

ASX ANNOUCEMENT 19 December 2019

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UPDATE ON EXPLORATION PROGRAM AT THE COX'S FIND GOLD PROJECT DUKETON BELT WESTERN AUSTRALIA

Great Southern Mining (ASX: GSN or the "Company") is pleased to advise further updates on the Company's maiden exploration program at the Cox's Find Gold Project (the Project).

HIGHLIGHTS:

- High grade zones have been identified in the exceptional drilling results and indicates that material mineralisation in the main quartz lode remains remnant to the historic workings;
- Reverse Circulation (RC) drilling program comprising 17 drill holes for 3,500m has been completed with assay results periodically being received from the laboratory;
- Structural mapping combined with the acquisition of high-resolution magnetic data and the current drilling program has been used to define an updated structural model for the deposit;
- The drilling results indicate that the deposit is open down plunge with planning underway to test with extensional drilling;
- GSN also a successful applicant for the co-funded drill program with the Department of Mining, Industry, Regulation and Safety (DMIRS) for up to \$150,000.

The preliminary RC drill program was focused on shallow high-grade gold mineralisation adjacent to the historic underground developments. Drill targets were identified from the integration and modelling of historic mining and exploration data from the past 80 years.

The results from the Company's maiden drilling program has enabled the technical team to update the geological model with definition of the high-grade mineralization trends and is seen as the first stage in unlocking the true potential of the Cox's Find Gold Project and creating value for shareholders.

Importantly, the grade and width of the intersections in the drill holes confirms that the mineralisation style and grade is consistent with what was mined by Western Mining Corporation between 1936 and 1942.

Commenting on the potential at Cox's Find and the exploration results from the maiden drilling program, GSN's Executive Chairman John Terpu said:

"The Company is extremely pleased with the outcomes from our maiden drilling program at Cox's Find. We have a far better understanding of the deposit, its geology and the existence of the remnant ore. We are progressively delineating some exciting structural and regional targets to test as well as examining some near-term development scenarios around potential monetization of the remnant mineralization.

GSN is the first company to explore the Project systematically, using modern exploration methods, in nearly three decades. The results demonstrate that the Project is one of the highest, if not the highest, grading deposits along the immediate strike. Following our disciplined and measured approach to the exploration program we will now interpret the significant amount of data acquired and prioritise targets for our planned extensional drilling program in early 2020.



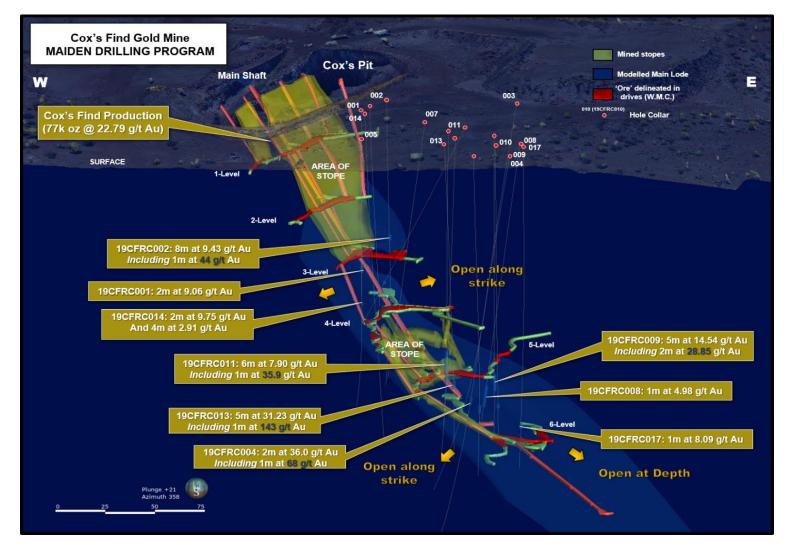


Figure 1: Cox's Find Project 3D Geological Model modelled high grade orebody, mine layout and significant intersections

BACKGROUND TO THE PROJECT

The Cox's Find Gold Project (Cox's Find) is a shear hosted Archaean orogenic gold deposit located in the Duketon Greenstone Belt, located along strike from, and within 12kms of, Regis multi-million-ounce Garden Well. The mine was operated by Western Mining Corporation's (WMC) for a short period between 1936 and 1942 only ceasing due to lack of personnel given the second world war. The mine produced approximately 76,000 ounces of gold at a reported head grade of ~23 g/t from a narrow vein stope operation during its short operation.

CURRENT PROGRAM RESULTS

The preliminary RC drilling program comprising 17 RC drill holes has now been completed. The program has been designed to define a geological model for the deposit through targeting the lode structure within the underground mining area. Drilling to date has successfully evaluated, and proven, the remnant high-grade mineralisation present in the unmined areas between and below stoped panels (Figure 2).

RC drill results into the unmined panel between 3-level and 4-level and also the unmined panel below 5-level have returned multiple high-grade hits **up to 143 g/t gold** (refer announcement of 4 December 2019) confirming that significant remnant mineralization is present at Cox's Find (Figure 1).



A high-grade zone has been defined in the exceptional drilling results, including:

19CFRC002 - **8m at 9.43 g/t** gold from 73m, including **1m at 44 g/t** from 140m

19CFRC004 - **2m at 36 g/t** gold from 146m, including **1m at 68 g/t** from 146m.

19CFRC009 - **5m at 14.54 g/t** gold from 140m, including **2m at 28.85 g/t** from 140m.

19CFRC011 - **6m at 7.90 g/t** gold from 132m, including **1m at 35.9 g/t** from 134m.

19CFRC013 - 5m at 31.23 g/t gold from 134m, including 1m at 143.0 g/t gold from 135m.

19CFRC014 - 2m @ 9.75 g/t gold from 88m,

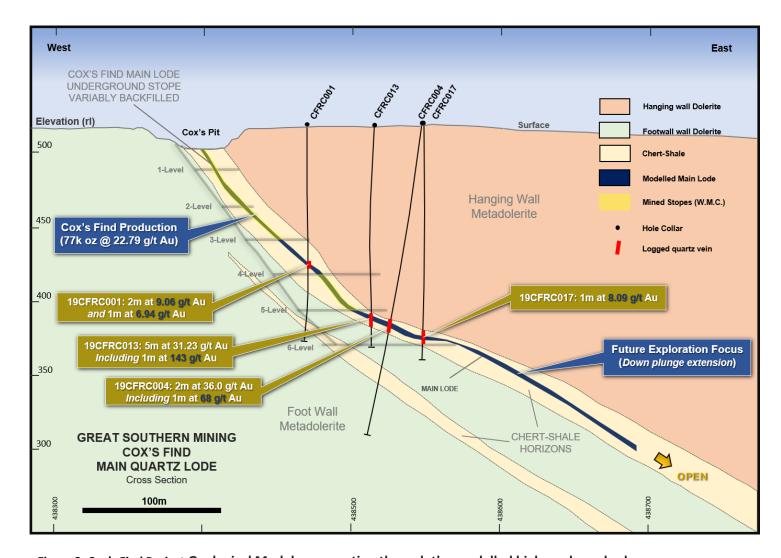


Figure 2: Cox's Find Project Geological Model cross section through the modelled high grade orebody.

IMPROVED GEOLOGICAL MODELLING

Mineralisation is characterised by ultra high-grade mineralised shoots localised within drag fold hinges with evidence for pinching and swelling within the structure, typical of vein deposits. The key horizon developed is a distinct 1-3m thick stratbound quartz lode developed at the footwall-hanging wall contact between interflow sediments (Cherts + shales) and a mafic volcanic unit (Figure 2).

Importantly, the high-grade shoots show excellent continuity down plunge and are consistent with the areas of stoping and subsequent historical production records in terms of width and grade reported from the development of the underground workings by W.M.C.



Along with the significant remnant mineralisation remaining, the mineralisation is structurally controlled through the complex interplay between various lithological and structural controls. Newly-developed deposit model concepts have led the Company to conclude that mineralisation remains open, untested extensionally and down plunge and along strike with multiple structural targets to test.

GSN has commenced planning to further test the down plunge extension with drilling (Figure 2), with the intention of gaining enough information in the next campaign to define an initial Resource and determine preferable options to exploit the remnant deposit.

The encouraging high grade and continuity of the mineralization demonstrates the potential of the Project with extensions of the open-pit and underground workings being examined as possible development options.

External consultants have been engaged to provide conceptual development scenarios on the revised geological model to give early sighter indications of how future mine extensions might look with respect to the existing mine development and provide guidance on the merits of the current exploration results.

ONGOING EXPLORATION TARGETING

In conjunction with the current drilling, the Company has commenced a brownfields targeting review of the Cox's Find Mine area. Technical consultants have been engaged to assist the Great Southern Mining technical team to complete this work in December 2019. This work will involve detailed geological mapping and review of recently acquired high-resolution magnetic data with a view to confirming structural concepts and evaluating the potential extension off the current workings.

SUCCESSFUL APPLIACTION FOR CO-FUNDED DRILLLING

The Company is also pleased to announce that it has been advised that the its application to participate in Round 20 of the Western Australian Governments Exploration Incentive Scheme's (EIS) Co-funded Exploration Drilling Program has been approved for co-funding of up to \$150,000 at the Cox's Find Gold Project.

The funding will be used to test deep stratigaphic and structural targets generated as part of the current drill program.



Table 1: Significant drill intercepts (>1.0 ppm)

Hole ID	FROM	то	INTERVAL (m)	Au (ppm)	Lode
19CFRC001	75	76	1	0.59	
	76	78	2	9.06	Main Lode
	82	83	1	3.53	
	85	88	3	1.37	
	95	96	1	6.94	Footwall Lode
19CFRC002	73	81	8	9.43	
including	74	75	1	44.0	Main Lode
19CFRC003			No significant F	Results	•
19CFRC004	121	122	1	1.1	
	141	142	1	1.11	
	146	148	2	36.23	Main Lode
including	146	147	1	68.2	
19CFRC005	78	79	1	1.02	
	80	82	2	1.11	
19CFRC006	111	112	1	1.05	
	112	113	1	Open Void	Main Lode
	113	114	1	2.61	
	115	116	1	3.36	
	119	120	1	1.31	
19CFRC007	108	110	2	2.37	
	114	115	1	1.35	
40050000	116	118	2	2.19	
19CFRC008	132	134	2	2.03	Hanging Wall Lode
	143	144	1	2.03	Main Lada
10050000	151 131	152 133	2	4.98 2.84	Main Lode
19CFRC009	134	135	1	1.81	Hanging Wall Lode
					Haligilig Wall Loue
	140	145	5	14.54	
including	140	142	2	28.85	Main Lode
	148	149	1	1.00	
	157	158	1	1.37	
100500010	159	161	2	3.15	
19CFRC010	139	140	1	1.10	
	149 156	151 157	2	1.43 1.04	
	153	156	3	Open Void	Main Lode
19CFRC011	41	42	1	1.46	Iviaiii Loue
13CFRC011	128	131	3	3.12	
	132	138	6	7.90	
including	134	135	1	35.9	Main Lode
	151	152	1	5.16	
	153	155	2	1.79	
19CFRC012	89	92	3	1.97	
	93	97	4	3.80	Main Lode
19CFRC013	126	127	1	2.34	
	128	129	1	1.03	
	134	139	5	31.23	
including	135	136	1	143.0	Main Lode
19CFRC014	88	90	2	9.75	
including	89	90	1	11.6	
	93	94	1	2.76	
	94	97	3	Open Void	Main Lode
100500015	97	101	4	2.91	
19CFRC015	136	138	2	1.22	
19CFRC016	141 149	142	1 1	1.47 1.78	
19CFRC017	156	150 157	1	8.09	Main Lodo
	130	157	1	0.03	Main Lode



ABOUT GREAT SOUTHERN MINING LIMITED

Great Southern Mining Limited is a Western Australian based Company listed on the ASX. Its aim is to become a leading gold exploration Company in Australia. With significant land holdings in the world-renowned gold districts of Laverton in Western Australia and the Mt Carlton Region of North Queensland, all projects are located within 25km of operating gold mills and major operations.

The Company's focus is on creating and capturing shareholder wealth through efficient exploration programs and strategic acquisitions of projects that complement the Company's existing portfolio of quality assets.

For further information regarding Great Southern Mining Ltd please visit the ASX platform (ASX: GSN) or the Company's website www.qsml.com.au.

Competent Person's Statement

The information in this report that relates to Exploration Results on M38/578, M38/170 and M38/740 is based on information compiled by Dr Bryce Healy, a Competent Person who is a Member of the Australian Institute of Geoscientists. Dr Healy is employed by Noventum Group Pty Ltd (ACN 624 875 323) and has been engaged by Great Southern Mining Limited as Head of Exploration. Dr Healy has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Dr Healy consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Forward Looking Statements

Forward-looking statements are only predictions and are not guaranteed. They are subject to known and unknown risks, uncertainties and assumptions, some of which are outside the control of the Company. Past performance is not necessarily a guide to future performance and no representation or warranty is made as to the likelihood of achievement or reasonableness of any forward-looking statements or other forecast. The occurrence of events in the future are subject to risks, uncertainties and other factors that may cause the Company's actual results, performance or achievements to differ from those referred to in this announcement. Given these uncertainties, recipients are cautioned not to place reliance on forward looking statements. Any forward-looking statements in this announcement speak only at the date of issue of this announcement. Subject to any continuing obligations under applicable law and the ASX Listing Rules, the Company, its directors, officers, employees and agents do not give any assurance or guarantee that the occurrence of the events referred to in this announcement will occur as contemplated.

Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	 Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information. 	All holes were sampled in part. 1 meter samples were routinely taken down the length of each hole. Sampling protocols: RC cuttings were collected over 1m intervals via cyclone into plastic bags (5-10 kg of sample material): For RC assay sampling, 1-2kg of sample was split from each 1 meter sample length via a cone splitter. The cyclone was manually cleaned at the completion of each rod and thoroughly cleaned at the completion of each hole. The 1-2kg samples were pulverised to produce 50g charge for fire assay. Samples were collected and submitted for analysis at ALS Laboratories in Perth. Field QC procedures involved the use of Certified Reference Materials (CRM's) as assay standards (2) and blanks (1). Samples were crushed (>70% <6 micron), pulverised (PUL-23) and split to produce a homogeneous sub-sample for geochemical analysis. The samples were assayed using Fire assay (Au-AA26) for Au (0.01).
Drilling techniques	 Drill type (eg core, reverse circulation, openhole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc). 	The drilling operation was undertaken by experienced drilling contractor PXD Drilling. Reverse Circulation (RC) drilling was conducted with a modern truck mounted Schramm. RC samples were obtained utilizing high pressure and high volume compressed air using RC 5¾" diameter face bit. Holes orientations were surveyed using a Reflex-gyrosprint-IQ continuously down hole.
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. 	RC sample recoveries of less than approximately 80% are noted in the geological/sampling log with a visual estimate of the actual recovery. Very few samples were recorded with recoveries of less than 80%. Wet RC samples are recorded in logs.
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 	All drilling was logged at the rig by an experienced geologist. Lithology, veining, mineralisation, alteration, weathering

Criteria	JORC Code explanation	Commentary
	metallurgical studies. • Whether logging is qualitative or quantitative in nature. Gaza for costory, channel, etc.)	and oxidation were recorded; Evidence for structural features are noted.
	 in nature. Core (or costean, channel, etc) photography. The total length and percentage of the relevant intersections logged. 	RC logging is qualitative and descriptive in nature and representative portions of samples were retained in chip trays for future reference.
		All data was recorded/logged in the field in geosoft MX deposit and subsequently transferred to the electronic drillhole database.
Sub-sampling techniques and sample	 If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, 	RC samples (nominal 5-10 kg weight) were split through a cyclone splitter, and a 2-3 kg sub-sample submitted as the primary sample for assay.
preparation	 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. 	Field duplicates were taken every 40 samples as a control on sample representivity.
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 	3500m of RC interval were sampled (on 1m sample intervals) and 3675 samples (including blanks and standards) were collected and submitted for analysis at ALS Laboratories in Perth. Field QC procedures involved the use of Certified
	parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.	Reference Materials (CRM's) as assay standards (2), along with blanks (1). The results of this analysis have been reviewed and deemed acceptable.
	 Nature of quality control procedures adopted (e.g., standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and 	The fire assay gold analyses undertaken are considered a total assay method and is an appropriate assay method for the target-style mineralisation.
	precision have been established.	Samples were analysed by 50g fire assay using (au-AA26). Standard lab QC was also implemented as part of the
		geochemical testing protocol.
		No geophysical tools have been applied to the samples, or down hole, at this stage.
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 	Field QC procedures involved the use of Certified Reference Materials (CRM's) as assay standards (2) and blanks (1). Field duplicates were collected for future analysis.
	procedures, data verification, data storage (physical and electronic) protocols.	

Criteria	JORC Code explanation	Commentary
	Discuss any adjustment to assay data.	
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 data location points referred to in this report are in: • Datum: Geodetic Datum of Australia 94 (GDA94) Projection: Map Grid of Australia (MGA) • Zone: Zone 51 All collar surveys were completed using handheld GPS (+/-
	Quanty and ducquacy of topograpme control.	5m accuracy).
		Downhole surveys were routinely carried out, generally on continuous measure, conducted using Reflex-gyro-sprint-IQ system.
		The 3D location of individual samples is considered to be adequately established and in line with industry standards for this stage of exploration.
Data spacing	Data spacing for reporting of Exploration	The holes were planned to test the continuity of
and distribution	 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. 	mineralisation along a broadly north-north-east striking and moderately east-dipping quartz reef, with a hypothesised south-eastrly plunge. The holes were oriented vertically or inclined and spaced at broadly 20m spacing around the historic areas of extraction of the reef with the aim of confirming the exploration target. Given the detailed understanding of the target reef from underground development the historical drill spacing is considered to be at a spacing inadequate as a first pass to define the continuity of mineralization.
		Sampling of RC cuttings has been undertaken at 1m intervals, appropriate with narrow high-grade mineralisation.
		Diamond drilling is required to accurately understand the thickness and grade of the high grade reef.
		No sampling compositing has been applied within key mineralised intervals.
Orientation of data in relation to	 Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering 	The drilling is completed orthogonal to the interpreted strike of the target mineralization zone.
geological structure	 the deposit type. If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material. 	No drilling orientation and/or sampling bias has been recognized at this time.
Sample security	The measures taken to ensure sample security.	Samples were shipped directly from site to a secure stored site in Perth to undergo evaluation.
		Select samples for geochemical analysis were transported from site to ALS in Perth (within 2 days of collection) where upon receipt the samples are officially checked in and appropriate chain of custody documentation received.

Criteria	JORC Code explanation	Commentary
		All sample information is kept in paper and digital form. Digital data is backed up onto the Company server regularly and then externally backed up daily.
Audits or reviews	 The results of any audits or reviews of sampling techniques and data. 	No audits or reviews have been conducted.

Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	 Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area. 	The Cox's Find Mine is surrounded by three (3) Mining Leases covering 290 ha, namely M38/170, M38/578 and M38/740.
Exploration done by other parties	 Acknowledgment and appraisal of exploration by other parties. 	Relevant exploration done by other parties has been outlined in the Company's ASX announcement on 26 August 2019.
Geology	Deposit type, geological setting and style of mineralisation.	Gold mineralisation is 'orogenic-style' and found within vitreous bluish grey to black vughy quartz which occurs as strata bound reef in interflow sediments between two mafic volcanic units. This dark quartz is cut by a network of white quartz veinlets which also contain gold.
		The oreshoots have developed with a morphology similar to the drag folds.
		A gold mineralisation halo extends away from the oreshoot either vertically, laterally or in both directions. There are also some areas in which there is a sharp contact between the oreshoots and barren quartz where no mineralised halo has developed.
		Secondary gold enrichment has occurred in cross fractures above the water table
		A second form of gold mineralisation is associated with shear zones. The Laverton lineament is a major deformation zone consisting of many individual shear zones which are discontinuous both vertically and laterally and display an interlacing morphology.
Drill hole Information	 A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar 	All the drill holes reported in this report are summarized in Table A-1.
,		Easting and northing are given in MGA94 – Zone 51 coordinates.
		RL is AHD
		Dip is the inclination of the hole from the horizontal. Azimuth is reported in magnetic degrees as the direction

Criteria	JORC Code explanation	Commentary
	 dip and azimuth of the hole down hole length and interception depth 	the hole is drilled. MGA94 and magnetic degrees vary by <10 in the project area.
	 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 	Down hole length is the distance measured along the drill hole trace. Intersection length is the thickness of an anomalous gold intersection measured along the drill hole trace.
	Competent Person should clearly explain why this is the case.	Hole length is the distance from the surface to the end of the hole measured along the drill hole trace.
Data aggregation	In reporting Exploration Results, weighting averaging techniques, maximum and/or	No maximum or minimum grades cut-offs have been applied to the historical results.
methods	minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.	Longer lengths of low grade (>0.1 - <0.3 g/t Au) are not reported.
	 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 between mineralisatio n 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 (eg 'down hole length, true width not known'). 	Intercepts are downhole length, true widths are not known at this stage.
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. 	Relevant Diagrams are included in the body of this report.
Balanced reporting	 Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results. 	The results reported diagrammatically are considered a balanced reporting of the understanding of the Exploration results and potential
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 that has been collected is considered meaningful and material to this report.

Criteria	JORC Code explanation	Commentary
Further work	 The nature and scale of planned further work (eg 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 includes a small diamond drilling program to more accurately define the high-grade zones and step-out drilling around and below the reported intersections focusing on extending the higher grade reef intersections to better define the extent of the mineralization at depth and along strike within the prospective horizon.