

ASX: DEG

ASX ANNOUNCEMENT 2 September 2020

Falcon – Major new gold discovery at Hemi

1.8km long, up to 80m thick, altered intrusion immediately south of Aquila

Highlights:

- New altered intrusion, 1.8km long, up to 80m thick logged in widespaced aircore drilling. Intrusion remains open to the south with aircore drilling continuing.
- Gold mineralisation defined over 1.5km in aircore drill assays with additional assays from drilling along strike pending. Initial aircore results include:
 - 21m @ 3.4g/t Au from 40m and 19m @ 2.1g/t Au from 68m in BXAC501 (ends in mineralisation)
 - **12m @ 2.0g/t Au** from 93m in BXAC502 (ends in mineralisation)
 - 21m @ 1.1g/t Au from 102m in BXAC506
 - **29m @ 1.3g/t Au** from 56m in BXAC546 (using a 0.3g/t lower cutoff)
- Follow-up RC and diamond drilling shows consistent gold mineralisation with intense brecciation and alteration over the northern 240m of strike and to 200m depth:
 - 58m @ 2.1g/t Au from 64m in HERC232 (section 7691640N)-visible gold reported 5 August 2020
 - 11m @ 1.2g/t Au from 199m in HERC231 (section 7691640N)
 - 24m* @ 0.8g/t Au from 167m in HERC233D (section 7691720N)-ended in mineralisation

*This RC precollar ends in mineralisation with the diamond core extension intersecting intensely brecciated and sulphide rich alteration for a further 69.8m downhole (assays pending).

- 31m @ 1.3g/t Au from 88m in HERC234 (section 7691800N)
- Mineralisation remains open beyond the current 1.8km strike and at depth

De Grey Managing Director, Glenn Jardine, commented:

"The discovery of the Falcon intrusion demonstrates the potential to significantly grow the gold endowment at Hemi as we expand our drilling footprint.

Reinterpretation of the overall geology shows the Aquila intrusion strikes for 1.2km in a southwest orientation and the new Falcon intrusion strikes for over 1.8km in a distinctly north-south orientation. Aircore drilling is continuing to track the Falcon intrusion to the south.

Opportunities to extend Hemi and to identify similar large scale, near surface Hemi-like intrusions in the Greater Hemi area are being actively pursued, with two aircore rigs in operation."

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De Grey Mining Limited (ASX: DEG, "De Grey", "Company") is pleased to provide the following drilling update at the Hemi Gold Discovery, located approximately 60km south of Port Hedland in Western Australia.

Recent drilling, west of Brolga and south of Aquila, has delineated a highly brecciated and extensively sulphide altered subvertical intrusion. This new intrusion has been named Falcon. The Falcon discovery has been intersected for over 1.8km in strike, up to 80m thick and to 200m below surface. The intrusion remains open along strike and at depth. The intense alteration and style of mineralisation observed to date shows strong similarities to the Aquila zone.

Reinterpretation of the overall geology shows the Aquila intrusion strikes for 1.2km in a south-west orientation, remaining open to the west. The Falcon intrusion strikes for over 1.8km in a distinctly north-south orientation, remaining open to the south. Aircore drilling is continuing to track the Falcon intrusion to the south. The drilling orientation at Falcon has been realigned east to west to intersect the intrusion perpendicular to drilling.

First phase RC drilling has returned highly encouraging broad gold intercepts with diamond core extensions showing continuation of the extensively altered intrusion at depth to at least 200 metres. Significant new gold results in drilling are provided in Table 1 and Figures 1 - 4. Examples of brecciation and alteration in core from HERC233D are shown in Figures 5 and 6 with assay results pending.

RC and Diamond Drilling

Initial RC drilling has defined gold mineralisation hosted in strongly brecciated, intensely altered and sulphide rich intrusion similar to the Aquila style of mineralisation. The dimensions of this newly discovered intrusion are approximately 1.8km long by +80m true thickness, providing a substantial new target immediately to the south of Aquila.

RC drilling is currently underway testing the northern most 240m of strike with over 1.5km of strike remaining to be RC drill tested.

Significant new results (>10gm*m) from RC drilling to date include:

- 58m @ 2.1g/t Au from 64m in HERC232 (section 7691640N)-visible gold reported 5 August 2020
- **11m @ 1.2g/t Au** from 199m in HERC231 (section 7691640N)
- 24m @ 0.8g/t Au from 167m in HERC233D (section 7691720N)

This RC precollar ends in mineralisation with the diamond core extension intersecting intensely brecciated and sulphide rich alteration for a further 69.8m downhole (assays pending).

- 31m @ 1.3g/t Au from 88m in HERC234 (section 7691800N)

Previously reported significant RC drilling results include:

- **16m @ 3.7g/t Au** from 43m including **10m @ 5.4g/t** in HERC141 (*ends in mineralisation*)

The previously reported (ASX release 5 August 2020) visible gold specimens in HERC232 occur within an interval of 9m @ 4.4g/t Au with a peak of 15g/t Au, forming part of the broader intercept of 58m @ 2.1g/t Au.

A diamond core extension to HERC233D has been drilled to a total depth of 345.3m and shows strong brecciation and intense sulphide rich alteration over a further down hole length of 69.8m from the end of the RC precollar (192.2m) to 262m (Figure 5 and 6).

Extensional RC and diamond drilling are underway on 80m spaced sections, initially targeting gold mineralisation to 200m depth. Deeper drilling will be undertaken as results warrant.



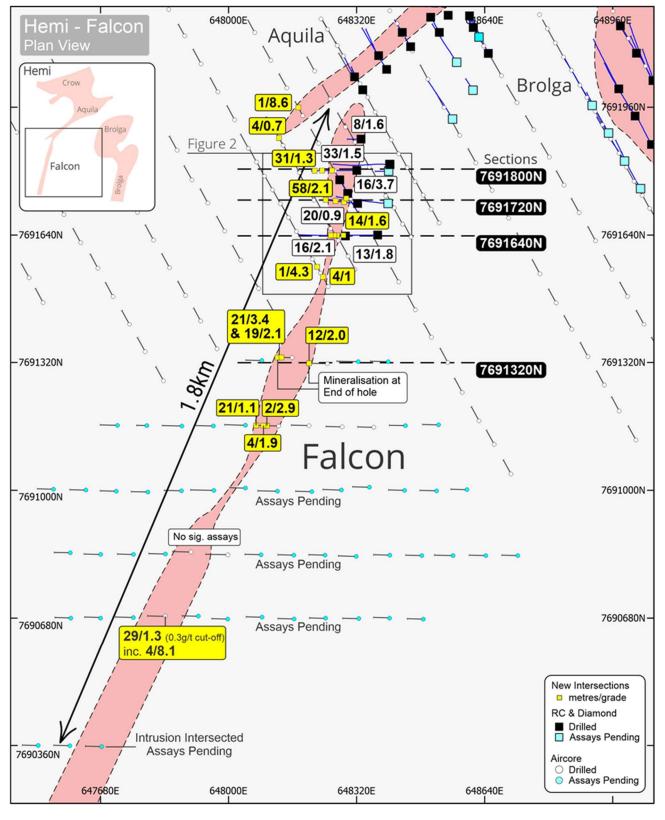


Figure 1: Falcon – Drill hole location plan showing the new strike extension to the south of Aquila and assay results in aircore and RC drilling.



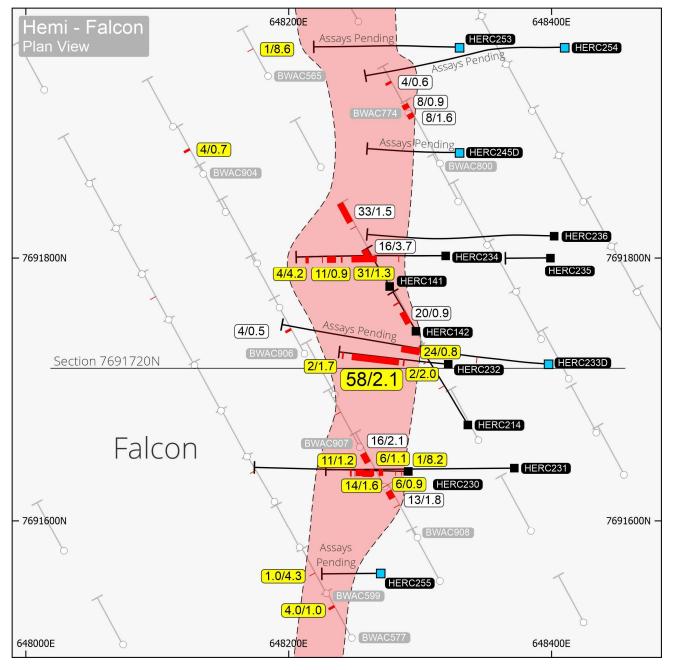


Figure 2: Falcon – Zoom into the northern drilling location plan showing RC drilling results.

Aircore Drilling

Aircore drilling has intersected the altered intrusion over 1.8km in a north south orientation. The drilling orientation has been changed to east west to intersect the intrusion perpendicular to the overall strike. Step out aircore drilling is occurring on 160m spaced sections to the south.

The intrusion is highly weathered to partially weathered in the shallow aircore drilling and appears to be variably altered and brecciated on most sections. The bedrock is covered by approximately 30-40m of transported material, similar to the Aquila, Brolga and Crow deposits.

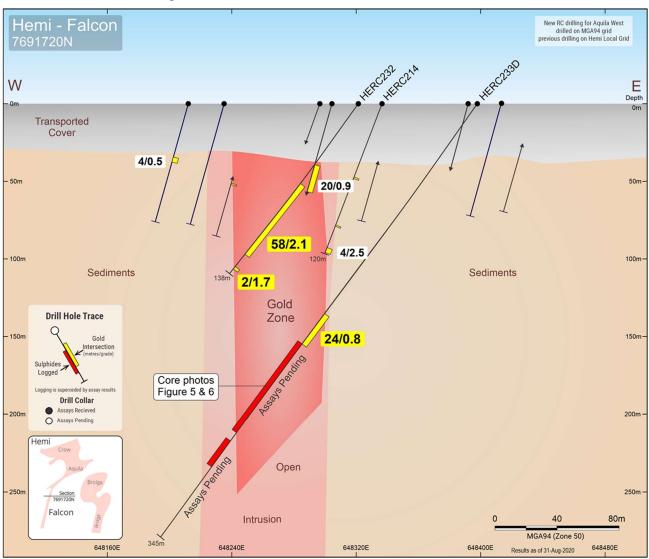


Significant new results in aircore drilling include:

- 21m @ 3.4g/t Au from 40m and 19m @ 2.1g/t Au from 68m to EOH in BXAC501
- 12m @ 2.0g/t Au from 93m to EOH in BXAC502
- 21m @ 1.1g/t Au from 102m in BXAC506
- 29m @ 1.3g/t Au from 56m in BXAC546 (using a 0.3g/t lower cutoff)

Previously reported (ASX releases 22 June and 5 August 2020) and aircore drilling results include:

- **33m @ 1.5g/t Au** from 64m in BWAC567 (ending in mineralisation)
- 30m @ 0.9g/t Au from 46m in BWAC568
- 16m @ 3.7g/t Au from 43m in HERC141 (ending in mineralisation)
- 16m @ 2.1g/t Au from 44m in BWAC783
- 13m @ 1.8g/t Au from 71m in BWAC908





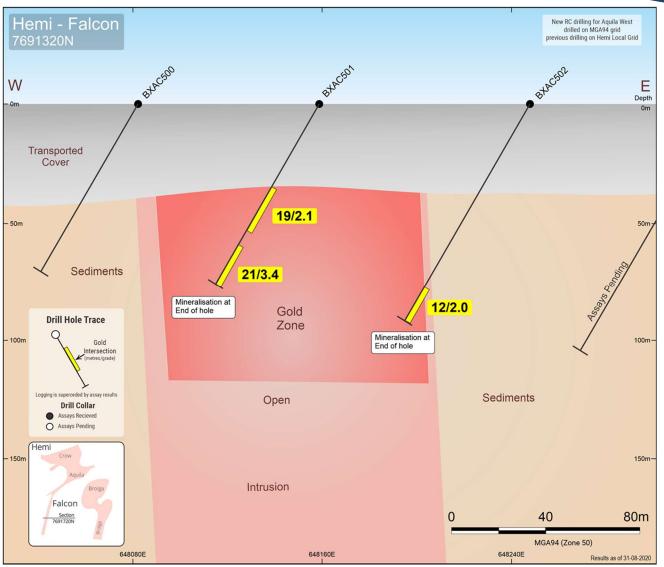
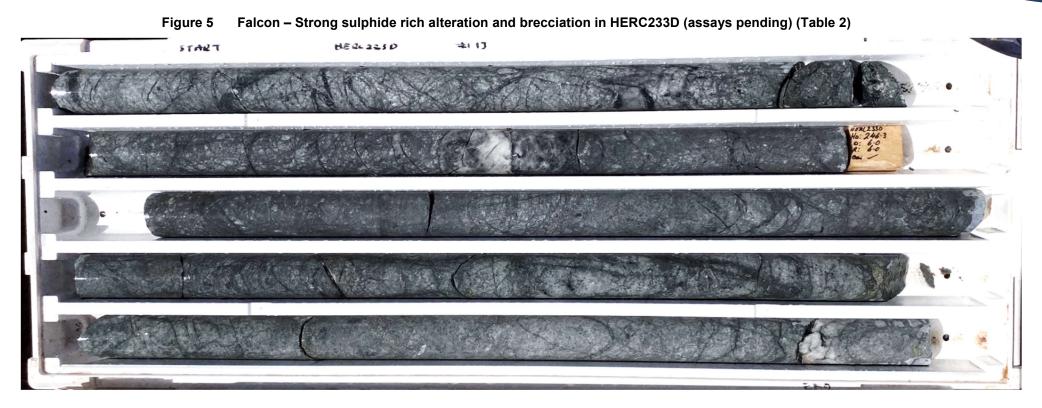


Figure 4: Falcon – Section 7691320N aircore drill results

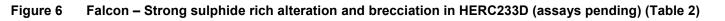


De Grey













This announcement has been authorised for release by the De Grey Board. For further information, please contact:

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Competent Person's Statement

The information in this report that relates to exploration results is based on, and fairly represents information and supporting documentation prepared by Mr. Phil 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 during 2020 includes;

Resources:

• 2020 Mallina Gold Project Resource update, 2 April 2020.

Exploration:

- 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
- HEMI Broad, high grade extensions at Aquila, 9 June 2020
- Further high grade and expanded footprint at Hemi, 22 June 2020
- High gold recoveries achieved at Hemi, 9 July 2020
- Further extensions confirmed at Brolga, 10 July 2020
- Hemi scale grows with Aquila new extensions, 22 July 2020
- Strong results boost Aquila westerly extension, 5 August 2020
- Aquila mineralisation extends to 400 vertical metres, New lode identified at Crow
- Brolga mineralisation extends north towards Aquila, northeast towards Scooby, 21 August
- Exceptional high grade gold intercept at Crow, 27 August 2020

Table 1: Significant new results (>2 gram x m Au)

HoleID	Zone	Depth From	Depth To (m)	Down hole	Au (g/t)	Collar East	Collar North	Collar RL	Dip (°)	Azimuth (GDA94)	Hole Depth	Hole Type
		(m)		Width (m)		(GDA94)	(GDA94)	(GDA94)			(m)	
BWAC565	Falcon	46.0	47.0	1.0	8.6	648184	7691938	69	-60	332	81	AC
BWAC599	Falcon	35.0	36.0	1.0	4.3	648229	7691545	69	-60	332	77	AC
BWAC904	Aquila	40.0	44.0	4.0	0.7	648135	7691864	69	-60	332	81	AC
BWAC906	Falcon	40.0	44.0	4.0	0.5	648212	7691727	69	-60	332	96	AC
BXAC501	Falcon	40.0	61.0	21.0	3.4	648158	7691332	70	-60	271	87	AC
incl	Falcon	48.0	52.0	4.0	13.6	648158	7691332	70	-60	271	87	AC
BXAC501	Falcon	68.0	87.0	19.0	2.1	648158	7691332	70	-60	271	87	AC
incl	Falcon	68.0	69.0	1.0	8.6	648158	7691332	70	-60	271	87	AC
incl	Falcon	81.0	83.0	2.0	10.0	648158	7691332	70	-60	271	87	AC
BXAC502	Falcon	93.0	105.0	12.0	2.0	648246	7691317	70	-60	271	105	AC
incl	Falcon	94.0	98.0	4.0	3.9	648246	7691317	70	-60	271	105	AC
BXAC506	Falcon	58.0	60.0	2.0	2.9	648124	7691161	70	-60	271	126	AC
BXAC506	Falcon	75.0	79.0	4.0	1.9	648124	7691161	70	-60	271	126	AC
BXAC506	Falcon	102.0	123.0	21.0	1.1	648124	7691161	70	-60	271	126	AC
incl	Falcon	114.0	116.0	2.0	6.2	648124	7691161	70	-60	271	126	AC
BXAC546	Falcon	56.0	60.0	4.0	8.1	647841	7690685	72	-60	271	90	AC
HERC230	Falcon	47.0	61.0	14.0	1.6	648291	7691638	69	-55	272	204	RC
incl	Falcon	51.0	52.0	1.0	3.7	648291	7691638	69	-55	272	204	RC
incl	Falcon	56.0	57.0	1.0	3.9	648291	7691638	69	-55	272	204	RC
HERC231	Falcon	149.0	150.0	1.0	8.2	648372	7691640	69	-55	270	250	RC
HERC231	Falcon	174.0	180.0	6.0	1.1	648372	7691640	69	-55	270	250	RC
HERC231	Falcon	186.0	192.0	6.0	0.9	648372	7691640	69	-55	270	250	RC
HERC231	Falcon	199.0	210.0	11.0	1.2	648372	7691640	69	-55	270	250	RC
HERC232	Falcon	57.0	59.0	2.0	2.0	648321	7691719	69	-56	275	138	RC
HERC232	Falcon	64.0	122.0	58.0	2.1	648321	7691719	69	-56	275	138	RC
incl	Falcon	75.0	78.0	3.0	7.0	648321	7691719	69	-56	275	138	RC
incl	Falcon	81.0	83.0	2.0	7.2	648321	7691719	69	-56	275	138	RC
HERC232	Falcon	132.0	134.0	2.0	1.7	648321	7691719	69	-56	275	138	RC
HERC233D	Falcon	167.0	191.0	24.0	0.8	648398	7691719	69	-55	275	345	RC
incl	Falcon	167.0	168.0	1.0	3.2	648398	7691719	69	-55	275	345	RC
HERC234	Falcon	88.0	119.0	31.0	1.3	648319	7691802	69	-55	269	186	RC
incl	Falcon	98.0	100.0	2.0	3.6	648319	7691802	69	-55	269	186	RC
HERC234	Falcon	138.0	149.0	11.0	0.9	648319	7691802	69	-55	269	186	RC
HERC234	Falcon	171.0	175.0	4.0	4.2	648319	7691802	69	-55	269	186	RC
incl	Falcon	172.0	173.0	1.0	12.6	648319	7691802	69	-55	269	186	RC
HERC236	Falcon	53.0	55.0	2.0	1.9	648402	7691817	69	-55	270	226	RC

HoleID	Collar East (GDA94)	Collar North (GDA94)	Collar RL (GDA94)	Dip (degrees)	Azimuth (GDA94)	Hole Depth (m)	Sulphide Interval (m)
HERC233D	648398	7691719	69.1	-54.9	274.8	345.3	192.2.2-258.0, 270.2-289.0

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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	 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 (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. 	 in an industry standard manner Core samples were collected with a diamond rig drilling mainly 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. HQ and PQ core was quartered, with one quarter sent for assay. Holes were sampled over mineralised intervals to geological boundaries on a nominal 1m basis. Sample weights ranged from 2-4kg RC holes were sampled on a 1m basis with samples collected from a cone splitter mounted on the drill rig cyclone. 1m sample ranges from a typical 2.5-3.5kg
Drilling techniques	 Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.). 	(51mm), HQ3 (61mm), PQ (85mm).



Criteria	JORC Code explanation	Commentary
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. 	 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. RC and aircore samples were visually assessed for recovery. 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. No sample bias is observed.
Logging	 Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) 	
	 photography. The total length and percentage of the relevant intersections logged. 	 estimation, except where sample recovery is poor. The aircore results provide a good indication of mineralisation but are not used in resource estimation.
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 subsampling 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. 	



Criteria	JORC Code explanation	Commentary
Quality of assay data and laboratory tests	 The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established. 	commercial independent laboratory in Perth, Australia.
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. 	•
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. 	 Diamond and RC drill hole collar locations are located by DGPS to an accuracy of +/-10cm. Aircore hole collar locations are located by DGPS to an accuracy of +/-10cm., or by handheld GPS to an accuracy of 3m. Locations are given in GDA94 zone 50 projection Diagrams and location table are provided in the report Topographic control is by detailed airphoto and Differential GPS data.
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. 	• Drill spacing varies from 80m x 40m to 320m x 80m.
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 deposit type. 	• The drilling is believed to be approximately perpendicular to the strike of mineralisation where known and therefore the sampling is considered representative



Criteria	JORC Code explanation	Commentary
geological structure	 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. 	 of the mineralised zone. In some cases, drilling is not at right angles to the dip of mineralised 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. 	 No audits have been completed. Review of QAQC data has been carried out by database consultants and company geologists.

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

Criteria	JORC Code explanation	Commentary
<i>Mineral tenement and land tenure status</i>	 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 license to operate in the area. 	by De Grey Mining Ltd or its 100% owned subsidiaries.
Exploration done by other parties	 Acknowledgment and appraisal of exploration by other parties. 	 The tenements have had various levels of 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.
Geology	 Deposit type, geological setting and style of mineralisation. 	 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.
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 	Drill hole location and directional information provide in the report.

Criteria	JORC Code explanation	Commentary
	of the report, the Competent Person should clearly explain why this is the case.	
Data aggregation methods	 In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated. 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. 	 grade of 0.5g/t gold with an internal dilution of 4m maximum. Higher grade intervals included in the above intercepts are reported at a 3g/t Au lower cut with an internal dilution of 2m maximum. Intercepts are length weighted averaged.
Relationship between mineralisation widths and intercept lengths	 These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known'). 	 approximately perpendicular to the strike of mineralisation. Drilling is not always perpendicular to the dip of mineralisation and true widths are less than downhole widths. Estimates of true widths will only be possible when all results are received, and final geological interpretations have been completed.
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. 	 Plans and sections are provided in 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. 	figures and all significant results 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. 	further details will be reported in future releases when data is available.
Further work	 The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. 	undertaken to test for strike extensions to mineralisation.

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