

# "Developing the growing 1.4Moz Pilbara Gold Project"

## Positive gold recoveries enhance Pilbara Gold Project potential

**ASX Announcement** 12 February 2019

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
Peter Hood
Brett Lambert
Steve Morris

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 2023 Subiaco WA 6905

admin@degreymining.com.au T +61 8 6117 9328 F +61 8 6117 9330

www.degreymining.com.au

- Breakthrough +90% recovery confirmed for "pyrite dominated sulphide" mineralisation at Withnell - the key sulphide deposit at the project - likely to improve project economics.
- Average indicated recoveries for mineralisation types:
  - +94% Oxide material
  - +92% Free milling fresh material
  - +90% Pyrite dominated sulphide material
- Ongoing optimisation seeking to further improve recoveries
- ➤ High gold recovery maintained at coarser grind size significantly reducing grinding requirements and the likely associated power costs.
- Simplified process flowsheet developed, GR Engineering Services now refining plant design, layout and costings. All components to be conventional industry accepted, targeting operating costs equal to or less than industry average for the relevant operation scale.
- Diamond drilling has been underway at Withnell since mid-January.
- An RC rig is due to arrive shortly to commence at Toweranna. Priority resource extension drilling will target Toweranna, Mt Berghaus and Mallina during the first half of the year..

Technical Director Andy Beckwith commented:

"The 90% recovery on the Withnell sulphide mineralisation is an outstanding improvement making Withnell a fundamental long-term baseload to the project. We are increasingly more confident that Withnell will also provide a long term high-grade underground mining opportunity.

GR Engineering are working on the plant design and costings and from this we will be re-evaluating pit optimisations and the potential to add an underground mining component.

The simplified processing flowsheet, rapid extraction times and reduced grinding requirements, together with on-going exploration success, point to a significantly enhanced operation. We are currently assessing the optimal project."



## **Summary Metallurgy Results**

De Grey is pleased to report on positive metallurgical test work undertaken across the Pilbara Gold Project ("PGP"), located immediately south of Port Hedland in the Pilbara Craton of Western Australia (Figure 1).

Detailed metallurgical test work has been on-going since the release of the August 2017 Scoping Study and has recently culminated in the breakthrough results achieved at Withnell, the largest resource at the PGP with rapidly expanding underground potential. This work has involved detailed metallurgical test work on existing drill core and the drilling of dedicated PQ diamond core holes at various deposits for additional sampling material. ALS Metallurgy Services have carried out the testing under the supervision of GR Engineering Services Limited (GRES), with input from De Grey technical staff. All test work was completed to standard industry accepted practices.

#### Overall average recoveries

- +94% Oxide material
- +92% Free milling fresh material
- +90% Pyrite dominated sulphide material
- Fast CIL extraction rates of between 6-24 hours

#### Gravity

Positive gravity yields warrant the inclusion of a gravity circuit

#### Comminution

- Rock properties indicate low to high hardness and moderate abrasion
- Coarser grind size improvement from 75-90µm to 106-150µm
- Coarser grind size leads to expectation of reduced power consumption

#### Sulphide flotation

- 5-9% (average 7%) mass pull to sulphide concentrate
- Flotation effective on all Withnell fresh and transition sulphide mineralisation

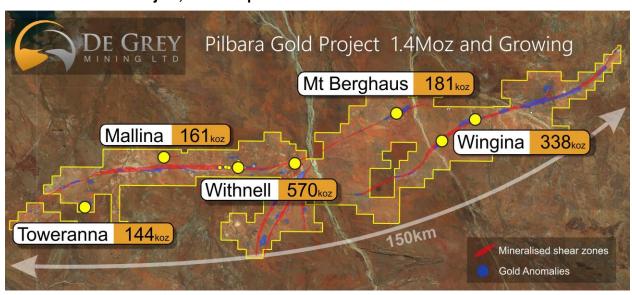
#### **Oxidation of Sulphide Concentrate**

- Sulphide flotation concentrate to be oxidised
- Pressure oxidation (POX) preferred
- POX requires only small vessel with capacity of 50kt-100kt per annum

#### Plant Design – underway by GRES

- All plant componentry is expected to be conventional and industry standard "tried and tested"
- Crush, grind, flotation, gravity, POX, CIL tanks, elution and tail disposal
- Simplified processing flowsheet, rapid extraction times and reduced grinding requirements point to a larger scale throughput which is expected to provide reduced operating costs

Figure 1 Pilbara Gold Project, location plan





#### **Oxide Samples**

Composite samples from the oxide domain were assessed, from the following deposits:

Calvert, Mt Berghaus, Camel, Roe and Dromedary.

The test work delivered positive results for each of the oxide domains with an average gold recovery of 94%. Two grind sizes, ranging from 106 and 150µm were used with room to further optimise. All samples demonstrated rapid extraction rates with leach residence times of 6-24 hours. The coarse grinding size of between 106-150µm is expected to provide cost savings due to reduced power requirements and lower grinding media consumption.

The Mt Berghaus sample showed a high gravity recovery component at 49% with Camel at 20%, indicating a gravity circuit could provide benefits to the processing circuit. Wingina and Withnell results are based on previously undertaken test work. Results are summarised in Table 1.

In general, the oxide domains in all deposits assessed to date will require a simple typical oxide CIL processing flowsheet used widely throughout the gold mining industry in Australia.

Table 1 Summary Oxide Metallurgy Test Work

OXIDE		AVER	AGE GOLD	RECOVER	OVERY ROCK PARAMETERS			S	
Deposit	No. Samples	Gravity	Direct CIL	Float CIL	Float	Grind Size	Bwi	Rwi	Abrasion
					Oxidise CIL				
		%	%	%	%	microns	kWh/t	kWh/t	
Calvert	2	10.3	95.4			106 - 150	11.6	13.5	0.0937
Camel	2	20.3	96.1			106 - 150	15.8	10.5	0.2922
Roe	1	1.6	94.7			106 - 150	10.3	8.43	0.0346
Dromedary	1	1.8	86.9			106 - 150	10.6	11.1	0.0214
Withnell	8	11.5	90.4			75 - 106	14.4	9.3	0.1023
Wingina	2	26.8	97.3			75			
Mt Berghaus	1	49.8	88.0			106	17.2	14.8	0.0784

#### Fresh Samples

Fresh core samples were assessed for the following deposits:

Withnell, Calvert and Mt Berghaus

The Withnell samples were chosen as the priority to concentrate on the pyrite dominant sulphide mineralisation assessment as it is currently the largest sulphide deposit at the project. The other pyrite dominant sulphide rich deposits include the Calvert, Roe, Dromedary and Calvert, all situated along the Withnell Trend. Mallina is expected to be sulphide rich mineralisation and this deposit is currently being evaluated with new drill core recently submitted to ALS Metallurgy. Results are summarised in Table 2.

Most importantly, the Withnell results have shown that high gold recovery can also be maintained from the fresh pyrite sulphide dominant mineralisation at coarser grind size. Previously proposed fine grinding has been eliminated in favour of a coarser sulphide flotation with a resultant small mass pull (5-9%) into sulphide concentrate followed by oxidation and standard CIL leaching to extract the contained gold. The preferred oxidation process is pressure oxidation (POX). Importantly, the POX component is expected to be significantly smaller with annual capacity of 50kt-100kt depending on final throughput volumes due to the strong volume reduction into the final sulphide concentrate.

Overall, the flotation, pressure oxidation (POX) and cyanide leach test work provided a peak recovery of 95.9% from the concentrate, so when combined with gravity and sulphide flotation recovery provides an overall average gold recovery of +90% of the contained gold. The fresh tail is also proposed to be processed through the standard CIL tanks to ensure the highest recovery of gold is extracted.

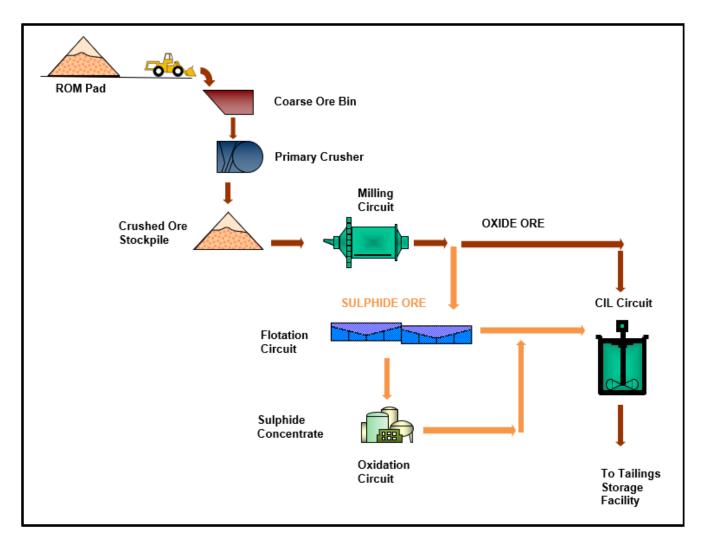


The simplification of the processing circuit (Figure 2) together with coarser grind size is considered a substantial improvement, on the previously proposed flotation and ultrafine grind methodology. Reduced operating costs are expected with this simplified flow sheet and importantly enhanced recovery. Results are summarised in Table 1.

Table 2 Summary Fresh Metallurgy Test Work

FRESH	GOLD RECOVERY				ROCK PARAMETERS				
Deposit	Nos Samples Tested	Gravity	Direct CIL	Float CIL	Float Oxidise CIL	Grind Size	Bwi	Rwi	Abrasion
		%	%	%	%	microns	kWh/t	kWh/t	
Calvert	2	Not Tested	15.8		70.6%	75 - 212	19.2	20	0.1774
Withnell	12	3	69.5	75.0	91.5%	75 - 150	17.4	20.3	0.203
Mt Berghaus	1	Not Tested	95.0			75	17.5	19.8	0.1318

Figure 2 Simplified processing circuit





#### **Additional Test Work**

Ongoing test work is planned to improve the overall knowledge of all the deposits. This work will include similar detailed comminution, recovery and where appropriate sulphide flotation test work as required.

- Metallurgical test work on the Toweranna and Mallina deposits with purpose drilled PQ core recently submitted to ALS Metallurgy
- Plant design, capital and operating costs underway with GRES (engineering consultants)
- Open pit and underground evaluation using new operating costs and recoveries and assessment to increase plant scale planned with CUBE (mining consultants)

Additional evaluation of the Withnell Deeps underground mining potential is currently being advanced with remodelling of the resources below the open pit and this will be followed by mine design and costing. Diamond drilling recommenced in mid-January and this +4000m drilling program is planned to continue through H1 CY2019 to increase resources at Withnell.

#### 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 Person**

The information in this report that relates to exploration results is based on, and fairly represents information and supporting documentation prepared by Mr. Andrew Beckwith, a Competent Person who is a member of The Australasian Institute of Mining and Metallurgy. Mr. Beckwith is a consultant to 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.



Table 3 Metallurgy - Drill hole location and intercepts

Prospect	HoleID	Depth From (m)	Depth To (m)	Downhol e Width (m)	Au (g/t)	Collar East (GDA94)	Collar North (GDA94)		Dip (degrees)	Azimuth (GDA94)	Hole Depth (m)	Oxidation
Withnell	MUDD003	38	99	61	1.28	624349	7688552	60	-60	358	100	Trans/Fresh
Withnell	incl	81	84	3	6.92	624349	7688552	60	-60	358	100	Trans/Fresh
Withnell	INDD029	67.9	102.4	34.5	2.02	624200	7688766	60	-59	179	111	Trans/Fresh
Withnell	incl	70	75.3	5.3	3.28	624200	7688766	60	-59	179	111	Trans/Fresh
Withnell	incl	87.2	92.2	5	5.79	624200	7688766	60	-59	179	111	Fresh
Withnell	NDD074	136	149	13	1.33	624474	7688576	61	-57	359	280	Fresh
Withnell	incl	141.4	145.8	4.4	2.75	624474	7688576	61	-57	359	280	Fresh
Withnell	NDD084	333.4	361.8	28.4	1.29	624373	7688489	62	-57	359	436	Fresh
Withnell	incl	346.8	352	5.2	2.84	624373	7688489	62	-57	359	436	Fresh
Withnell	NDD100	37	50	13	0.79	624257	7688668	55	-52	350	115	Fresh
Withnell	NDD100	63	67	4	2.20	624257	7688668	55	-52	350	115	Fresh
Withnell	NDD100	74	86	12	6.61	624257	7688668	55	-52	350	115	Fresh
Withnell	NDD100	90	106	16	1.50	624257	7688668	55	-52	350	115	Fresh
Withnell	incl	90	93	3	3.39	624257	7688668	55	-52	350	115	Fresh
Withnell	NDD101	47	67	20	1.82	624651	7688668	60	-64	180	71	Fresh
Withnell	incl	62.7	67	4.3	5.49	624651	7688668	60	-64	180	71	Fresh
Calvert	NDD102	34.7	59	24.3	2.52	634600	7689123	68	-60	90	62	Fresh
Calvert	incl	49	57	8	5.34	634600	7689123	68	-60	90	62	Fresh
Mt Berghaus	NDD104	50	62.9	12.9	3.13	656991	7700205	76	-65	325	76	Fresh
Mt Berghaus	incl	54.4	55.8	1.4	8.45	656991	7700205	76	-65	325	76	Fresh
Mt Berghaus	incl	62	62.9	0.9	24.50	656991	7700205	76	-65	325	76	Fresh
Calvert	NDD103	0.0	19.0	19.0	1.28	634668	7689075	68	-60	90	25	Oxide
Calvert	incl	17.0	19.0	2.0	4.92	634668	7689075	68	-60	90	25	Oxide
Mt Berghaus	NDD105	7	9	2	121.76	656891	7700196	77	-70	325	29	Oxide
Mt Berghaus	incl	8	9	1.00	242.00	656891	7700196	77	-70	325	29	Oxide
Camel	NDD106	42	51.5	9.5	3.43	621222	7688581	48	-69	360	85	Oxide
Camel	NDD106	62	70	8	3.10	621222	7688581	48	-69	360	85	Oxide
Roe	NDD107	25	43	18	3.11	620509	7688525	61	-60	360	55	Oxide
Dromedary	NDD108	35	73	38	1.96	619326	7688464	62	-57	360	79	Oxide



#### Appendix 1

## **Background**

De Grey reported Scoping Study results on 4 August 2017 (ASX: "Positive Scoping Study completed at Pilbara Gold Project"). The 2017 Scoping Study reported a positive economic outcome, though noting many areas where the potential for significant economic improvements as identified include:

- Increase in overall resources to provide longer project life
- Longer term underground mining opportunities
- Improvement in metallurgical recoveries within the fresh pyrite dominant sulphide mineralisation; i.e. Withnell Trend deposits and now the Mallina deposit.
- Increase plant scale to reduce operating unit costs and increase annual gold production

Since the 2017 scoping study, exploration activities have ramped up markedly as De Grey's confidence has grown across the project and all exploration levels and economic evaluations.

- Resources extensions have grown 1.0Moz to 1.4Moz and are expected to continue to grow.
- New gold deposits defined at Toweranna and Malina, both showing substantial upside potential.
- Drilling at Withnell continues to provide encouraging high-grade lode intersections at depth
- Metallurgical test work has established significantly improved recoveries
- Confidence that substantial economic benefits will be achieved in the near term

The detailed metallurgical test work has been designed, managed and reviewed by GRES metallurgist and the samples were processed at ALS Metallurgy Services laboratory in Perth, as per standard industry practices. The test work includes aspects of the following:

- Unconfined compressive strength (UCS) determination
- Bond impact crushing work index (CWi) determination
- Head assays
- Composite generation and sample preparation
- SMC test work
- Bond abrasion index (Ai) determination Bond Rod mill work index (RWi) determination
- Bond Ball mill work index (BWi) determination
- Grind establishment test work
- Gravity Gold recovery and cyanide leach test work
- Flotation test work
- Oxidation test work



#### **JORC Code, 2012 Edition** Table

Section 1 Sampling Techniques and Data (Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <li>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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>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.</li> </ul>	<ul> <li>All diamond drilling and sampling was undertaken in an industry standard manner</li> <li>Samples were collected with a diamond drill rig drilling PQ diameter core.</li> <li>Oxide core was provided to the laboratory as whole core.</li> <li>Fresh core was provided to the laboratory, as half core, after logging and photographing.</li> <li>One quarter of the remaining fresh core was quartered one half sent to the metallurgical laboratory for test work.</li> <li>Holes were sampled over mineralised intervals to geological boundaries on a nominal 1m basis or less as required.</li> </ul>
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.).	The diamond drill holes were PQ size core.
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>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.</li> </ul>	<ul> <li>Samples are considered representative with good recoveries.</li> <li>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.</li> <li>Samples are considered representative with generally 100% recovery.</li> <li>No sample bias is observed</li> </ul>
Logging	<ul> <li>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.</li> <li>Whether logging is qualitative or</li> </ul>	<ul> <li>Company geologists logged each hole and supervised all sampling.</li> <li>Diamond sample results are appropriate for a resource estimation with sampling undertaken on a nominal 1m basis or less based on geological boundaries.</li> </ul>



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 techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>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.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul> <li>Diamond drilling was logged, photographed and sampled as cut quarter and half core with one quarter retained on site.</li> <li>Independent standard reference material was inserted approximately every 20 samples for the assay samples.</li> <li>The metallurgical half core was provided intact for special purpose metallurgical test work</li> <li>The samples are considered representative and appropriate for this type of drilling and for use in a resource estimate</li> <li>The assayed portion was provided to the metallurgical lab to define the mineralised intervals for the metallurgical test work.</li> <li>Metallurgical samples were composited in to a number of subsamples over a number of metres and comparative assays completed as a head grade.</li> </ul>
Quality of assay data and laboratory tests	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>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.</li> <li>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.</li> </ul>	<ul> <li>The samples were submitted to a commercial independent laboratory in Perth, Australia.</li> <li>Each sample was dried, crushed and pulverised.</li> <li>Au was analysed by a 50gm charge Fire assay fusion technique with an AAS finish. In most cases 33 multi-elements were also analysed by HF-HNO3-HClO4 acid digestion, HCl leach and ICP-AES.</li> <li>The techniques are considered quantitative in nature.</li> <li>As discussed previously standards by the Company and the laboratory also carries out internal standards in individual batches</li> <li>Results for the standards and duplicates were considered satisfactory.</li> </ul>
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul> <li>Sample results have been entered and then checked by a second company geologist</li> <li>Results have been uploaded into the company database, checked and verified</li> <li>No adjustments have been made to the assay data.</li> <li>Results are reported on a length weighted basis</li> <li>Head grades, recoveries and associated physical rock properties undertaken on the metallurgical samples were provided in a specialised report covering the test work undertaken.</li> <li>Results have been review and assessed by an independent metallurgist by GR Engineering Services.</li> </ul>
Location of data points	<ul> <li>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.</li> </ul>	<ul> <li>Drill hole collar locations for diamond are located by Differential GPS to an accuracy of +/-20cm.</li> <li>Locations are given in either GDA94 zone 50 projection.</li> <li>Drill hole information is provided in the report</li> </ul>



Criteria	JORC Code explanation	Commentary
	<ul> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul> <li>Topographic control is by airphoto photogrammetry to a resolution of either 0.10m or 0.15m, together with DGPS control.</li> </ul>
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>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.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul> <li>The metallurgical holes are specific holes drilled into the previously defined resource envelope in order to provide quality core samples of the mineralisation.</li> <li>All holes have been geologically logged and provide a strong basis for geological control and continuity of mineralisation.</li> <li>Results are sufficient to provide support for the results to be used in a resource estimate.</li> <li>Metallurgical results will be used to define the proposed processing flowsheet and expected recoveries for economic evaluations.</li> <li>Sample compositing has not been applied to the individual assays</li> <li>Sample compositing was undertaken on the metallurgical half core for specific metallurgical test work.</li> </ul>
Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>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.</li> </ul>	The drilling is approximately perpendicular to the strike of mineralisation and therefore the sampling is considered representative of the mineralised zone.
Sample security	The measures taken to ensure sample security.	<ul> <li>Samples were collected by company personnel and delivered direct to the laboratory via a transport contractor</li> </ul>
Audits or reviews	<ul> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	No audits have been completed. Review of QAQC data has been carried out by 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> <li>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.</li> <li>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.</li> </ul>	<ul> <li>The resources are on tenements of the Pilbara Gold Project, located approximately 60km south of Port Hedland.</li> <li>The resources of Mt Berghaus are tenements 100% owned by De Grey or its 100% owned subsidiaries. The resources of Withnell, Camel, Toweranna, Mallina are on tenements 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); extension payment of \$700,000 paid in Dec 2018 with a total of \$12.7M on Settlement scheduled for 24 July</li> </ul>



Criteria	JORC Code explanation	Commentary
		2019 as \$9.7M in cash and \$3 Million of Consideration Shares (new De Grey fully paid ordinary shares) to be issued on Settlement.
Exploration done by other parties	<ul> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul> <li>De Grey and Indee Gold as well as previous owners have completed exploration activities including extensive drilling to define the resources and explore the tenement package. Ongoing exploration activities continue.</li> </ul>
Geology	<ul> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul> <li>The mineralisation targeted is hydrothermally emplaced and chert/sediment hosted gold mineralisation within a shear zone and is similar in style to many other Western Australian gold deposits.</li> </ul>
Drill hole Information	<ul> <li>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:</li> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> <li>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.</li> </ul>	Drill hole location and directional information is provided in this report.
Data aggregation methods	<ul> <li>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.</li> <li>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.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul> <li>The results have been presented by the independent laboratory.</li> <li>No upper cuts or truncations have been undertaken</li> </ul>
Relationship between mineralisa- tion widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>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').</li> </ul>	<ul> <li>The drill holes are interpreted to be approximately perpendicular to the strike of mineralisation.</li> <li>The drilling was completed to provide core in order to carry out determination of rock quality properties including strength, hardness, recovery and sulphide concentrations.</li> <li>Sulphide concentrates were then further tested to determine potential recovery attributes to allow processing flowsheet to be determined.</li> </ul>
Diagrams	Appropriate maps and sections (with	Data and plans are provided in the report.



Criteria	JORC Code explanation	Commentary
	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.	
Balanced reporting	<ul> <li>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.</li> </ul>	<ul> <li>The report is considered balanced and provided in context.</li> </ul>
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.	<ul> <li>Previous metallurgical test work has been completed at Withnell and Wingina. This new test work incorporates and builds on previous results previously reported.</li> </ul>
Further work	<ul> <li>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul> <li>Independent consultant engineers (GRES) are evaluating the results to establish a preferred processing plant, components, design including layout, operating costs and capital requirements.</li> <li>Further ongoing metallurgical test work is continuing with drill core submitted for the Toweranna and Mallina deposits</li> </ul>