlikely to impact estimated Mineral Resources as mineralised domains are based on zones of elevated assay grades and these zones are unlikely to change due to a change in the deposit genesis model. A fault, observable in underground developments, cross cuts the deposit at the southern end of Main North and is interpreted to off-set Main South by about 25 m to the west.
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 Mineral Resources at Hera span a length of around 800 m and consist of seven en echelon volumes that dip steeply to the west-southwest. The plan width of the Mineral Resource varies from 2 m to 70 m (including internal low grade zones) with individual stopes reaching up to 25 m wide. The upper limit of the reported estimates occurs at a depth of around 155 m from surface and the lower limit of the Mineral Resource extends to a depth of 585 m below the surface.
Estimation and modelling techniques	• *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters, and maximum distance of extrapolation from data points.* • *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.* • *The assumptions made regarding recovery of by-products.* • *Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).* • *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.* • *Any assumptions behind modelling of selective mining units.* • *Any assumptions about correlation between variables.* • *Description of how the geological interpretation was used to control the Mineral Resource estimates.* • *Discussion of basis for using or not using grade cutting or capping.* • *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.*	The concentrations of gold, silver, lead, zinc, copper, iron, sulphur, arsenic and antimony were estimated on density weighted values in order to better reflect the contained metal within each interval. The estimated density weighted concentrations were then divided by the estimated density to produce grade estimates for each block. The concentration of antimony was only estimated for North Pod due to lack of data coverage in the other domains. The density weighted concentration of gold was estimated using Multiple Indicator Kriging (MIK). The gold grades at Hera exhibit a highly positively skewed distribution with coefficients of variation within each domain of over 5. The gold estimates at Hera therefore show extreme sensitivity to a small number of high grades. MIK is considered an appropriate estimation method for the gold grade distribution at Hera 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. Arsenic was also estimated using MIK due to the highly positively skewed distribution of arsenic grades. The density weighted concentrations of silver, lead, zinc, copper, iron, sulphur 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 coefficients of variation (except arsenic) were generally low to moderate and the grades are reasonably well structured spatially. Micromine software was used for both the MIK and Ordinary Kriging estimates. The Hera deposit was estimated by H&S Consultants in July 2018. H&S Consultants considers that the current Mineral Resource Estimate takes appropriate account of previous estimates. Additional drilling and mining has occurred since these estimates were produced. Mine production data were provided to H&S Consultants and compared to the current estimate. As such, H&S Consultants considers that the Mineral Resource Estimate takes appropriate account of these data. This is discussed in more detail below, with reference to reconciliation data.

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		Hera currently utilises two processing routes namely; a gold and silver dore and a lead-zinc concentrate that also includes gold and silver credits. It is assumed that recoveries will continue at the current level. The gold, silver, lead, zinc and copper estimates are considered to be of economic significance. The iron, sulphur, arsenic and antimony estimates are not considered to be of economic significance, with sulphur, arsenic and antimony being potentially deleterious. Two additional indicator parameters were estimated using Ordinary Kriging and the gold metal variogram model, namely a data location accuracy factor and a screen fire assay factor. The data location accuracy factor was estimated because Aurelia have found evidence in underground developments that some surface drill holes have deviated a significant distance from the planned and surveyed drill hole traces. Aurelia provided a list of drill holes for which the location of the drillhole traces was known with a high degree of confidence. These drill holes consisted of all underground drill holes and surface drill holes that had been located in underground development. The relative contribution to estimates of samples with a high degree of confidence in their location was estimated and used to modify the Mineral Resource classification as described below. The data from some surface drill holes was removed from some mineralised zones in areas where extensive underground drilling had superseded the less reliable surface drilling. The screen fire assay factor gives an estimate of the relative contribution of data derived from screen fire assays versus the contribution of fire assays. This was provided for reference but was not used to modify Mineral Resource classification Samples were composited to nominal 1.0 m intervals, whilst honouring the mineralised domain wireframes. The minimum composite length was set to 0.5 m. A three pass search strategy was used for estimation. Each pass utilised a search ellipse with four radial sectors. The maximum number of samples per sector was set to four with a maximum of 8 data per sector for each pass. Additional search parameters are given below: 1. 3x20x20m search, 16-32 samples, minimum 4 drill holes used, maximum 6 data per hole 2. 5x35x35m search, 16-32 samples, minimum 4 drill holes used, maximum 6 data per hole 3. 9x60x75m search, 8-32 samples, minimum 2 drill holes used, maximum 8 data per hole The maximum distance of extrapolation of estimates from data points is 70 m. The drill hole spacing at Hera is difficult to quantify due to the irregular distribution of collars, which is largely a result of underground collar locations being limited to development. In general, drill hole spacing is around 20 m along strike and down dip. Composite length is 1 m. The block model was set up on a rotated grid to honour the historic mine grid rotation. Parent block dimensions are 2x5x5 m (X, Y, vertical respectively). The five metre Y and vertical block dimensions were chosen to reflect drill hole spacing and to provide definition requested for mine planning. The shorter two metre X dimension was used to reflect the narrow mineralisation and downhole data spacing. Discretisation was set to 2x5x5 (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 GS3 on the one metre composited data from the eight mineralised domains that contained over 2,000 data points. These domains are Main North, Main South, Hays South, Hays North, Far West, North Pod, East South and Western PbZn. The other domains used the variogram parameters from a nearby domain.

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		Each domain was estimated separately using only data from within that domain. The orientation of the search ellipse was varied to reflect the orientation of the mineralisation in each domain. Grade cutting was applied to gold, silver, lead, zinc on a domain by domain basis in order to reduce the impact of extreme values on the Mineral Resource 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. Top-cuts were not applied to arsenic or antimony composites although top-cutting may be warranted. These elements are considered to be potentially deleterious. The final H&S Consultants block model was reviewed visually by H&S Consultants and Aurelia and it was concluded that the block model fairly represents the grades observed in the drill holes. H&S Consultants also validated the block model statistically using histograms and summary statistics. The estimates were compared to the previous Mineral Resource estimate produced by H&S Consultants in July 2018. That estimate was produced following essentially the same methodology as the estimates presented here. Small differences include removal of some surface drill holes where superseded by new drilling and changes to the NSR estimation. The July 2018 and May 2019 estimated grades are very similar. The final H&S Consultants block model was reviewed visually by H&S Consultants and Aurelia and it was concluded that the block model fairly represents the grades observed in the drill holes. H&S Consultants also validated the block model statistically using histograms and summary statistics. Significant additional drilling and mining has occurred between the July 2018 and current Mineral Resource estimate. Despite minor differences the two models agree well. The estimates were compared to Run of Mine (ROM) production records for verification. A summary of this comparison is provided below in the Discussion of relative accuracy/ confidence section.
Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	Tonnages are estimated on a dry weight basis.
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 polymetallic mineralisation in order to simplify reporting. Aurelia provided the NSR estimation to H&S Consultants. A NSR cut-off of AUD$120 was selected by Aurelia. Material at this cut-off is considered by Aurelia to have reasonable prospects of extraction in the medium term. Hera is an operating mine and the NSR estimation is well developed and informed. The NSR estimation takes account the recoveries associated with each of the two processing routes; namely production of Au and Ag dore and Pb-Zn concentrate (that also includes Ag credits). The NSR also takes account of the metal price, exchange rates, freight and treatment charges and royalties. The metal recoveries and metal prices used in the NSR estimation are given below. Costs associated with royalties, processing and transport are considered to be commercially sensitive to Aurelia and are not given. The estimation formula is complex as it takes into account the two processing routes and the recoveries and costs associated with each. For this reason the formula is not provided. An AUD$ to USD$ exchange rate of 0.74 was assumed for the Mineral Resource.

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Assumed metal recoveries:

Parameter	2018 Recovery	2019 Recovery
Gold Recovery - Dore	90%	90%
Silver Recovery - Dore	10%	10%
Silver Recovery - Concentrate	80%	80%
Lead Recovery - Concentrate	91%	91%
Zinc Recovery - Concentrate	90%	90%

Assumed metal prices:

Metal	2018 Price (US$)	2019 Price (US$)
Gold (oz)	1,400	1,400
Silver (oz)	18.80	18.80
Lead (t)	2,280	2,280
Zinc (t)	2,600	2,600

All elements included in the NSR estimation are currently being recovered and sold. Copper concentrations have been estimated but due to the low copper grades it is not being recovered or sold and is therefore not reported as part of the mineral resource.

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.*	Hera currently uses longhole bench stoping. The reported Mineral Resources are limited to block centroids that lie within practical shapes that were designed using Deswik's Stope Shape Optimiser. The Smallest Mineable Unit (SMU) is 5 m long, 25 m high, with a minimum mining width of 3 m. The reported Mineral Resources include all estimated blocks that lie within the practical shapes and therefore include internal dilution. Additional external mining 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.*	Hera is an operating mine and the assumptions about metallurgical amenability are based on actual performance of the mill over a period of time. Processing recoveries have been shown to consistently meet or exceed those quoted above.
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*	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 Hera as stope fill. Any remaining waste will be added to surface dumps.

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	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	• *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.*	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 4,021 density measurements have been taken from drill core at the Hera deposit. Samples are weighed before and after oven drying overnight at 110ºC 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. 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	• *The basis for the classification of the Mineral Resources into varying confidence categories.* • *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).* • *Whether the result appropriately reflects the Competent Person's view of the deposit.*	The classification is based predominately on the search pass used to estimate the block. The data location accuracy factor that quantifies the relative contribution of data points with low location accuracy confidence was used to downgrade the classification of blocks that were estimated using an excessive number of data with poor confidence in their location. The changes to the search pass are shown in the table below. **Search Pass** / **Location Accuracy Factor** / **Modified Pass** / **Classification** 1 / >0.75 / 1 / Measured 1 / <0.75 / 2 / Indicated 2 / >0.5 / 2 / Indicated 2 / <0.5 / 3 / Inferred 3 / All / 3 / Inferred In order to produce a single classification for each stope the tonne-weighted modified pass was averaged for each stope. Stopes with an average modified pass of less than 1.5 were classified as Measured, stopes averaging between 1.5 and less than 2.5 were classified as Indicated and stopes averaging 2.5 or over were classified as Inferred. Following discussion with Aurelia personnel individual isolated Inferred stopes were upgraded to Indicated and isolated Indicated stopes were downgraded to Inferred. The classification of two areas of Indicated stopes in Main South was downgraded to Inferred due to poor reconciliation of adjacent, mined stopes. This scheme is considered by H&S Consultants 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 classification appropriately reflects the Competent Persons' (Adam McKinnon and Rupert Osborn) view of the deposit.
Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	This Mineral Resource estimate has been reviewed by Aurelia personnel and the Mineral Resource report was peer reviewed by both Aurelia and H&S Consultants. No material issues were identified as a result of these reviews.

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Discussion of relative accuracy/ confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the 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.* • *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* • *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	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 H&S Consultants 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. Overall, the silver, lead, zinc and copper estimates compare reasonably well to ROM production records although there are some large differences on individual stopes. The estimates for gold show even more variability when compared to individual stope production records and appear to underestimate the gold content by about 16% overall. Reconciliation of Main South showed that estimates had underestimated the grade of Au, Ag, Pb and Zn. Investigation into this issue in 2017 indicated that the ROM grades produced were significantly higher than the mineralisation intersected by local drilling. This poor reconciliation instigated the downgrade of all Measured Resources to Indicated in Main South. At this stage only relatively small tonnages have been mined at Hays North, Hays South, Far West, Far West Deeps and North Pod. It is recommended that the estimates continue to be reconciled against production records. If the estimated gold grades are shown to consistently under-represent production records, the top-cutting procedure may need to be altered. The table below shows the estimated grades over the ROM recorded grades. Values less than 100% indicate that the estimated grades are lower than the ROM records i.e. an underestimation.

Domain	Tonnes (kt)	Au	Ag	Pb	Zn	Cu
Main North	478	91%	109%	97%	103%	104%
Main South	493	88%	97%	98%	97%	96%
Hays North	15	95%	110%	96%	71%	111%
Hays South	62	84%	83%	83%	98%	86%
Far West	90	46%	94%	88%	98%	84%
Far West Deeps	46	79%	127%	115%	110%	106%
North Pod	100	60%	97%	99%	108%	92%
Total	**1,282**	**84%**	**102%**	**97%**	**101%**	**100%**

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Section 4 Hera 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 Reserves	• *Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.* • *Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.*	The Ore Reserve Estimate is based on the Mineral Resource block model received in May 2019 and the same block model was used to create the Mineral Resource Estimate by Adam McKinnon. The Mineral Resource Estimate includes the Ore Reserve Estimate. All known mineralisation in the area is epigenetic "Cobar" style. Deposits are structurally controlled quartz + sulphide matrix breccias grading to massive sulphide. 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 as brittle sulphide matrix breccias with silicification grading to ductile massive sulphides that crosscut both bedding and cleavage.
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits have been undertaken indicate why this is the case.*	Ore Reserve Estimate was completed by Givemore Kamupita, who is site based, with assistance from Anthony Allman.
Study status	• *The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.* • *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.*	A full Life of Mine Plan (LOM) was conducted in June 2019 to incorporate the Ore Reserve Estimate and Production Target. This included development design, stope access, mining method application, scheduling and resource levelling. The mine is currently in operation. The order of accuracy is at least or better than a definitive feasibility study with actual costs, stope performance and recoveries applied to the Ore Reserve Estimate.
Cut-off parameters	• *The basis of the cut-off grade(s) or quality parameters applied.*	The cut-off values were estimated using the current economic performance of the mine. Cut-off values incorporate all costs including sustaining capital, 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	• *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).*	Inferred Mineral Resource was considered as a Production Target as part of the LOM design for this report. The mining method used for the LOM is benching over 25m sublevels. The mining method is a bottom up process. This is still the most appropriate method for control of dilution, reduction of pillars and ore loss, ground control, safety and regional stability.

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	• *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.* • *The assumptions made regarding geotechnical parameters (e.g. pit slopes, stope sizes, etc.), grade control and pre- production drilling.* • *The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).* • *The mining dilution factors used.* • *The mining recovery factors used.* • *Any minimum mining widths used.* • *The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.* • *The infrastructure requirements of the selected mining methods.*	Access is from the hanging wall (east) decline and the decline has a standoff of 50m from the ore body. The decline face is currently 640m vertical from surface. Level spacing is 25m Sill pillars will be extracted approximately every 100m vertical extent using an uphole stoping and yielding pillar arrangement. Stopes are typically 30m long, 25m high and 10m wide. Stopes are assumed to be stable up to 30m in strike based on current CMS survey information. This represents a side wall hydraulic radius of 7.3m. A minimum stoping width of 3m has been used and the mine average stope width was 10m. Stope shapes in the Ore Reserve Estimate include an expected dilution of 0.5m on both eastern and western walls. This equates to approximately 11% dilution. Survey of current voids suggests this is reasonable. Bench stopes and crown pillar stopes in the Ore Reserves include the expected recovery of 95% and 90% respectively. Survey of current voids suggests this is reasonable. Stope shapes and mine development were assessed every 5m along strike
Metallurgical factors or assumptions	• *The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.* *Whether the metallurgical process is well-tested technology or novel in nature.* • *The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.* • *Any assumptions or allowances made for deleterious elements.* • *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.* • *For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications*	The Ore Reserve Estimate is predicated on the existing Hera ore processing facility with a nominal throughput rate up to 480ktpa. It incorporates gravity, flotation and a concentrate leach to produce a gold and silver doré and a Pb/Zn concentrate. All metallurgical assumptions are based on current operation processing criteria. The main deleterious elements present at Hera ore body is Silica (SiO_2) >3%, iron (Fe) >10% and arsenic. It is assumed that all deleterious elements are within tolerances and no penalties have been applied to financial estimations.

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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 waste dumps should be reported.*	The Hera Mine is in full operation and has all environmental, statutory and social approvals and licenses to operate. The project continues to meet the reporting requirements under the terms of the project approval and as such remains in good standing with all regulatory authorities. The Hera Deposit along with the Hebe, Zeus and Athena Prospects are located on ML1686. The land comprising ML1686 is part of "The Peak" property which is a perpetual lease held by Aurelia Metals.
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.*	All surface infrastructures are complete with no new surface infrastructure required for constructing for the current Ore Reserve. Ongoing sustaining capital and infrastructure underground including declines, level accesses, escapeways, vent accesses and rises, pump stations and substations will need to be developed to develop this Ore Reserve Estimate. This has been accounted for in the cost analysis and cut-off values in determination of ore.
Costs	*The derivation of, or assumptions made, regarding projected capital costs in the study.* • *The methodology used to estimate operating costs.* • *Allowances made for the content of deleterious elements.* • *The derivation of assumptions made of metal or commodity price(s), for the principal minerals and co- products.* • *The source of exchange rates used in the study.* • *Derivation of transportation charges.* • *The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.* • *The allowances made for royalties payable, both Government and private.*	Sustaining and operation costs have been based on FY2019 year to date actual costs. Production of the first 250,000 ounces of gravity gold from the Hera Deposit is subject to a 4.5% royalty payable to CBH Resources Ltd. as part of the purchase of the project. Metal Price and exchange rate assumptions are as provided by Aurelia Metals management and have been based on consensus forecasts.
Revenue factors	• *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.* • *The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.*	The following table represents revenue assumptions. Treatment costs of US$105/dmt were used.

Metal	Unit	2018 USD	2018 Recoveries	2019 USD	2019 Recoveries
Gold	oz	1,220	90%	1,188	90%
Silver	oz	17.00	90%	16.10	90%
Lead	t	2,280	91%	2,160	91%
Zinc	t	2,600	90%	2,463	90%
AUD/USD		0.76		0.72	

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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.* • *A customer and competitor analysis along with the identification of likely market windows for the product.* • *Price and volume forecasts and the basis for these forecasts.* *For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract*	Hera project has in place all necessary contracts and approvals for the transportation of concentrate to clients. The transport contracts are renewable on standard commercial terms. The concentrate offtake agreement is life of mine. Gold and silver doré products produced on site are shipped to receiving Mint for refining 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	• *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.* • *NPV ranges and sensitivity to variations in the significant assumptions and inputs.*	A financial model of the Hera Project has been completed by suitably qualified and experienced accounting and financial staff employed by Aurelia and has been reviewed by senior management of Aurelia. The financial model demonstrates a positive NPV.
Social	• *The status of agreements with key stakeholders and matters leading to social licence to operate.*	Hera mine is in full operation and has all environmental and social approvals and licenses to operate. The project continues to meet the reporting requirements under the terms of the project approval and as such remains in good standing with all regulatory authorities. The land comprising ML1686 is part of "The Peak" property which is a perpetual lease held by Aurelia Metals. ML1686 is a granted mining lease that expires in 2031.
Other	• *To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:* • *Any identified material naturally occurring risks.* • *The status of material legal agreements and marketing arrangements.* • *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.*	

Classification	• *The basis for the classification of the Ore Reserves into varying confidence categories.* • *Whether the result appropriately reflects the Competent Person's view of the deposit.* • *The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).*	The Ore Reserve Estimate is based on the Mineral Resource Estimate. Measured and Indicated Mineral Resources been converted to a Probable Ore Reserve. It is the Competent Person's view that the classifications used for the Ore Reserve Estimate are appropriate.
Audits or reviews	• *The results of any audits or reviews of Ore Reserve estimates.*	No external audit of this Ore Reserve Estimate has been done to date but the process has been internally reviewed.
Discussion of relative accuracy/ confidence		The Ore Reserve Estimate is mostly determined by the order of accuracy associated with the Mineral Resource model, the metallurgical inputs and the cost adjustment factors used. In the opinion of the Competent Person, there is some risk that the operating costs are not achieved due to likely reduced output of the processing plant when mining high grade Pb/Zn ore. There is a risk with maintaining silica below 3%, so as not to incur penalties, as assumed. There is a risk with the high arsenic and antimony values in the North Pod. Further work is ongoing to ensure the levels are acceptable in the concentrate feed.

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APPENDIX 2 Peak JORC Code 2012 (Table 1) – Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. AusIMM.
Section 1 Peak Sampling Techniques and Data
(Criteria in this section apply to all succeeding sections)

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Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (e.g. cut channels, random chips or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.*	The Mineral Resources are predominantly based on diamond drill holes in fresh rock with 100% recovery. The 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. PGM has employed Swick Mining Services since 2008 as their preferred underground drilling contractor to maintain quality in core handling.
	• *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 are 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.
	• *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.*	Up to 100% of the core can be sampled but is generally restricted to all intervals which have alteration, mineralisation and shearing. Sampling is continuous and perpendicular to strike of the lodes reported. The entire metre of whole BQ or half NQ is completely is crushed to 3mm and 100g is riffle split and pulverised to 90% passing 75 microns. All gold assays are 50g fire assay (Method Au – AA26) with a detection level of 0.01ppm and base metals by 4 acid digest (Method ME-ICP61) with detection levels of: Ag-0.5ppm, Cu-0.01ppm, Pb-0.01ppm, Bi-1ppm, Zn-0.01ppm, S-0.01%, Fe-0.01%. Over limit analysis is by OG62- with sulphur over range by method S-IR08 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	• *Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).*	The majority of samples are core samples using a variety of sizes (LTK48, BQ, NQ2 and HQ) depending on drill hole spacing, depth and angle of hole. The holes are surveyed every 30m with a 15m and end of hole survey. The holes are drilled with a jumbo mounted LM90 diamond rig supplied by SMS drilling. A proportion of near surface drilling is RC. The proportion of surface areas making up the Mineral Resource is low.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.*	Drillers record core loss while drilling with core blocks in the run. Location of loss is recorded on sample submission sheet. 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.

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	• *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *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.*	In RC drilling efforts are made to reduce the amount of fines lost.
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.* • *The total length and percentage of the relevant intersections logged.*	Lithological information is gathered to 10cm intervals into tables defining lithology, mineralisation, alteration and shear. Mine delineation is not oriented so structural measurements are taken in relation to the regional foliation which is considered to be constantly orientated. Broader stratigraphical and structural units are captured in an interpretation table. All of the deposits have defined structural zones across strike. Major lithologies are wireframed to ensure continuity of the interpretation. Exploration core is oriented so structural measurements can be taken. 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. All core and chips are 100% logged for lithology, stratigraphy, mineralisation, alteration, RMQ, structure and shear.
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether 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 technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *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.*	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. RC drill holes were sampled in 1, 2 and 4 metre intervals depending on the classification. An exploration RC hole would normally be sampled initially in 4m composites and followed up with 1m samples for anomalous intervals. Both the riffle splitter and spears have been used in these subsampling instances. 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. The amount of Mineral Resource attributed to areas dominated by RC drilling is minor and usually omitted from the Mineral Resource by exclusion. For a sample of core being assayed for grade the same regime is followed as explained in sampling techniques above. RC samples are split to a 300 gram sample so no further reduction is necessary at the lab. Audits of PGMs core yard facilities by external sources have suggested few improvements to the system currently employed. Measures to ensure sample representivity are outlined under sampling techniques. Twinning holes and second half core sampling is adopted during exploration programmes.

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	• *Whether sample sizes are appropriate to the grain size of the material being sampled.*	Variability and nugget effects produces complications when sampling for coarse gold have been address by PGM. The sample size of drill core is adequate to capture gold at the micron size range. The ore bodies with the higher CV's are drilled at a closer spacing to minimise risk.
Quality 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.*	Samples dry for 12 hours at 104°C in oven. Samples are crushed to <3mm and pulverised to 90% passing 75um in and LM5 pulveriser. 250 grams of sample is scooped from the bowl. Sizing tests are performed every 10 samples. Barren wash is used between samples. 50 grams is scooped from the 250 grams for fire assay. 4 acid digest is used to determine base metals. Fire assay and four acid digest are methods considered as total element analysis. Acid leach tests are performed on waste used for surface works where necessary. The suite of elements assayed and the lad methods used are considered adequate for Mineral Resource reporting. Nil by these methods A blank is submitted at the start of every hole. Standards are submitted at a frequency of 1 in 20. Standard fails are followed up with 10 sample repeats adjacent to the standard that failed. Replicates and duplicates are done by ALS at a frequency of 1 in 20. Standards, replicates and duplicates are graphed at regular intervals to determine accuracy and precision. The standards are supplied by Gannet Holdings Pty Ltd and Geostats. Standards have been both matrix matched and non-matrix matched. Between 300 and 500 pulps are selected from ore samples and sent for check assay at another lab annually.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.*	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 .CSV file from the lab is manipulated by an excel add-in routine to suit the load query in the geological database "Drillview". The database has a verification sequence which checks end of holes and overlapping intervals. All data entry procedures are documented. Historic hard copies are stored in a fire proof room. Electronic data is backed up weekly monthly and yearly and stored in a fire proof safe on site. Default low grades are used for unassayed intervals in the estimation composite.
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used* • *Quality and adequacy of topographic control.*	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 checked 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.* • *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity*	Underground drill hole spacing, for Ore 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 a mine progresses to depth. Drill spacing away from the main mineralised lodes is generally wider spaced and dependent on the stage of exploration.

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	appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. • *Whether sample compositing has been applied.*	The classification scheme is based on the estimation search pass for gold in the case of gold deposits and copper or lead-zinc 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 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 are sampled at one metre intervals and compositing is at 1m intervals.
Orientation of data in relation to Geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *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.*	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.
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 regards 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. Drill hole data is reviewed by H&S Consultants during the Mineral Resource audits and measures of drill hole deviation and assay ranges are scrutinised and verified.

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Section 2 Peak Reporting of Exploration Results

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

<table>
<tr><th>Criteria</th><th>JORC Code explanation</th><th>Commentary</th></tr>
<tr>
<td>Mineral tenement and land tenure status</td>
<td>

- *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.*
- *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*

</td>
<td>

In August 2012 a notice of application for determination of native title was made in central NSW which encompassed all of Peak Gold Mines mineral tenements. Legal advice indicated that Crown land may be claimable, so exploration has been delayed over this land tenure until it can be established if native title has been extinguished or if an access agreement with the claimants will be required. This effects areas within EL5933 (Wrightville Common & Kaloogleguy Regeneration Ore Reserve) and EL7355 (Cumbine State Forest). The following table is a list of tenements held in full or part by PGM.

<table>
<tr><th>Tenement No</th><th>Name</th><th>Ownership</th></tr>
<tr><td>CML6</td><td>Fort Bourke Hill</td><td>PGM 100%</td></tr>
<tr><td>CML7</td><td>Coronation/Beechworth</td><td>PGM 100%</td></tr>
<tr><td>CML8</td><td>Peak to Occidental</td><td>PGM 100%</td></tr>
<tr><td>CML9</td><td>Queen Bee</td><td>PGM 100%</td></tr>
<tr><td>ML1483</td><td>Fort Bourke Hill</td><td>PGM 100%</td></tr>
<tr><td>MPL854</td><td>Dam</td><td>PGM 100%</td></tr>
<tr><td>EL5933</td><td>Peak</td><td>PGM 100%</td></tr>
<tr><td>EL6149</td><td>Mafeesh</td><td>PGM 100%</td></tr>
<tr><td>EL6401</td><td>Rookery East</td><td>PGM 100%</td></tr>
<tr><td>EL7355</td><td>Nymagee East</td><td>PGM 100%</td></tr>
<tr><td>EL8060</td><td>Nymagee North</td><td>PGM 100%</td></tr>
<tr><td>EL8523</td><td>Margaret vale</td><td>PGM 100%</td></tr>
<tr><td>EL8548</td><td>Narri</td><td>PGM 100%</td></tr>
<tr><td>EL8567</td><td>Kurrajong</td><td>PGM 100%</td></tr>
<tr><td>EL5982</td><td>Norma Vale</td><td>PGM 75%, Zintoba 25%</td></tr>
<tr><td>EL6127</td><td>Rookery South</td><td>PGM 83%, Lydail 17%</td></tr>
</table>

PGM continues to fulfil all requirements of tenement ownership, including reporting obligations, timely renewals, expenditure commitments, environment permitting and rehabilitation. All tenements are held securely

</td>
</tr>
<tr>
<td>Exploration done by other parties</td>
<td>

- *Acknowledgment and appraisal of exploration by other parties.*

</td>
<td>

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.

</td>
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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 of 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 gold, copper, silver, lead and zinc occurring in parallel lenses to the fault zones within the PGM leases
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:* ○ *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.* • *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.*	For the purpose of reporting Ore Reserves and Mineral Resources this section is not applicable.
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.* • *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.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	For the purpose of reporting Ore Reserves and Mineral Resources this section is not applicable.
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').*	For the purpose of reporting Ore Reserves and Mineral Resources this section is not applicable.
	• *Appropriate maps and sections (with scales) and tabulations*	For the purpose of reporting Ore Reserves and Mineral Resources this section is not applicable.

Diagrams	*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.*	
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.
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	• *The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	For the purpose of reporting Ore Reserves and Mineral Resources this section is not applicable.

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Section 3 Peak 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.* • *Data validation procedures used.*	Samples are dispatched in a pre-numbered series of calico bags and database programming prevents duplication of sample numbers. The data collection programs and storage are Microsoft Access based. 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 are 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	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits have been undertaken indicate why this is the case.*	Arnold van der Heyden first visited PGM in mid-2003 and has performed annual resource audits on site since 2012. During these visits, the core yard and mine areas were inspected and discussion 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 six years.
Geological interpretation	• *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.* • *Nature of the data used and of any assumptions made* • *The effect, if any, of alternative interpretations on Mineral Resource estimation.* • *The use of geology in guiding and controlling Mineral Resource estimation.* • *The factors affecting continuity both of grade and geology.*	There is a high degree of confidence in the geological interpretation of most of the deposits with mineral resources at PGM because these are generally well drilled and have good underground access. The majority of data is diamond drill core assays and logging but underground mapping can also be 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 of either 0.1 g/t Au and/or 0.1 % base metal. Internal waste is carried in some domains. There is generally a sharp contact to mineralisation on one wall of the lenses and a gradational boundary on the other wall 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. These are sometimes associated with lithological contacts, such as the rhyolite-shale contact at Perseverance. 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 lodes hosting the Mineral Resources at PGM have the following dimensions, in terms of strike length, average plan width and depth respectively: • Perseverance - 600x12x900m, starting at 850m below surface • Peak – 400x15x800m from surface • Kairos – 200x10x400m, starting at 800m below surface • New Cobar/Jubilee – 600x9x1000 from surface

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		• Chesney – 500x10x1000 from surface • Great Cobar – 800x20x1000 from surface The Mineral Resources comprise the remaining mineralisation of these lodes **(as shown in the long section Figure 10 in the body of the market announcement).**
Estimation and modelling techniques	• *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters, maximum distance of extrapolation from data points.* • *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.* • *The assumptions made regarding recovery of by-products.* • *Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).* • *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.* • *Any assumptions behind modelling of selective mining units.* • *Any assumptions about correlation between variables.* • *Description of how the geological interpretation was used to control the resource estimates.* • *Discussion of basis for using or not using grade cutting or capping.* • *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.*	• *Estimation techniques applied are multiple indicator kriging (MIK) and ordinary kriging (OK). MIK is used for gold where there is significant gold mineralisation and a highly skewed grade distribution, while OK is used for all other attributes and styles of mineralisation.* • *MIK is considered an appropriate estimation method for gold at PGM because it deals with highly skewed grade distributions and reduces the need for grade cutting. OK is considered appropriate when grades are less skewed and reasonably well structured spatially.* • *Extreme gold grades are dealt with in MIK by adjusting the value applied to the top indicator class, based on reconciliation with mine production. Limited top-cuts are applied during OK estimates if extreme values are considered likely to produce significant grade smearing.* • *Domains generally have soft boundaries between mineralisation and hard boundaries against waste.* • *Most estimates used a fixed estimation search and variogram model orientations, although dynamic interpolation has recently been implemented for S400 and Kairos.* • *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.* • *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 15x15m. For the base metal deposits, blocks are up to 2x25x25m for a nominal hole spacing of 25 to 50m. Sub-blocks at half the block dimensions in each direction are permitted. Initial search radii completely enclose the block and capture the first halo of holes around the block in better drilled areas.* • *Maximum extrapolation distances range from 60m for the gold deposits up to 95m for base metal deposits; in most cases the domain wireframes restrict extrapolation to distances less than these.* • *Estimates were generated using Vulcan and/or Datamine software; parameters used are essentially identically implemented in both packages.* • *While gold is the main commodity of interest at PGM, economic quantities of copper, silver, lead and zinc 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.* • *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. Lead and zinc can be penalties in copper concentrates but are usually blended out during processing.* • *Mineral Resource estimates are reported within mineable shapes. The minimum mineable size is 5m long, 25m high, and 3m wide, which is the effective minimum selective mining unit.* • *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 in the drill hole samples, such as bismuth and gold, and lead and zinc. The*

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		similarity in variogram models effectively guarantees that this correlation is preserved in the estimates. • *The geological interpretation controls the resource estimates through the estimation domain boundaries, which incorporate a number of relevant geological features.* • *Models are validated in a number of ways, including visual and statistical comparisons of block and drill hole grades, examination of grade-tonnage data, comparison with previous models and reconciliation against mine production.Models are reconciled against mine production on a monthly basis and against previous estimates annually, so the Mineral Resource estimates do take appropriate account of this data.*
Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	*Tonnages are estimated on a dry 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$120 per tonne was chosen to define Mineral Resources because this value is considered to have reasonable prospects of economic extraction in the medium term. Peak Gold Mines 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. **An explanation of the NSR formula are provided in the body of the market announcement.**
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 sub-economic as additional internal dilution. The minimum selective mining unit is 5m long, 25m high, and 3m 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*	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.

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	always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	
Environmental factors or assumptions	• *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.*	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	• *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.* • *The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.* • *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials* • *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials*	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), i.e. 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.

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Classification	• *The basis for the classification of the Mineral Resources into varying confidence categories.* • *Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).* • *Whether the result appropriately reflects the Competent Person's view of the deposit.*	The classification scheme is based on the estimation search pass for gold in the case of gold deposits and copper or lead-zinc 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 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.
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, sometimes during the audit process. Log and script files are available, documenting all aspects of the Vulcan estimation process and form an excellent audit trail. The 2019 estimates by H&S Consultants have been checked by PGM personnel and will have been reviewed internally by H&S Consultants.
Discussion of relative accuracy/ confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the 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.* • *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* • *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	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. 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 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. Long term tonnage reconciliation is acceptable at +/-3%. However, grades appear to be consistently under-estimated, by an average of 12% for copper and 15% for gold. The average grade call factors from production records since June 2018 are shown below. The Mineral Resource block model call factors are shown for the five economic elements assayed at Peak Gold Mines. • Gold over calling by 25% (under call 24% with no Chronos) • Silver under calling by 16% • Copper under calling by 7% • Lead under calling by 8% • Zinc under calling by 13%

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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 Reserves	• *Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.* • *Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.*	The Ore Reserve estimate is based on the following Mineral Resource block models provided on the June 2019 and the same block model was used to create the "Peak Gold Mineral Resource Estimate 30 June 2019" by Chris Powell. • chrmod_20190311.bmf • ncmod_201906.bmf • chsmod_201906.bmf • gcmod_201906.bmf • permod_201906.bmf • S400_Chr_mod_201906.bmf • pkdeepmod_201906_avdh.bmf • pkmod_201712_ext.bmf. The Mineral Resource Estimate includes the Ore Reserve Estimate. All known mineralisation in the area is epigenetic "Cobar" style. Deposits are structurally controlled quartz + sulphide matrix breccias grading to massive sulphide. The rocks have undergone low grade greenschist metamorphism with chlorite alteration being predominant.
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits have been undertaken indicate why this is the case.*	Ore Reserve Estimate was produced by Brett Fowler, who is site based, with assistance from Anthony Allman.
Study status	• *The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.* • *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.*	A full Life of Mine Plan (LOM) was conducted in May 2019. This included development design, stope access, mining method application, scheduling and resource levelling. The mine is currently in operation. The order of accuracy is at least or better than a definitive feasibility study with actual costs, stope performance and recoveries applied to the Ore Reserve Estimate.
Cut-off parameters	• *The basis of the cut-off grade(s) or quality parameters applied.*	The cut-off values were estimated using the current economic performance of the mine. Cut-off values incorporate all costs including sustaining capital, development, stoping haulage, processing and administration. Costs beyond the mine gate including concentrate haulage, port facilities, shipping, penalties and royalties are netted from revenues of gold and concentrates and form the Net Smelter Return estimates.
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 Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).* • *The choice, nature and appropriateness of the*	No Inferred Mineral Resource was considered for the Ore Reserve estimation. The mining method used for the LOM is varied depending on the orebody. Long hole open stoping is predominantly used in the Peak and Perseverance orebodies. Modified Avoca is used in a small area of Perseverance. Mining method applied at New Cobar, Jubilee and Chesney are benching and long hole open stoping with up and down hole combination.

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	selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc. • *The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre- production drilling.* • *The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).* • *The mining dilution factors used.* • *The mining recovery factors used.* • *Any minimum mining widths used.* • *The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.* • *The infrastructure requirements of the selected mining methods.*	Sub level intervals vary from 25m to 50m for various areas in the North and South Mine. This is based on appropriate method for control of dilution, reduction of pillars and ore loss, ground control, safety and regional stability. A minimum stoping width of 3m has been used. Stope shapes in the Ore Reserve estimate include an expected dilution of (0.2-0.7m) on both eastern and western walls. The average dilution for all reported stopes equates to approximately 14%. Down hole and crown pillar stopes in the Ore Reserves include the expected recovery of 95% and 90% respectively. Stope shapes and mine development were assessed every 5m along strike
Metallurgical factors or assumptions	• *The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.* *Whether the metallurgical process is well-tested technology or novel in nature.* • *The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.* • *Any assumptions or allowances made for deleterious elements.* • *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.* • *For minerals that are defined by a specification, has the Ore Reserve estimation been based on the appropriate mineralogy to meet the specifications*	The Ore Reserve estimate is predicated on the existing Peak Gold ore processing facility with a nominal throughput rate of 700ktpa. Gold and Silver are recovered in gravity circuit with Knelson concentrator. This is further concentrated in an intensive leach reactor and smelted to produce gold doré bars. Gold, silver and copper are also recovered as copper concentrate in a conventional flotation circuit. All metallurgical assumptions are based on current operation processing criteria. The main deleterious elements present at Peak Gold Mines ore body is Silica (SiO_2), Iron (Fe), Sulphur (S) and bismuth (Bi). Rhyolitic rocks have up to 80% SiO_2 and contribute to airborne contaminants as well as being a contaminant in the concentrate. Iron is present in most of the sulphides treated and it also dilutes the concentrate. Sulphur is estimated and high concentrations are monitored for the prediction of sulphide dust explosions. Pyrrhotite is an iron sulphide and increases cyanide consumption as it oxidises easily. Pyrrhotite also tends to plate other minerals and can obstruct gold, lead and zinc from processing efficiently. Bismuth is a penalty in the concentrate and high levels are present in the copper deposits. The NSR script estimates the bismuth penalty. The Production Target assumes metallurgical performance at Great Cobar will be consistent with performance from similar ores currently being processed at the Peak Gold Mines. Further evaluation work and appropriate studies are required to establish sufficient confidence that the Production Target will be met.
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 waste dumps should be reported.*	The Peak Gold Mines (PGM) is in full operation and has all environmental, statutory and social approvals and licenses to operate the existing mines. The project continues to meet the reporting requirements under the terms of the project approval and as such remains in good standing with all regulatory authorities. Regulatory approvals for the Great Cobar project are in progress. PGM currently holds Consolidated Mining Leases (CML) 6 and 8. PGM operation and New Cobar mine operation are located on CML8 and CML6 respectively

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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.*	All surface infrastructures are complete with no new surface infrastructure required for constructing for the current Ore Reserve. It has been agreed that Pb/Zn circuit to be installed to gain the full value from Chronos in the short term, Kairos in the medium term and Great Cobar in the long term. Ongoing sustaining capital and infrastructure underground including declines, level accesses, escapeways, vent accesses, rises, pump stations and substations will need to be developed to develop this Ore Reserve Estimate. This has been accounted for in the cost analysis and cut-off values in determination of ore.
Costs	*The derivation of, or assumptions made, regarding projected capital costs in the study.* • *The methodology used to estimate operating costs.* • *Allowances made for the content of deleterious elements.* • *The derivation of assumptions made of metal or commodity price(s), for the principal minerals and co-products.* • *The source of exchange rates used in the study.* • *Derivation of transportation charges.* • *The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.* • *The allowances made for royalties payable, both Government and private.*	Metal price and exchange rate assumptions are as provided by Aurelia Metals management and have been based on consensus forecasts.
Revenue factors	• *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.* • *The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.*	The following table represents revenue and metal recovery assumptions. Treatment costs for lead and copper are US$50/dmt and US$70/dmt respectively.

Commodity	Unit	2018 Mineral Resources	2018 Ore Reserves	2018 Metal Recovery	2019 Mineral Resources	2019 Ore Reserves	2019 Metal Recovery
Gold	US$/oz	1,400	1,220	94%	1,400	1,188	94%
Silver	US$/oz	18.80	17.00	0%	18.80	16.10	92%
Lead	US$/t	2,280	2,280	80%	2,280	2,160	72%
Zinc	US$/t	2,600	2,600	0%	2,600	2,463	70%
Copper	US$/t	7,000	6,500	90%	7,000	6,158	90%
FX	AUD/USD	0.74	0.76		0.74	0.72	

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.*	PGM has in place all necessary contracts and approvals for the transportation of concentrate to agreed clients. The transport contracts are renewable on standard commercial terms. The concentrate offtake agreement is life of mine.

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	• *A customer and competitor analysis along with the identification of likely market windows for the product.* • *Price and volume forecasts and the basis for these forecasts.* *For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract*	Gold doré products produced on site are shipped to receiving Mint for refining under a refining agreement. The copper concentrate is trucked to Dubbo, NSW. From Dubbo it is rail-hauled to Port-Botany before being transferred to ships and sold to markets in Asia.
Economic	• *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.* • *NPV ranges and sensitivity to variations in the significant assumptions and inputs.*	A financial model of the Peak Gold Mines Project has been completed by suitably qualified and experienced accounting and financial staff employed by Aurelia Metals Limited and has been reviewed by senior management of Aurelia. The financial model demonstrates a positive NPV.
Social	• *The status of agreements with key stakeholders and matters leading to social licence to operate.*	PGM is in full operation and has all environmental and social approvals and licenses to operate the existing mines. The project continues to meet the reporting requirements under the terms of the project approval and as such remains in good standing with all regulatory authorities. Regulatory approvals for the Great Cobar project are in progress. The lands comprising CML6 and CML8 are part of "The Peak" property with a perpetual lease held by Aurelia Metals
Other	• *To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:* • *Any identified material naturally occurring risks.* • *The status of material legal agreements and marketing arrangements.* • *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.*	Regulatory approvals for the Great Cobar project are in progress.
Classification	• *The basis for the classification of the Ore Reserves into varying confidence categories.* • *Whether the result appropriately reflects the Competent Person's view of the deposit.* • *The proportion of Probable Ore Reserves that have been derived from Measured Mineral*	The Ore Reserve Estimate is based on the Mineral Resource Estimate. Measured and Indicated Mineral Resources become Proved and Probable Ore Reserves. Site specific resource classification factor (RESCAT Factor) of 90% was applied to determine individual stope classifications, as follows: IF % of Measured Resource >= RESCAT Factor then RESCAT = 1 and converted to Proved Ore Reserve, otherwise IF % of (Measured + Indicated Resource) >= RESCAT Factor then RESCAT = 2 and converted to Probable Ore Reserve, otherwise IF % of (Measured + Indicated + Inferred) >= RESCAT Factor then RESCAT = 3 and converted to Production Target, otherwise

	Resources (if any).	RESCAT = 4 and deemed as Unclassified It is the competent person's view that the classifications used for the Ore Reserve Estimate are appropriate.
Audits or reviews	• *The results of any audits or reviews of Ore Reserve estimates.*	No external audit of this Ore Reserve Estimate has been completed but the process has been internally reviewed with assistance from an external consultant.
Discussion of relative accuracy/ confidence		The Ore Reserve Estimate is mostly determined by the order of accuracy associated with the Mineral Resource model, the metallurgical inputs and the cost adjustment factors used. There is some risk that the operating costs per tonne are not achieved due to reduced output of the processing plant. Continue debottlenecking will be carried out over time to align the Ore Reserve Estimate assumptions with actual metallurgical performance.

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

Section 1 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 (e.g. cut channels, random chips or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.*	Sampling is by sawn half core of HQ, NQ, LTK60 core or quarter PQ core. Nominal sample intervals are 1m with a range from 0.5m to 1.5m. From April 2016, all underground delineation drilling (NQ) utilised whole of core sampling. Samples are transported to ALS Geochemistry Orange for preparation and assay.
	• *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.*	Assay standards or blanks are inserted at least every 15 samples. Silica flush samples are employed after each occurrence of visible gold. During Mineral Resource drill out programmes duplicate splits of the coarse reject fraction of the crushed core are assayed every 20 samples
	• *Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.*	Diamond drilling was used to obtain core samples of nominally 1m, but with a range between 0.5-1.5m. Core samples are cut in half, dried, crushed and pulverised to 85% passing 75 microns. This is considered to appropriately homogenise the sample. 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 OG46- Aqua Regia Digestion with ICP-AES finish. Where specified, coarse gold samples greater than 0.5g/t were reassayed by screen fire assay (Method Au-SCR22AA) using the entire sample.
Drilling techniques	• *Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).*	Drilling is by diamond coring. Surface holes generally commence as PQ core until fresh rock is reached. The PQ rods are left as casing thence HQ or NQ coring is employed. A small number of RC holes are also included in the present Mineral Resource estimate.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.*	Measured core recovery against intervals drilled is recorded as part of geotechnical logging. Recoveries are greater than 95% once in fresh rock. Recovery in the limited number of RC holes was estimated visually. No detailed assessment of RC chip recovery has been conducted. Surface holes use triple tube drilling to maximise recovery. The relationship between sample recovery and grade has not been assessed.

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	• *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.*	
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.* • *The total length and percentage of the relevant intersections logged.*	Systematic geological and geotechnical logging is undertaken. Data collected includes: • 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. • 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. • Bulk density by Archimedes principle at regular intervals. • Magnetic susceptibility recorded at 1m intervals for some holes as an orientation and alteration characterisation tool. • Both qualitative and quantitative data is collected. All core is digitally photographed • 100% of all recovered core and chips are geologically and geotechnically logged.
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether 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 technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *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.*	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. RC chips have generally been dry riffle split 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. The use of 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 occurrence of visible gold. 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. These are checked by Aurelia employees. Assay grades are compared with mineralogy logging estimates. If differences are detected a re-assay 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. 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).

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Quality 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 (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.*	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: 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 sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.*	The raw assay data forming significant intercepts are examined by at least two company personnel. Drill hole data including meta data, orientation methods, any gear left in the drill hole, lithological, mineral, structural, geotechnical, density, survey, sampling and occasionally magnetic susceptibility is collected and entered directly into an excel spread sheet using drop down codes. When complete the spreadsheet is emailed to the geological database administrator, the data is validated and uploaded into an SQL database. 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	• *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.* • *Specification of the grid system used* • *Quality and adequacy of topographic control.*	Surface drill hole collars are initially located using hand held GPS to ±5m. Upon completion collars are located with differential GPS to ±5cm. 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 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	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.*	Nymagee final drill spacing ranges between 25-50m 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 and Indicated Mineral Resources consistent with the number of drill holes intersecting the lode and with the classifications applied under the 2012 JORC code.

	• *Whether sample compositing has been applied.*	Sample compositing is not applied.
Orientation of data in relation to Geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *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.*	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. 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
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data*	An audit and review of the sampling regime at Hera was undertaken by H&S Consultants in November 2015. Recommendations from this review form part of the current sampling practices at Hera & Nymagee.

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	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	The 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.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	The area has a 50 year exploration history in the Nymagee area 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. Most of the drill core has been relocated and re-examined and resampled.

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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. 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. The main mineralisation occurs 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 nearby Hera deposit.
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:* ○ *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.* • *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.*	For the purpose of reporting Mineral Resources this section is not applicable.
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.* • *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.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• *For the purpose of reporting Mineral Resources this section is not applicable.*
Relationship between	• *These relationships are particularly important in the reporting of Exploration Results.*	• *Orientated drill core is used to allow determination of orientation of structures and mineralisation. Orientation of the Hera and Nymagee deposits is well constrained by extensive drilling and mine exposures.*

mineralisation widths and intercept lengths	• *If the geometry of the mineralisation with respect to the drillhole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').*	• *For the purpose of reporting Mineral Resources this section is not applicable.*
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.*	• *See body of report.*
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 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.*	See body of report.
Further work	• *The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	Exploration drilling for extending the mineralised system at depth and along strike is planned. The exact timing and quantity is yet to be determined. For the purpose of reporting Mineral Resources this section is not applicable.

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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.* • *Data validation procedures used.*	All geological data is stored electronically with limited automatic validation prior to upload into the secure DataShed database, managed by Maxwell GeoServices in Perth. The master drill hole database is located on an SQL server, which is backed up on a daily basis. Basic checks were performed prior to this resource estimate to ensure data consistency, including checks for FROM_TO interval errors, missing or duplicate collar surveys, excessive down hole deviation, and extreme or unusual assay values. All data errors/issues were reported to the Group Manager – Geology to be checked, corrected or flagged in the primary DataShed database.
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits have been undertaken indicate why this is the case.*	The Competent Person for the Mineral Resource estimate has not visited the Nymagee site nor examined core samples for the deposit, as this was not considered essential at this stage of the project. The Competent Person is familiar with data collection by Aurelia at the nearby Hera Mine, which is carried out in a professional manner and to a high standard, and a proportion of holes at Nymagee were drilled and processed by Aurelia.
Geological interpretation	• *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.* • *Nature of the data used and of any assumptions made.* • *The effect, if any, of alternative interpretations on Mineral Resource estimation.* • *The use of geology in guiding and controlling Mineral Resource estimation.* • *The factors affecting continuity both of grade and geology.*	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 and 1 footwall lens in the south, as well as North Lens located around 600m north of the Main group. Statistical analysis identified a bimodal Pb+Zn distribution within Main lens, with a small higher-grade 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. Mineralisation at Nymagee is hosted by a monotonous sequence of sediments with no obvious marker horizons or structures, so sulphide content is the best available indicator of mineralisation. 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 an assumed orientation. It also suggested 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 estimates at economic cut-off grades, but it does suggest possible alternative interpretations in some areas.

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		Geology guides and controls the Mineral Resource estimate through the use of total 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 surface to the upper and lower limits of the Mineral Resource.*	The Mineral Resource (within resource stope shapes) for Main lens and associated footwall lodes occur within a volume of: • 540m along strike • 170m maximum plan width, with individual stopes varying from 3 to 22m • 425m in depth from surface The Mineral Resource occurs discontinuously within this volume, with the largest contiguous zone having maximum dimensions 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 parameters, and maximum distance of extrapolation from data points.* • *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.* • *The assumptions made regarding recovery of by-products.* • *Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).* • *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.* • *Any assumptions behind modelling of selective mining units.* • *Any assumptions about correlation between variables.* • *Description of how the geological interpretation was used to control the Mineral Resource estimates.* • *Discussion of basis for using or not using grade cutting or capping.* • *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.*	Only diamond core and reverse-circulation percussion holes were used in the Mineral Resource estimate, including some historical underground core holes. 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 Main Lens, which was not considered likely to significantly change the current variogram models. Estimates were generated for Cu, Pb, Zn, Ag, Au, Fe, S, As & density. Minimal grade cutting was applied to the elements with more skewed grade distributions, namely Cu, Pb, Zn, Ag, Au, As. Top-cuts were based on the global 99.95th 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 of 4 octants informed 2. 8x60x60m search, 16-32 samples, minimum of 4 octants informed 3. 16x120x120m search, 8-32 samples, minimum of 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 distance 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 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 potentially deleterious elements have also been estimated, namely As and S.

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		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 2x15x15m. The drill hole spacing is highly variable but the nominal drill hole spacing is approximately 30x60m 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 mineable shapes. The minimum mineable shapes 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 into 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 estimates through the use of total sulphide envelopes defining each lode, which were used as hard boundaries during estimation. The new 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 reconciliation data is available. On an equivalent cut-off grade basis, the new model is quite similar to the previous version, reported in July 2018. However, the new cut-off grade of $120/t NSR represents a significant increase compared to the $80/t NSR used previously and has resulted in a substantial reduction in the Mineral Resource.
Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	Tonnages are estimated on a dry weight basis. Moisture content has been determined for some of the density samples, by comparing sample weights before and after oven drying.
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	The new cut-off grade for Nymagee is a combination of two net smelter return (NSR) formulas, one for a copper concentrate and the other for a bulk metal concentrate. These formulas are based on metal prices and recoveries for Cu, Ag, Pb and Zn as shown below. The formula with the higher value is taken as the preferred NSR value on a block by block basis. The adopted cut-off grade of AUD $120/t is considered likely to be economic for the mining method and scale of operation envisioned for Nymagee.

Metal	2019 Price (USD)	2019 Cu Conc Recovery	2019 Bulk Conc Recovery
Copper	$7,000	93 – 96%	59%
Silver	$18.80	64.0%	77%
Lead	$2,280	0%	88%
Zinc	$2,600	0%	89%
AUD/USD	$0.74		

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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.*	Mineral Resources for Nymagee have been restricted to mineable shapes that were designed using Deswik's Stope Shape Optimiser. Minimum mineable shape size is 5 m long, 25 m high, with a minimum mining width of 3 m. The reported Mineral Resources include all estimated blocks that lie within the mineable shapes and therefore include internal dilution. Additional external mining 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.*	The NSR calculation assumes material from Nymagee would be treated through the Hera Mine mill. The recovery for each metal is based on available metallurgical test work and knowledge gained through treatment of the similar ores from Hera.
Environmental factors or assumptions	• *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.*	It is currently assumed that process residue disposal will take place in existing facilities at Hera Mine, which is currently licensed for this purpose. Waste rock will be utilised on site at Nymagee as stope fill as much as possible, leaving only a small amount for disposal on surface dumps. All waste and process residue disposal will be done in a responsible manner and in accordance with the mining license conditions.
Bulk density	• *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.*	Dry bulk density is measured on-site using an immersion method (Archimedes principle) on selected core intervals for full 1.0m assay samples. The Nymagee database now 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. Samples are weighed before and after oven drying overnight at 110ºC to determine dry weight and moisture content. For intervals without measurements, density is determined from assay values by calculating the proportion of each sulphide mineral and gangue. This method compares well with the actual measurements. 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.
Classification	• *The basis for the classification of the Mineral Resources into varying confidence categories.* • *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).*	The classification scheme is based on the estimation search pass for copper, where Pass 1&2 = Indicated and Pass 3 = Inferred. 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 classification appropriately reflects the Competent Person's view of the deposit.

	• *Whether the result appropriately reflects the Competent Person's view of the deposit.*	
Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	This Mineral Resource estimate has been reviewed by Aurelia personnel and internally peer reviewed by H&S Consultants; no material issues were identified.
Discussion of relative accuracy/ confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the 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.* • *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* • *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	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 similar deposits in the Cobar region. The main factor that affects the relative accuracy and confidence of the Mineral Resource estimate is drill hole spacing, because there are no strong geological controls on the primary mineralisation. 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 Indicated Mineral Resources. No production data is available for the small part of the deposit that was mined historically.

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