

ASX ANNOUNCEMENT

4 December 2020

Mallina Gold Project Exploration Update

- **Hemi - RC and diamond drilling continue to expand and delineate the footprint and depth of the known mineralisation ahead of a maiden resource in mid-2021:**
 - Aquila, Brolga, Brolga South, Crow and Falcon
 - Two RC and two diamond drill rigs currently focused on this activity
- **Greater Hemi - Aircore drilling of the known intrusions in the Greater Hemi area is progressing. Anomalous gold mineralisation is being noted, with prospective geochemical targets to be followed up by RC drilling into the first half of 2021:**
 - Scooby, Shaggy, Antwerp and Alectroenas
 - New intrusions identified by aeromagnetics, geochemistry and aircore drilling
 - Two aircore and one RC rig currently focused on this activity
- **Regional Intrusion Targets - Aircore to test known regional intrusions during 2021:**
 - Charity Well, Calvert, Geemas and other intrusions
 - Extensions at Toweranna
 - Identification of new targets – aeromagnetics, geochemistry and aircore drilling
- **Existing Regional Shear Zone Targets - RC and diamond drilling to extend existing shear-hosted deposits during 2021, targeting a significant increase in the current 2.2Moz Mineral Resource regionally (including Toweranna):**
 - Mallina, Withnell, Wingina and Mt. Berghaus – all open along strike and at depth
 - Ongoing identification and drilling of new regional shear zone targets, such as Buckle

De Grey Managing Director, Glenn Jardine, commented:

“Since the discovery of Hemi 12 months ago, our near sole focus has been on extending and delineating the discovery. We have completed approximately 250,000 metres of drilling during the year since discovery. This continues to prove a successful path to increasing the gold endowment at Hemi as confirmed by the recent discovery of the new Falcon zone and north-west extensions emerging to the footprint of Crow. Extending and defining Hemi as a Tier One resource is our focus.

There remains ongoing potential to expand at Hemi. Two RC rigs and two diamond rigs are currently operating with a third diamond rig to be mobilised in the near future to continue drilling depth extensions, particularly at the recently discovered Falcon zone.

Following a recruitment phase we are now appropriately resourced to lift our exploration gaze to the Greater Hemi area, where we have two aircore rigs and one RC rig drilling both intrusion and structural targets. We are continuing to look at resourcing the company to reinvigorate exploration across the whole tenement package during 2021 where we are blessed with many targets.

We will use the knowledge that we have gained at Hemi over the past year to leverage exploration success across our district scale tenement package.”

De Grey Mining Limited (ASX: DEG, “De Grey”, “Company”) is pleased to provide the following update on regional exploration activities at the Mallina Gold Project, located approximately 60km south of Port Hedland in Western Australia.

While the majority of the Company’s resourcing remains focused on infill resource drilling and extending the Hemi discovery area, exploration activity in new areas outside Hemi will increase in 2021. An exploration team with a dedicated focus on regional activities outside the Hemi area has been established to accelerate the testing of new target areas. Plan views of Hemi and Greater Hemi with updated geochemistry results is contained in Figure 1 and 2 respectively. A new regional plan highlighting intrusive structures overlaid with geophysical survey results is contained in Figure 3.

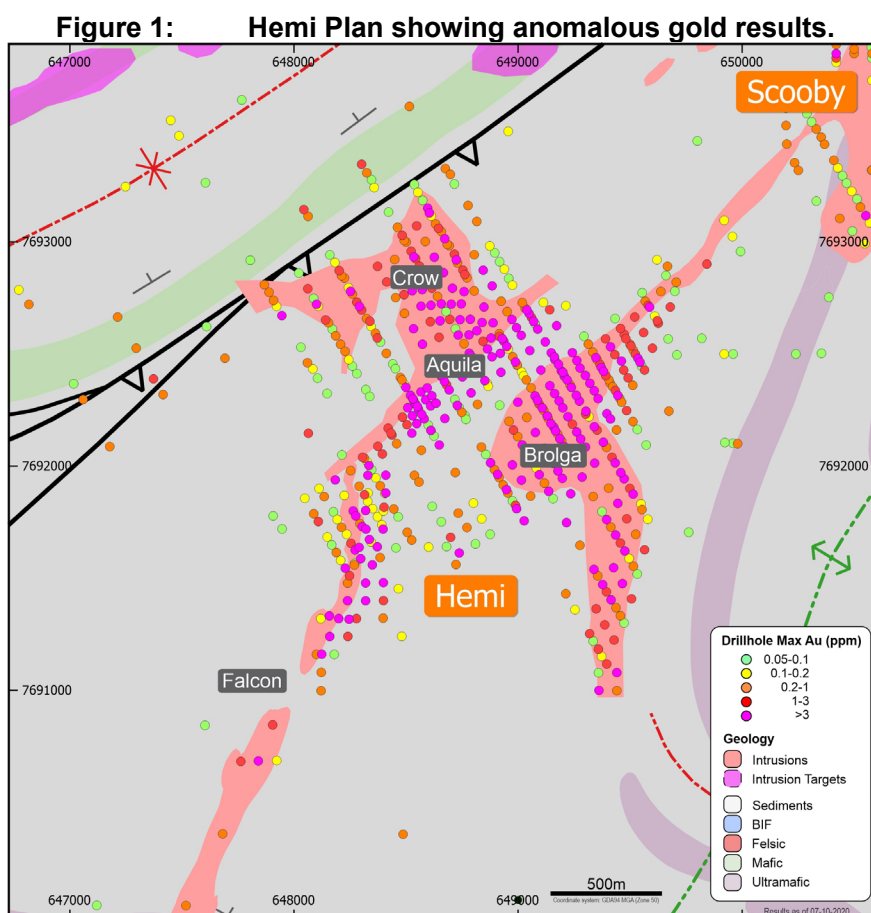
Hemi Drilling

Two RC rigs and two diamond rigs are currently operating at Hemi. A third diamond rig will be mobilised to site this month. These rigs are conducting resource delineation and extensional drilling.

Delineation drilling this year has been successful in demonstrating the continuity of wide spans of gold mineralisation at Aquila, Brolga and Falcon. At Crow, infill drilling has also identified previously unrecognised higher grade sub-vertical mineralised lodes within the larger mineralised system. Delineation drilling will support the release of a high quality Mineral Resource for Hemi in mid-2021.

Extensional drilling has expanded each of the original zones of Aquila, Brolga and Crow. Extensional aircore drilling has been successful with the recent discovery of the Falcon zone and extensions to the north-west of Crow.

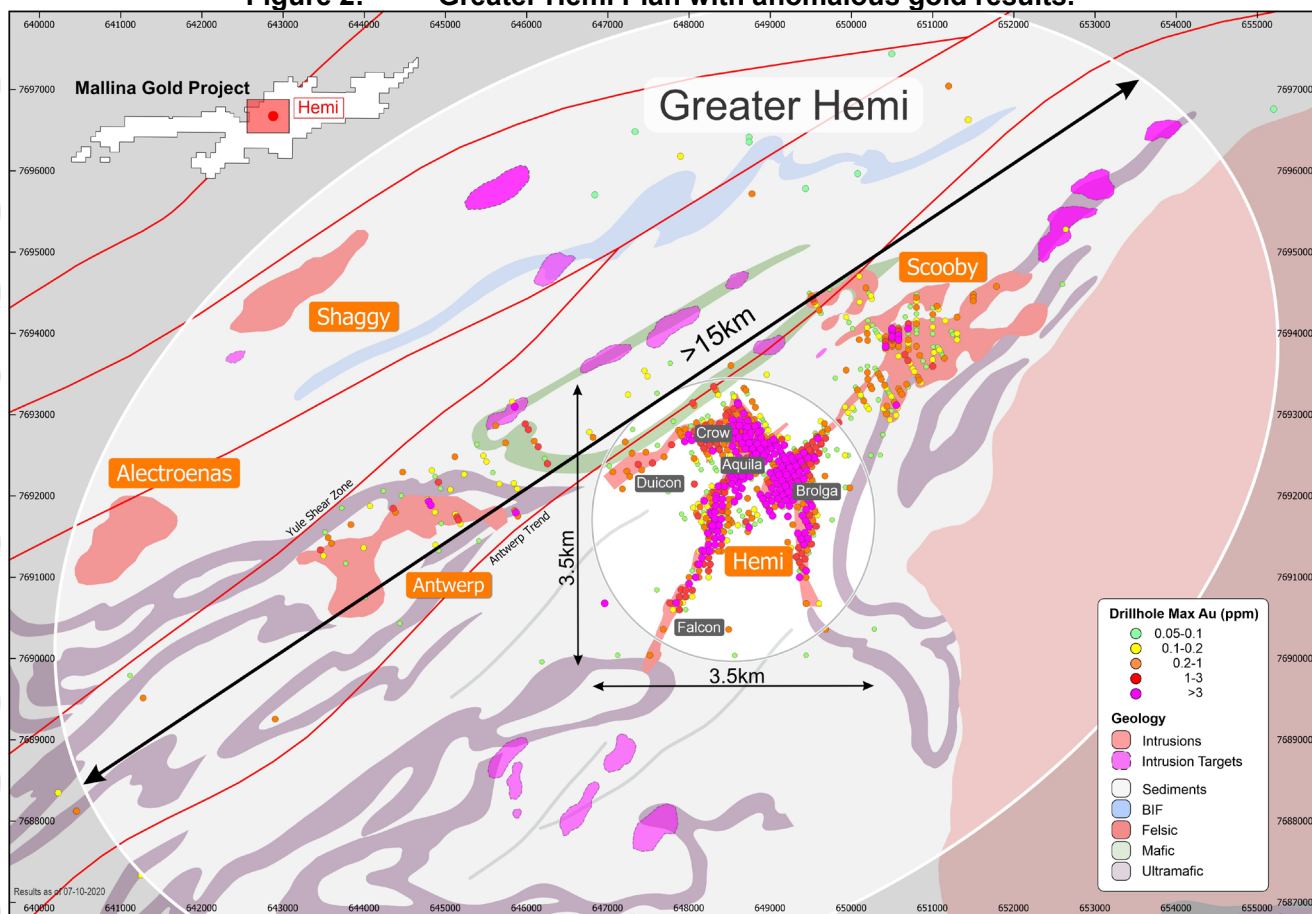
The recent discovery of the Falcon intrusion exemplifies the upside that remains in the immediate vicinity of known mineralisation at Hemi. This support the Company’s continuing focus of drilling resources in this area.



Greater Hemi Exploration

Systematic aircore drilling of the Greater Hemi area including at Scooby, Shaggy, Antwerp and Electroenas intrusions (Figure 2) is progressing. Prospective areas identified by aircore drilling will be followed up with meaningful blocks of RC drilling to determine the extent of mineralisation. Some RC drilling is in progress within Greater Hemi and this will continue into the first half of 2021.

Figure 2: Greater Hemi Plan with anomalous gold results.



Regional Exploration

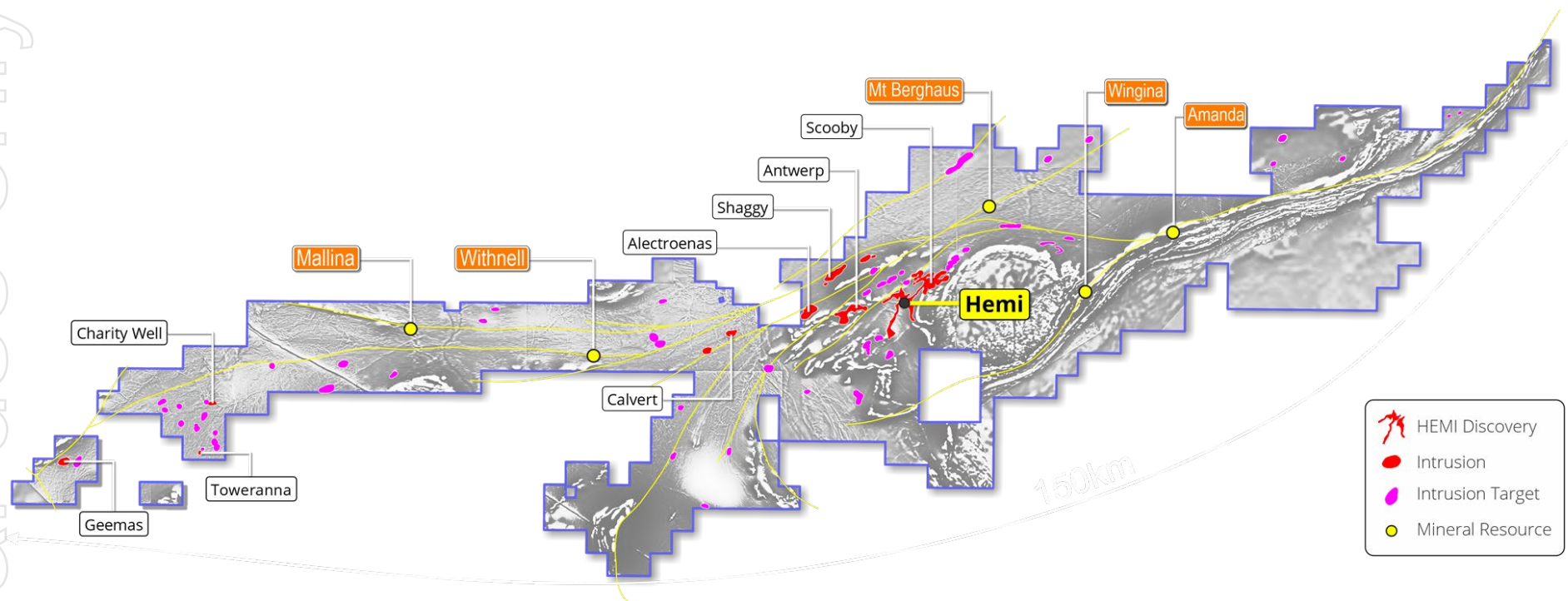
Significant untested exploration potential remains across the wider project area (Figure 3).

Outside the Greater Hemi area, four known intrusions have been identified with the first aircore drilling of these targets – Charity Well, Calvert and Geemas – commencing in the first half of 2021. Calvert has a small shear zone hosted resource in sediments lying to the south of an intrusion. The intrusion has been tested to only shallow depths in historical drilling.

Interpretation of a detailed, project-wide aeromagnetic survey and geochemical sampling results has highlighted more than 30 potential intrusive targets requiring assessment.

Initial focus of the regional exploration team will be on identifying new, large scale, high value intrusion-hosted deposits similar to Hemi. However, work will also be undertaken on the shear-hosted potential of the project. More than 200km of shear zones also exist across the Mallina Project and the majority of the current Mineral Resource of 37.4 million tonnes grading 1.8g/t Au for 2.2 million ounces (excluding Hemi) is found in shear-hosted deposits.

Figure 3: Mallina Gold Project Regional Plan



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**This announcement has been authorised for release by the De Grey Board.
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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.

Previous Resource Statements:

- *Mallina Gold Project Resource Update – 02 April 2020*

Material ASX Release References since June 2020 that relates to Hemi Prospect include:

- *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*
- *Falcon -Major new gold discovery at Hemi, 2 September 2020*
- *Falcon – Drilling Update, 15 September 2020*
- *Strong Brolga infill and extensions, 25 September 2020.*
- *Encouraging Extensional and Infill Drilling Results at Aquila and Crow, 7 October 2020*
- *Thick High Grade near surface hits continue at Falcon, 12 October 2020*
- *Further positive results extend Aquila and Crow, 29 October 2020*
- *High-grade extensions at Crow and Aquila, 12 November 2020*
- *High grade depth extensions and visible gold at Falcon, 30 November 2020*

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"> 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. 	<ul style="list-style-type: none"> All drilling and sampling was undertaken 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 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. Sample weights ranges from around 1-3kg. The independent laboratory pulverises the entire sample for analysis as described below. Industry prepared independent standards are inserted approximately 1 in 20 samples. The independent laboratory then takes the samples which are dried, split, crushed and pulverized prior to analysis as described below. Sample sizes are considered appropriate for the material sampled. The samples are considered representative and appropriate for this type of drilling. Diamond core and RC samples are appropriate for use in a resource estimate.
Drilling techniques	<ul style="list-style-type: none"> 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.). 	<ul style="list-style-type: none"> Diamond core diameters are - NQ2 (51mm), HQ3 (61mm), PQ (85mm). Reverse Circulation (RC) holes were drilled with a 5 1/2-inch bit and face sampling hammer. Aircore holes were drilled with an 83mm diameter blade bit.
Drill sample recovery	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> 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

Criteria	JORC Code explanation	Commentary
	<p><i>have occurred due to preferential loss/gain of fine/coarse material.</i></p>	<p>with generally good recovery. Deeper RC and aircore holes encountered water, with some intervals having less than optimal recovery and possible contamination.</p> <ul style="list-style-type: none"> 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 and core was photographed by Company geologists, with systematic sampling undertaken based on rock type and alteration observed RC and diamond sample results are appropriate for use in a resource 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	<ul style="list-style-type: none"> <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i> <i>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</i> <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i> <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i> <i>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.</i> <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i> 	<ul style="list-style-type: none"> Core samples were collected with a diamond drill rig drilling NQ2, HQ3 or PQ 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. 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. 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. 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 Core and 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.

Criteria	JORC Code explanation	Commentary
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 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 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"> 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	<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. It has not yet been determined if data spacing and distribution of RC and diamond 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	<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. 	<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

Criteria	JORC Code explanation	Commentary
geological structure	<ul style="list-style-type: none"> 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"> 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	<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 various tenements held by De Grey Mining Ltd or its 100% owned subsidiaries. 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 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 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 igneous rocks intruding Mallina Basin metasediments. Style is similar to some 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 	<ul style="list-style-type: none"> Drill hole location and directional information provide in the report.

Criteria	JORC Code explanation	Commentary
	<i>of the report, the Competent Person should clearly explain why this is the case.</i>	
Data aggregation methods	<ul style="list-style-type: none"> <i>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.</i> <i>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.</i> <i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i> 	<ul style="list-style-type: none"> Results are reported to a minimum cutoff 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. No maximum cuts have been made.
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 widely 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.