

9 June 2020 ASX Release

# HEMI - Broad, high grade extensions at Aquila

Aquila extended 80m to the east on section 30,640E with results including:

41m @ 6.8g/t Au from 181m in HERC086 inc. 14m @ 10g/t Au from 206m (Hole ends in mineralisation)
16m @ 1.6g/t Au from 144m in HERC085

Significant depth extensions including:

69.5m @ 1.3g/t Au from 80m in HERC031D

30m @ 1.7g/t Au from 125m in HERC093

Shallow high grade RC results confirming previous aircore\* drilling on section 30,000E:

**45m @ 8.1g/t Au** from 111m in HERC096 inc. **16m @ 13.2g/t Au** from 114m (10gm lower cut)

**49m @ 3.4 g/t Au** from 49m in HERCO95 inc. **19m @ 5.1g/t Au** from 50m

De Grey Mining Limited (ASX: DEG, "De Grey", "Company") is pleased to provide this drilling update for the Aquila Zone within the Hemi Discovery, located approximately 60km of Port Hedland in Western Australia.

Aquila is a parallel gold-sulphide zone located to the immediate north of the Brolga zone and adjacent to the new Crow zone to the north (Figure 1).

RC and diamond core drilling are currently ongoing with 3 rigs operating between Aquila, Brolga and Crow testing for extensions of the gold mineralisation on a nominal 80m x 80m basis, with a second RC due shortly.

At Aquila, step out drilling continues both along strike and at depth. The deeper drilling aims to test approximately 80-100m below known mineralisation. Drilling to the east of the high grade mineralisation on section 30640E is also planned.

The Aquila results announced today and the announcement last Friday of the discovery of a new extension to the Brolga intrusion are encouraging.

De Grey Mining Technical Director, Andy Beckwith, commented

"At Aquila, we still have not reached the limits of mineralisation. Step out drilling shows we are still in strong broad and high grade mineralisation along the length of the deposit. Deeper RC and diamond drilling is planned to target approximately 100m below mineralisation as well as further extensions along strike.

We announced on Friday that we would be increasing the number of aircore and RC rigs on site. This will allow us to expand aircore drilling coverage immediately around Hemi and at the other nearby intrusions including Scooby, Shaggy and Antwerp. The additional RC rig will allow us to follow up the positive aircore results that are extending mineralisation and to continue defining known mineralisation."

Wide spaced aircore drilling is currently advancing to the west of Aquila. Aircore holes have intersected encouraging alteration approximately 500m to the west of Aquila. The alteration appears similar to alteration at Aquila. Samples from these aircore holes will this week be dispatched for assaying."

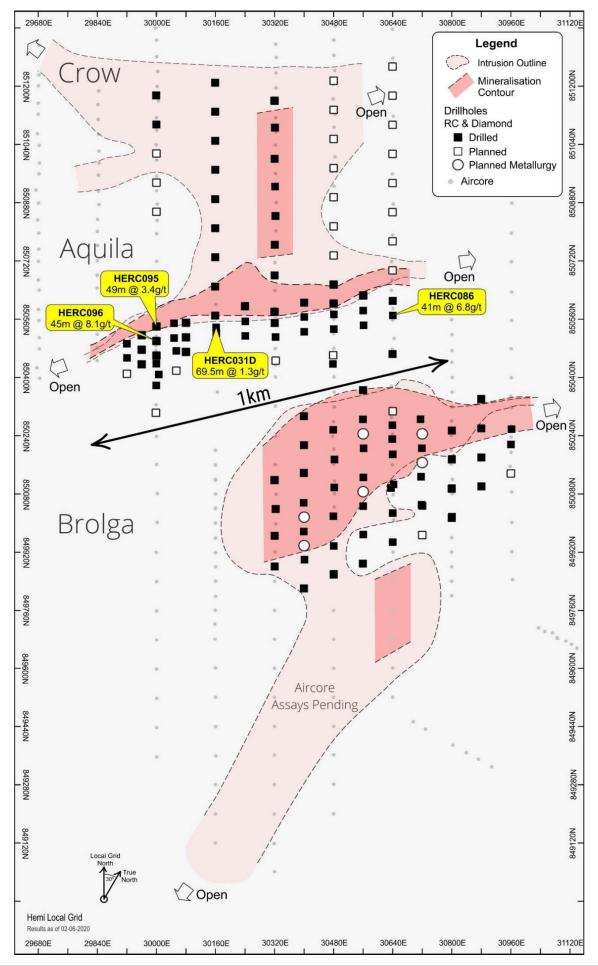
\*Aircore assay results are not used for resource estimation purposes. Follow-up RC and/or diamond drilling is required for use in resource estimates.

T: +61 8 6117 9328

F: +61 8 6117 9330



Figure 1 HEMI - RC and DD drill collar locations (local grid) showing major new results.





### **AQUILA**

Aquila is a parallel gold-sulphide zone located to the immediate north of the Brolga zone and adjacent to the new Crow zone to the north. Recent RC and diamond drilling on nominal 80m x 40m spacing continues to extend broad scale gold mineralisation (Figure 2). The anomalous gold zone in RC, diamond and aircore drilling currently extends to over 1km in strike and recent widespaced aircore drilling has intersected similar looking Aquia style alteration approximately 500m further to the west.

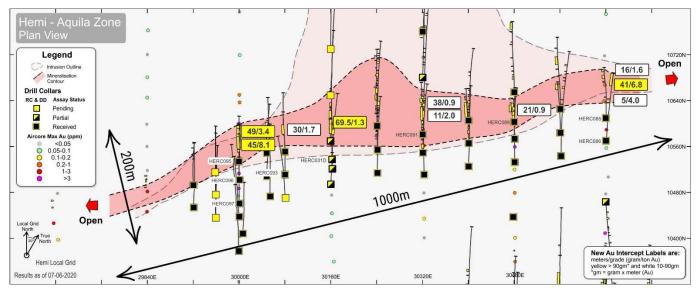
New high grade gold mineralisation, on Section 30640E (Figure 3), represents an 80m extension to the east. This strong zone of high grade mineralisation, 41m @ 6.8g/t Au from 181m in HERC086 including 14m @ 10g/t Au from 206m remains open at depth and along strike to the east. Drilling to extend this zone at depth is underway and step out drilling to the east is planned.

Two RC holes, HERCO95 and 096, were drilled to confirm the original high grade discovery aircore results on section 30,000E (Figure 4). This drilling was carried out to allow inclusion within the resource estimation.

Significant new intercepts (>10gm\*m) on section include:

<u>Section</u>	<u>Intercept</u>
30,000E	<b>45m @ 8.1g/t Au</b> from 111m in HERC096
	49m @ 3.4 g/t Au from 49m in HERC095
30,080E	<b>30m @ 1.7g/t Au</b> from 125m in HERC093
30,160E	69.5m @ 1.3g/t Au from 80m in HERC031D
30,320E	<b>38m @ 0.9g/t Au</b> from 51m in HERC091
	11m @ 2.0g/t Au from 101m in HERC091
30,480E	<b>21m @ 0.9g/t Au</b> from 57m in HERC089
30,640E	5m @ 4.0g/t Au from 133m in HERC086
	41m @ 6.8g/t Au from 181m in HERC086 (ends in mineralisation)
	<b>16m @ 1.6g/t Au</b> from 144m in HERC085

Figure 2 Aquila Drilling Plan (local grid) showing drilling locations and significant new drilling results.



The encouraging alteration seen in recent 320m  $\times$  160m spaced aircore drilling approximately 500m west of the Aquila is currently being infilled to 160m  $\times$  80m sections.

The additional RC and aircore rigs are expected to arrive on site in the next 10 days. The extra rigs will increase drilling to 6 rigs operating in the Hemi environs and allow a ramp up of testing along strike into Scooby and Antwerp in parallel to the resource extension drilling at Aquila, Brolga and Crow.



Figure 3 Aquila Zone - Section 30,640E

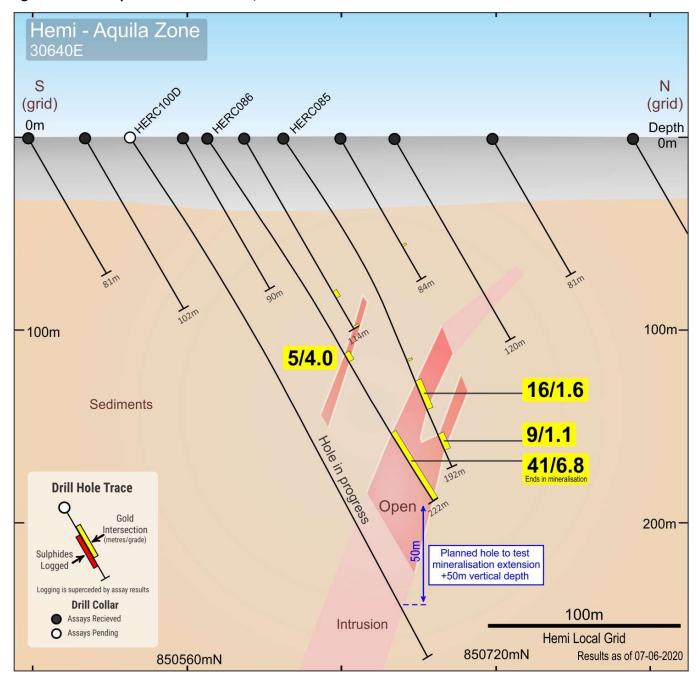
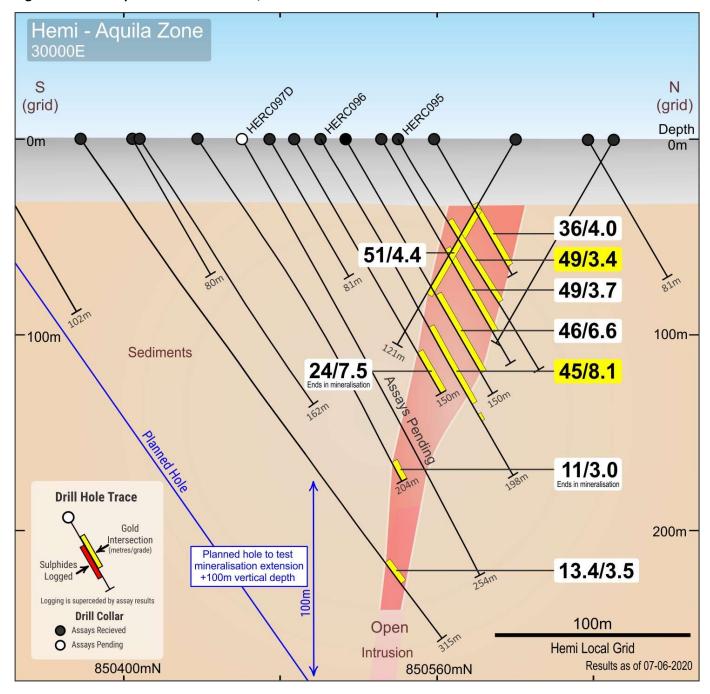




Figure 4 Aquila Zone - Section 30,000E





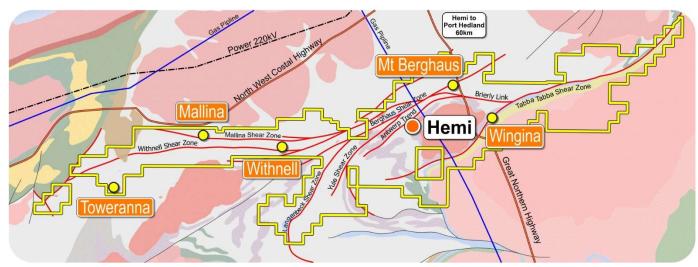
### **BACKGROUND**

**Hemi is a new major gold discovery**, where gold mineralisation is hosted in a series of intrusions associated with stringer and disseminated sulphide rich zones. This style of mineralisation is new to the Pilbara region and shows a scale of mineralisation not seen in the project previously.

Hemi is shaping up as a world class, large scale deposit with world class infrastructure at its doorstep. Drilling is continuing to determine the extent of the Hemi mineralisation with the expectation that overall project resources will increase significantly from the current 2.2Moz (Figure 5). There are at least four other look-alike intrusion targets already defined in the immediate region surrounding Hemi, three of which have known ore grade mineralisation.

This release covers the latest diamond and RC results at the Aquila Zone as of 9 June 2020. Full gold intercepts (>2gm \*m) discussed in this report are listed in Table 1.

Figure 5 Mallina Gold Project showing main gold deposits and the new Hemi Discovery.



This ASX report is authorised for release by the De Grey Board.

For further information:

Glenn Jardine (Managing Director) or

Andy Beckwith (Technical Director and Operations Manager)

**De Grey Mining Ltd** 

Phone +61 8 6117 9328

admin@degreymining.com.au

Luke Forrestal (Media enquiries)

Phone +61 411 479 144

luke.forrestal@mcpartners.com.au



#### **Competent Person Statements**

The information in this report that relates to exploration results is based on, and fairly represents information and supporting documentation prepared by Mr. Philip Tornatora, a Competent Person who is a member of The Australasian Institute of Mining and Metallurgy. Mr. Tornatora is an employee of De Grey Mining Limited. Mr. Tornatora 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 Resource and Ore Reserves". Mr. Tornatora consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

### **Previously released ASX Material References** that relates to Hemi Prospect includes;

#### Resources:

2020 Mallina Gold Project Resource update, 2 April 2020.

#### **Exploration:**

- Multiple new targets increase exploration potential, 2 July 2019;
- New Gold Discoveries at Hemi and Antwerp, 17 December 2019;
- Hemi confirms potential for major discovery, 6 February 2020;
- Further impressive thick and high grade gold at Hemi, 11 February 2020;
- Major extension of sulphide mineralisation at Hemi, 26 February 2020;
- RC drilling confirms large scale gold system at Hemi, 5 March 2020;
- Continuing extensive sulphide mineralisation intersected at Hemi, 10 March 2020;
- Hemi continues to grow, 17 March 2020;
- Major Gold Extensions defined at BROLGA, 25 March 2020.
- Brolga Continues to grow, 9 April 2020
- Aircore Drilling defines third large gold zone at Hemi, 17 April 2020
- Brolga and Aquila drilling update, 22 April 2020
- Large gold system defined at Crow, 1 May 2020
- Exploration update,20 May 2020
- Significant extension at Hemi- Aquila, 27 May 2020
- HEMI Major extension, 5 June 2020



Table 1 Significant new Drill Intersections (>2 gram x m Au)

HoleID	Zone	Depth From (m)	Depth To (m)	Down hole Width (m)	Au (g/t)	Collar East (GDA94)	Collar North (GDA94)	Collar RL (GDA94)	Dip (°)	Azimuth (GDA94)	Hole Depth (m)	Hole Type	Comments
HERC030D	Aquila	321.0	321.8	0.8	4.8	648824	7692436	68	-56	327	514	DD	
HERC030D	Aquila	343.0	344.0	1.0	5.1	648824	7692436	68	-56	327	514	DD	
HERC030D	Aquila	356.0	357.0	1.0	2.4	648824	7692436	68	-56	327	514	DD	
HERC031D	Aquila	80.0	149.5	69.5	1.3	648672	7692378	68	-57	328	517	RC/D D	
incl	Aquila	83.0	84.0	1.0	5.4	648672	7692378	68	-57	328	517	RC	
incl	Aquila	144.0	146.0	2.0	3.7	648672	7692378	68	-57	328	517	DD	
HERC031D	Aquila	277.0	280.4	3.3	1.7	648672	7692378	68	-57	328	517	DD	
HERC085	Aquila	144.0	160.0	16.0	1.6	649049	7692680	68	-55	329	192	RC	
incl	Aquila	146.0	150.0	4.0	3.6	649049	7692680	68	-55	329	192	RC	
HERC085	Aquila	174.0	183.0	9.0	1.1	649049	7692680	68	-55	329	192	RC	
incl	Aquila	175.0	176.0	1.0	3.7	649049	7692680	68	-55	329	192	RC	
HERC086	Aquila	133.0	138.0	5.0	4.0	649070	7692646	68	-56	333	222	RC	
HERC086	Aquila	181.0	222.0	41.0	6.8	649070	7692646	68	-56	333	222	RC	
incl	Aquila	206.0	216.0	10.0	14.0	649070	7692646	68	-56	333	222	RC	
HERC089	Aquila	57.0	78.0	21.0	0.9	648917	7692578	68	-55	331	102	RC	
HERC089	Aquila	96.0	99.0	3.0	1.3	648917	7692578	68	-55	331	102	RC	
HERC091	Aquila	51.0	89.0	38.0	0.9	648790	7692492	68	-56	329	150	RC	
incl	Aquila	51.0	52.0	1.0	3.9	648790	7692492	68	-56	329	150	RC	
HERC091	Aquila	101.0	112.0	11.0	2.0	648790	7692492	68	-56	329	150	RC	
incl	Aquila	106.0	109.0	3.0	4.1	648790	7692492	68	-56	329	150	RC	
HERC093	Aquila	125.0	155.0	30.0	1.7	648615	7692314	69	-57	329	192	RC	
incl	Aquila	135.0	136.0	1.0	3.5	648615	7692314	69	-57	329	192	RC	
HERC095	Aquila	49.0	98.0	49.0	3.4	648531	7692300	69	-61	329	138	RC	
incl	Aquila	50.0	69.0	19.0	5.1	648531	7692300	69	-61	329	138	RC	
HERC096	Aquila	111.0	156.0	45.0	8.1	648551	7692266	69	-60	329	198	RC	
incl	Aquila	114.0	130.0	16.0	13.2	648551	7692266	69	-60	329	198	RC	10g/t lower cut
HERC096	Aquila	162.0	166.0	4.0	0.6	648551	7692266	69	-60	329	198	RC	



## JORC Code, 2012 Edition – Table 1

# 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 (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>	manner
Drilling techniques	<ul> <li>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.).</li> </ul>	• Reverse Circulation(RC) holes were drilled with a 5 1/2-inch bit and face sampling hammer.
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>	<ul> <li>Core recovery is measured for each drilling run by the driller and then checked by the Company geological team during the mark up and logging process.</li> <li>RC and aircore samples were visually assessed for recovery.</li> <li>Samples are considered representative with generally good recovery. Deeper RC and aircore holes encountered water, with some intervals having less than optimal recovery and possible contamination.</li> <li>No sample bias is observed.</li> </ul>
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 relevant intersections logged.</li> </ul>	<ul> <li>The entire hole has been geologically logged and core was photographed by Company geologists, with systematic sampling undertaken based on rock type and alteration observed</li> <li>RC and diamond sample results are appropriate for use in a resource estimation, except where sample recovery is poor.</li> <li>The aircore results provide a good indication of mineralisation but are not used in resource estimation.</li> </ul>



Criteria	JORC Code explanation	Commentary
Sub-sampling techniques and sample preparation	<ul> <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 subsampling 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>Core samples were collected with a diamond drill rig drilling HQ or NQ2 diameter core. After logging and photographing, NQ2 drill core was cut in half, with one half sent to the laboratory for assay and the other half retained. Holes were sampled over mineralised intervals to geological boundaries on a nominal 1m basis.</li> <li>RC sampling was carried out by a cone splitter on the rig cyclone and drill cuttings were sampled on a 1m basis in bedrock and 4m composite basis in cover.</li> <li>Aircore samples were collected by spear from 1m sample piles and composited over 4m intervals. Samples for selected holes were collected on a 1m basis by spear from 1m sample piles.</li> <li>Industry prepared independent standards are inserted approximately 1 in 20 samples.</li> <li>Each sample was dried, split, crushed and pulverised.</li> <li>Sample sizes are considered appropriate for the material sampled.</li> <li>The samples are considered representative and appropriate for this type of drilling</li> <li>Core and RC samples are appropriate for use in a resource estimate.</li> <li>Aircore samples are generally of good quality and appropriate for delineation of geochemical trends but are not generally used in resource estimates.</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 (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</li> </ul>	<ul> <li>The samples were submitted to a commercial independent laboratory in Perth, Australia.</li> <li>For diamond core and RC samples Au was analysed by a 50g charge Fire assay fusion technique with an AAS finish and multi-elements by ICPAES and ICPMS</li> <li>Aircore samples were analysed for Au using 25g aqua regia extraction with ICPMS finish and multi-elements by ICPAES and ICPMS using aqua regia digestion</li> <li>The techniques are considered quantitative in nature.</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>	<ul> <li>consultants.</li> <li>Results have been uploaded into the company database, checked and verified.</li> </ul>
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>	<ul> <li>accuracy of +/-10cm.</li> <li>Aircore hole collar locations are located by DGPS to an accuracy of +/-10cm., or by handheld GPS to an accuracy of 3m.</li> <li>Locations are given in GDA94 zone 50 projection</li> <li>Diagrams and location table are provided in the report</li> <li>Topographic control is by detailed airphoto and Differential GPS data.</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 applied.</li> </ul>	<ul> <li>geological control and continuity of mineralisation.</li> <li>Data spacing and distribution of RC drilling is not yet sufficient to provide support for the results to be used in a resource estimate.</li> <li>Sample compositing has not been applied except in reporting of drill intercepts, as described in this Table</li> </ul>
Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> </ul>	<ul> <li>The drilling is believed to be approximately perpendicular to the strike of mineralisation where known and therefore the sampling is considered representative of the mineralised zone.</li> <li>In some cases, drilling is not at right angles to the dip of mineralised</li> </ul>



Criteria	JORC Code explanation	Commentary
	<ul> <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>	structures and as such true widths are less than downhole widths.  This is allowed for when geological interpretations are completed.
Sample security	The measures taken to ensure sample security.	• Samples were collected by company personnel and delivered direct to the laboratory via a transport contractor.
Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	<ul> <li>No audits have been completed. Review of QAQC data has been carried out by database consultants and company geologists.</li> </ul>

# 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 license to operate in the area.</li> </ul>	which is a 100% subsidiary of De Grey Mining Ltd.
Exploration done by other parties	<ul> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul> <li>The tenement has had some previous surface geochemical sampling and wide spaced aircore and RAB drilling by De Grey Mining. Limited previous RC drilling was carried out at the Scooby Prospect. Airborne aeromagnetics/radiometrics has been flown previously.</li> </ul>
Geology	<ul> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul> <li>The mineralisation style is not well understood to date but is thought to be hydrothermally emplaced gold mineralisation within structures and intrusions. Host rocks comprise igneous rocks intruding Mallina Basin metasediments. Style is similar to some other Western Australian gold deposits.</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:</li> <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> <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 clearly explain why this is the case.</li> </ul>	
Data aggregation methods	<ul> <li>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.</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> </ul>	<ul> <li>an internal dilution of 4m maximum.</li> <li>Higher grade intervals included in the above intercepts are reported at a 3g/t Au lower cut with an internal dilution of 2m maximum.</li> </ul>



Criteria	JORC Code explanation	Commentary
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	
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 (e.g. 'down hole length, true width not known').</li> </ul>	the strike of mineralisation.
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>	Plans and sections are provided in the report.
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>	are provided in this report.
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.	Drilling is currently widely spaced and further details will be reported in future releases when data is available.
Further work	<ul> <li>The nature and scale of planned further work (e.g. 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>Follow up aircore drilling will be undertaken to test for strike extensions to mineralisation.</li> <li>Programs of follow up RC and diamond drilling aimed at extending resources at depth and laterally are underway.</li> </ul>