

# Major Resource Upgrade for Mt Bundy Gold Project to 1.8M Ounces

## HIGHLIGHTS

- Gold Resource at the Rustlers Roost Deposit increased by 72% to 1,332,050 ounces (49.6 million tonnes at 0.84 g/t Au)
- 78% of this resource is in the Indicated category
- Preliminary Pit optimisation indicates approximately 900,000 ounces fall into a single pit
- Strip ratio of 1:1, making Rustlers Roost one of the lowest strip ratios gold deposit in Australia
- Work commenced on PFS for Mt Bundy due 1H 2018
- Total Mt Bundy gold Resource increased to 1.8M ounces
- Primary Gold's global Mineral Resources now ~ 2 million ounces

Table 1: Mineral Resources for Rustlers Roost Deposit (cut-off of 0.5g/t Au)

Resource Category	'000t	Au g/t	Koz Au
Indicated	36,611	0.87	1,028.0
Inferred	12,990	0.73	304.0
TOTAL	49,601	0.84	1,332.0

## **Management Comment**

Commenting on the increase to the gold Resources, Primary Gold Managing Director, Garry Mills, said, "This is an outstanding result for the Company and highlights the significant potential at the Rustlers Roost deposit. What is most pleasing is that the pit optimisation study for the Rustlers Roost deposit indicates more than 900,000 oz of gold will fall into a single pit, with a strip ratio of 1:1. This would make the Rustlers Roost deposit one of the lowest strip ratio gold deposits in Australia. This increase in the size of the deposit is central to the PFS which is underway and due for completion in 1H18, by which stage we intend to be a gold producer at our Coolgardie project."

## **Increased Gold Resource**

**Primary Gold Limited** (ASX: PGO) ("Primary" or "the Company") is pleased to report a significant increase of 72% for its Resources at the Rustlers Roost gold deposit to 49.6 Mt at 0.84 g/t Au for **1,332,000 ounces** including 36.6 Mt @ 0.87 g/t gold Indicated and 12.990 Mt @ 0.73 g/t gold Inferred. Rustlers Roost forms part of the Mount Bundy Gold Project in the Northern Territory, Australia. The total gold Resource at the Mt Bundy project has now increased to 1,780,000 ounces.

This increased resource was the result of the recently completed and highly successful exploration drill program at Rustlers Roost, which was the first drill program in more than 20 years. Drilling both confirmed and validated

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the gold distribution previously encountered by historical drilling at the deposit. The Rustlers Roost deposit remains open both along strike and depth, with further exploration planned at the conclusion of the current wet season in 2018.

Primary has achieved an upgrade for a significant part of the Inferred Resources into the Indicated category due to the increased data density of the 2017 drilling. The new Indicated Resource of the deposit has doubled from 14.42 Mt at 1.1 g/t Au for 505,000 ounces of contained gold to 36.6 Mt at 0.87 g/t Au for 1,028,000 ounces of contained gold.

The new Mineral Resources estimate for Rustlers Roost is now reported at a 0.5 g/t cut-off. The adoption of a 0.5g/t Au cutoff is a function of:

- an improved understanding of the mining and processing costs for bulk mining from economies of scale;
- revising the mining model based on prevailing gold price as previous studies were completed at a lower gold price.

The global Primary Gold inventory across its two projects now stands at approximately 2 million ounces of gold.

**Table 2: Mineral Resources of Primary Gold** 

		Measure	ed		Indicat	ed		Inferred			Total	
Resources	'000t	g/t	Koz Aı	u '000t	g/t	Koz Au	'000t	g/t	Koz Au	'000t	g/t	Koz Au
Coolgardie Project												
Macphersons*	690	1.36	30.1	1,216	1.71	66.9	616	2.41	47.8	2,523	1.79	144.8
Tycho*				600	1.44	27.8	640	1.22	25.2	1,240	1.33	53.0
Franks Find							48	1.84	2.8	48	1.84	2.8
SUBTOTAL	690	1.36	30.1	1,816	1.61	94.7	1,304	1.81	75.8	3,811	1.64	200.6
					Mt Bu	ndy Project						
Rustlers Roost*				36,611	0.87	1,028.0	12,990	0.73	304.0	49,601	0.84	1,332.0
Toms Gully**				835	9.0	242.0	265	8.5	73.0	1,100	8.9	315.0
Quest 29***				2,190	1.4	98.0	1,205	1.3	50.0	3,395	1.4	148.0
SUBTOTAL				39,636	1.07	1,368.0	14,460	0.92	427.0	54,096	1.03	1,795.0
TOTAL	690	1.36	30.1	41,452	1.10	1,463.0	15,764	0.99	503.0	57,907	1.07	1,996.0

Notes: Figures have been rounded and hence may not add up exactly to the given totals. MacPhersons Resources include A-Cap. Cut off: \* 0.50g/t Au \*\* 6.00g/t Au \*\*\* 0.80g/t Au

#### **Table 3: Ore Reserves of Primary Gold**

Mineral Resources above are reported as inclusive of Ore Reserves.

Reserves		Prov	ed		Probab	le		Total	
	'000t	g/t	Koz Au	'000t	g/t	Koz Au	'000t	g/t	Koz Au
Mt Bundy Project				775	6.9	175.0	775	6.9	175.0
Coolgardie Project	267	1.5	13.0	802	1.8	45.0	1,069	1.7	58.0
TOTAL	267	1.5	13.0	1557	4.3	220.0	1,844	3.9	233



## Pit Optimisation & PFS

Preliminary pit optimisation over Rustlers Roost using the Resources at 0.5g/t cut off indicates 31Mt @ 0.9 g/t for approximately 900,000oz contained gold with a strip ratio of approx. 1:1. Further design work will form part of the PFS currently underway by GR Engineering Services. The PFS, due for release during 1H 2018, is building on the successful scoping study completed on the Mt Bundy Project in April 2017 (see ASX 19 April 2017).

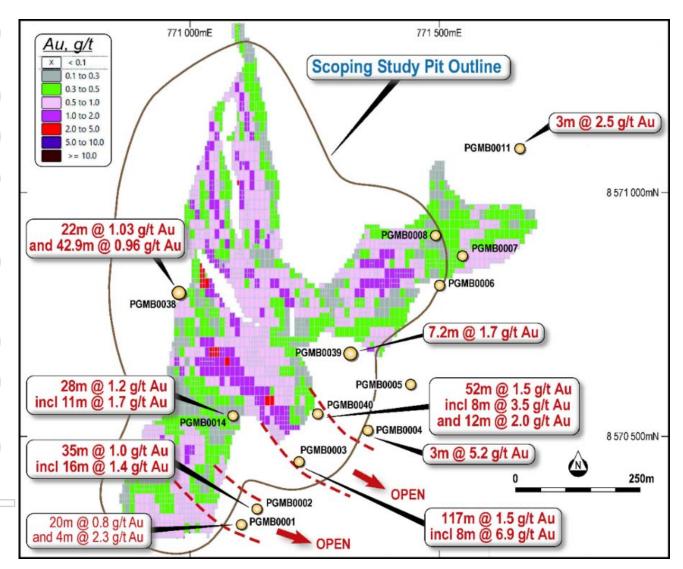


Fig. 1: Pit outline of scoping study of Rustlers Roost deposit presented as a section of the block model drawn at the 10mRL and the 2017 drill-holes with their significant intersections

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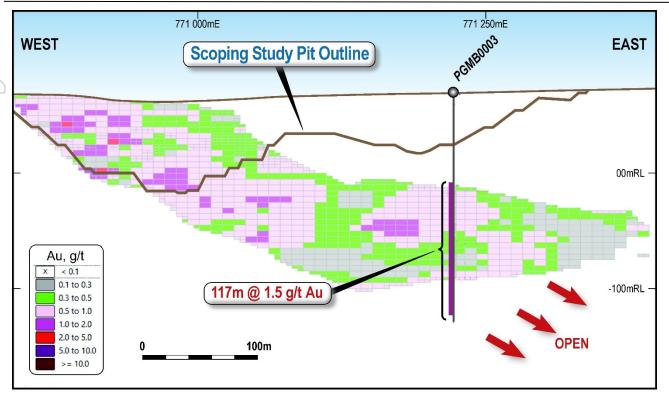


Fig. 2: Cross-section through the existing block model of Rustlers Roost showing the recently drilled hole PGMB0003 with an average grade of 1.5g/t Au compared with previous modelled grades of between 0.1g/t Au and 1.0g/t Au

# Resource Estimation Methodology and Data

The Resources for the Rustlers Roost deposit were estimated by independent consultants from Cube Consulting Pty Ltd ("Cube").

#### **Geology and Geological Interpretation**

The Rustlers Roost deposit is orogenic gold deposits hosted by weakly metamorphosed turbidite sequence. The bulk of the gold mineralisation at Rustlers Roost is located on both sides of the west to south-west dipping fold limb between the Backhoe Syncline to the west and the Dolly Pot Anticline to the east. Elevated gold results (>0.5g/t Au over 2m intervals) were obtained mostly from intervals that contain one or more sulphidic chert beds. These chert beds are generally only 5-20cm thick and less commonly 20-40cm thick and comprise only 10-20% of the sample interval.

There is evidence that the strongest gold mineralisation in the laminated sediment hosted sequence is spatially and genetically associated with a set of 1-3cm thick, sheeted pyritic quartz veins which occur throughout the mine. These veins generally dip to the south-east at 15°-25°.

The gold occurs most commonly in cherty quartz but also in association with chlorite and less commonly with pyrite and arsenopyrite. There is, however, a close spatial relationship with pyrite and to a lesser extent with arsenopyrite. Coarse gold grains are rare. In conclusion, the geological interpretation is robust as it is largely empirical and is based on the optimally spaced RC and DD core drilling and detailed open pit mapping.

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## **Drilling Techniques**

The Rustlers Roost deposit was explored using Reverse Circulation (RC) and diamond core drilling. The historic data that was used for Resource estimation in 2014 included 883 drill holes comprising 63,617m. Most of the drilling was RC with a limited number of holes completed using diamond core drilling.

The majority of core drilling was HQ or HQ triple tube with minor PQ coring for metallurgical and geotechnical test work. High quality core was produced with a total recovery rate in excess of 95%. Core orientation marks using a downhole spear with a chinagraph pencil were made on all angle holes and the core fitted back together prior to geological logging and sampling.

In 2017 Primary Gold drilled 14 RC and 2 diamond core (using HQ size drill bits) holes that were used for verification the previous results and updating the deposit's Resources. Standard procedure of the drilling and sampling was used. RC samples are collected at the 1m intervals. All samples are logged and supplied to North Australian Laboratories Pty Ltd for preparation and analysis. Drill core was logged, photographed, sampling intervals are marked on the drill core and all core trays were shipped to the laboratory for cutting the core, collecting and processing the samples.

# Sampling and Sub-Sampling Techniques

RC holes were sampled at regular 1m intervals. The diamond core was sampled at 1m intervals to the geological boundaries. All core was cut longitudinally in half and the 'south' side of the core submitted to the laboratory for assay. Samples, approximately 3 kg each, was sent to a certified laboratory for preparation and assaying.

In 2017 a standard sample preparation technique was used for samples preparation in the laboratory. This included crushing of 3 Kg sample to 1mm using roll crusher and split. 1 kg sub-sample collected and pulverised to 100 microns from which 50 g aliquot is taken for gold assay by a conventional fire-assay method. This procedure is commonly used by gold companies operating in the Northern Territories of Australia.

Similar procedures were used for 2014 data. A dry 3kg sample was taken and pulverised using a Keigor mill. Approximately 750grams of the dry sample was further reduced to a particle size of 100micron for analysis.

Cube has stated that "for all sample types, the nature, quality and appropriateness of the sample preparation technique is industry standard".

#### Sample Analysis Method

Assaying was completed by Assaycorp. In 2017 samples were assayed by North Australian Laboratories Pty Ltd (NAL) at Pine Creek. Gold grade was assayed using fire assays. 50 g aliquot was used. The analytical procedures were controlled using rigorous QAQC of the data, that included using of the certified standard samples and the sample duplicates. All CRM results fall within the acceptable tolerance range (mean +/- 2st.dev).

#### **Estimation Methodology**

The Mineral Resources for the Rustlers Roost deposit were estimated using an ID2 interpolation method with ellipsoids oriented to match mineralisation directions evident in the grade control sample data.

Variography was attempted using the 2m composite data from inside the mineralisation wireframes. Poorly structured variograms were generated. The only directional variograms that showed reasonable structure were

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in the east-west direction and were considered to be a result of the closer drill spacing in that direction. Consequently, the drilling is considered to be beyond the limits of the short range variability of the gold mineralisation. Without robust variograms, geostatistical interpolation methods were not considered appropriate, so ID2 interpolation was chosen for the Rustlers estimate with ellipsoids oriented to match mineralisation directions evident in the GC sample data

2m composites were extracted from each of the mineralised domains for statistical analysis and grade estimation. This was deemed acceptable as it closely matched the expected open pit mining flitch height of 2.5m

Based on the log-normal probability plots for all four domains for the 2m composite data, a top-cut of 10g/t Au was applied for the mineral resource estimate. Within the four mineralised domains, only 1% of the composites are above 5g/t Au. As there are very few composites above the top-cut of 10g/t Au cut-off, the impact of applying a top-cut was minimal.

Block model definition parameters were set by Primary with the parent block size of  $10m E-W \times 20m N-S \times 5m$  vertical and sub-blocking to  $5mE \times 10mN \times 2.5mRL$ . This was deemed to be appropriate for block estimation and modelling the selectivity for an open pit operation.

Interpolation parameters were based on the 2014 mineral resource estimate as specified in the scope of work for Cube. For all domains, a first pass a search radius of 50m was used along strike by 10m down dip and 25m across strike. Minimum and maximum number of samples used was 10 and 40 respectively. A second pass run was required in order to fill blocks in outlying or sparsely drilled areas; a search radius of 200m was used with a minimum and maximum number of samples of 2 and 40 respectively.

Surpac v6.8.0 was used for modelling and estimation. Snowden Supervisor v8.6 was used for statistical and geostatistical data analysis to review search parameters.

#### **Cut-off Grade**

The cut-off grade for reporting is 0.5/t Au, which is based on the scoping studies undertaken by Primary Gold for the Rustlers Roost Project.

## **Resource Classification Criteria**

The Mineral Resource is classified as Indicated where drill spacing is 50m or less and there is well defined continuity of mineralisation and structure. The Indicated Resource corresponds to the upper portions of the deposit to an approximately depth of 200m.

The Inferred portions of the Resource mainly represent the sparsely drilled areas, corresponding to those areas below 200m depth or extending to the east beyond the current extension drilling.

## Mining and Metallurgical Methods and Parameters

Open pit mining has previously taken place with documentation on mining methods and mine reconciliation providing good background information for future mining considerations. Any future mining method is therefore likely to be bulk open pit mining at 2.5m to 5m bench heights. Scoping study undertaken by Primary has confirmed that the deposits amenable for exploitation by the open pit mining technologies and production will be economically viable at 0.5 g/t Au cut-off.

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A minimum width of 2m was used in interpretation of the mineralisation in order to preserve 3D wireframe integrity and continuity. Block model size was determined by minimum SMU block size and drill spacing considerations. For the regularised block model, a block size of 10mN, 5m E and 10.0m RL was created for mine optimisation studies.

For previous scoping studies, both heap leach and milling options have been reviewed. Independent consultants, IMO Pty Ltd reviewed a report of the considerable testwork program undertaken on the Rustlers Roost deposit approximately 15 years ago. They summarise that the deposit is unique as the presence of fine graphite results in severe preg-robbing behaviour during cyanidation, however, the proposed flowsheet incorporating pre-fouling of the graphite with kerosene and resin-in-leach extraction of the gold was expected to have the potential to recover over 90% of the contained gold.

Primary has resumed metallurgical testworks with emphasis on investigating the recovery using the new resins that represents a significant potential for process improvements. Metallurgical studies are currently in progress.

# Mount Bundy Gold Project

The Mount Bundy Gold Project is located approximately 100km from Darwin and consists of a 1,500km2 tenement package within the Pine Creek gold region where over 14m oz of gold have been discovered to date. The Project currently consists of three deposits, the Rustler Roost and Quest 29 open pittable deposits as well as the high grade Toms Gully underground mine. Combined these deposits have a resource of 1.78 million ounces of gold. Primary released a positive Scoping Study for the Mt Bundy Project in 2017 which examined a 3Mtpa operation, with All in sustaining Operating Costs of AlSC of A\$1,054/oz.

For more information, please contact:

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Or download our Primary Gold App

## Competent Person's Statement

The information in this announcement that relates to Mt Bundy Mineral Resources is based on, and fairly represents, information and supporting documentation compiled and prepared by Mr Brian Fitzpatrick. Mr Fitzpatrick is a Member of The Australasian Institute of Mining and Metallurgy and a full-time employee of Cube Consulting Pty Ltd. Neither Cube nor Mr Fitzpatrick holds any interest in Primary Gold, its related parties, or in any of the mineral properties that are the subject of this report. Mr Fitzpatrick has sufficient experience which is relevant to the styles of mineralisation and types of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Fitzpatrick has provided prior written consent as to the form and context in which the Exploration Results and Mineral Resources and the supporting information are presented in this market announcement.

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The information that relates to Mineral Resources of the Coolgardie project is based on information compiled by Dr Marat Abzalov who is a Competent Person according to the JORC 2012 Code. Dr Abzalov is a Fellow of the Australasian Institute of Mining and Metallurgy. He has sufficient experience in estimation of resources of gold mineralisation, and has a strong expertise in the all aspects of data collection, interpretation, geostatistical analysis, validation of the results and classification of the Resources to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting Exploration Results, Mineral Resources and Ore Reserves'. Dr Abzalov consents to the inclusion in the report of the matters based on the information in the form and context in which it appears.

The information that related to Ore Reserves for the Coolgardie Project is based on and fairly represents information compiled by Mr Craig Mann, a Competent Person, who is a Member of the Australasian Institute of Mining and Metallurgy. Mr Mann is employed by Entech Pty Ltd, an independent consulting company. Mr Mann has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Mann consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

The information that relates to Mt Bundy Ore Reserves (Toms Gully deposit) is extracted from the report entitled Toms Gully Ore Reserve Estimate Summary Report, August 2013 as announced 27 August 2013. Both report and announcement are available to view on www.primarygold.com.au. Primary Gold Limited confirms it is not aware of any new information or data that materially affects the information in the original market announcements relating to Toms Gully ore reserves, that all material assumptions and technical parameters underpinning the Toms Gully mineral resource estimate continue to apply and have not materially changed. The company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.

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# APPENDIX 1: JORC (2012) COMPLIANCE CHECK LIST - Rustlers Roost Deposit

# Reporting criteria presented in the Section 1 of the JORC Table 1 (Sampling techniques and data)

		data)
Criteria of JORC Code 2012	JORC Code 2012 explanation	Comments/Findings
mpling chniques	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.	<ul> <li>2017 Drilling:</li> <li>RC and diamond core (using HQ size drill bits) samples were collected.</li> <li>Standard procedure of the drilling and sampling was used. RC samples are collected at the 1m intervals. All samples are logged and supplied to laboratory in Pine Creek (North Australian Laboratories Pty Ltd) for preparation and analysis</li> <li>Drill core was logged, photographed, sampling intervals are marked on the drill core and all core trays were shipped to the laboratory for cutting the core, collecting and processing the samples.  Previous Drilling:</li> <li>RC drilling produced dry and wet percussion chip samples. RC holes were sampled at regular 1m intervals and sent to Assaycorp for analysis.</li> <li>The majority of core drilling was HQ or HQ triple tube with minor PQ coring for metallurgical and geotechnical test work. High quality core was produced with a total recovery rate in excess of 95%. Core orientation marks using a downhole spear with a chinagraph pencil were made on all angle holes and the core fitted back together prior to geological logging and sampling. The core was sampled at 1m intervals. All core was cut longitudinally in half and the 'south' side of the core submitted to the laboratory for assay. Assaying was completed by Assaycorp or by North Australian Laboratories Pty Ltd (NAL) at Pine Creek.</li> </ul>
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	<ul> <li>RC samples are collected at the drill rig cyclone and then split using the cone splitter. Cyclone and the splitter were cleaned after each sample.</li> <li>Approximately 3 kg RC sample is sent to the laboratory for assaying. Every sample had its duplicate, which were collected together with the main sample.</li> <li>Diamond core was sawn on half by a diamond saw and half core was sampled for assaying. Remaining half is retained in the core trays for further studies. Sampling was made to geological contacts maintaining the sample length 0.6 – 1.2m. Average length of the drill core samples was approximately 1 m. Barren intervals were also sampled, however 2m long samples were used in the barren rocks.</li> </ul>
	<ul> <li>Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a</li> </ul>	<ul> <li>Standard procedure of using a reverse circulation drilling was applied.         <ol> <li>m samples were collected from the drill-rigs cyclone, from which approximately 3 kg was received using the cone splitter. 3kg samples were sent to the certified laboratory in Pine Creek (North Australian Laboratories Pty Ltd) for preparation and assaying using conventional techniques.</li> </ol> </li> <li>3 Kg sample was crushed to 1mm using roll crusher and split. 1 kg subsample collected and pulverised 10 100 microns from which 50 g aliquot is taken for gold assay, by a conventional fire-assay method.</li> </ul>

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Criteria of JORC Code 2012	JORC Code 2012 explanation	Comments/Findings
Drilling techniques	30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.  • Drill type (e.g. core, reverse circulation, openhole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, facesampling bit or other type, whether core is oriented and if so, by what method, etc.).	<ul> <li>2017 Drilling:</li> <li>Conventional Reverse Circulation (RC) and diamond core (HQ size) drilling.</li> <li>Previous Drilling:</li> <li>Reverse circulation, Diamond drilling (PQ, HQ, and NQ) with standard and triple inner tubes and some percussion drilling.</li> <li>Down hole surveys were completed by the drilling contractor at the time of drilling using an Eastman or Pee Wee single shot camera. Holes drilled prior to 2003 were surveyed at the bottom of the hole and depending on the amount of hole deviation, one, two or three additional surveys were taken back up the hole. For subsequent drilling, surveys were taken at intervals ranging between 25m and 50m downhole. Vertical holes were not surveyed down hole.</li> <li>Angled diamond core was oriented with the orientation mark determined by use of a downhole spear with a chinagraph pencil.</li> </ul>
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed.	<ul> <li>2017 Drilling:</li> <li>Sample weight was documented for every sample received in the laboratory. This was a part of the QAQC procedures.</li> <li>Recovery of the drill core was documented by drillers and checked by geologists.  Previous Drilling:</li> <li>Percussion and RC drilling prior to 2003 produced subsamples of 3-4kg for assaying. Sample recovery was recorded as being of high quality, uncontaminated dry and wet percussion chip samples. No records or reporting of whether percussion and RC chip samples were weighed in the field before splitting.</li> <li>Diamond core recoveries measured in the core trays.</li> <li>Prior to 2003, HQ or HQ triple tube core was produced with a total recovery rate in excess of 95%.</li> </ul>
	<ul> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> </ul>	<ul> <li>2017 Drilling:</li> <li>Drilling parameters were adjusted to maximise recovery. This included frequent changes of the drill bits and using heavy drilling muds when drilling through intensely sheared rocks where recovery was tending to drop.</li> <li>Previous Drilling:</li> <li>Measures taken to maximize sample recovery and ensure representative nature of the samples are not known.</li> </ul>
	<ul> <li>Whether a relationship exists between sample recovery and grade and</li> </ul>	No relationships between recovery and grade.

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Criteria of JORC Code 2012	JORC Code 2012 explanation	Comments/Findings
	whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	
Logging	Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.	<ul> <li>All samples were geologically logged to level of details which will be sufficient for estimation of the Mineral Resources.</li> <li>Logging has included documentation degree of weathering and appearance of the water (water table) in the drill hole.</li> <li>Drill core was photographed for more detailed geotechnical logging.</li> </ul>
	<ul> <li>Whether logging is qualitative or quantitative in nature.</li> <li>Core (or costean, channel, etc.) photography.</li> </ul>	<ul> <li>2017 Drilling:</li> <li>Logging was quantitative and consist of diagnostics of the rocks and minerals and degree of the rocks weathering</li> <li>Recording of the observed characteristics was made into the electronic device.</li> <li>RC and drill core samples were systematically assayed using portable XRF which was used to support geological interpretation. Previous Drilling: </li> <li>Detailed geological logging was carried out on all the HQ and PQ diamond core drilled in 2003. Percussion, RC and DD drilling completed prior to 2003 have basic lithology recorded in historical databases.</li> </ul>
	The total length and percentage of the relevant intersections logged.	100% of the drillholes were logged.
Sub-sampling techniques and sample preparation	If core, whether cut or sawn and whether quarter, half or all core taken.	<ul> <li>Drill core was sawn on half in the lab and half core was taken for sampling.</li> </ul>
	<ul> <li>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</li> </ul>	Dry and wet samples were collected. Sub-sampling of the RC samples was made using cone splitter.
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	<ul> <li>2017 Drilling:</li> <li>Standard sample preparation technique is used.</li> <li>3 Kg sample was crushed to 1mm using roll crusher and split. 1 kg subsample collected and pulverised 10 100 microns from which 50 g aliquot is taken for gold assay by a conventional fire-assay method.</li> <li>This procedure is commonly used by gold companies operating in the Northern Territories of Australia.</li> <li>Previous Drilling:</li> <li>Core is cut into half core longitudinally for sampling. The samples were sent to North Australian Laboratories (NAL) for jaw crushing followed by hammer or ring milling. A dry 3kg split was taken and pulverised. Approximately 750grams of the dry sample was further reduced to a particle size of 100micron for analysis.</li> <li>The submitted RC subsamples were dried and the entire sample</li> </ul>

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Criteria of JORC Code 2012	JORC Code 2012 explanation	Comments/Findings
		<ul> <li>pulverised using a Keigor mill. Approximately 750grams of the dry sample was further reduced to a particle size of 100micron for analysis.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique is industry standard.</li> </ul>
	<ul> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> </ul>	<ul> <li>2017 Drilling:</li> <li>Certified standards (ORES 220) systematically used for assays quality control. Standard samples are inserted with every submitted batch of the samples. The standard samples constitute approximately 2% of the RC samples.</li> <li>2003 Drilling:</li> <li>After completion of all assaying by primary laboratory sample pulp duplicates were selected with a total of 8% dispatched to an independent laboratory for independent check assays. The correlation data shows some scatter attributed to coarse gold; otherwise the regression line is within acceptable limits.</li> </ul>
	<ul> <li>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</li> </ul>	<ul> <li>Every 1m sample has a field duplicate collected at the same time when the sample was collected. Duplicates are stored in safe place in the mine office area and will be used for confirmation the high-grade intersections and for general QAQC purposes.</li> <li>Pulp duplicates were systematically collected in the lab and assayed for QAQC purposes.</li> </ul>
	<ul> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	Samples are approximately 3kg which is a standard size for the gold samples.
Quality of assay data and laboratory tests	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> </ul>	Gold grade was assayed using fire assays. 50 g aliquot was used.
	<ul> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> </ul>	Portable XRF Olympus was used for the holes logging purposes for the 2017 drilling program.
	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	<ul> <li>2017 Drilling:</li> <li>Certified standards (ORES 220) systematically used for assays quality control. Standard samples are inserted with every submitted batch of the samples. The standard samples constitute approximately 2% of the RC samples.</li> <li>All CRM results fall within the acceptable tolerance range (mean +/-2st.dev.)</li> </ul>

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Criteria of JORC Code 2012 explanation Comments/Findings **JORC Code** 2012 have been established. 0.95 0.93 0.91 0.89 0.8 0.85 0.81 0.79 0.77 0.75 Mean of the Assayed standard samples 0.870 ppm, the certified value is 0.866, 0.004 ppm difference is statistically insignificant. **Previous Drilling:** The assay laboratories used comprehensive internal QAQC controls and with 25% of pulp samples routinely re-assayed. Samples selected for re-assay were initially > 0.3g/t Au. The QAQC program for 2003 DD drilling consisted of regular insertion of a standard and blanks into the sample stream. For the 2003 DD core all sample assays showed an acceptable level of accuracy and precision. 2017 Drilling: Verification of The verification of sampling and significant intersections Filed duplicates were collected for each 1m interval and will be assaying by either independent or processed and analysed for confirmation purpose. alternative company Pulp duplicates were systematically analysed and compared with personnel. original sample assays. Results show good consistency of the gold assays determined from original sample with that of the duplicates. Mean values are 0.90 and 0.89 g/t and correlation coefficient is 0.99. CV% (measure of the precision error) is 19%, which is at the level of the industry common practices. 1:1 Line 25.0 ₹ 20.0 **Previous Drilling:** For the 2003 DD core correlation analyses of duplicates and check assays produced results within acceptable limits. Where there were coarse gold outliers, the assaying was repeated.

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Criteria of JORC Code 2012	JORC Code 2012 explanation	Comments/Findings
	The use of twinned holes.	Diamond core holes were drilled close to the historic RC holes and can be used for the grade confirmation purpose.
	<ul> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> </ul>	<ul> <li>2017 Drilling:</li> <li>All RC holes logged electronically into mobile database (Geobank-Mobile) using Panasonic tough-book device.</li> <li>The database backed up and sent to PGO's Perth office at the end of each week. During the week, the database backed up on a field laptop computer.</li> <li>Assay results sent electronically to the Perth office where they are stored on PGO's server.</li> <li>Diamond core holes were initially logged on the paper log-sheets and then typed into the database.</li> </ul>
	<ul> <li>Discuss any adjustment to assay data.</li> </ul>	No adjustments are made, and it is believed that data does not require any additional adjustments.
Location of data points	<ul> <li>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> </ul>	<ul> <li>2017 Drilling:         <ul> <li>Drill hole collars are located using hand held GPS. Reported accuracy of the instrument is approximately +/- 3m in horizontal dimensions.</li> <li>Down hole survey is made by Reflex tool with the measurements taken at 20-25m intervals. All holes were surveyed.</li></ul></li></ul>
	<ul> <li>Specification of the grid system used.</li> </ul>	All data are recorded in a MGA51 (GDA94) grid.
	<ul> <li>Quality and adequacy of topographic control.</li> </ul>	<ul> <li>DTM file used in the current study was obtained from the previous project owner and as used for scoping study. This file is used in the current programme for estimation the RLs of the drillhole collars.</li> </ul>
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> </ul>	New holes are drilled at the distance of 50 – 100m from the previous holes and resource block model.
	<ul> <li>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> </ul>	<ul> <li>Drilling was undertaken on 25m to 50m spaced east-west oriented sections in the shallow part of the mineral resource increasing to a sectional spacing in excess of 100m at the extremities of the mineral resource. This spacing is adequate to determine the geological and grade continuity for reporting of a combined Indicated and Inferred Mineral Resources.</li> </ul>
	<ul> <li>Whether sample compositing has been applied.</li> </ul>	<ul> <li>Drillholes were oriented to obtain the true intersection of the gold lodes, with an angle of intersection approximately 80 - 90° which provides a true thickness estimate.</li> </ul>
Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is</li> </ul>	<ul> <li>2017 Drilling:</li> <li>Drillholes were oriented to obtain the true intersection of the gold lodes, with an angle of intersection approximately 80 - 90° which provides a true thickness estimate.</li> </ul>

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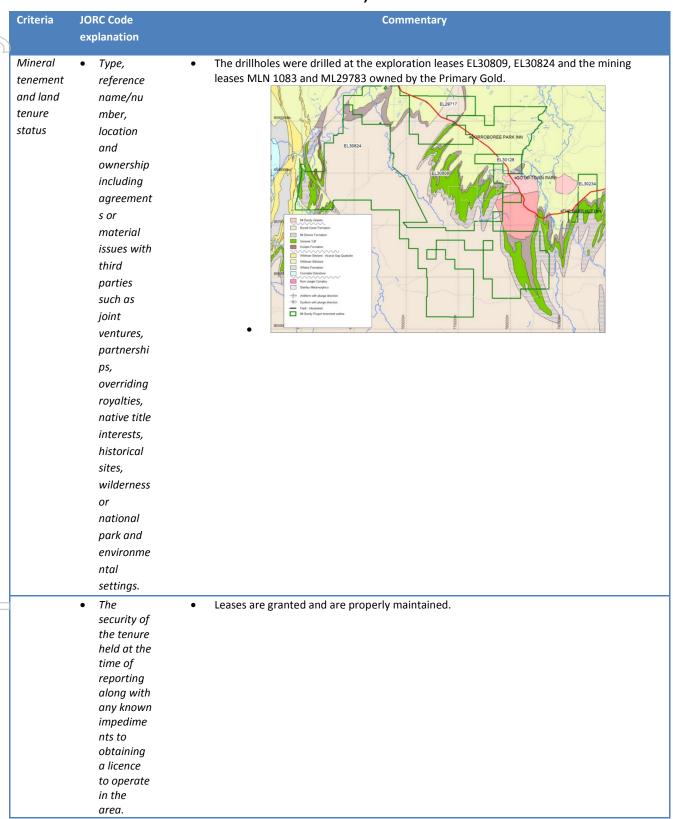
Criteria of JORC Code	JORC Code 2012 explanation	Com	nments/Findings	
2012	known, considering the deposit type.	Au, g/t   X   < 61     1   10   13     3   10   15     5   10   15     10   10   15     10   10     10   10     10   10     10   10	Pit \$1700/oz  3m @ 5.2 g/t Au  7m @ 1.3 g/t Au	East Pomboood
	• If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if	<ul> <li>the deposit. Some down folded nature of the min</li> <li>Not applicable</li> <li>2017 drilling - Drilling lodes and testing their of the previous drilling - Orien location of the sub-down folders.</li> </ul>	orientation is optimal for sa controlling structures at the I ntation of drillholes was de omains of the overall mine nb locations once the overa	e known strike of erved due to the ampling the gold PGO's projects. etermined by the ralised envelope
Sample security	<ul> <li>material.</li> <li>The measures taken to ensure sample security.</li> </ul>	of the day and stored at Previous Drilling:	were removed from the dri t the safe place at the explor resource reports but assume sampling.	ation camp.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	duplicates and will be samples.  Previous Drilling:  Several reviews have be independent consultant.  Cube conducted a data checking the mineral reinvolved checks for drassays and geological.	further re-assayed using the further than t	s companies and ts. alidation prior to companies. This surveys errors,

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# Reporting criteria presented in the Section 2 of the JORC Table 1 (Reporting of Exploration Results)



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Criteria	JORC Code			Cor	nmentary			
	explanation							
			Expl.	No of				
			Lease	blocks	Sq Km	<b>Grant Date</b>	Expiry Date	
			EL30809	152	508.90	3-Jul-15	2-Jul-21	
			EL30824	185	619.38	3-Jul-15	02-Jul-21	
			Mining	No of	Sq Km	Grant Date	Expiry Date	
			Lease	hectars				
			ML29781	140	1.40	06-Feb-13	05-Feb-23	
			ML29782	80	0.80	06-Feb-13	05-Feb-23 05-Feb-23	
			ML29783 ML29785	285 40	2.85 0.40	06-Feb-13 06-Feb-13	05-Feb-23 05-Feb-23	
			ML29786	112.52	1.13	06-Feb-13	05-Feb-23	
			ML29812	158	1.58	06-Feb-13	05-Feb-23	
			ML29814	84.29	0.84	06-Feb-13	05-Feb-23	
			MLN1058	681.8	6.82	03-Aug-89	02-Aug-39	
		•	MLN1083	755.6	7.56	04-Mar-91	31-Dec-20	
Explorati	<ul> <li>Acknowled</li> </ul>	The previous ov	vners of the	company	project hav	e explored ar	nd carried out	open pit mining
by other parties	appraisal of exploratio n by other parties.	<ul> <li>Alluvial gold at and pitting iden head stamp bat It is estimated t gold.</li> <li>In 1977, EL 1473 has since been out to Aurex Pty Pegasus Gold A</li> <li>Further explora 1.17g/t Au production of ore at an estimate and estimate and</li></ul>	tified the Sitery was erectant 200 – 2  3 was granted explored by Ltd in 1981 ustralia Ltd dition by Validuction from the pits at Sisibility studing acquired to acquired to acquired to style and for the pits at Sisibility studing acquired to acquired to style acqu	weat Ridge, ected at Pig 50 tonnes of the Engineerin, Naron Invin 1988 who dora Miner mheap-lea weat Ridge, y of the prifacility was enditions con 1998 was envery of 70% of purchased by and report the Rustler 75koz of go	Dolly Pot, hole on Moof ore was area which ag Excavation estimates in 1990, rals NL led ch comme Dolly Pot, imary resons the most ontributed approximate.  If by a Canalited reserves Roost Prid.	Beef Bucket a punt Bundy Cremined for the mined a rest to an increasuring in June Beef Bucket alurce was also to appropriate to the closure tely 3,425kg Andian Companives at 13Mt at roject in 2009	and Backhoe peek, 4 km east e production of what as Rustlers I in 1978, Norto Gold Mines source of 4.8N se in the reso 1994. The in completed was treatment of the of operation and 337kg y, Valencia Versian I in 12g/t Au.	rospects. A five- of the workings of about 3.7kg of Roost. The area thern Metals Pty NL in 1988, and At at 1.6g/t Au. urce to 34Mt at itial plan was to to a single, large hich indicated a route, however, as in early 1998. Ag from 4.58Mt entures Inc. who
Geology	Deposit     type,     geological     setting     and style     of     mineralisa     tion.	<ul> <li>The Mineral Re         Evaluations Ltd         previous owner</li> <li>Orogenic gold d</li> <li>The bulk of the         south-west dipp         Anticline to the         mostly from int         generally only 5         the sample inte</li> <li>There is evidence         sequence is spa         quartz veins wh</li> </ul>	in 2004 a s. leposits hos gold minerabing fold limeast. Elevarervals that is 20cm thick rval. ce that the stially and getting the second secon	nd reviewed ted by wea alisation at ab between ted gold res contain one of and less contains strongest genetically a	kly metam Rustlers Ro the Backh sults (>0.5g e or more s ommonly 2	orphosed turk oost is located oe Syncline to s/t Au over 2m ulphidic chert 20-40cm thick lisation in the vith a set of 1-	pidite sequence on both sides the west and intervals) we beds. These and comprise laminated see- 3cm thick, sh	ce. s of the west to the Dolly Potere obtained chert beds are only 10-20% of diment hosted eeted pyritic

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Criteria	JORC Code					Com	menta	ry					
	explanation												
			at 15°-25	°									
		•			most comr	nonly in che	rty qua	rtz but a	also in	associa	tion wit	h chlori	te and
			_			and arsenop							
			with pyri	te and t	o a lesser	extent with a	rseno	oyrite. C	oarse	gold gra	ins are	rare.	
Drill hole	• A	•	Hole Inte	ersection	ns:								
Informati	summary				Grid = I	MGA 52/ GDA	94					Down ho	
on	of all		Tavast	Drilli		,		A:		FO!!	In	tersection	
	informatio	Hole ID	Target Area	ng				Azim uth	Dip	EOH (m)	Inter	Grad e	Inter ept
	n material			Type	Easting	Northing	RL			` '	val (m)	(g/t	dept
	to the										(m)	Au)	(m)
	understan	PGMB0 001	Rustle	RC	771,104 .70	8,570,318	63. 55	0	-90	160	20	0.80	10
	ding of the	001	r Ext		.70	.67	55				4	2 20	1.4
	exploratio										4	2.30	14
	n results	PGMB0 002	Rustle r Ext	RC	771,136 .72	8,570,351 .11	65	270	-70	180	35	1.00	9
	including a	PGMB0	Rustle		771,220	8,570,447	70.						
	tabulation	003	r Ext	RC	.74	.71	15	0	-90	200	117	1.50	7
	of the	PGMB0	Rustle	RC	771,356	8,570,512	75.	0	-90	180	2	F 20	14
	following	004	r Ext	KC	.83	.85	84	U	-90	180	3	5.20	14
	informatio										7	1.30	16
	n for all	PGMB0	Rustle	RC	771,443	8,570,607	82.	0	-90	160	2	1.10	2
	Material	005	r Ext		.67	.08	9					4.00	_
	drill holes:										4	1.20	7
	o eastin	PGMB0 006	Rustle r Ext	RC	771,502 .30	8,570,810 .44	82	270	-65	165	1	1.50	1
	g and	000	I EXC		.50						2	0.80	8
	northi												
	ng of	DCMARO	Dl.		774 547	0.570.000	70				3	0.80	12
	the	PGMB0 007	Rustle r Ext	RC	771,547 .05	8,570,869 .10	79. 04	0	-90	150	6	0.50	5
	drill	00.			.00	.10	٠.				5	0.90	6
	hole										1		8
	collar											2.00	
	o elevati										2	1.00	10
	on or	PGMB0 008	Rustle r Ext	RC	771,493 .50	8,570,910 .13	79. 91	0	-90	160	5	0.80	6
	RL	008	I EXL		.50	.13	91				3	0.80	13
	(Reduc	PGMB0	Rustle		771,662	8,571,088						0.00	13
	ed	011	r Ext	RC	.41	.09	86	90	-65	115	3	2.50	
	Level –										3	1.10	1
	elevati	PGMB0	Rustle	D.C.	771,807	8,571,084	73.		65	440			
	on	012	r Ext	RC	.47	.07	22	90	-65	110	NSI	-	
	above	PGMB0	Rustle	RC	771,086	8,570,542	69.	40	-80	160	5	1.00	7
	sea	014	r Ext		.80	.70	23				20	1 20	10
	level in	DCMARO	Dustla		770.256	0.570.020	02				28	1.20	10
	metres	PGMB0 015	Rustle rs W	RC	770,256 .48	8,570,938 .46	92. 88	90	-65	140	1	1.50	1
	) of	313	.5 **		. 13	. 13	30				1	0.90	3
	the	PGMB0	Rustle		770,225	8,571,000	84.						
	drill	016	rs W	RC	.70	.03	53	90	-70	140	1	1.00	1
	hole	PGMB0	Rustle	RC	774,771	8,572,029	48.	90	-60	140			
	collar	017	rs E		.20 774,770	.00	67				NSI	-	
	o dip	PGMB0 018	Rustle rs E	RC	.00	8,572,030 .00	52. 3	270	-60	140	NSI	_	

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Criteria	JORC Code explanation					Com	mentar	У					
	and	PGMB0	Rustle	_	774,908	8,572,012	55.						
	azimut	019	rs E	RC	.80	.00	2	270	-60	155	NSI	-	
	h of	PGMB0	Rustle	RC	775,074	8,572,027	60	270	-60	140			
	the	020	rs E		.70	.80				110	NSI	-	
	hole	PGMB0 021	Rustle rs E	RC	774,747 .60	8,572,250 .00	52. 02	90	-60	140	NSI	_	
	o down	PGMB0	Rustle	RC	774,746	8,572,250	52.	270	-60	160			
	hole	022	rs E	KC	.30	.50	26	270	-60	100	NSI	-	
	length	PGMB0 023	Rustle rs E	RC	774,943 .20	8,572,238 .40	53. 7	270	-60	140	2	0.30	2
	and	023	13 L		.20	.40	,				6	0.10	4
	interce	PGMB0	Rustle		775,146	8,572,242						0.10	
	ption	024	rs E	RC	.40	.20	60	270	-60	140	NSI	_	
	depth	PGMB0	Rustle	RC	772,482	8,572,618	70.	90	-60	140			
	o hole	025	rs N	INC .	.10	.40	9	90	-00	140	NSI	-	
	length.	PGMB0 026	Rustle rs N	RC	772,581 .70	8,572,617 .70	69. 6	270	-60	140	NSI	_	
	iciigiii.	PGMB0	Rustle		772,424	8,572,404	68.				1431		
		027	rs N	RC	.10	.30	41	90	-60	163	NSI	-	
		PGMB0	Rustle	RC	772,528	8,572,410	65.	270	-60	140	NGI		
		028 PGMB0	rs N Rustle		.40 772,362	.50 8,572,161	68 59.				NSI	-	
		029	rs N	RC	.00	.00	44	270	-60	140	NSI	-	
		PGMB0	Rustle	DDH	770,980	8,570,794	63.	90	-55	230	22	1.03	46
		038	r Ext	(HQ)	.10	.60	67	30	33	230			
											42.9	0.96	124
											2.1	0.90	103
											5.3	0.66	124
		PGMB0	Rustle	DDH	771,320	8,570,667	77.	270	-75	200	7	0.71	14
		039	r Ext	(HQ)	.90	.10	34	270	-73	200	,	0.71	14
											7.2	1.70	156
		PGMB0	Rustle	RC	771,255	8,570,546	72.	270	-70	220	10	0.90	6
		040	r Ext		.81	.29	54					4.50	
											52	1.50	9
											8	1.10	21
	<ul> <li>If the exclusion of this informatio</li> </ul>	•	Not appl	icable.									
	n is												
	justified												
	on the basis that												
	the												
	informatio												
	n is not												
	Material												
	and this												
	exclusion												
	does not detract												
	from the												
	understan												
	ding of the												

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Cri	teria	JORC Code	Commentary
		explanation	
Dan agg on	gregati	Competen t Person should clearly explain why this is the case.  In reporting Exploratio	Down hole length of the hole is the distance from the surface to the end of the hole, as measured along the drill trace. Interception depth is the distance down the hole as measured along the drill trace. Intersection width is the downhole distance of an intersection as
	ethods	n Results, weighting averaging techniques , maximum	<ul> <li>measured along the drill trace.</li> <li>RC assay results are length weighted using 1 metre lengths for each assay. Drill core intersection assay results are length weighted using the downhole length of the relevant assay interval.</li> <li>The assay intervals are reported as down hole length as the true width variable is not known.</li> <li>No grade truncation or high-grade cutting was applied.</li> </ul>
		and/or minimum grade truncation s (eg cutting of high	
		grades) and cut- off grades are usually Material and should be stated.	
		<ul> <li>Where aggregate intercepts incorporat e short lengths of</li> </ul>	<ul> <li>Intersections can include short intervals of high-grade mineralisation, in the range of 10 – 33 g/t per 1 or 2 metres length which are surrounded by a mineralisation of a lower grade, commonly 0.5 – 1.5 g/t, which create a thick mineralised bodies, several tenses of metres of an average grade 1.5 g/t (like one shown on the diagram).</li> <li>NE 70°</li> </ul>
		high grade results and longer lengths of low grade results,	Scoping Study Pit Outline
		the procedure used for such aggregati on should be stated	7.0m @ 1.92 g/t 5.3m @ 2.10 g/t 5.4m @ 1.11 g/t

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Criteria	JORC Code explanation	Commentary
	and some typical examples of such aggregati ons should be shown in detail.	
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	<ul> <li>Not applicable. Only gold grade is reported.</li> <li>No metal equivalent reporting is used or applied.</li> </ul>
Relations hip between mineralis ation widths and intercept lengths	• These relationshi ps are particularl y important in the reporting of Exploratio n Results.	The holes were drilled at right angle to the mineralisation at the Rustlers Roost deposit which is gently dipping to the east and commonly laying horizontally. Holes were drilled either vertically or at the angle providing 90° intersection with the mineralisation, thus the intercept length is an accurate measure of the mineralisation thickness.
	<ul> <li>If the geometry of the mineralisa tion with respect to the drill</li> </ul>	<ul> <li>Geometry of mineralisation is well known because resources of Rustlers Roost were estimated including the Indicated category and mine was in production in the past. This information together with orientation of the historic drillholes that were used for resource estimation was used for planning the current brown field exploration.</li> </ul>
	hole angle is known, its nature should be reported. • If it is not	Not applicable. Geometry of mineralisation is well known.
	known and only the down hole lengths are reported,	• Not applicable. Geometry of militeralisation is well known.

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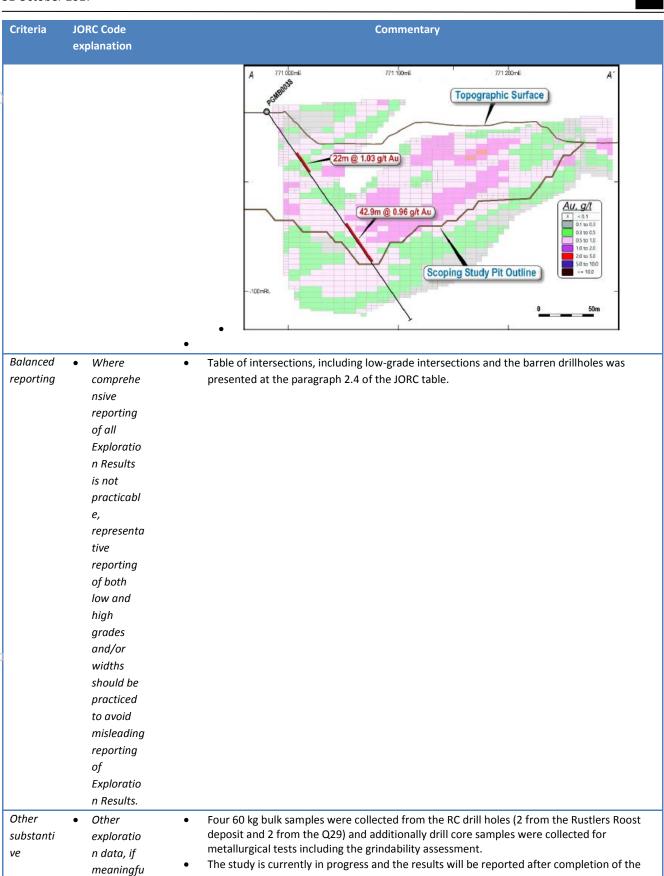


Criteria	JORC Code explanation	Commentary
	there should be a clear statement to this effect (eg 'down hole length, true width not known').	
Diagrams		Map summarising the brown field intersections at the Rustlers Roost deposit:  Pit © \$1700/oz  PGMB0011 (3m @ 2.5 g/t)  PGMB0007 (5m @ 0.9 g/t)  PGMB0006 (3m @ 0.8 g/t)  PGMB0004 (3m @ 5.2 g/t)  PGMB0004 (3m @ 5.2 g/t)  PGMB0004 (3m @ 5.2 g/t)  PGMB0001 (20m @ 0.8 g/gand 4m @ 2.3 g/t)  PGMB00038:

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Criteria	JORC Code	Commentary
	explanation	
explorati	l and	tests.
n data	material,	
	should be	
	reported	
	including	
	(but not	
	limited	
	to):	
	geological	
	observatio	
	ns;	
	geophysic	
	al survey	
	results;	
	geochemic	
	al survey	
	•	
	results;	
	bulk	
	samples –	
	size and	
	method of	
	treatment;	
	metallurgi	
	cal test	
	results;	
	bulk	
	density,	
	groundwa	
	ter,	
	geotechnic	
	al and	
	rock	
	characteri	
	stics;	
	potential	
	deleteriou	
	s or	
	contamina	
	ting	
	substance	
	S.	
ırther	The nature	The 2017 brown field exploration drilling has provided new significant intersections which
ork	and scale	have been used for updating the mineral resources.
J. N.	of planned	<sub>-</sub>
	oj pidililed	
	further	
	further	
	further work (eg tests for	

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	Criteria	JORC Code explanation	Commentary
5		extensions or depth extensions or large-	
		scale step- out drilling).	
		<ul><li>Diagrams clearly highlightin</li></ul>	<ul> <li>Mineralisation still open in the down-the-plunge direction (shown by dashed red lines in the plan view diagram above) which will be further studied and explored by drilling.</li> </ul>
		g the areas of possible	
		extensions , including the main	
		geological interpretat ions and	
		future drilling areas,	
		provided this informatio n is not	
		n is not commerci ally sensitive.	

# Reporting criteria presented in the Section 3 of the JORC Table 1 (Estimation and Reporting of Mineral Resources)

Criteria	JORC Code explanation	Commentary
Database integrity	<ul> <li>Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.</li> </ul>	<ul> <li>The 2017 drilling data is maintained by Primary, who compiled the electronic data for export into csv format files for use in the October 2017 Rustlers Roost Mineral Resource estimate.</li> <li>The historic drilling data is also sourced from Primary which previously compiled the electronic data room based on data from previous companies that have operated at Rustlers Roost.</li> </ul>
	<ul> <li>Data validation procedures used.</li> </ul>	<ul> <li>Cube carried out a database validation review of the supplied drilling data, supplied digital terrain models ("DTM") and three-dimensional models ("3DM") validation checks prior to undertaking the resource estimation update.</li> <li>Validation checks on the database included comparing collar points to the topography, maximum hole depths, checks between</li> </ul>

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Criteria	JORC Code explanation	Commentary
		tables and the collar data. Cube also verified the data using visual inspection of the drillholes in 3D mining software (Surpac and Leapfrog) to identify inconsistencies of drill hole traces.
Site visits	<ul> <li>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</li> </ul>	<ul> <li>The Competent Person completed a site visit to the Rustlers Roost Open Pit workings and Toms Gully core storage area in 2014. Cube was able to inspect core from the previous drilling programs at Rustlers Roost.</li> <li>The open pit workings are currently flooded, and the most recent drilling information dates from 2004.</li> </ul>
	<ul> <li>If no site visits have been undertaken indicate why this is the case.</li> </ul>	<ul> <li>The Cube CP did not carry out a site visit during the 2017 drilling program. The drilling program was completed prior to scope of work approval by Primary.</li> </ul>
Geological Interpretation	<ul> <li>Confidence in (or conversely, the uncertainty of ) the geological interpretation of the mineral deposit.</li> </ul>	<ul> <li>The geological confidence is good as a result of the optimally spaced RC and DD core drilling and detailed open pit mapping. Geological and mineralisation interpretations in plan and cross sections have been followed up with 3D wireframe models based on fact geology.</li> </ul>
	Nature of the data used and of any assumptions made.	<ul> <li>The lithological description for all drilling is logged and stored within the drillhole database. This has been used for 3 dimensional lithological domaining. In addition, open pit mapping and grade control information have been used for interpretation and 3D wireframing. The detailed information has been used to project down dip and down plunge projections if stratigraphic units, major structural features (fold hinge zones, major faults) and mineralisation trends.</li> <li>Weathering DTM surfaces have been supplied by Primary but have not been confirmed as the weathering characteristics for all drilling were not recorded in the database geological logs. Interpreted wireframe surfaces were supplied for oxide, transitional and primary weathering boundaries which allowed the density values for the mineral resource model to be sub-divided by weathering domains.</li> </ul>
	<ul> <li>The effect, if any, of alternative interpretations on Mineral Resource estimation.</li> </ul>	<ul> <li>An alternate model scenario was reviewed by Cube which involved more tightly constrained mineralisation boundaries based on the favourable stratigraphic units within each folded hinge zone, and separated by fault block domains. Further detailed research is required on this alternate approach, and was beyond the scope and timing of current mineral resource estimate work.</li> </ul>
	The use of geology in guiding and controlling Mineral Resource estimation.	<ul> <li>A strong stratigraphic control on the gold mineralisation at Rustlers Roost was noted very early and this was reinforced by later exploration and open pit mining. Findings reported from previous authors described elevated Au grades (&gt;0.5g/t Au over 2m intervals) within in sulphidic chert horizons (5-20cm thick). There is also evidence that the strongest gold mineralisation in the laminated sediment sequences is spatially and genetically associated with a set of thin (1-3cm), widely-spaced (1-3m), parallel, pyritic quartz veins ("sheeted veins") which occur widely throughout the mine. According to pit mapping and drill core, these veins dip to the SE at 15-25 degrees, at least between the axes of two major fold structures (Backhoe Syncline and Dolly Pot Anticline).</li> <li>Four main structural domains have therefore been used to guide</li> </ul>

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		the overall mineralisation trends within the resource model. These were based on the orientation of the folded zones and bounded by either the main fold hinge zones or by the major local NE trending fault structure (Broken Nose Fault).
	The factors affecting continuity both of grade and geology.	<ul> <li>Drillhole grade data was used to develop mineralised outlines. The outlines were modelled to a nominal grade cut-off of approximately 0.2g/t Au cutoff which allowed the model shapes to have optimum continuity. The use of this low grade cutoff resulted in a series of simplified mineralised domains encompassing discontinuous sheeted veins. Mineralisation domains and gold grade continuity becomes more sporadic above a 0.4g/t Au grade envelope.</li> </ul>
Dimensions	The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.	<ul> <li>The Mineral Resource has an overall strike length of approximately 1,100 metres with a maximum width of the mineralisation envelope being 600m.</li> <li>The mineral resource is modelled to 260m vertical depth with the estimate based primarily on RC and diamond drilling collared from surface. No grade control drilling was used in the estimate other than to assist with geological and general mineralisation trends.</li> <li>Four mineralised domains were modelled to represent changes in strike and dip of the mineralisation across the hinge zone and fold limbs of the regional fold structure, and bisected by a major fault (Broken Nose Fault).</li> </ul>
Estimation and modelling techniques	The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.	<ul> <li>The mineral resource model was estimated using an ID2 interpolation method with ellipsoids oriented to match mineralisation directions evident in the grade control sample data.</li> <li>Variography was attempted using the 2m composite data from inside the mineralisation wireframes. Poorly structured variograms were generated. The only directional variograms that showed reasonable structure were in the east-west direction and were considered to be a result of the closer drill spacing in that direction. Consequently, the drilling is considered to be beyond the limits of the short-range variability of the gold mineralisation. Without robust variograms, geostatistical interpolation methods were not considered appropriate, so ID2 interpolation was chosen for the Rustlers estimate with ellipsoids oriented to match mineralisation directions evident in the GC sample data</li> <li>2m composites were extracted from each of the mineralised domains for statistical analysis and grade estimation. This was deemed acceptable as it closely matched the expected open pit mining flitch height of 2.5m</li> <li>Based on the log-normal probability plots for all four domains for the 2m composite data, a top-cut of 10g/t Au was applied for the mineral resource estimate. Within the four mineralised domains, only 1% of the composites are above 5g/t Au. As there are very few composites above the top-cut of 10g/t Au cutoff, the impact of applying a top-cut was minimal.</li> <li>Block model definition parameters were set by Primary with the parent block size of 10m E-W x 20m N-S x 5m vertical and subblocking to 5mE x 10mN x 2.5mRL. This was deemed to be appropriate for block estimation and modelling the selectivity for an open pit operation.</li> <li>Interpolation parameters were based on the 2004 mineral resource estimate as specified in the scope of work for Cube. For</li> </ul>

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2			strike maxir secon sparsi minin respe • Surpa Super	mains, a first pass a search radius by 10m down dip and 25m acronum number of samples used was id pass run was required in order to ely drilled areas; a search radius on num and maximum number of ctively.  c v6.8.0 was used for modelling a rvisor v8.6 was used for statistica sis to review search parameters.	oss strike. Minimum and 10 and 40 respectively. A point fill blocks in outlying or f 200m was used with a samples of 2 and 40 and estimation. Snowden
	•	The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.	2004 as a c used increa Histor miner	017 mineral resource estimate has block model, but no other estimation theck estimate. As the same block has in 2004, no significant variance we have in volume attributed to the rical production information was usuralisation trends by comparing the statthe grade control information.	on method has been used model parameters were vas noted, other than the new extension drilling. ed to confirm the overall
	•	The assumptions made regarding recovery of by-products.	• No by	-product recoveries were considere	ed.
	•	Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).	miner	ation of deleterious elements was ral resource. Only gold assays were rimary database assay export file.	·
	•	In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.	10m geom	I domains, a search radius of 50m down dip by 25m across strike. etry and drill hole spacing. nterpolation regions are noted in th	This was based on lode
		scaren employea.	Search Area	Description	Strike/Dip of Ellipsoid
			Sweat Ridge Beef Bucket	North of BN Fault  South of BN Fault, north of 60,350N, not	345 to 350/-60 to -80W 315/-30SW
				domain 1014.	252/2005
			Dolly Pot Backhoe	South of BN Fault, inside object 1014  South of 60,350, not inside object 1014	060/-30SE Plunge –20 to 180°
	•	Any assumptions behind modelling of selective mining units.	• The b size o 10m s dimer	lock model definition parameters f 10m E-W x 20m N-S x 5m vertical x 2.5m and are deemed appropriates are suitable for block estimativity for an open pit operation	included a primary block and sub-blocking to 5m x e for this deposit. These
	•	Any assumptions about correlation between variables.		orrelation between elements was s were supplied in the assay record	
	•	Description of how the geological interpretation was used to control the resource estimates.	appar geom miner Goule strati	I on evidence from the GC sampling tent that different regions of the detery for the higher-grade mineralisation envelope was relatively evitch (2004b) and by other authors graphic control on mineralisations ary to ensure that the grade into	posit have quite different sation, even though the uniform. As noted in this reflected the strong on. Therefore, it was

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		<ul> <li>geometry of the stratigraphy in the different areas of the deposit.</li> <li>A number of the geological features interpreted from the exploration drilling did not correspond well to the distribution of gold grades and were subtle and difficult to interpret with confidence. As a result, it was decided to use the geological boundaries and spatial boundaries as "soft boundaries" in the interpolation process. This meant that a single assay file was created for the entire mineralised envelope, and was used to interpolate the different regions of the deposit without further constraints</li> </ul>
	<ul> <li>Discussion of basis for using or not using grade cutting or capping.</li> </ul>	<ul> <li>The influence of extreme grade values was reduced by top-cutting for all mineralisation domains. The top-cut was determined using a combination of top-cut analysis tools (grade histograms, log probability ("LN") plots and effects on the coefficient of variation ("CV") and metal at risk analysis.</li> <li>Based on this analysis, for all four domains for the 2m composite data, a top-cut of 10g/t Au was applied for the mineral resource estimate. Within the four mineralised domains, only 1% of the composites are above 5g/t Au. As there are very few composites above the top-cut of 10g/t Au cutoff, the impact of applying a top-cut was minimal</li> </ul>
	<ul> <li>The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</li> </ul>	<ul> <li>Validation of the block model estimation was carried out by comparing the estimated tonnes and gold grade against the raw composited mean grades for both north-south sections and by elevation for the four mineralised domains combined. Validation plots of raw composited mean grades versus estimated block grades show reasonable correlation for both cross section and plan view orientations</li> </ul>
Moisture	<ul> <li>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</li> </ul>	The tonnages are estimated on a dry tonnes basis. Moisture was not considered in the density assignment.
Cut-off parameters	<ul> <li>The basis of the adopted cut- off grade(s) or quality parameters applied.</li> </ul>	<ul> <li>The cut-off grade for reporting is 0.5/t Au, as advised by Primary, and based on their scoping studies for the Rustlers Roost Project.</li> </ul>
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	<ul> <li>Open Pit mining has previously taken place with documentation on mining methods and mine reconciliation providing good background information for future mining considerations</li> <li>Any future mining method is therefore likely to be bulk open pit mining at 2.5m to 5m bench heights.</li> <li>A minimum width of 2m was used in interpretation of the mineralisation to preserve 3D wireframe integrity and continuity.</li> <li>Block model size was determined by minimum SMU block size and drill spacing considerations. For the regularised block model, a block size of 10mN, 5m E and 10.0m RL was created for mine optimisation studies.</li> </ul>

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	reported with an explanation of the basis of the mining assumptions made.	
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.	<ul> <li>No recent metallurgical testwork and reporting have been conducted.</li> <li>For previous scoping studies, both heap leach and milling options have been reviewed.</li> <li>Independent consultants, IMO Pty Ltd reviewed a report of the considerable testwork program undertaken on the Rustlers Roost project approximately 15 years ago. They summarise that the deposit is unique as the presence of fine graphite results in severe preg-robbing behaviour during cyanidation, however, the proposed flowsheet incorporating pre-fouling of the graphite with kerosene and resin-in-leach extraction of the gold was expected to have the potential to recover over 90% of the contained gold.</li> <li>IMO also suggest that as the testwork occurred over 15 years ago, further work and review is worthwhile. The work would include assessment of relevant current technology and the potential for process improvements, as well as further sampling and testwork to confirm previous conclusions and provide any missing metallurgical information.</li> </ul>
Environmenta factors or assumptions	Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.	The resource has previous been the subject of mining and processing, hence environmental issues are well understood. Key considerations include encapsulation of sulphidic waste rock, integrity of tails facility to ensure against leakages, both of which have engineering solutions.
Bulk density	<ul> <li>Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness</li> </ul>	<ul> <li>Bulk density values have been determined by several methods.</li> <li>Initial bulk density was reported to be routinely collected from half HQ diamond core samples and sent to laboratories in Pine Creek to be measured.</li> <li>A subsequent programme described the determination of In Situ Bulk Densities (ISBD) of 2.27t/m3 for the oxide mineralisation from limited data derived from gamma-gamma logging of four shallow percussion holes and in-pit ISBD sampling.</li> </ul>

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	of the samples.	<ul> <li>The 2003 drilling at Rustlers Roost involved taking 285 samples from 9 diamond core holes (RRDH051-059). The data was sorted according to depth in relation to the weathering profile.</li> <li>No bulk density data is available to date from the recent 2017 drilling program.</li> </ul>
	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.	No description of methodology for determination of bulk density values is currently available from either previous technical reports or from the electronic data room provided by Primary.
	<ul> <li>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</li> </ul>	<ul> <li>The assigned bulk density values were applied based on a combination of the diamond core and in-pit measurements and has been assigned according to oxidation state and lithology.</li> </ul>
Classification	The basis for the classification of the Mineral Resources into varying confidence categories.	<ul> <li>All the mineral resources for Rustlers Roost are classified as Indicated or Inferred.</li> <li>Resource classification is based on confidence in the geological domaining, drill spacing and geostatistical measures.</li> <li>The Mineral Resource is classified as Indicated where drill spacing is 50m or less and there is well defined continuity of mineralisation and structure. The Indicated resource corresponds to the upper portions of the deposit to an approximately depth of 200m.</li> <li>The Inferred portions of the resource mainly represent the sparsely drilled areas, corresponding to those areas below 200m depth or extending to the east beyond the current extension drilling.</li> </ul>
	Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).	<ul> <li>The resource classification is based on the quality of information for the geological domaining, as well as the drill spacing and geostatistical measures to provide confidence in the tonnage and grade estimates.</li> </ul>
	<ul> <li>Whether the result appropriately reflects the Competent Person's view of the deposit.</li> </ul>	The Mineral Resource estimate appropriately reflects the Competent Person's view of the deposit.
Audits or review.	<ul> <li>The results of any audits or reviews of Mineral Resource estimates.</li> </ul>	<ul> <li>Several mineral resource technical reports and internal technical summaries have previously been written for the Rustlers Roost deposit which provides a good, comprehensive description on the geology and mineralisation controls at Rustlers Roost.</li> <li>Cube has previously conducted a review of the most recent reported mineral resource estimates for Rustlers Roost in 2014, based on the model completed in 2004 by ResEval.</li> <li>In that review Cube made the following recommendation:</li> <li>The Rustlers Roost Mine may have potential for large scale open</li> </ul>

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2			pit mining. To test the potential, Cube recommends that an alternative resource estimation method be trialled being Local Uniform Conditioning ("LUC") involving the interpretation of several broader alteration zones. This estimation method may better reflect the likely outcome achieved from an open pit selective mining scenario. This estimation method estimates a block grade into each SMU. The use of a simplified mineralisation boundary (such as the 0.2g/t Au domain used in the 2004 Model) and LUC will simplify and de-risk the other alternate methodologies that may use numerous multiple lode wireframe interpretations.
	Discussion of relative accuracy/confidence	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.	<ul> <li>Gold mineralisation at Rustlers Roost is sediment and vein-hosted, and is concentrated in three stratigraphic units known as the Dolly Pot, Beef Bucket and Backhoe sequences. The majority of mineralisation occurs on a west to south-west dipping limb between a south-south-west plunging syncline-anticline duplex. Future interpretation and 3D modelling of the mineralisation should review the current bulked out domains with more discreet zonation of mineralisation based on the more favourable stratigraphic host units, bounded within the fold limbs and the major fault structures currently modelled from detailed pit mapping available.</li> <li>The alternate estimation methodology previous recommended by Cube (LUC) could be considered so that a check estimate may be reviewed in comparison with the ID<sup>2</sup> estimation methodology</li> <li>The 2017 resource model is sensitive to cutoff grade, and subsequently sensitive to prevailing gold price variations and other economic considerations.</li> </ul>
	•	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.	<ul> <li>The 2017 Mineral Resources constitute a global resource estimate.         The estimate represents an in-situ mineral resource, as it has not been constrained by any pit optimisation or other mining factors, or any metallurgical factors.     </li> </ul>
	•	These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	<ul> <li>Previous open pit mining activity occurred between 1994 and 1997. As noted from the ResEval report (2004) a total of 4,710 Mt @ 1.05g/t Au for 159,000 was mined. Recoveries from heap leaching were recorded at an average of 80%. Open pit grade control and mapping data was used to assist with updating the geological interpretations in 2004.</li> <li>The overall grade estimate from the open pit mining corresponds well with the 2017 grade at a cut- off of 0.8g/t Au, i.e. 1.05g/t vs 1.09g/t.</li> <li>Based on the available information provided from the drilling, pit mapping, previous technical reports, and reconciliation data, the 2017 Rustlers Roost Mineral Resource estimate has demonstrated sufficient geological and grade continuity to support the definition of a mineral resource and enable classification in accordance with</li> </ul>

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		the JORC Code (2012 edition).