

ASX ANNOUNCEMENT 17 February 2021

High-grade gold hits of up to 6.37g/t at Mt York Project

Results confirm and extend near-surface gold mineralisation and identify a new gold lode at the Old Faithful deposit; 20,000m follow-up drill program to start in April.

Highlights

- All assays received from drilling completed in December 2020 at the Old Faithful and Mt York deposits, part of the 873,500oz Mt York Gold Project in the Pilbara of WA.
- The drilling, which was designed to test extensions to the known mineralisation and in-fill the existing Mineral Resources, returned significant gold assays including:

Old Faithful:

• KMYC097 5m @ 2.67g/t from 60m, including:

3m @ 3.78g/t from 61m, and

1m @ 6.37g/t from 63m (extension of mineralisation).

8m @ 2.09g/t from 92m (new lode).

• KMYC098 12m @ 1.02g/t from 44m, including:

4m @ 2.13g/t from 44m (extension of mineralisation).

KMYC105 12m @ 1.32g/t from 28m (in-fill drilling).

Mt York:

• KMYC108 4m @ 2.09g/t from 82m (in-fill drilling).

- Mineralisation remains open along strike and down-dip at both deposits.
- 20,000m follow-up RC drilling program planned at the Mt York Project, with earthmoving works starting mid-March and first drilling expected to commence in April.



Figure 1: Reverse Circulation (RC) drill rig at the Mt York Project.



Kairos' Executive Chairman, Terry Topping, said: "We're very encouraged by these positive results, particularly at the Old Faithful deposit where we have identified several mineralised extensions to the known gold mineralisation, as well as a potential new lode. Considering that this was a relatively limited 16-hole program completed as the wet season was closing in, I believe we have generated and excellent return for Kairos shareholders from what was a discrete and focused program.

"Planning is now well underway for a much larger, 20,000 metre RC drilling campaign at the Mount York Project, which is expected to commence in April. This program will continue targeting extensions to the current Resource areas, as well upgrading the existing Resources into higher-confidence categories. We're also planning several holes to test key targets outside of the Resource areas, including Zakanaka, Iron Stirrup South, Gilt Dragon and Green Creek.

"These results will feed into initial Mining Studies for Mount York, which are now underway. Our strategy will be to continue to expand, de-risk and advance the Mt York Project, which is underpinned by a sizeable gold resource, in parallel with high-impact exploration targeting our priority intrusive-related gold prospects."

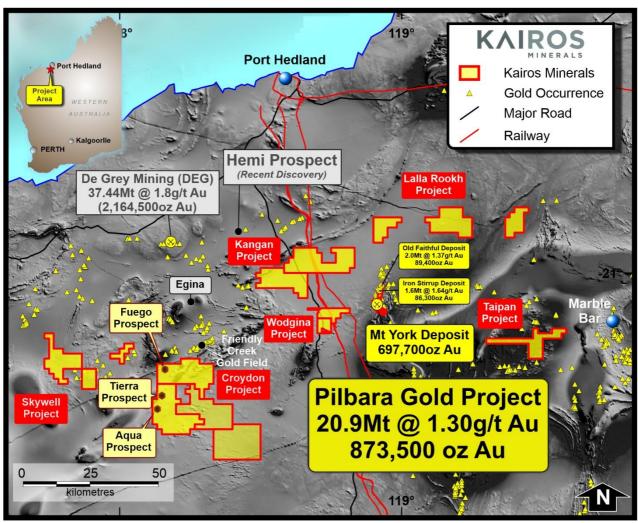


Figure 2: Pilbara Gold Project, WA.

Kairos Minerals Ltd (ASX: KAI; "Kairos" or "the Company") is pleased to advise that recent Reverse Circulation (RC) drilling at its 100%-owned **Pilbara Gold Project in WA** has returned significant gold assay results from the Old Faithful and Mt York deposits, extending the known mineralisation and identifying new gold lodes.

The RC drilling was undertaken in December 2020 and comprised 16 holes for a total of 2,130 metres.



Assay results have been received from 4-metre composite samples from the drill holes (see Table 1), with the single-metre samples to be collected once weather conditions improve in the Pilbara region.

RC Drilling Program

Old Faithful Deposit

Kairos completed 12 RC drill holes for a total of 1,766 metres at the Old Faithful Deposit (see Figure 3 for plan view of completed drill holes).

The drill holes at Old Faithful were designed to extend the known mineralisation and to in-fill the existing Indicated and Inferred Resource (2.027Mt @ 1.37g/t Au for 89.4koz).

Hole KMYC0097 returned three mineralised zones, including two zones that extended known gold lodes and one zone from a new gold lode (see the cross-section in Figure 4).

Significant intersections returned from the Old Faithful deposit are summarised below:

KMYC096 (in-fill drilling):

- 3m @ 2.07g/t Au from 102m down-hole, including:
 - o 1m @ 3.72g/t Au from 102m.

KMYC097 (extended mineralisation and hit a new lode):

- 5m @ 2.67g/t Au from 60m, including:
 - o 3m @ 3.78g/t Au from 61m, and
 - o 1m @ 6.37g/t Au from 63m.
- 8m @ 2.09g/t Au from 92m (new lode).

KMYC098 (extended mineralisation):

- 12m @ 1.02g/t Au from 44m, including:
 - o 4m @ 2.13g/t Au from 44m.

KMYC105 (in-fill drilling and extended mineralisation):

- 12m @ 1.32g/t Au from 28m.
- 19m @ 0.71g/t Au from 124m.

Gold mineralisation at Old Faithful occurs in chlorite-talc to chlorite schists, with sulphides occasionally occurring as laminated crystals along the foliation; and in chert and ferruginous chert layers with associated fine to very fine sulphides, mostly pyrite and some arsenopyrite. In the schists, mineralisation eventually occurs where some structural deformation is observed, with some slickenside surfaces observable. The chert layers present sparse and narrow (1-2m) levels of dark silica, occasionally with iron oxides, where sulphides may be present as very fine to locally fine crystals.

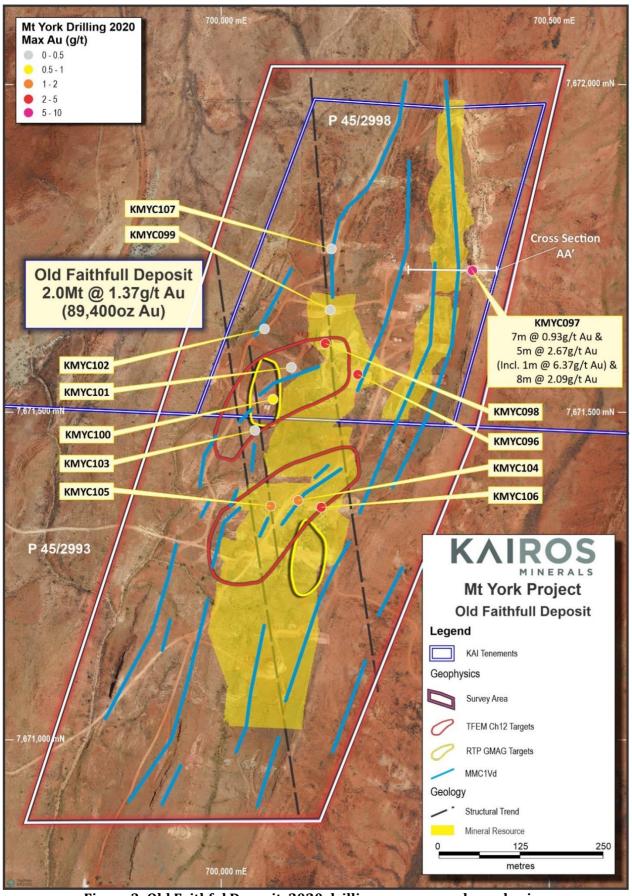
Mount York Deposit

Kairos drilled four RC holes for a total of 364 metres at the Mount York Deposit, with two of the drill holes abandoned before reaching the planned depth. Hole KMYC111 was abandoned at 28m due to deteriorating weather conditions and hole KMYC108 was abandoned at 88m due to drilling issues.

The best intersection was recorded in drill hole **KMYC108** as follows:

• 4m @ 2.09g/t Au from 82m down-hole.





 $Figure \ 3: Old \ Faithful \ Deposit, 2020 \ drilling \ program \ and \ geophysics.$



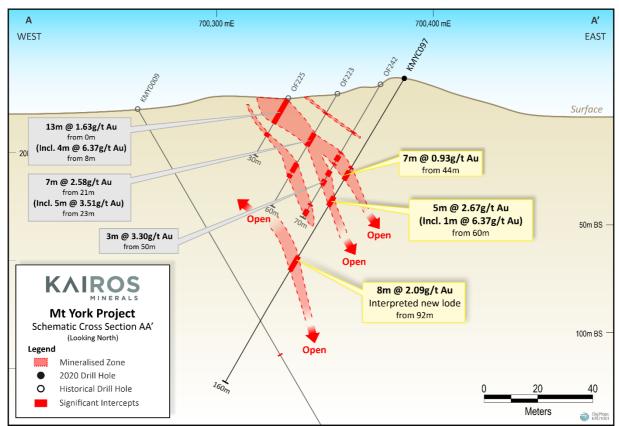


Figure 4: Old Faithful Deposit Drill Section (7,671,720mN section).

2021 Mt York Exploration Program

RC Drilling

Kairos has appointed Mt Magnet Drilling Company to conduct 20,000m of RC drilling at the Mt York Project, with earthmoving works starting mid-March and the first drilling expected to commence in April.

This program is designed to target extensions to the current Resource areas, as well as to upgrade the current Unclassified, Inferred and Indicated Resources into higher-confidence categories. In addition, several holes are being planned to test targets already generated outside the current Resource areas, such as Zakanaka, Iron Stirrup South, Gilt Dragon and Green Creek.

Geophysics and Geochemistry Programs

Additional geophysics and geochemistry surveys are being planned as part of the target generation program for the Mt York Project. Geological mapping will also be conducted to improve the understanding of the gold mineralisation. Consideration is also being given to extending this program to study the potential for lithium mineralisation in pegmatites within the Mt York project area.

Mining Studies

Kairos has commenced Mining Studies for the Mt York Project, with geotechnical diamond drill holes being planned for completion during the current field season. A study of the existing data and available diamond core samples is also underway.



Next Steps

- Collection of single-metre samples from the 2020 Mt York RC drilling program.
- Receipt of soil sampling results from the Skywell Project, followed by interpretation and targeting.
- Mining Studies for the Mt York Project.
- Geochemistry sampling program at the Wodgina Project.
- In-fill soil sampling program at the Kangan Project.
- Heritage survey and air-core drilling at the Kangan Project.
- Heritage survey and air-core drilling at the Skywell Project.
- RC drilling at the Mt York Project.

About Kairos Minerals

Kairos Minerals (ASX: KAI) is a diversified West Australian-based exploration company which is focused on the exploration and development of two key project hubs located in WA's premier mining districts.

The Company's 100%-owned Pilbara Gold-Project has its central "hub" located \sim 100km south of Port Hedland in the world-class Pilgangoora district immediately adjacent to the major lithium-tantalum projects owned by Pilbara Minerals and Altura Mining, which are both currently in production.

Since acquiring the project in early 2016, Kairos has established a JORC Indicated 8.56Mt at 1.3 g/t for 366,000oz and Inferred 12.36Mt at 1.28 g/t for 507,000oz for a Total Mineral Resource of 20.93Mt @ 1.3g/t Au for 873,000oz (ASX announcement, 4 March 2020). The Project encompasses the historical Lynas Find gold project, which produced over 125,000oz of gold between 1994 and 1998.

Kairos's 100%-owned Roe Hills Project, located 120km east of Kalgoorlie in WA's Eastern Goldfields, comprises an extensive tenement portfolio where the Company's recent exploration work has confirmed the potential for significant discoveries of high-grade gold, nickel and cobalt mineralisation. Kairos' tenure adjoins the emerging Lake Roe gold discovery, owned by Breaker Resources (ASX: BRB).

In the Pilbara, Kairos also holds 1,547 square kilometres of tenure (granted and applications) which is highly prospective for gold discoveries.

Kairos has been well recognised for its industry leading technical team that includes its Chairman Terry Topping (Taipan Resources NL, Cauldron Energy Ltd), Technical Director Neil Hutchison (Poseidon Nickel, Jubilee Mines) and consulting specialists.

With the authority of the Board.

For further information, please contact:

Investors:

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Nicholas Read/Paul Armstrong Read Corporate Ph: 08 9388 1474

COMPETENT PERSON STATEMENT:

Competent Person: The information in this report that relates to Exploration Results or Mineral Resources is based on information compiled and reviewed by Mr Terry Topping, who is a Director of Kairos Minerals Ltd and who is also a Member of AusIMM. Mr Topping has sufficient experience that is relevant to the style of mineralisation and type of deposits under consideration and to the activity which they are undertaking to qualify as Competent Persons as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves.' (the JORC Code 2012). Mr Topping has consented to the inclusion in the report of the matters based on their information in the form and context in which it appears.

The Australian Securities Exchange has not reviewed and does not accept responsibility for the accuracy or adequacy of this release.



Collar Location & Orientation							Intersections					
Prospect	Hole	Туре	MGAE	MGAN	RL	Dip	Az	Total Depth (m)	From (m)	To (m)	Length (m)	Au (ppm)
Old Faithful	KMYC096	RC	700210	7671558	222	-60	273	166	85	96	11	0.82
								including	88	92	4	1.43
									102	105	3	2.07
								Including	102	103	1	3.72
									119	123	4	1.15
Old Faithful	KMYC097	RC	700384	7671715	231	-60	273	160	44	51	7	0.93
								including	50	51	1	2.16
									60	65	5	2.67
								including	63	64	1	6.37
									92	100	8	2.09
Old Faithful	KMYC098	RC	700160	7671604	227	-75	273	100	44	56	12	1.02
								Including	44	48	4	2.13
									88	92	4	0.8
Old Faithful	KMYC099	RC	700167	7671655	220	-60	273	110				NSA
Old Faithful	KMYC100	RC	700080	7671519	214	-60	273	184	108	112	4	0.54
Old Faithful	KMYC101	RC	700107	7671568	216	-60	273	132				NSA
Old Faithful	KMYC102	RC	700067	7671626	211	-60	273	130				NSA
Old Faithful	KMYC103	RC	700053	7671472	210	-60	273	178				NSA
Old Faithful	KMYC104	RC	700118	7671364	210	-60	273	160	16	28	12	0.8
									64	68	4	0.68
									84	88	4	1.53
Old Faithful	KMYC105	RC	700077	7671356	210	-90	0	180	28	40	12	1.32
									52	56	4	0.53
									124	143	19	0.71
									172	176	4	0.6
Old Faithful	KMYC106	RC	700154	7671354	209	-60	273	196	32	44	12	0.76
								Including	40	41	1	2.86
									56	60	4	1.08
									152	160	8	0.63
Old Faithful	KMYC107	RC	700170	7671751	225	-60	273	70				NSA
Mt York	KMYC108	RC	698220	7664221	183	-60	0	88	75	77	2	1.45
									82	86	4	2.09
Mt York	KMYC109	RC	698524	7664205	182	-60	0	136	112	119	7	0.94
Mt York	KMYC110	RC	698525	7664235	185	-60	0	112	84	91	7	0.82
Mt York	KMYC111	RC	696960	7665420	180	-60	45	28				NSA

Table 1: Old Faithful and Mt York deposits significant assay results.



Appendix 1 – Kairos Minerals JORC Code, 2012 Edition – Table 1

Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	 Nature and quality of sampling (eg 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. 	 Samples from the RC drilling were split on a 1 metre sample interval at the rig cyclone. Samples from this initial drilling program were collected on four meters composites, with individual single meters samples sampled from intervals where the rig geologist observed mineralisation. Additional individual single meters samples will be sampled where significant results returned from the four meters composites. All samples were delivered by Kairos personnel to RGR Road Haulage in Port Hedland for transport to Intertek Minerals Laboratory in Perth WA for final analysis. All samples were submitted for Four Acid Multi-Element Analysis (4A/OE33) and Fire Assay for Gold (FA/ICP-OES).
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). 	 RC drilling was carried out by Mt Magnet Drilling Pty Ltd using an RCD300-2 rig and a booster compressor. 4-1/2" diameter drill rods and 5-5/8" diameter face sampling hammer. All the holes were surveyed by the Drilling Supervisor/Senior Driller at regular intervals downhole, approximately 10 meters, using a Reflex Sprint Gyroscopic survey instrument.
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 samples were logged in detail at the drill site by supervising geologists and recorded in the Company's database. Overall recoveries were excellent and there were no significant sample recovery problems. Sample depths are continually checked against the rod string depth during the drilling process by the Senior Driller.
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 	 Detailed geological logging of the entirety of each hole by Kairos geologists is carried out on the RC chips and recorded as a qualitative description of colour, lithological type, grain size, structures, minerals, alteration, and various other features. Representative material is sieved and collected as 1m individual samples in number-coded plastic chip trays and stored



All RC holes were surveyed down hole with north seeking gyroscopic survey

		MINERALS
Criteria	JORC Code explanation	Commentary
	relevant intersections logged.	 at the Company's site storage facility or in Perth. Photography of chips is not routinely done. Detailed petrological studies are planned for selected samples to assist in ongoing evaluation.
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. 	 The majority of RC samples were dry. Minor water ingress occurred during rod/bit changes however samples were generally dry once active drilling recommenced. Samples were collected as 1m intervals via on-board cone splitters then laid out on the ground in the case of RC work collected in large numbered plastic bags. Sample quality was ensured by monitoring sample volume and by regularly cleaning the rig cyclone & sample splitters. Sampling sheets were prepared and checked by Kairos' site geologists and field technicians to ensure correct sample representation. QAQC samples were included at the rates 1:50 as certified reference material (standard). Duplicate samples will be resplited and collected for the single meter samples. These samples are analysed with the original sample and provide an assessment of the representativity of the sample.
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 (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established. 	 Kairos RC drilling samples were submitted to Intertek Genalysis in Perth for Four Acid Multi-Element Analysis ICP-OES finish (4A/OE33). Gold analyses are carried out via the FA 25/OE or MS technique being Fire Assay with 25g lead collection fire assay in new pots, analysed by Inductively Coupled Plasma Mass Spectrometry. Fire Assay is industry standard for gold and considered appropriate. Certified Reference Material (CRM or standards) were inserted every 50th sample to assess the assaying accuracy of the external laboratories. No laboratory audits were undertaken
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. 	 Primary data was collected using Excel templates utilizing lookup codes on laptop computers by Senior Supervising Geologists. No twin holes were drilled. All data is received and stored securely in digital format in the Company's database. Final data is rigorously interpreted by Kairos' geoscientific personnel. Kairos collars surveyed by handheld GPS with an accuracy of +/- 5m. All drill hole collars are in MGA94 Zone 50 (GDA94). All RC holes were surveyed down hole



Criteria	JORC Code explanation	Commentary
Location of	Accuracy and quality of surveys used to	 instruments by the Supervising/Senior driller Vertical control is defined by detail aerial survey +/- 25cm. Kairos collars surveyed by handheld GPS
data points	 Accuracy and quanty 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. 	 with an accuracy of +/- 5m All holes are in MGA94 Zone 50 (GDA94). Vertical control is defined by detail aerial survey +/- 25cm.
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. 	 Minimal sample spacing for assay samples is 1m and maximum composite sample spacing is 4m. Hole spacing of Kairos'drilling varies between 20m-80m along section lines spaced between 40m and 200m apart. The data will be eventually used to update the existing Mineral Resource Estimations relevant to the Old Faithful and Mt York gold inventory.
Orientation of data in relation to geological structure	 Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material. 	 At Mt York the targeted gold bearing BIF horizon is steep to shallow dipping. At Old Faithful the targeted gold bearing unit or structural feature is steep to shallow dipping. The majority of RC holes were drilled at -60 deg to provide true width intersections of the targeted horizon. Holes are designed to intersect the geological contacts/targets as close to perpendicular as possible in order to provide approximate true width intercepts at all times.
Sample security	The measures taken to ensure sample security.	 The sample chain of custody is managed by Kairos. All samples were collected in the field at the project site in number coded calico bags/secure labelled polyweave sacks by Kairos' geological and field personnel. All samples were delivered directly to RGR Road Haulage Port Hedland by Kairos personnel prior to being transported to Intertek Laboratory in Perth WA for final analysis.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	No audits have been completed



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. 	 Kairos Minerals owns 100% of the Tenements that define the Mt York Project. The project consists of 12 PL's, P45/2987 – 2998 inclusive. The Project is located on Wallareenya and Strelley Pastoral leases. Kairos is not aware of any existing impediments nor of any potential impediments which may impact ongoing exploration and development activities at the project site.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	 Significant past work has been carried out by other parties including open pit mining of previously defined gold resources. Significant historical gold exploration including surface geochemical sampling, airborne and ground electromagnetic surveys, RAB, AC, RC and DD drilling. This is acknowledged in past ASX announcements.
Geology	Deposit type, geological setting and style of mineralisation.	The targets Archaean aged structurally controlled BIF sulfide replacement and shear zone hosted gold mineralization.
Drill hole Information	 A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole length and interception depth hole length. If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case. 	The coordinates and other attributes of all drill holes relevant to the work being described are included in table 1 within the body of the release.



Criteria	JORC Code explanation	Commentary
Data aggregation methods Relationship between mineralisation	 In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg 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. These relationships are particularly important in the reporting of Exploration 	 Exploration results as reported are length-weighted averages at nominal 0.5g/t Au cut-off grades where applicable. All intercepts reported are measured in down hole metres. All holes are oriented to provide intersections which are orthogonal to the respective targeted horizon.
mineralisation widths and intercept lengths	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').	ortnogonal to the respective targeted nortzon.
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.	Suitable summary plans and a drill hole section have been included in the body of the 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	All relevant results have been reported
Other substanive	 Other exploration data, if meaningful and material, should be reported including 	All relevant and meaningful data has been reported.



Criteria	JORC Code explanation	Commentary
exploration data	(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.	
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. 	 Further mapping, geochemistry, geophysics, rock chip sampling and drilling is planned. Refer to diagrams in the body of the release.