

23 March 2017

ASX Market Announcements ASX Limited Exchange Centre 20 Bridge Street Sydney NSW 2000



### **Ore Reserves and Operations Update**

Excelsior Gold Limited (ASX: EXG) ("Excelsior Gold" or the "Company") is pleased to provide a market update on ore reserves and operational matters.

- Zoroastrian South Ore Reserves 210,000 tonnes @ 2.1g/t Au for 14,000 ounces of contained gold (13,100 recovered ounces) with further drilling underway.
- Bulletin South Ore Reserves 250,000 tonnes @ 2.8g/t Au for 23,000 ounces of contained gold (21,200 recovered ounces), extensional holes planned in the near future.
- Grade Control drilling in Zoroastrian Central Pit defines an additional 1,500 ounces inside the final pit design to be mined by June 2017.
- Heavy rains have resulted in rescheduling about 2,000 ounces of gold production into the June 2017 quarter.
- Annual negotiations with Norton Gold Fields (NGF) have finalised the terms and conditions for 2017, to the satisfaction of both parties. Ore continues to be treated at both Lakewood and Paddington mills.
- Exploration targeting continues with the aim of being drill ready once all debt has been cleared.
- All repayments are on schedule for Excelsior Gold to be debt and derivative liability (call options and forward contracts) free by July 2017; this will represent an improvement of over \$20M to the Company's balance sheet in the 9 months since September 2016.

### **Zoroastrian South**

The new ore reserve statement for Zoroastrian South indicates a mine design that will produce approximately 14,000 ounces of contained gold (13,100 recovered ounces) at a grade of 2.1g/t Au from 210,000 tonnes of ore. The waste to ore ratio is calculated at 17:1 with a C1 cost of \$1,300/oz. There is an additional 46,000 tonnes at 2.1g/t Au of inferred material inside the current pit design that does not contribute to the gold production. Modelling has shown a lack of information in the upper levels of the planned pit; to this end drilling has commenced on a partial grade control pattern with the aim of further

significantly improving the economics of this stage one pit. Early indications are that additional mineralisation is present in the upper parts of the pit.

Mineralisation continues below the current design and the mining of this first stage is expected to fund the drilling required to infill the resource below the pit floor with the aim of further extending the ore reserves at Zoroastrian South. These funds will also help fund the cut back, if economical, and also the exploration and resource definition programs scheduled to commence once the Company is debt and gold derivative liability free.

The pipeline, which was used to supply gas to the Cawse Nickel Mine's power station, runs through the Zoroastrian South mine design. The pipeline is not currently in use but still contains low-pressure gas. The Company has engaged with the Mines Department, the owners, the licensees and the managers of the pipeline with the aim of relocating the pipeline to allow mining to commence prior to the completion of the Central Pit. Zoroastrian South is planned to be mined once the pipeline has been cut.

### **Bulletin South**

The updated ore reserve statement for Bulletin South includes 250,000 tonnes of ore at 2.8g/t Au for 23,000 contained ounces of gold (21,200 recovered ounces). The strip ratio for this pit is 22 BCM of waste to one BCM of ore. This is a relatively high strip ratio as there is a large cut back to complete prior to accessing the ore, but is carried by the relatively high grade and is calculated to have a C1 cost of \$1,205/oz.

An additional four holes are planned below the current design to check some historical drilling, which appears to show a low-grade zone that stops the pit prematurely. These holes are planned for the June quarter. The results of these holes may result in an expansion of the pit.

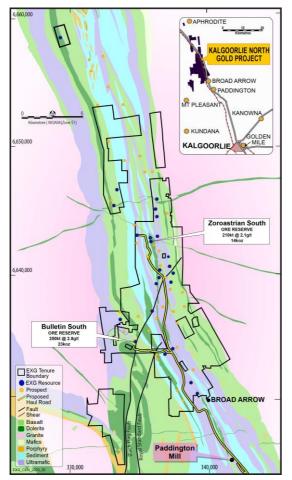


Figure 1

	Prove	ed Ore Re	serve	Probab	le Ore Re	eserve	Total Ore Reserve		
Source	Tonnes (,000t)	Grade (g/t Au)	Ounces (,000oz)	Tonnes (,000t)	Grade (g/t Au)	Ounces (,000oz)	Tonnes (,000t)	Grade (g/t Au)	Ounces (,000oz)
Zoroastrian South	0	0.00	0	210	2.1	14	210	2.1	14

Zoroastrian South Ore Reserve Summary Table

	Prove	ed Ore Re	serve	Probab	ole Ore Re	serve	Total Ore Reserve			
Source	Tonnes (,000t)	Grade (g/t Au)	Ounces (,000oz)	Tonnes (,000t)	Grade (g/t Au)	Ounces (,000oz)	Tonnes (,000t)	Grade (g/t Au)	Ounces (,000oz)	
Bulletin South	0	0.00	0	250	2.8	23	250	2.8	23	

Bulletin South Ore Reserve Summary Table

**Zoroastrian Central** 

Grade Control drilling is all but complete in the Central Pit; results of this drilling have identified an additional 1,500 ounces within the current pit design which is planned for completion in June this year

(compared with the last ore reserve update - ASX announcement December Quarterly Activities Report 23/1/2017).

The Goldfields received widespread heavy rains in February and March that has delayed mining and reduced haulage, which is likely to result in approximately 2,000 ounces being rescheduled into the June Quarter. EXG is now hauling to both the Paddington and the Lakewood processing facilities reducing the

amount of ore on stockpile in an attempt to minimise the negative impact of the delayed production.

A minor slip, brought on by the heavy rains, occurred in the Western Wall of the Central pit. An independent geotechnical expert has been on site and assessed the possible impact and has cleared the

current pit design for completion.

Annual negotiations with Norton Gold Fields for the 2017 toll treatment have been finalised to the

satisfaction of both parties.

**Exploration** 

Target generation external to known resources is progressing, with re-processing and re-interpretation of geophysical datasets (aeromagnetics and gravity) and interrogation of other datasets including geological

fact mapping, HyVista airborne hyperspectral mapping and the Exploration drilling database.

In-pit and drillcore structural mapping is planned for April. This work seeks to expand the current mining interpretations of the Zoroastrian vein system into the regional framework and assist with identifying

targets elsewhere in the Company's tenure. Additionally, a program of spectral analysis on selected rock chips within and surrounding the Zoroastrian and Excelsior deposits will provide a new dataset to help

refine the target generation process.

These relatively low cost, but important programs, build on the current geological understanding of the project and will identify new targets within the prospective Bardoc Tectonic Zone. Drill evaluation of targets

identified by these programs will commence once the Company has sufficient cash flow, which is expected

to occur in the September quarter.

**Debt and Liability repayments** 

The Company remains on target to repay all debt and derivative liability (call options and forward contracts) by July 2017, which will represent an improvement of over \$20M of the Company's working capital since

the end of September 2016.

As at the end of February 2017 there are 6,911 ounces remaining under the forward contacts with

approximately 16,000 ounces left to mine in the Zoroastrian Central Pit. There are 9,971 ounces remaining

in the long dated call options with funds being set aside to cover the cost of closing out these options.

For further information visit <a href="www.excelsiorgold.com.au">www.excelsiorgold.com.au</a> or contact <a href="mailto:ExcelsiorGold Limited">Excelsior Gold Limited</a>

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#### Competent Person Statement - Mineral Resources:

Information in this announcement that relates to the Zoroastrian South and Bulletin South Mineral Resource results is based on information compiled by Mr. Patrick Adams who is a Director of Cube Consulting Pty Ltd. Mr. Adams is a Fellow of the AuslMM (CP) and a Member of The Australian Institute of Geoscientists and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity that he is undertaking, to qualify as Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr. Adams consents to the inclusion in the document of the information in the form and context in which it appears.

### Competent Persons Statements - Ore Reserves Zoroastrian South and Bulletin South Open Pits

The information in this Release which relates to the Ore Reserve estimates accurately reflect information prepared by Competent Persons (as defined by the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves). The information in this public statement that relates to the Zoroastrian South and Bulletin South Open Pit Ore Reserves at the Excelsior Gold Kalgoorlie North Gold Project is based on information resulting from Feasibility works carried out by Excelsior Gold Limited. Mr. Randell Ford, who is employed by Excelsior Gold Limited and works at the Kalgoorlie North Gold Project as the Registered Mine Manager, completed the Ore Reserve estimate for the Zoroastrian South and Bulletin South Open Pits. Mr Ford is a Member of the Australasian Institute of Mining and Metallurgy and has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity that he is undertaking to qualify him as a Competent Person as defined in accordance with the 2012 Edition of the Australasian Joint Ore Reserves Committee (JORC). Mr Ford consents to the inclusion in the document of the information in the form and context in which it appears.

### **Qualifying Statement**

This release may include forward-looking statements. These forward-looking statements are based on a number of assumptions made by the Company and its consultants in light of experience, current conditions and expectations concerning future events which the Company believes are appropriate in the present circumstances. Forward-looking statements are necessarily subject to risks, uncertainties and other factors, many of which are outside the control of Excelsior Gold, which could cause actual results to differ materially from such statements. The Company makes no undertaking to subsequently update or revise the forward-looking statements made in this release to reflect the circumstances or events after the date of this release.

# JORC Code, 2012 Edition – Table 1 – ZOROASTRIAN SOUTH Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <li>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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <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 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.</li> </ul>	<ul> <li>EXG carried out an infill drilling program on its Zoroastrian South project during the period of December 2016 to January 2017. A total of 17 RC drill holes were drilled - a total of 1,343m. The drill hole database used in the 2017 MRE consists of historic (pre-2003) and EXG drilling data.</li> <li>Historical holes consist of 141 RAB holes RB, 78 RC holes and 7 diamond drill holes and 6 Trenches (TR), totalling 10,529m. EXG holes which make up 76% of the data, comprise 11 RCD, 180 RC and 312 RCGC totalling 33,557m.</li> <li>Complete details are un-available for historic drilling.</li> <li>The average drill hole spacing is 20-30m between section line and 10 to 20m between drill holes. Grade control drilling was also carried out in the area at spacing of 7.5m x5m. There are in total 735 drill holes used in the resource estimate, totalling 44,087m.</li> <li>All EXG RC recovered samples were collected and passed through a cone splitter. Prior to drilling, the drill hole locations were pegged using either contract surveyors or hand held GPS units. After drilling, all drill hole locations are picked up by surveyors using a RTK system. All drill hole sgreater than 80m drilled by EXG are down hole surveyed by contractors using industry standard digital tools.</li> <li>All EXG RC drilling was sampled on one metre down hole intervals. The recovered samples were passed through a cone splitter and a nominal 2.5kg -3.5kg sample was collected. Where the original 1m samples were not collected, nominal 4m composite samples were collected by spear sampling individual 1m composite intervals.</li> <li>Limited numbers of field duplicates have been collected to support sample representivity.</li> <li>Industry standard work undertaken by EXG has in most instances supported the grades and widths indicated by historic drilling – there is a risk inherent in this MRE that the historic drilling data is to some unknown extent biased or not representative as this cannot be demonstrated due to lack of QA/QC information.</li> </ul>
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).	<ul> <li>Little information is available for historical non EXG holes (232) with respect to rig type and capability, core size, sample selection and handling.</li> <li>For (post 2003) EXG drilling (503 RC and RCD holes), the RC drilling (Redmond Drilling – Schramm RC with cyclone attached) system employed the use of a face sampling hammer and a nominal 146mm diameter drill bit. The DC drilling is NQ2 size core (nominal 50.6mm core diameter) or HQ (nominal 63.5mm core diameter).</li> <li>All EXG drill core is orientated by the drilling contractor with a down the hole Ace system. Core diameter is noted in the assay results table for DC assay results.</li> </ul>
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.	<ul> <li>Historical holes were generally sampled at 1m intervals.</li> <li>All EXG RC 1m samples are logged for drilling recovery by a visual estimate and this information is recorded and stored in the drilling database. All samples received by the laboratory are weighed with the data collected and stored in the database.</li> <li>The EXG DC samples are orientated; length measured and compared to core blocks placed in the tray by the drillers, any core loss or other variance from that expected from the core blocks is logged and recorded in the database. Sample loss or gain is reviewed on an ongoing basis and feedback given to the drillers to enable the best representative sample to always be obtained.</li> <li>EXG RC samples are visually logged for moisture content, sample recovery and contamination. This information is stored in the database. The RC drill system utilizes a face sampling hammer which is industry best practice and the contractor aims to maximize recovery at all times. RC holes are drilled dry whenever practicable to maximize recovery of sample.</li> </ul>

- The DC drillers use a core barrel and wire line unit to recover the core, they aim to recover all core at all times and adjust their drilling methods and rates to minimise core loss, i.e. different techniques for broken ground to ensure as little core as possible is washed away with drill cuttings.
- Study of sample recovery vs gold grade does not show any bias towards differing sample recoveries or gold grade. The drilling contractor uses standard industry drilling techniques to ensure minimal loss of any size fraction.

### Logging

- Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.
- Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.
- The total length and percentage of the relevant intersections logged.

- All EXG RC samples are geologically logged directly into hand-held Geobank devices
- All EXG DC is logged for core loss, marked into metre intervals, orientated, structurally logged, geotechnically logged and logged with a hand lens with the following parameters recorded where observed: weathering, regolith, rock type, alteration, mineralization, shearing/foliation and any other features that are present
- All EXG DC is photographed both wet and dry after logging but before cutting.
- The entire lengths of EXG RC holes are logged on a 1m interval basis, i.e. 100% of the drilling is logged, and where no sample is returned due to voids (or potentially lost sample) it is logged and recorded as such. Drill core is logged over its entire length and any core loss or voids intersected are recorded.

#### Sub-sampling techniques and sample preparation

- If core, whether cut or sawn and whether quarter, half or all core taken.
- If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.
- For all sample types, the nature, quality and appropriateness of the sample preparation technique.
- Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.
- Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.
- Whether sample sizes are appropriate to the grain size of the material being sampled.

- EXG Exploration results reported for drill core are half core taken from the right hand side of the core looking down hole. Core is cut by contractors with a diamond core saw and all sampling is conducted by Excelsior geologists.
- All EXG RC samples are put through a cone splitter and the sample is collected in a unique pre-numbered calico sample bag. The moisture content of each sample is recorded in the database.
- The EXG RC samples are sorted, oven dried, the entire sample is pulverized in a one stage process to 85% passing 75 µm. The bulk pulverized sample is then bagged and approximately 200g extracted by spatula to a numbered paper bag that is used for the 50g fire assay charge.
- The EXG DC samples are oven dried, jaw crushed to nominal <10mm, 3.5kg is obtained by riffle splitting and the remainder of the coarse reject is bagged while the 3.5kg is pulverized in a one stage process to 85% passing 75 µm. The bulk pulverized sample is then bagged and approximately 200g extracted by spatula to a numbered paper bag that is used for the 50g fire assay charge.
- EXG RC and DC samples submitted to the laboratory are sorted and reconciled against the submission documents. EXG inserts blanks and standards with blanks submitted in sample number sequence at 1 in 50 and standards submitted in sample number sequence at 1 in 20. The laboratory uses their own internal standards of 2 duplicates, 2 replicates, 2 standards, and 1 blank per 50 fire assays. The laboratory also uses barren flushes on the pulveriser.
- In the field every 10<sup>th</sup> metre from the bulk sample port on the cone splitter is bagged and placed in order on the ground with other samples. This sample is then used for collection of field duplicates via riffle splitting. RC field duplicate samples are collected after results are received from the original sample assay. Generally, field duplicates are only collected where the original assay result is equal to or greater than 0.1g/t Au. The field duplicates are submitted to the laboratory for the standard assay process. The laboratory is blind to the original sample number.
- The results of this field duplicate process are within acceptable limits, indicating that the RC sample results are repeatable.
- For DC, no core duplicates (i.e. half core) have been collected or submitted.
- The sample sizes are considered to be appropriate for the type, style, thickness and consistency of mineralization located at this project. The sample size is also appropriate for the sampling methodology employed and the gold grade ranges returned.

### Quality of assay data and laboratory tests

- The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.
- For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.
- Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.
- EXG has routinely used local Kalgoorlie Certified Laboratories for all sample preparation and analysis. The most commonly used laboratories have been SGS Australia and Bureau Veritas Australia which has two facilities in Kalgoorlie. No complete details of the sample preparation, analysis or security are available for either the historic DD or RC drilling results in the database.
- The assay method is designed to measure total gold in the sample.
   The laboratory procedures are appropriate for the testing of gold at this project given its mineralization style. The technique involves using a 40g sample charge with a lead flux which is decomposed in a furnace with the prill being totally digested by 2 acids (HCl and HNO3) before measurement of the gold content by an AA machine.
- The QC procedures are industry best practice. The laboratory is accredited and uses its own certified reference material. The laboratory has 2 duplicates, 2 replicates, 1 standard and 1 blank per 50 fire assays.
- EXG submits blanks at the rate of 1 in 50 samples and certified
  reference material standards at the rate of 1 in 20 samples in the
  normal run of sample submission numbers. As part of normal
  procedures EXG examines all standards and blanks to ensure that
  they are within tolerances. Additionally, sample size, grind size and
  field duplicates are examined to ensure no bias to gold grade exists.

### 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.
- Discuss any adjustment to assay data.
- Consultant geologist, John Harris from John Harris Geological Services, inspected drill core and RC chips in the field to verify the correlation of mineralized zones between assay results and lithology/alteration/mineralization.
- A number of RC holes have been drilled throughout the deposit to twin
  historical RC holes. These twinned holes returned results comparable
  to the original holes and were also used to collect geological
  information and material for metallurgical assessment. Both historical
  and new diamond drilling has been drilled to confirm geological
  interpretation and results obtained from RC drill holes.
- Primary data is sent digitally every 2-3 days from the field to EXG's Database Administrator (DBA). The DBA imports the data into the commercially available and industry accepted DataShed database software. Assay results are merged when received electronically from the laboratory. The responsible geologist reviews the data in the database to ensure that it is correct and has merged properly and that all data has been received and entered. Any variations that are required are recorded permanently in the database.
- No adjustments or calibrations were made to any assay data used in this report.

### 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.
- All drill holes have their collar location recorded from a hand held GPS unit. Downhole surveys are completed every 30m downhole. No detailed down hole surveying information is available for the historic RC or DD drilling.
- EXG routinely contracted down hole surveys during the programmes
  of exploration drilling for each RC and DC drill hole completed using
  either digital electronic multi-shot tool or north seeking gyro, both of
  which are maintained by Contractors to manufacturer specifications.
- All drill holes and resource estimation use the MGA94, Zone 51 grid system.
- The topographic data used was obtained from consultant surveyors and is based on a LiDAR survey flown in 2012. It is adequate for the reporting of Exploration Results and subsequent Mineral Resource estimates. The original final pit survey has been used to deplete the resource model.

### 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.
- The nominal exploration drill spacing is 30m x 20m with some cross sections filled to 10m. This spacing includes data that has been verified from previous exploration activities on the project
- This report is for the reporting of the Mineral Resource Estimate. The
  drill spacing, spatial distribution and quality of assay results is
  sufficient to support the JORC classification of material reported within
  this report and is appropriate for the nature and style of mineralisation
  being reported.
- The majority of holes were sampled at 1m, but when this isn't the case, sample compositing to 1m has been applied.

Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>The majority of drilling is to grid east or west mineralized zones are perpendicular to the drill mapping and geophysical interpretations supports and sampling method.</li> </ul>	ing direction. Field
	If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.  • No drilling orientation and sampling bias has been time.	n recognized at this
Sample security	The measures taken to ensure sample security.  • RC samples are delivered directly from the field laboratory by EXG personnel on a daily basis we laboratory then checks the physically received so EXG generated sample submission list and discrepancies	ith no detours, the amples against an
Audits or reviews	The results of any audits or reviews of sampling techniques and data.  • An internal review of sampling techniques and completed in March 2014. No external or third par have been completed.	

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

Criteria	J	ORC 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	The results reported in this Announcement are on granted Mining tenements held by GPM Resources Pty Ltd, a wholly owned subsidiary of Excelsior Gold Limited.						
		royalties, native title interests, historical	Tenement	Holder	Area (Ha)	Expiry Date			
		sites, wilderness or national park and	M24/11	GPM Resources	1.80	23/03/2025			
		environmental settings.	M24/43	GPM Resources	9.28	15/10/2026			
		The security of the tenure held at the time	M24/99	GPM Resources	190.75	02/12/2028			
		of reporting along with any known	M24/121	GPM Resources	36.95	02/11/2029			
		impediments to obtaining a licence to	M24/135	GPM Resources	17.75	10/06/2029			
		operate in the area.	M24/869	GPM Resources	7.16	21/10/2024			
			M24/870	GPM Resources	7.04	21/10/2024			
			M24/871	GPM Resources	9.72	21/10/2024			
			M24/951	GPM Resources	190.03	16/04/2036			
			At this tir	me the tenements are beli	:				
Exploration done by other parties	•	Acknowledgment and appraisal of exploration by other parties.	Exploration by other parties has been reviewed and is used as a gui to EXG's exploration activities. Previous parties have completed be open pit and underground mining, geophysical data collection a interpretation, soil sampling and drilling. This report only comment on exploration results collected by EXG.						
Geology	Deposit type, geological setting and style o mineralisation.			osit occurs on the easter , the Bardoc-Broad Arrow this zone the sequence co f intercalated Archaean r iments	syncline within the omprises highly def	Bardoc Tectonic formed fault slice			
			gold bea these N dipping, coming c or as in contacts, these str It was no the centrassociate	geological interpretation viring lodes delineated and NW trends narrow (0.3rhigh-grade gold veins we of the western sediment slaternal link structures by the sediment shadow in the structures flatten out and/or orded that a distinct quartz ral western part of the ded with quartz veining go within the flat "rungs" of	traced over 1400m to 5.0m wide) re related to either hear contact (i.e. a etween the two s (>16g/t) appeared in associated third adder array systeposit where gold with higher grace	of strike. Within 60-degree west splay structures flower structure) sheared dolerite to occur where order structures. em developed in mineralisation is			
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  elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar	No explo drill holes	ration is being reported in s to report.	n this release there	fore there are no			

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 In reporting Exploration Results, weighting No exploration is being reported in this release therefore there are no aggregation averaging techniques, maximum and/or drill holes to report. methods 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. Relationship These relationships are particularly No exploration is being reported in this release therefore there are no between important in the reporting of Exploration drill holes to report. mineralisatio Results. n widths and intercept lengths 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'). Diagrams Schematic cross section of Zoroastrian South, showing significant Appropriate maps and sections (with scales) and tabulations of intercepts should mineralised zone and pit outline be included for any significant discovery **Zoroastrian South** being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views. Balanced Where comprehensive reporting of all No exploration is being reported in this release therefore there are no reporting Exploration Results is not practicable, drill holes to report. representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results. Other Other exploration data, if meaningful and No exploration is being reported in this release therefore there are no substantive material, should be reported including (but drill holes to report. exploration not limited to): geological observations; data 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.		
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).	•	No exploration is being reported in this release therefore there are no drill holes to report.
	•	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 (Zoroastrian South) (Criteria listed in section 1, 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.	<ul> <li>EXG data is logged in the field directly into the Geobank mobile device. Lab submission sheets are digitally recorded in the same way. Assay data are received from the laboratories in an electronic format and are imported directly into a standard DataShed system. All data have been validated by the EXG Database Administrator and geological management prior to transmission to Cube.</li> <li>Any errors recorded from the various validation processes are manually checked and correlated back to the original collection of data. If necessary, field checks are made to confirm validation issues.</li> </ul>
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.	Mr Rick Adams and Mr Mike Millad visited the property from the 4th May 2016 to 5th May 2016 to review the geology and historic mining activities.
Geological interpretation	<ul> <li>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</li> <li>Nature of the data used and of any assumptions made.</li> <li>The effect, if any, of alternative interpretations on Mineral Resource estimation.</li> <li>The use of geology in guiding and controlling Mineral Resource estimation.</li> <li>The factors affecting continuity both of grade and geology.</li> </ul>	<ul> <li>The geology of the mineralised system appears to be relatively simple however the gold distribution is more complex. Cube believes that the continuity of mineralisation and volume controls are well established where drilling is at a nominal 40 x 20 m hole spacing.</li> <li>The use of historical drilling provides a level of uncertainty as the company cannot validate the QAQC data and downhole survey data. As such at several locations through the deposit the company has twinned historical holes to confirm results and location.</li> <li>The close spaced RC grade control drilling and mining pit floor exposure at nearby Zoroastrian Central has allowed a detailed reevaluation of the geological controls on mineralisation by EXG. The new interpretation of these controls impacts the estimation of the Mineral Resources and has triggered the need for the re-estimation.</li> <li>The result of this revision is that the majority of the mineralisation of economic interest is associated with the (45-50-degree east dipping) ladder veins.</li> </ul>
Dimensions	The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.	The main body of mineralisation extends approximately 700m along strike (NNW-SSE- Azi 335 degrees), an average of 400m across strike (ENE-WSW) and 300m in elevation. Mineralisation is present at surface and is exposed on the historic pit floor and walls from previous mining activities.
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.  The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.	<ul> <li>Cube has used 3DM wireframes to constrain the mineralised zone, based on exploration (40m x 20m) and GC (5m x 7.5m) drill hole data. The wireframes were constructed on a sectional basis using the Surpac software package.</li> <li>A low grade "waste" domain was also modelled around the main mineralisation domain to the extents of the available drill data.</li> <li>Drill intervals falling within the wireframed estimation domains were coded in the database. Composites of gold assay values were then generated using the Surpac™ "best-fit" method. On the basis of sample size, selectivity assumption (2mE-W x 5mN-S x 2.5mRL) and selected estimation methodology, Cube chose to use 1m downhole composites for this estimation.</li> </ul>

The assumptions made regarding recovery It was evident that the estimation domains contained a limited number of outlier gold values, necessitating the use of gold grade top cuts to of by-products. mitigate estimation risk. The highly positively skewed gold distributions mean that conventional linear estimation methods, such Estimation of deleterious elements or other as Ordinary Kriging ("OK") are very likely to produce over-smoothed non-grade variables of economic significance (e.g. sulphur for acid mine block grade estimates. For this reason, it was decided to undertake drainage characterization). grade estimation using the non-linear Localised Uniform Conditioning ("LUC") method. In the case of block model interpolation, the block size in relation to the average sample The following criteria were considered when choosing gold grade top spacing and the search employed. The coherence and stability of the upper tail of the Any assumptions behind modelling of gold grade distribution; Visual inspection of the spatial location of outlier selective mining units. values: Sensitivity tests to gauge the effect of various top cuts on mean gold grade; By consideration of the top cuts being used in grade control modelling at nearby Zoroastrian Central. Any assumptions about correlation The LUC estimates were implemented using the Isatis® software between variables. package before being transferred into a Surpac™ block model. Description of how the geological No consideration has been made of by-products. interpretation was used to control the resource estimates. Inverse Distance Squared (ID2) check estimates were undertaken for Discussion of basis for using or not using comparison to the LUC model. This comparison demonstrated a good level of agreement between global mean ID<sup>2</sup> and LUC grades. grade cutting or capping. The LUC model was also validated by comparison of the block estimates to the informing composite data: Global mean un-declustered and declustered The process of validation, the checking process used, the comparison of model composite grades were compared to the block estimates. Agreement was good. data to drill hole data, and use of reconciliation data if available. Semi-local comparison of un-declustered and declustered composite grades to block estimates was undertaken using swath plots by northing and RL slices. Observed agreement was good. Visual 3D comparison of raw assay grades to LUC revealed estimates good correspondence. Block size for gold grade estimation was chosen in consultation with EXG and with due regard to data spacing, orebody geometry, and practical mining considerations. The estimation panel size used was 8mE-W x 10mN-S x 5mRL. An SMU block size of 2mE-W x 5mN-S x 2.5mRL was chosen (no rotation) for use in the localisation process. This SMU block size corresponds exactly to the current block size for grade control modelling and mining selection at the nearby and currently active Zoroastrian Central pit, conforms to the mining flitch height and is elongated in the approximately the same direction (north-south axis) as the trend of the mineralised envelope at Bulletin South. While the data spacing in areas other than the grade control drilled volume would be considered too wide for such a small block size if conventional linear estimation methods were used. Cube has used the LUC method, which is intended specifically for estimating the distribution smaller arade of blocks. Moisture Whether the tonnages are estimated on a Tonnages were estimated on a dry basis. dry basis or with natural moisture, and the method of determination of the moisture content. Cut-off The selection of mineralised domains has used geological factors The basis of the adopted cut-off grade(s) or parameters quality parameters applied. such a logged quartz and sulphides in conjunction with a 0.2 to 0.3g/t Au cut off which represents the mineralised shear modelled domains. The MR has been reported above a 0.6g/t Au cut-off. This has been chosen to allow the application of modifying factors for the estimation of Mineral Reserves which indicate an economic cut-off of 0.9 to 1g/t Au. Mining This MRE has been undertaken on the assumption of open pit mining Assumptions made regarding possible factors or methods, the selection of SMU size was based on the scale of mining minina methods. minimum minina assumptions dimensions and internal (or, if applicable, equipment currently in use at Zoroastrian Central. 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.	
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>Metallurgical testwork was conducted by ALS Global, on one sample of representative material, in their Perth laboratory. Overall cyanide leaching of Au in a 24 hour period was 98.2% with 77% being recovered by gravity.</li> </ul>
Environment al 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.	There are no existing environmental issues concerning the extraction or disposal of waste or tailing material known to Cube.
Bulk density	Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.  The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.  Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.	<ul> <li>There are limited sources of relevant experimental bulk density data consisting of 14 determinations from 2015 EXG DD.</li> <li>These determinations are all on competent rock both within the mineralised porphyry and surrounding waste mafic rocks.</li> <li>On balance Cube believe that there are sufficient data to allow the assignment of average values to the MRE block model but not enough to allow a spatially representative estimation of bulk density. Cube have used assumed bulk density values based on the interpreted weathering surfaces.</li> </ul>
Classification	<ul> <li>The basis for the classification of the Mineral Resources into varying confidence categories.</li> <li>Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the</li> </ul>	<ul> <li>The geological model and continuity of the mineralised domain is currently well understood due to the GC drilling and mining exposure of the mineralised lodes.</li> <li>The MRE has been classified as Measured, Indicated and Inferred based on the assessment of geological continuity, sample representivity and spacing and geostatistical summary parameters derived from the variogram models.</li> <li>Inferred material has been included in portions of the waste domain to ensure that during potential mining these smaller occurrences are grade control checked for mineable volumes.</li> <li>The Mineral Resource estimate appropriately reflects the view of the Competent Person</li> </ul>
Audits or reviews	The results of any audits or reviews of Mineral Resource estimates.	<ul> <li>No independent audits or reviews have been undertaken on the February 2017 MRE</li> </ul>

# 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.

- The relative accuracy of the Mineral Resource estimate is reflected in the reporting of the Mineral Resource in accordance with the guidelines of the 2012 JORC Code.
- The block model estimate is a local resource estimate which has block sizes chosen at the expected "SMU" selection size.
- There is no relevant production to compare the resource to.

### **Section 4 Estimation and Reporting of Ore Reserves (Zoroastrian South)**

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

Criteria IORC Code explanation Commentary

Criteria	JORC Code explanation						Commentary								
Mineral Resource estimate for conversion to Ore Reserves						of Cube	e Consulting (Cube). These he area referred to as the								
	MODEL	Lower Cut- off: g/t Au	N	Measured		Indicated			Inferred		Total				
			Tonnes ( (Mt)	Grade g/t Au	Ounces (000° oz)	Tonr (Mi		irade g/t Au	Ounces (000° oz		Grade g/t Au	Ounces (000° oz)	Tonnes (Mt)	Grade g/t Au	Ounces (000° oz)
	Open Pit	0.6	0.376	1.69	20.5	0.78	2	1.79	44.9	0.98	1.45	46	2.138	1.62	111.4
Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.      The Ore Reserves are contained within the N															
		Source	'	Proved Ore Reserv				Probable Ore Reserve Total Ore R				e Reserv	eserve		
	Source	Tonnes (,000t)			Grade (g/t Au)	1	inces 00oz)	Ton (,00	nes Ot)	Grade (g/t Au)	Ounces (,000oz)	Tonno (,000	- 1		Ounces (,000oz)
	Zo	roastrian South¹	0	0	0.00		0	21	10	2.1	14	210	) :	2.1	14
							Note	, some	differen	ces may ex	ist due to	rounding			
Site visits	the thos	Compete se visits.	any site vi nt Person a	and the	outcome	e of	The Competent Person, Mr Randell Ford, works at the Zoroastrian Central open pit as the Registered Mine Manager.								
			isits have this is the o		underta	iken									
Study status	ena		l level of s al Resourd ves.							ogress at				·	
	The Code requires that a study to at least     Pre-Feasibility Study level has been     undertaken to convert Mineral Resources					<ul> <li>The mining methods, design layouts, production performance and cost profiles used in preparing these Mineral Reserve estimates reflect this experience and known costs. Estimation of Reserves is considered to be at a higher level than a Feasibility Study</li> </ul>									

	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.	
Cut-off parameters	The basis of the cut-off grade(s) or quality parameters applied.	<ul> <li>Cut-off grades used were based upon known economic costs from the current mining of the Zoroastrian Central open pit.</li> <li>Open Pit Reserves are based on a nominal 0.8g/t Au lower cut-off grade.</li> <li>No changes to the current mining fleet currently used are expected.</li> </ul>
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.	<ul> <li>The assumptions and mining factors were updated to assess and optimize Mineral Resources to Ore Reserves within Zoroastrian South open pit based on the current mining.</li> <li>Standard planning processes of pit optimization, mine design and scheduling using known unit costs were applied in compiling Ore Reserves.</li> <li>The final calculation of the Ore Reserve figures was performed using the Geovia Surpac™ software suite.</li> <li>The selected method was open cut mining.</li> <li>The open pit is being mined using selective drill and blast methods, utilising conventional hydraulic excavators for removal of waste rock and trucks for ore and waste haulage. Ore will be drilled and blasted on 5m benches and excavated on 2.5m flitches and delivered directly to the ROM pad.</li> <li>Mining dilution was derived from the previous experience of mining at Zoroastrian Central and applied to provide high grade ore. Low grade ore below 0.8g/t will be stockpiled for eventual treatment prior to site closure.</li> </ul>
	<ul> <li>The assumptions made regarding geotechnical parameters (e.g. pit slopes, stope sizes, etc.), grade control and preproduction drilling.</li> <li>The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).</li> <li>The mining dilution factors used.</li> <li>The mining recovery factors used.</li> <li>Any minimum mining widths used.</li> </ul> The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.	<ul> <li>Open pit design of pit angles, berms and batters were based upon Zoroastrian Central experience and modified with geotechnical input to match the rock properties. The pit design parameters have recently been reviewed by a specialist geotechnical consultancy, Peter O'Bryan &amp; Associates.</li> <li>The Mineral Resource model used is the one described in this Table 1, Section 3.</li> <li>Mining dilution and recoveries were allocated by the use of minimum mining blocks around the mineralised occurrences</li> <li>Where possible and appropriate a minimum pre-goodbye cut mining width of 20m was applied as a constraint to the design. A minimum mining width of 12m has been used.</li> <li>Inferred Mineral Resources were not used in the Ore Reserve work.</li> </ul>
	The infrastructure requirements of the selected mining methods.	No further infrastructure is required with this open pit mining
Metallurgical factors or assumptions	<ul> <li>The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.</li> <li>Whether the metallurgical process is well-tested technology or novel in nature.</li> <li>The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.</li> <li>Any assumptions or allowances made for deleterious elements.</li> <li>The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole.</li> <li>For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?</li> </ul>	<ul> <li>The planned treatment of Zoroastrian South Open Pit ore is at the Paddington processing facility, a conventional 3.5Mtpa CIL plant suitable for regional mineralisation, consisting of primary crusher, SAG mill, pebble crusher, secondary ball mill, gravity recovery, CIL (carbonin-leach), carbon elution, electrowinning and smelting to produce gold doré.</li> <li>The planned process is a conventional, robust, well tested technology, and is currently being used for ore from the Zoroastrian Central open pit.</li> </ul>
Environment al	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	<ul> <li>Environmental approvals are in the process of being obtained for the mining of the Zoroastrian South open pit from all necessary government authorities along with mining approval to extract the ore using open pit mining methods.</li> <li>Previous works completed, as part of the (granted) approval process include flora and fauna surveys, existing land disturbance surveys, waste rock sampling, soil analysis, hydrology, Aboriginal heritage surveys and database reviews.</li> </ul>

	storage and waste dumps should be reported.	Waste Rock Landforms are conservatively designed to take into consideration high proportions of oxide waste and will be rehabilitated as per the license requirements.
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.	
Costs	The derivation of, or assumptions made, regarding projected capital costs in the study.  The methodology used to estimate	No additional equipment capital costs are required with open pit mining carried out by mining contractors  Known established operating costs have been used in determining
	operating costs.     Allowances made for the content of deleterious elements     The source of exchange rates used in the study.	Forming (PAF) waste material has been detected.
	Derivation of transportation charges.      The basis for forecasting or source of	Ore haulage transportation charges were applied. The charges reflect the costs currently incurred by active mining and transport of the Zoroastrian Central open pit ore.  Treatment and refining charges are based on costs associated with
	treatment and refining charges, penalties for failure to meet specification, etc.	the treatment of Zoroastrian Central ores currently being treated at the Paddington Mill as supplied by Norton Gold Fields (NGF).
	The allowances made for royalties payable, both Government and private.	Allowances were made for WA State government royalties; 2.5% of the sale price was reduced as a 'sell cost' upfront during the optimisation works.
Revenue factors	The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter	The head grade is derived from each individual Mineral Resource and applied Modifying Factors as described above.  An assumed base gold price of A\$1,600 per gold ounce was applied to the final study. No doré transport or refining costs were applied.
	returns, etc.  The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.	No revenue has been allocated to any possible economically beneficial by-products.
Market assessment	The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.	Gold is a precious metal and demand is assumed to be steady and rising in the medium to longer term worldwide but the gold price is variable and affected by many factors – as a safe-haven reflecting geopolitical factors, demand for jewellery and as part of many
	A customer and competitor analysis along with the identification of likely market windows for the product.	countries' currency reserves and thus subject to fluctuations, due principally to market sentiment.  Under the treatment agreement with Norton Gold Fields, the recovered
	<ul> <li>Price and volume forecasts and the basis for these forecasts.</li> <li>For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.</li> </ul>	gold content of each ore batch is determined from detailed sampling and analytical procedures and fine ounces of gold are transferred into GPM's gold account at the Perth Mint by Norton once the gold content is finalised and agreed.  The gold sell price used for the Zoroastrian Central open pit works was A\$1,600/oz.
Economic	The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.	Economic analysis was carried out using established site costs for mining, geology, processing and administration. A discount rate of 10% was applied to the optimisation works.
	NPV ranges and sensitivity to variations in the significant assumptions and inputs.	Sensitivities to existing unit costs, were carried out to establish the viability of the Zoroastrian South Ore Reserves.
Social	The status of agreements with key stakeholders and matters leading to social licence to operate.	All key stakeholder agreements, including Native title and Pastoral Lease holder agreements are in place. The Company has close working relationships with communities and key stakeholders surrounding the Project.
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.	, ,
	<ul> <li>The status of material legal agreements and marketing arrangements.</li> <li>The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary government</li> </ul>	Gold Pty Ltd (a wholly owned subsidiary of Norton Gold Fields Limited) and GPM Resources Pty Ltd (GPM) (a wholly owned subsidiary of Excelsior Gold Limited), dated 13 October 2015, Norton agrees to process a minimum of 500,000 tonnes of ore per annum from the Kalgoorlie North Gold Project over a period of up to 10 years. The Zoroastrian project falls under this agreement. Excelsior Gold will be responsible for all of the mining operations whilst Norton will be
	approvals will be received within the timeframes anticipated in the Pre-	responsible for haulage and milling of the ore.

	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.	<ul> <li>All current deposits are located on granted Mining Leases and all necessary government approvals are in place.</li> </ul>
Classification	Reserves into varying confidence categories.	<ul> <li>Measured Mineral Resources have been converted to Probable Ore Reserves. Indicated Mineral Resources have been converted to Probable Ore Reserves.</li> <li>The estimated Zoroastrian South Open Pit Ore Reserves are, in the opinion of the Competent Person, appropriate for this style of deposit.</li> <li>Probable Ore Reserves were derived from Measured and Indicated Mineral Resources, they comprise approximately 100% of the Ore Reserve ounces.</li> <li>Additional ore to be mined following further drilling within the pit is expected from within Inferred Resources but is not included within the JORC Reserve estimate</li> </ul>
Audits or reviews	The results of any audits or reviews of Ore Reserve estimates.	<ul> <li>The Ore Reserve estimate was completed by Excelsior Gold Limited based on Mineral Resource estimation and open pit optimisation studies conducted by Cube Consulting with internal checks completed.</li> <li>No external audit of the reserve estimate was completed.</li> </ul>
Discussion of relative accuracy/ confidence	Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which 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.  Accuracy and confidence discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.  It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	<ul> <li>The Ore Reserve is considered robust given the existing mining, plant and equipment currently in use on site, the established unit costs available and the personnel team on site as well as in Perth are now familiar with mining and processing the ore whose characteristics have been established.</li> <li>The relative accuracy of the estimate is reflected in the reporting of the Ore Reserves as per the guidelines re: modifying factors, study levels and Competent Persons contained in the JORC 2012 Code.</li> <li>The Ore Reserves are considered robust on a local scale for material classified as Probable</li> <li>The Zoroastrian Central lodes are currently being mined and is expected that the Zoroastrian South lodes are of similar geological characteristics which lend confidence to the accuracy of vein tenor, mining recovery and treatment plant recoveries and the departmental costs used in the estimation of Ore Reserves.</li> <li>Sensitivity studies were carried out. Standard linear deviations were observed. The project is most susceptible to fluctuations in gold price.</li> </ul>

# JORC Code, 2012 Edition – Table 1 – BULLETIN SOUTH Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <li>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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <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 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.</li> </ul>	<ul> <li>The Bulletin South open pit was mined up to April 1994. The drill hole database consists of historic (pre-2003) and EXG drilling data. The historical data is concentrated mostly within the part that has been mined, whilst the EXG drill holes extend below the pit.</li> <li>Historical holes consist of 562 grade control RB (possibly some form of RC), 70 RC holes and 9 grade control RC holes (RCGC). The grade control holes were drilled at an average spacing of 3m x 5m (N x E) and in general 1m samples were collected.</li> <li>Complete details are un-available for historic drilling.</li> <li>EXG holes, 2 diamond drill holes and 34 RC holes were drilled at variable azimuths at dips of -60° to -50° to optimally test for potential mineralized zones, at a nominal spacing of 40m x 20m (N x E). There are in total 677 drill holes used in the resource estimate.</li> <li>All RC recovered samples were collected and passed through a cone splitter. Prior to drilling, the drill hole locations were pegged using either contract surveyors or hand held GPS units. After drilling, all drill hole locations are picked up by surveyors using a RTK system. All drill holes greater than 80m drilled by EXG are down hole surveyed by contractors using industry standard digital tools.</li> <li>All RC drilling was sampled on one metre down hole intervals. The recovered samples were passed through a cone splitter and a nominal 2.5kg -3.5kg sample was collected. Where the original 1m samples were not collected, nominal 4m composite samples were collected by spear sampling individual 1m composite intervals.</li> <li>Industry standard work undertaken by EXG has in most instances supported the grades and widths indicated by historic drilling – there is a risk inherent in this MRE that the historic drilling data is to some unknown extent biased or not representative as this cannot be demonstrated due to lack of QA/QC information.</li> </ul>
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).	<ul> <li>Little information is available on the drilling techniques for the historical holes. However, holes have been drilled by Caris Corporation during 1984; by Getty Oil in 1984 and 1985 (using a Schramm T66H RC rig); by Aberfoyle during 1986, 1987; by MMC Management during 1993; by Goldfields during 1996 and 1998 (using a Schramm660 RC rig drilling 5.5" holes) and by Halycon during 2003 and 2004.</li> <li>For (post 2011) EXG drilling, the RC drilling (Redmond Drilling – Schramm RC with cyclone attached) system employed the use of a face sampling hammer and a nominal 146mm diameter drill bit. The DC drilling is NQ2 size core (nominal 50.6mm core diameter) or HQ (nominal 63.5mm core diameter).</li> <li>All EXG drill core is orientated by the drilling contractor with a down the hole Ace system. Core diameter is noted in the assay results table for DC assay results.</li> </ul>
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.	<ul> <li>Historical holes were generally sampled at 1m intervals which were split on site and reduced to samples of between 1-1.5kg in weight. A four metre composite was taken at the same time which was assayed for Au and As by Kalgoorlie Assay Laboratory. Intervals containing anomalous gold were re-assayed using the 1m samples. The Goldfield holes were sampled on 1m intervals, with samples being placed on the ground. All dry samples were riffle split to 4kg and all wet samples were scoop sampled. Alternate samples were submitted for analysis, and infill samples were subsequently tested once any anomalous zones were identified. All alternate samples were analysed by either ALS or Analabs for gold by Fire Assay to 0.01ppm using a 50g charge</li> <li>All EXG RC 1m samples are logged for drilling recovery by a visual estimate and this information is recorded and stored in the drilling database. At least every 10th metre is collected in a plastic bag and these are weighed when they are utilized for the collection of field duplicate samples. All samples received by the laboratory are weighed with the data collected and stored in the database.</li> <li>The EXG DC samples are orientated, length measured and compared to core blocks placed in the tray by the drillers, any core loss or other variance from that expected from the core blocks is logged and recorded in the database. Sample loss or gain is reviewed on an ongoing basis and feedback given to the drillers to enable the best representative sample to always be obtained.</li> <li>EXG RC samples are visually logged for moisture content, sample recovery and contamination. This is information is stored in the database. The RC drill system utilizes a face sampling hammer which</li> </ul>

#### is industry best practice and the contractor aims to maximize recovery at all times. RC holes are drilled dry whenever practicable to maximize recovery of sample. The DC drillers use a core barrel and wire line unit to recover the core, they aim to recover all core at all times and adjust their drilling methods and rates to minimise core loss, i.e. different techniques for broken ground to ensure as little core as possible is washed away with drill cuttings. Study of sample recovery vs gold grade does not show any bias towards differing sample recoveries or gold grade. The drilling contractor uses standard industry drilling techniques to ensure minimal loss of any size fraction. Logging Whether core and chip samples have been All EXG RC samples are geologically logged directly into hand-held geologically and geotechnically logged to a Geobank devices level of detail to support appropriate All EXG DC is logged for core loss, marked into metre intervals, Mineral Resource estimation, orientated, structurally logged, geotechnically logged and logged with studies and metallurgical studies. a hand lens with the following parameters recorded where observed: weathering, regolith, rock type, alteration, mineralization, Whether logging is qualitative or quantitative in nature. Core (or costean, shearing/foliation and any other features that are present All EXG DC is photographed both wet and dry after logging but before channel, etc) photography. cuttina. The total length and percentage of the The entire lengths of EXG RC holes are logged on a 1m interval basis, relevant intersections logged. i.e. 100% of the drilling is logged, and where no sample is returned due to voids (or potentially lost sample) it is logged and recorded as such. Drill core is logged over its entire length and any core loss or voids intersected are recorded. Sub-If core, whether cut or sawn and whether EXG Exploration results reported for drill core are half core taken from sampling guarter, half or all core taken. the right hand side of the core looking down hole. Core is cut by techniques contractors with a diamond core saw and all sampling is conducted by and sample Excelsior geologists. preparation If non-core, whether riffled, tube sampled, All EXG RC samples are put through a cone splitter and the sample rotary split, etc and whether sampled wet or is collected in a unique pre-numbered calico sample bag. The moisture content of each sample is recorded in the database. For all sample types, the nature, quality and The EXG RC samples are sorted, oven dried, the entire sample is appropriateness of the sample preparation pulverized in a one stage process to 85% passing 75 $\mu m$ . The bulk technique. pulverized sample is then bagged and approximately 200g extracted by spatula to a numbered paper bag that is used for the 50g fire assay charge. Quality control procedures adopted for all The EXG DC samples are oven dried, jaw crushed to nominal <10mm, sub-sampling stages to maximise 3.5kg is obtained by riffle splitting and the remainder of the coarse reject is bagged while the 3.5kg is pulverized in a one stage process representivity of samples. to 85% passing 75 $\mu m$ . The bulk pulverized sample is then bagged and approximately 200g extracted by spatula to a numbered paper bag that is used for the 50g fire assay charge. EXG RC and DC samples submitted to the laboratory are sorted and Measures taken to ensure that the sampling is representative of the in situ reconciled against the submission documents. EXG inserts blanks material collected, including for instance and standards with blanks submitted in sample number sequence at results for field duplicate/second-half 1 in 50 and standards submitted in sample number sequence at 1 in sampling. 20. The laboratory uses their own internal standards of 2 duplicates. 2 replicates, 2 standards, and 1 blank per 50 fire assays. The laboratory also uses barren flushes on the pulveriser. Whether sample sizes are appropriate to In the field every 10<sup>th</sup> metre from the bulk sample port on the cone splitter is bagged and placed in order on the ground with other the grain size of the material being samples. This sample is then used for collection of field duplicates via sampled. riffle splitting. RC field duplicate samples are collected after results are received from the original sample assay. Generally, field duplicates are only collected where the original assay result is equal to or greater than 0.1g/t Au. The field duplicates are submitted to the laboratory for the standard assay process. The laboratory is blind to the original sample number. The results of this field duplicate process are within acceptable limits, indicating that the RC sample results are repeatable. For DC, no core duplicates (i.e. half core) have been collected or submitted. The sample sizes are considered to be appropriate for the type, style, thickness and consistency of mineralization located at this project. The sample size is also appropriate for the sampling methodology employed and the gold grade ranges returned. Quality of EXG has routinely used local Kalgoorlie Certified Laboratories for all The nature, quality and appropriateness of assay data the assaying and laboratory procedures sample preparation and analysis. The most commonly used and used and whether the technique is laboratories have been SGS Australia and Bureau Veritas Australia laboratory which has two facilities in Kalgoorlie. No complete details of the considered partial or total. tests For geophysical tools, spectrometers, sample preparation, analysis or security are available for either the handheld XRF instruments, etc, historic AC, DD or RC drilling results in the database.

parameters used in determining

applied and their derivation, etc.

analysis including instrument make and model, reading times, calibrations factors

the

The assay method is designed to measure total gold in the sample. The laboratory procedures are appropriate for the testing of gold at

this project given its mineralization style. The technique involves using

a 40g sample charge with a lead flux which is decomposed in a furnace with the prill being totally digested by 2 acids (HCl and HNO3) before measurement of the gold content by an AA machine.

Nature of quality control procedures The QC procedures are industry best practice. The laboratory is adopted standards. accredited and uses its own certified reference material. The (e.g. blanks. duplicates, external laboratory checks) and laboratory has 2 duplicates, 2 replicates, 1 standard and 1 blank per whether acceptable levels of accuracy (i.e. 50 fire assays. lack of bias) and precision have been EXG submits blanks at the rate of 1 in 50 samples and certified established. reference material standards at the rate of 1 in 20 samples in the normal run of sample submission numbers. As part of normal procedures EXG examines all standards and blanks to ensure that they are within tolerances. Additionally, sample size, grind size and field duplicates are examined to ensure no bias to gold grade exists. Verification The verification of significant intersections No independent verification of significant intersections has been of sampling by either independent or alternative undertaken. and company personnel. assaying A number of RC holes have been drilled throughout the deposit to twin The use of twinned holes. historical RC holes. These twinned holes returned results comparable to the original holes and were also used to collect geological Documentation of primary data, data entry procedures, data verification, data storage information and material for metallurgical assessment. Both historical (physical and electronic) protocols. and new diamond drilling has been drilled to confirm geological interpretation and results obtained from RC drill holes. Discuss any adjustment to assay data. Primary data is sent digitally every 2-3 days from the field to EXG's Database Administrator (DBA). The DBA imports the data into the commercially available and industry accepted DataShed database software. Assay results are merged when received electronically from the laboratory. The responsible geologist reviews the data in the database to ensure that it is correct and has merged properly and that all data has been received and entered. Any variations that are required are recorded permanently in the database. No adjustments or calibrations were made to any assay data used in this report. Location of Accuracy and quality of surveys used to All drill holes have their collar location recorded from a hand held GPS data points locate drill holes (collar and down-hole unit. Downhole surveys are completed every 30m downhole. No surveys), trenches, mine workings and detailed down hole surveying information is available for the historic other locations used in Mineral Resource estimation EXG routinely contracted down hole surveys during the programmes of exploration drilling for each RC and DC drill hole completed using Specification of the grid system used either digital electronic multi-shot tool or north seeking gyro, both of which are maintained by Contractors to manufacturer specifications. Quality and adequacy of topographic All drill holes and resource estimation use the MGA94, Zone 51 grid control. system. The topographic data used was obtained from consultant surveyors and is based on a LiDAR survey flown in 2012. It is adequate for the reporting of Exploration Results and subsequent Mineral Resource estimates. The original final pit survey has been used to deplete the resource model. The nominal exploration drill spacing is 40m x 20m with some cross Data Data spacing for reporting of Exploration spacing Results. sections filled to 10m. This spacing includes data that has been and verified from previous exploration activities on the project distribution Whether the data spacing and distribution This report is for the reporting of the Mineral Resource Estimate. The is sufficient to establish the degree of drill spacing, spatial distribution and quality of assay results is geological and grade continuity appropriate sufficient to support the JORC classification of material reported within for the Mineral Resource and Ore Reserve this report and is appropriate for the nature and style of mineralisation estimation procedure(s) and classifications being reported. applied. The majority of holes were sampled at 1m, but when this isn't the case, sample compositing to 1m has been applied. Whether sample compositing has been applied. Orientation Whether the orientation of sampling The majority of drilling is to grid east or west. The bulk of the of data in achieves unbiased sampling of possible mineralized zones are perpendicular to the drilling direction. Field relation to structures and the extent to which this is mapping and geophysical interpretations supports the drilling direction geological known, considering the deposit type. and sampling method. structure If the relationship between the drilling No drilling orientation and sampling bias has been recognized at this orientation and the orientation of key time. mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material. Sample The measures taken to ensure sample RC samples are delivered directly from the field to the Kalgoorlie security security. laboratory by EXG personnel on a daily basis with no detours, the laboratory then checks the physically received samples against an EXG generated sample submission list and reports back any discrepancies Audits or The results of any audits or reviews of An internal review of sampling techniques and procedures was reviews sampling techniques and data. completed in March 2014. No external or third party audits or reviews have been completed.

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

Criteria	JORC Code explanation Comm	nentary
Mineral tenement and land tenure status	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.	results reported in this Announcement are on granted Mining nents held by GPM Resources Pty Ltd, a wholly owned diary of Excelsior Gold Limited.  s time the tenements are believed to be in good standing. There oyalty of \$2 per tonnes of ore removed payable to third parties.
	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.	
Exploration done by other parties	exploration by other parties. to EX open interp	pration by other parties has been reviewed and is used as a guide (G's exploration activities. Previous parties have completed both pit and underground mining, geophysical data collection and pretation, soil sampling and drilling. This report only comments exploration results collected by EXG.
Geology	mineralisation.  assortextumine altera  Whils surfa  Historand orien	primary gold mineralisation at Bulletin South is predominantly ciated with a quartz rich dolerite unit with a strongly porphyritic re and associated second order structures. The gold ralisation is associated with quartz, carbonate, sulphide ation. It structure and primary gold mineralisation can be traced to the ce, depletion has occurred in the top 10-20m rical working and shafts exist within the area, detailed mapping sampling of these workings and structural measurements from tated diamond core drilling assists with the geological pretation.
Drill hole Information		able below summarise the recent exploration results carried out ulletin South during 2016.
	including a tabulation of the following information for all Material drill holes:	EAST NORTH AHD RL DEPTH (m) DIP (Magnetic) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m
	elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar	334062.19 6634820.57 391.96 45 -65 240 <b>17 30 13 1.63</b> 34 36 2 1.32 42 45 3 0.99
	o dip and azimuth of the noie  KNC160015 KNC160016	27   36   9   1.33   39   41   2   2.82   334083.1   6634786.64   393.55   55   53   240   25   42   17   2.58   334082.46   6634765.56   398.08   54   -60   240   23   34   11   3.64
	o down hole length and interception depth	334080.42 6634747.74 400.73 60 -61 227 28 33 5 1.23 36 44 8 1.51 334058.25 6634725.34 403.56 45 -70 240 29 31 2 1.65 35 36 1 1.13 38 39 1 3.72
		334045.7 6634874.32 425.57 45 -50 255 21 22 1 1.46 334010.48 6634842.52 419.66 60 -55 63 <b>4 11 7 1.56</b>
	o hole length.	10 11 1 6.32 34 35 1 1.13 41 46 5 1.8
	If the evelveion of this information is	esults from previous unreported exploration are the subject of this uncement
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.      No h result	igh grade cuts have been applied to assay results. RC assay ts are distance weighted using 1m for each assay.
	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.	sections are reported if the interval is at least 1m wide at 1.0g/t grade or for composite samples greater than 1.0 g/t Au. sections greater than 1m in downhole distance can contain up to f ow grade of barren material.
	The assumptions used for any reporting of metal equivalent values should be clearly stated.  No metal equivalent values should be clearly stated.	etal equivalent reporting is used or applied.

Relationshi p between mineralisati on 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').	4000	PSV033 20m @ 1.81 from 55m  PSV049 19m @ 1.73 from 73m  Cordense  KNC160015 17m @ 2.58 from 25m  KNC160011 15m @ 1.31 from 105m  KNC150006 Fresh 20m @ 4.44 from 126m
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.	•	Refer to EXG ASX announcement on Operation Update dated 22 December 2016
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.	•	Refer to EXG ASX announcement on Operation Update dated 22 December 2016
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.	•	No other exploration data is considered meaningful and material to this announcement
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.	•	Future exploration has not been planned and may involve the drilling of more drill holes, both DC and RC, to further extend the mineralised zones and collect additional detailed data on known mineralised zones.  Further future drilling areas are not highlighter as they are not yet planned.

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

Criteria	JORC Code explanation	Commentary
Database integrity	<ul> <li>Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.</li> <li>Data validation procedures used.</li> </ul>	391
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.	

### Geological interpretati on

- 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.

### **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.

### 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.
- 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 characterization).
- In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.
- Any assumptions behind modelling of selective mining units.
- Any assumptions about correlation between variables.
- Description of how the geological interpretation was used to control the resource estimates.
- Discussion of basis for using or not using grade cutting or capping.
- The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.

- The geology of the mineralised system appears to be relatively simple however the gold distribution is more complex. Cube believes that the continuity of mineralisation and volume controls are well established where drilling is at a nominal 40 x 20 m hole spacing.
- The use of historical drilling provides a level of uncertainty as the company cannot validate the QAQC data and downhole survey data.
   As such at several locations through the deposit the company has twinned historical holes to confirm results and location.
- The close spaced (possibly RC) grade control drilling and mining pit floor exposure has allowed a detailed re-evaluation of the geological controls on mineralisation by EXG. The new interpretation of these controls impacts the estimation of the Mineral Resources and has triggered the need for the re-estimation.
- The result of this revision is that the majority of the mineralisation of economic interest is associated with the (45-50-degree east dipping) ladder veins rather than the previous interpretation of a steeper shear hosted (80 to 90-degree dipping) discontinuous mineralisation.
- The main body of mineralisation extends approximately 300m along strike (NNW-SSE- Azi 335 degrees), an average of 40m across strike (ENE-WSW) and 150m in elevation. Mineralisation is present at surface and is exposed on the historic pit floor and walls from previous mining activities.
- Cube has used 3DM wireframes to constrain the mineralised zone, based on exploration (40m x 20m) and GC (3m x 5m) drill hole data. The wireframes were constructed on a sectional basis using the Surpac software package.
- A low grade "waste" domain was also modelled around the main mineralisation domain to the extents of the available drill data.
- Drill intervals falling within the wireframed estimation domains were coded in the database. Composites of gold assay values were then generated using the Surpac™ "best-fit" method. On the basis of sample size, selectivity assumption (2mE-W x 5mN-S x 2.5mRL) and selected estimation methodology, Cube chose to use 1m downhole composites for this estimation.
- It was evident that the estimation domains contained a limited number
  of outlier gold values, necessitating the use of gold grade top cuts to
  mitigate estimation risk. The highly positively skewed gold
  distributions mean that conventional linear estimation methods, such
  as Ordinary Kriging ("OK") are very likely to produce over-smoothed
  block grade estimates. For this reason, it was decided to undertake
  grade estimation using the non-linear Localised Uniform Conditioning
  ("LUC") method.
- The following criteria were considered when choosing gold grade top cuts:
  - The coherence and stability of the upper tail of the gold grade distribution;
  - Visual inspection of the spatial location of outlier values:
  - Sensitivity tests to gauge the effect of various top cuts on mean gold grade;
- The statistics show that there is not a large reduction in mean grade (approx. -7%) following top cutting of the main mineralisation domain (100). Cube therefore does not consider the use of top cutting to be a material risk with respect to the estimation. The LUC estimates were implemented using the Isatis® software package before being transferred into a Surpac™ block model.
- No consideration has been made of by-products.
- A number of check estimates have been undertaken by Cube as part of the validation steps. Firstly, a comparison of an OK grade control model, based only on the tight 3m x 5m grade control drilling, to an LUC model undertaken using only the exploration drill data was undertaken within the volume covered by GC drilling (now mostly mined out). Results indicate that the LUC model based on only exploration data reconciles to the OK GC model to within 9% of contained metal at 0.6g/t and 0.9g/t Au cut-offs. This comparison gives some indication as to how the LUC method might perform in the remaining in-situ ground, which is largely informed by exploration data only. The final reported LUC model, however, is based on all available data (ie. both exploration and GC drill data).
- Inverse Distance Squared (ID²) check estimates were undertaken for comparison to both the LUC model based on only the resource data, and also for the reported LUC model based on resource and GC data. This comparison demonstrated a good level of agreement between global mean ID² and LUC grades.
- The LUC model was also validated by comparison of the block estimates to the informing composite data:
  - Global mean undeclustered and declustered composite grades were compared to the block estimates. Agreement was good.

		<ul> <li>Semi-local comparison of undeclustered and declustered composite grades to block estimates was undertaken using swath plots by northing and RL slices. Observed agreement was good.</li> <li>Visual 3D comparison of raw assay grades to LUC block estimates revealed good spatial correspondence.</li> <li>Block size for gold grade estimation was chosen in consultation with EXG and with due regard to data spacing, orebody geometry, and practical mining considerations. The estimation panel size used was 6mE-W x 10mN-S x 5mRL. An SMU block size of 2mE-W x 5mN-S x 2.5mRL was chosen (no rotation) for use in the localisation process. This SMU block size corresponds exactly to the current block size for grade control modelling and mining selection at the nearby and currently active Zoroastrian Central pit, conforms to the mining flitch height and is elongated in the approximately the same direction (north-south axis) as the trend of the mineralised envelope at Bulletin South. While the data spacing in areas other than the grade control drilled volume would be considered too wide for such a small block size if conventional linear estimation methods were used, Cube has used the LUC method, which is intended specifically for estimating the grade distribution of smaller blocks.</li> </ul>
Moisture	<ul> <li>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</li> </ul>	Tonnages were estimated on a dry basis.
Cut-off parameters	The basis of the adopted cut-off grade(s) or quality parameters applied.	The selection of mineralised domains has used geological factors such a logged quartz and sulphides in conjunction with a 0.2 to 0.3g/t Au cut off which represents the mineralised shear modelled domains.  The MR has been reported above a 0.6g/t Au cut-off. This has been chosen to allow the application of modifying factors for the estimation of Mineral Reserves which indicate an economic cut-off of 0.9 to 1g/t Au.
Mining factors or assumption	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.	methods, the selection of SMU size was based on the scale of mining equipment currently in use at Zoroastrian Central.
Metallurgic al factors or assumption	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.	of representative material, in their Perth laboratory. Overall cyanide leaching of Au in a 24 hour period was 98.2% with 77% being recovered by gravity.
Environme ntal factors or assumption	• 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.	or disposal of waste or tailing material known to Cube.
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,	consisting of 14 determinations from 2015 EXG DD.

the nature, size and representativeness of These determinations are all on competent rock both within the the samples. mineralised porphyry and surrounding waste mafic rocks. The bulk density for bulk material must On balance Cube believe that there are sufficient data to allow the have been measured by methods that assignment of average values to the MRE block model but not enough adequately account for void spaces (vugs, to allow a spatially representative estimation of bulk density. Cube porosity, etc), moisture and differences have used assumed bulk density values based on the interpreted between rock and alteration zones within weathering surfaces. the deposit. Discuss assumptions for bulk density estimates used in the evaluation process of the different materials. Classificati The basis for the classification of the The geological model and continuity of the mineralised domain is Mineral Resources into varying confidence currently well understood due to the GC drilling and mining exposure of the mineralised lodes. The MRE has been validated by "ground categories. Whether appropriate account has been truth" methods whereby an estimate using only resource exploration taken of all relevant factors (i.e. relative drilling on a 40x20m collar spacing has been compared to a volume estimated by close spaced GC drilling. The results of this comparison confidence in tonnage/grade estimations, confirm that the deeper MR areas estimated outside the grade control reliability of input data, confidence in continuity of geology and metal values, volumes can be expected to be representative of what will be defined quality, quantity and distribution of the for mining by the GC data to within +-10% contained metal. The MRE has been classified as Measured, Indicated and Inferred data). Whether the result appropriately reflects based on the assessment of geological continuity, sample the Competent Person's view of the representivity and spacing and geostatistical summary parameters deposit. derived from the variogram models. Mineralisation classified as Measured is within the primary porphyry domain with an average distance to sample data of 7-10m and an average slope of regression parameter of 0.72. Mineralisation classified as Indicated is within the primary porphyry domain with an average distance to sample data of 12m and an average slope of regression parameter of 0.44. Mineralisation classified as Inferred is within the primary porphyry domain or as isolated veins within the waste domain with an average distance to sample data of 18m and an average slope of regression parameter of 0.26. Inferred material has been included in the waste domain to ensure that during potential mining these smaller occurrences are grade control checked for mineable volumes. The Mineral Resource estimate appropriately reflects the view of the Competent Person Audits or The results of any audits or reviews of No independent audits or reviews have been undertaken on the Dec reviews Mineral Resource estimates. 2016 MRE Discussion Where appropriate a statement of the The conditional simulation methodology of gold grade has been used to quantify potential variations in the grade, tonnes and metal for of relative relative accuracy and confidence level in accuracy/ the Mineral Resource estimate using an portions of the estimate. The simulated outcomes at a 0.5g/t Au cutprocedure confidence approach or off demonstrate that probable variations in grade (+-14.3%), tonnes appropriate by the Competent Person. For (+-5.0%) and metal (+-15.2%) are within reasonable expectations for moderate-to-high confidence. This relative accuracy summarised example, the application of statistical or geostatistical procedures to quantify the relates to a global mineral resource estimate of in-situ grade and relative accuracy of the resource within tonnes within the potential pit design. Note that the conditional stated confidence limits, or, if such an simulation cannot account for additional uncertainty due to sampling approach is not deemed appropriate, a bias, volume or density estimation. qualitative discussion of the factors that could affect the relative accuracy and The relative accuracy of the Mineral Resource estimate is reflected in confidence of the estimate. the reporting of the Mineral Resource in accordance with the The statement should specify whether it guidelines of the 2012 JORC Code. relates to global or local estimates, and, if The block model estimate is a local resource estimate which has block local, state the relevant tonnages, which sizes chosen at the expected "SMU" selection size. 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.

# Section 4 Estimation and Reporting of Ore Reserves (Bulletin South) (Criteria listed in section 1, and where relevant in section 2, also apply to this section.) Criteria JORC Code explanation Commentary

Criteria	JC	ORC Code expla	anation				mmentar						
Mineral Resource estimate for	us	escription of the Mined as a basis for the eserve.							sulting (Cu				
conversion to Ore		Source	Prov	ed Ore Re	eserve Probable Ore Reserve Total				al Ore Reserve				
Reserves		Source	Tonnes (,000t)	Grade (g/t Au)		inces 00oz)	Tonnes (,000t)	Grade (g/t Au)	Ounces (,000oz)	Tonnes (,000t)	Grade (g/t Au)	Ounces (,000oz)	
		Bulletin South	0	0.00		0	250	2.8	23	250	2.8	23	
	Re	ear statement as to esources are repor clusive of, the Ore Re	rted addit		-	The	Ore Reserv	res are cor	ntained with	nin the Mir	neral Reso	urces.	٦
		Source	Prove Tonnes	ed Ore Res		e inces	Probab Tonnes	Grade	Ounces	Tota Tonnes	I Ore Res	erve Ounces	
		Bulletin	(,000t)	(g/t Au)		00oz)	(,000t)	(g/t Au)	(,000oz)	(,000t)	(g/t Au)	(,000oz)	-
		South <sup>1</sup>	0	0.00		0	250	2.8	23	250	2.8	23	
							, some differe						
Site visits	Vis If I	omment on any site vompetent Person and sits. no site visits have be ny this is the case	the outco	me of those	Э		Competent Project as				ks at the K	(algoorlie	North
Study status	en Or Th Fe co Su wii ted viá	ne type and level of able Mineral Resource Reserves. The Code requires that passibility Study level of anyort Mineral Resourch studies will have determined a chnically achievable able, and that materially been considered.	rces to be t a study to has been u rces to Ore been carrie mine plan and econo	converted at least Pi ndertaken Reserves d out and that is mically	to re- to	the Cen The profi	e feasibility experience tral open pit mining met les used in erience and higher level	from min thods, des preparing known cos	ing currentign layouts these Mirsts. Estima	atly in pro s, producti neral Rese tion of Res	gress at t on perform erve estima	the Zoroas nance and ates reflec	strian d cost ct this
Cut-off parameters		ne basis of the cut- rameters applied.	-off grade(	's) or qua	lity	curre haul of m Ope	off grades of the control of the con	of the Zoles to the notes are backets.	roastrian ( nill and mir sed on a n	Central opening paramominal 0.8	en pit mod neters relev g/t Au lowe	dified to revant to the er cut-off g	reflect e style grade.
Mining factors or assumptions	The search of th	the Pre-Feasibility Invert the Mineral Peserve (i.e. either Pre-Feasibility Invert the Mineral Peserve (i.e. either Propriate factors be Predicted mining methor Predicted mining mini	or Feasible Resource r by ap py optimis design).  I appropria od(s) and ssociated of sss, etc.  Peregarding opes, stope production	to an Coplication or teness of to other minimizes geotechnical geotechnical drilling.	to Ore of by he ing res	optiribases Zorco Starra sche Resirate Geo The Utilis truck bend Rom Mini Zorco belo Ope Zorco matereviere reviere control of the Control of	assumption mize Minera ed on the pastrian Cerudard planreduling using erves. final calculativa Surpac <sup>T</sup> selected me open pit is sing conventous for ore arches and editon pastrian Cerum 0.8g/t will no pit designes that he rock pewed by a pociates.	al Resource current in trail open in trail o	es to Ore mining op oit. It isses of punit cost ore Rese suite. Open cut no ined using aulic excavalulage. Open 2.5m flood from the opplied to provided from the opplied for every nigles, bereience and The pit de	Reserves erations to bit optimizes were a rve figures mining.  I selective vators for re will be exitted and be exitted treatment and be modified vators parare	within Bul being und cation, mir pplied in s was performance drill and removal of drilled and d delivered s experience grade ore tracet prior satters well with geote- meters hav	lletin Soutilertaken ar ne design compiling ormed using blast metiwaste rocal blasted of directly to the ce of mini. Low grader to site clore based chnical ingrerecently the recently the	th are at eh an and g Ore ang the chods, sk and on 5m to the ing at the ore obsure. Upon put to been and to be the chods are obsure.

Resource model used for pit and stope The Mineral Resource model used is the one described in this Table 1. optimisation (if appropriate). Section 3. The mining dilution factors used. Mining dilution was allocated by using minimum mining blocks dimensions The mining recovery factors used. around the mineralised shapes. Any minimum mining widths used. Where possible and appropriate a minimum pre-goodbye cut mining width of 20m was applied as a constraint to the design. A minimum mining width The manner in which Inferred Mineral Resources are utilised in mining studies and of 12m has been used. the sensitivity of the outcome to their inclusion. Inferred Mineral Resources were not used in the Ore Reserve work. The infrastructure requirements of the selected No further infrastructure is required with this open pit mining mining methods. Metallurgic The metallurgical process proposed and the The planned treatment of Bulletin South Open Pit ore is at the Paddington processing facility, a conventional 3.5Mtpa CIL plant suitable for regional al factors appropriateness of that process to the style of or mineralisation. mineralisation, consisting of primary crusher, SAG mill, pebble crusher, assumptio secondary ball mill, gravity recovery, CIL (carbon-in-leach), carbon Whether the metallurgical process is wellelution, electrowinning and smelting to produce gold doré. ns tested technology or novel in nature. The planned process is a conventional, robust, well tested technology, The nature, amount and representativeness of and is currently being used for ore from the Zoroastrian Central open pit. metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied. Any assumptions or allowances made for deleterious elements. The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole. For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications? Environme The status of studies of potential environmental Environmental approvals have been obtained for the mining of the Bulletin ntal impacts of the mining and processing South open pit from all necessary government authorities along with operation. Details of waste mining approval to extract the ore using open pit mining methods. characterisation and the consideration of Previous works completed, as part of the (granted) approval process potential sites, status of design options include flora and fauna surveys, existing land disturbance surveys, waste considered and, where applicable, the status of rock sampling, soil analysis, hydrology, Aboriginal heritage surveys and approvals for process residue storage and database reviews. waste dumps should be reported. Waste Rock Landforms are conservatively designed to take into consideration high proportions of oxide waste and will be rehabilitated as per the license requirements. Infrastruct The existence of appropriate infrastructure: The Bulletin South Pit is located in the southwest of the Kalgoorlie North availability of land for plant development, Gold Project. Previous mining of Bulletin South during 1993 to 1994 ure power, water, transportation (particularly for produced an estimated 66,562 tonnes @ 2.76g/t Au for 5,900 recovered bulk commodities), labour, accommodation; or ounces of gold within a pit approximately 170m long by 55m deep. the ease with which the infrastructure can be Prior cleared land, dumps, open pits and underground workings exist provided, or accessed. throughout the area. The mine site is situated close to the Goldfield-Menzies Highway, meaning power, water, and site access have been easily obtained and are in use at the mining operations. The bulk of the site labour is be sourced from, and commute between, the City of Kalgoorlie-Boulder and the mine site via this highway. Costs The derivation of, or assumptions made, No additional equipment capital costs are required with open pit mining regarding projected capital costs in the study. carried out by mining contractors The methodology used to estimate operating Known established operating costs have been used in determining Reserves with allowances for changing activity levels costs. Allowances made for the content of deleterious No deleterious elements require an allowance. No Potentially Acid elements Forming (PAF) waste material has been detected. The source of exchange rates used in the N/A, all costs are in Australian Dollars. Derivation of transportation charges. Ore haulage transportation charges were applied. The charges reflect quoted haulage costs from the Bulletin South Pit to the Paddington Mill supplied by the current haulage contractor. Treatment and refining charges are based on current costs associated The basis for forecasting or source of treatment and refining charges, penalties for failure to with the treatment of Kalgoorlie North Gold Project ores at the Paddington Mill as supplied by Norton Gold Fields. meet specification, etc. The allowances made for royalties payable, Allowances were made for WA State government royalties; 2.5% of the both Government and private. sale price was reduced as a 'sell cost' upfront during the optimisation works. Revenue The derivation of, or assumptions made The head grade is derived from each individual Mineral Resource and factors regarding revenue factors including head applied Modifying Factors as described above. grade, metal or commodity price(s) exchange An assumed base gold price of A\$1,600 per gold ounce was applied to rates, transportation and treatment charges, the final study. No doré transport or refining costs were applied. penalties, net smelter returns, etc. The derivation of assumptions made of metal No revenue has been allocated to any possible economically beneficial or commodity price(s), for the principal metals, by-products. minerals and co-products. The demand, supply and stock situation for the Market Gold is a precious metal and demand is assumed to be steady and rising assessmen particular commodity, consumption trends and in the medium to longer term worldwide but the gold price is variable and factors likely to affect supply and demand into affected by many factors – as a safe-haven reflecting geopolitical factors, the future. demand for jewellery and as part of many countries' currency reserves

Economic	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.  The inputs to the economic analysis to produce	and thus subject to fluctuations, due principally to market sentiment.  Under the treatment agreement with Norton Gold Fields, the recovered gold content of each ore batch is determined from detailed sampling and analytical procedures and fine ounces of gold are transferred into GPM's gold account at the Perth Mint by Norton once the gold content is finalised and agreed.  The gold sell price used for the Bulletin South open pit works was A\$1,600/oz.  Economic analysis was carried out using established site costs for mining,
	the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.  NPV ranges and sensitivity to variations in the significant assumptions and inputs.	geology, processing and administration.  Sensitivities to existing unit costs, were carried out to establish the viability of the Bulletin South Ore Reserves.
Social	The status of agreements with key stakeholders and matters leading to social licence to operate.	All key stakeholder agreements, including Native Title and Pastoral Lease holder agreements are in place. The Company has close working relationships with communities and key stakeholders surrounding the Project.
Other Classificati on	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 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	Barring standard economic and/or labour force fluctuations or other unforeseen acts there are no known significant impacts that could affect the Ore Reserves specific to the area.  There are no known significant naturally occurring risks to the project.  Under the terms of the Ore Treatment Agreement between Paddington Gold Pty Ltd (a wholly owned subsidiary of Norton Gold Fields Limited) and GPM Resources Pty Ltd (GPM) (a wholly owned subsidiary of Excelsior Gold Limited), dated 13 October 2015, Norton agrees to process a minimum of 500,000 tonnes of ore per annum from the Kalgoorlie North Gold Project over a period of up to 10 years. The Bulletin South Pit falls under this agreement. Excelsior Gold will be responsible for all of the mining operations whilst Norton will be responsible for haulage and milling of the ore.  All current deposits are located on granted Mining Leases and all necessary government approvals are in place.  Measured Mineral Resources have been converted to Probable Ore Reserves. Indicated Mineral Resources have been converted to Probable Ore Reserves.  The estimated Bulletin South Open Pit Ore Reserves are, in the opinion of the Competent Person, appropriate for this style of deposit.  Probable Ore Reserves were derived from Measured and Indicated
Audits or	Resources (if any).  The results of any audits or reviews of Ore	Mineral Resources, they comprise approximately 100% of the Ore Reserve ounces.  Additional ore to be mined following further drilling within the pit is expected from within Inferred Resources but is not included within the JORC Reserve estimate  The Ore Reserve estimate was completed by Excelsior Gold Limited
reviews	Reserve estimates.	based on Mineral Resource estimation and open pit optimisation studies conducted by Cube Consulting with internal checks completed. No external audit of the reserve estimate was completed.
Discussion of relative accuracy/ confidence	Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which 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.  Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material	The Ore Reserve is considered robust given the existing mining, plant and equipment currently in use on site, the established unit costs available and the personnel team on site as well as in Perth are now familiar with mining and processing the ore whose characteristics have been established.  The relative accuracy of the estimate is reflected in the reporting of the Ore Reserves as per the guidelines re: modifying factors, study levels and Competent Persons contained in the JORC 2012 Code.  The Ore Reserves are considered robust on a local scale for material classified as Probable  Sensitivity studies were carried out. Standard linear deviations were observed. The project is most susceptible to fluctuations in gold price.

impact on Ore Reserve viability, or for which
there are remaining areas of uncertainty at the
current study stage.
It is recognised that this may not be possible or
appropriate in all circumstances. These
statements of relative accuracy and confidence
of the estimate should be compared with
production data, where available.