

"Developing the +1.2Moz Pilbara Gold Project"

ASX Announcement 10 August 2018

ASX Code DEG FRA Code WKN 633879

ABN 65 094 206 292

DIRECTORS/MANAGEMENT

Executive Chairman
Simon Lill

Technical Director & Operations Manager Andy Beckwith

Non-executive Directors
Steve Morris
Brett Lambert

Company Secretary Patrick Holywell Craig Nelmes

Exploration ManagerPhil Tornatora

CONTACT DETAILS

Principal & Registered Office Level 3, 22 Railway Rd, Subiaco WA 6008

PO Box 281 Mt Hawthorn WA 6016

www.degreymining.com.au

admin@degreymining.com.au

T +61 8 6117 9328 F +61 8 6117 9330

68m Conglomerate Sequence intersected at Steel Well

- First stratigraphic diamond core hole completed to 230.90m downhole at Steel Well Prospect.
- Multiple conglomerate beds intersected down-dip of outcropping conglomerate, greywacke and siltstone units demonstrating overall true thickness of 68m.
- Multiple pyritic horizons identified throughout the conglomerate sequence.
- Conglomerate sequence unconformably overly mafic intrusive rocks interpreted to be feeder dyke for lower Fortescue Group, Mt Roe Basalt.
- Single gold nugget (0.2gm) found in new area by metal detector on recently developed drill pad access track in difficult metal detecting terrain.
- Soil sampling programs planned for Loudens Patch, Jarret Well and Steel Well due to commence in coming weeks.

Pyrite-bearing pebble conglomerate in SWDD0001 at 14.20m



(core diameter 61.10mm)

"Our geological understanding of the conglomerate sequence at both Jarret Well and Steel Well has increased markedly and the multi-element assays are intended to focus the future bulk sampling on the preferred gold anomalous portions of the units. We now have pyrite bearing conglomerate units at all three prospects." commented Technical Director, Andy Beckwith.



De Grey Mining Limited (ASX: DEG, "De Grey", "Company") is pleased to report that the second diamond core hole drilled as part of a detailed stratigraphic review of conglomerate beds mapped at Jarret and Steel Wells is now completed. The hole was drilled at the north end of the Steel Well Conglomerate Gold Prospect where recent bulk stream sampling detected alluvial gold draining the conglomerate outcrops which have been mapped over 900m strike and dipping to the northwest (ASX release dated March 19, 2018 "Conglomerate Gold Update – Widespread gold and nuggets).

The stratigraphic drilling aims to provide detailed lithological information to interpret the palaeodepositional environment of the conglomerate beds and highlight the most prospective units for potential gold mineralisation.

Geological information will be gathered in the form of detailed lithological and petrographic descriptions supported by geochemical fingerprinting of rock types through multi-element analysis, assays for gold and combining surface mapping and down-hole structural and lithological data to commence building a 3D geological model. Results of this test work will be further used to target preferred upcoming bulk sampling programs.

Drilling to date

Jarrett Well

Lithology logging and structural interpretation of JWDD0001 is now complete with core ready for cutting and sampling. (ASX release dated July 23, 2018 "Jarrett Well – 11.6m Pyritic Conglomerate intersected in drilling").

Steel Well

Stratigraphic diamond core hole SWDD0001 was collared in conglomerate outcrop, approximately 10m below the upper contact with overlying Mt Roe Basalt and was drilled towards the southeast, perpendicular to bedding (Figure 1).

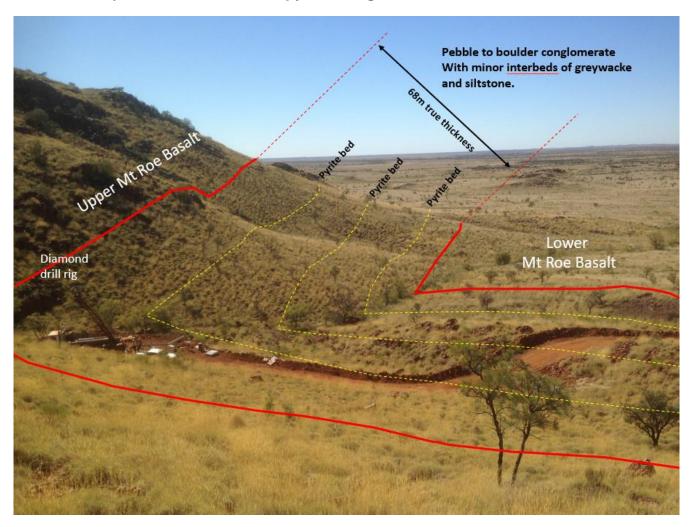
Drilling intersected a mixed sedimentary package of greywacke, siltstone and pebble to boulder conglomerate with the bottom of the conglomerate rock package occurring at 69.04m with an estimated true thickness of 68m. Below 69.04m, the hole intersected thick glomeroporphyritic basalt (daisy rock), amygdaloidal basalt and fine grained dolerite, interpreted to be a phase of Mt Roe basalt, and was stopped at 230.90m. The aim of pushing the hole beyond the planned depth of 150m was to locate further prospective conglomerate sequence above the unconformity basement contact with the Mallina Formation. However, it is interpreted the hole penetrated a subvertical feeder zone of thick Mt Roe Basalt which may have intruded along a north-northeast regional structure.

Conglomerates within the sedimentary package comprise pebble to boulder sized, angular to well-rounded clasts of intermediate to mafic volcanic, arenaceous sediments and quartz. The conglomerate units range from 3m to 30m thick with the thickest units at the base of the package. The thinner upper conglomerates occur interbedded with greywacke and siltstone. Pervasive chlorite alteration is common throughout the conglomerate units with quartz and carbonate frequently forming halos surrounding the individual rock clasts.

Multiple pyrite-bearing horizons were intersected in the drilling principally between 12.71m - 14.89m in pebble conglomerate, 42.1m - 47.50m in pebble to cobble conglomerate and 53.9m - 57.73m also in pebble to cobble conglomerate. The pyrite is well rounded to euhedral implying multiple sources and is generally confined to discrete layers 1 to 5cm thick in addition to being finely disseminated throughout the conglomerate horizons (See Plates 1 to 6 for rock descriptions and pyrite zones).



Figure 1 Panoramic view of SWDD0001 looking northeast showing conglomerate sequence and location of pyritic conglomerate beds.



Gold Nugget

Recent metal detecting along the new access track to the drill site, resulted in the discovery of a single gold nugget (Figure 2). The gold nugget (0.2gm) was found 100m south of the Steel Well drill collar (SWD0001) where the bulldozer track exposed a small section of outcropping boulder conglomerate. Previously metal detectors hadn't been able to penetrate bedrock due to abundant spinifex bush and cover material which in places is up to 0.5m thick. This cover is quite consistent along the conglomerate area and between Steel Well and Jarret Well. This nugget is the first discovered in proximity to the conglomerate outcrops at Steel Well. Three nuggets have previously been reported approximately 500m to the south of the outcropping conglomerate.

Future work

Petrography

Petrographic thin section work is planned for both drill holes to aid in classifying rock types, interpreting depositional environment (if appropriate) and identifying intensity and types of alteration. A suite of representative rock types will be taken from each hole across stratigraphy with results combined with the multi-element data to determine the most appropriate rock type classification.

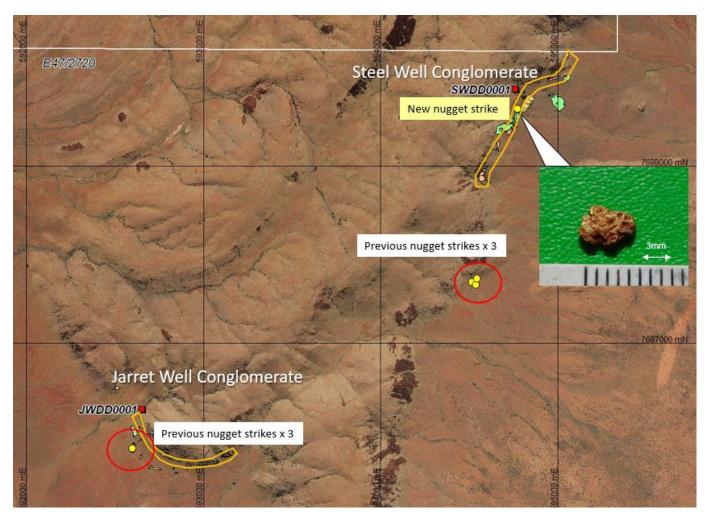
Gold assay and multi-element analysis

Given the highly nuggetty nature of gold distribution within the conglomerates, gold assay analysis is not intended to be representative of grade of the different rock types. Gold assaying is only



being undertaken as a routine analysis to identify potential gold-bearing horizons. Multi-element analytical data will be combined with the petrographic analysis to aid in determining rock type and alteration. In addition, the multi-element data will be combined with gold assays to identify possible correlations between specific elements which could aid in regional geochemical programmes in addition to identifying further potential bulk sampling horizons.

Figure 2 Steel Well gold nugget found on access track.



3D modelling

Down-hole lithological and orientated structural data will be combined with surface geological mapping to commence building a 3D geological model of the individual rock units. The geological model will be used to extrapolate the units down-dip and along strike to help trace the prospective geological units which will aid in future drilling and bulk sampling programs.

Soil Sampling

Soil sample programs have been planned at Loudens Patch, Jarret Well and Steel Well targeting the unconformity contact between the Mallina basement and overlying Mt Roe Basalt. The aim of the soil sampling is to identify and delineate the potential gold-bearing conglomerate horizons and highlight areas with high gold soil tenor which can be preferentially targeted in the upcoming bulk sampling program. Approximately 800 soil samples have been planned in total with the program planned to commence in the coming weeks.



Plate 1 Pyritic rich interbed in chlorite altered, polymictic pebble conglomerate at 13.40m (core diameter 61.10mm).

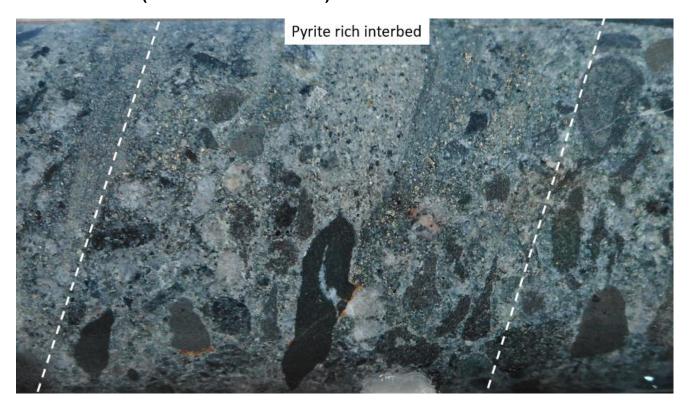


Plate 2 Chlorite altered, laminated siltstone at 27.20m (core diameter 61.10mm).





Plate 3 Medium grained, massive chlorite altered greywacke at 38.60m (core diameter 61.10mm).



Plate 4 Detrital pyrite in sericite-chlorite alter pebble to cobble conglomerate at 46.90m (core diameter 61.10mm).

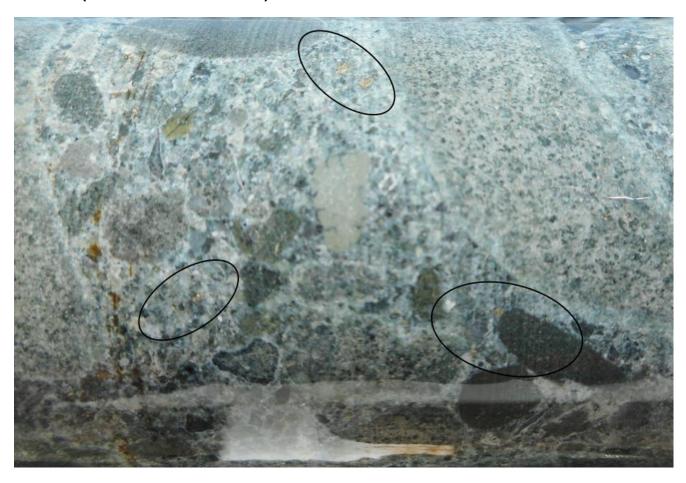




Plate 5 Pyritic beds in chlorite altered pebble to cobble conglomerate at 54.35m (core diameter 61.10mm).

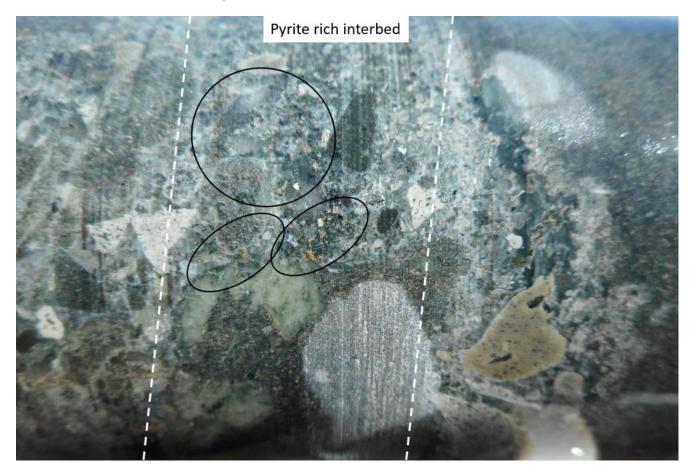
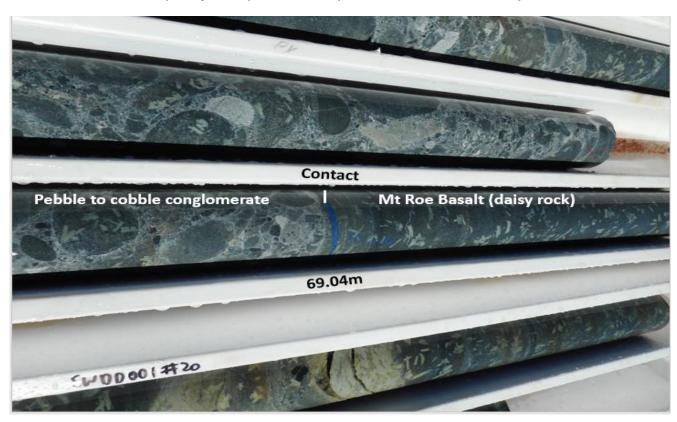


Plate 6 Basal contact between pebble to cobble conglomerate and earlier phase of Mt Roe Basalt (daisy rock) at 69.04m (core diameter 61.10mm).





For further information:

Simon Lill (Executive Chairman) or

Andy Beckwith (Technical Director and Operations Manager)

De Grey Mining Ltd

Phone +61 8 6117 9328

admin@degreymining.com.au

COMPETENT PERSONS STATEMENT

The information in this report that relates to exploration results is based on, and fairly represents information and supporting documentation prepared by Mr. Michael Jackson, a Competent Person who is a Member of The Australian Institute of Geoscientists. Mr. Jackson is a consultant to De Grey Mining Limited. Mr. Jackson 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. Jackson consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

ASX References

"Jarrett Well - 11.6m Pyritic Conglomerate intersected in drilling", 23 July 2018

"Conglomerate Gold - Heritage survey commenced", 18 April 2018.

"Conglomerate Gold Update", 19 March 2018

"VIDEO: Conglomerate Exploration finds gold nugget", 3 November 2017

"Discovery of thick conglomerates and gold nuggets confirms potential of 12km target", 31 October 2017.

"Gold nuggets confirms important new conglomerate discovery", 26 September 2017

"12kms of Witwatersrand conglomerate target identified", 23 August 2017.

"Pilbara Gold Project increases gold resources by >20% to over 1.2Moz", 28 September 2017



Pilbara Gold Project Background

The +1.2Moz Pilbara Gold Project, located 75km from Port Hedland Western Australia, has excellent potential to define significant additional resource ounces along the 200 km plus strike length of mineralised shears zones throughout the large 1,480 km2 landholding. To date, approximately 10% of the shear zones have received detailed shallow RC and diamond drilling to a nominal depth of 100-150m and have already successfully defined +1.2Moz (JORC 2012*) of gold resources.

(* ASX release "Pilbara Gold Project increases gold resources by >20% to over 1.2Moz", 28 September 2017)

Pilbara Gold Project – Jarret Well, Steel Well and Loudens Prospect areas highlighted

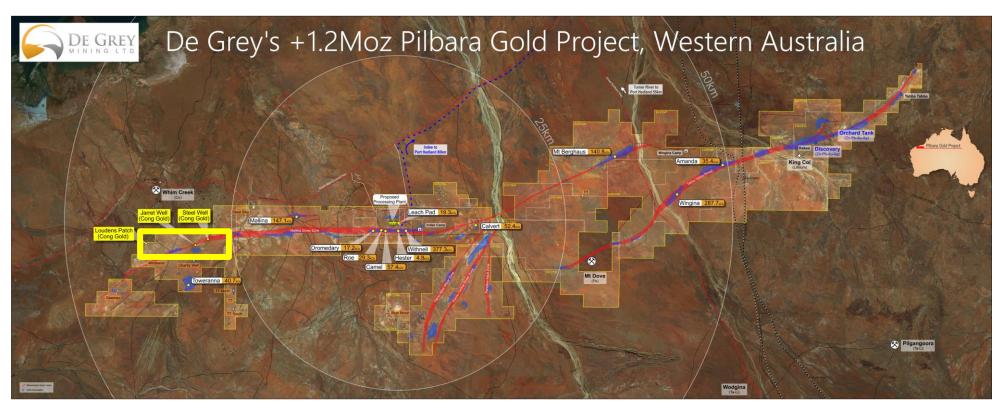




Table JORC Code, 2012 Edition

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. 	 Drilling was undertaken in an industry standard manner. No sampling has been conducted to date. Sampling is intended to be conducted on a 1m basis or to geological boundaries. The gold nugget was found using a handheld metal detector traversing the conglomerate target area. Once a metal detector signal is evident, the source of the signal was found by hand digging using a handheld pick. The nugget was found at 10cm depth in soil and rock scree. The nugget location was recorded with a hand held GPS. The gold has not been tested for purity.
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, facesampling bit or other type, whether core is oriented and if so, by what method, etc.). 	Drilling is HQ3 triple tube diamond core.
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. 	 No sampling has been conducted on the diamond drill core to date. Sampling is intended to be undertaken on a nominal 1m basis or to geological boundaries. Photographs are from initial geological inspection with full detailed logging remaining to be undertaken.
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. 	 Initial geological inspection of the drill core has been undertaken. Full detailed logging of the drill core remains to be undertaken. A gold nugget has been found using a hand held metal detector. The nugget was found at 10cm depth in the soil and rock scree overlying conglomerate. Rock types associated with the nugget were recorded and



Criteria	JORC Code explanation	Commentary
	The total length and percentage of the relevant intersections logged.	confirmed as prospective conglomerate beds. • The nugget was found in an area that had been geologically mapped and known to be prospective.
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. 	 Full detailed sampling of the drill core remains to be undertaken. The gold nugget is not considered to be representative as it was found in loose rock and soil near the prospective geological unit and is only representative of coarse gold. The geological unit remains to be sampled in detail.
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. 	 Full detailed sampling of the drill core remains to be undertaken. No assay data or laboratory tests have been completed on the nugget.
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. 	 Full detailed sampling of the drill core remains to be undertaken. Due to the early stage of exploration and type of work completed to date, no verification nor assaying has been undertaken.
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. 	 Drill hole collar locations are measured by Differential GPS (DGPS) to an accuracy of +/-20cm. Collar location coordinates are reported in GDA94, zone 50s. Topographic control uses a combination of locations of drill collars and 1m contour data. The accuracy of the nugget location is approximately +/-5m and was determined using a hand held GPS Mapping and nugget locations were completed in GDA94 zone 50s projection. Location of nugget is indicated on the map within the report, refer to Figure 2



Criteria	JORC Code explanation	Commentary
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. 	 The diamond core is hole the first to be drilled at Steel Well. The hole has been designed to provide geological and structural information of the conglomerate sequence prior to defining additional drilling and sampling programs. Due to the early stage of exploration and type of work completed to date, the sampling of the nugget is non-systematic nor representative for any future resource estimate.
Orientation of 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. 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. 	 The drilling is approximately perpendicular to the strike of mineralization. Down-hole intercepts are approximately equal to true widths. The nugget metal detecting concentrated on an area immediately above the prospective horizon to determine if the horizon contained coarse gold nuggets. The prospective horizon is a conglomerate at the base of the Mt Roe Basalt which outcrops north—south for approximately 900m. The deposit style is poorly understood, and further detailed work is required before any conclusion on the mineralisation can be confirmed.
Sample security	The measures taken to ensure sample security.	 Sampling of the drill core remains to be undertaken. Nuggets are collected by company personnel and stored at the company's exploration camp
Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	No audits have been completed.

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. 	 The drilling was conducted on E47/2720 which is located approximately 80km southwest of Port Hedland, in the Pilbara Region, Western Australia. The nugget metal detecting was also conducted on E47/2720. The tenement is held by Indee Gold Pty Ltd, which De Grey Mining has an option to purchase 100%. De Grey has executed a Share Sale Purchase Agreement on 9 February 2018, to acquire 100% of Indee Gold Pty Ltd, holder of the Indee Gold Project tenements. Under the executed Share Sale Purchase Agreement, the total acquisition price is A\$15 Million with payments of and Initial Exclusivity Fee of \$100,000 (Paid in Jan 2017). Initial Deposit of A1.5 Million (paid on SSA execution – 9 February 2018); A\$10.4 Million to be paid on Settlement scheduled for 24 January 2019 and A\$3 Million of Consideration Shares (new De Grey fully paid ordinary shares) to be issued on settlement. De Grey has the right to extend settlement by 6 months to 24 July 2019 by payment of an Extension Deposit of A\$700,000, before 24 January 2019, which would reduce the cash payable at settlement to A\$9.7 Million.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	 The Steel Well prospect has not been explored for this style of mineralization previously other than work completed and reported by De Grey. The metal detecting area has no known history of alluvial



Criteria	JORC Code explanation	Commentary
		 mining by prospectors. No previous drilling is known within the immediate mapped area or in the Mt Roe Basalt within the tenement.
Geology	Deposit type, geological setting and style of mineralisation.	 The mineralisation targeted is related to palaeo-placer conglomerate hosted gold. This style of mineralisation is poorly understood in the Pilbara region, however recent discoveries in the region have been noted and are currently being explored by third parties.
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 is included in this 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. The assumptions used for any reporting of metal equivalent values should be clearly stated. 	 Sampling of the diamond drill core remains to be undertaken. A shallow nugget has been found only. Due to the early stage of exploration and type of work completed to date, the sampling is non-systematic nor representative.
Relationship between mineralisa- tion 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'). 	 Sampling of the diamond drill core remains to be undertaken. A shallow nugget has been found only. Due to the early stage of exploration and type of work completed to date, the sampling is non-systematic nor representative.
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.	 Photographs of the various rock types are included in the report. A location plan of the prospect is provided in the report. Full reporting of the drill hole will be completed once the hole has been logged and sampled in detail.



Criteria	JORC Code explanation	Commentary
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. 	 The report is considered balanced with the information provided in the context. The geological reporting of the rock types and down hole depths is provided in the information. Full detailed logging and sampling remains to be undertaken. Maps and photographs of the area and geology are reported in the 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.	 De Grey has recently completed a detailed aerial photographic survey over the entire project area including the conglomerate gold targets Jarret Well, Steel Well and Loudens Patch. This photography is georeferenced with pixel density to an accuracy of 0.25m. The survey was flown by contractor Aerometrex. De Grey has recently completed a detailed infill aeromagnetic survey over portions of the project areas including the conglomerate gold targets Jarret Well, Steel Well and Loudens Patch. The survey was flown at a mean height of 50m at 50m line spacing. The survey was flown by contractor MAGSPEC Airborne Surveys Pty Ltd.
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. 	 Detailed drill core logging and sampling is in progress. Additional diamond core drilling will be undertaken as understanding of the geological model and ore forming processes develop. Further geology mapping and soil sampling is planned over the outcrops to determine new geological extensions. Further metal detecting is currently underway. Results of this work will be reported if further nuggets are located. Approvals for ground disturbing work including trenching and bulk sampling have been granted and due to start in the coming months. The results of this work will be reported in future announcements. Progressive heritage surveys will be undertaken as required.