

# **GIDJI DRILLING EXTENDS RUNWAY AND HITS VISIBLE GOLD**

- Diamond drilling intersects extension to Runway porphyry and visible gold
- Phase 2 aircore programme over 50% complete
- "Piccadilly" aircore target upgraded by high grade gold result

**Miramar Resources Limited (ASX:M2R**, "Miramar" or "the Company") is pleased to provide an update on exploration activities at the Company's 80% owned Gidji JV Project ("Gidji") located approximately 15km north of Kalgoorlie, in the Eastern Goldfields of Western Australia.

#### 8-Mile Diamond Drilling

The Company is pleased to advise that diamond drilling at the "8-Mile" target has confirmed the presence of the "Runway Porphyry" 60m north of the nearest diamond hole and intersected visible gold in a quartz vein within the hanging wall sediments.

**GJDD001** and **GJDD002** both intersected an intrusive unit which is interpreted to represent an extension of the unit that hosts the 314,000 ounce "Runway" deposit immediately south of the Gidji project boundary.

Both holes also intersected numerous quartz/sulphide veins in the hanging wall sandstone unit with several specks of visible gold observed in hole **GJDD002** at 124.7m downhole (Figure 3).

Notably, numerous quartz veins with high-grade gold results up to **4m** @ **5.96g/t Au** (including **0.4m** @ **48.6g/t Au**), were recorded within holes drilled by KCGM immediately south of the Project boundary.

A plan and cross section of the two diamond holes is shown in Figures 1 and 2 respectively with examples of mineralisation observed shown in the attached figures.

Core from the first two holes has been logged and submitted for analysis.

A third diamond hole collared 50m to the north of GJDD001 and 002, is currently underway. Table 1 provides summary information for the three diamond holes at 8-Mile.

Miramar's Executive Chairman, Mr Allan Kelly, said the first two holes intersected the same geological sequence seen at Runway, to the south.

*"Importantly, both holes intersected the Runway porphyry at a shallower depth to that seen to the south, lending weight to the idea of a southerly plunge," Mr Kelly said.* 

"The fact that we are seeing visible gold and widespread alteration and sulphide mineralisation in our first two diamond holes has us very excited about the potential of this target," he added.

#### Table 1. 8-Mile diamond drill hole locations

Hole ID	Easting	Northing	RL	Dip	Azimuth	Depth	Comments
GJDD001	352320	6609100	360	-60	054	319.1m	
GJDD002	352319	6609099	360	-50	054	331.0m	
GJDD003	352319	6609149	360	-60	054	241	In progress



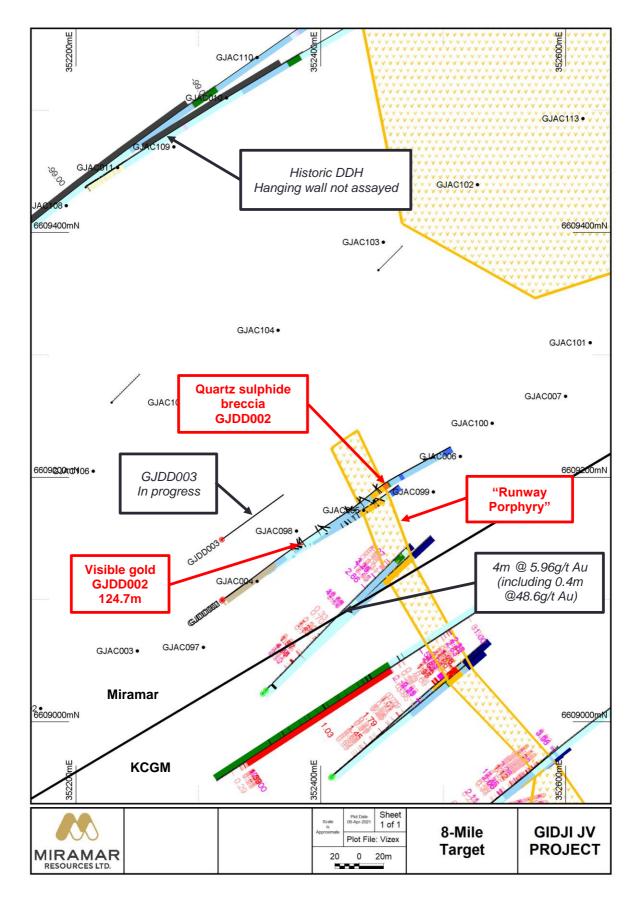
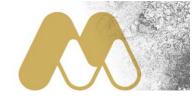
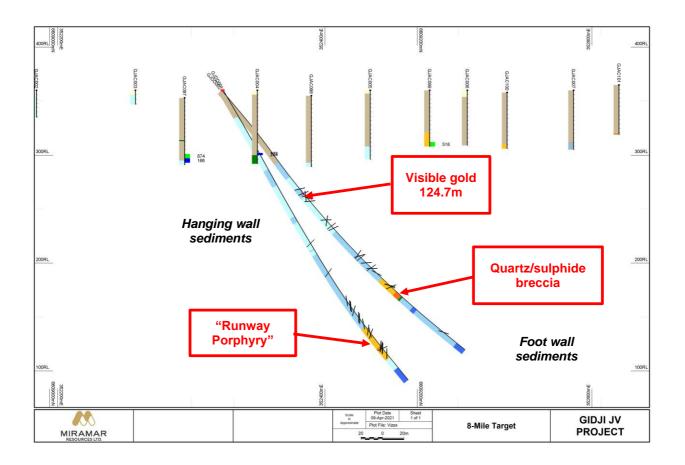


Figure 1. Plan view of "8-Mile" target showing location of new diamond holes.





*Figure 2.* Cross section of GJDD001 and 002 showing geology (blue – sediments, yellow – porphyry, orange – breccia) and quartz veins (black lines).

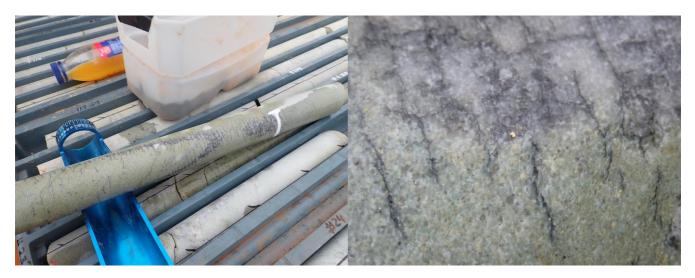


Figure 3. Quartz/sulphide vein with visible gold in altered hanging wall sandstone (GJDD002 – 124.7m).

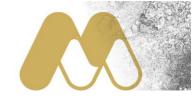




Figure 4. Quartz/sulphide breccia with coarse grained arsenopyrite (GJDD002).



Figure 5. Quartz/sulphide breccia showing chalcopyrite, pyrrhotite and galena (GJDD002).



#### Phase 2 aircore drilling

The Company advises that the phase 2 aircore programme is progressing well, with over 50% of holes completed to date (Figure 6).

Results have already been received for infill holes drilled at the 8-Mile target with the most significant result of **4m @ 1.1g/t Au** in GJAC097 from 52-56m. This hole is located above the hanging wall sandstone which contains the high-grade veins observed in the diamond holes.

Table 2 shows a summary of results received to date.

#### New "Piccadilly" target upgraded

As part of the phase 1 and 2 aircore drilling, the Company routinely collects a bottom of hole sample from each hole for analysis of Au by fire assay and a multi-element suite using a "total digest".

Results from the "EOH" samples for phase 1 have recently been received and have upgraded the newly named "Piccadilly" target, located halfway between 8-Mile and Marylebone.

Hole **GJAC058** previously returned an initial result of 2m @ 0.78g/t Au at the end of hole from the first pass aqua regia digest method. Analysis of the 1m "EOH" sample returned a result of **4.5g/t Au**.

Likewise, hole **GJAC059** initially returned a result of 1m @ 0.13g/t Au at the end of hole from the first pass analysis, whereas analysis of the 1m "EOH" sample returned a result of **0.83g/t Au**.

Examination of historical geophysical data potentially suggests the presence of another intrusive unit, like that seen at Runway/8-Mile.

The Piccadilly target has a strike length of approximately 850m and remains open along strike. The Company is currently infilling the first phase aircore drilling over this target.

Miramar's Executive Chairman, Mr Allan Kelly said it was an exciting time for the Company.

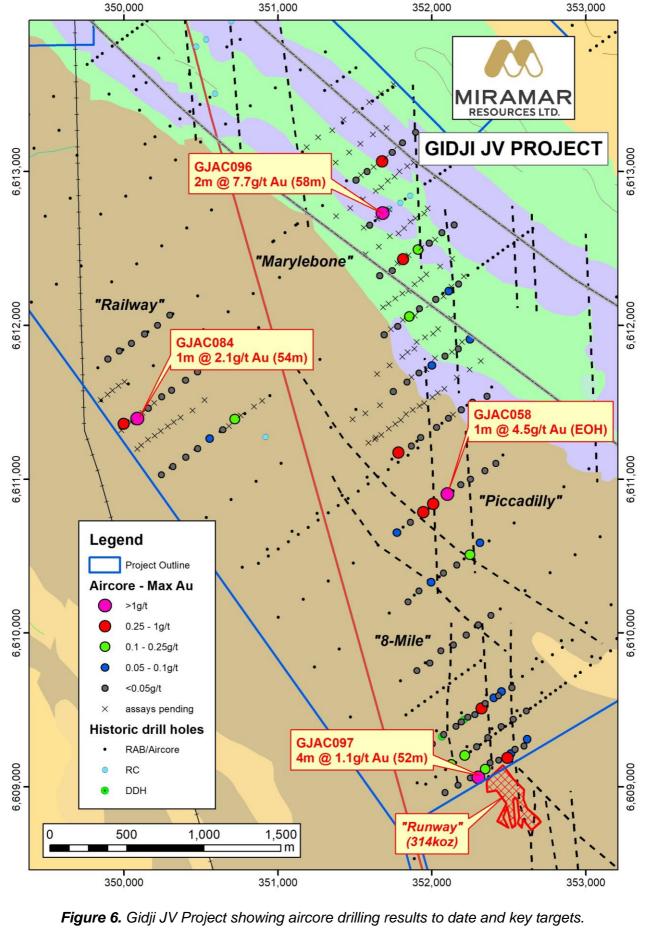
"We look forward to completing these two drill programmes and reporting results from both the diamond and aircore drilling across the various targets," Mr Kelly said.

"We still have about 50% of the project tenements yet to be granted, and these areas hold additional highly prospective targets," Mr Kelly said.

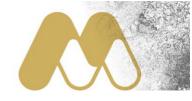
For more information on Miramar Resources Limited, please visit the company's website at <u>www.miramarresources.com.au</u> or contact:

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This announcement has been authorised for release by Mr Allan Kelly, Executive Chairman, on behalf of the Board of Miramar Resources Limited.





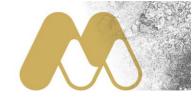


Target	Hole ID	MGA E	MGA N	EOH Depth	From (m)	To (m)	Interval (m)	Au (g/t)	Comments
	GJAC097	352304	6609061	62	52	56	4	1.08	
					56	60	4	0.24	
	GJAC098	352380	6609156	66				NSR	
	GJAC099	352492	6609188	52	48	52	4	0.52	EOH
	GJAC100	352540	6609244	52				NSR	
	GJAC101	352620	6609310	46	44	46	2	0.08	EOH
	GJAC102	352528	6609439	37				NSR	
	GJAC103	352451	6609392	50				NSR	
	GJAC104	352365	6609320	61				NSR	
"8-Mile"	GJAC105	352292	6609261	69				NSR	
	GJAC106	352214	6609205	54	48	52	4	0.17	
					52	54	2	0.25	EOH
	GJAC107	352127	6609146	44	40	44	4	0.16	EOH
	GJAC108	352192	6609422	57				NSR	
	GJAC109	352280	6609470	48				NSR	
	GJAC110	352348	6609543	49				NSR	
	GJAC111	352434	6609593	53				NSR	
	GJAC112	352520	6609646	51				NSR	
	GJAC113	352614	6609493	36				NSR	

#### Table 2. Summary of aircore results from Phase 2 campaign received to date

Note:

- Coordinates in MGA Zone 51S
- All holes drilled vertically (ie -90 towards 000)
- Intervals reported over 0.1g/t (over 0.05g/t for EOH samples)
- "NSR" means no results over 0.1g/t (or 0.05g/t at EOH)



#### ABOUT MIRAMAR RESOURCES LTD

Miramar Resources Limited is a WA-focused mineral exploration company with highly prospective exploration projects in the Eastern Goldfields, Murchison and Gascoyne regions of Western Australia.

Miramar's Board has a track record of successful discovery, development and production within Australia, Africa, and North America, and aims to create shareholder value through the acquisition, exploration and monetisation of high-quality mineral assets.

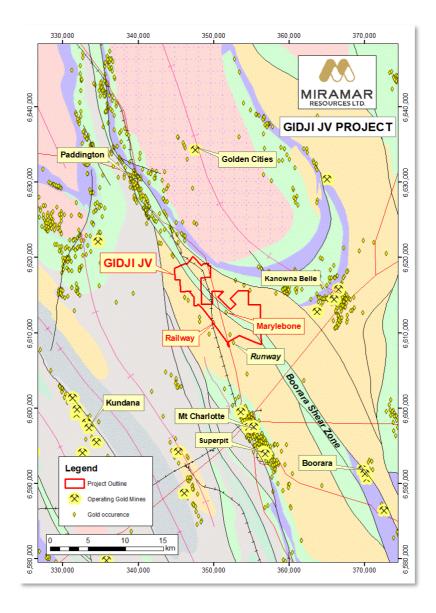
#### ABOUT THE GIDJI JV PROJECT

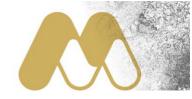
The Gidji JV Project is located approximately 15km north of Kalgoorlie and consists of 3 granted tenements and 14 applications covering a strike length of approximately 15km.

Miramar purchased an 80% interest in the Gidji JV project tenements as part of the recent IPO.

The Project is located with the Boorara Shear Zone, a major mineralised structure that hosts the Paddington and Boorara gold deposits along strike. The Project has apparently been poorly explored despite its location close to several major gold deposits.

Miramar believes the project contains numerous opportunities for the discovery of an economic gold deposit within close proximity to existing mining and processing infrastructure.





#### **COMPETENT PERSON STATEMENT**

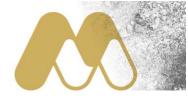
The information in this report that relates to Exploration Targets or Exploration Results is based on information compiled by Allan Kelly, a "Competent Person" who is a Member of The Australian Institute of Geoscientists. Mr Kelly is the Executive Chairman of Miramar Resources Ltd. He is a full-time employee of Miramar Resources Ltd and holds shares and options in the company.

Mr Kelly has sufficient experience that is relevant to the style of mineralisation and type of deposits under consideration and to the activity being undertaken to Qualify as a "Competent Person" as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'.

Mr Kelly consents to the inclusion in this presentation of the matters based on his information and in the form and context in which it appears.

Information on historical exploration results for the Gidji JV, including JORC Table 1 and 2 information, is included in the Miramar Prospectus dated 4 September 2020.

Information on the phase 1 aircore programme, including JORC Table 1 and 2 information, is included in the ASX Announcements released on 1 February 2021 and 11 February 2021.



## JORC 2012 Table 1 – Gidji JV Aircore Drilling

### **Section 1 Sampling Techniques and Data**

(Criteria in this section apply to all succeeding sections.)

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.</li> <li>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.</li> </ul>	<ul> <li>Sampling conducted by scooping material from individual 1 meter sample piles and combining to form 4-meter composite samples</li> </ul>
Drilling techniques	<ul> <li>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).</li> </ul>	<ul> <li>Vertical aircore drilling to "blade refusal"</li> <li>Hammer bit was used occasionally where the rig encountered hard material within the regolith profile that was not interpreted to be "bedrock"</li> </ul>
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>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.</li> </ul>	Not recorded
Logging	<ul> <li>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.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the</li> </ul>	<ul> <li>Samples were dry and wet sieved and logged for colour, weathering, grain size and interpreted geology</li> </ul>



Criteria	JORC Code explanation	Commentary			
Sub- sampling techniques and sample preparation	<ul> <li>relevant intersections logged.</li> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul> <li>4-meter composite samples were compiled from spear sampling of individual 1 meter sample piles</li> <li>Samples were generally dry</li> <li>Field duplicate samples were randomly collected with a frequency of 2 duplicates per 100 samples</li> </ul>			
Quality of assay data and laboratory tests	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> <li>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.</li> </ul>	<ul> <li>Samples were assayed by an aqua-regia digest followed by analysis using ICPMS</li> <li>The analytical method is considered appropriate for this type of drilling</li> <li>QAQC samples were added at a frequency of 4 samples per 100 samples (ie 2 standards/blanks and 2 duplicate samples)</li> </ul>			
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	No verification has been undertaken to date			
Location of data points	<ul> <li>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>				
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> <li>Whether sample compositing has been</li> </ul>	<ul> <li>Drilling was conducted at a nominal spacing of 400m x 100m or 200m x 50m which is appropriate for the nature of this programme.</li> </ul>			



Criteria	JORC Code explanation	Commentary
	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>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.</li> </ul>	<ul> <li>Drill lines were completed perpendicular to the trend of the main geological units and parallel to previous drill lines.</li> <li>It is likely that the mineralized structures trend at a different orientation to the regional geology</li> </ul>
Sample security	The measures taken to ensure sample security.	<ul> <li>Samples were transported directly from the drill site to the assay laboratory by Miramar field staff</li> </ul>
Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	No audits have been undertaken

# **Section 2 Reporting of Exploration Results**

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul> <li>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.</li> <li>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.</li> </ul>	<ul> <li>The exploration was conducted on E26/214, P26/4221 and P26/4222 which are owned 80% by Miramar Goldfields Pty Ltd and 20% by Thunder Metals Pty Ltd</li> <li>Miramar Goldfields Pty Ltd is a wholly owned subsidiary of Miramar Resources Limited</li> <li>Miramar has an exploration JV with Thunder Metals Pty Ltd</li> </ul>
Exploration done by other parties	<ul> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul> <li>Exploration has been previously completed by other companies including Goldfields and KCGM, and included auger drilling, RAB, aircore and limited RC drilling.</li> </ul>
Geology	<ul> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul> <li>The target is Archaean greenstone-hosted mesothermal gold mineralisation.</li> </ul>
Drill hole Information	<ul> <li>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: <ul> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>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</li> </ul>	• See Figure 5 and Table 2



Criteria	JORC Code explanation	Commentary
Data aggregation methods	<ul> <li>clearly explain why this is the case.</li> <li>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.</li> <li>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.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul> <li>Results reported above a lower cutoff of 0.1g/t Au (or above 0.05g/t Au for EOH samples)</li> </ul>
Relationship between mineralisation widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>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').</li> </ul>	<ul> <li>No assumptions about true width or orientation of mineralisation can be made from the current programme</li> </ul>
Diagrams	<ul> <li>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.</li> </ul>	<ul> <li>See attached Tables and Figures</li> </ul>
Balanced reporting	<ul> <li>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.</li> </ul>	<ul> <li>All drill collars and maximum Au in hole shown in Figure 5</li> <li>Table 2 lists hole information</li> </ul>
Other substantive exploration data	<ul> <li>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.</li> </ul>	No other relevant data
Further work	<ul> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul> <li>Further aircore, RC and diamond drilling planned</li> </ul>