

Continuing extensive sulphide mineralisation intersected at Hemi

Brolga Gold Zone

- **RC drilling extends sulphide rich mineralisation along strike**
 - Up to 200m wide sulphide zones defined on section 30,560E and 30,720E
 - Sulphide mineralisation now 200m wide by +160m strike x +150m deep - open in all directions
- **Initial diamond drilling core shows abundant disseminated sulphide mineralisation**



Figure 1 Brolga Zone – Section 30,640E diamond drill core HEDD001 (field of view ~5cm x 15cm from 149.5m) showing abundant disseminated sulphide (pyrite and arsenopyrite) mineralisation within the intrusive immediately below the previously reported gold zone.

- **New gold intercepts continue to extend gold mineralisation on section 30,640E**
 - 13m @ 1.9g/t Au from 36m in HEDD001 (RC pre-collar only)
 - 18m @ 2.3g/t Au from 59m in HEDD001 (RC pre-collar only)
 - 16m @ 2.6g/t Au from 104m in HEDD001 (RC pre-collar only)

Technical Director, Andy Beckwith, commented:

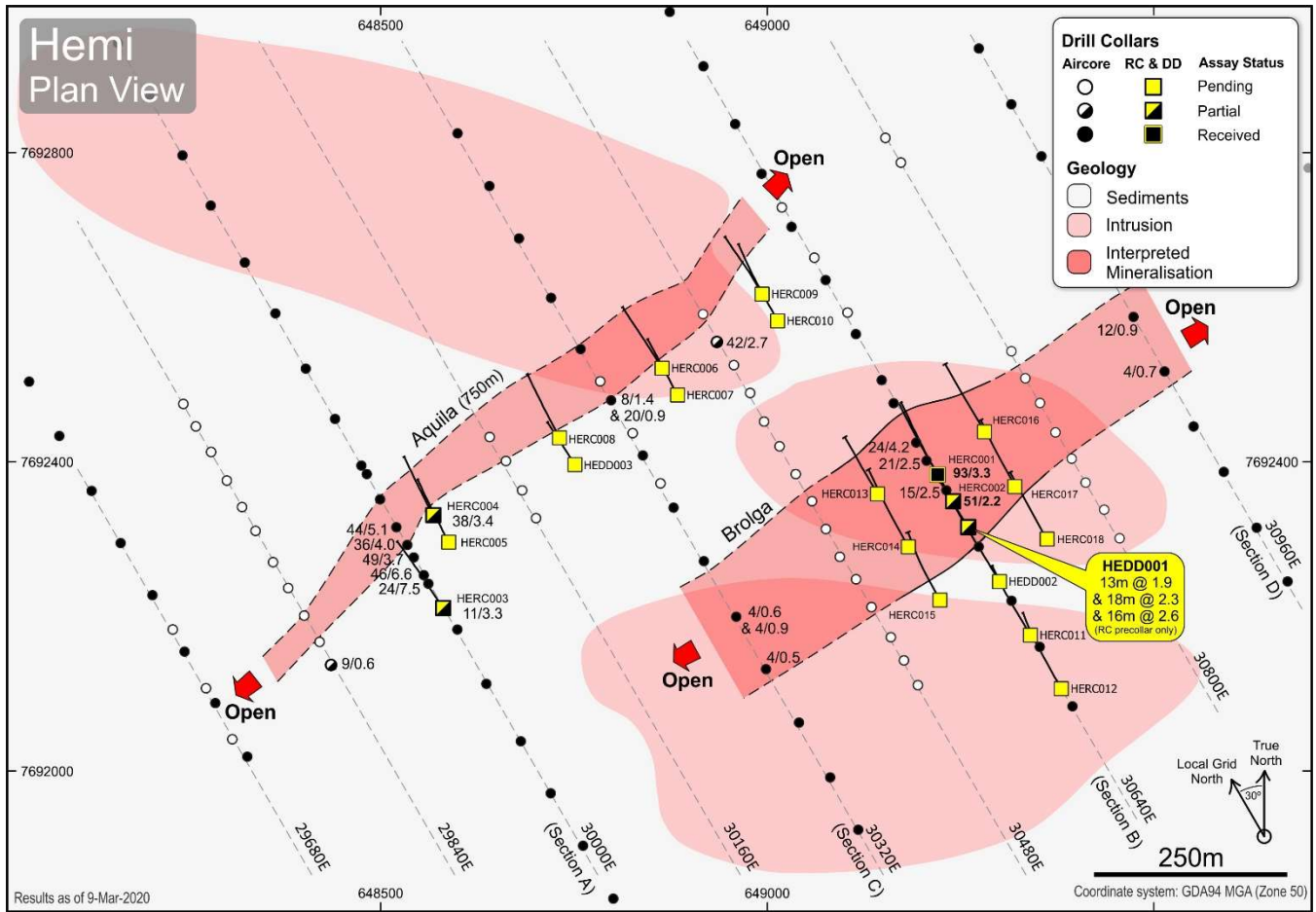
“Step out drilling has confirmed immediate strike extensions of the Brolga Zone, providing encouraging indications for substantial potential along strike. The widths, grades and consistency of mineralisation intersected to date are very pleasing. Our geological model is evolving rapidly, and our confidence continues to grow that the strong sulphide rich mineralisation directly relates to gold.”

We have a large volume of assays in the lab and are continuing drilling with three rigs. We expect frequent news flow over the coming weeks as we progress drilling on this exciting new discovery.”

De Grey Mining Limited (ASX: DEG, “De Grey”, “Company”) is pleased to report on new drilling assay results and further encouraging sulphide mineralisation observed over large widths and depths at the Brolga Zone within the Hemi Discovery, located within 60km of Port Hedland, Western Australia.

This release covers geological observations that extend the extensive sulphide mineralisation on the adjoining sections 80m east and 80m west of the Brolga Discovery together with new gold assay results on section 30,640E (Figure 2).

Figure 2 Hemi Prospect drilling plan showing new drill hole locations.



BROLGA ZONE

Sulphide Extensions on Section 30,560E and 30,720E (Hemi Local Grid)

Initial RC drilling has now been undertaken on sections 30,560E and 30,720E, located 80m east and 80m west of the original discovery section 30,640E (Section B). This recently completed drilling now demonstrates similar sulphide rich mineralisation occurs on both sections over substantial intervals (Figure 3 and 4) and defines extensive sulphide mineralisation over 160m of strike length. Further RC drilling is currently underway on sections 30,480E and 30,800E.

Section 30,560E, 80m to the west, shows markedly similar style of sulphide mineralisation and over a 200m width. The broad individual sulphide zones are interpreted to dip approximately 45-60° to the south (local grid). On Section 30,720E, the sulphide zones occur over a similar gross width of 200m width, with more pronounced individual zones evident. All assay results remain pending.

Importantly, the reconnaissance aircore drilling shows the potential for lateral strike extensions remains strong along the recognized trend (Figure 2).

Figure 3 Brolga Zone – Section 30,560E showing sulphide mineralisation zones as logged (5-10% sulphide)

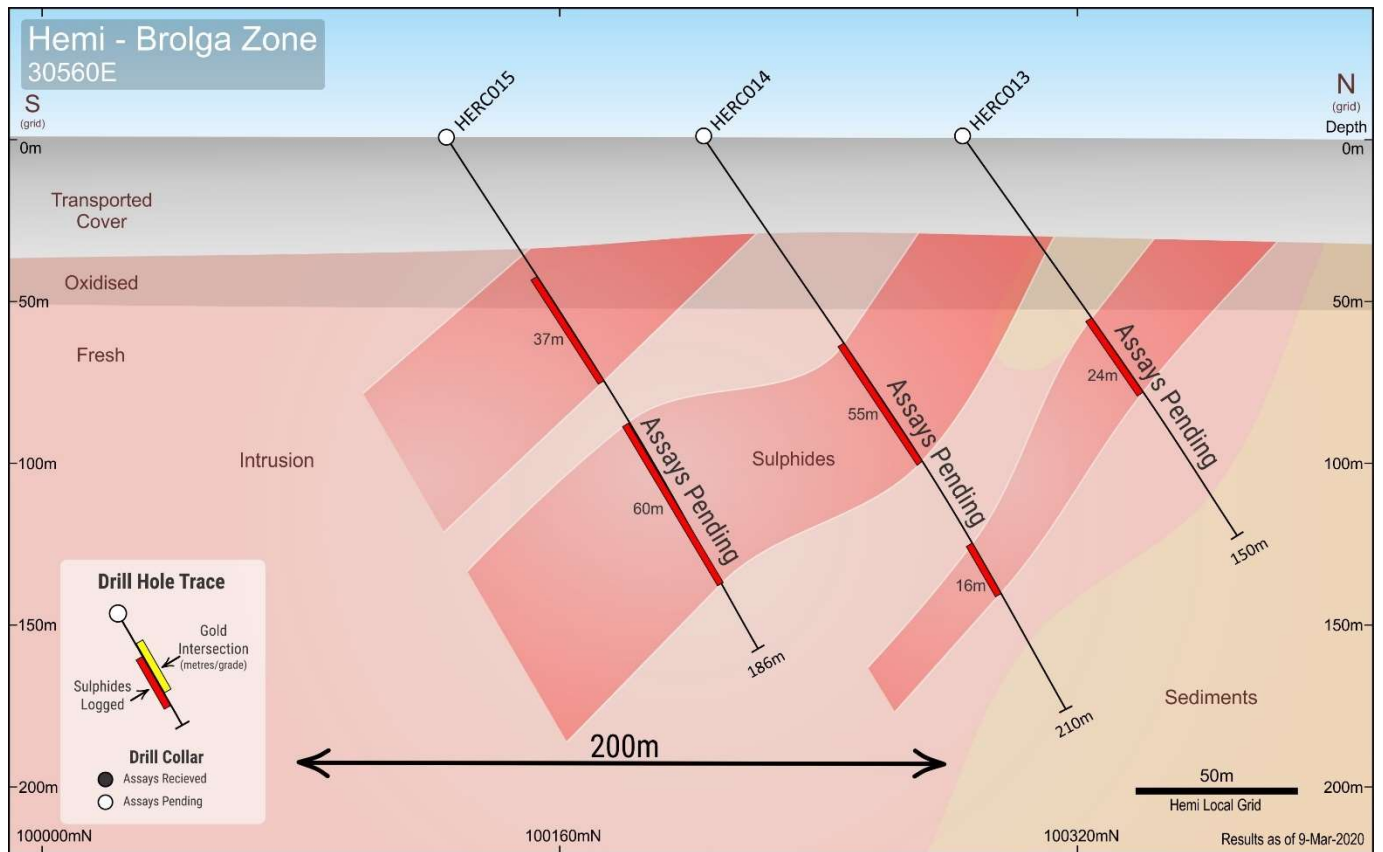
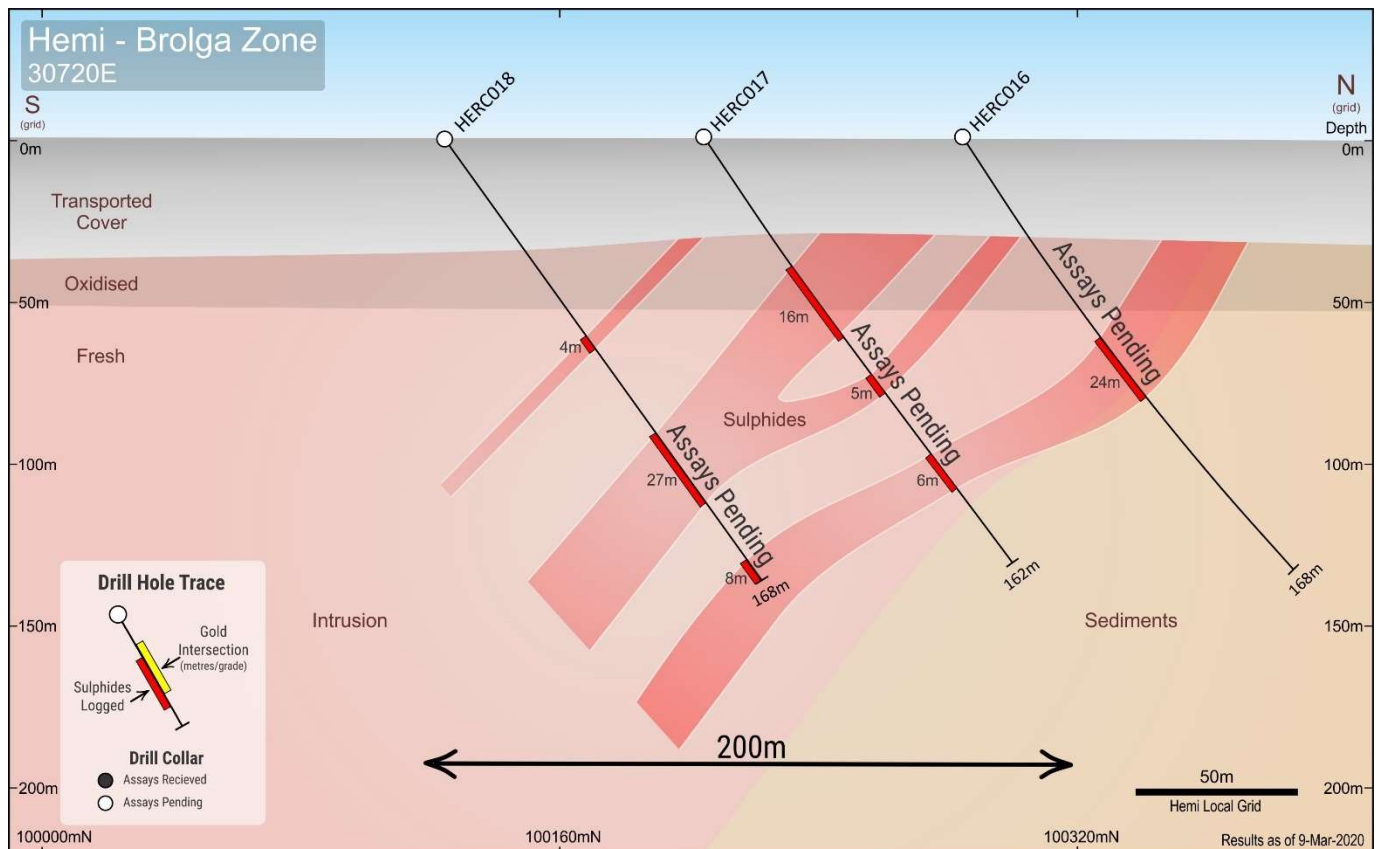


Figure 4 Brolga Zone – Section 30,720E showing sulphide mineralisation zones as logged (5-10% sulphide)



Section 30,640E (Hemi Local Grid)

New RC gold assays continue to confirm and extend strong gold mineralisation on Section 30,640E (local grid). Further RC drill assays remain pending on this section.

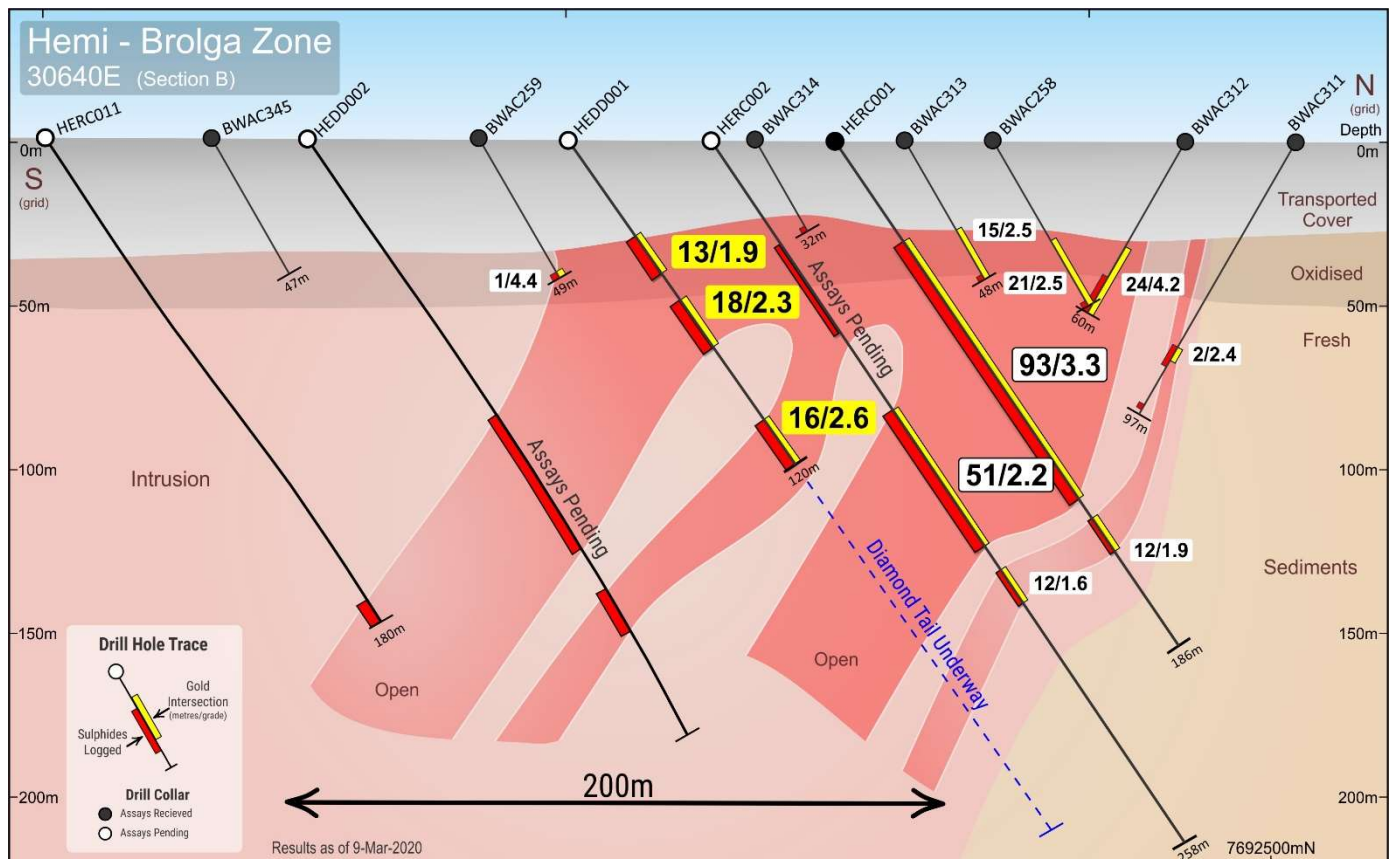
Highly encouraging gold assays have now been received for the precollar of HEDD001, providing confirmation of strong gold mineralisation along section (Figure 5). The gold intercepts correlate very well with the logged sulphide rich zones of mineralisation adding confidence to the geological model. Diamond core drilling extending this hole is well underway targeting extension of the previously reported broad high grade gold mineralisation below holes HERC001 and HERC002 (93m @ 3.3g/t and 51m @ 2.2g/t respectively). Full results are presented in Table 1

New significant drilling results from the RC precollar of HEDD001 include:

- **13m @ 1.9g/t Au** from 36m in HEDD001 including **3m @ 4.5g/t Au**
- **18m @ 2.3g/t Au** from 59m in HEDD001 including **2m @ 6.9g/t Au**
- **16m @ 2.6g/t Au** from 104m in HEDD001 including **3m @ 6.7g/t Au**

The early diamond drill core is providing the first ever detailed view of the mineralisation style and associated alteration. The extensive pyrite and arsenopyrite sulphide alteration occurs as wide zones of disseminated to fine stringers as a stockwork throughout the mineralised zone. A series of fine chlorite to biotite rich fractures also occur within the alteration zone (Figure 1 – Front Page).

Figure 5 Brolga Zone – Section 30,640E showing strong gold mineralisation



Hemi Background

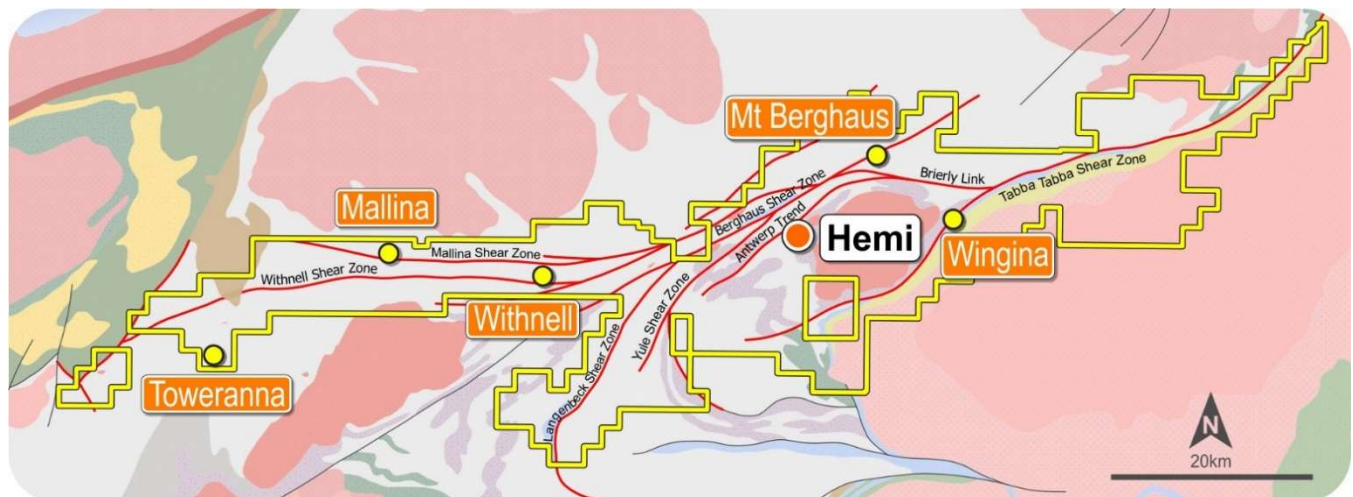
Hemi is a new discovery under 30m of transported cover, with the first aircore drill results reported on 17 December 2019 and further encouraging high grade results subsequently reported during February 2020. Two zones of strong, broad sulphide rich alteration with high grade gold mineralisation has been partially defined in the Aquila and Brolga zones. The gold zones represent a major new discovery for De Grey and potentially a new and exciting new style of mineralisation in the Pilbara region. The scale, grade and overall dimensions of the mineralisation defined to date is larger than all the other gold deposits De grey has defined to date. Hemi has substantial potential to increase De Grey’s current 1.7Moz of shallow gold resources.

The Aquila Zone represents a 30-50m wide high grade gold zone (>5g/t) defined on Section 30,000E (local grid) to 180m below surface. Widespaced drilling has now defined this zone over approximately 750m of strike and remains open in all direction with many assays results still pending.

The Brolga Zone is a substantially wider alteration zone, potentially up to 200m wide and is currently defined by RC drilling over 160m of strike. Widespaced reconnaissance aircore drilling provides scope for further along strike extensions.

The gold mineralisation is intimately associated with strong and extensive sulphide alteration, comprising of pyrite and arsenopyrite, hosted in stockwork within a felsic to mafic intrusion. The genetic link to the host intrusion is significant as the three interpreted large intrusions at Hemi show elevated gold in every aircore hole within the intrusions. This style of mineralisation is considered new to the Pilbara region.

Figure 6 Mallina Gold Project showing main gold deposits and the new Hemi Discovery.



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

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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

The information in this report that relates to Hemi Prospect and the general Berghaus West area that has been previously released includes;

Resources:

- *Pilbara Gold Project increases gold resources by >20% to over 1.2Moz, 28 September 2017;*
- *2018 Total Gold Mineral Resource increases to 1.4Moz, 3 October 2018; and*
- *2019 Total Gold Mineral Resource – 21% increase to 1.7Moz, 16 July 2019.*

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*

Table 1 Significant Drill Intersections (>2 gram x m) based on 4m composites

Hole ID	Depth From (m)	Depth To (m)	Downhole Width (m)	Au (g/t)	Collar East (GDA94)	Collar North (GDA94)	Collar RL (GDA94)	Dip (degrees)	Azimuth (GDA94)	Hole Depth (m)
HEDD001	36	49	13	1.9	649260	7692316	68.797	-55.36	327.751	120
incl	44	47	3	4.4						
HEDD001	59	77	18	2.3						
incl	66	68	2	6.9						
HEDD001	104	120	16	2.6						
incl	114	117	3	6.7						

Table 2 Sulphide zones logged in RC

Hole ID	Collar East (GDA94)	Collar North (GDA94)	Collar RL (GDA94)	Dip (degrees)	Azimuth (GDA94)	Hole Depth (m)	Sulphide Interval (m)
HERC013	649142.74	7692358.36	69.13	-55	330	150	69-93
HERC014	649182.74	7692289.08	69.13	-55	330	210	79-134
HERC014							152-168
HERC015	649222.70	7692220.00	69.13	-56	330	186	49-86
HERC015							104-164
HERC016	649281.00	7692438.00	69.00	-55	330	168	70-94
HERC017	649321.00	7692369.00	69.00	-55	330	162	48-64
HERC017							70-75
HERC017							90-96
HERC018	649361.30	7692299.79	69.13	-55	330	168	76-80
HERC018							112-139
HERC018							160-168

Cautionary Note: The sulphide zones listed in Table 2 are based on 1m geological logging of the drill samples at the rig. The geologist logs the rock type, alteration and determines an estimate of the sulphide abundance based on training and standardised techniques. The intervals are based on average sulphide percentages approximating >5%, however it is noted that due to the fine grained nature of the mineralisation there is an inherent difficulty in the accuracy of the estimate. The intervals remain to be assayed which will provide a more accurate sulphide abundance.

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 style="list-style-type: none"> • <i>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.</i> • <i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i> • <i>Aspects of the determination of mineralisation that are Material to the Public Report.</i> • <i>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.</i> 	<ul style="list-style-type: none"> • All drilling and sampling was undertaken in an industry standard manner • 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 • Aircore samples were collected by spear from 1m sample piles and composited over 4m intervals. • The independent laboratory pulverises the entire sample for analysis as described below.
Drilling techniques	<ul style="list-style-type: none"> • <i>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.).</i> 	<ul style="list-style-type: none"> • Reverse Circulation(RC) holes were drilled with a 5 1/2-inch bit and face sampling hammer. • Diamond core were drilled HQ core size • Aircore holes were drilled with an 83mm diameter blade bit.
Drill sample recovery	<ul style="list-style-type: none"> • <i>Method of recording and assessing core and chip sample recoveries and results assessed.</i> • <i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i> • <i>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.</i> 	<ul style="list-style-type: none"> • RC and aircore samples were visually assessed for recovery. • Samples are considered representative with generally good recovery. Deeper holes encountered water in some cases, with some intervals having less than optimal recovery and possible contamination. • No sample bias is observed.
Logging	<ul style="list-style-type: none"> • <i>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.</i> • <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.</i> • <i>The total length and percentage of the relevant intersections logged.</i> 	<ul style="list-style-type: none"> • The entire hole has been geologically logged by Company geologists. • RC sample results are appropriate for use in a resource estimation • The aircore results provide a good indication of mineralisation but are not used in resource estimation.

Criteria	JORC Code explanation	Commentary
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • RC sampling was carried out by a cone splitter on the rig cyclone and drill cuttings were sampled on a 1m and 4m composite basis. • Aircore samples were collected by spear from 1m sample piles and composited over 4m intervals. • Industry prepared independent standards are inserted approximately 1 in 20 samples. • Each sample was dried, split, crushed and pulverised. • Sample sizes are considered appropriate for the material sampled. • The samples are considered representative and appropriate for this type of drilling • RC samples are appropriate for use in a resource estimate. • Aircore samples are generally of good quality and appropriate for delineation of geochemical trends but are not generally used in resource estimates.
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • The samples were submitted to a commercial independent laboratory in Perth, Australia. • For RC samples Au will be analysed by a 50g charge Fire assay fusion technique with an AAS finish. • 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 • The techniques are considered quantitative in nature. • As discussed previously certified reference standards were inserted by the Company and the laboratory also carries out internal standards in individual batches • The standards and duplicates were considered satisfactory
Verification of sampling and assaying	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • Sample results have been merged by the company's database consultants. • Results have been uploaded into the company database, checked and verified. • No adjustments have been made to the assay data. • Results are reported on a length weighted basis.
Location of data points	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • Drill spacing varies from 80m x 40m to 320m x 80m. • All holes have been geologically logged and provide a strong basis for geological control and continuity of mineralisation. • Data spacing and distribution of RC drilling is sufficient to provide support for the results to be used in a resource estimate. • Sample compositing has not been applied except in reporting of drill intercepts, as described in this Table
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • 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. • 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.

Criteria	JORC Code explanation	Commentary
Sample security	<ul style="list-style-type: none"> The measures taken to ensure sample security. 	<ul style="list-style-type: none"> Samples were collected by company personnel and delivered direct to the laboratory via a transport contractor.
Audits or reviews	<ul style="list-style-type: none"> The results of any audits or reviews of sampling techniques and data. 	<ul style="list-style-type: none"> 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
Mineral tenement and land tenure status	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Drilling occurs on tenement E45/3392 held by Last Crusade Pty Ltd, which is a 100% subsidiary of De Grey Mining Ltd. The Hemi Prospect is approximately 60km SSW of Port Hedland.
Exploration done by other parties	<ul style="list-style-type: none"> Acknowledgment and appraisal of exploration by other parties. 	<ul style="list-style-type: none"> 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 aeromagnetism/radiometrics has been flown previously.
Geology	<ul style="list-style-type: none"> Deposit type, geological setting and style of mineralisation. 	<ul style="list-style-type: none"> 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 intrusive rocks intruding Mallina Basin metasediments. Style is similar to other Western Australian gold deposits.
Drill hole Information	<ul style="list-style-type: none"> 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 style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Drill hole location and directional information provide in the report.
Data aggregation methods	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Results are reported to a minimum cutoff grade of 0.5g/t gold with an internal dilution of 2m maximum. Higher grade intervals included in the above intercepts are reported at a 5g/t Au lower cut. Intercepts are length weighted averaged. No maximum cuts have been made.

Criteria	JORC Code explanation	Commentary
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> • <i>These relationships are particularly important in the reporting of Exploration Results.</i> • <i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i> • <i>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').</i> 	<ul style="list-style-type: none"> • The drill holes are interpreted to be 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	<ul style="list-style-type: none"> • <i>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.</i> 	<ul style="list-style-type: none"> • Plans and sections are provided in the report.
Balanced reporting	<ul style="list-style-type: none"> • <i>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.</i> 	<ul style="list-style-type: none"> • All drill collar locations are shown in figures and all significant results are provided in this report. • The report is considered balanced and provided in context.
Other substantive exploration data	<ul style="list-style-type: none"> • <i>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.</i> 	<ul style="list-style-type: none"> • Drilling is currently very wide spaced and further details will be reported in future releases when data is available.
Further work	<ul style="list-style-type: none"> • <i>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</i> • <i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i> 	<ul style="list-style-type: none"> • Follow up aircore drilling will be undertaken to test for strike extensions to mineralisation. • Programs of follow up RC and diamond drilling aimed at extending resources at depth and laterally are underway and/or will commence shortly.