

#### **ASX Announcement**

13 June 2019

# High gold recoveries with conventional CIL processing at Toweranna

- "Free Milling" with high gold recovery from conventional CIL processing
  - Oxide +94% recovery
  - Fresh +96% recovery
- High gravity gold recovery
  - Oxide 20.8% Recovery
  - Fresh 54.3% Recovery

De Grey Mining Limited (ASX: DEG, "De Grey", "Company") is pleased to announce positive results for metallurgical test work on samples from within the proposed Toweranna open pit resource area at the Company's Pilbara Gold Project (PGP).

Test work to assess conventional carbon-in-leach (CIL) gold recovery from both oxidised and fresh rock was carried out at grind sizes ranging from 150 $\mu$ m to 75 $\mu$ m. High gold recovery was obtained from all of the oxide zone samples, ranging from 92.0% at the coarse grind size to 94.7% at 75 $\mu$ m within 24 hour extraction time. The fresh rock samples returned excellent results with 94.7% gold recovery at 150  $\mu$ m and 96.3% at the finer grind size over the 24 hour timeframe. These results indicate Toweranna mineralisation is free milling and fully amenable to convention CIL processing.

Separate samples were also tested for gravity recovery, with oxide and fresh rock samples returning recoveries of 20.8% and 54.3% respectively. The high levels of gravity gold indicate that it may be possible to lift total gold recovery by installing a gravity concentrator ahead of the CIL circuit. The merits of employing gravity extraction will be further evaluated in subsequent test work.

## Andy Beckwith, Technical Director commented:

*"Toweranna continues to grow in stature with strong resource growth potential and high recovery with conventional CIL processing characteristics.* 

On-going drilling results continue to define multiple stacked lodes to at least 200m depth. Once drill assays are finalised, we will update the 0-200m open pit resource and run open pit optimisations.

We are increasingly seeing free gold in the veins in core and the high gold recovery together with the simple free milling nature is encouraging.

Toweranna is poised as a game changer as it has the potential to rapidly increase resources and improve the PFS economics."



Comminution test work was carried out to assess the physical properties of the Toweranna samples. The oxide material was classified as soft with a low abrasion index, similar to the other deposits at the PGP. The fresh samples were classified as medium to hard with a high abrasion index.

The test work was carried out by ALS Metallurgy, a leading global testing and analysis company, on oxidised and fresh rock samples obtained from a single PQ (large diameter) diamond hole drilled specifically for the purpose. Details of the drill hole location and sample intervals are provided in Table 4. The test work program was supervised by GR Engineering Services Limited, with input from De Grey technical staff.

The metallurgical results are summarised in Table 1 and Table 2, and it should be noted that the gold grades of the samples tested significantly exceed the average grade of the Toweranna Mineral Resource. Further variability test work will be required across the deposit to assess gold recovery at various head grades and De Grey cautions that lower grade material may yield lower gold recovery rates. However recent LeachWELL test results from multiple Toweranna drill samples indicate consistently high cyanide leach gold recoveries over a wide sample grade range, as shown in Table 3.





Table 1	Summary Metallurgy Test Work Results – CIL and rock parameters
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		CIL Gold Recovery			Rock Parameters			
Deposit	Туре	Head Grade g/t	Residue Grade g/t	Recovery %	<b>Grind</b> Size (P80) μm	Bwi kWh/t	Rwi kWh/t	Abrasion Index
Toweranna	Oxide	6.63	0.35	94.7	75	11.7	12.1	0.072
	Fresh	9.83	0.36	96.3	75	16.7	18.4	0.254



## Table 2 Summary Metallurgy Test Work Results – Gravity Gold

		Gravity Gold Recovery			
Deposit	Туре	Head Grade g/t	Recovery to concentrate %	<b>Grind Size</b> (P80) μm	
Toweranna	Oxide	5.36	20.8	75	
	Fresh	10.84	54.3	75	

## Additional LeachWELL and Screen Fire Sampling.

A selected program of 34 RC samples from 8 previously reported holes were analysed by the LeachWELL technique as a simple indicative proxy for cyanide leaching. Result from this sampling indicate the LeachWELL results compare favourably with the original fire assay. This technique is used as a preliminary assessment of gold extraction using cyanide solvent.

Screen fire check sampling was also completed on the same samples. Results compare favourably with both the original routine fire assays and the LeachWELL check sampling as describe above. Results are provided below in Table 3.

HoleID	From	То	Ох	Fire Assay (g/t)	LeachWELL (g/t)	Screen Fire (g/t)
TRC069	41	42	OXIDE	1.36	1.42	1.53
TRC069	42	43	OXIDE	33.50	33.4	36.40
TRC054	3	4	OXIDE	19.40	19.2	19.80
TRC054	4	5	OXIDE	14.00	12.95	13.25
TRC054	5	6	OXIDE	0.63	0.62	0.67
TRC080	28	29	TRANSITION	34.70	33.4	34.20
TRC080	29	30	TRANSITION	24.00	19.55	19.05
TRC080	30	31	TRANSITION	3.17	4.5	4.21
TRC080	31	32	TRANSITION	1.26	1.1	1.62
TRC080	32	33	TRANSITION	1.22	0.84	1.08
TRC069	43	44	TRANSITION	6.37	5.15	5.16
TRC069	44	45	TRANSITION	1.03	1.07	2.10
TRC058	51	52	FRESH	16.30	14.75	15.70
TRC058	52	53	FRESH	32.90	31.8	32.60
TRC058	53	54	FRESH	22.50	19.5	18.50
TRC058	54	55	FRESH	4.84	0.23	1.16
TRC073	107	108	FRESH	20.30	18.45	20.70
TRC073	108	109	FRESH	16.85	17.5	13.90
TRC073	109	110	FRESH	11.95	10.4	10.45

#### Table 3Fire assay gold results compared to LeachWELL and Screen Fire assays.

DE	GREY
MIN	NGLTD

HoleID	From	То	Ох	Fire Assay (g/t)	LeachWELL (g/t)	Screen Fire (g/t)
TRC073	110	111	FRESH	14.55	12.55	14.00
TRC073	111	112	FRESH	2.43	2.45	2.65
TRC073	112	113	FRESH	3.47	2.91	3.00
TRC073	113	114	FRESH	6.19	5.63	5.86
TRC050	64	65	FRESH	1.21	0.99	1.19
TRC050	65	66	FRESH	0.20	0.17	0.20
TRC050	66	67	FRESH	25.00	24.1	25.90
TRC050	67	68	FRESH	13.85	13	14.40
TRC050	68	69	FRESH	1.66	1.72	1.96
TRC052	50	51	FRESH	0.93	0.99	1.09
TRC052	51	52	FRESH	33.30	30.9	25.00
TRC052	52	53	FRESH	8.68	10.95	9.93
TRC052	53	54	FRESH	2.18	3.42	2.81
TRC052	54	55	FRESH	0.29	0.38	0.68
TRC052	55	56	FRESH	1.27	1.42	1.24
			Average	10.95	10.19	10.13

Only one sample (TR058 54-55m) has a large variance in both LeachWELL and Screen fire results to the original Fire assay result. This result is suggestive of a nugget effect where a small gold nugget is included in the original fire assay. Overall, the results indicate a low to moderate nugget effect with generally high repeatability between the three analytical techniques.

Resource extension RC drilling has been completed to 200m depth with encouraging multiple stacked lodes defined throughout the intrusion. Ongoing scout diamond drilling continues to test mineralisation potential between 200m-600m depth. Examples of the high grade lodes intersections include: 29m @ 4.38g/t, 26m @ 3.07g/t, 15m @ 5.11g/t, 8m @ 14.12g/t, 21m @ 2.04g/t, 11m @ 5.21g/t, 7m @ 8.14g/t and 12m @ 2.94g/t. A resource update is expected to be completed during the September Quarter.

## **Forward Programs**

Toweranna is considered to have potential for significant resource growth, and potential for both open pit and underground mining. This potential is considered significant and may have a material and positive impact on the 2019 PFS open pit mine scheduling.

Work programs have been accelerated to expand resources to a nominal 200m depth and test mineralisation down to a depth of at least 600m. Work activities at Toweranna over the next 2-3 months include;

- Scout diamond drilling evaluating gold potential between 200-600m drilling in progress with initial assays pending.
- Updated resource estimation planned for September Quarter, upon final diamond assay receipt.
- Second phase of ore sorting test work including
  - > 2-4 tonne granite crushing test work using existing historic mine waste,
  - > ore sorting on selected gold lodes using existing drill core.
- Open pit mining optimisations as part of the 2019 PFS, planned for the September Quarter upon completion of new resource model.



HoleID	Collar East (GDA94)	Collar North (GDA94)	Collar RL (GDA94)	Dip (degrees)	Azimuth (GDA94)	HoleDepth	From (m)	To (m)	Туре
TD007	591297	7679970	79.8	-77	90	81	4	17	Oxide
TD007	591297	7679970	79.8	-77	90	81	48.2	53.0	Fresh

### Table 4Metallurgical drill holes location data.

## Background

The Toweranna deposit shows a style of gold mineralisation not previously known in the Pilbara, but similar to other granitoid hosted gold deposits around the world, many of which host large gold resources (greater than 1.0Moz). Two Western Australian analogues are both located in the Laverton region of the Eastern Goldfields and include:

- the Wallaby deposit (Goldfields Limited) over 8Moz resource and producing over 250,000oz per year; and
- the nearby Jupiter Deposit<sup>1</sup> (Dacian Gold Limited) 1.6Moz resource.

Additionally, the Lamaque and Sigma gold deposits in Quebec, Canada, have both produced over 4.5Moz each for a total production in excess of 9.0Moz<sup>2</sup>. At Sigma, mineralisation and mining extends to over 1800m depth.

Importantly, these large multi-million ounce gold deposits also tend to occur in clusters, providing longer term upside to discover additional Toweranna style targets within De Grey tenement portfolio. De Grey is assessing several similar style early stage exploration targets including targets to the south west of Mt Berghaus.

The Toweranna deposit currently hosts a shallow resource of 2.01Mt @ 2.2g/t Au for 143,900oz (JORC 2012) covering approximately 60% of the target between 100-120m depth. Further resource extension drilling is warranted to enable the final proposed open pit limits to be accurately defined and test for underground resource potential.

In March 2019, a Toweranna Exploration Target was defined based on increments in depth as follows:

Exploration Target (0-400m)	9.6Mt – 11.2Mt @ 2.1g/t to 2.3g/t for 680,000oz – 800,000oz
Exploration Target (200-400m)	4.8Mt – 5.6Mt @ 2.1g/t to 2.3g/t for 340,000oz – 400,000oz supported by limited but positive drilling to 420m depth
Exploration Target (0-200m)	4.8Mt – 5.6Mt @ 2.1g/t to 2.3g/t for 340,000oz – 400,000oz includes existing resource of 2.01Mt @ 2.2g/t Au for 143,900oz

#### **Exploration Target Cautionary Statement**

\*Exploration Target - The potential quantity and grade of the exploration target is conceptual in nature. There has been insufficient exploration to determine a mineral resource and there is no certainty that further exploration work will result in the determination of a mineral resource.

References

- <sup>1</sup> www.daciangold.com.au/site/operations/mt-morgans-gold-project/jupiter-gold-mine
- <sup>2</sup> Integra Gold N43-101 Report, Lamaque, 2017



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#### **Competent Persons Statements**

The information in this report that relates to **Exploration Results** is based on, and fairly represents information and supporting documentation prepared by Mr. Phil Tornatora, a Competent Person who is a Member of The Australian Institute of Geoscientists. Mr. Tornatora is an employee of 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.

The Information in this report that relates to **Mineral Resources** is based on information compiled by Mr Paul Payne, a Competent Person who is a Fellow of the Australasian Institute of Mining and Metallurgy. Mr Payne is a full-time employee of Payne Geological Services. Mr Payne 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 Resources and Ore Reserves". Mr Payne consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The information in this report that relates to **Toweranna Exploration Targets** is based on, and fairly represents information and supporting documentation compiled 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.

#### **Forward Looking Statements**

Statements regarding De Grey's plans with respect to the mineral properties, resource reviews, programmes, economic studies and future development are forward-looking statements. There can be no assurance that De Grey's plans for development of its mineral properties will proceed any time in the future. There can also be no assurance that De Grey will be able to confirm the presence of additional mineral resources/reserves, that any mineralisation will prove to be economic or that a mine will successfully be developed on any of De Grey's mineral properties.



## JORC 2012 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 quantitative in nature. Core (or costean, channel, etc.) photography.</li> <li>The total length and percentage of the relevant intersections logged.</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
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 subsampling 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 and whole 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 into 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.</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> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</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 GDA94 zone 50 projection.</li> <li>Drill hole information is provided in the report</li> <li>Topographic control is by airphoto photogrammetry to a resolution of either 0.10m or 0.15m, together with DGPS control.</li> </ul>



Criteria	JORC Code explanation	Commentary
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	• The results of any audits or reviews of sampling techniques and data.	<ul> <li>No audits have been completed. Review of QAQC data has been carried out by company geologists</li> </ul>

# 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 2019 as \$9.7M in cash and \$3 Million of Consideration Shares (new De Grey fully paid ordinary shares) to be issued on Settlement.</li> </ul>



Criteria	JORC Code explanation	Commentary
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	• Deposit type, geological setting and style of mineralisation.	<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> <li>The Toweranna mineralisation is quartz veining hosted within an intrusive body</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>	<ul> <li>Drill hole location and directional information is provided in this report.</li> </ul>
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 mineralisation 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> </ul>
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	Data and plans are provided in the report.



Criteria	JORC Code explanation	Commentary
	sectional views.	
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.
Other substantive exploration data	<ul> <li>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.</li> </ul>	<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>