

"Developing the +1.2Moz Pilbara Gold Project"

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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 Manager Phil 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

Jarrett Well - 11.6m Pyritic Conglomerate intersected in drilling

- First stratigraphic diamond core hole completed to 177.5m downhole at Jarrett Well Prospect.
- 11.6m (true thickness) of pyrite rich pebble conglomerate intersected towards the base of conglomerate package.
- Interpreted as the downdip extension of outcropping ferruginous and pyritic conglomerate mapped at surface where 3 gold nuggets previously found.
- Overall conglomerate sequence extends from 57.5m to 97m downhole
- Mapping has extended the Jarret Well conglomerate in limited outcrop to approximately 1.5kms strike length.
- Drill rig has commenced next stratigraphic hole at Steel Well Prospect.

Photograph - Pyrite bearing conglomerate



(Field of view ~ 6.5cm x 8cm)

"The pyrite bearing conglomerate appears very similar to the gold bearing pyritic units as reported by Novo Resources at the Comet Well and Purdy's prospects, some 120km to the west, near Karratha." commented Technical Director, Andy Beckwith.

Pilbara Gold Project – Unlocking Shareholder Value



De Grey Mining Limited (ASX: DEG, "De Grey", "Company") is pleased to report on initial diamond core drilling at the Jarret Well Prospect and planned conglomerate gold exploration activities within the +1.2Moz Pilbara Gold Project, located 75km from Port Hedland, Western Australia.

The recent discovery of gold nuggets associated with previously unrecognised conglomerate sequences below the Mt Roe Basalt and above the older Mallina Formation provides significant additional exploration potential for the Pilbara Gold Project. Outcropping Mt Roe Basalt occurs over an area of approximately 20km² within the project area with 50 and 80m thick conglomerates previously mapped at the Jarret and Steel Well prospects respectively. At Loudens Patch, over 200 gold nuggets have been metal detected shedding from a similar but thinner basal conglomerate beneath a smaller remanent outlier of Mt Roe Basalt.

De Grey is increasing exploration activities across the Pilbara Gold Project, targeting both structural and conglomerate gold mineralisation. While primary focus remains on continuing to expand De Grey's substantial structurally hosted gold resource, diamond drilling has now commenced testing the conglomerate gold style of mineralisation as part of the larger overall development of the Pilbara Gold Project. Further programs are described below.

Conglomerate Gold Programs

Stratigraphic diamond drilling - underway

Diamond core holes are planned at both the Jarret and Steel Well prospects. This drilling is designed to provide an initial assessment of the rock types and establish the palaeoenvironment at the time of deposition through the interpreted 50-80m thick sequences.

Jarret Well

The first diamond hole is reported within, with geological logging now underway. This hole has intersected fresh conglomerate sequence (refer to photos attached) from 57.5m to 97m depth with a pyrite rich conglomerate intersected from 73.5m to 85.1m (Figure 1). The pyrite bearing conglomerate contains euhedral to rounded pyrite and is interpreted to represent a similar "buck shot" pyrite rich unit as seen at Novo Resources Corp's Comet Well and Purdy's prospects.

The upper conglomerate comprises coarse rounded boulder to pebbles clasts of variable rock types with very minor pyrite in places. The overall package includes a 11.9m thick basalt at the base prior to intersecting the Mallina Formation. The conglomerate lithologies are shown in Plates 1 to 7.

Steel Well

A stratigraphic diamond hole has commenced and is designed to intersect the conglomerate sequence and continue into the older basement rocks. The outcropping sequence is currently interpreted to be approximately 80m thick. De Grey considers the entire sequence may not be fully outcropping and a greater thickness of sequence is a possibility based on mapping and comparison to Jarret Well lithologies.

Loudens Patch

No diamond drilling is currently planned at Loudens with the focus to be on bulk sampling when the specialized equipment arrives.

Upon completion of the two stratigraphic diamond holes at Steel Well and Jarret Well, detailed logging and comparisons of geological units will be assessed. The core will be processed and sampled as per the Company's normal practice. Based on current third-party sampling



protocols and results it is expected the assay data is unlikely to be representative for gold grade due to the probable nuggetty nature of the mineralisation. De Grey expects to be able to use the systematic downhole sampling data for geochemical characterization purposes on rock type and potentially as a mineralisation pathfinder for selecting appropriate portions for detailed bulk sampling and representative gold determination.

Figure 1 Jarret Well – Schematic cross-section showing simplified outcrop and correlation with new drill hole geology



Mapping and stream sediment sampling - ongoing

Geological mapping continues with small conglomerate outcrops recently discovered amongst the large basalt scree slopes over a further 1km strike length to the north west of Jarret Well. This now provides for a total strike length of 1.5km of conglomerate beds now discovered at Jarret Well.

Further mapping and detailed stream sediment sampling is planned to be undertaken along the remaining ridge lines to the northwest of Jarret Well and north of Steel Well.

Bulk sampling - planned

Bulk sampling of each of the geological units at the three conglomerate gold targets, Jarret well, Steel Well and Loudens Patch, will be progressively undertaken once a detailed geological logging of the diamond core has been completed and specialised equipment arrives on site. This sampling is likely to commence in August.

Initial earthworks is planned to firstly create better exposures of the conglomerate sequence by using an excavator to cut away the overburden to expose the underlying rocks sequence. Once exposed the rocks will be mapped to provide lithological control. Sampling is planned to initially comprise a ~250kg sample size. This large sample will be processed on site to



determine any visible gold content. The samples will be crushed, metal detected and then run through a water fed and gravity based sluicing table to separate any finer gold particles. The residue will be collected for further processing.

The aim of the initial 250kg sampling is not to determine the precise grade of the sample but to provide a visual guide to the preferred lithological units that may contain elevated levels of gold. Sampling will then focus on larger bulk samples (2 - 10 tonne) of the mineralised portions. The larger bulk samples will then be sent to an independent laboratory for gold grade determination.

Aeromagnetic Survey - completed

A detailed low level aeromagnetic survey has recently been completed to infill the existing detailed magnetic data set. This new infill survey included coverage over the conglomerate gold target areas and other portions of the overall gold project including the Farno McMahon JV areas. Processing and integration of this data with the existing data is currently underway.

Heritage Surveys

Heritage surveys (ethnographical and archaeological) were completed over Toweranna, Jarret Well, Steel Well and Loudens Patch. Further surveys will be required as the company progresses through future work programs.



Plate 1 Rounded boulder and pebble conglomerate





Rounded boulder and pebble conglomerate showing euhedral pyrite Plate 3 within a clast



Pyrite bearing conglomerate





Plate 5 Pyrite bearing conglomerate





Plate 7

Pyrite bearing conglomerate



(Width of drill core is ~ 6.35cm in all photographs)



For further information:

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. Andy Beckwith, a Competent Person who is a Member of The Australian Institute of Geoscientists. Mr. Beckwith is an employee of De Grey Mining Limited. Mr. Beckwith 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. Beckwith 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

"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

Table 1Jarret Well – Drill hole information

Prospect	HoleID	EAST_GDA94	NORTH_GDA94	RL_GDA94	Actual_Depth	Dip	Az_MAG
Jarret Well	JWDD0001	592663.00	7686631.00	80.00	177.5	-60	210



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. 	 Drill was undertaken in an industry standard manner No sampling completed to date. Sampling is intended to be sampled on a nominal 1m basis or to geological boundaries. 			
)	Drilling techniques	 Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.). 	Drilling is HQ 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 completed to date. Sampling is intended to be sampled on a nominal 1m basis or to geological boundaries. Photographs are from initial geological inspection with full detailed logging remains 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 	Initial geological inspection undertaken.Full detailed logging remains to be undertaken			



Criteria	JORC Code explanation	Commentary			
	quantitative in nature. Core (or costean channel etc.) photography				
	• The total length and percentage of				
	the relevant intersections logged.				
Sub-sampling	• If core, whether cut or sawn and	Full detailed sampling remains to be undertaken			
techniques	whether quarter, half or all core				
and sample	 If non-core, whether riffled, tube 				
preparation	sampled, rotary split, etc. and				
	whether sampled wet or dry.				
	 For all sample types, the nature, 				
	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.				
	appropriate to the grain size of the				
	material being sampled.				
Quality of	The nature, quality and	Full detailed sampling remains to be undertaken			
assay data	appropriateness of the assaying and laboratory procedures used and				
anu Iaboratory	whether the technique is considered				
tests	partial or total.				
	For geophysical tools,				
	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,				
	checks) and whether acceptable				
	levels of accuracy (i.e. lack of bias)				
	and precision have been established.				
Verification of	 The verification of significant intersections by either independent 	 Full detailed sampling remains to be undertaken 			
sampiing and assaving	or alternative company personnel.				
ussaynig	• 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				
loootier -f	data.	Drill halo collegiographics are leasted by Different's			
Location Of data points	 Accuracy and quality of surveys used to locate drill holes (collar and down- 	 Drill note collar locations are located by Differential GPS to an accuracy of +/-20cm. 			
autu ponito	hole surveys), trenches, mine	Locations are given in GDA94 zone 50 projection			
	workings and other locations used in	Topographic control uses a combination of locations			
	Mineral Resource estimation.	of drill collars and 1m contour data.			
	 Quality and adequacy of topographic 				
	control.				

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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 hole is the first drill hole drilled on this target. The hole has been designed to provide geological and structural information of the conglomerate sequence prior to defining additional drilling and sampling programs. The hole will be suitable for resource wireframing of the geology once detailed logging has been completed.
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 mineralisation. Downhole intercepts are approximately equal to true widths.
Sample security	The measures taken to ensure sample security.	Sampling remains to be completed.
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
<i>Mineral tenement and land tenure status</i>	 Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. The security of the tenure held at the time of reporting along with any known impediments to obtaining a license to operate in the area. 	 The drilling is on E47/2720 which is located approximately 80km southwest of Port Hedland. 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 the Indee Gold Pty Ltd, holder of the Indee Gold Project tenements. Under the executed Share Sale 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 \$1.5 Million (paid on SSA execution - 9 February 2018); \$10.4 Million to be paid on Settlement scheduled for 24 January 2019 and \$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 \$700,000, before 24 January 2019, which would reduce the cash payable at Settlement to \$9.7 Million.
Exploration done by other parties	 Acknowledgment and appraisal of exploration by other parties. 	 The Jarret Well prospect has not been explored for this style of mineralisation previously other than work completed and reported by De Grey.
Geology	 Deposit type, geological setting and style of mineralisation. 	 The mineralisation style is not fully understood at this stage. Further work is required to understand the nature and depositional environment of the gold



Criteria	JORC Code explanation	Commentary
		 mineralisation. This style of mineralisation is similar to other conglomerate gold mineralisation that has recently been reported in the Pilbara Region of Western Australian.
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 provided 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 remains to be completed.
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 remains to be completed.
Diagrams	 Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views 	 Photographs of the various rock types provide. Location plan of the prospect provided. Full reporting of the drill hole will be completed once the hole has been logged and sampled in detail.



Criteria JORC Code e		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 and provided in 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. 			
	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 photography survey over the entire project are a including the conglomerate gold targets of Jarret Well, Steel Well and Loudens. 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 of Jarret Well, Steel Well and Loudens. The survey was flown at mean height of 50m and 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 remains to be undertaken. Additional diamond drilling to be completed as the geological understanding progresses. Geological mapping and stream sediment sampling along strike to determine new prospective geological extensions. Bulk sampling of the outcrops to assess the representative gold grades of each geological unit within the sequence. Progressive heritage surveys will be undertaken as required 			