aurelia METALS Ltd.

ASX: AMI | 17 July 2018

PEAK GOLD MINES RESOURCES AND RESERVES

HIGHLIGHTS

- **Chronos production extended for 12 months**
- **Predominant Lead/Zinc Resources advanced to Ore Reserve status**
- **Great Cobar and Lead/Zinc Mining Inventories estimated which show good potential for extended mine life**
- **Perseverance South400 Ore Reserves increased by 38,000 ounces**
- **Conservatism employed with the estimation of Resources and Reserves with higher cutoffs and bounding of Resources within stope shapes.**

Aurelia Metals Limited ("AMI" 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. A comprehensive review of the previous Mineral Resources and Ore Reserves has been ongoing with particular focus on Lead/Zinc resource. This review includes a mill upgrade to cater for lead and zinc processing. Further infill drilling and a more detailed structural, lithological and geochemical understanding of the lead-zinc orebody will also be carried out. Low grade ores below cut-off have been excluded from the Resources and Reserves.

Peak Gold Mines Resource Estimate as at 30 June 2018

Class	Tonnes (Kt)	NSR (A$/t)	Au (g/t)	Ag (g/t)	Cu (%)	Pb (%)	Zn (%)
Measured	2,141	239	2.07	14.4	1.24	1.38	1.40
Indicated	5,758	226	1.82	9.77	1.50	0.97	1.00
Inferred	2,989	187	1.01	7.80	1.63	0.63	0.84
Total	**10,888**	**218**	**1.64**	**10.1**	**1.48**	**0.96**	**1.04**

Note: The updated Peak Gold Mines Resource Estimate utilises optimised A$120/tonne NSR cut-off shapes that include internal dilution. The previous Resource Estimates were reported on block model classifications based on drill hole spacing. This change has been implemented to more realistically represent the tonnages and grades that may become available for potential extraction. 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. A full summary of the Resource Estimate is included with this release below.

The updated Mineral Resource Estimate represents a decrease in tonnage over the previous estimate (allowing for mining depletion) and exclusion of non-economic resources. This is due to the evaluation techniques adopted in accordance with Aurelia Metals guidelines. The new guidelines report the estimate from stope shapes. Past estimates have been based on block reporting. The Mineral Resource Estimate has been completed in accordance with the guidelines of the JORC Code (2012 Edition) of this release.

The Ore Reserve Estimate is derived from the Mineral Resource Estimate.

Peak Gold Mines Ore Reserve Estimate as at 30 June 2018 *(Predominant Cu/Au/Pb Ore)*

Class	Tonnes (kt)	NSR (A$/t)	Au (g/t)	Ag (g/t)	Cu (%)	Pb (%)	Zn (%)
Proven	290	185	1.67	7.3	1.77	0.10	
Probable	1,753	268	3.78	12.5	1.33	0.75	
Total	**2,042**	**257**	**3.48**	**11.7**	**1.39**	**0.66**	

Peak Gold Mines Ore Reserve Estimate as at 30 June 2018 *(Predominant Pb/Zn Ore)*

Class	Tonnes (kt)	NSR (A$/t)	Au (g/t)	Ag (g/t)	Cu (%)	Pb (%)	Zn (%)
Proven	14	265	0.44	34.7	0.35	5.88	5.87
Probable	518	262	0.39	31.7	0.17	5.72	6.15
Total	**532**	**262**	**0.40**	**31.8**	**0.17**	**5.72**	**6.15**

An updated Ore Reserve Estimate has been calculated from the Peak Gold Mines Resource models using Measured and Indicated categories only.

Note: The Peak Gold Mines Reserve Estimate utilises an A$150/tonne NSR cut-off for mines Peak and Perseverance, Great Cobar and an A$130/tonne NSR for mines Chesney, New Cobar and Jubilee. NSR stands for Net Smelter Return and is an estimate of the net recoverable value per tonne. Tonnage estimates have been rounded to the nearest 1,000 tonnes. A full summary of the Ore Reserve Estimate is included with this release.

This updated Ore Reserve Estimate represents a 10% decrease in tonnage against the previous Ore Reserve Estimate 31 December 2017 including 291,268t at 7.7g/t of Au and 1.5% Cu of mining depletion since January 2018. This includes 532 kt of predominant Pb/Zn ore which was not reported in December 2017 due to uncertainty of the proposed mill upgrade. This updated Ore Reserve Estimate represents a 6% increase in gold grade and a 15% (from 1.33% to 1.14% of Cu) decrease in copper grade. The key reasons for the reduction in copper grade is the inclusion of 532 kt of Pb/Zn ore containing 0.17% of copper. 86% of production ounces were replaced.

Metal prices assumptions provided by the Corporate is given in the table shown below.

Metal Price Assumptions

Commodity	Unit	Reserves Jun 18	Resources Jun 18
Gold	US$/oz	1,220	1,400
Silver	US$/oz	17	18.8
Lead	US$/t	2,280	2,280
Zinc	US$/t	2,600	2,600
Copper	US$/t	6,500	7,000
FX	AUD/USD	0.76	0.74
Gold	A$/oz	1,605	1,892
Silver	A$/oz	22	25
Lead	A$/t	3,000	3,081
Zinc	A$/t	3,421	3,514
Copper	A$/t	8,553	9,459

Commenting on the revised Estimates, Aurelia Chief Executive Officer, Jim Simpson, said:
"There has been a thorough review of the Resources, Reserves and Mining Inventories at Peak following the purchase. There is considerable infill drilling required to convert the current resources. In particular, there is great potential in the lead and zinc orebodies and Great Cobar. The reconciliations from mine to mill in Chronos have also been very positive. The current ore reserves provide a mine life of four years with the focus on extending mine life with the continuing conversion of Inferred Resources and further exploration success."

Competent Persons Statement – Peak Gold Mines Resource Estimate

Compilation of the drilling database, assay validation and geological interpretations for the resource update were completed by Chris Powell, BSc, MAusIMM, who is a full time employee of Aurelia Metals Limited. The resource estimate has been prepared by Chris Powell and audited by 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.

Competent Persons Statement – Peak Gold Mines Ore Reserves Estimate

The Ore Reserves were compiled by Jim Simpson, CEO of Aurelia Metals. Mr Simpson has worked at polymetallic mines at Golden Grove, Mt Isa Mines and Peak Gold Mines. Mr Simpson is a mining engineer with a BE Min Eng obtained at the University of NSW and has worked in underground hard rock mines since 1986 with +30 years' experience. The Ore Reserve Estimate was produced on site.

Mr Simpson 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 Simpson is a chartered professional and member of the AusIMM and also a registered mining engineer of Queensland, New South Wales and Western Australia.

Technical guidance and review has been provided Mr Anthony Allman MAusIMM CP(Min), RPEQ, Director of Antcia Consulting Pty Ltd.

INTRODUCTION

Peak Gold operates two underground mines. Within the two mines, there are mining areas made up of different deposits as shown in Figure 1. The June 2018 Ore Reserve/Resource Estimation has been based on this configuration. Jubilee and New Cobar reserves have been reported as one orebody this year.

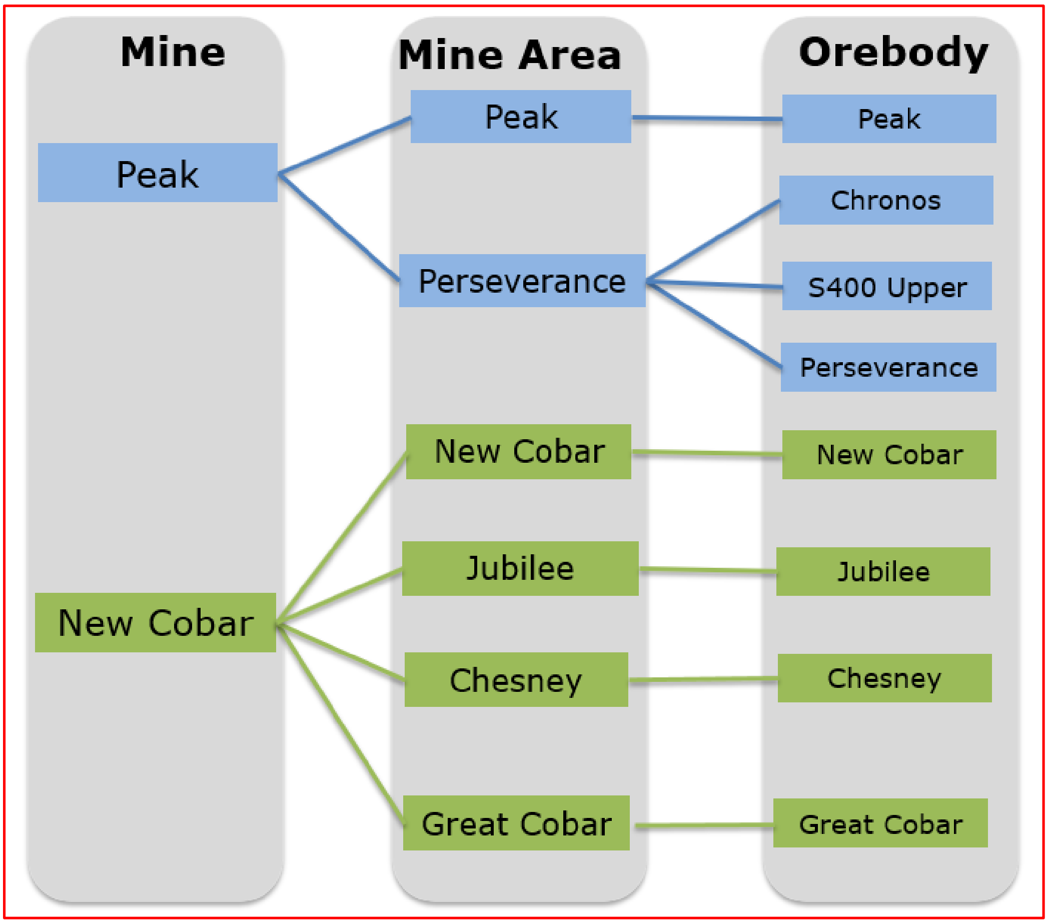

Figure 1. Peak Gold Mines, Mine Areas and Deposits

MINERAL RESOURCE ESTIMATE

A new resource estimate has been completed for Aurelia Metals' wholly owned Peak Gold Mines Project, located 10 kilometers south of Cobar, New South Wales. The Peak Gold Mines resource is estimated from five independent models which are Perseverance, Peak, Chesney, New Cobar–Jubilee and Great Cobar. The updated total Measured, Indicated and Inferred Resources based on a $120 Net Smelter Return (NSR) cut-off are summarised in Table 1, and estimated contained metal in Table 2. The stated resources include all blocks within the volumes produced by Deswik Stope Shape Optimiser (SSO) but does not include material that has been mined or sterilised by nearby mining. The reported estimates therefore include an appropriate internal dilution component (see below for details). The Resource Estimate has been completed by Chris Powell, MAusIMM, who is the Senior Mine Geologist at PGM.

Table 1. Peak Gold Mines Resource Estimate, as at 30 June 2018

Class	Tonnes (Kt)	NSR (A$/t)	Au (g/t)	Ag (g/t)	Cu (%)	Pb (%)	Zn (%)
Measured	2,141	239	2.07	14.4	1.24	1.38	1.40
Indicated	5,758	226	1.82	9.77	1.50	0.97	1.00
M+I	7,899	229	1.88	11.0	1.43	1.08	1.11
Inferred	2,989	187	1.01	7.80	1.63	0.63	0.84
Total	**10,888**	**218**	**1.64**	**10.1**	**1.48**	**0.96**	**1.04**

Table 2. Contained metal within the Resources.

Class	Au (Koz)	Ag (Koz)	Cu (Kt)	Pb (Kt)	Zn (Kt)
Measured	142	993	27	30	30
Indicated	336	1808	86	56	58
Inferred	97	750	49	19	25
Total	**576**	**3551**	**162**	**104**	**113**

DRILLING AND ASSAYS DATA

The drill hole database used for resource estimation contained 5,267 drill holes. This consists of 288 surface diamond drill holes, 4375 underground diamond holes, 527 RC drill holes and 76 percussion drill holes. All drill holes have been surveyed at collar by registered surveyors and also at regular downhole intervals using magnetic surveying tools. surface holes are systematically replaced by underground holes. A replaced surface hole is excluded from the resource estimation. Underground collared holes are checked when intersected by underground development and to date none of these have required correction.

Most of the drill core has been sampled on nominal 1.0m intervals. NQ size core is halved and BQ size core is whole core sampled. All the samples from core are assayed in certified commercial laboratories.

Recently, Peak Gold Mines drilling has been assayed for a suite of 34 elements Ag, Al, As, Ba, Be ,Bi, Ca, Cd, Co, Cr, Cu, Fe, Ga, K, La, Mg, Mn, Mo, Na, Ni, P, Pb, S, Sb, Sc, Sr, Th, Ti, Tl, U, V,W, Zn and Au at ALS Orange. An SGS lab in Cobar was used before ALS and assayed for Au, Cu, Ag, Pb, Zn, Bi and Fe. Gold assaying has been completed by 50g fire assay with all other elements by four acid digests. Peak Gold Mines has maintained a detailed QA/QC system during its sampling and assaying process.

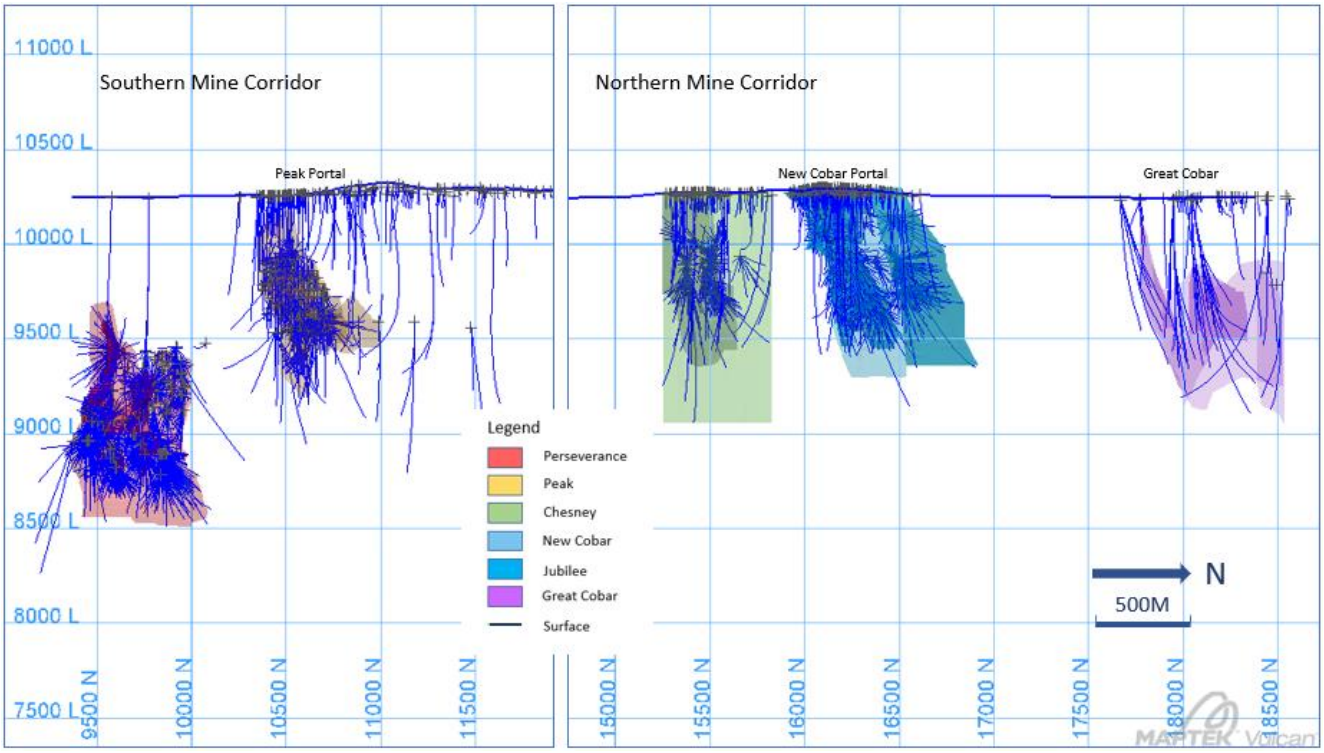

Figure 2. Long Section view looking west of the drill holes and mineralisation wireframes used in the 2018 resource update

Density measurements are performed, by Peak Gold Mines core yard personnel, on every sampled interval by the wet balance technique. Adequate QAQC is performed during the process by means of frequent standard measurements. Temperature adjustment is also performed during the process. Measured values show that the bulk density of the rock at Peak Gold Mines varies significantly. The density variations are largely due to sulphide mineralisation.

Wireframes for resource reporting are constructed by snapping to metre intervals. The boundaries are defined by continuous intercepts over 0.1 g/t Au and or 0.1 % of Cu, Pb, or Zn depending on the dominance of mineral associations present. Some internal waste is accepted depending on interpretation both mineralogically and structurally. Figure 2 shows a long-section view of the mineralisation wireframes provided. These wireframes are further subdivided into subzones based on strike, dip and mineralogical variations. For example, Perseverance has eight sub- zones namely Zone A, Zone B, Zone D, Zone D East, Hulk, Hercules, Chronos and S400. Zone D lens is divided into 6 subzones namely North, North East, South West, South Upper, South Lower and South East mainly based on orientation. Hulk is subdivided into two subzones namely upper and lower based on copper or gold dominance. Chronos has internal subzones to isolate the high grade gold. The S400 lens is a further division of the South East subzone based on recent drilling showing continuous mineralisation between Zone D and Chronos.

The composite file used in estimation is extracted using a selection file of the drill holes and is also modified by giving unlogged intervals, within the domains, a nominal minimum value. The selection file allows replaced surface holes to be omitted. Samples were composited to one metre intervals. Estimates use actual values except at Great Cobar where density weighted values are used for Copper and Gold. The block model estimates of the density weighted elements are then divided by the estimated density for each block.

Block Modelling and Estimation

Variography was carried out using the software program GS3 on the one metre composited data from each mineralised subzone. Variography for each element showed relatively high continuity in the along strike and down dip orientations and poor continuity in the orientation perpendicular to these.

The mineralisation of Peak Gold Mines deposits is mostly oriented grid north-south. The Peak Mine grid (PMG) is orientated 25 degrees west of True North. Un-rotated block models are constructed parallel to the PMG. The only exception to this is the recent addition of the S400 subzone, which is rotated 90° around the Z-axis. Block dimensions vary between deposits. They range between 2x10x10m (E, N, RL respectively) for Peak and Perseverance, 2x12x15 for New Cobar, 2x15x20 for Chesney and 2x25x25m for Great Cobar. These dimensions were chosen to reflect drill hole spacing and to provide definition needed for mine planning. The shorter two metre east-west dimension was used to reflect the narrow mineralisation and down hole data spacing. Discretisation was set to 2x5x5 (E, N, RL respectively). The wireframes representing lenses, subzones and depletion are used to flag the block model. Sub-blocking, with the minimum dimensions of half the parent block dimension, was permitted.

The search parameters used to estimate elements can be seen in Table 3 and consist of three search passes with progressively increasing search radii. The search ellipsoids for each lens and subzone are rotated to best fit dip and strike directions of the lenses and subzones. Recently, the search ellipse has been changed from equal dimensions in the Y and Z axis to an anisotropic search being longer in the Z direction. This better reflects the increased continuity in that direction.

Table 3. Search criteria used in the estimation process.

Pass	Axis	Zone A, B&D	Peak	Hulk	Hercules	Chronos	S400	New Cobar	Jubilee	Chesney	Great Cobar
Pass 1	X - axis	3	3	3	3	3	3	3	3	4	4
	Y - axis	15	15	15	10	10	10	15	20	20	20
	Z - axis	15	15	15	20	20	20	20	25	30	30
Pass 2	X - axis	6	6	6	6	6	6	6	6	8	8
	Y - axis	30	30	30	20	20	20	30	40	40	40
	Z - axis	30	30	30	40	40	40	40	50	60	62.5
Pass 3	X - axis	12	12	12	9	9	9	9	9	12	12
	Y - axis	60	60	60	30	30	30	45	60	60	60
	Z - axis	60	60	60	60	60	60	60	75	90	95

Ordinary Kriging (OK) was used to estimate the concentrations of Ag, Cu, Pb, Zn, Bi, Fe, S and density. OK is considered to be appropriate for the estimation of these features as the coefficient of variation (CV) is relatively low and the mineralisation is reasonably well structured. Limited top-cutting was applied to values of silver, copper, lead, zinc and bismuth. An OK estimate for gold is also calculated but not used in the reported resources except in the case of Great Cobar where data is limited.

The gold grades intersected at Peak Gold Mines are highly variable and exhibit a strongly skewed grade distribution. Multiple Indicator Kriging (MIK) was considered a more appropriate estimation method for this type of gold grade distribution because it specifically accounts for the changing spatial continuity at different grades through a set of indicator variograms at a range of grade thresholds.

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 calculation takes account the recoveries associated with each of the two processing streams; namely production of Au and Ag doré and Cu and Pb-Zn concentrate (that also includes Au and Ag credits). The NSR also takes account of the metal price, exchange rates, freight and treatment charges, royalties and mill recoveries. Metal price parameters used in the NSR calculation are given in table 9. Recoveries and concentrate grades are given in Table 10.Two scripts are run for some deposits and subzones, namely an Au/Cu script and an Au/Pb/Zn script, due to the polymetallic nature of the mineralisation. Most of the deposits report from the Au/Cu script whilst Peak, Chronos, S400 and Great Cobar have economic Lead and Zinc mineralisation and also report from the Au/Pb/Zn script. The highest NSR of the two scripts is saved to the block model as the selection criteria.

Following estimation, a series of wireframed optimised stope designs were produced by Deswik's Stope Shape Optimiser (SSO). The SSO stope designs were used to constrain the reported Mineral Resource Estimate (MRE). Mineralisation outside these stopes is unclassified as it does not meet the criterion of eventual economic extraction. The smallest mineable unit (SMU) for the SSO shapes is 5 metres long, 25 metres high, with a minimum mining width of 3 metres. The SMU is used as a starting shape and evaluated across the orebody until it finds an area with a SMU head grade above $120/t. If it is, then it adds it to the SMU and continues across the orebody. Where a slice is below a cut-off of $120/t it is flagged as waste and not included. If the waste slice is greater than 5 metres wide it is then left as a pillar. If it is less than 5 metres and has some high grade that carries above cut-off, it is then included in the stope.

The MRE, broken down by class, deposit, Au-Cu-Pb and Pb-Zn, is reported in Table 4 and Table 5. Estimated resources reported include all block centroids that lie within the SSO stope wireframes that have not been mined or sterilised by nearby mining. The reported estimates therefore include internal dilution and dilution. Sterilised regions are flagged with a mined variable in the block model from a wireframe. The resource blocks calculated by Anthony Allman of Antcia Consulting were sorted by PGM to categorize the blocks viability. The MRE is the sum of shapes with a high degree of certainty of being mined as well as those that are slightly marginal. The marginal shapes would benefit from changes in either commodity pricing or mining opportunity to become more viable.

Table 4. Mineral Resource Estimate for Peak Gold Mines by deposit for Au-Cu-Pb mineralisation.

Class	Lode	Tonnes (kt)	NSR ($/t)	Au (g/t)	Ag (g/t)	Cu (%)	Pb (%)	Zn (%)
Measured	Perseverance	224	256	3.62	5.17	0.91	0.03	0.02
	Pers_S400	188	289	4.22	17.8	0.81	0.65	0.51
	Chronos	57	796	13.64	46.8	0.64	6.26	3.56
	Peak	99	188	2.34	6.11	0.94	0.06	0.08
	Chesney	385	191	2.66	9.45	0.69	0.74	1.02
	New Cobar	479	183	0.70	7.01	2.10	0.01	0.02
	Jubilee	349	207	0.96	11.0	2.37	0.04	0.04
	Great Cobar	-	-	-	-	-	-	-
	Measured Total	**1781**	**230**	**2.42**	**10.4**	**1.45**	**0.45**	**0.41**
Indicated	Perseverance	528	291	4.55	5.42	0.67	0.12	0.11
	Pers_S400	276	329	4.74	16.9	0.97	0.62	0.46
	Chronos	179	692	12.21	41.1	0.32	7.85	4.82
	Peak	315	188	2.18	5.53	1.04	0.05	0.04
	Chesney	268	195	2.92	4.56	0.57	0.50	0.49
	New Cobar	759	169	0.92	5.73	1.70	0.01	0.02
	Jubilee	721	177	0.60	9.65	2.15	0.03	0.03
	Great Cobar	1957	195	0.87	4.64	2.30	0.01	0.05
	Indicated Total	**5004**	**223**	**2.04**	**7.64**	**1.70**	**0.37**	**0.26**
Total Au-Cu-Pb M+I		**6785**	**225**	**2.14**	**8.37**	**1.63**	**0.39**	**0.30**
Inferred	Perseverance	30	164	2.11	6.16	0.78	0.33	0.20
	Pers_S400	1	422	6.39	12.0	1.06	0.31	0.40
	Chronos	-	-	-	-	-	-	-
	Peak	89	162	1.60	9.53	1.09	0.19	0.13
	Chesney	457	167	2.65	3.02	0.39	0.30	0.26
	New Cobar	366	146	0.81	4.85	1.48	0.00	0.02
	Jubilee	56	156	0.19	9.70	2.13	0.05	0.05
	Great Cobar	1626	194	0.76	6.84	2.36	0.02	0.07
	Inferred Total	**2626**	**181**	**1.13**	**6.04**	**1.83**	**0.08**	**0.10**
Au-Cu-Pb Total		**9411**	**213**	**1.86**	**7.72**	**1.69**	**0.30**	**0.25**

Note: A Lead concentrate is produced instead of a Copper concentrate from Chronos ore.

Table 5. Mineral Resource Estimate for Peak Gold Mines by deposit for Pb-Zn mineralisation.

Class	Lode	Tonnes (kt)	NSR ($/t)	Au (g/t)	Ag (g/t)	Cu (%)	Pb (%)	Zn (%)
Measured	Chronos	360	285	0.34	34.1	0.20	6.01	6.29
	Great Cobar	-	-	-	-	-	-	-
	Measured Total	**360**	**285**	**0.34**	**34.1**	**0.20**	**6.01**	**6.29**
Indicated	Chronos	686	248	0.35	24.7	0.19	5.19	5.61
	Great Cobar	68	208	0.24	15.9	0.26	2.36	8.81
	Indicated Total	**754**	**244**	**0.34**	**23.9**	**0.19**	**4.94**	**5.90**
Total Pb-Zn M&I		**1114**	**257**	**0.34**	**27.2**	**0.19**	**5.29**	**6.03**
Inferred	Chronos	302	249	0.13	20.5	0.11	5.06	5.99
	Great Cobar	62	170	0.23	20.6	0.44	2.56	7.29
	Inferred Total	**363**	**236**	**0.15**	**20.5**	**0.16**	**4.64**	**6.21**
Total Pb-Zn		**1478**	**252**	**0.29**	**25.6**	**0.19**	**5.12**	**6.07**
Grand Total M&I Resource		**7899**	**229**	**1.89**	**11.0**	**1.43**	**1.08**	**1.11**
Grand Total Resource		**10888**	**218**	**1.64**	**10.1**	**1.48**	**0.96**	**1.04**

Classifications are based predominately on the search pass used to estimate the block (Table 3). In order to produce a single classification for each SSO shape the tonne-weighted modified pass was averaged for each shape. To ensure coherency in the resource classification, some individual isolated Inferred shapes were upgraded to Indicated and isolated Indicated shapes were downgraded to Inferred. Figure 3 shows a long section of the blocks reported in the resource estimate coloured by resource classification.

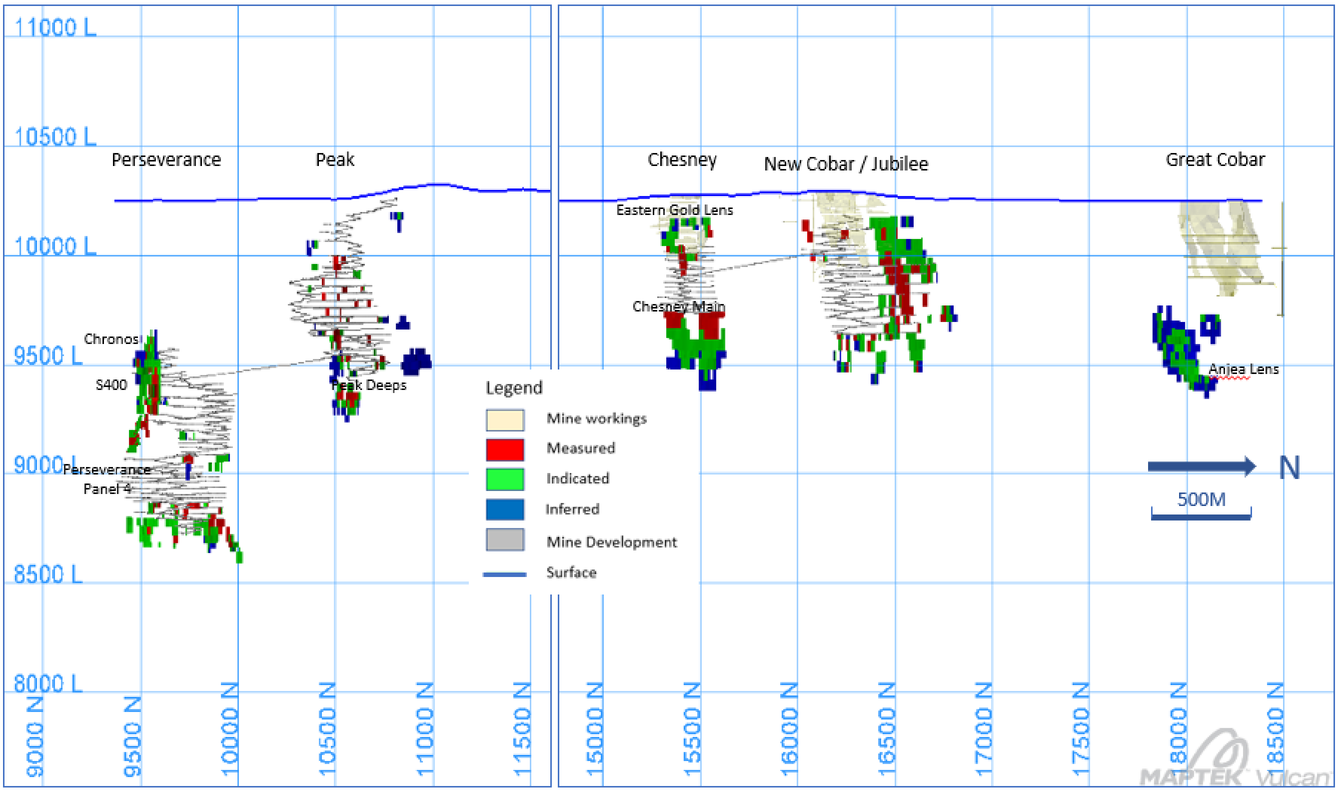

Figure 3. Long section, looking west, showing the distribution of Measured (red), Indicated (green) and Inferred (blue) Resources with existing mine development and historic mine workings.

COMPARISON TO DECEMBER 2017 MINERAL RESOURCES

Figure 4, Figure 5 and Figure 6 below show a series of comparisons of tonnes, gold and copper by means of waterfall graphs between the December 2017 and June 2018 for the Au-Cu-Pb Mineral Resources. Figures 7, Figure 8 and Figure 9 shows a series of comparisons of tonnes, lead and zinc by means of waterfall graphs between the December 2017 and June 2018 for the Pb-Zn Mineral Resources. The differences reflect changes in script parameters and cut-offs. New Cobar shows the greatest change due to the change in cut-off from $80/t NSR to $120/t NSR. All the other deposits NSR cut-offs were equal or higher than $120/t NSR for the December 2017 reporting period. This should result in an increase in Mineral Resource if the method had remained the same, especially since a lower exchange rate is being used for this reporting period. The method introduced by Aurelia Metals of reporting from shapes passing the cut-off criteria does have the effect of reducing the Mineral Resource because each block needs support of surrounding blocks to make cut-off and therefore single blocks will be left out of resource.

Other notable changes include increases in the Peak that are mainly due to increased resource in remnant areas. The increase in the Chesney resource is due to the reduced NSR from $130/t to $120/t, a decrease in the exchange rate from 0.77 to 0.74 and a slight increase in the copper price from $3.00 to $3.15. PGM's copper resources have always been very sensitive to changes.

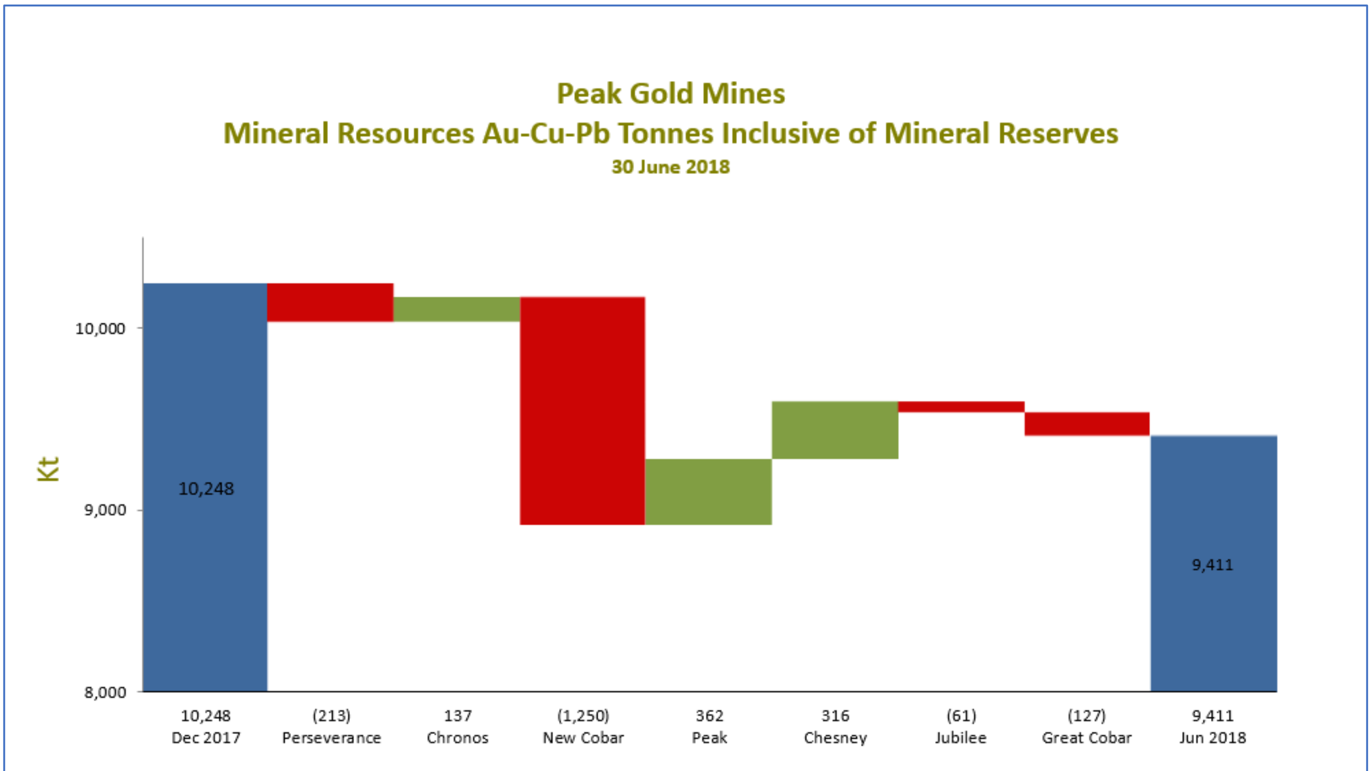

Figure 4. Waterfall graph comparison of Mineral Resource Au-Cu-Pb Tonnes (Kt) between December 2017 and June 2018.

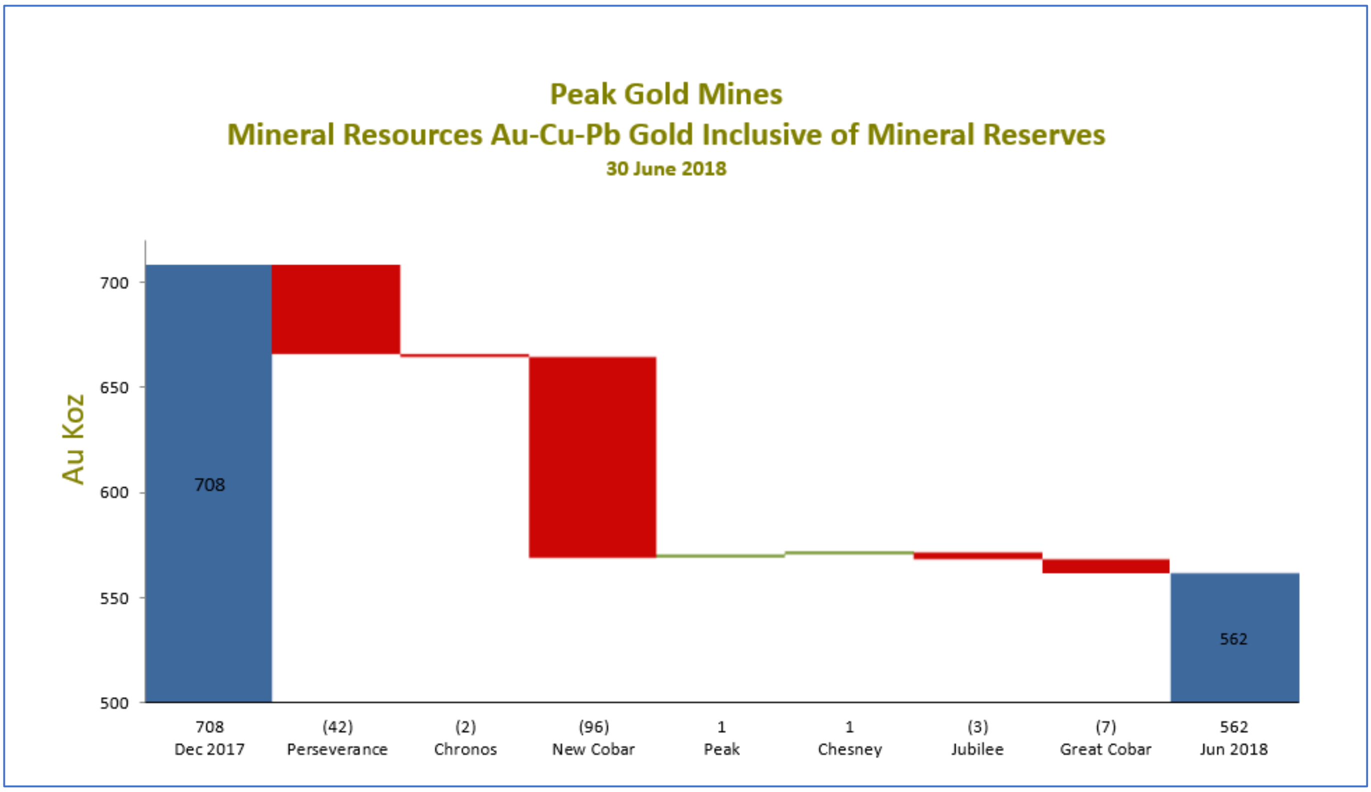

Figure 5. Waterfall graph comparison of Mineral Resource Au-Cu-Pb Gold (Koz) between December 2017 and June 2018.

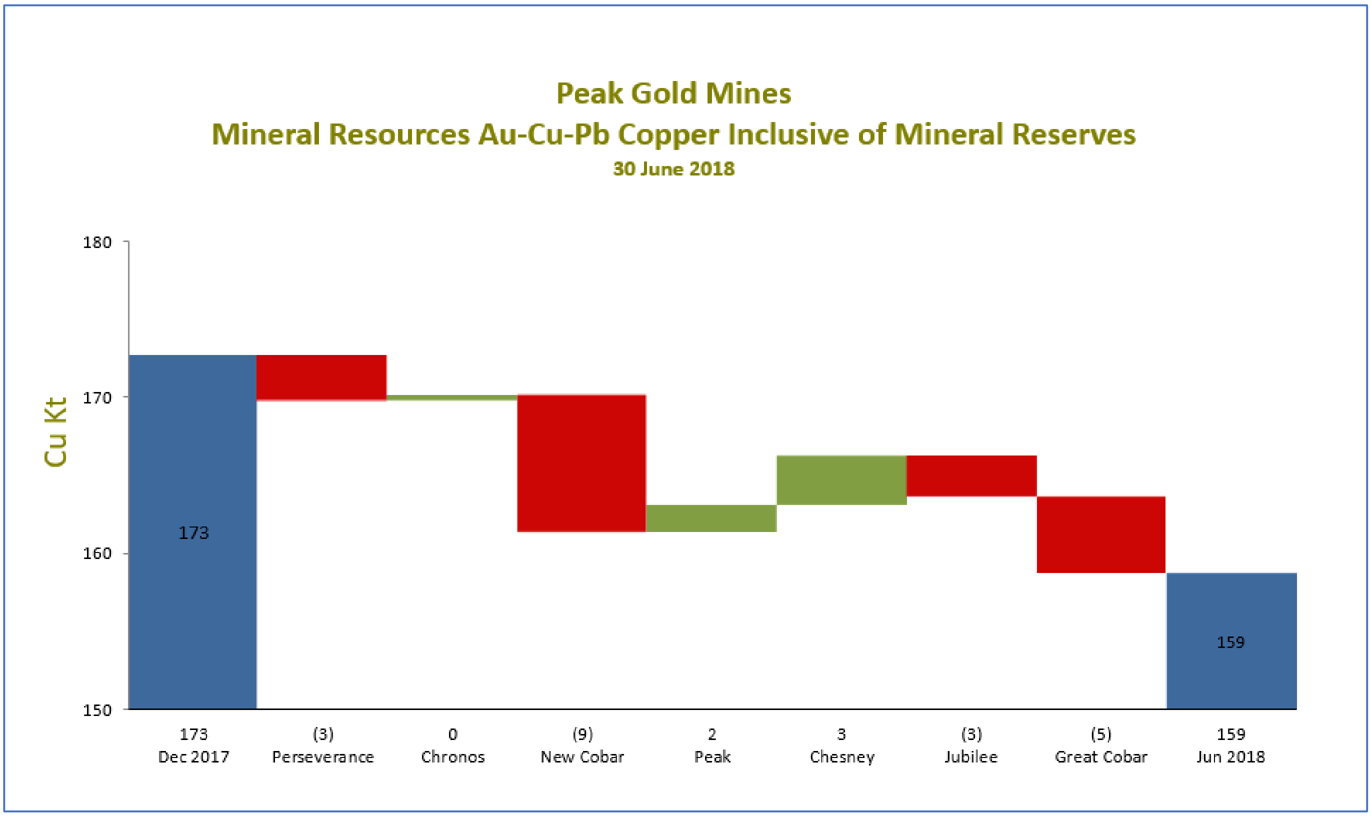

Figure 6. Waterfall graph comparison of Mineral Resource Au-Cu-Pb Copper (Kt) between December 2017 and June 2018.

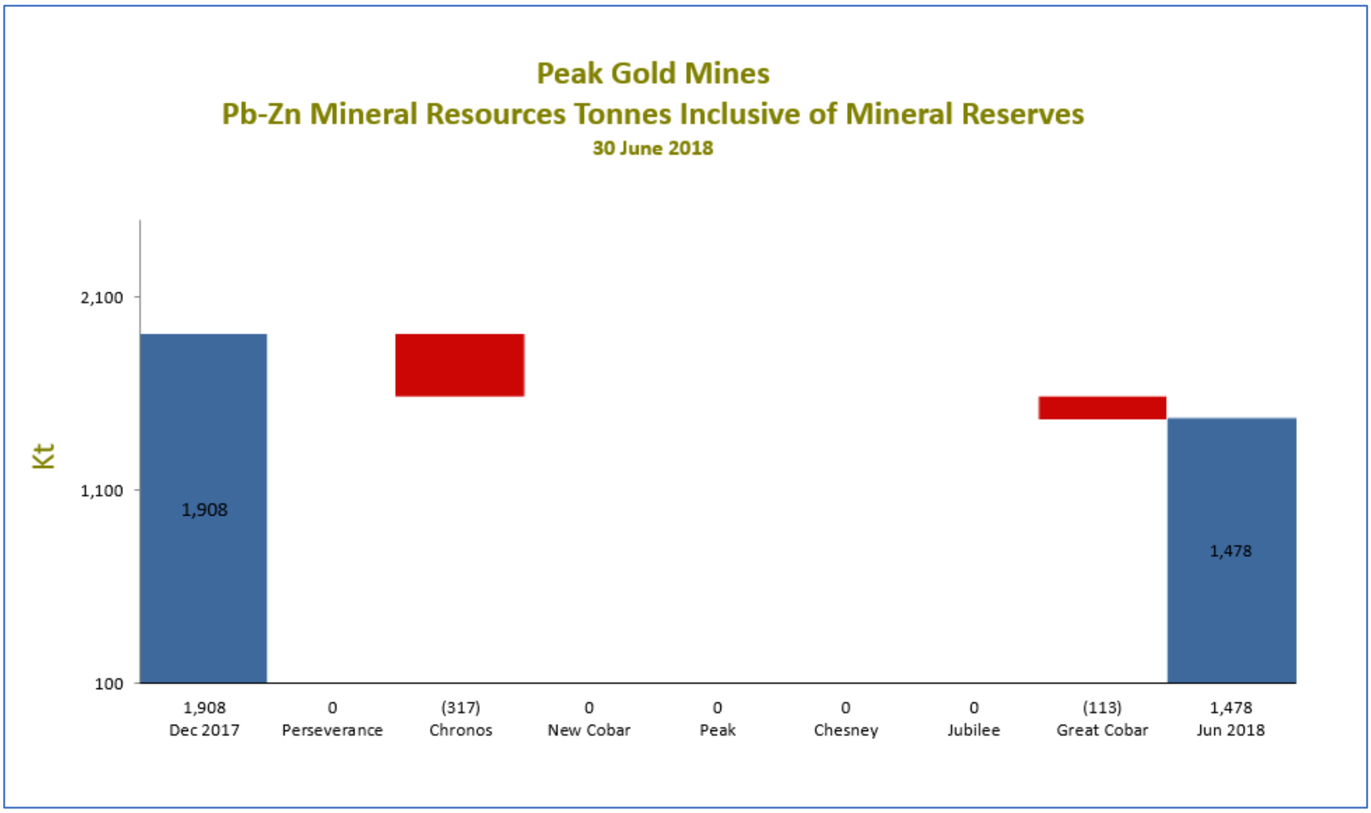

Figure 7. Waterfall graph comparison of Pb-Zn Mineral Resource Tonnes (Kt) between December 2017 and June 2018.

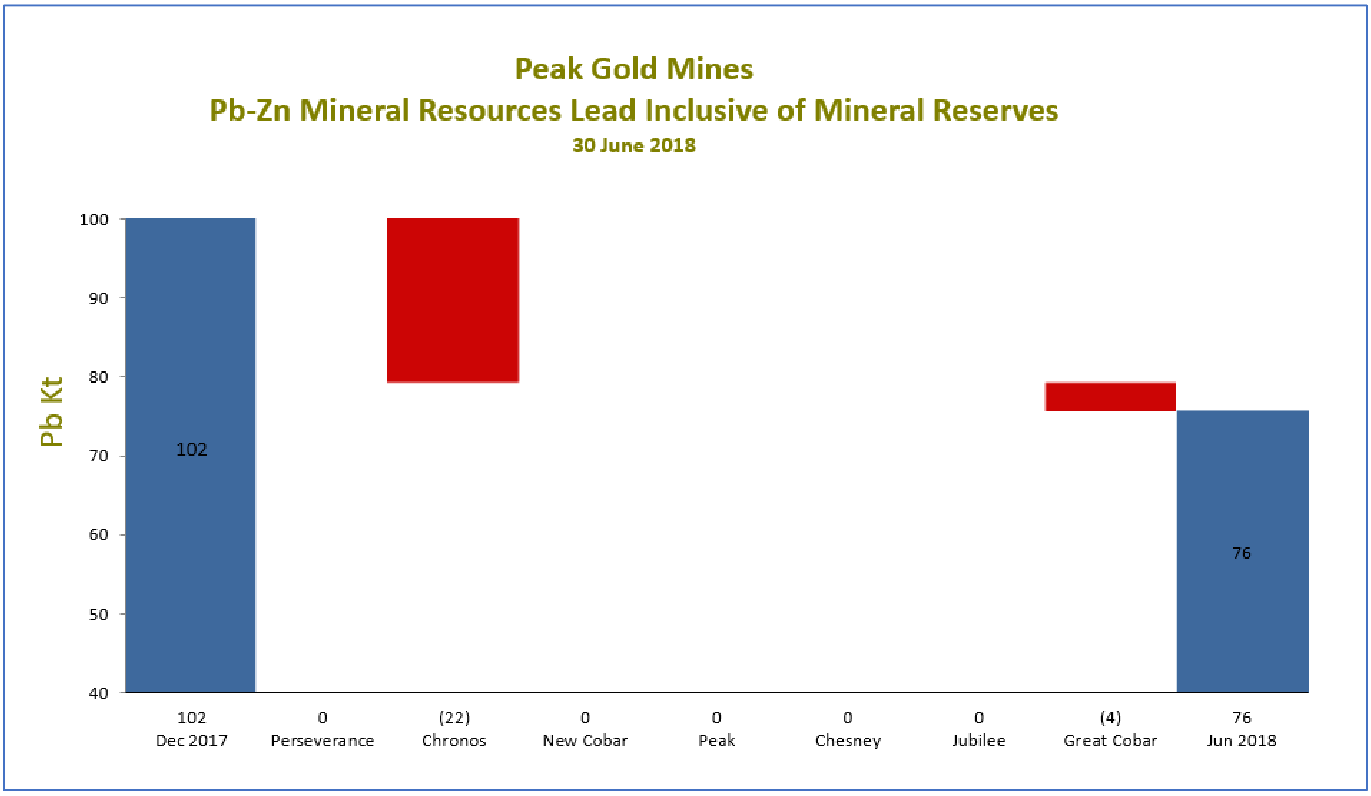

Figure 8. Waterfall graph comparison of Pb-Zn Mineral Resource Lead (Kt) between December 2017 and June 2018.

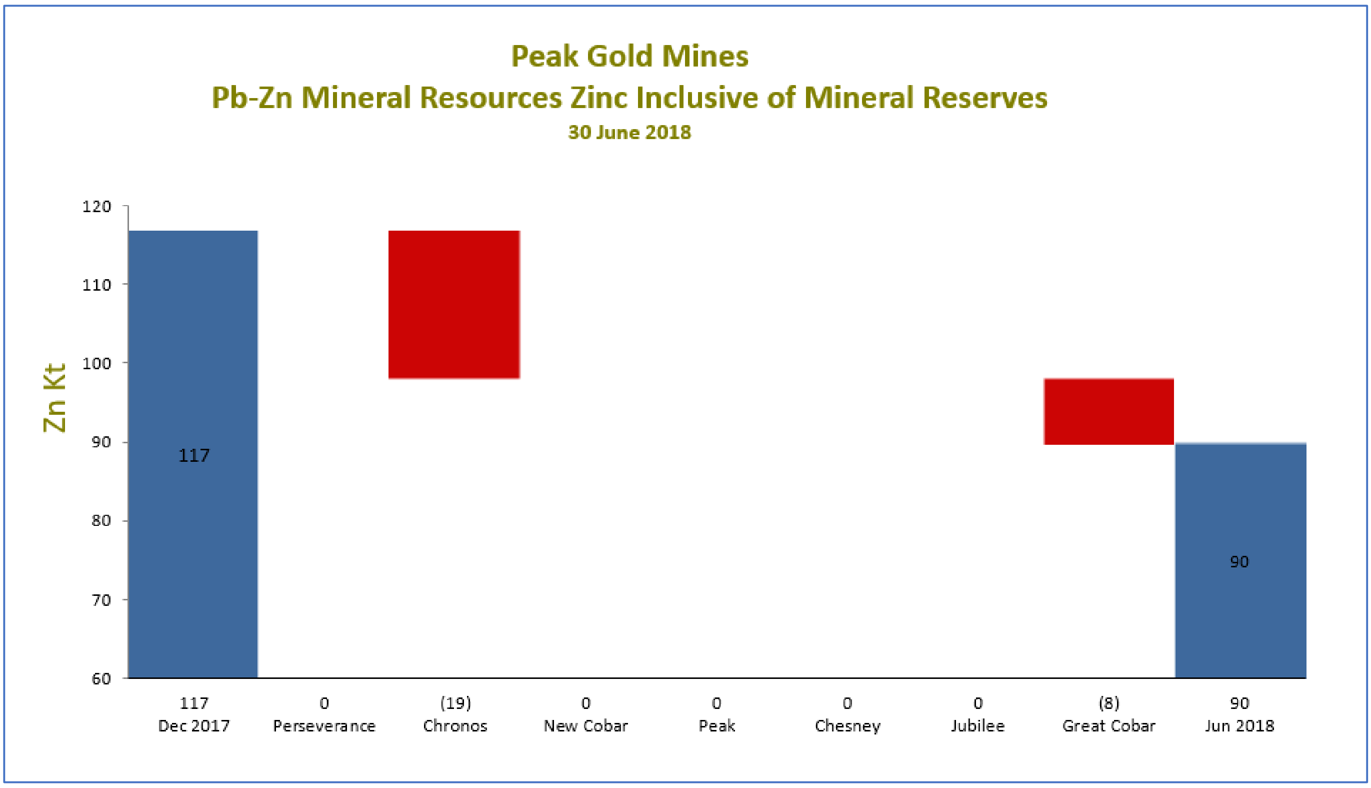

Figure 9. Waterfall graph comparison of Pb-Zn Mineral Resource Zinc (Kt) between December 2017 and June 2018.

ORE RESERVES ESTIMATE

The Ore Reserve Estimate by Ore category and mine area are shown in Table 6 and Table 7 .

Category	Mine Area	Tonnes (kt)	NSR (AU$)	Au (g/t)	Ag (g/t)	Cu (%)	Pb (%)
Proven	Perseverance Deeps	18	316	5.60	4.77	0.97	0.03
	Perseverance S400	24	209	4.02	14.7	0.35	0.87
	Peak Deeps	6	247	5.04	2.65	0.33	0.13
	Chesney	185	169	0.79	7.30	2.18	0.01
	Jubilee	56	177	1.94	5.28	1.44	0.01
	Great Cobar Cu						
Proven		**290**	**185**	**1.67**	**7.3**	**1.77**	**0.10**
Probable	Chronos	128	987	16.6	49.4	0.47	8.29
	Perseverance Deeps	340	253	4.73	4.15	0.62	0.02
	Perseverance S400	404	255	4.22	16.5	0.91	0.53
	Peak Deeps	93	231	4.37	2.83	0.55	0.13
	Chesney	252	164	1.00	5.92	1.90	0.01
	Jubilee	536	172	0.96	10.5	2.17	0.04
	Great Cobar Cu						
Probable		**1,753**	**268**	**3.78**	**12.5**	**1.33**	**0.75**
Cu/Au/Pb Ore Reserves (P+P)		**2,042**	**257**	**3.48**	**11.7**	**1.39**	**0.66**

Table 6. Ore Reserve Estimate by Orebody as at 30 June 2018 (Predominant Cu/Au/Pb Ore)

Category	Mine Area	Tonnes (kt)	NSR ($/t)	Au (g/t)	Ag (g/t)	Cu (%)	Pb (%)	Zn (%)
Proved	Chronos PbZn	14	265	0.44	34.7	0.35	5.88	5.87
	Great Cobar PbZn							
Proved		**14**	**265**	**0.44**	**34.7**	**0.35**	**5.88**	**5.87**
Probable	Chronos PbZn	518	262	0.39	31.7	0.17	5.72	6.15
	Great Cobar PbZn							
Probable		**518**	**262**	**0.39**	**31.7**	**0.17**	**5.72**	**6.15**
Pb/Zn Ore Reserves (P+P)		**532**	**262**	**0.40**	**31.8**	**0.17**	**5.72**	**6.15**

Table 7. Ore Reserve Estimate by Orebody as at 30 June 2018 (Predominant Pb/Zn Ore)

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 Resource is converted to a Proven and Probable Reserve. It is the competent person's view that the classification used for the Ore Reserve Estimate is appropriate. Long sections (Looking west) of the Peak Gold Mine by orebody of Mineral Resource classifications overlaid on the Ore Reserves as at 30th June 2018 is shown in Figures 10 to 16.

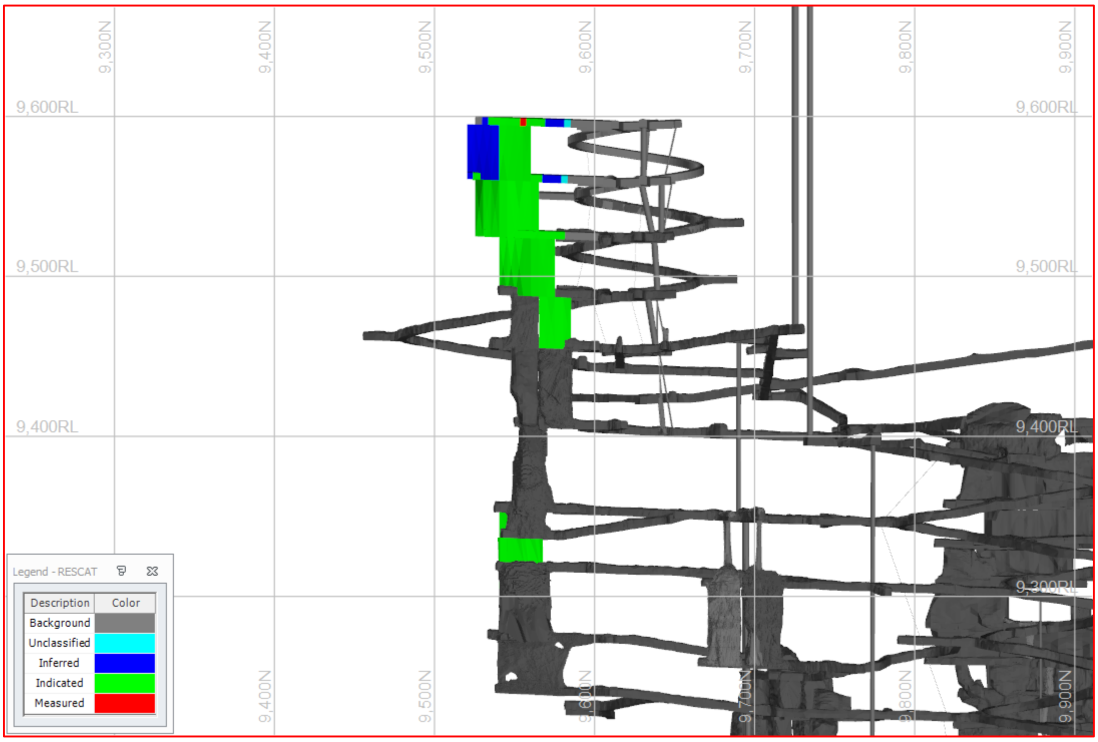

Figure 10. Chronos Au Ore Reserve June 2018 Long Section

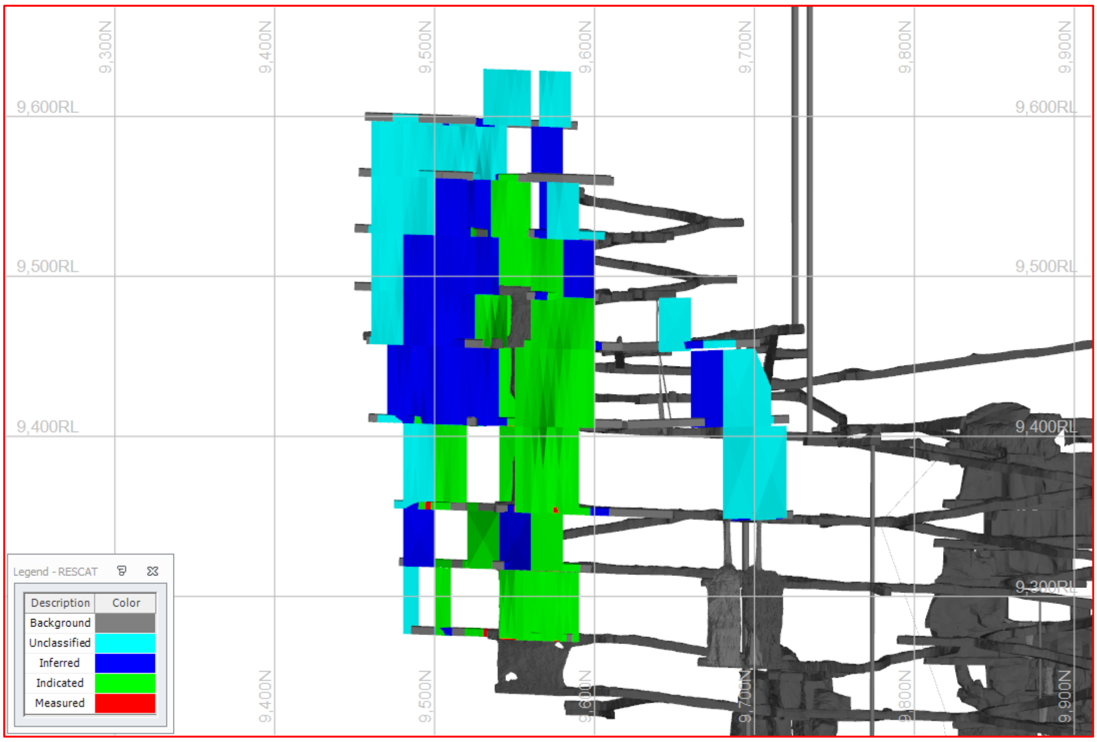

Figure 11. Chronos Pb/Zn Ore Reserve June 2018 Long Section

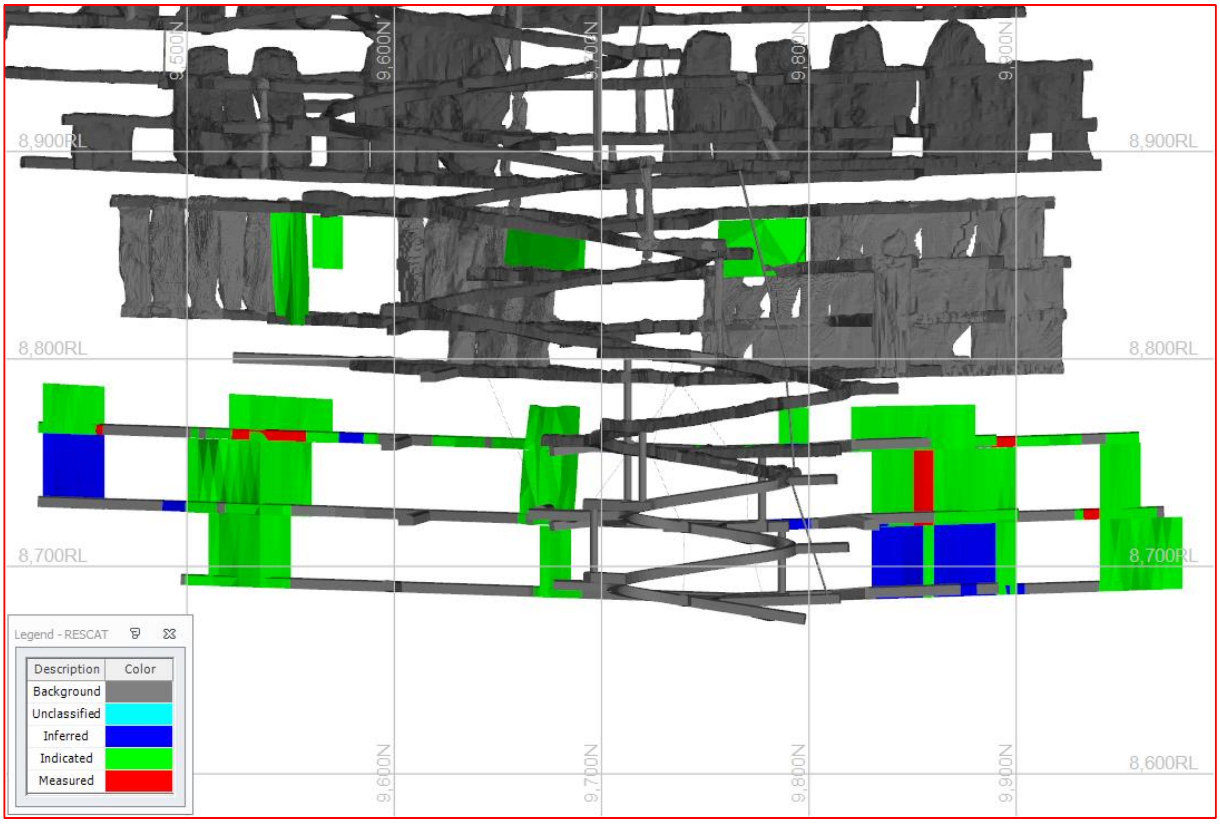

Figure 12. Perseverance Ore Reserve June 2018 Long Section

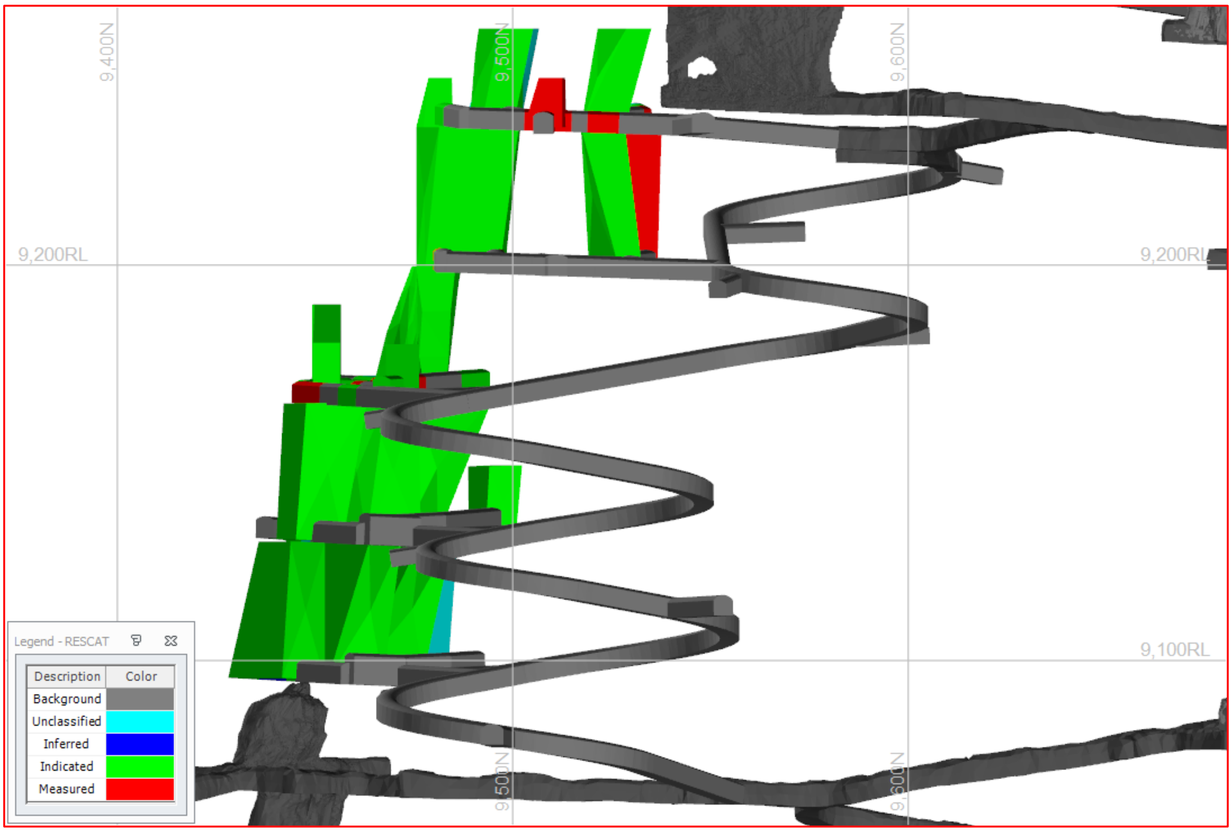

Figure 13. S400 Ore Reserve June 2018 Long Section

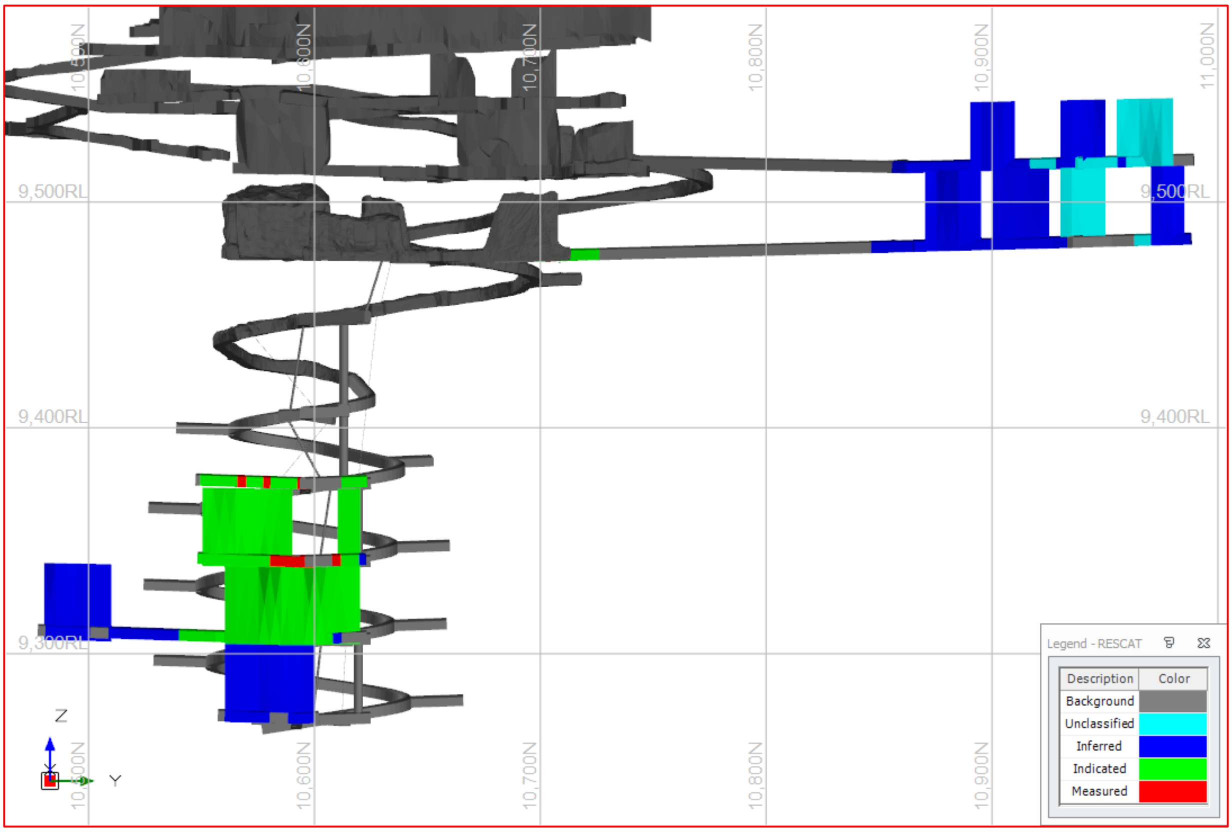

Figure 14. Peak Deep Ore Reserve June 2018 Long Section

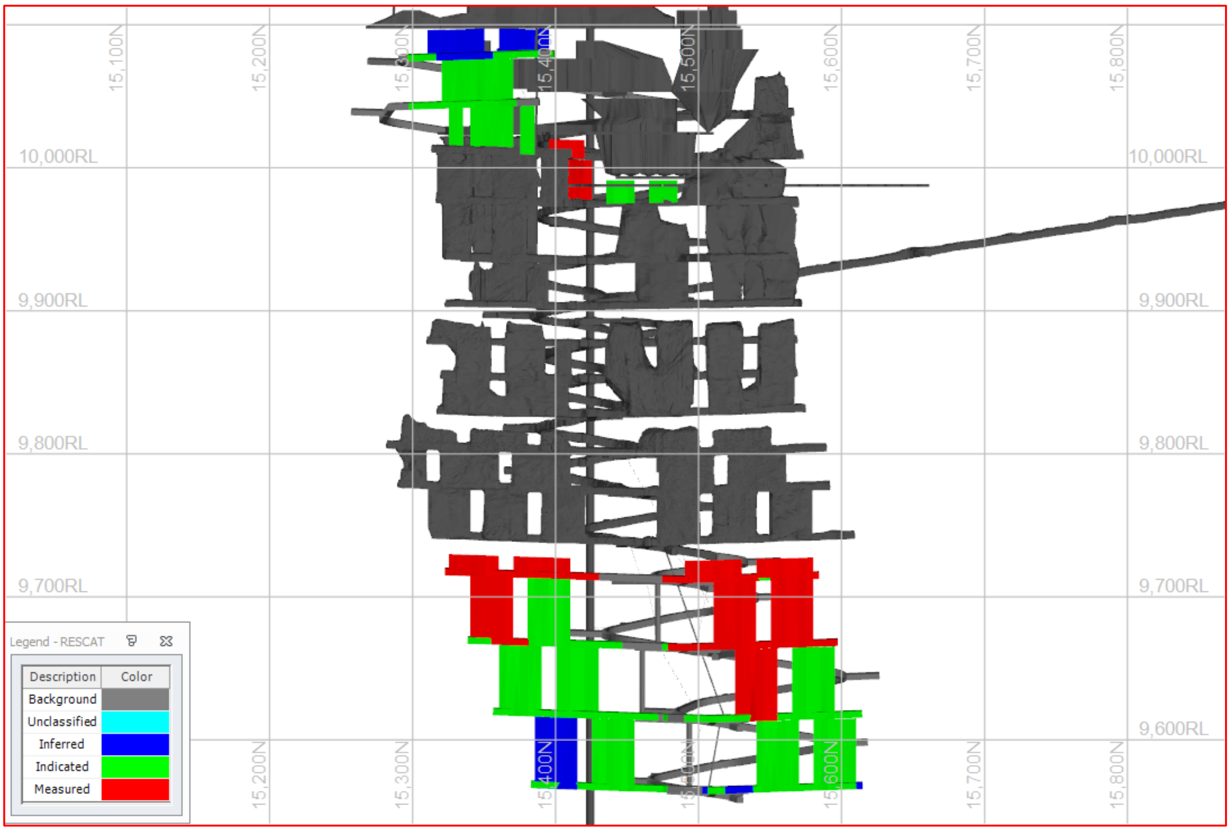

Figure 15. Chesney Ore Reserve June 2018 Long Section

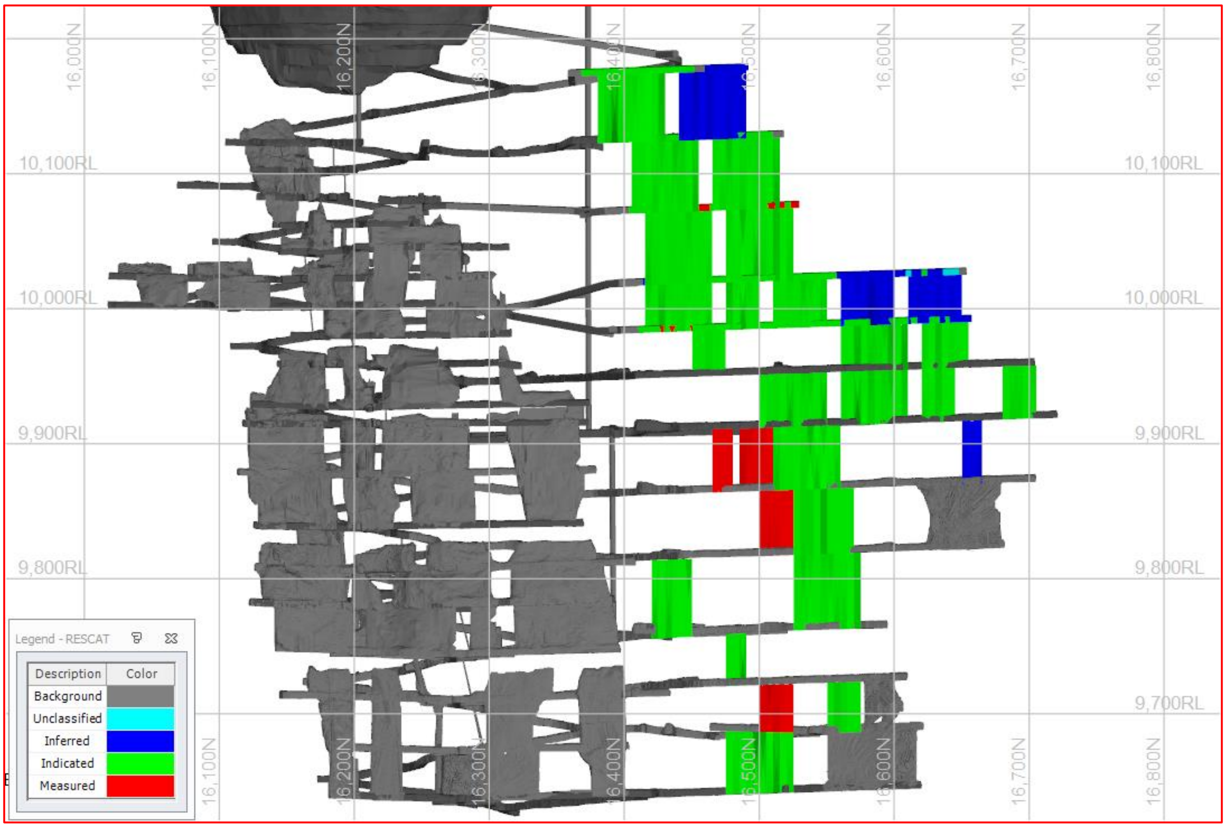

Figure 16. Jubilee Ore Reserve June 2018 Long Section

MINING METHOD REVIEW AND ASSUMPTIONS

Peak and Perseverance Mining methods

The Perseverance ore body is situated approximately 900m south of Peak. Access to the ore body is via a 1.2km long decline driven south from the 740L at the Peak ore body. Ore from the Perseverance is transported to the Peak's crusher and hoisting system at the 680L, via the access declines, in 45 – 55 tonne capacity underground haul trucks.

Mining method which is used at the Peak and Perseverance Mine Areas is predominantly the longhole open stoping. Retreat direction can either be longitudinal or transverse. Longitudinal retreat is adopted in areas where the ore body is less than 20m wide. Transverse retreat is adopted in areas where the ore body is greater than 20m wide. Stope blasting utilises conventional longhole blasting techniques. A schematic of longhole stope drilling is shown in Figure 17.

Each stope is opened up using a raise bore hole. Ring drilling of 89mm or 120mm diameter blast holes is undertaken for stope production blasting. Emulsion is the main explosive used, however ANFO is still used depending on the availability of machinery.

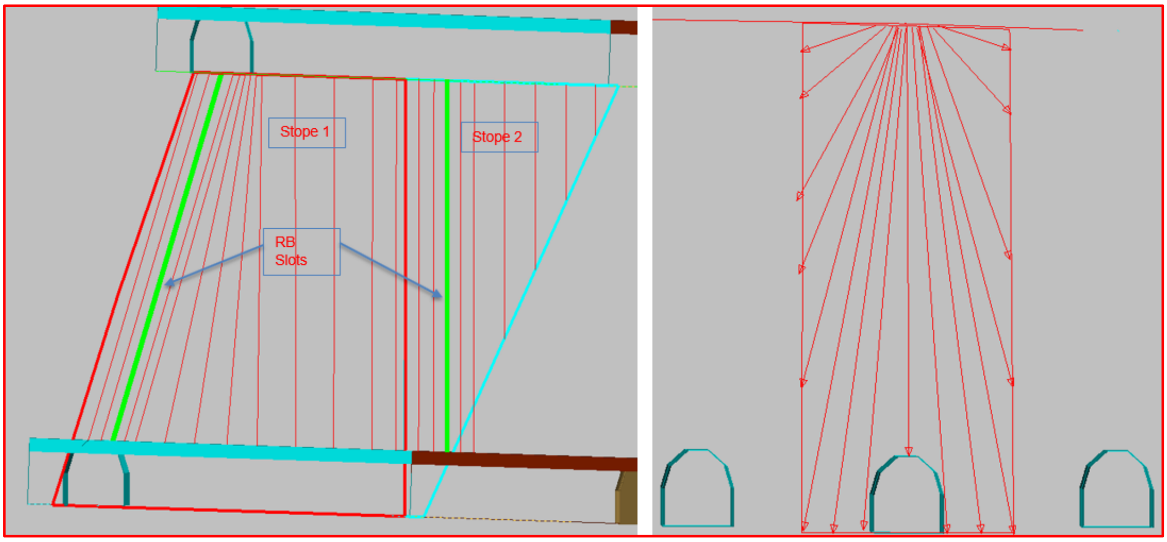

Figure 17. A Schematic of Long hole open stope drilling

Benching with continuous filling, also known as the "Modified Avoca Method" is used in a small area of Perseverance. A schematic of the mining method, (Classic Avoca and two variations) is shown in Figure 18.

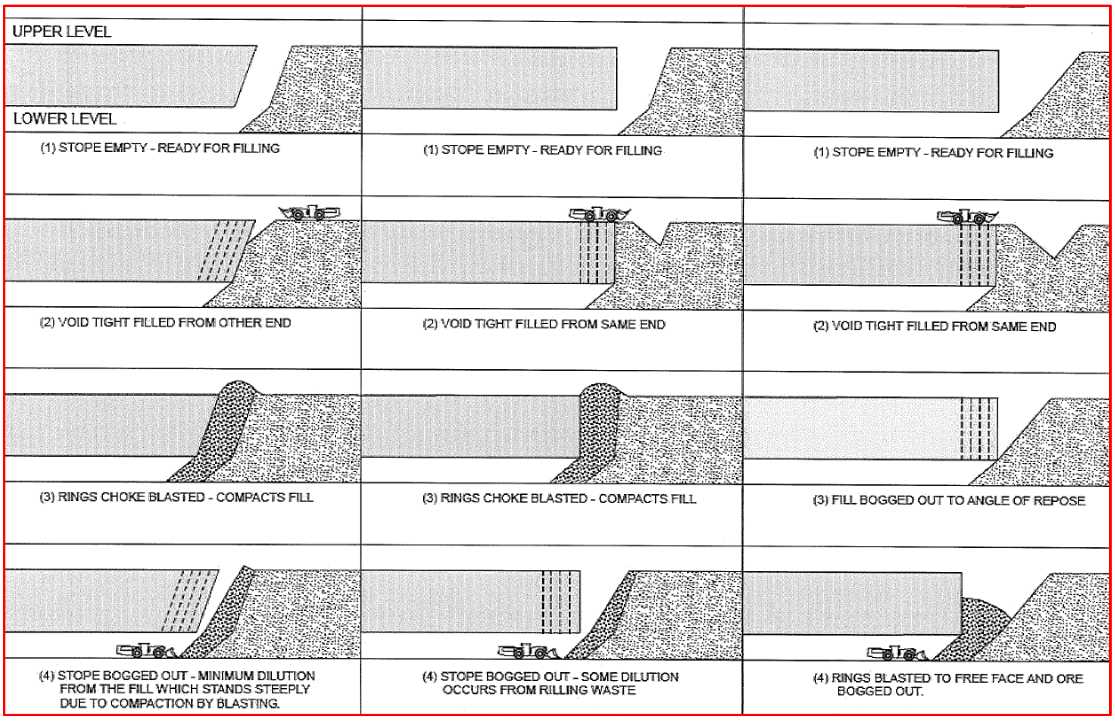

Figure 18. Modified Avoca mining method

This method was chosen as it allows PGM to ensure operator safety as well as continuous mining. The mining sequence allows for ore to be extracted from a bench at the same time as backfilling, thereby minimising the required stand up times for stope walls. All backfill is sourced from development waste from the Perseverance ore body. This Ore Reserve Estimate for the Perseverance and Peak orebodies has been based on longhole and Modified Avoca stoping methods.

New Cobar, Jubilee and Chesney Mining Methods

Access to the New Cobar ore body is via a decline from the base of the existing open pit. The decline is 5m wide by 5.5m high. Ore is trucked in 45 and 55 tonne capacity haul trucks via the access decline to the surface run-of-mine (ROM) pad. Ore is sorted and loaded onto road trains and trucked to Peak via the Kidman Way (during day light hours) for processing. Rock breaking to reduce oversized ore to more manageable dimensions is only undertaken during daylight hours at the New Cobar ROM pad.

Chesney ore body is accessed via a decline from the 28L at New Cobar. All operations at Chesney are undertaken in conjunction with New Cobar operations.

Mining methods applied at New Cobar, Jubilee and Chesney are benching and longhole open stoping with up and downhole combination (see Figure 19). These methods provide good selectivity, recovery and production rates, whilst requiring minimal development and minimal CRF requirement. Rib and crown pillars are left selectively for maintaining local and regional stability.

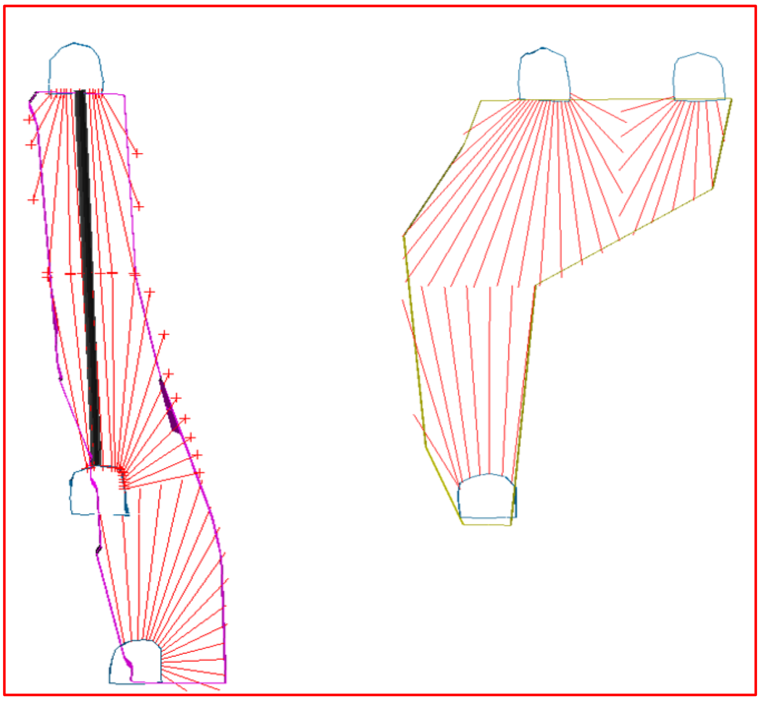

Figure 19. Long hole stoping with up and downhole combination

Blast holes are 89mm/102mm diameter down-holes and drilled between levels. Production blast holes are fired in slots located at the extremities of each stope. Ore is mucked to stockpiles using a LHD with remote capabilities and later hauled to the ROM pad for transportation over to Peak for processing.

In the bottom-up configuration, stoping operations commence immediately above a centrally positioned crown pillar. Bench stopes are backfilled progressively using waste from development and rock fill from the surface. Backfill is introduced upon completion of each stope for ground stability purpose. The fill also acts as a working platform for stoping immediately above. Large stopes at New Cobar and Chesney require backfill to be used to support stope walls / backs and also act as a working platform. The backfill method utilises un-cemented rock fill placed in the stope by a loader.

On review, both stoping methods have provided:

- Greater safety
- Reduced risk from rock fall and damage to equipment
- Reduced oversize and
- Reduced ground support check

Great Cobar Proposed Mining Methods

Proposed mining method to be applicable in Great Cobar is similar to that of Perseverance using the Avoca and transverse longhole open stoping with 25m vertical sub level spacing.
The Great Cobar tonnes and grade were excluded and not reported as a reserve this year.

Minimum Mining Width

The minimum mining width (MMV) of 3m was used, based on the production drill rig and development size.

Stope Reconciliation & Ore Recovery

HW and FW dilutions included in the stope shape were based on site reconciliation. This process is described in detail under Stope Shape Methodology. A 95% stope recovery was applied for downhole stopes. A 90% stope recovery was applied to crown pillar stopes after pillars being subtracted. Additional fill dilution was applied for stopes firing against or bogging off loose fill (Modified Avoca).

CUT-OFF GRADE ESTIMATION

The following cutoff values were be applied for the June 2018 Ore Reserve and Resource Estimate.

Resources - $120/t for all sources.
Ore Reserves – Southern Corridor - $150/t (Peak and Perseverance)
Ore Reserves – Northern Corridor - $130/t (New Cobar, Jubilee and Chesney)
Ore Reserves – Great Cobar - $150/t (includes exploration decline capital)

RESERVE STOPE SHAPE METHODOLOGY

For the purpose of ore reserve estimation, the seven mining areas shown in Figures 10 to 16 were evaluated separately. For each mining area, stopes were created by applying the Stope Shape Optimiser (SSO) software in Deswik CAD for pre-determined cut-off grades. The process used is as follows.

- Convert all the Vulcan block models to Datamine format (field names aligned with Aurelia naming standard) to be used in Deswik SSO for creating shapes.
- Create centreline strings for all areas to replicate level intervals and ore drive gradients as per current on site planned development.
- Modify block models to split out the resource classifications into four separate fields to allow for ore reserve creation later.
- Create a combined NSR ($/t) (NSR_RES) using the Cu/Au and the PB/Zn resource NSR ($/t) fields. The combined resource NSR ($/t) was selected as the maximum of the Cu/Au or Pb/Zn field.
- Create a combined NSR ($/t) (NSR_LONG) using the Cu/Au and the PB/Zn reserve NSR ($/t) fields. The combined reserve NSR ($/t) was select as the maximum of the Cu/Au or Pb/Zn field.
- Run SSO using corresponding cut-off NSR_RES for the seven mining areas to create the initial resource shapes at 5m intervals (and full level heights).
- Run SSO using mining cut-off NSR_LONG for the seven mining areas to create the initial resource shapes at 5m intervals (and full level heights).
- These are not final design but sufficient for LOM and Ore Reserve reporting.
- Stamp all shapes with LODE and LEVEL intervals to enable further evaluation on a level basis.
- Deplete the shapes that have been created within the mined out areas.
- Combine 5m shapes to honour predetermined geotechnical parameters (eg. Hydraulic Radius) and existing stope shapes.
- Report out the tonnes and grade for each mining area.
- Incorporate sustaining capital and perform economic evaluation.

The Smallest Mining Unit (SMU) is used as a starting shape and evaluated across each orebody until it finds an area with a SMU head grade above cut-off NSR ($/t). It then applies a 0.5m skin and evaluates the slice to determine if it is above cut-off. If it is then it adds it to the SMU and continues across the orebody. Where a slice is below a cutoff, it is flagged as waste and not included. If the waste slice is greater than 5m wide it is then left as a pillar. If it is less than 5m and has some high grade that carries above cut-off it is then included in the stope. A graphical explanation is shown in Figure 20.

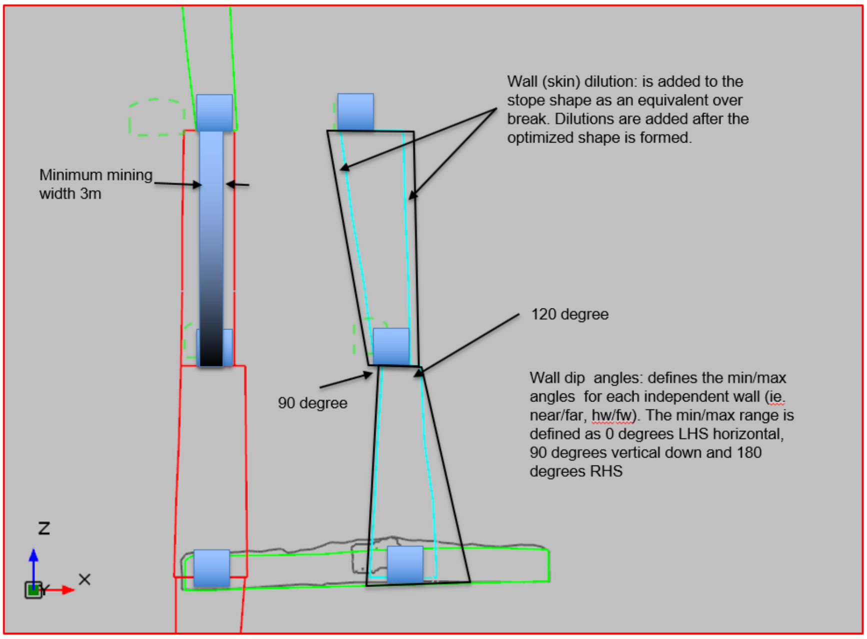

Figure 20. Stope Shape Optimiser Process

The SSO process creates practical shapes but is always evaluating a slice to ensure it is above a cut-off. The final process adds dilution to both side walls and does the final evaluation to ensure the diluted stope is above cut-off. External dilutions applied for each mining area are summarized in Table 8. The final stope shapes were created by combining the 5m SSO shapes together where there was stope continuity.

Peak Gold Mines 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 (plan)	0.4	0.5	Average

Table 8. External Dilution

NET SMELTER RETURN (NSR ($/t)

Since Peak Gold Mine is a polymetallic operation producing gold, copper, silver, lead and zinc, a net smelter return (NSR ($/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 calculated 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 recoveries have been taken from operating experience and near term operating targets. Metal prices have been based with reference to consensus forecasts.

The metallurgical recoveries for the Ore Reserve Estimate are predicated on the existing Peak Gold ore processing facility with a nominal throughput rate of 700Ktpa. Gold and silver are recovered in a gravity circuit with Knelson concentrator. This is further concentrated in a leach reactor, electrowon and sludge smelted in a gas fired furnace to produce gold doré bars. Gold, copper and silver are also recovered as a copper concentrate in a conventional flotation circuit. The flotation concentrate is thickened and dewatered with the tail of the flotation processed via a CIL circuit with gold and silver being produced in gold doré bars. Metal recoveries are approximately 94% and 90% for gold and copper respectively.

METAL PRICE ASSUMPTIONS

Metal prices and recovery assumptions provided by the Corporate are given in Table 9 and Table 10 respectively.

Commodity	Unit	Reserves Jun 18	Resources Jun 18
Gold	US$/oz	1,220	1,400
Silver	US$/oz	17.00	18.8
Lead	US$/t	2,280	2,280
Zinc	US$/t	2,600	2,600
Copper	US$/t	6,500	7,000
FX	AUD/USD	0.76	0.74
Gold	A$/oz	1,605	1,892
Silver	A$/oz	22	25
Lead	A$/t	3,000	3,081
Zinc	A$/t	3,421	3,514
Copper	A$/t	8,553	9,459

Table 9. Metal Price Assumptions

Peak Physical Assumptions	Mine Planning	Reserve	Resources
Gravity gold recovery	28%	28%	28%
Total Gold recovery	94%	94%	94%
Lead recovery	80%	80%	80%
Zinc recovery	0%	0%	0%
Copper recovery	90%	90%	90%
Pb Conc. grade	40%	40%	40%
Cu Conc grade	25%	25%	25%

Table 10. Recovery Assumptions

Peak Gold Mines 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.

CUT OFF VALUES

Cut-off values applied for each mine area is given in Table 11.

Mine Area	Reserve Cut-off Value (NSR$/t)	Resource Cut-off Value (NSR$/t)
Peak	150	120
Chronos	150	120
S400 Upper	150	120
Perseverance	150	120
NCB/Jubilee	130	120
Chesney	130	120
Great Cobar	150	120

Table 11. Cut-off Values used to Estimate the Peak Gold Resource and Reserve

ORE RESERVE COMPARISONS FROM DECEMBER 2017 TO JUNE 2018

The comparison of metal in the ore reserves from December 2017 to June 2018 are shown in Figures 21 to 23. The Mineral Resource block models; permod, pkmod, ncmod, chmod and gcmod have post script 201806, were finalised on 31 December 2017. The models used for the June 2018 reporting period are copies of the 201712 post scripted models as there was no new drilling included in the block models in the six months between reports. The waterfall graphs show mine depletion and minor variations with metal prices and estimation processes.

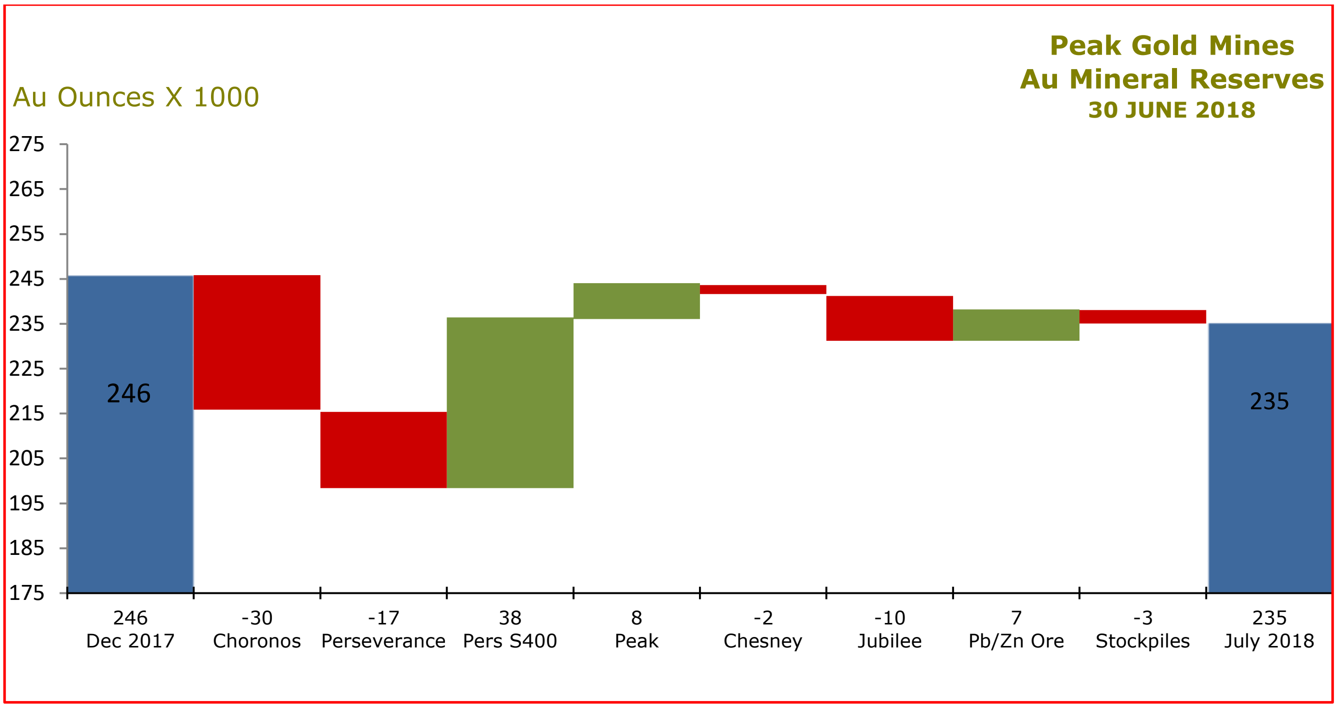

Figure 20. Changes in gold ounces for Mineral Reserves between December 2017 and June 2018

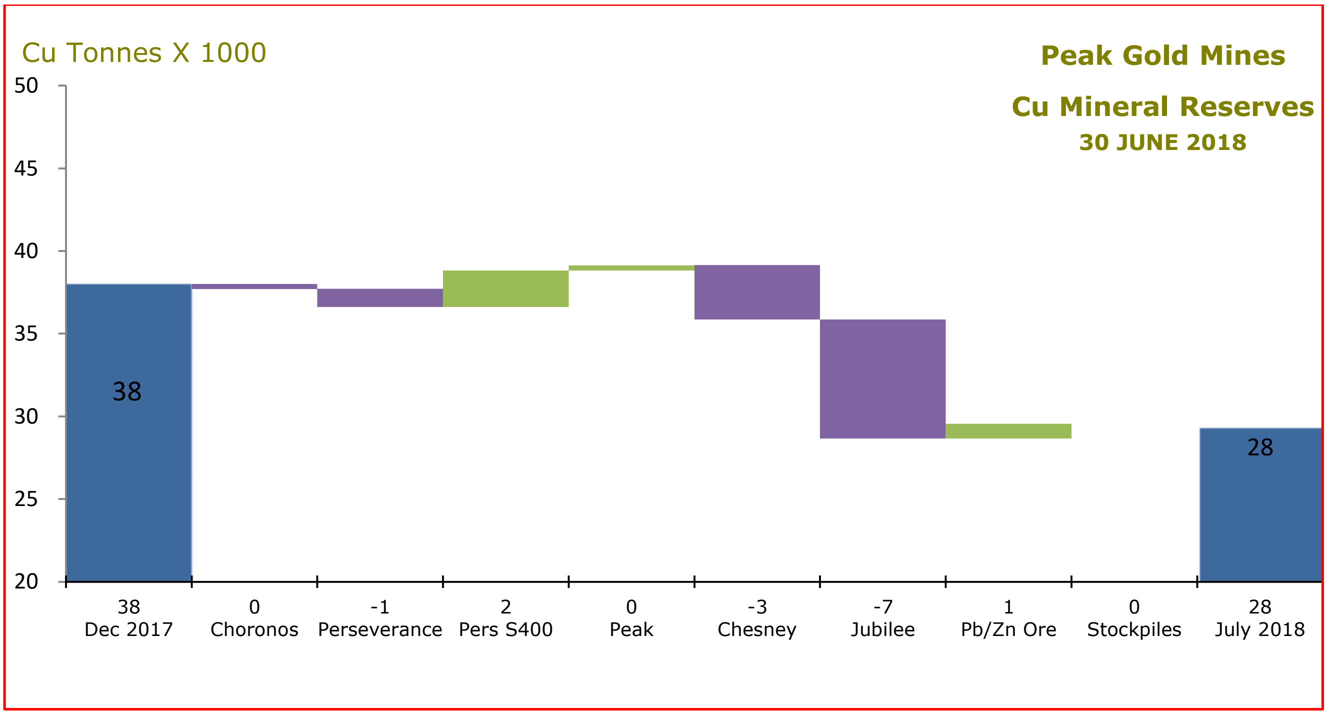

Figure 21. Changes in Copper Tonnes for Mineral Reserves between December 2017 and June 2018

CONVERSION OF RESOURCES TO RESERVES

The Mineral Resource Estimate, excluding Inferred Mineral Resources and excluding Great Cobar as reported at 30 June 2018 is **5,874Kt,** which contains the Ore Reserve Estimate of **2,574Kt**. The tonnage conversion rate of Mineral Resources to Mining Ore Reserve is 44%. It is important to note that both the Mineral Resource Estimate and the Ore Reserve Estimate were bounded by mineable shapes.

The two 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 cutoff value than the Ore Reserve Estimate

The average grade call factors since July 2017 are shown below. The Mineral Resource block model is closely representing the five grade fields assayed at Peak Gold Mines mine.

- Gold under calling by 97% (under call 17% with no Chronos)
- Silver under calling by 15%
- Copper over calling by 33%
- Lead under calling by 7%
- Zinc over calling by 2%

The gold under call is mainly due to the Chronos ore body. The grade in Chronos is unusually high for not many tonnes. Adjustment was made to the model in December 2017. However, it is still underestimating the gold content. Most likely any adjustment would not be accurate of the entire lens. The PGM end of month process is pro-rata based, tonnes and grade weighting back to the mill production. Uneven distributions arise if bogging and trucking factors are not accurate and also the resonance time in the mill can cause gold to carry over to the next month.

METAL PRICES FOR RESOURCE ESTIMATE

Metal price and recovery assumptions provided by the Corporate are given in Table 9 and Table 10 respectively. The Net Smelter Return (NSR) for Mineral Resource Estimate provides a higher value of ore in the block model compared to the Ore Reserve Estimate.

The Mineral Resource Estimate has been estimated with higher metal prices in line with 2012 JORC Code stating that:

A 'Mineral Resource' is a concentration or occurrence of solid material of economic interest in or on the Earth's crust in such form, grade (or quality), and quantity that there are reasonable prospects for eventual economic extraction.

It is reasonable to state that metal prices stated under the Mineral Resource Estimate section have been achieved in the past and have reasonable prospects of being achieved in future based on the Peak Mine Life.

For comparison, the average NSR ($/t) head grade of the Au-Cu-Pb Mineral Resource Measured and Indicated estimate is $237/t (minus Great Cobar) and the Ore Reserve Estimate is $258/t for the same sub-set. If the same metal prices were used for the Ore Reserve Estimate as for the Mineral Resource Estimate, the Ore Reserve Estimate would be $284/t.

CUT-OFF VALUES FOR RESOURCE AND RESERVE ESTIMATES

Cut-off values applied for each mine area is given in Table 11.

The Mineral Resource Estimate has been based on a cut-off value of $120/t which includes stoping, bogging, trucking, processing and administration. Development costs and sustaining capital have been excluded. The metal pricing and the cost structure create potential opportunities and reasonable prospects for Mineral Resources to be converted to Ore Reserves in the future.

Every isolated stoping area which required excess development was assessed to ensure that the stopes were economic taking into consideration the additional access development. No stoping areas created in the SSO process had to be excluded.

COMPARISON TO DECEMBER 2017 ORE RESERVES

An ore reserve comparison has been done between the June 2018 and December 2017.

There had been some variation to the estimation methodology. Previously, practical mining shapes (stope) were manually created above cut-off by inspection on 5.0m sections. June 2018 estimation has been based on Deswik Stope Optimiser (SO) shapes created at 5.0m intervals.

Mineral reserve classification has also been changed. Previously, all designed stope shapes are evaluated against the resource block model. All Measured and Indicated Resources within the stope shape are classified as Proven and Probable Reserves respectively. This classification methodology was reviewed and changed as follows.
Site specific RESCAT Factor was defined.
IF RES_MEA >= **RESCAT Factor** then RESCAT = 1, otherwise
IF (RES_MEA + RES_IND) >= **RESCAT Factor** then RESCAT = 2, otherwise
IF (RES_MEA+RES_IND+RES_INF) >= **RESCAT Factor** then RESCAT = 3, otherwise
RESCAT = 4
For reporting purpose, RESCAT = 1 is classified as Measured (Proven)
RESCAT = 2 is classified as Indicated (Probable)

In addition to methodology changes, additional diamond drilling carried out in S400 Upper orebody resulted increase in reserves. It has also been confirmed that the mill upgrade required for processing high Pb/Zn/Cu ore will be implemented. As a result, Chronos Pb/Zn resource has been partially converted to reserve.

In comparison, the Measured and Indicated Mineral Resource tonnes has decreased by 10%. This includes the 291 kt mined between the January 2018 and June 2018.

There has been a shift in the metal prices used for the June 2018 Ore Reserves. These changes are shown in Table 12

Metal Price	Unit	Ore Reserve Dec 17	Ore Reserves Jun 18	Change to 2017 Ore Reserve
Gold	A$/oz	1,658	1,605	-3%
Silver	A$/oz	22	22	0%
Lead	A$/t	2,866	3,000	5%
Zinc	A$/t	3,439	3,421	-1%
Copper	A$/t	7,882	8,553	9%

Table 12. Metal price changes

Total gold recovery assumed has been increased from 92% to 94%.

MINING INVENTORIES

Mining Inventory is estimated by converting Inferred resources using the same mining factors as per the Ore Reserves Estimate. Mining Inventories are shown in Tables 14 and 15.

Mine Area	Tonnes (kt)	NSR ($/t)	Au (g/t)	Ag (g/t)	Cu (%)	Pb (%)
Chronos	18	743	12.82	33.6	0.15	6.83
Perseverance Deeps	58	230	4.16	3.7	0.67	0.03
Pers S400	29	236	4.16	11.1	0.69	0.39
Peak Deeps	119	209	4.32	1.9	0.25	0.15
Chesney	53	170	0.82	6.1	2.06	0.01
Jubilee	83	150	0.25	10.4	2.31	0.05
Great Cobar Cu	2,426	202	1.08	7.4	2.66	0.02
Total	**2,788**	**205**	**1.36**	**7.4**	**2.46**	**0.08**

Table 14. Inventory outside Ore Reserves (Predominant Cu/Au/Pb Ore)

Mine Area	Tonnes (kt)	NSR ($/t)	Au (g/t)	Ag (g/t)	Cu (%)	Pb (%)	Zn (%)
Chronos PbZn	759	238	0.20	22.9	0.14	5.36	6.01
Great Cobar PbZn	601	274	0.14	37.3	0.36	4.88	8.93
	1,360	**254**	**0.17**	**29.3**	**0.24**	**5.15**	**7.30**

Table 5. Inventory outside Ore Reserve (Predominant Pb/Zn Ore)

A total of 4,148kt of mining inventory could provide another six years of mine life over and above the current mine life based on Reserves.

NOTES ON AUTHOR AND OTHERS

Anthony Allman, from ANTCIA Consulting Pty Ltd, has assisted Peak Gold Mine in the preparation of the June 2018 Peak Gold ore reserve estimate. Anthony has worked at polymetallic mines at Mt Isa Mines and similar mining methods at Renison Tin mine and Kanowna Belle Gold mine. Anthony also has 18 years of consulting experience, ranging from technical studies and reviews, mine planning assistance and preparation of ore reserve estimate. Anthony is a mining engineer with a BE Min Eng obtained at the University of NSW and has worked in underground hard rock mines since 1990 with over 25 years' experience. Anthony is a chartered professional and member of the AusIMM (107189), and also a registered professional engineer of Queensland (10138).

The Ore Reserve Estimate was compiled by Jim Simpson, the Chief Executive Officer at Aurelia Metals Ltd. Jim has worked at polymetallic mines at Golden Grove, Mt Isa Mines and Peak Gold Mines. Jim is a mining engineer with a BE Min Eng obtained at the University of NSW and has worked in underground hard rock mines since 1986 with 30 years' experience. The Ore Reserve Estimate was produced on site.

Mr Simpson has sufficient experience which is relevant to the style of mineralization, 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'. Jim is a chartered professional and member of the AusIMM, and also a registered mining engineer of Queensland, New South Wales and Western Australia.

REFERENCES

JORC Code 2012 (Table 1)
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.*	The resources are mostly 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. The core is processed in an established core yard with racks, water and cover.
	• *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. Drilling run errors affecting mark up are dealt with by the contractor crew responsible ensuring they take more care. 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 put at the beginning of every job. 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 shear. 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 (Archemedes 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 resource is minor.
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 preferential loss/gain of fine/coarse material.*	Drillers record core loss whilst drilling with core blocks in the run. Geology records the estimated location of loss on sample submission sheet. The estimated meterage of the core loss depends on how the core is pieced together. As mentioned above the sample weights of the assayed intervals are assessed to give another quantitive estimate of recovery. In the contract it is stated that "where difficult drilling circumstances prevail at least 90% of the drilled interval is guaranteed except where the driller is of the opinion it is not – he must immediately make all reasonable efforts to report the matter to PGM. Overall it is expected that 98% recovery should be achieved in difficult drilling. In good drilling 100% recovery is required". In RC drilling efforts are made to reduce the amount of fines lost. Further efforts are made to estimate what the loss is in the fines by trialling methods to capture the fines and compare assays between fine and coarse fractions. The best available sample recovery techniques including face hammer bits, high volume compressors and cyclone sample catchers with riffle splitters Generally good drilling equipment and experience is required to minimise core loss. When tendering drilling companies these factors weigh heavily on the outcome. Further more, adequate supervision is required to make the drillers focus on quality rather than quantity. The core is pieced together where possible. This ensures the core has been placed in the tray the right way around and is a check on the run lengths. At all times the core is handled with care requiring two person lifts on trays and transportation using proper tie down points. Whole core sampling of the BQ core eliminates sample bias from having to half the core. When sampling NQ core the cut line is perpendicular to structures. This is usually not ambiguous in PGMs Cobar style deposits, having a dominant regional foliation and sub-parallel alteration and mineralisation
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.*	In PGM's case the geological domains are much larger than the mineralisation and in most cases it is possible to drill continuously through the ore zone. For mine delineation drilling 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 interp 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 are accurate also magnetic susceptibility is measured at 1m intervals where appropriate.

		Rock mass quality information, to support engineering considerations, are logged and Q primed is calculated. 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. Further sampling during production has supplemented metallurgical testing for abrasion and mineralogical reasons.
	• *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.* • *The total length and percentage of the relevant intersections logged.*	All core and underground faces are 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. Walls and backs are photographed underground. Structural measurements are measured against the Dominant regional S2 foliation based on quality of observation. Visual estimates of minerals in percent are checked against assay data. All tables have set fields in drop down menus. 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 using coreview software.
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 core 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. Quarter coring is usually used in these instances. 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 resource attributed to areas dominated by RC drilling is minor and usually omitted from the resource by exclusion as it is not mineable by our underground techniques and the costs involved to open pit have not been thoroughly scoped. The assays are used in the composites where not in depleted zones 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. Geotechnical samples are glad wrapped and handled as per engineering lab instructions. Metallurgical quarter core samples are considered appropriate. The 3mm course reject is sometimes recovered from the commercial laboratory and sent for metallurgical testing. Audits of PGMs core yard facilities by external sources have suggested few improvements to the system currently employed Same procedures as outlined under sampling techniques.

	• *Whether sample sizes are appropriate to the grain size of the material being sampled.*	Twinning holes and second half core sampling is usually adopted during exploration projects. PGM reported resources are mostly mining areas and resource estimated from exploration drill holes only applies to one of its current projects. The drilling, sampling and assaying protocols are similar to those exercised by mining. It would be highly unlikely given the knowledge PGM has of its ore bodies for sample to require additional proof of its representivity. 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 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 geologist and engineers on the PGM site. Any abnormalities in the data would become apparent. A third party audit is performed annually and performs analysis on the data. During annual pulp checks certain intersections are repeated in full. Restricted to exploration – as a general rule deeper holes that have resource attached to them are replaced with grade control drill holes and left out of the data set as this occurs. 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 "Drillveiw". 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.

		Reliable assays and surveys are flagged “reliable” in the database for resource use. This will distinguish between check assay intervals and surveys with magnetic interference. 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. Two fails and instrument is sent away and replaced. Collar surveys are as accurate as the mine survey which is subject to regulatory re-survey on an interval basis 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. Magnetic drilling surveys are corrected by 25 degrees. 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 appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* • *Whether sample compositing has been applied.*	Underground drill hole spacing, for 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 The resource is classified on the following Drill hole centres and search distances depending on the type and complexity of the mineralisation: Measured – range 15mx15m to 25mx25m Indicated – range 30mx30m to 50mx50m Inferred – range 60mx60m to 75mx75m The confidence in classification 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,*	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.

	this should be assessed and reported if material.	
Sample security	• *The measures taken to ensure sample security*	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.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data*	H&SC audited PGMs core yard in 2008. No overly 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. Previously PGM was using non mineralised core mainly from the beginnings of New Occidental delineation holes representing the barren Great Cobar Slate. Drill hole data is reviewed by H&SC during the resource audits and measures of drill hole deviation and assay ranges are scrutinised and verified.

Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *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.*	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 Reserve) and EL7355 (Cumbine State Forest). The following table is a list of tenements held in full or part by PGM.

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

		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
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	Exploration has been ongoing since early 1900. No holes pre 1960 remain selected for the current resource estimate. Such holes were drilled by the New Occidental Mining Company and the like. • All exploration holes left in the resource selection were drill during CRA, Wheaton River, Goldcorp, Newgold and Aurelia ownership which is concurrent with the modern era of mining and hence there is greater confidence in directional techniques in drilling and analytical techniques for assaying.
Geology	• *Deposit type, geological setting and style of mineralisation.*	The deposits fall under the group of epigenetic "Cobar Style" mineralisation and are controlled structurally by major fault zones (Rookery Fault System) and subsequent spurs and splays. The faults are within 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:* o *easting and northing of the drill hole collar* o *elevation or RL (Reduced Level – elevation*	For the purpose of reporting PGM reserves and resources this section has been deemed inconsequential as the resources are based on mines with a long production history and are not anymore considered as exploration based As Above

	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.	
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 PGM reserves and resources this section has been deemed inconsequential as the resources are based on mines with a long production history and are not anymore considered as exploration based.
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 PGM reserves and resources this section has been deemed inconsequential as the resources are based on mines with a long production history and are not anymore considered as exploration based. As above As above
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 PGM reserves and resources this section has been deemed inconsequential as the resources are based on mines with a long production history and are not anymore considered as exploration based.

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 PGM reserves and resources this section has been deemed inconsequential as the resources are based on mines with a long production history and are not anymore considered as exploration based
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 PGM reserves and resources this section has been deemed inconsequential as the resources are based on mines with a long production history and are not anymore considered as exploration based
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.*	•

Section 3 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. Numbers cannot be duplicated by means of database programming. The data collection programs and storage are Microsoft Access based. Table fields are drop down selections. Data transfer from logging software to main database is electronic. Further validation for overlapping intervals and end of hole checks are part of the database function. Data is extracted from the database to mine design software (Vulcan) is electronic and is authenticated visually in the software. Data extracted from Vulcan to composite files can also be authenticated visually. Checks such as univariate statistics are analysed for meaningful ranges consistent with the assay returns. The validation sequence covers end of hole and overlapping intervals for all tables and reports errors. Visual checks are performed in Vulcan mine software.
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.*	H&SC has reported on PGM resources process for the last eight years as an auditor usually bi-annually. Chris Powell who will be signing off on the resources for 2018 has worked with H&SC since 2006 and has been in the role of Resource Geologist at PGM for the last 5 years. H&SC reports have concluded on most occasions that there are no material issues with the PGM resources. Obvious inconsistencies are corrected at audits prior to reporting. H&SC surmises that PGM's resource estimation methods are adequate and that inconsistencies are minor and immaterial to the report when checked against a GS3 generated model. H&SC has been represented at PGM by Arnold van der Heyden and has made yearly site visits for the past five years to do the auditing work required by PGM.
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.*	All deposits have visual indications of ore bearing material. Indications include combinations of quartz veins with sulphide internally or on selvages, a high degree of chlorite alteration, brecciation, silica flooding, and suphide presence in either semi massive or massive form. The domains for reporting and estimation are defined by elevated grades within these visual parameters and the boundary cut-off is grade based at either 0.1 g/t Au, 0.1 % base metal. Internal waste is carried in some domains. Structural complexity is commonly ground truthed during underground mapping and incorporated into the interpretation. The contacts are usually defined by high grade contacts at a dominant lithological boundary on one side, hanging wall or foot wall, of the mineralised zone with a diffuse and grading mineralisation on the other and along strike. There is also a strong correlation between the regional foliation orientation and orientation of mineralised structures The majority of data is diamond drill core. 100% recovery is assumed except where core is missing H&SC compare PGMs estimations against a second software package. No materially significant differences are depicted. Variations in the proportion of resource reporting to the measured and indicated categories are common between the different software but the addition of both is generally within acceptable tolerances Generally the resources are constrained across strike by, but not restricted to, lithological boundaries and alteration. A grade boundary is preferred for mineralised domains for resource reporting. Geology is used to guide the domain if the alteration and structure is present in the intersection but grade is not. Commonly the ore zones are accompanied by intense silica alteration, chloritisation and brecciation continuous along strike. Changes in strike and dip are sub-domained for the purpose of estimation.

		Generally, mineralisation in the Peak Mine corridor is distributed in steeply dipping ore shoots with a steep northerly plunge. The down dip continuity is the major search orientation direction. The semi major direction is along strike and the minor direction is across strike. A mechanism of dip and strike slip along the major shear zones created dilation for mineral deposition. There are no obvious sharp structural terminations of grade along strike or down dip within the ore lenses but rather gradational boundaries in these directions
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 resource is the addition of four developed mines and one at feasibility stage. The four developed mines share two portals but each have their own internal declines and ventilation. These are in length, breadth and depth: Perseverance - 600x300x900m is a blind deposit starting at 850m below surface. Peak – 400x200x1050m from surface New Cobar/Jubilee – 600x50x1000 from surface Chesney – 500x50x1000 from surface Great Cobar – 800x100x1000 from surface (feasibility) Within a total mine corridor 9000x900x1400m
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*	The estimation methods used are multi indicator kriging (MIK) for gold where there is significant gold mineralisation and high co-efficient of variation (CV) and ordinary kriging (OK) for other domains. OK is used for base metals, Silver and specific gravity. MIK is considered an appropriate estimation method for the gold grade distribution at PGM 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. Extreme grades are contained by using the median instead of the mean of the top grade threshold when using MIK. The 99th percentile is normally used as the top threshold. The 99.5th percentile is used for one lens that has a CV of 34. Vulcan software is used to calculate the estimate. Variography and directional data is taken from GS3 software. Wire-framed lenses are sub-domained by orientation so that the search ellipse suits the major (down dip), semi-major (along strike) and minor axis (across strike). Typical interpolation parameters from Vulcan are shown in the following table. The estimation performs three passes of increasing dimension which dictates the Resource Classification into Measured, Indicated and Inferred. The first pass is based on the drill hole spacing considered appropriate to define the ore continuity.

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.*

Major axis	Semi-major axis	minor axis	discretisation - X	discretisation - Y	discretisation - Z	Min samples per estimate	Max samples per estimate	Octant based search	Max samples per octant	Min octants with samples	Min samples per octant	Oct rot on typ
15	15	3	2	5	5	8	32	yes	4	4	2	Ellip id
30	30	6	2	5	5	8	32	yes	4	4	2	Ellip id
60	60	12	2	5	5	8	32	yes	4	4	2	Ellip id

PGM does the estimations in house and have access to all the data. H&SC check the estimates, annually, in GS3 usually for domains where drilling has been added. The previous estimate is also available to check against. Each new model can be checked against the last model by running the old report formats, NSR scripts, cut-offs and exclusions and check the totals for areas which have and have not changed. Experience should tell whether the expectation that drilling has increased the resource base is correct or not. Mine reconciliation data is also used to make sure the estimate is not over estimating

PGM has two Net Smelter Return Scripts (NSR) that calculate a value of each block based on mill recoveries, penalty elements and commodity prices. The Gold/Copper (Au/Cu) NSRT script calculates the recoveries of payable commodities gold, copper and silver and penalties incurred by bismuth and a Gold/Lead/Zinc (Au/Pb/Zn) NSRT script for payable commodities of Gold, Silver Lead and Zinc with bismuth penalties. The Pb/Zn script is used on domains with economic grades of Lead and Zinc. Lead and Zinc are penalties in Au/Cu domains but are usually blended out during processing

Sulphur is estimated. The Sulphur estimate is used as a guide to sulphide dust ignition during blasts

The block size is determined to be no less than half the nominal Measured drill hole spacing. The range of block sizes for PGM operating mines is 10mx10mx2m, 15mx12mx2m, and 20mx15mx2m for drill hole spacing of 15mx15m, 20mx20m and 25mx25m respectively. The blocks size used for other estimates of deposits at feasibility or exploration stage in the mine corridor is 25mx25mx2m correlating to drill hole spacing 40m or greater.

Selective mining units are not used formally as a basis for the model parameters. It is not likely that one single block will be mined as ore or waste on its own merits given the estimation method used. The current resource estimate reports all material within planned stope wireframes and is therefore considered to include internal dilution and it is more likely that you will recover that grade if you mined that shape.

		There are correlations between bismuth and gold, and lead and zinc but each element is modelled separately. The domain boundaries are chosen at either a 0.1 g/t Au or 0.1 % base metal but trends in the mineralised envelope are sometimes extrapolated by secondary elements rather than the target element. The geological boundaries are not the estimate boundaries as the grade is less continuous than the geology. Domaining and/or lens wireframing is controlled by assays, dip and strike. Alteration, texture, shearing and brecciation are considered when including internal dilution. For example, at Perseverance the rhyolite controls the orientation of subzones within lenses by the changes in strike and dip around the contact and therefore mapping the rhyolite is of major importance to the search parameters and grade distribution. Subzones within the rhyolite have a higher CV than in the sedimentary hosted subzones. At New Cobar the alteration zone, characterised by high silica and chlorite content, is much larger than the ore bearing domains within it. There is a western boundary that is steeper than the slightly shallower alteration and foliation features that splay off. The geology accounts for variances in the orientation of the domains particularly in the southern subzones of both the west and main lenses. PGM has found that gold deposits with low CVs need no high grade cutting when estimated using MIK as MIK itself is method of limiting the influence of high gold grades. The base metal elements estimated using OK have been assessed by considering the high end distribution of the grade population within each domain and selecting the value at which the distribution becomes erratic. Reconciled data helps determine the cutting strategies as does analysing Swath plots and global averages. The MIK threshold medians have been used as a means of top cutting where reconciliation has been poor (the estimate over calling ROM grades). has Cutting is only introduced during the modelling process. No cutting is performed before compositing The models are validated using grade tonnage, drift or swath plots and reconciliations as mentioned above. Check models have been run in GS3 by H&SC. As mentioned above, the previous estimate is also available to check against. Each new model can be checked against the last model by running the old report formats, NSR scripts, cut-offs and exclusions and check the report totals for areas which have and have not changed. Experience should tell whether the expectation that drilling has increased the resource base is correct or not

Section 4 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 2018 and the same block model was used to create the "Peak Gold Mineral Resource Estimate 30 June 2017" by Chris Powell. • ncmod_201806.bmf • chsmod_201806.bmf • gcmod_201806.bmf • permod_201806.bmf • permod_201806_zdseu.bmf • pkmod_201806.bmf and • pkmod_201806_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 completed off site by Anthony Allman and included regular monthly visits to site by Jim Simpson
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 2018. 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 calculated 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 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.*	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. Sub level interval has been increased from 25m to 35m for new areas currently being developed. This is still the most appropriate method for control of dilution, reduction of pillars and ore loss, ground control, safety and regional stability. Proposed mining method to be applicable in Great Cobar is similar to that of Perseverance longitudinal and transverse long hole open stoping with 40m vertical sub level spacing. Possibility of mining as multi-lifts (two or three, 80 to 120m) in a single stope must be further evaluated. 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. For a 10m wide orebody (average of all reported stopes) this equates to approximately 10%. 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*	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 dor'e 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

	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*	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 NSRT script calculates the bismuth penalty. Lead and Zinc were considered penalties, as well, but the script does not calculate this penalty because it is blended out.
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 Mine (PGM) 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. PGM currently holds Consolidated Mining Leases (CML) 6 and 8. PGM operation and New Cobar mine operation are located on CML8 and CML6 respectively
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 excluding Pb/Zn reserves. It has been agreed that Pb/Zn circuit to be installed to gain the full value from Chronos in the short term and Great Cobar later. On going 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.*	Metal Price and exchange rate assumptions are as provided by Aurelia Metals management and have been based on consensus forecasts.

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- *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.*

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<tr>
<td>Revenue factors</td>
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- *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.*

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The following table represents revenue assumptions. Treatment costs for Pb and Cu are US$60/dmt and US$76/dmt respectively.
<table>
<tr><th>Commodity</th><th>Unit</th><th>Reserves</th><th>Resources</th><th>Recovery</th></tr>
<tr><td>Gold</td><td>US$/oz</td><td>1220</td><td>1400</td><td>94%</td></tr>
<tr><td>Silver</td><td>US$/oz</td><td>17</td><td>19</td><td></td></tr>
<tr><td>Lead</td><td>US$/t</td><td>2280</td><td>2280</td><td>80%</td></tr>
<tr><td>Zinc</td><td>US$/t</td><td>2600</td><td>2600</td><td>0%</td></tr>
<tr><td>Copper</td><td>US$/t</td><td>6500</td><td>7000</td><td>90%</td></tr>
<tr><td>FX</td><td>AUD/USD</td><td>0.76</td><td>0.74</td><td></td></tr>
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<td>Market assessment</td>
<td>

- *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

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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.

Gold doré products produced on site are shipped to receiving Mint for refining under a refining agreement. The copper concentrate is trucked to Dubbo. From Dubbo it is rail-hauled to Port-Botany before being transferred to ships and sold to markets in Asia.
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<td>Economic</td>
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- *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*

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<td>
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.
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	in the significant assumptions and inputs.	
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 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 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 reserve is contingent.*	The ore reserve estimate is based on the mineral resource estimate. Measured and Indicated Resources become Probable. It is the competent person's view that the classifications used for the ore reserve estimate are appropriate.
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 Resources become Probable. 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
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 are not achieved due to reduced output of the processing plant. In the opinion of the competent person, there is some risk associated with the metallurgical inputs especially the throughputs. Continue debottlenecking will be carried out over time to align the ore reserve estimate assumptions with actual metallurgical performance.
Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	As mentioned previously in the sampling section all samples submitted for assay are SG'd by the Archimedes method. No oven drying of the sample is performed before this process. The samples are all fresh rock samples. The porosity and permeability of the rocks is very low. There is a small amount of natural moisture in the rock. For the purpose of PGM resources the SG is considered dry.
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 to simplify reporting. A NSR cut-off of AUD$120 was selected by Aurelia. Material at this cut-off is considered by Aurelia to have reasonable prospects of extraction in the medium term. Peak Gold Mines is an operating mine and the NSR calculation is well developed and informed. The NSR calculation takes account the recoveries associated with each of the two processing routes; namely production of Au dore and Cu concentrate or Au dore and Pb-Zn concentrate (both includes Ag credits). The NSR also takes account of the metal price, exchange rates, freight and treatment charges and royalties. The metal recoveries and metal prices used in the NSR calculation are given below. Costs associated with royalties, processing and transport are commercially sensitive to PGM and are not given. The calculation formula is complex as it takes into account the two processing routes and the recoveries and costs associated with each. For this reason the formula is not provided. An AUD$ to USD$ exchange rate of 0.74 was assumed. Recoveries:

		<table><tr><td>Parameter</td><td>Recovery</td></tr><tr><td>Gold Recovery – Gravity & Leach</td><td>64%</td></tr><tr><td>Gold Recovery - Concentrate</td><td>30%</td></tr><tr><td>Silver Recovery - Dore</td><td>10%</td></tr><tr><td>Silver Recovery - Concentrate</td><td>60%</td></tr><tr><td>Copper Recovery - Concentrate</td><td>90%</td></tr><tr><td>Lead Recovery - Concentrate</td><td>92%</td></tr><tr><td>Zinc Recovery - Concentrate</td><td>73%</td></tr></table>Assumed metal prices:<table><tr><td>Metal</td><td>Price (US$)</td></tr><tr><td>Gold (oz)</td><td>1,400</td></tr><tr><td>Silver (oz)</td><td>18.8</td></tr><tr><td>Lead (t)</td><td>2,500</td></tr><tr><td>Zinc (t)</td><td>2,280</td></tr></table>All elements included in the NSR calculation are currently being recovered and sold.
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.*	The resource parameters are adequate for PGMs purposes to extract a reserve that satisfies the mining method used. PGM has been operating for 20 plus years so the mining methods and parameters are real and not assumed. 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. Dilution and recovery parameters are factored during the reserve conversion process and is based on mining technique and ground behaviour locally. The estimate can be interrogated for shapes with or without dilution (ie the model estimate includes waste). The reserve is based on the same shape model as the resource but at a higher cut off and with different classification constraints The Smallest Mineable Unit (SMU) is 5 m long, 25 m high, with a minimum mining width of 3 m.

Metallurgical factors or assumptions	• *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.*	PGM has been operating for 20 plus years so the metallurgical methods and parameters are based on actual processing performance and not assumed. 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 scripts used.
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.*	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. It is assumed that process residue disposal will continue to take place in existing facilities at PGM, which are currently licensed for this purpose.
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.*	Every assayed sample has an SG. The SG is determined by the Archimedes method. Most of the sg determination is done on whole core (LTK48 or BQ). The method is described below. Specific Gravity Determination Method During the sampling process the specific gravity (SG) of each sample was determined by the wet balance method. Each sample was weighed dry (dry weight). Each sample was then weighed in a basket suspended beneath the scales to determine the weight of the sample suspended in water (wet weight).

	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*	Weights were electronically transferred from the scales into a computer to eliminate typographic errors (SG access database). The SG was automatically calculated using the formula SG = DRY WEIGHT/(DRY WEIGHT-(WET WEIGHT-BASKET WEIGHT)). The volume of each sample was calculated using the formula VOLUME = DRY WEIGHT /SG As a QAQC protocol SG standards are used to test the precision of the technique. Initially 3 SG standards were used; a block of mineralised rock, a cored piece of quartz and one metre piece of LTK48 rhyolite core cut into seven equal length pieces. The SG standards are now aluminium cylinders. The 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. The temperature of the water used during determination of “wet weights” for the standard were recorded to check whether any drift in Standard SG values was temperature related. Each metre of LTK48 or ½ NQ2 core should have the same volume which can theoretically calculated knowing the diameter of the relevant core size. The actual volume of core relative to the theoretical value is a measure of core recovery. Prior to each sample batch submission the core volumes of the samples were reviewed as a gross measure of the accuracy of drilling and core yard procedures (core loss and mark up, cutting and sampling errors etc). All samples are fresh rock samples. Flaky or porous core probably represents less than 0.1% of the samples. These are noted during the SG process as the SG will be lower and the wet basket weight will take a while to stabilise. Daily (and per assay submission) the SG table is checked as a peer review and work is redone if it is not within standard limits. There is no assumption. The bulk density (SG) is measured.
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,*	The methods used for resource estimation and the process of reporting resources meets with approval of the competent person – Chris Powell who has taken guidance from H&SC over the past five years.

	quality, quantity and distribution of the data). *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.*	In most cases the audits done by H&SC have found no significant material issues with the PGM models. The last review was not finalised due to the selling of PGM to Aurelia Metals. There was one domain where the drilling information was not complete and the check estimate showed some differences in tonnage over the grade ranges. Changes to the models suggested by H&SC included the adjustment of minimum values, adding constraints to the octant search, adding realistic default values elements where 0.005 is not appropriate, changing the gold estimation method where "high yield" (Vulcan specific function) was used and increasing the threshold cut-off for extreme grades.
Discussion of relative accuracy/ confidence	*Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.* *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	Reviews by H&SC state that: "No fatal flaw issues were identified in this review, and the PGM resource estimates were all close to the H&SC check estimates, within tolerable limits. The new PGM estimates were generally similar in methodology, parameters and results to the PGM 2012 estimates. A number of improvements have been implemented in the new resource models, but a range of minor issues and inconsistencies remain." The estimates are global estimates. The data is domained where the interpretation is considered continuous. Areas of waste are not reported as the mineralisation that may occur in these zones is considered not to be relevant to the overall mineralised trends, or is poorly drilled and therefore is an individual occurrence that has not been adequately defined. Monthly reconciled tonnes and grade is compared to planned grades which are derived from the block model. Individual months and sources vary greatly. PGM has records from 2005 compiled from this comparison. The results of this comparison:

Shaft	Tonnes	Au	Cu	BM Au	BM Cu	BMAu / Au	BMCu / Cu
New Cobar	3,361,910	2.84	1.3	2.5	1.3	0.87	0.94
Peak	5,671,797	5.77	0.8	5.8	0.7	1.01	0.96
Grand Total	**9,033,706**	**4.68**	**0.98**	**4.57**	**0.93**	**0.98**	**0.95**

The call factors show the block model underestimating up to 5%.

Further to this the final surveyed shapes are compared to the reconciled data. PGM has records back to 2010 for this data. The results of this comparison:

Row Labels	Actual Tonnes	Optec_t	AU_recon	Au_BM	CU_recon	Cu_BM	Ton_BM/rec	Au_BM/recon
New Cobar	2543098	2603025	2.65	2.00	1.39	1.26	102%	77%
Peak	2758405	2664058	6.13	5.59	0.88	0.74	97%	88%
Grand Total	5301503	5267083	4.46	3.81	1.13	0.99	99%	85%

This comparison takes into account dilution, under-break, over-break and shows long term mine call factors as much as 15%.