

22 June 2020

ASX Release

Further High Grade & Expanded Footprint at Hemi

Near surface, broad high grades intersected at Aquila that include:

- Section 29,960E, 40m west of the discovery section:
 - 29m @ 3.8g/t Au from 64m in HERC098
 - 53m @ 5.9g/t Au from 117m in HERC099 inc. 28m @ 10.2g/t Au from 117m
 - 35m @ 3.1 g/t Au from 175m in HERC101 inc. 16m @ 5.6g/t Au from 180m
- Section 30,080E:
 - 44m @ 2.5g/t Au from 60m in HERC092

Expected depth extensions below 150m in HERC094D and HERC105D

Aquila Zone extended 400m west – open along strike and at depth

Aquila style mineralisation identified 400 metres west of Aquila with near surface gold in aircore drilling:

33m @ 1.5g/t Au from 64m in BWAC567 ending in mineralisation

20m @ 0.9g/t Au from 46m in BWAC568

- > Follow up drilling to further test depth and lateral extensions at Aquila has commenced
- > Six drill rigs now operating on site

De Grey Exploration Manager, Phil Tornatora, commented:

"The Aquila style gold mineralisation identified in highly altered intrusion 400m to the west is an exciting and significant development as it opens up the overall strike potential of the deposit. The broad high grade mineralisation announced today is particularly encouraging demonstrating the potential to rapidly add to Aquila's gold endowment.

We are now targeting diamond drilling to extend Aquila to at least 300m below surface along the entire strike of the deposit. The potential to extend Aquila a further 400m to the west under an interpreted shallow veneer of sediments is an exciting development and will also be targeted. Similar potential remains to be tested to the east under the sediment contact.

Diamond core assays of the depth extensions below the recent high grade intercepts are in the lab with results expected shortly. Stepout extension diamond drilling is on-going with a further 8 pre-collars already completed. A second RC rig arriving next week will help accelerate drilling on all mineralised zones at Hemi."

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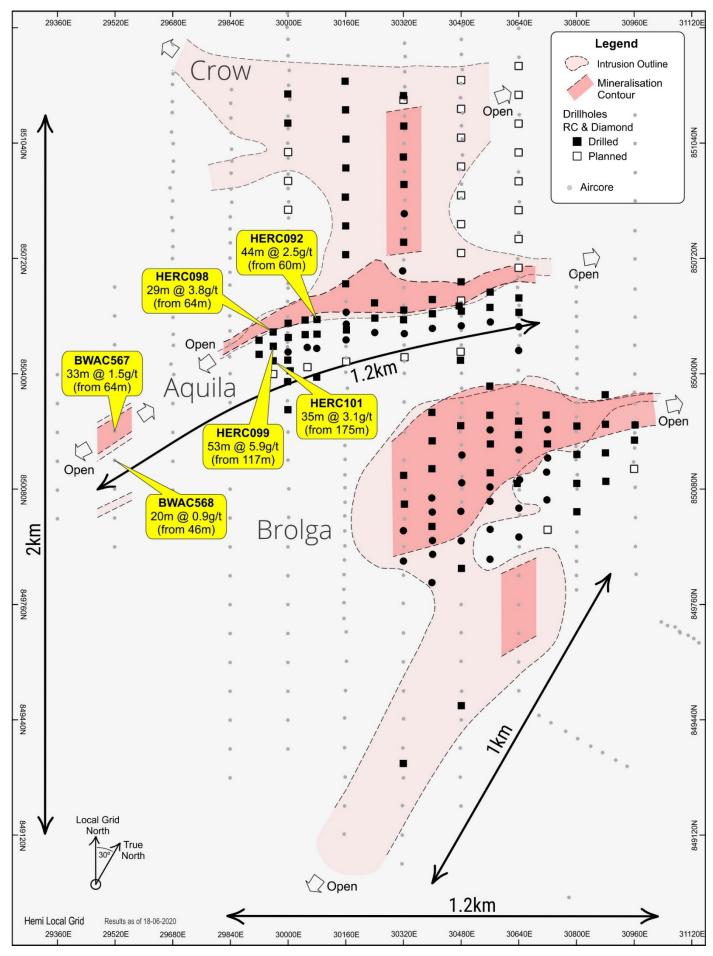


Figure 1 HEMI - RC and DD drill collar locations (local grid) showing major new results



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

Gold endowment at Hemi continues to grow with drilling still to define the limits of mineralisation. Aquila is a 1.2km long linear mineralised zone located between the Brolga and Crow intrusions. (Figure 1) and remains open in all directions. Two high grade (+5g/t) plunging shoots appear to be developing in drilling. Recent aircore drilling has provided a potential 400m strike extension. These high grade shoots and lateral extension have the potential to significantly increase the open pit mining potential at Aquila.

Recent RC and diamond drilling continue to extend broad scale gold mineralisation with the 4 rigs operating at all mineralized zones at Hemi. RC drilling has been adversely affected for a week in mid-June due to mechanical availability. The RC rig has also been completing pre-collars for deeper diamond drilling at Aquila. Aircore drilling is continuing to the southwest of Hemi targeting mineralised extensions. A second aircore rig will extend coverage to the east of Hemi toward Scooby commencing this week.

<u>AQUILA</u>

Aquila is well defined over a strike length of 800m and a depth of approximately 150m with RC and diamond drilling. Recent aircore drilling shows potential to extend mineralisation a further 400m to the west. Possible extensions to the east remain untested.

Drilling is now targeting a vertical extension to a nominal depth of 300m along the entire strike. Two high grade shoots appear to be developing at the western and eastern ends of the deposits (Figure 3) and remain open at depth and along strike. A program of step out diamond drilling on 80m sections is underway with 8 precollars already completed to extend mineralisation.

Recent results define broad, near surface, high grade mineralisation on Section 29,960 (Figure 4) and 30,080E (Figure 5) that remains open at depth. This high grade mineralisation confirms a western high grade plunging shoot (>50gm*m) and provides the opportunity to rapidly increase gold endowment at Aquila. Drilling to extend this zone at depth is underway with further step out drilling to the west and east also planned. Significant new intercepts (>10gm*m) include:

| <u>Section</u> | <u>Intercept</u> | | | | |
|----------------|---|--|--|--|--|
| 29,960E | 29m @ 3.8g/t Au from 64m in HERC098 | | | | |
| | 53m @ 5.9 g/t Au from 117m in HERC099 including 28m @ 10.2g/t Au from 117m | | | | |
| | 35m @ 3.1 g/t Au from 175m in HERC101 including 16.0m @ 5.6 g/t Au from 180m | | | | |
| 30,080E | 44m @ 2.5g/t Au from 60m in HERC092 | | | | |
| | Two holes, HERC094D and 105D, were extended at depth by diamond drilling on section 30,080 (Figure 6). Assays are pending for both. | | | | |

Aircore drilling has intersected Aquila style mineralisation on section 29520E, approximately 400m to the west of Aquila (Figure 6). The mineralisation is interpreted to represent a western extension of the Aquila zone. An interpreted thin veneer of sediments occurs between the known mineralisation (Figure 2). Significant aircore results include:

29,520E 33m @ 1.5g/t Au from 64m in BWAC567 (ending in mineralisation)

30m @ 0.9g/t Au from 46m in BWAC568.

The additional RC and aircore rigs are expected to arrive on site this week. 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 extensional drilling at all mineralized zones at Hemi.

Full gold intercepts (>2gm *m) discussed in this report are listed in Table 1.



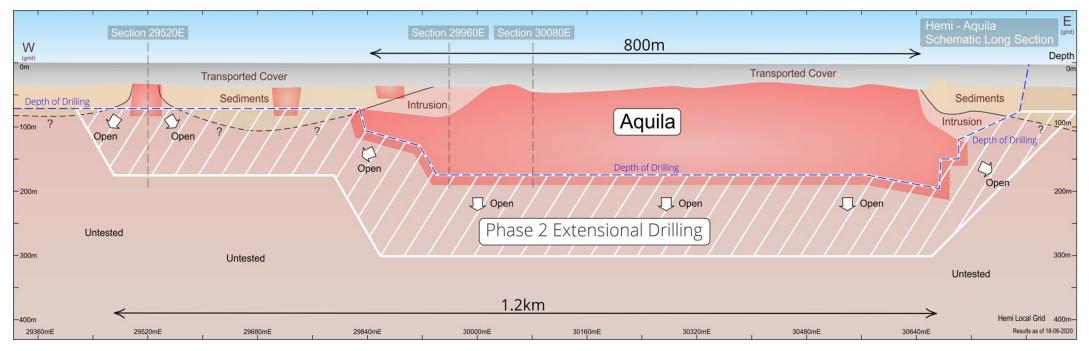
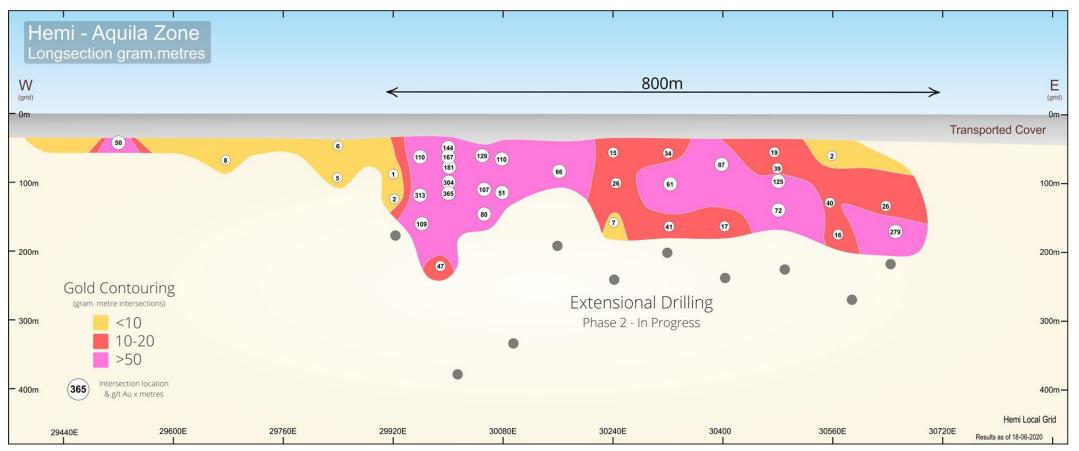


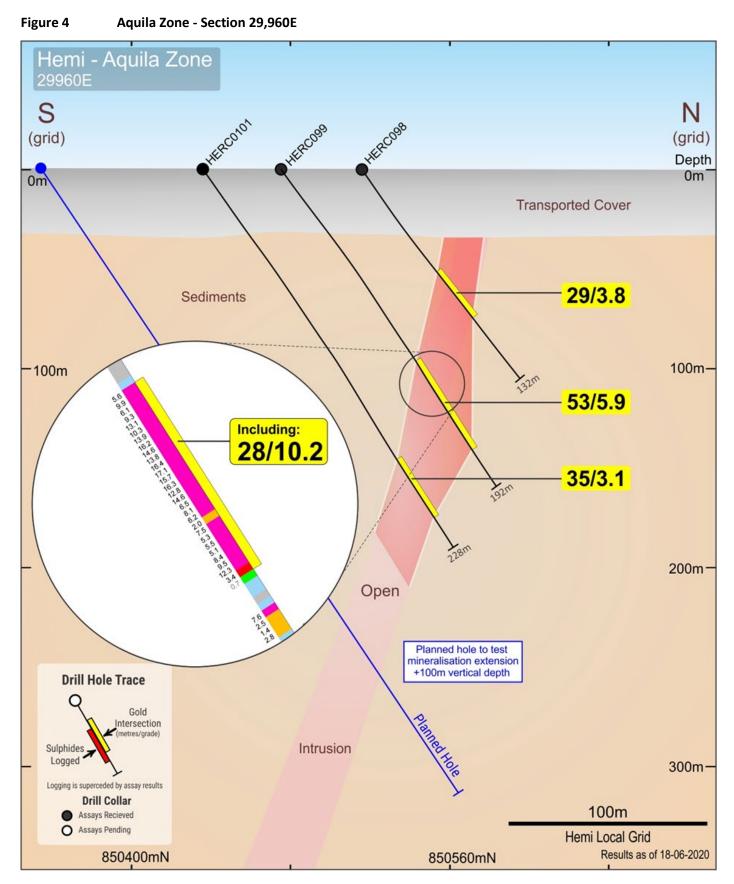
Figure 2 Aquila long projection showing extent of RC and diamond drilling and Western Intrusion



Figure 3 Aquila long projection gold endowment (g/t Au by downhole interval – "gram metres")









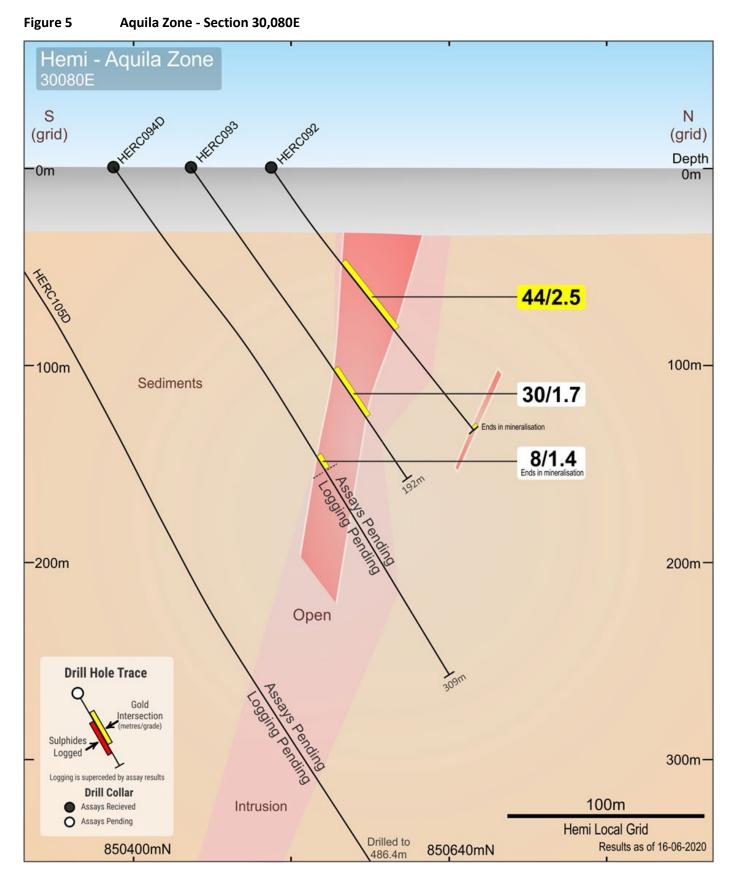
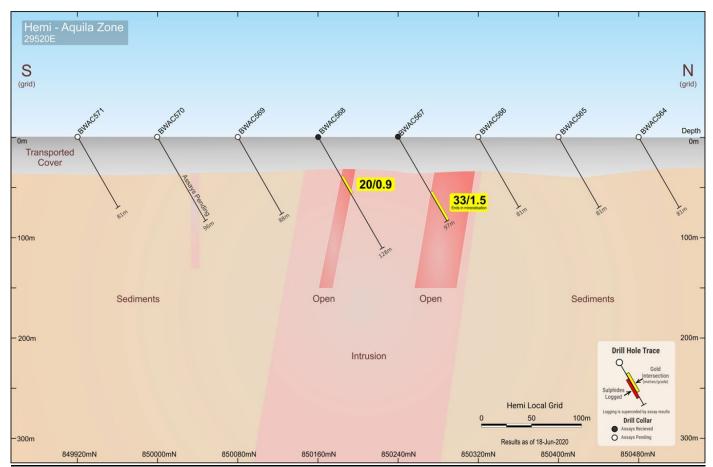




Figure 6 Cross Section through BWAC567 and BWAC568



BACKGROUND

Hemi is a new major gold discovery with world class infrastructure at its doorstep (Figure 7). Gold mineralisation at Hemi 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 previously seen in the Mallina Basin.

There are at least four other look-alike intrusion targets already identified the immediate vicinity of Hemi - Scooby, Shaggy, Antwerp and Alectroenas (Figure 8). Three already host known shallow gold mineralisation with Alectroenas never previously drilled. A detailed aeromagnetic over the Scooby to Antwerp trend has recently been completed. The results are being analysed to identify potential new intrusive targets.

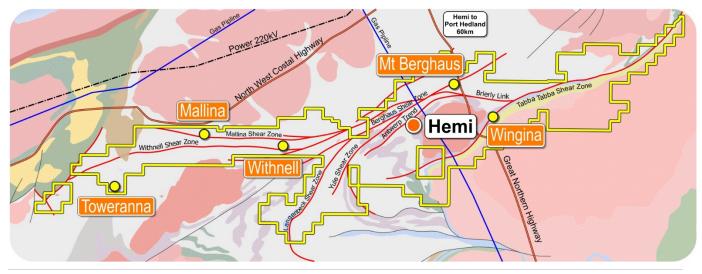
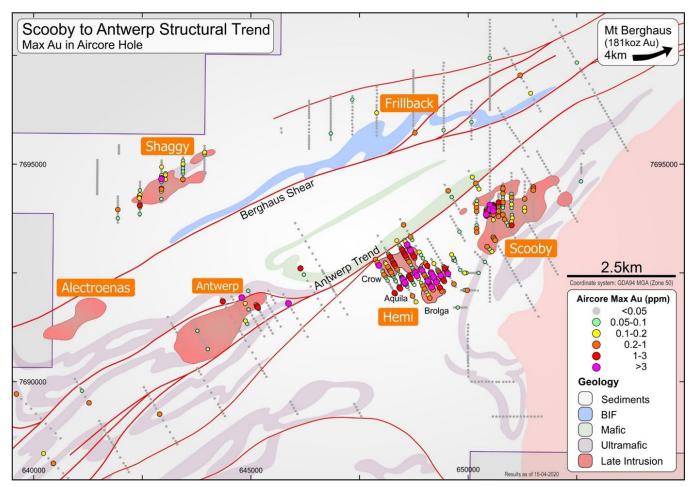


Figure 7 Mallina Gold Project showing main gold deposits and the new Hemi Discovery.



Figure 8 Scooby to Antwerp Structural Trend



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 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
- HEMI Broad, high grade extensions at Aquila, 9 June 2020



| HoleID | Zone | Depth From | Depth To (m) | Downhole | Au (g/t) | Collar East | Collar North | Collar RL | Dip | Azimuth | Hole Depth | Hole Type | Comments |
|----------|--------|------------|--------------|-----------|----------|-------------|--------------|-----------|-----------|---------|------------|-----------|-----------|
| | | (m) | | Width (m) | | (GDA94) | (GDA94) | (GDA94) | (degrees) | (GDA94) | (m) | | |
| BWAC567 | Aquila | 64.0 | 97.0 | 33.0 | 1.5 | 648264 | 7691800 | 69 | -60 | 332 | 97 | AC | |
| incl | Aquila | 72.0 | 77.0 | 5.0 | 3.7 | 648264 | 7691800 | 69 | -60 | 332 | 97 | AC | |
| incl | Aquila | 94.0 | 96.0 | 2.0 | 3.8 | 648264 | 7691800 | 69 | -60 | 332 | 97 | AC | |
| BWAC568 | Aquila | 46.0 | 66.0 | 20.0 | 0.9 | 648304 | 7691731 | 69 | -60 | 332 | 128 | AC | |
| HERC092 | Aquila | 60.0 | 104.0 | 44.0 | 2.5 | 648595 | 7692349 | 69 | -56 | 327 | 168 | RC | |
| HERC092 | Aquila | 166.0 | 168.0 | 2.0 | 1.2 | 648595 | 7692349 | 69 | -56 | 327 | 168 | RC | |
| HERC098 | Aquila | 64.0 | 93.0 | 29.0 | 3.8 | 648507 | 7692258 | 69 | -55 | 330 | 132 | RC | |
| incl | Aquila | 65.0 | 70.0 | 5.0 | 7.3 | 648507 | 7692258 | 69 | -55 | 330 | 132 | RC | |
| HERC099 | Aquila | 117.0 | 170.0 | 53.0 | 5.9 | 648527 | 7692224 | 69 | -56 | 328 | 192 | RC | |
| incl | Aquila | 117.0 | 145.0 | 28.0 | 10.2 | 648527 | 7692224 | 69 | -56 | 328 | 192 | RC | |
| HERC100D | Aquila | 43.0 | 45.0 | 2.0 | 1.7 | 649089 | 7692611 | 68 | -58 | 330 | 180 | RCD | Precollar |
| HERC101 | Aquila | 175.0 | 210.0 | 35.0 | 3.1 | 648547 | 7692189 | 69 | -56 | 331 | 228 | RC | |
| incl | Aquila | 180.0 | 196.0 | 16.0 | 5.6 | 648547 | 7692189 | 69 | -56 | 331 | 228 | RC | |

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



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. | 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 |
| Drilling techniques Drill sample | 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.). Method of recording and assessing core and chip | 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. Core recovery is measured for each drilling run by the driller and then |
| recovery | 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. | 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. | 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. |



| Criteria | JORC Code explanation | Commentary | | | | |
|---|--|---|--|--|--|--|
| 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 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. | 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. 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. | | | | |
| 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. | 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. | | | | |
| 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. | Sample results have been merged by the company's database consultants. Results have been uploaded into the company database, checked and verified. | | | | |
| 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. | accuracy of +/-10cm. | | | | |
| Data spacing and distribution Orientation of | 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. Whether the orientation of sampling achieves | geological control and continuity of mineralisation. Data spacing and distribution of RC drilling is not yet 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 | | | | |
| data in relation to geological structure | • Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. | The drining 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 | | | | |



| Criteria | JORC Code explanation | Commentary |
|-------------------|--|---|
| | 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. | 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 |
|--|---|--|
| Mineral tenement and land tenure status | 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. | which is a 100% subsidiary of De Grey Mining Ltd. |
| Exploration done by other parties | • Acknowledgment and appraisal of exploration by other parties. | 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. |
| 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 of the report, the Competent Person should clearly explain why this is the case. | Drill hole location and directional information provide in the report. |
| 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. | 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. |



| 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 | 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'). | the strike of mineralisation. | | | |
| 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. | 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 | • 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 | 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. | 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. | | | |