

ASX Announcement

27 February 2019

Further coarse gold in bulk sampling at Loudens Patch

- Visible coarse gold extended in trial trenching and bulk sampling.
- Gravity gold concentrates average 3g/t within the conglomerate unit when crushed to <1.2mm with potential for grade increases when the fine fraction is analysed.
- Gold grades recorded to date suggest the conglomerate gold mineralisation could potentially provide an additional source of high grade feed to the proposed 2Mtpa plant De Grey is currently evaluating to treat the conventional shear zone hosted resources at the PGP, although they will not form part of the studies currently underway.

De Grey Mining Ltd (ASX: DEG, “De Grey”, “Company”) is pleased to provide a further update on conglomerate gold exploration activities and the continuation of positive results from the trial bulk sampling at Loudens Patch within the Pilbara Gold Project, located near Port Hedland in the Pilbara region of Western Australia.

Continued trenching and bulk sampling has extended visible coarse gold within the first trench (“LTR001”) now over a total strike length of 20m, as well as along the first 4m of the second trench (“LTR002”).

Figure 1 Loudens Trench LTR001 Sample LB250-007 - 1.502gms Au concentrate from 250kg sample



The continuation of trenching at LTR001 has now exposed 20m of conglomerate along strike with bulk sampling defining further visible coarse gold (Figure 1) along the entire trench, except for approximately a one metre interval where there is no conglomerate in the exposure (Figure 3).

Trenching and bulk sampling was also completed at LTR002, with bulk sampling also defining visible coarse gravity gold (Figure 2 and 4). LTR002 is located along the same creek line approximately 60m to the south of LTR001 and adjacent to an old prospecting shaft where De Grey had previously detected various gold nuggets associated with rock debris around the shaft.

- **Gravity gold concentrate average grades range :**
 3.34g/t in LTR001 and
 2.36g/t in LTR002
- **Conglomerate averages between 1-2m thickness at Loudens West.**
- **Results only assess the coarse gravity separated gold in the sample after crushing to minus 1.2mm with the fine residue fraction remaining to be analysed.**
- **Further sampling planned to extend LTR002 prior to moving to Loudens South**

The sampling of this second trench has been divided into an upper and lower conglomerate horizons sample. Four (4) samples have been completed along this trench to date with additional sampling to extend this trench expected to recommence during Q1 CY2019. Results only assess the coarse gravity separated gold (>1.2mm) fraction of the sample with the fine fraction (<1.2mm) remaining to be analysed.

Figure 2 Loudens Trench LTR002 Sample LB250-021 - 1.083gms Au concentrate from 250kg sample



Results of trenches LTR001 and LTR002 are presented in Table 1 and conglomerate sample concentrates in Appendix 1.

Overall the results from the Loudens West trial bulk sampling indicate the average coarse gold concentrate is around 3g/t average. These results do not account for the fines tails gold content which remains to be assayed.

Further sampling is to be completed along the LTR002 trench at Loudens West after which trial trenching will then move to Loudens South (Figure 5.)

Figure 3 Loudens Patch – Trench LTR001 6m-20m Bulk sample results

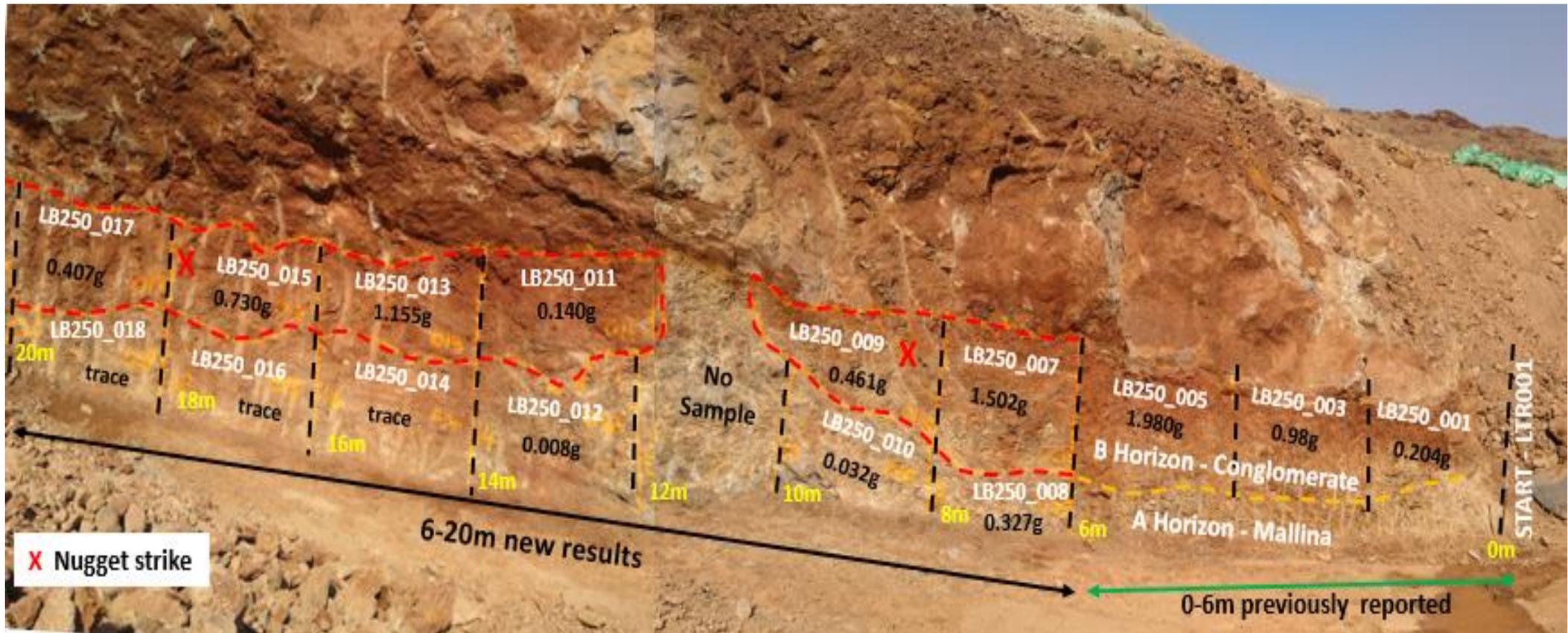


Figure 4 Loudens – Trench LTR002 0m-4m Bulk sample results

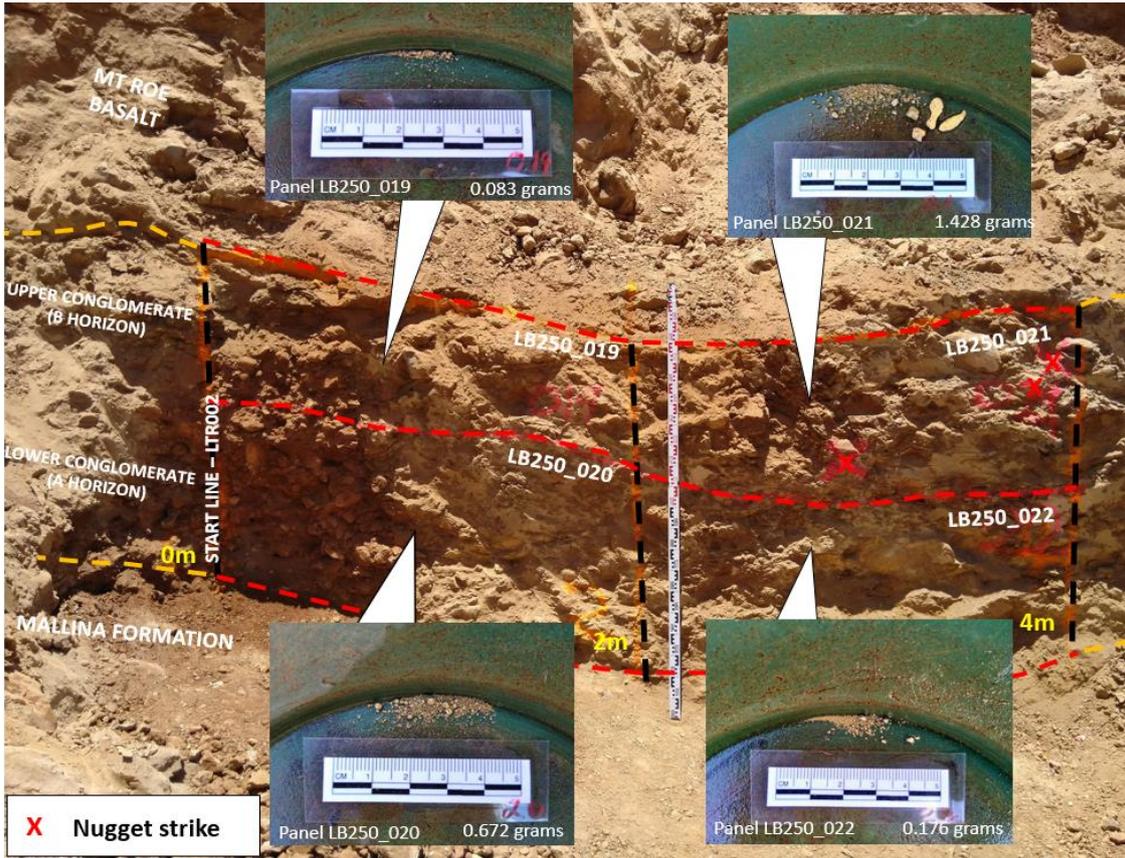


Figure 5 Loudens – Target area location plan

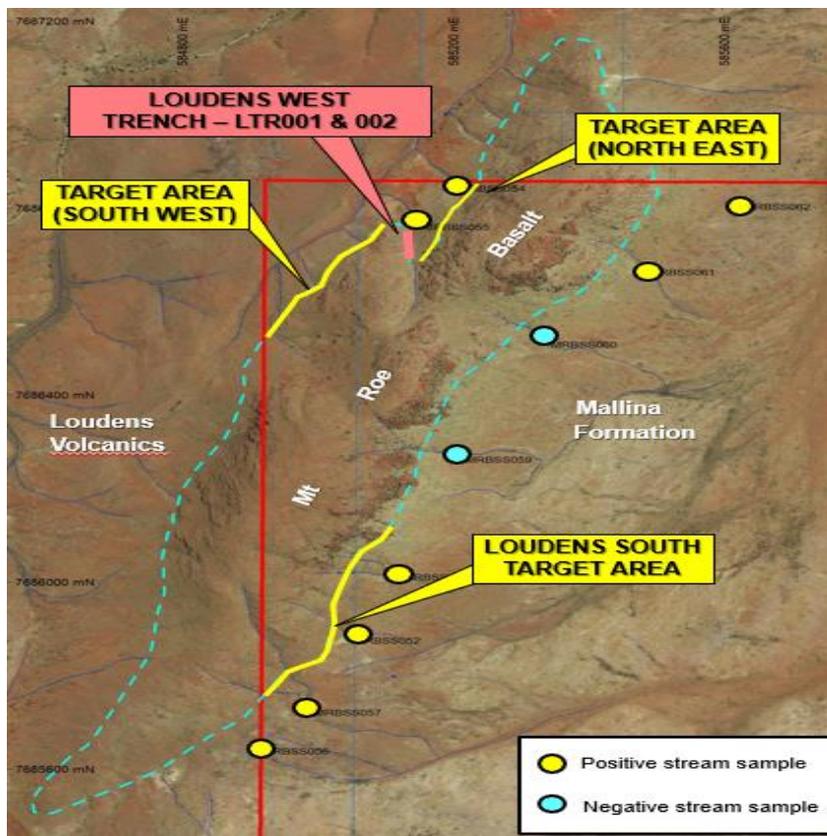


Table 1 Loudens – Trench sample results in conglomerate sequence

Trench	Sample No	Gold Concentrate Grams per 250kg	Gold Concentrate Grams per 1000kg (g/t)
LTR001 (585127mE, 7686767mN) 0-2m	LB250-001	0.204	0.816
2-4	LB250-003	0.980	3.92
4-6	LB250-005	1.980	7.92
6-8	LB250-007	1.502	6.008
8-10	LB250-009	0.461	1.844
12-14	LB250-011	0.140	0.56
14-16	LB250-013	1.155	4.62
16-18	LB250-015	0.703	2.812
18-20	LB250-017	0.407	1.628
LTR002 (585138mE, 7686703mN) 0-2A	LB250-019	0.083	0.332
0-2B	LB250-020	0.672	2.688
2-4A	LB250-021	1.428	5.712
2-4B	LB50-022	0.176	0.704
	Average	0.761	3.043

For further information:

Simon Lill (*Executive Chairman*) or

Andy Beckwith (*Technical Director and Operations Manager*)

ASX references

De Grey executes Indee Gold Share Sale Agreement, 30 January 2018

De Grey executes Indee Gold Share Sale Agreement, 12 February 2018

Conglomerate gold update, widespread visible gold and nuggets, 19 March 2018

Jarret Well – 11.6m pyritic conglomerate intersected in drilling, 23 July 2018

68m Conglomerate Sequence intersected at Steel Well, 10 August 2018

Conglomerate Gold Bulk Sampling Commences, 2 October 2018

Coarse Gold at Loudens Patch in first bulk sampling, 12 November 2018.

Indee Gold Settlement Extended to July 2019, 21 December 2018

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.

Indee Gold Option Agreement

De Grey has signed a binding agreement to acquire 100% of the Indee Gold Project with settlement due on 24 July 2019. A non-refundable deposit of \$1.5M has been paid, \$0.7M extension payment, in Dec 2018, and final settlement will include \$9.7M in cash and \$3.0M in DEG shares. (refer to ASX release “Indee Gold Settlement Extended to July 2019, 21 December 2018”).

Appendix 1

Conglomerate gold concentrate samples (*note samples of Mallina sediments are not shown)

Trench LTR001

Sample LB250-001



Sample LB250-003



Sample LB250-005



Sample LB250-007



Sample LB250-009



Sample LB250-011



Sample LB250-013



Sample LB250-015



Sample LB250-017



Trench LTR002

Sample LB250-019



Sample LB250-020



Sample LB250-021



Sample LB250-022



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	<ul style="list-style-type: none"> • Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling. • Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. • Aspects of the determination of mineralisation that are Material to the Public Report. • In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information. 	<ul style="list-style-type: none"> • Bulk samples comprise 250kg bulk samples taken as a 5-10cm layer scaled from a vertical wall marked up as 2m x 1.5m sample panels. • Bulk sampling is constrained by the principal geological units which have been lithology mapped and photographed prior to sampling. • Nominal 2m sample intervals for the bulk sampling are taken along strike and measured using a tape reel, and survey staff, however, interval widths will be modified if geological boundaries are encountered (e.g. Fault zones or facies changes). • Bulk samples comprise a 250kg nominal weight. Sample weights are calculated using a calibrated, industry standard electronic scale. • Bulk samples are crushed, pulverised and passed through a series of gravity separators to recover heavy minerals and gold. The percentage of gold recovered from the gravity separation process is not known but the concentrate is estimated to contain 90-95% gold associated with heavy mineral sands. • Gold nuggets are located with hand held metal detectors and the locations recorded on 1:25 geological map sheets. Nuggets are removed from the sample panels if they occur <10cm from the face (to avoid being destroyed) and reinserted into the gold concentrate for weighing. The material surrounding the nuggets is stored and reinserted in the sample for crushing. • The gold concentrate has not been tested for purity.
Drilling techniques	<ul style="list-style-type: none"> • Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.). 	No drill results are being reported.
Drill sample recovery	<ul style="list-style-type: none"> • Method of recording and assessing core and chip sample recoveries and results assessed. • Measures taken to maximise sample recovery and ensure representative nature of the samples. • Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material. 	<ul style="list-style-type: none"> • Sample panels are dropped onto a rubber mate placed squarely at the base of the sample face. • Prior to sampling the walls are hosed down to remove loose rock contamination. • An even skin of 5 to 10cm of material is removed from the sample face to obtain an unbiased, representative sample.
Logging	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • Detailed geological mapping of the sample faces is undertaken at 1:25 scale. • The line geology data is recorded on paper log sheets, manually entered into the Company data entry templates then imported into the Company database. • The captured data is not intended to be used to calculate a JORC compliant resource estimate. • The logging is qualitative and detailed. Sample faces are also photographed with survey points marked with a DGPS. •

Criteria	JORC Code explanation	Commentary
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • An even sample layer is removed from the sample face to make the sample as representative as possible. • After washing down, the sample face is left to dry for a minimum 24hours to ensure extracted and weighed samples are completely dry. • All sampling equipment used in the field and processing circuit are cleaned before and after use. • During the crushing process frequent panning of the sluice tails is undertaken to ensure good recoveries in the Knelson and sluice are maintained. • Following the processing of the 250kg sample, the hammer mill and Knelson are dismantled and thoroughly cleaned with water and wire brushes. 5kg of certified blank material is then fed through the cleaned hammer mill and Knelson concentrator and the pulverized blank material included in the overall concentrate. • No field duplicates have been taken to date. • Sample faces are metal detected to remove coarse gold nuggets. Remaining sample is pulverized to <1.2mm to liberate gravity recoverable gold contained within the sample. It's considered the bulk of the gravity recoverable gold is liberated during this process and the <1.2mm size fraction is suitable for this initial trial period.
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> • The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. • For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. • Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established. 	<ul style="list-style-type: none"> • No bulk samples have been submitted to the laboratory. • The gold concentrates have not been tested for purity. • The gold concentrates comprise approximately 90-95% alluvial gold and nuggets and heavy mineral sands. • Bulk samples weighed in the field are measured using calibrated electronic scales accurate to 0.05kg. • Gold concentrates are measured using calibrated electronic scales accurate to 0.001gram.
Verification of sampling and assaying	<ul style="list-style-type: none"> • The verification of significant intersections by either independent or alternative company personnel. • The use of twinned holes. • Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. • Discuss any adjustment to assay data. 	<ul style="list-style-type: none"> • No duplicate samples have been taken to date. • All data is collected using field data log sheets and electronically captured using the Company's data entry templates then imported into the Company database.
Location of data points	<ul style="list-style-type: none"> • Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. • Specification of the grid system used. • Quality and adequacy of topographic control. 	<ul style="list-style-type: none"> • The line start point location is measured by Differential GPS (DGPS) to an accuracy of +/-20cm. • Collar location coordinates are reported in GDA94, zone 50s. • Geological mapping is undertaken using a tape reel to measure horizontal distance and surveyors' staff to measure vertical distance.
Data spacing and distribution	<ul style="list-style-type: none"> • Data spacing for reporting of Exploration Results. • Whether the data spacing, and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. • Whether sample compositing has been applied. 	<ul style="list-style-type: none"> • The bulk sampling intervals are 2m and constrained by the geological domain boundaries. • The 2m samples are composited. • The sampling data is not intended to be used in a JORC compliant resource estimate.
Orientation of data in relation	<ul style="list-style-type: none"> • Whether the orientation of sampling achieves unbiased sampling of possible structures and the 	<ul style="list-style-type: none"> • The prospective horizon is a conglomerate at the base of the Mt Roe Basalt which outcrops along the sample line over

Criteria	JORC Code explanation	Commentary
to geological structure	<p><i>extent to which this is known, considering the deposit type.</i></p> <ul style="list-style-type: none"> <i>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.</i> 	<p>approximately 60m.</p> <ul style="list-style-type: none"> The deposit style is poorly understood, and further detailed work is required before any conclusion on the mineralisation can be confirmed.
Sample security	<ul style="list-style-type: none"> <i>The measures taken to ensure sample security.</i> 	<ul style="list-style-type: none"> Samples are sealed in 44 Gallon drums with lids between the sample site and crushing shed. Nuggets and gold concentrates are collected by company personnel and stored at the company's exploration camp
Audits or reviews	<ul style="list-style-type: none"> <i>The results of any audits or reviews of sampling techniques and data.</i> 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> <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.</i> <i>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.</i> 	<ul style="list-style-type: none"> Sampling was conducted on E47/2720 which is located approximately 80km southwest of Port Hedland, in the Pilbara Region, Western Australia. 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\$15M with payments of and Initial Exclusivity Fee of \$0.1M (Paid in Jan 2017). Initial Deposit of A1.5M (paid on SSA execution – 9 February 2018); A\$0.7M (paid on 21 December 2018), with Settlement now scheduled for 24 July 2019 with \$9.7M in cash and A\$3.0M of Consideration Shares (new De Grey fully paid ordinary shares) to be issued on settlement.
Exploration done by other parties	<ul style="list-style-type: none"> <i>Acknowledgment and appraisal of exploration by other parties.</i> 	<ul style="list-style-type: none"> The Loudens Patch prospect has not been explored for this style of mineralization previously other than work completed and reported by De Grey.
Geology	<ul style="list-style-type: none"> <i>Deposit type, geological setting and style of mineralisation.</i> 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> <i>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:</i> <i>easting and northing of the drill hole collar</i> <i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i> <i>dip and azimuth of the hole</i> <i>down hole length and interception depth</i> <i>hole length.</i> <i>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</i> 	<ul style="list-style-type: none"> The trench sample location is included in this report.

Criteria	JORC Code explanation	Commentary
	<p><i>understanding of the report, the Competent Person should clearly explain why this is the case.</i></p>	
Data aggregation methods	<ul style="list-style-type: none"> <i>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.</i> <i>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</i> <i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i> 	<ul style="list-style-type: none"> No weighted average techniques have been applied. The reported gold concentrate includes nuggets located with metal detectors and coarse gold nominally >0.5mm size recovered from bulk processing for gravity recoverable gold.
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> <i>These relationships are particularly important in the reporting of Exploration Results.</i> <i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i> <i>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').</i> 	<ul style="list-style-type: none"> Bed thicknesses are exposed in outcrop with sample dimensions measured using a tape measure (horizontal meters) and survey staff (vertical meters). Due to the early stage of exploration and type of work completed to date, the sampling is non-systematic nor representative.
Diagrams	<ul style="list-style-type: none"> <i>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</i> 	<ul style="list-style-type: none"> Photographs of the sampled face is included in the report. A location plan of the prospect is provided in the report. A photograph of the gold concentrates recovered is included in the report.
Balanced reporting	<ul style="list-style-type: none"> <i>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</i> 	<ul style="list-style-type: none"> The report is considered balanced with the information provided in the context. The geological reporting of the rock types is provided in the information. Maps and photographs of the area and geology are reported in the report.
Other substantive exploration data	<ul style="list-style-type: none"> <i>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</i> 	<ul style="list-style-type: none"> Bulk sampling and procedure data are included in the report.
Further work	<ul style="list-style-type: none"> <i>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</i> <i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i> 	<ul style="list-style-type: none"> Future work includes extending the current excavation to expose conglomerate beds along strike for further bulk sampling. Additional trenching of target areas adjacent to the current work area is planned.