

ASX ANNOUNCEMENT

6 August 2018

**Alchemy Resources Limited**  
**Hermes South Resource Update Addendum**

On 3 August 2018, Alchemy Resources Limited (“Alchemy”) released an announcement that included an update to the Hermes South Mineral Resource estimate, in order to bring it into compliance with JORC 2012. The ASX has determined that updating a Mineral Resource from JORC 2004 to JORC 2012 constitutes a ‘material’ change and, as such, certain information that was included in the JORC tables presented on pages 4-19 of the 3 August 2018 announcement is required to be included in the main body of the announcement (in accordance with ASX Listing Rule 5.8.1).

This announcement serves as an addendum to the Hermes South Mineral Resource update contained in the Alchemy announcement dated 3 August 2018. It differs only by the inclusion of summary information required under LR 5.8.1 (the information was originally included in the tables in accordance with LR 5.8.2) which can be found on pages one to three of this announcement. There is no change to the Mineral Resource estimate classification, tonnes, grade, or ounces which remains at **1.37Mt @ 2.0 g/t for 87,000oz Au** (0.6g/t Au lower cut-off).

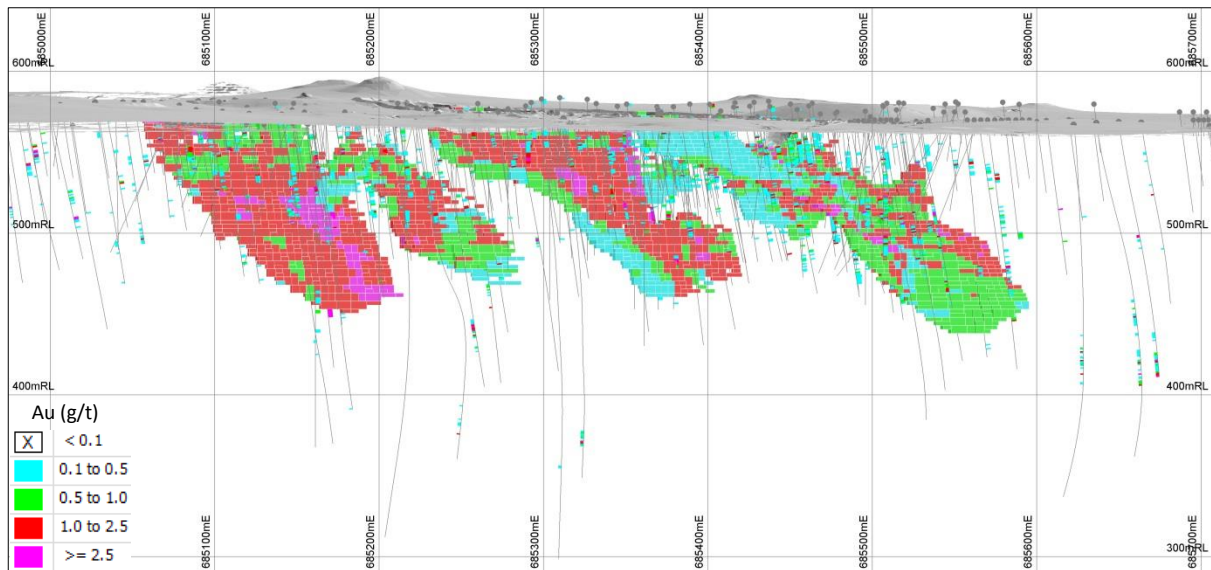
Geology and Geological Interpretation

The Hermes South deposit (previously known as the Wilgeena deposit) lies within the 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. Gold mineralisation occurs within a predominantly metasedimentary sequence of Proterozoic schists and mafic volcanic units and is associated with the development of linear fabrics (070 → 080) (possible axial planar shearing) and quartz veining dipping at 65 degrees to the south in relatively predictable and consistent zones. An overall plunge to gold mineralisation at approximately 40° to the east is observed in the four main gold shoots that contain the majority of gold mineralisation defined to date (*Figure 1*).

The confidence in the current geological interpretation at Hermes South is considered to be good and is consistent with the mineralisation geometry and styles observed in the open pit and drill core. Assay data has been used to interpret mineralisation domains based on a nominal 0.2g/t Au lower cut-off grade which was selected based on visual inspection of grade continuity between mineralised drill intersections. Mineralisation outlines were snapped to the drill holes and the resulting strings were used to construct wireframe solids to constrain resource estimation. A maximum extrapolation distance of 20m was used during wireframe construction.

The current interpretation accounts for all of the available geological data. The mineralisation constraints modelled to constrain resource estimation have been defined using all available geological and structural data and are consistent with the mineralisation geometry and styles observed in the open pit and drill core.

Observation of small scale fault structures in the open pit workings and drill core indicate there is likely to be short range variations in mineralisation grades, thicknesses, and orientations.



**Figure 1:** Hermes South long section showing all drilling (traces coloured by downhole gold), topo surface, and resource block model (coloured by gold grade).

### Sampling and Sampling techniques

Sampling data considered in the Resource Estimate was derived from diamond, Reverse Circulation (RC), Rotary Air Blast (RAB) and Aircore (AC) drilling completed by various project owners over a period dating back to 1985. Sampling information from historical data compiled from annual reports shows that 'industry standard' work has been completed in most instances. Listed below are the different generations of drilling with the detail of sampling techniques for each generation:

HM - RC - 1986. Sampled every 1m interval. Sampling method not recorded.

WO - RC - 1990. 4m composite samples collected. Sampling method not recorded.

GPM - RC - 1992. Sampled every 1m interval. Sampling method not recorded.

HMR - RAB - 1993. 4m composite samples collected. Sampling method not recorded.

WRAB - RAB - 1993. Spear sampling individual 1m sample piles and compositing into 1m, 2m, 3m and 4m composites.

WRC0040-0072 - RC -1993. Drill cuttings were passed through a riffle split cyclone for samples collected in 1m intervals. Samples were otherwise collected as composite samples over 4m intervals.

WR -RAB - 1997. All samples were drill sampled every meter and composite scoop sampled over 4 consecutive metres for analysis. Samples returning greater than 100ppb gold were resampled at 1m intervals.

WRC0073-0112 - RC -1997. Drill samples were collected at 1m intervals via a cyclone and contained in large plastic numbered bags. A riffle splitter collected a 1m sample into calico bag.

WGDC001&2 - RC pre-collar - 2010. Spear sample collected for a 4m composite. Re-sampled every 1m by riffle split cyclone into pre-numbered calico bags for 4mCOMPs greater than 0.1g/t.

WGRC - RC - 2010. Spear sample collected for a 4m composite, 1m SPLIT samples collected every 1m by riffle split cyclone into pre-numbered calico bags completed on 4mCOMPs greater than 0.1g/t.

WGAC - AC - 2011. Spear sample collected for a 4m composite, 1m SPLITS (spear samples) completed on 4mCOMPs greater than 0.1g/t.

WGDC006 – DD - 2017. Whole diamond core was sampled and collected in calico bags.

WR - RC – unknown

WRC - RC – unknown

WRD - DD - unknown

### Drilling Techniques

Historical data between 1986 and 2009 provides details on the drill type only and little in the way of specific rig capabilities or drill rod sizes. It is assumed that 'industry standard' at the time was used. The following provides details for each Listed below are the drilling techniques for the different generations of drilling:

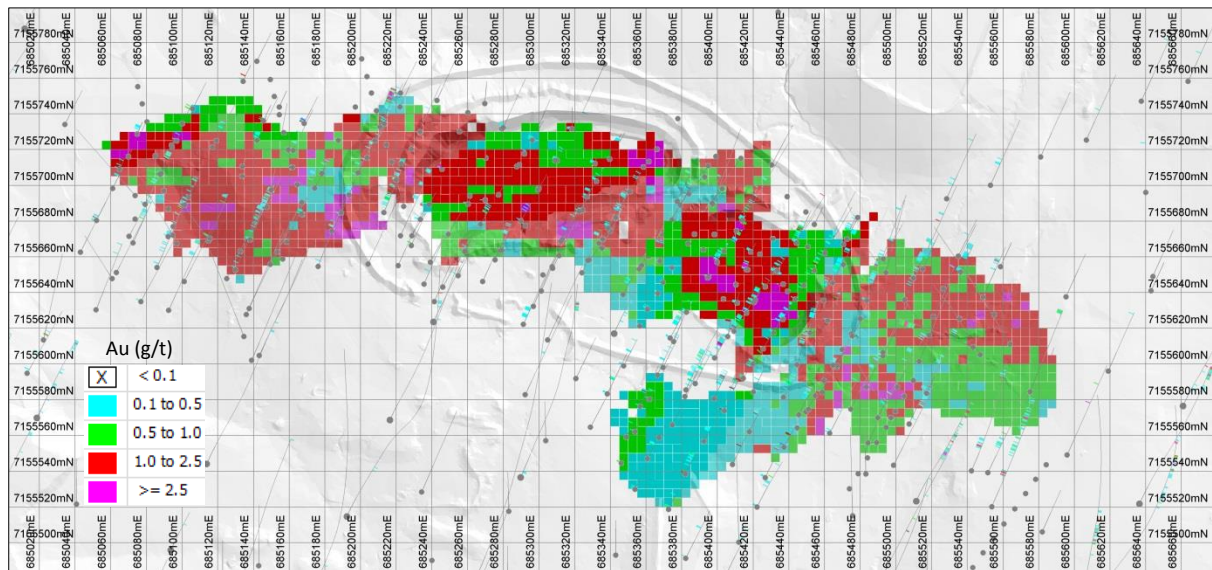
WGRC – RC – 2010. 41 RC holes were drilled at an angle of  $-60^{\circ}$  towards an azimuth of 024 (with the exception of WGRC022 which was drilled  $-60^{\circ}$  towards 294). Challenge Drilling completed the program using a KWL350 Rig with 6m rods and hammer bit. Samples were collected by spear or riffle split into calico bags. The remainder of the sample was stored in green bags until rehabilitated.

WGAC - AC – 2011. 53 holes were drilled at  $-60^{\circ}$  towards 360. Challenge drilled the program using a Challenger R/A 150 rig with 3m rods and an aircore hammer bit. Samples were speared from spoils laid in 10m run on the ground.

WGDC – DD – 2011. In April 2011 diamond drill hole WGDC006 was drilled to a depth of 180.2m with a 35.8m deep mud rotary pre-collar. Diamond core was extracted using a NQ-2 tube in 3m runs drilled by Macro Drilling. 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. Specific gravity records were obtained in 2017 by Billabong Gold.

### Criteria used for resource classification (including drill and data spacing and distribution).

RC and diamond drilling has taken place on lines 20m apart across the entire strike of mineralisation (*Figure 2*) and the data spacing and distribution is considered more than sufficient to establish an appropriate degree of geological and grade continuity appropriate for classification of an Inferred Mineral Resource.



**Figure 2:** Hermes South plan showing all drilling (traces coloured by downhole gold), topo surface, 20m x 20m grid and resource block model (coloured by gold grade).

### Sample analysis method

For drilling pre-2009 the level of sub-sampling and sample preparation techniques for core and drill chips is unknown. For drilling post-2009 whole core was taken to be sampled while drill chips were sampled wet or dry and dried at the lab if required. Samples were pulverized using technique PUL-23 to gain a 50g sample. This sample preparation was considered appropriate for the nature of the sample.

Clean calico bags were used to avoid sample contamination. Duplicates and laboratory supplied standards were used in sequence after every 25 RC drill chip samples to ensure quality control and duplicity of samples. Standards and blanks were also used in sequence after every 25 samples for diamond core. Duplicates were not collected in cases where whole core was sampled. Sample sizes were considered appropriate to the grain size of the material being sampled.

The quality of assay data and laboratory tests from pre-2009 work is unknown.

Hermes South appears to contain certain levels of coarse gold and subsequently screen fire assay techniques were used from 2010 onwards to gain a complete gold analysis for each sample. For samples under a 7g/t gold analysis, believed not as affected by coarse gold, samples were analysed by fire assay with an AAS finish. Lab checks were completed by ALS Perth and returned acceptable levels of accuracy.

### Estimation methodology

Mineralisation outlines were snapped to the drill holes and the resulting strings were used to construct wireframe solids to constrain resource estimation. A maximum extrapolation distance of 20m was used during wireframe construction. It is estimated that less than 10% of the resource is based on extrapolated data.

Ordinary Kriging (OK) was adopted as the estimation method to achieve the best unbiased global estimate. Statistical and geostatistical analyses were undertaken in Isatis™ by Jorvik in 2017 and the results adopted by RES for the 2018 estimation.

OK was undertaken in Vulcan™ using one or two passes to fully populate the mineralised block model. Standard kriging neighbourhood analyses were undertaken for each lode to provide the best global estimate for each lode. Because of the generally high nugget effects and short ranges a large number of samples were used for estimation.

The Wilgeena/Hermes South block model has parent blocks of 10mx10mx5m and sub-celling where required. The estimation block size is suitable for the sample spacing and search employed at the Inferred level of resource confidence reported. The estimation block size will be refined in future estimates through the use of neighbourhood analyses.

Validation of the block model included visual checks of block model construction and domain coding, volume check of mineralisation zones against resource wireframes. Validation of the estimate included visual checks against resource wireframes and drill holes, comparison of block grades with input composite data via statistics. The estimate has honoured the raw data and appears to be appropriately smoothed. No selective mining units were assumed in this estimate as studies into the mine design criteria have not commenced.

#### Cut-off grade(s) incl. basis for selected cut-off grades

Statistical and geostatistical analyses were undertaken in Isatis™ by Jorvik in 2017 and the results adopted by RES for the 2018 estimation. A nominal modelling grade cut-off grade of 0.2g/t Au was used to interpret and model 3-D wireframes outlining the mineralised domains. This cut-off grade effectively represents an upper threshold at which robust three dimensionally continuous zones of mineralisation can be modelled without including significant sub-grade mineralisation that is unlikely to be of economic value.

This was a single variable estimation for gold (Au). The Mineral Resource estimate was undertaken using hard boundaries as defined by the mineralisation lode wireframes.

Spatial restraining using a 5m limit on samples  $\geq 20$  g/t Au was used to control the influence of outlier composite samples. Blocks beyond 5m used 20 g/t Au cut samples. Previous Mineral Resource estimates were undertaken by Inverse Distance weighting and top cutting at 20g/t was applied. The global results compare reasonably well.

#### Mining and metallurgical methods or parameters and other material modifying factors

It is anticipated that the mining of the Hermes South resource will be by traditional open pit mining methods. No metallurgical assumptions or predictions are reflected in the resource block model, however records of historical production in the district demonstrate that the mineralisation is amenable to the recovery of gold using carbon-in-leach methods.

Bulk density was assumed on the basis that the depth of the weathering profile at the prospect is consistent. SG was based on a nominal value of  $2.1 \text{ t m}^{-3}$  above 490m RL and  $2.6 \text{ t m}^{-3}$  below 490m RL.

SG values were based on Hermes South (Wilgeena) and other nearest gold workings (including Hermes). No information was available relating to historical bulk density estimates at the prospect. The size of the bulk density dataset is insufficient to enable any statistical analysis and bulk density assignment was nominal only.

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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 Hermes South Gold Deposit is based on information compiled by Stephen Godfrey, who is an employee of Resource Evaluation Services Pty Ltd, a consultant to Alchemy Resources Limited. Mr Godfrey 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 2012 Edition of the Joint Ore Reserves Committee 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' ('JORC Code 2012'). Mr Godfrey consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.*