

ASX Announcement 16 December 2016

Initial Mt Berghaus drilling assays deliver robust gold mineralisation

ASX Code DEG

ABN 65 094 206 292

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- Highly encouraging initial assay results from first 21 holes of a 64 hole RC drilling program
- Significant new high grade shallow oxide gold mineralisation defined

Best results include:

- 12m @ 11.36g/tAu from 5m
- 31m @ 2.07g/tAu from 8m
- 12m @ 2.21g/tAu from 51m
- 3m @ 5.51g/tAu from 64m
- 4m @ 7.95g/tAu from 28m

NB: downhole widths do not necessarily reflect true widths.

- Drilling intersected multiple subparallel gold lodes many drill intersections outside of existing resource boundary. Resources remain open along strike and at depth
- Shallow oxide mineralisation extends to surface with rock chip samples of quartz veins returning results of up to 62.5g/t Au with an average grade of 7.11g/t Au. (31 samples).
- Potential for significant upgrade of the existing Mt. Berghaus gold resource.
- Several other targets at Mt. Berghaus remain untested along strike.
- Further results to be released in the New Year.

Andy Beckwith, Geology Manager, commented

"Growing the Mt Berghaus shallow oxide resource is the second step in De Grey's strategy of defining 500,000 plus ounces of gold at Turner River.

We are currently 70% there, with 366,000 ounces already defined.

Mt Berghaus has the hallmarks of a large gold system with multiple parallel lodes, excellent grades and many untested targets remaining."

Turner River – Unlocking Shareholder Value



De Grey Mining Ltd (ASX: DEG, "De Grey" "Company") is pleased to advise that the 64 hole RC drilling program at the Mt Berghaus prospect (Turner River Project) has now been completed for a total advance of 5,536m (Figure 2).

This drilling program forms an integral part of the Company's strategy of targeting a combined 500,000oz resource at the Turner River Project in the coming six months. Specifically the Mt Berghaus drilling program aims to both upgrade and expand on the current 43Koz gold resource (*Resources Statement by De Grey Mining Limited as reported to the ASX on 23 June 2016*). Work has focused on key infill drilling within the existing resource and immediate along strike extensions to the known resource, as well as testing newly defined outcropping gold bearing quartz veins and other priority targets.

This announcement contains results for the first 21 holes of the 64 hole program, with assays pending for remaining holes.

Significant zones of shallow oxide mineralisation, with some high grade zones, were intersected in numerous holes. Best results include:

- **12m @ 11.36g/tAu** from 5m in BGRC125 (including 1m @ 73.0g/tAu from 7m and 1m @ 48.7g/tAu from 13m)
- 3m @ 5.51g/tAu from 64m and 6m @ 0.93g/tAu from 73m in BGRC126
- 8m @ 2.03g/tAu from 12m and 17m @ 0.85g/tAu from 48m in BGRC129 (4m composites)
- 4m @ 7.95g/tAu from 28m in BGRC131 (4m composite)
- **31m @ 2.07g/tAu** from 8m in BGRC132 (including 6m @ 6.93g/tAu from 11m)
- **12m @ 2.21g/tAu** from 51m in BGRC134 (including 3m @ 5.22g/tAu from 56m)
- 9m @ 1.71g/tAu from 45m in BGRC136

A complete list of significant results is given in Table 2.

A program of surface rock chip sampling has identified exposed quartz veins with significant high grade gold mineralisation. Rock chip samples returned high grade gold results, with assays including 62.5g/t, 34.1g/t, 29.8g/t and 16.2g/t. Thirty one (31) rock chip samples were taken during the program and returned an average grade of 7.11g/t Au.

Whilst the bulk of drilling assay results are pending, drilling to date, together with the rock chip sampling, has enabled an improved understanding of the geology and mineralisation of the prospect. Multiple steeply-dipping lodes which extend from surface have been defined, with many of these remaining open along strike and at depth (Figure 3).



Drilling results received to date are highly encouraging and show significant potential to increase the Mt. Berghaus resource and in particular the shallow oxide portion of the deposit.

Final assay results for the remaining 42 holes are expected during early January 2017, following which De Grey will provide an updated resource estimate for Mt. Berghaus. Some initial metallurgical testwork will also be undertaken.

A series of soil sampling results will also be assessed and reported as required.

For further information:

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The information in this report that relates to exploration results is based on, and fairly represents information and supporting documentation prepared by Mr. Philip Tornatora, a Competent Person who is a member of The Australasian Institute of Mining and Metallurgy. Mr. Tornatora is a consultant to De Grey Mining Limited. Mr. Tornatora has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resource and Ore Reserves". Mr. Tornatora consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.



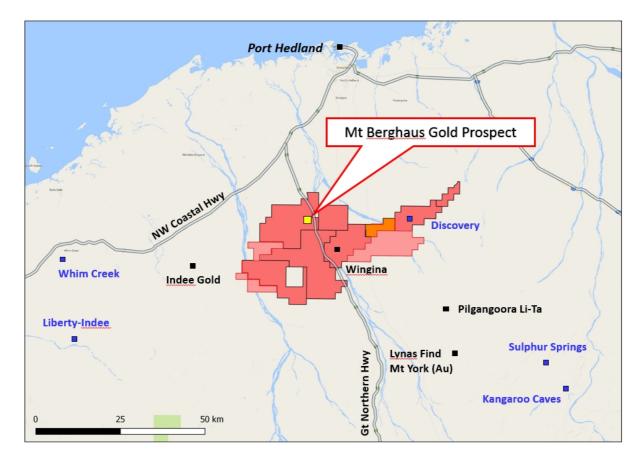
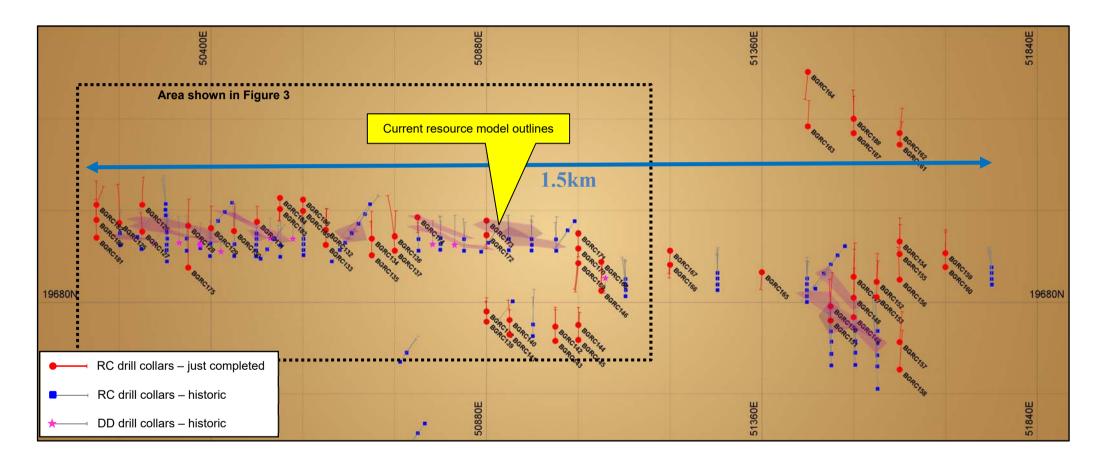


Figure 1 Turner River Project location plan



Figure 2 Mt Berghaus central resource area collar plan





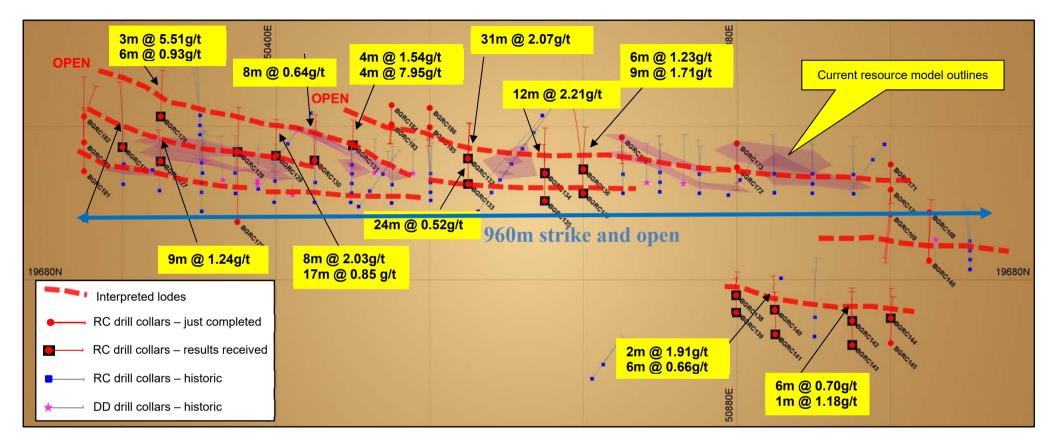


Figure 3 Mt Berghaus central resource area collar plan detail

	EAST_MtBerg	_	RL_MtBerg	FAST CDAGA			Dauth	D:	Az_MtBerg	A- CD404
		- 0	LOCAL		NORTH_GDA94	_	-			Az_GDA94
BGRC125	50240	19818	82	656901	7700189	82	119	-55	360	325
BGRC126	50280	19850	81	656915	7700238	81	83	-55	360	325
BGRC127	50280	19803	79	656942	7700199	79	59	-55	360	325
BGRC128	50360	19813	78	657002	7700253	78	83	-55	360	325
BGRC129	50400	19809	78	657037	7700273	78	65	-55	360	325
BGRC130	50440	19804	79	657073	7700292	79	83	-55	360	325
BGRC131	50480	19820	78	657096	7700328	78	47	-55	360	325
BGRC132	50600	19806	76	657203	7700385	76	65	-55	360	325
BGRC133	50600	19780	74	657218	7700364	74	107	-55	360	325
BGRC134	50680	19791	75	657277	7700419	75	83	-55	360	325
BGRC135	50680	19762	75	657294	7700395	75	102	-55	360	325
BGRC136	50720	19795	73	657307	7700445	73	77	-55	360	325
BGRC137	50720	19770	73	657322	7700425	73	173	-55	360	325
BGRC138	50880	19664	77	657514	7700430	77	41	-55	360	325
BGRC139	50880	19646	78	657524	7700415	78	59	-55	360	325
BGRC140	50920	19649	75	657555	7700440	75	59	-55	360	325
BGRC141	50920	19623	77	657570	7700419	77	77	-55	360	325
BGRC142	51000	19637	76	657627	7700476	76	60	-55	360	325
BGRC143	51000	19612	74	657642	7700456	74	95	-55	360	325
BGRC144	51040	19640	72	657658	7700502	72	53	-55	360	325

Table 1Drill hole location data

Mt Berg local grid orientated at 35 degrees to GDA94

Table 2Significant Intersections

HoleID	DepthFrom	DepthTo	Width	Au (g/t)	Sample Type
BGRC125	5	17	12	11.36	RC_1M
incl	7	8	1	73.00	RC_1M
incl	13	14	1	48.70	RC_1M
BGRC126	64	67	3	5.51	RC_1M
BGRC126	73	79	6	0.93	RC_1M
BGRC127	22	31	9	1.24	RC_1M
BGRC128	20	24	4	0.56	RC_4mComp
BGRC129	12	20	8	2.03	RC_4mComp
BGRC129	48	65	17	0.85	RC_4mComp
BGRC130	8	16	8	0.64	RC_4mComp
BGRC130	28	32	4	0.50	RC_4mComp
BGRC130	44	52	8	0.98	RC_4mComp
BGRC131	16	20	4	1.54	RC_4mComp
BGRC131	28	32	4	7.95	RC_4mComp
BGRC132	0	1	1	1.56	RC_1M
BGRC132	8	39	31	2.07	RC_1M
incl	11	17	6	6.93	RC_1M
BGRC133	44	68	24	0.52	RC_4mComp
BGRC134	25	27	2	0.58	RC_1M
BGRC134	51	63	12	2.21	RC_1M
incl	54	57	3	5.22	RC_1M
BGRC135	NSI				RC_4mComp
BGRC136	20	26	6	1.23	RC_1M
BGRC136	45	54	9	1.71	RC_1M
BGRC136	65	72	7	0.67	RC_1M
BGRC137	36	40	4	0.70	RC_4mComp
BGRC138	NSI				RC_1M
BGRC139	41	43	2	0.81	RC_1M
BGRC140	20	22	2	1.91	RC_1M
BGRC140	27	33	6	0.66	RC_1M
BGRC141	NSI				RC_1M
BGRC142	43	49	6	0.70	RC_1M
BGRC143	77	78	1	1.18	RC_1M
BGRC144	NSI				RC_1M

Table 5	able 3 Surface rock chip sample data							
		EAST_MtBerg	NORTH_Mt	RL_MtBerg				
SampleID	Sample Type	LOCAL	BergLOCAL	LOCAL	EAST_GDA94	NORTH_GDA94	RL_GDA94	Au (g/t)
C80901	Rock Chip	47524.85	20579.13	73.73	654240.30	7699254.71	73.73	< 0.01
C80902	Rock Chip	51348.59	19538.91	64.44	657969.17	7700595.82	64.44	<0.01
C80903	Rock Chip	51356.54	19572.42	76.41	657956.46	7700627.83	76.41	< 0.01
C80904	Rock Chip	51368.00	19569.67	77.90	657967.43	7700632.15	77.90	< 0.01
C80905	Rock Chip	51400.35	19580.03	76.14	657987.99	7700659.19	76.14	< 0.01
C80911	Rock Chip	50687.97	19799.77	76.32	657278.40	7700430.59	76.32	0.46
C80912	Rock Chip	50682.68	19802.20	76.48	657272.67	7700429.54	76.48	4.01
P37012	Rock Chip	50672.27	19801.60	76.32	657264.49	7700423.08	76.32	6.42
P37013	Rock Chip	50662.04	19800.34	76.59	657256.83	7700416.18	76.59	29.80
P37014	Rock Chip	50651.51	19805.14	75.85	657245.45	7700414.07	75.85	0.53
P37015	Rock Chip	50646.38	19805.13	75.79	657241.26	7700411.12	75.79	4.57
P37016	Rock Chip	50633.75	19807.48	76.03	657229.56	7700405.80	76.03	5.52
P37017	Rock Chip	50629.34	19810.10	76.52	657224.45	7700405.42	76.52	3.41
P37018	Rock Chip	50622.52	19808.98	76.33	657219.51	7700400.59	76.33	0.07
P37019	Rock Chip	50401.98	19829.78	79.25	657026.92	7700291.13	79.25	3.22
P37020	Rock Chip	50409.93	19828.17	78.65	657034.35	7700294.37	78.65	2.60
P37021	Rock Chip	50409.64	19828.37	78.65	657034.00	7700294.37	78.65	1.03
P37022	Rock Chip	50378.24	19829.86	77.87	657007.43	7700277.58	77.87	1.11
P37023	Rock Chip	50377.89	19830.10	77.87	657007.00	7700277.58	77.87	11.65
P37024	Rock Chip	50322.40	19869.87	78.73	656938.73	7700278.33	78.73	8.25
P37030	Rock Chip	50515.60	19840.18	86.46	657114.03	7700364.82	86.46	4.98
P37031	Rock Chip	50521.55	19826.67	86.89	657126.65	7700357.17	86.89	16.20
P37032	Rock Chip	50531.58	19823.86	86.92	657136.48	7700360.62	86.92	2.95
P37033	Rock Chip	50532.74	19822.09	87.01	657138.44	7700359.83	87.01	62.50
P37034	Rock Chip	50539.63	19820.44	86.32	657145.03	7700362.43	86.32	34.10
P37035	Rock Chip	50546.52	19817.55	86.39	657152.33	7700364.02	86.39	1.77
P37036	Rock Chip	50225.66	19836.53	73.55	656878.61	7700195.53	73.55	5.29
P37037	Rock Chip	50218.75	19840.65	73.22	656870.59	7700194.94	73.22	5.33
P37038	Rock Chip	50205.76	19854.15	73.39	656852.20	7700198.55	73.39	0.53
P37039	Rock Chip	50165.48	19872.99	74.54	656808.40	7700190.88	74.54	0.10
P37040	Rock Chip	50393.14	19787.11	72.43	657044.15	7700251.11	72.43	3.88

 Table 3
 Surface rock chip sample data

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. 	 All drilling and sampling was undertaken in an industry standard manner All holes sampled on both a 1m and nominal 4m basis over the entire length of the hole. 1m samples were submitted for analysis for mineralised zones based on the geologist's interpretation, with 4m composite samples submitted for analysis for all other intervals. Where assays over 0.1g/tAu were received for 4m composite sample results, 1m samples were then submitted for these zones. Both the 4m and 1m samples were taken from a cone splitter mounted on the drill rig cyclone. The cyclone was calibrated to provide a continuous sample volume accordingly to sample length Each 4m and 1m sample ranges from a typical 2.5-3.5kg The independent laboratory then takes the sample and pulverises the entire sample for analysis as described below Rock chip samples were collected from outcropping quartz veins and comprised 2-3kg of material. Assays were undertaken at an industry standard independent laboratory
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.). 	 All drill holes are Reverse Circulation(RC) with a 5 1/2- inch bit and face sampling hammer.
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. 	 All samples were visually assessed for recovery. Samples are considered representative with good recoveries. Only a small percentage of samples were considered low recovery primarily due to change of rods when a small amount of wet sample occurred. No sample bias is observed
Logging	 Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource 	 Company geologist logged each hole and supervised all sampling. The sample results are appropriate for a resource estimation. The 1m sample results are considered

Criteria	JORC Code explanation	Commentary
Sub-sampling techniques and sample preparation	 JORC Code explanation 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. 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. The nature, quality and 	 Commentary the preferred sample to use in the resource estimation for more accurate definition of lodes Rock chip samples were geologically logged at the time of sampling. The sampling of the RC sample was carried out by a cone splitter on the rig cyclone and drill cuttings were sampled on a 1m and 4m composite basis. Duplicate samples were taken approximately every 95 samples and independent standards were inserted approximately every 30 samples The samples are considered representative and appropriate for this type of drilling and for use in a future resource estimate. Rock chip samples comprised samples of 2-3kg. Samples were bagged and sent to the independent laboratory for assay where they were crushed, pulverised and assayed.
Quality of assay data and laboratory tests		 The samples were submitted to a commercial independent laboratory in Perth, Australia. Each sample was dried, crushed and pulverised. Au was analysed by a 50gm charge Fire assay fusion technique with a AAS finish The techniques are considered quantitative in nature. As discussed previously standards and duplicates samples were inserted by the Company and the laboratory also carries out internal standards in individual batches The standards and duplicates were considered satisfactory
Verification of sampling and assaying	 The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data. 	 Sample results have been entered and then checked by a second company geologist Results have been uploaded into the company database, checked and verified No adjustments have been made to the assay data. Results are reported on a length weighted basis
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 	 Drill hole collar and rock chip sample locations are located by hand held GPS to an accuracy of +/-3m. Locations are given in Mt Berghaus local grid coordinates in addition to GDA94 zone 50

Criteria	JORC Code explanation	Commentary
	 Mineral Resource estimation. Specification of the grid system used. Quality and adequacy of topographic control. 	 Diagrams and location table are provided in the report
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 RC drilling is on a nominal 40m x 40m or 80m x 40m grid. All holes have been geologically logged and provide a strong basis for geological control and continuity of mineralisation Sample result and logging will provide strong support for the results to be used in a resource estimate Rock chip sampling spacing varied depending on outcrops. Rock chip samples assist with geological interpretation but are not used in resource estimates.
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 and therefore the sampling is considered representative of the mineralised zone. In some cases, drilling is not at right angles to the dip of mineralised structures and as such true widths are less than downhole widths. This will be allowed for in resource estimates when geological interpretations are completed.
Sample security	The measures taken to ensure sample security.	 Samples were collected by company personnel and delivered direct to the laboratory via a transport contractor
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	 No audits have been completed. Review of QAQC data has been carried out by company geologists

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 E45/3390 which is located approximately 50km south of Port Hedland and is 100% owned De Grey Mining (or its 100% owned subsidiaries)
Exploration done by other parties	 Acknowledgment and appraisal of exploration by other parties. 	• The Mt Berghaus deposit has had previous drilling undertaken over a period of 12 years. The large proportion of the holes were completed by De Grey Mining between 2003-2008. A joint venture party completed several diamond holes in 2014/15.
Geology	 Deposit type, geological setting and style of mineralisation. 	 The mineralisation targeted is hydrothermally emplaced and sediment/quartz hosted gold mineralisation within a shear zone and is similar in style to many other Western Australian gold deposits.

Criteria	JORC Code explanation	Commentary
Drill hole Information	 A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole length and interception depth hole length. If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case. 	Drill hole location and directional information provide in the report.
Data aggregation methods	 In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated. Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. The assumptions used for any reporting of metal equivalent values should be clearly stated. 	 Results are reported to a minimum cutoff grade of 0.3g/t gold with an internal dilution of 4m maximum. Intervals over 0.5g/tAu are reported. Intercepts are length weighted averaged. No maximum cuts have been made. Rock chip samples relate to a point source and not data aggregation is applied.
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'). 	 The drill holes are interpreted to be perpendicular to the strike of mineralisation. Drilling is not always perpendicular to the dip of mineralisation and true widths are less than downhole widths. Estimates of true widths will only be possible when all results are received and final geological interpretations have been 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. 	 Plans are provided in the report. Appropriate sections will be provided in upcoming reports when all results have been received and interpretations finalised.
Balanced reporting	 Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should 	 This report provides the assay results for the first 21 holes of a 64 hole program. Further updates will be provided when additional assay results have been received.

Criteria	JORC Code explanation	Commentary
	be practiced to avoid misleading reporting of Exploration Results.	 The report is considered balanced and provided in context.
Other substantive exploration data	 Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances. 	 The Mt Berghaus Gold deposit has an existing 2012 JORC gold resource (43,000oz) previously reported by De Grey.
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. 	 The company plans to complete detailed wireframes of geology and mineralisation prior to updating the resource estimation. Metallurgical testwork to determine possible recoveries will be carried out at an appropriate stage Further drilling will be assessed on receipt of all results and completion of geological wireframing and interpretation.