

## ASX RELEASE

26 MARCH 2018

CODE: ALY

### BOARD OF DIRECTORS

**Mr Lindsay Dudfield**  
Non-Executive Chairman

**Mr Leigh Ryan**  
Managing Director

**Ms Liza Carpene**  
Non-Executive Director

**Mr Anthony Ho**  
Non-Executive Director

### ISSUED CAPITAL

SHARES 342,335,585

OPTIONS 19,500,000 (Unlisted)

### PROJECTS

BRYAH BASIN (80-100%)

KARONIE (100%)

LACHLAN (earning up to 80%)

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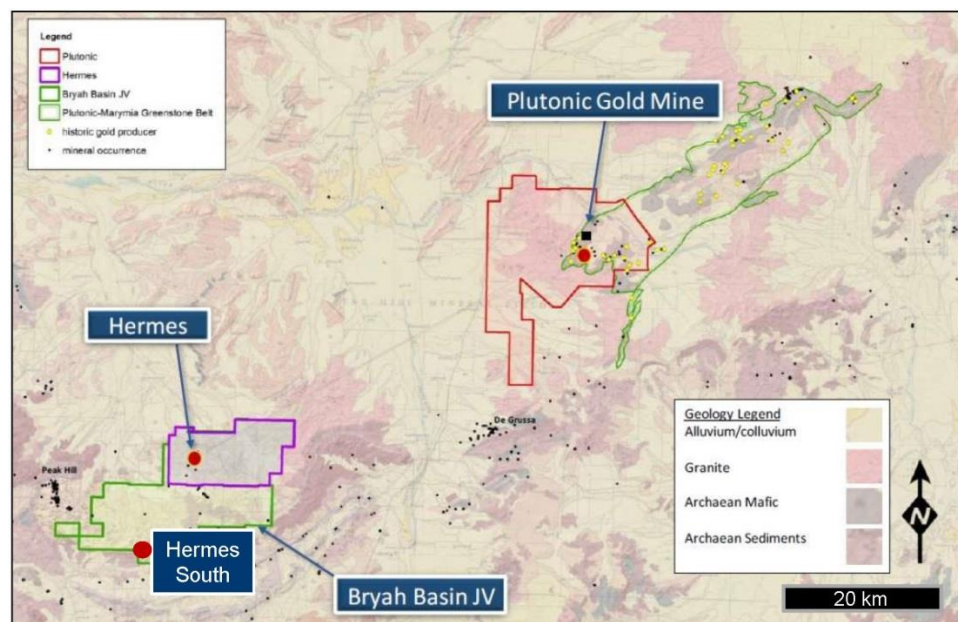


# Significant Drill Intercept at Hermes South, Bryah Basin Joint Venture, WA

## HIGHLIGHTS

- Superior Gold Inc. sampling of Alchemy Resources Ltd diamond hole at the Hermes South (Wilgeena) Prospect returns **9m @ 9.3g/t Au from 136.2m**<sup>1)</sup>
- Core sampling completed for specific gravity and gold analysis in preparation for resource modelling and update of the existing Wilgeena JORC 2004 **Indicated Resource of 1.36Mt @ 1.99g/t Au for 87,373oz Au**<sup>2)</sup>
- The intercept confirms high grade **plunging ore shoots at Hermes South / Wilgeena remain open at depth to the east**
- Superior Gold are planning further drilling in order to determine the **potential for the Prospect to become a second open pit operation**

Alchemy Resources Limited (ASX: **ALY**) (“**Alchemy**”) is pleased to announce the discovery of a new intersection at its Hermes South (Wilgeena) Prospect, located approximately 20 kilometres south southwest of the Superior Gold Inc. (TSX.V: **SGI**) Hermes mining operation, and 65 kilometres southwest of the Plutonic gold mine in Western Australia (*Figure 1*).



**Figure 1:** Bryah Basin JV, Hermes South (Wilgeena) Location and Superior Gold Licences

<sup>1)</sup> Refer to Superior Gold Inc. TSX announcement dated 21 March 2018

<sup>2)</sup> Refer to Alchemy Resources Limited ASX Announcement dated 24 February 2015

The Bryah Basin farm-in and joint venture arrangement with Billabong Gold Pty Ltd (“**Billabong**”), a subsidiary of Superior Gold Inc (“**Superior**”) allows Superior to earn up to 80% in Alchemy’s interests in the tenements through earn-in exploration expenditure of \$1.2M within three years. Upon fulfilment of the earn-in expenditure, Alchemy’s interest is carried on an interest-free deferred basis to production, with Alchemy to repay the deferred amount from 50% of its share of free cash flow from production following commencement of mining. The Billabong Gold JV currently includes a JORC 2004 Indicated Resource of 87,373 ounces of gold (**1.36Mt @ 1.99g/t Au**) at the Hermes South / Wilgeena Prospect.

As part of the preparation for an updated resource model for Hermes South, Billabong conducted a review of the existing diamond drill core from Hermes South in order to obtain accurate specific gravity measurements. This work identified a number of geotechnical holes (WGDC series) drilled by Alchemy Resources immediately prior to entering the Bryah Basin farm-in and joint venture agreement which had not been sampled and analysed (*Figure 2*). The first of these to be analysed was hole WGDC006 which returned **9m @ 9.3g/t Au from 136.2m** (*Refer to Superior Gold Inc. TSX announcement dated 21 March 2018*). Holes WGDC003, 4, and 5 are also being sampled for analysis.

The intercept confirms the presence of high grade, moderately east plunging ore shoots at the Hermes South/Wilgeena Prospect that remain open at depth (*Figures 3 & 4*). Mineralisation at the prospect shows excellent potential for further drilling to expand the area of gold mineralisation and add to the known resource.

Superior Gold are planning further drilling in order to determine the potential for the prospect to become a second open pit and part of the production profile for the Plutonic Gold Operation. The prospect and resource is strategically located and can be readily serviced by extending the existing Hermes haul road. The preliminary resource will be included in Superior’s reserve and resource update for the Plutonic mine, which is expected to be released early in the second quarter of 2018.



**Figure 2:** Hermes South (Wilgeena) geotechnical diamond holes (WGDC prefix) and x-section / long section locations over Google Earth image (drill hole traces coloured by Au g/t).



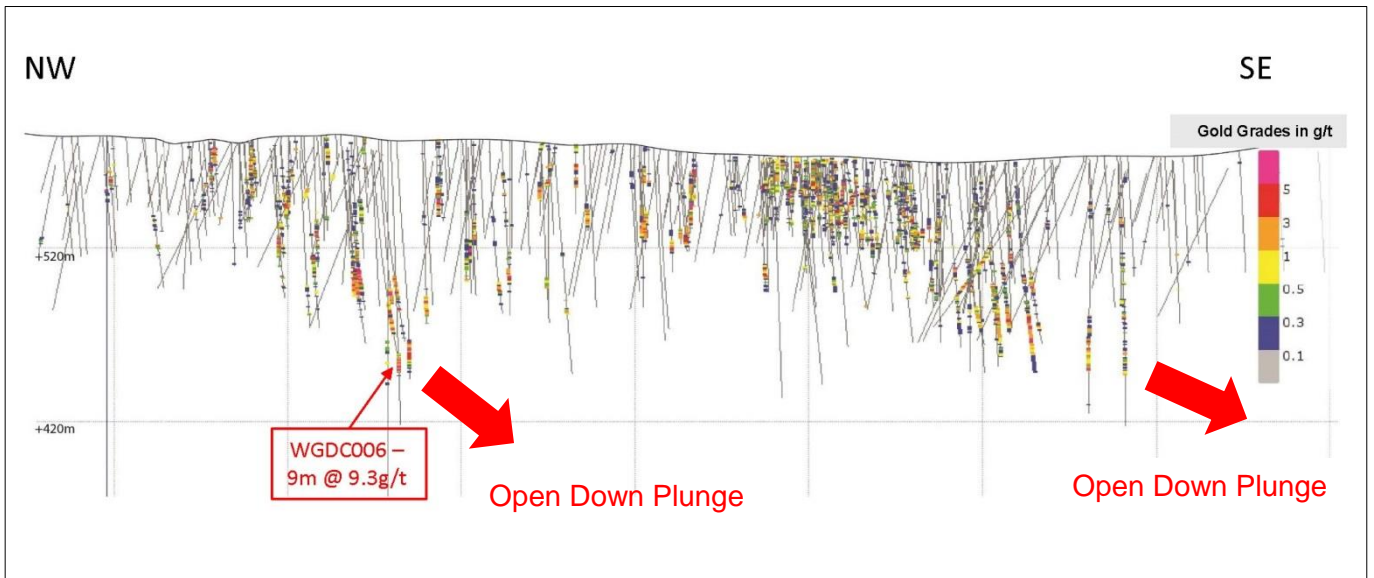


Figure 3: Hermes South (Wilgeena) long section (drill hole traces coloured by Au g/t).

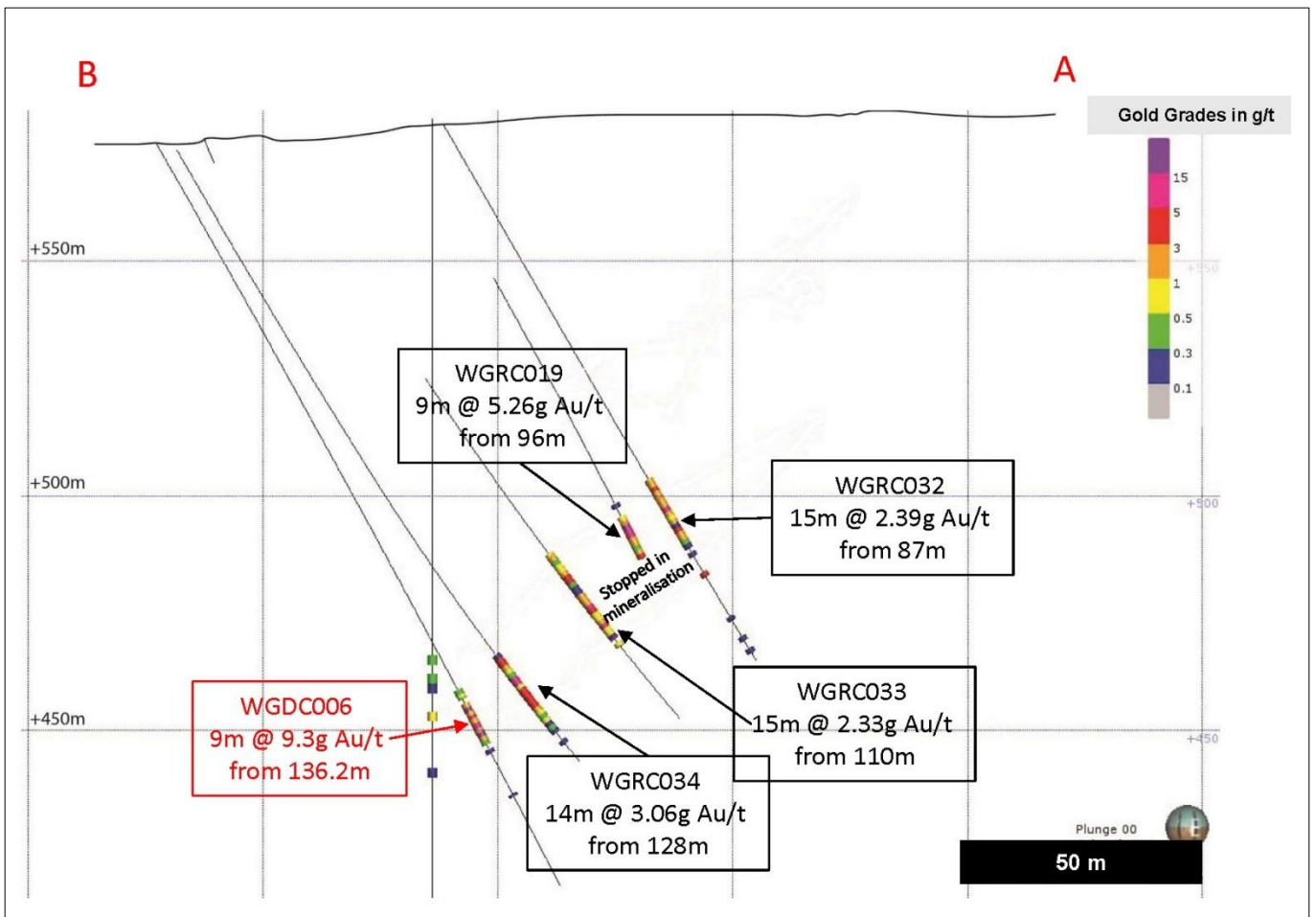


Figure 4: Hermes South (Wilgeena) cross section (drill hole traces coloured by Au g/t).

Table 1 –Hole details for WGDC006

Hole ID	Easting (MGA94z50)	Northing (MGA94z50)	RL	Dip (degrees)	Azimuth (degrees)	Total Depth (m)	From (m)	To (m)	Intersection (m)	Au (g/t) uncut	Est. True Thickness (m)
WGDC006	685139	7155602	575	-60	24	180.2	136.2	145.2	9.00	9.30	9.00

Alchemy's Managing Director, Leigh Ryan said:

"This high grade intercept highlights the need for more drilling in order to potentially expand the existing resource in this very prospective area."

Please direct enquiries to:

Mr Leigh Ryan – Managing Director

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*The information in this report that relates to Exploration Results is based on information compiled by Mr Leigh Ryan, who is the Managing Director of Alchemy Resources Limited. Mr Ryan is a Member of the Australian Institute of Geoscientists and has sufficient experience of relevance to the styles of mineralisation and the types of deposits under consideration, and to the activities undertaken, to qualify as a Competent Person as defined in the 2012 Edition of the Joint Ore Reserves Committee 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' ('JORC Code 2012'). Mr Ryan 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 at the Wilgeena Gold Deposit is based on information compiled by Simon Coxhell, who is an employee of CocksRocks Pty Ltd, a consultant to Alchemy Resources Limited. Mr Coxhell is a Member of the Australian Institute of Geoscientists and the Australasian Institute of Mining and Metallurgy and has sufficient experience of relevance to the styles of mineralisation and the types of deposits under consideration, and to the activities undertaken, to qualify as a Competent Person as defined in the 2004 Edition of the Joint Ore Reserves Committee 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' ('JORC Code 2004'). Mr Coxhell consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.*

*Alchemy confirms that the Indicated Mineral Resource at the Wilgeena Gold Deposit were prepared and first disclosed under JORC Code 2004. These have not been updated since to comply with JORC Code 2012 on the basis that the information has not materially changed since last reported on 22 October 2012. Alchemy is not aware of any new information or data that materially affects the information included in that announcement and that all material assumptions and technical parameters underpinning the estimates in that announcement continue to apply and have not materially changed.*

# JORC Code, 2012 Edition – Table 1

## Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
<b>Sampling techniques</b>	<ul style="list-style-type: none"> <li>Nature and quality of sampling (eg 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 (eg '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 (eg submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul style="list-style-type: none"> <li>Samples referred to in this Public Report are diamond core drill samples, obtained using an 'industry standard' drill rig, drilling equipment and sampling practices.</li> <li>Sampling was completed on whole diamond core.</li> <li>The diamond core samples obtained are considered to be representative of the material drilled.</li> <li>Samples were measured to the nearest mm at lithological contacts.</li> <li>As a result of possible course gold issues in the mining area core samples were submitted to ALS Perth for analysis by Fire Assay (Au-AA26) and Screen Fire Assay (AuSCR-22).</li> </ul>
<b>Drilling techniques</b>	<ul style="list-style-type: none"> <li>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg 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).</li> </ul>	<ul style="list-style-type: none"> <li>In April 2011 diamond drill hole WGDC006 was drilled to a depth of 180.2m with a 35.8m deep mud rotary pre-collar.</li> <li>Diamond core was extracted using a NQ-2 tube in 3m runs drilled by Macro Drilling.</li> <li>Core was orientated between 35.8m and 126m using the mechanical lower most point method. Alpha angles were then measured using a wrap-around template. The remainder of the hole could not be orientated due to strongly oxidized core.</li> <li>Specific gravity records were obtained in 2017 by Billabong Gold.</li> </ul>
<b>Drill sample recovery</b>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>Core runs were marked up into 1m lengths with any core loss recorded in the sample sheets both digitally and manually in the field.</li> <li>Further records of core loss were made when completing RQD measurements on each run length of core.</li> <li>Substantial core loss occurred at intervals that could have effect on bias of grade.</li> </ul>
<b>Logging</b>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>Geological logging of the entire hole, WGDC006, was completed in April 2010 in the field.</li> <li>Logging is qualitative based on measurements to the nearest mm. Core photography was completed between 35.8m and 180.2m.</li> <li>100% of the relevant intersections were logged geologically and structurally.</li> </ul>
<b>Sub-sampling techniques and sample preparation</b>	<ul style="list-style-type: none"> <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> </ul>	<ul style="list-style-type: none"> <li>All core was taken to be sampled.</li> <li>Core was pulverized using technique PUL-23 to gain a 50g sample for Screen Fire Assay (Au-AA26)</li> <li>Screen Fire Assay was also undertaken which involves the sample pulp (up to 1000g) being passed through a 75 µm (Tyler 200 mesh) stainless steel screen. Any material remaining on the screen (+) 75 µm fraction is retained and analysed in its entirety by fire assay with</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <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>	<p>gravimetric finish and reported as the Au (+) fraction. The material passing through the screen (-) 75 µm fraction) is homogenized and two sub-samples are analysed by fire assay with AAS finish (Au-AA25 and Au-AA25D). The average of the two AAS results is taken and reported as the Au(-) fraction result. All three values are used in calculating the combined gold content of the plus and minus fractions. The gold values for both the (+) 75 and (-) 75 µm fractions are reported together with the weight of each fraction as well as the calculated total gold content of the sample.</p> <ul style="list-style-type: none"> <li>Standards and blanks were used in sequence after every 25 samples.</li> <li>Duplicates were not collected as whole core was sampled</li> <li>Sample sizes were appropriate to the grain size of the material being sampled.</li> </ul>
<b>Quality of assay data and laboratory tests</b>	<ul style="list-style-type: none"> <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 (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</li> </ul>	<ul style="list-style-type: none"> <li>Due to an issue raised regarding coarse gold/'nugget' effect in the Wilgeena Mining area screen fire assay techniques were used to gain the complete gold analysis of each sample, description as above.</li> <li>Field standards and blanks were submitted in the sampling sequence after every 25<sup>th</sup> sample. Duplicates were not used as whole core was used for analysis.</li> <li>Lab checks were completed by ALS Perth and returned acceptable levels of accuracy.</li> </ul>
<b>Verification of sampling and assaying</b>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>No verification of significant intersections by either independent or alternative company personal was undertaken.</li> <li>The diamond hole WGDC006 was a twin of an original RC hole WGRC034.</li> <li>The sampling data is entered directly into our acQuire database using an online handheld device (Toughbook) – data is stored in the Plutonic Operations acQuire database</li> <li>Data is stored on the Plutonic Operation server and exported as Access data packages to be used in various software programs.</li> </ul>
<b>Location of data points</b>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>Collar locations are located using a handheld GPS, downhole surveys were completed by Macro drilling using digital multi-shot camera every 50m downhole.</li> <li>Local Wilgeena Mine grid is used to plan the holes in the Wilgeena Mining Centre and MGA94 zone 50 is the standard grid system for final location data.</li> <li>DGPS of the local mine area was completed in 2010, using these points as a reference an accurate DTM of the terrain is used to gain topographic control.</li> </ul>
<b>Data spacing and distribution</b>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>RC and Diamond drilling has taken place on lines 20m apart across the strike of mineralisation.</li> </ul>
<b>Orientation of data in</b>	<ul style="list-style-type: none"> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which</li> </ul>	<ul style="list-style-type: none"> <li>No bias due to orientation of sampling</li> <li>No bias due to drilling orientation.</li> </ul>

Criteria	JORC Code explanation	Commentary
<b>relation to geological structure</b>	<p><i>this is known, considering the deposit type.</i></p> <ul style="list-style-type: none"> <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>	
<b>Sample security</b>	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>Mine site security employed.</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul style="list-style-type: none"> <li>None Available</li> </ul>

## Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
<b>Mineral tenement and land tenure status</b>	<ul style="list-style-type: none"> <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 licence to operate in the area.</li> </ul>	<ul style="list-style-type: none"> <li>Mining Lease 52/1049 is located in the Wilgeena Mining Centre in the Peak Hill Mineral Field. Alchemy Resources (3R) Pty Ltd are the owners of the tenement in joint venture with Billabong Gold Pty Ltd whom also manage the tenement. There are no native title interests, historical sites, wilderness or national park and environmental settings associated with the lease.</li> <li>The Mining Lease commenced in 2010 for a term of 21 years to expire in 2031.</li> </ul>
<b>Exploration done by other parties</b>	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>Wilgeena has a history of exploration and mining including two test pits developed in early 1988 by Esmeralda Exploration Ltd which produced 2,722oz of gold from 28,500t at 2.97g/t. Plutonic and Homestake gold then held the then exploration title through the 90s and 2000s including further RAB and RC drilling. Alchemy Resources commenced AC, RC and Geotechnical Diamond drilling in 2010 – 2011 for resource definition. Billabong Gold Pty Ltd formed a joint venture with Alchemy Resources (3R) in 2016 and have recently reviewed the Wilgeena area and have since analysed for gold on the diamond core of hole WGDC006.</li> </ul>
<b>Geology</b>	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul style="list-style-type: none"> <li>Gold discovered in the Wilgeena Mining Centre lies within oxidized Proterozoic Peak Hill Schist. The Peak Hill Schist comprises quartz-sericite schist and quartz-muscovite schist and is located on the south-western tip of the Marymia Inlier.</li> <li>Gold mineralization occurs within a predominantly metasedimentary sequence of Proterozoic schists and is associated with the development of string linear fabrics (070-080)(axial planar shearing?) and quartz veining dipping at 65 degrees to the south in fairly predictable and consistent zones. An overall plunge to grid east is indicated.</li> </ul>
<b>Drill hole Information</b>	<ul style="list-style-type: none"> <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: <ul style="list-style-type: none"> <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> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Refer to body of announcement</li> </ul>



Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <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>	
<b>Data aggregation methods</b>	<ul style="list-style-type: none"> <li>● In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg 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 style="list-style-type: none"> <li>● No cutting of high grades was used.</li> <li>● A weighted average of the 50g Fire Assay (Au-AA26) results was used to calculate the intercept.</li> </ul>
<b>Relationship between mineralisation widths and intercept lengths</b>	<ul style="list-style-type: none"> <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 (eg 'down hole length, true width not known').</li> </ul>	<ul style="list-style-type: none"> <li>● WDGC006 is reporting using estimated true widths based on strike and dip of confining geological structures.</li> </ul>
<b>Diagrams</b>	<ul style="list-style-type: none"> <li>● 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.</li> </ul>	<ul style="list-style-type: none"> <li>● Refer to body of announcement</li> </ul>
<b>Balanced reporting</b>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>● NA</li> </ul>
<b>Other substantive exploration data</b>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>● NA</li> </ul>
<b>Further work</b>	<ul style="list-style-type: none"> <li>● The nature and scale of planned further work (eg 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 style="list-style-type: none"> <li>● Further drilling is planned for the Hermes South / Wilgeena Prospect.</li> </ul>