ASX ANNOUNCEMENT

8 MAY 2019

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 440,419,481

OPTIONS 29,500,000 (Unlisted)

PROJECTS

WEST LYNN (earning up to 80%)

LACHLAN (earning up to 80%)

KARONIE (100%)

BRYAH BASIN (10-100%)

Suite 8/8 Clive Street
WEST PERTH WA 6005

Phone: +61 8 9481 4400
Facsimile: +61 8 9481 4404

www.alchemyresources.com.au

Alchemy Resources Limited

Hermes South Resource Upgrade
Bryah Basin, WA

Highlights

- **Upgraded Hermes South JORC Code 2012 compliant resource estimate of 2.2Mt @ 1.6g/t for 114,000oz. Au.**
- **The revised resource estimate adds 46,000oz Au to the previous resource.**
- **Geotechnical model and metallurgical testwork results expected Q2 2019.**

Alchemy Resources Limited (**ASX: ALY**) ("Alchemy") is pleased to announce the completion of a JORC Code 2012 Edition compliant top-cut indicated and inferred resource estimate of **2.2Mt @ 1.6g/t for 114,000oz. Au** (0.6g/t Au lower cut-off) for the Hermes South deposit (formerly named Wilgeena) located ~20 kilometres south of the Hermes mining operation, and 65 kilometres southwest of the Plutonic gold mine in the Bryah Basin, WA *(Figure 1)*.

Hermes South forms part of the farm-in and joint venture agreement with Billabong Gold Pty Ltd, a subsidiary of Superior Gold Inc. (**TSX-V: SGI**). Alchemy retains a 20% interest in the Project and is carried on an interest-free deferred basis to production, with repayment from 50% of Alchemy's share of free cash flow from production.

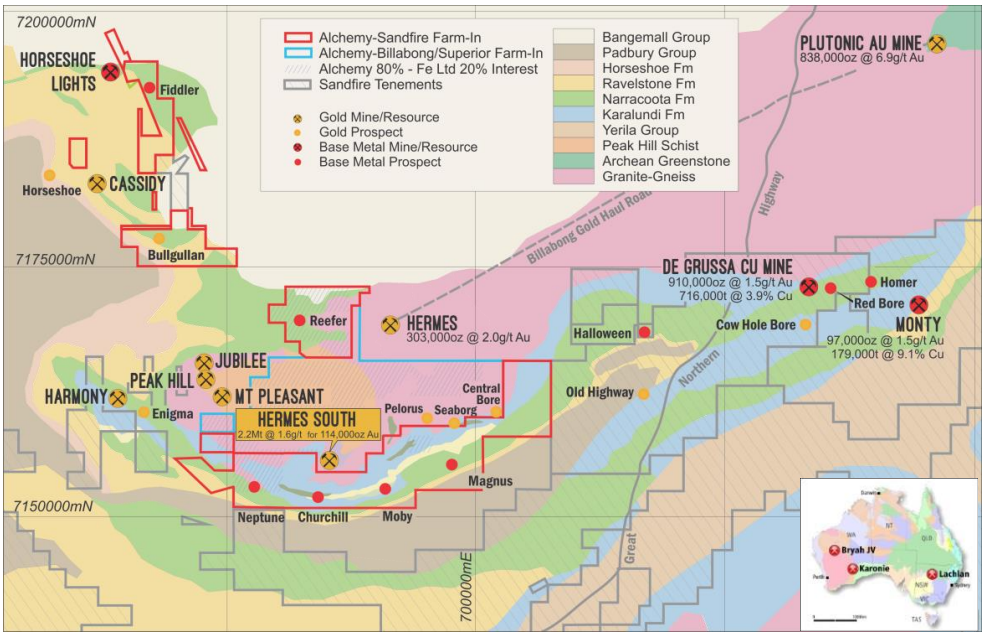

***Figure 1**: Bryah Basin Project tenements, major deposits and Alchemy prospects over interpreted geology.*

The Hermes South resource modelling and resource estimation was completed by Paul Forman and Pascal Blampain of Superior Gold *(Figures 2 & 3)*. Top-cuts were applied to the drill hole composite file prior to grades being interpolated. A lower cut-off of 0.6 g/t Au was used to report resources. A summary of the updated Hermes South resource estimate is shown in Table A below.

Table A: Hermes South JORC Code 2012 Indicated and Inferred Mineral Resource Estimate

Hermes South	Tonnes	Grade (g/t Au)	Au (Ounces)	Lower Cut
Indicated	1,285,000	1.7	72,000	0.6
Inferred	950,000	1.4	42,000	0.6
Total	2,235,000	1.6	114,000	0.6

Metallurgical test-work undertaken on oxidised core from the Hermes and Hermes South gold deposits, obtained from previous diamond drilling, indicates that the ore is amenable to treatment in a conventional crush, grind and CIL plant with good recoveries across all size fractions. A high proportion of gold is contained in the coarse fraction, and the test-work indicates that a large percentage (40-60%) of the free gold at Hermes South could be recovered by gravity concentration. No technical issues have been identified that would result in a poor recovery or extenuating cost issues[1].

Four HQ diamond holes for 684.6 metres were recently completed for the purpose of gathering geotechnical information, additional bulk density data, and samples for additional metallurgical testwork. Detailed geotechnical data was also collected from nine previously drilled RC holes using an acoustic/optical televiewer. A geotechnical model using all the recent drilling information is being created, and metallurgical testwork results are expected during the current quarter.

The mineralisation remains open at depth and has excellent potential for further drilling to expand the area of gold mineralisation and add to the known resource, and Alchemy is hopeful that the Hermes South deposit will become part of the production profile for the Plutonic Gold Operation. The Hermes South deposit is strategically located and Miscellaneous Licence applications to accommodate the development of a haul road between the existing Hermes Haul road and the Hermes South resource area will also be lodged during the current quarter.

Please direct enquiries to:

Mr Leigh Ryan – Managing Director

Telephone: +61 8 9481 4400 Email: Leigh@alchemyresources.com.au

[1] *Refer to Alchemy Resources ASX Announcement dated 22 October 2012*

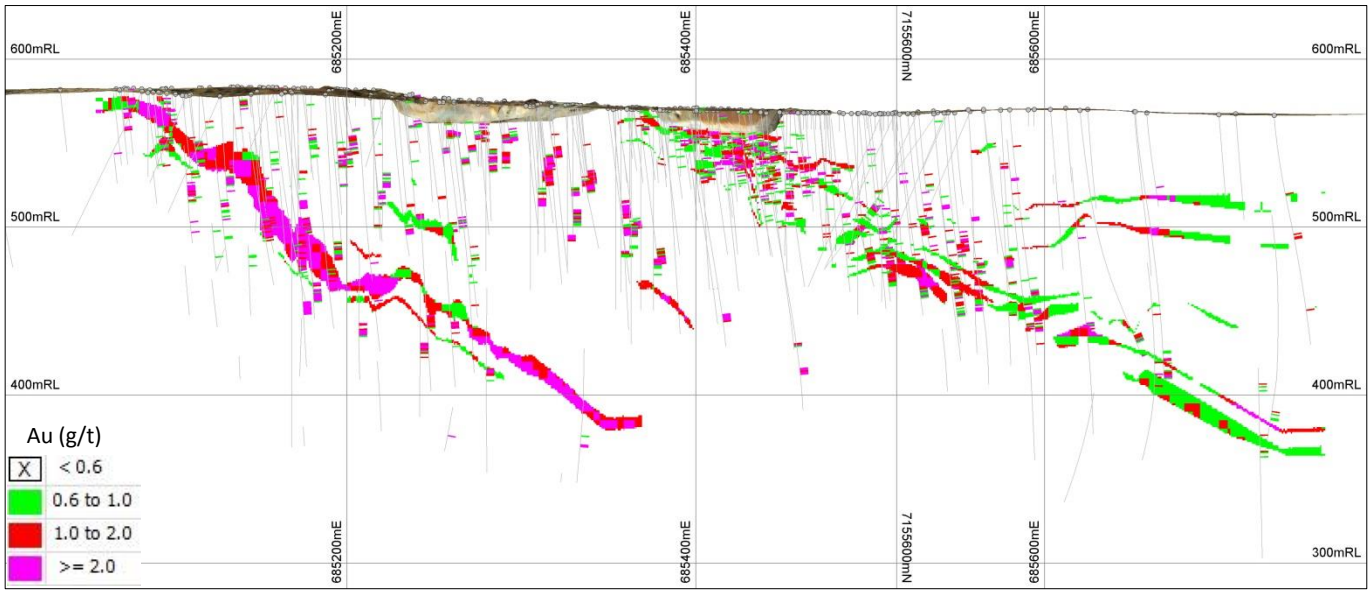

Figure 2: *Hermes South long section (~7155640N +/-50m) showing all drilling (traces coloured by Au g/t), topo surface including old pits, and resource block model (coloured by Au g/t).*

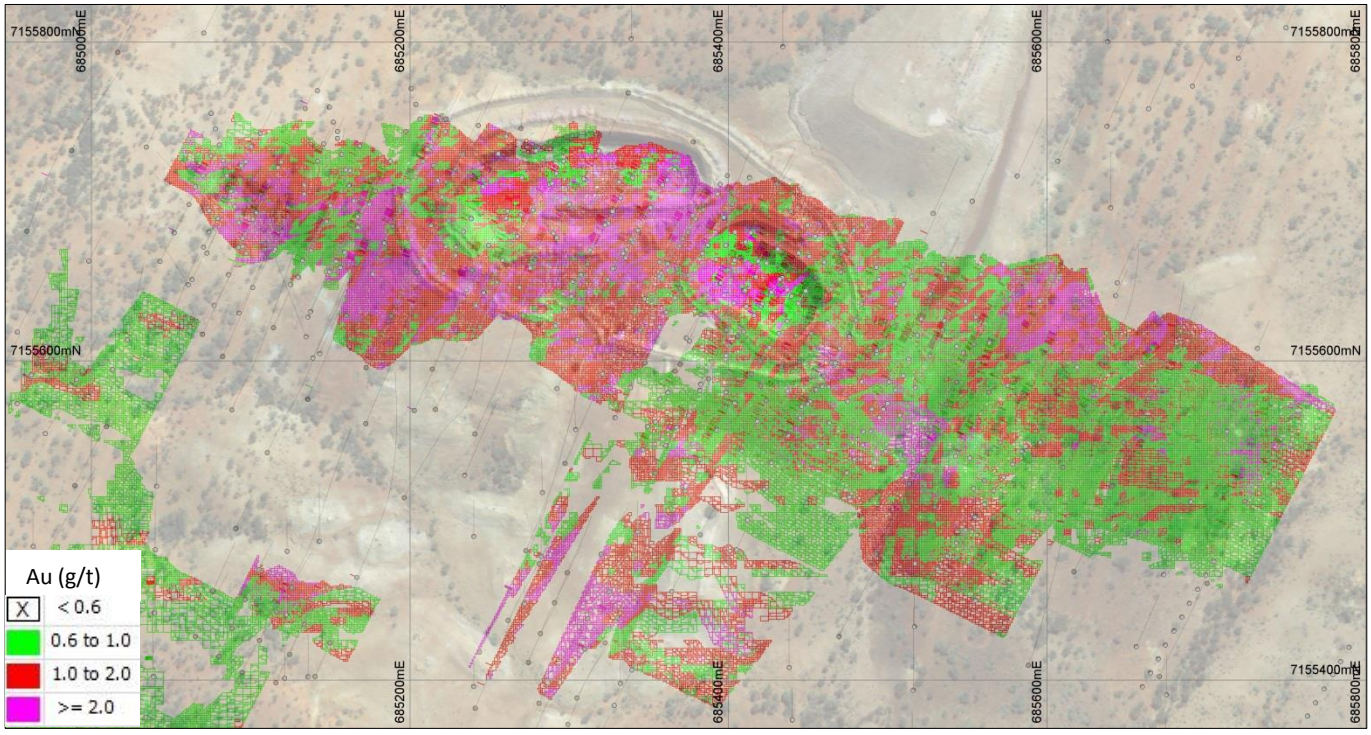

Figure 3: *Hermes South plan showing all drilling (traces coloured by Au g/t) and resource block model (coloured by Au g/t) over satellite image.*

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 and holds shares and options in the Company. 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 Mr Pascal Blampain, who is an employee of Superior Gold Inc. Mr Blampain is a Member of the Australasian Institute of Mining and Metallurgy, 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 Blampain consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

JORC Code, 2012 Edition – Table 1

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *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.* • *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 (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.*	Sampling data considered in the resource estimate was derived from diamond, Reverse Circulation (RC) 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 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 whole 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 meters for analysis. Samples returning greater than 100ppb gold were resampled at 1m

Criteria	JORC Code explanation	Commentary
		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 pre-numbered calico bags. WR - RC – sampling methodology is unknown WRC - RC – sampling methodology is unknown WRD - DD - sampling methodology is unknown Sampling from 2018 Superior Gold Inc. drilling program included reverse circulation (RC) drill samples, obtained using an 'industry standard' drill rig (Schramm T685 WS RC– Wheel Mounted on 8x8 Mercedes Carrier), drilling equipment and sampling practices. RC drilling obtained 1m samples dispensed into plastic buckets via an industry standard cyclone. An industry standard cone splitter was used to obtain two reduced size sample "splits" (primary and duplicate) for gold analysis (1 to 3kg) and one large bucket of residual drill chips. Samples for gold analysis were collected at 1m intervals. The RC samples obtained are considered to be representative of the material drilled. Sampling was carried out using Superior Gold Inc. documented sampling and QAQC procedures.
Drilling techniques	• *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple*	Historical data between 1986 and 2009 provides details on the drill type only and little in the way of specific rig capabilities or rod sizes. It is

Criteria	JORC Code explanation	Commentary
	or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).	assumed that 'industry standard' at the time was used. WGRC – RC in 2010. 41 RC holes were drilled at an angle of -60 degrees towards an azimuth of 024 (with the exception of WGRC022 which was drilled -60 degrees 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 in 2011. 53 holes were drilled at -60 degrees 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 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 Superior Gold Inc. BHSRC – RC in 2018 RC holes were completed from surface using 6m x 4.75" RC drill rods, a 5.5" hammer (with a standard sample retrieval collar) and a 5.75" RC tungsten button drill bit. Samples were cone split. A pre-numbered calico and a duplicate were collected.
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.*	Methods of recording and assessing core and chip sample recoveries for historical data between 1986 and 2009 are unknown. In WGRC and WGAC pre-fixed holes sample recoveries were logged if drill chip samples were less than 100%. WGDC core runs were marked up into 1m lengths with any core loss recorded in the sample sheets both digitally and manually in the field. Further records of core loss were made when completing RQD measurements on each run length of core. Minor core loss occurred in WGDC006 which may have created sample bias. In sample recoveries and moisture content estimates were logged into spreadsheets by the field assistant then uploaded into a database. There were minimum sample recovery problems. Sample recovery was

Criteria	JORC Code explanation	Commentary
		maximised by ensuring correct drilling techniques were employed. A geologist was always onsite for the drilling of each hole to ensure quality sample recovery was obtained. Measures taken to maximize sample recovery from the historical diamond and percussion drilling are unknown. No relationship exists between sample recovery and grade so no bias has occurred as a result of loss/gain of material.
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	All RC, diamond and air core holes were logged with lithology, colour, alteration, grainsize, weathering, mineralogy, veining, texture/structures, content of sulphide and any other relevant information that could help on mineral resource estimation. Logging of veining occurrences and sulphide mineralisation are quantitative. RC/AC rock chips used for geological logging were photographed and appropriately stored in labelled chip trays for future reference. There is no known core photograph from historical diamond core other than hole WGDC006 which was processed and sampled by Superior Gold Inc. The level of detail logged is sufficient to support Mineral Resource estimation.
Sub-sampling techniques and sample preparation	• *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.*	For drilling pre-2009, the level of sub-sampling and sample preparation techniques for core or drill chips is unknown. For drilling post-2009 up to 2017 whole core was taken to be sampled while drill chips were sampled wet or dry and dried at the lab if required. Samples were pulverised using technique PUL-23 to gain a 50g sample. This preparation was considered appropriate for the nature of the sample. Clean calico bags were used to avoid contamination. Duplicates and standards were used in sequence after every 25 samples for drill chips to ensure quality control and duplicity representation of samples. For core, standards and blanks were used in sequence after every 25 samples core. Duplicates were not collected as whole core was sampled. From 2018, RC Samples from Superior Gold Inc. drilling programs were cone split. Samples were collected in pre-numbered calico bags with a duplicate sample collected every metre. The opening shoots were adjusted to collect between 1 and 3 kg of sample. In cases where the

Criteria	JORC Code explanation	Commentary
		sample size was not considered satisfactory the duplicate sample would be used instead. All samples were 1m samples. The full duplicate sample was left on top of the corresponding pile of drill chips. The majority of the samples were collected dry with very minor cases where the samples returned wet. A commercial laboratory standard and a blank sample was inserted every 20 samples (i.e. 10% total QAQC samples for all the samples collected). Sample sizes are considered appropriate for the grain size of the material being collected and for the style of mineralisation. The sampling methodology and the assay ranges for the elements analysed were also considered appropriate for the style of mineralisation.
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* • *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	The quality of assay data and laboratory tests from historical work is unknown. It is assumed they were to industry standard. Due to an issue raised regarding coarse gold/'nugget' effect in the project area, screen fire assay techniques were carried out from 2010 historical drilling to gain the complete gold analysis of 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. For the Superior Gold Inc. drilling programs, all 1m samples were sent to ALS Laboratory in Perth for preparation and analysis. Preparation of the samples follows industry laboratory best practice involving logging of sample weights, drying the entire sample in an electric oven set at 105ºC+5ºC for several hours (drying time dependent on moisture content), then crushing the entire sample (>70% -6mm). A split of 2.5 to 3kg was taken and then pulverized to 85% passing 75µm. A representative sample was split and bagged as the analytical sample. All 1m samples were analysed using ALS method code Au-ICP28 for Au (up to 40g Fire Assay with ICP-AES finish). Laboratory QAQC involves the use of internal laboratory standards using certified reference material, blanks, splits and duplicates as part

Criteria	JORC Code explanation	Commentary
		of in-house procedures. Superior Gold Inc. procedure states that any fail on the QAQC whether by CRM standards falling outside the acceptable error limits or blank samples showing signs of contamination would require the samples to be re-assayed including intervals above and below the failed QAQC. Commercially available reference materials (Lab Standards) have been used, with a suitable range of values, that were inserted every 20 samples. Results indicate that Lab Standard assay values are within acceptable error limits. Blank samples were also inserted every 20 samples. Overall, results did not detect any significant contamination from adjacent samples. No geophysical or other tools were used to assess grade concentrations in samples from the historical or recent drilling.
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.*	Reported drill hole intercepts are verified by the company's Competent Person. Historical data was logged onto paper. Data then compiled from annual reports to build the Hermes South database. Data from 2018 drilling was collected by qualified geologists and Field Assistants, entered into an Acquire database and reviewed by an experienced Database Administrator and the company's Competent Person. No twinned holes were drilled in the 2018 drilling campaign. No assays data adjustments or amendments have been made.
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 Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	Pre-2018 collar locations were located using a handheld GPS, downhole surveys were completed by digital multi-shot camera every 50m downhole for the most recent RC and diamond holes. 2018 drilling used a handheld GPS to locate collar positions, with an expected +/-5m vertical and horizontal accuracy. After drilling was completed the final collar positions were acquired using a DGPS system with an expected ± 0.3m vertical and horizontal accuracy. Down hole surveys were collected every 30m using a reflex gyro. The grid system used for all collar locations is the UTM Geocentric

Criteria	JORC Code explanation	Commentary
		Datum of Australia 1994 (MGA Zone 50). Easting and Northing are stated in metres. Drill collar and down hole location accuracy is considered appropriate. Surface topography data was supplied in DTM format and is of sufficient accuracy to allow resource estimation.
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.*	Drill line spacing ranges from 20m to 100m. Hole spacing within the drill lines vary from 20m to 50m. The data spacing and distribution is considered sufficient to establish an appropriate degree of geological and grade continuity appropriate for classification of Inferred and Indicated Mineral Resources. No sample physical compositing has been applied.
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.*	Gold bearing structures and lithologies in the area drilled are interpreted to dip steeply to the south and plunge moderately to the east-southeast. All holes were drilled at -60 degrees towards the azimuth of 24º (magnetic). Approximately right angled to lithological trends. The orientation of the sampling is suitable for the interpreted mineralisation and no sample bias is observed. The relationship between the drilling orientation and the orientation of the key mineralised structures is considered unbiased.
Sample security	• *The measures taken to ensure sample security.*	All drill samples were collected in pre-numbered calico bags and duplicate sample bags remained on site until rehabilitation was completed. All primary samples were transported via company vehicle to the Plutonic Gold Mine and subsequently transported to ALS Perth by McMahon Burnett Transport for preparation and sample analysis. Measures taken to ensure sample security from the historical drilling are unknown.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	No external audit or review of the sampling techniques or sample data capture has been conducted to date.

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	• *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 licence to operate in the area.*	The mineral tenement is a Mining Licence under the reference number M52/1049 and reference names used are Wilgeena (historical) and Hermes South (project area named by Superior Gold Inc.). The Mining Lease was granted in 2010 for a term of 21 years to expire in 2031. Location – approximately 80 km southwest of the Plutonic Gold Mine, Western Australia. 20 Km southwest of Hermes Gold Mine. Alchemy Resources (Three Rivers) Pty Ltd (a wholly owned subsidiary of Alchemy Resources Limited) is the owner of the tenement subject to a Farm-in and Joint Venture Agreement with Superior Gold Inc. who manage the tenement. The Farm in Agreement provides for a final holding of 80% Billabong Gold Pty Ltd / 20% Alchemy Resources Limited. Billabong Gold Pty Ltd is a wholly owned subsidiary of Superior Gold Inc. (TSX: SGI). A royalty on gold production is payable to the Wongatha Education Trust at a rate of $1.00 per ounce of gold mined and sold (Carey Royalty). A 2.5% royalty is payable to the State of Western Australia. The land is 100% freehold. No Wilderness Reserves, National Parks, Native Title sites or registered historical sites. No environmental issues are known. The tenement is in good standing and no impediments to operating are currently known to exist.
	• *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.*	Mining Lease M52/1049 is valid for a term of 21 years and is renewable.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	Data relevant to this resource was collected by Esmeralda Exploration Limited, Homestake Gold, Plutonic Gold and Alchemy Resources Limited, previous to Billabong Gold and Superior Gold. Esmeralda Exploration Ltd produced 2,722oz of gold from 28,500t at

Criteria	JORC Code explanation	Commentary
		2.97g/t, from two test pits in 1988. The area has since been explored through RAB and RC drilling by various companies such as Homestake Gold and Plutonic Gold throughout the 90's and 2000s. Alchemy Resources commenced AC, RC and Geotechnical Diamond drilling in 2010 – 2011 for resource definition. Superior Gold Inc. through its subsidiary Billabong Gold Pty Ltd are in a joint venture with Alchemy Resources (Three Rivers) Pty Ltd following the purchase of the Plutonic Mine and associated tenement package from Northern Star Resources Ltd in 2016. Superior Gold Pty Ltd have recently reviewed the Hermes South/Wilgeena area and data and have since analysed for gold on the diamond core of hole WGDC006 along with an extensive resource definition and exploration RC drilling program to support its in-house Mineral Resource Estimation.
Geology	• *Deposit type, geological setting and style of mineralisation.*	Gold mineralisation occurs within a predominantly metasedimentary sequence of the Proterozoic Peak Hill Schist and mafic units. The Peak Hill Schist comprises quartz-sericite schist and quartz-muscovite schist and is located on the south-western extreme of the Marymia Inlier. Mineralisation at Hermes South is associated with the development of strong linear fabrics and quartz veining dipping at 65 degrees to the south in fairly predictable and consistent zones. An overall moderate plunge to the east-southeast is indicated.
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*	Drill results and geological interpretations form the basis of the exploration results and mineral resource estimation, and are tabulated within the text of the public announcements released to the ASX. No material information has been excluded from the announcements.

Criteria	JORC Code explanation	Commentary
	explain why this is the case.	
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.*	Exploration drill intercepts generally use a 1.0g/t Au lower grade cut-off, no upper cut-off grade, maximum 1m internal waste, and all >1g/t Au intercepts are reported, and used to differentiate mineralised material from un-mineralised material for public reporting. A weighted average was used to calculate the intercept. No metal equivalents or aggregated have been used.
Relationship between mineralisation 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 orientation of the drilling is suitable for the interpreted mineralisation and no bias is observed. Drilling has typically been undertaken at an angle ~80 degrees to perpendicular to the dip of mineralisation. All intercepts reported include both intercept lengths and true width estimates.
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.*	Appropriate maps, plans and cross sections have been included in the body of public announcements released to the ASX. Similar diagrams accompany this report.
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.*	Results reported in public announcements and this report are considered comprehensively reported in a balance manner.
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.*	N/A
Further work	• *The nature and scale of planned further work (eg 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,*	Diamond drilling was recently completed at Hermes South for the purpose of gathering additional data on the metallurgy, physical characterisation, and additional bulk density information for the ore zone. A geotechnical model using all the recent drilling information is being created, and metallurgical testwork results are expected during

Criteria	JORC Code explanation	Commentary
	provided this information is not commercially sensitive.	Q2 2019.

Section 3 Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	JORC Code explanation	Commentary
Database integrity	• *Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.* • *Data validation procedures used.*	ALY supplied all its drill hole data in an Access database to Superior Gold and the Superior Gold database manager checked and validated all the data and entered it into AcQuire. All drilling data logged by Superior Gold was captured digitally preventing the duplication of data and entry of incorrect codes. Digital data was entered directly into AcQuire. Acquire was used to store and undertake routine validation including reporting missing co-ordinates, missing hole names, bearing, dip etc. and non-contiguous sample intervals.
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits have been undertaken indicate why this is the case.*	A site visit was undertaken in August 2018 and significant outcomes showed the host rock is highly weathered, and lodes and faults, where visible, coincided with an initial interpretation.
Geological interpretation	• *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.* • *Nature of the data used and of any assumptions made.* • *The effect, if any, of alternative interpretations on Mineral Resource estimation.* • *The use of geology in guiding and controlling Mineral Resource estimation.* • *The factors affecting continuity both of grade and geology.*	The confidence in the geological interpretation at Hermes South is considered to be satisfactory and is consistent with the mineralisation geometry and styles observed in the open pit and drill core. Lode interpretations were mostly undertaken on 10m- and 5m-spaced north-south cross sections. Lode outlines were interpreted on each section and linked to the adjacent section where there was a correlation. Drill hole assays were used to interpret the lodes using a nominal lower cut of 0.16 g/t Au which was the natural break between waste and ore on a log histogram plot and which visually showed grade continuity between drill hole intersections. All interpreted points were snapped. There were no alternative interpretations. Lode outlines were used to construct triangulations to constrain the

Criteria	JORC Code explanation	Commentary
		resource estimation. The lodes are hosted in highly weathered volcanoclastic sediments and occur on the northern limb of a syncline, whose axial plane strikes ENE, in quartz-filled tension zones which strike east-west and plunge to the south east. A total of 33 lodes were interpreted, not including transported cover.
Dimensions	• *The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	In plan view, the resource area extends along strike about 1,000m from 684,750mE to 685,750mE, and is approximately 650m wide from 7,155,150mN to 7,155,800mN. It is about 250m deep from 575mRL down to 325mRL.
Estimation and modelling techniques	• *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.* • *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.* • *The assumptions made regarding recovery of by-products.* • *Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).* • *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.* • *Any assumptions behind modelling of selective mining units.* • *Any assumptions about correlation between variables.* • *Description of how the geological interpretation was used to control the resource estimates.* • *Discussion of basis for using or not using grade cutting or capping.* • *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.*	Ordinary kriged estimates were interpolated into each lode after top-cuts were applied to reduce the effect of outlier composites on grades. Top-cuts were determine for each lode. Search parameters were derived from variography and a two-pass approach was employed. During the first pass, cells were informed using search distances equal to the variogram ranges, a maximum of 30 samples and a minimum of 10 samples were used, with no more than 9 samples from one hole, to ensure that samples were taken from at least 2 holes using Vulcan™ software version 9.1.2.64. Cells not informed during the first pass were re-estimated using search distances 30% greater than the major and semi-major ranges, and 50% greater than the minor range, with a maximum of 30 samples and a minimum of 5, which included no more than 4 samples from one hole. A comparison between reported mined ounces of 2,722oz (mined by Esmeralda Exploration Limited) against predicted mined ounces of 2,917oz showed a variation of only 195oz. There are no by-products. No deleterious elements have been estimated. A block size of 5m x 5m x 5m which is about quarter of the drill hole spacing was employed to construct an empty-cell block model. Blocks were sub-celled down to 1m x1m x 1m and all cells were estimated as if a parent cell. There were no assumptions behind the modelling of selective mining units as studies into mine design criteria have not commenced. There were no assumptions behind the correlation between variables

Criteria	JORC Code explanation	Commentary
		as only gold grades were modelled. Geological interpretation in the form of lode triangulations were used to control the estimation process. Each interpreted lode was assigned a unique BOUND code in the drill hole composite file and the same lode within the empty cell block model was also assigned that BOUND code. During estimating, cells and composites with the same BOUND value were retrieved from their respective files and used to interpolate grade. All BOUND values were processed. Top-cuts were employed to reduce the effect of outlier composites on grades. Rather than apply a single global top-cut to each lode, drill hole composites for each lode were visually examined to determine an appropriate cutting value, using a lognormal probability plot. Cut composites were then used to undertake variography and grade interpolation. Validation of the block model included visual checks to ensure: • model extents overlapped the interpretations, • the correct sequence of triangulations was employed so any overlapping features were correctly modelled, • only maximum of two schemas were used, • the right combination of key codes and each lode was correctly represented by comparing volumes from triangulations against the model and investigating differences (differences were due to cross-cutting features). Kriged grades were visually compared against drill hole composites and results showed estimates to be intermediate of drill hole composites. The estimates were also checked by comparing the average weighted grades for pass one against the mean drill hole composites and investigating differences greater than 10%. Aberrations were mostly due to grades less than 1g/t Au where a small change has a significant percentage difference.
Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	All tonnages are dry.
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	A lower cut-off of 0.16g/t Au was used as a guide to determine the boundary between waste and mineralisation as this appeared to be a natural break in datasets on a log histogram plot; this was used to interpret and triangulate the lodes. Top-cuts were applied to the drill

Criteria	JORC Code explanation	Commentary
		hole composite file prior to grades being interpolated. A cut-off of 0.6 g/t Au was used to report resources and is based on previous optimisation work and current cost model of the nearby operating Hermes mine.
Mining factors or assumptions	• *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.*	There is a very reasonable prospect that this deposit will be exploited via open-cut mining. If drilling confirms, there is also potential for deeper lodes to be mined using underground mining methods.
Metallurgical factors or assumptions	• *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.*	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.
Environmental factors or assumptions	• *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.*	No significant environmental constraints are envisaged. The resource area is situated on a granted Mining Lease.
Bulk density	• *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.* • *The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity,*	Bulk densities were determined using the water displacement method. In 2010, Amdel completed density work using 35 diamond core samples, as 5m composites of various materials, and average values were used to determine density. In 2017, Superior Gold tested 27 drill core samples from different materials that had not been tested previously and obtained different values compared to those determined

<table>
<tr><th>Criteria</th><th>JORC Code explanation</th><th>Commentary</th></tr>
<tr><td></td><td>etc), moisture and differences between rock and alteration zones within the deposit.
• Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</td><td>by Amdel. In 2018, Superior Gold tested 694 samples from RC drill hole spoils and obtained results that compared to the 2017 work and were used to update the density values in the block model as shown below.
<table><tr><th colspan="2">Material</th><th>2017</th><th>2018</th></tr><tr><td>Transp. Cover</td><td>Transp. Cover</td><td>N/A</td><td>2.24</td></tr><tr><td>Oxide</td><td>Waste</td><td>1.6</td><td>2.49</td></tr><tr><td>Oxide</td><td>Ore</td><td>1.6</td><td>2.71</td></tr><tr><td>Transition</td><td>Waste</td><td>1.7</td><td>2.54</td></tr><tr><td>Transition</td><td>Ore</td><td>1.7</td><td>2.67</td></tr><tr><td>Fresh</td><td>Waste</td><td>2.3</td><td>2.55</td></tr><tr><td>Fresh</td><td>Ore</td><td>2.3</td><td>2.60</td></tr></table>
Superior Gold will continue density work in 2019. Superior Gold believes the methods used in 2017 and 2018 adequately account for void spaces as there is a very good correlation of the results for different material types given different sample types used.
Based on work completed by Superior Gold in 2017 and 2018, drill core samples and samples from RC drill hole samples can both be used to determine density for different material types.</td></tr>
<tr><td>Classification</td><td>• The basis for the classification of the Mineral Resources into varying confidence categories.
• Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).
• Whether the result appropriately reflects the Competent Person's view of the deposit.</td><td>Lodes in the block model were classified as Indicated if they occurred in a continuous area that was informed using at least 4 drill holes and 5 composites during the first pass. Remaining informed lode cells during the first and second pass were classified as Inferred.
The classification accounts for the confidence in the estimates and continuity of the geology due to the strict nature of the criteria that were applied to each lode.
The Mineral Resource Estimate appropriately reflects the view of the Competent Person.</td></tr>
<tr><td>Audits or reviews</td><td>• The results of any audits or reviews of Mineral Resource estimates.</td><td>Audits and reviews are confined to internal corporate procedures.</td></tr>
</table>

Criteria	JORC Code explanation	Commentary
Discussion of relative accuracy/ confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.* • *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* • *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	The public reporting of Mineral Resource estimates is in accordance with the JORC Code (2012 edition) guidelines. The statement relates to global estimates of tonnes and grade. A memorandum issued by Jorvik Resources on the 28th June 2017 stated that the project was mined by Esmeralda Exploration Ltd in 1988 for 2,722oz. The current model predicts 2,917oz were mined for a variation of only 195oz.

Section 4 Estimation and Reporting of Ore Reserves

(Criteria listed in section 1, and where relevant in sections 2 and 3, also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral Resource estimate for conversion to Ore Reserves	• *Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.* • *Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.*	The post-mined Hermes South Resource Estimates at a cut-off of 0.6 g/t Au are given below. **Post-Mined Wilgeena Resources at Cut-off of 0.6 g/t Au** **Classification** / **Tonnes** / **Grade (g/t Au)** / **Ounces** Indicated / 1,285,000 / 1.7 / 72,000 Inferred / 950,000 / 1.4 / 42,000 Total / 2,235,000 / 1.6 / 114,000 Note: Ore Reserves have not yet been estimated.
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits have been undertaken indicate why this is the case.*	

Criteria	JORC Code explanation	Commentary
Study status	• *The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.* • *The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.*	
Cut-off parameters	• *The basis of the cut-off grade(s) or quality parameters applied.*	
Mining factors or assumptions	• *The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).* • *The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.* • *The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling.* • *The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).* • *The mining dilution factors used.* • *The mining recovery factors used.* • *Any minimum mining widths used.* • *The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.* • *The infrastructure requirements of the selected mining methods.*	
Metallurgical factors or assumptions	• *The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.* • *Whether the metallurgical process is well-tested technology or novel in nature.* • *The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.* • *Any assumptions or allowances made for deleterious elements.* • *The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole.*	

Criteria	JORC Code explanation	Commentary
	• *For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?*	
Environmen-tal	• *The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.*	Due to the historic open pits and waste dumps from historic mining activities at Hermes South, environmental impacts are foreseen to be limited.
Infrastructure	• *The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed.*	An existing pastoral station track extends from the Hermes haul road to the Hermes South resource area.
Costs	• *The derivation of, or assumptions made, regarding projected capital costs in the study.* • *The methodology used to estimate operating costs.* • *Allowances made for the content of deleterious elements.* • *The source of exchange rates used in the study.* • *Derivation of transportation charges.* • *The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.* • *The allowances made for royalties payable, both Government and private.*	
Revenue factors	• *The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.* • *The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.*	
Market assessment	• *The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.* • *A customer and competitor analysis along with the identification of likely market windows for the product.* • *Price and volume forecasts and the basis for these forecasts.* • *For industrial minerals the customer specification, testing and*	N/A

Criteria	JORC Code explanation	Commentary
	acceptance requirements prior to a supply contract.	
Economic	• *The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.* • *NPV ranges and sensitivity to variations in the significant assumptions and inputs.*	N/A
Social	• *The status of agreements with key stakeholders and matters leading to social licence to operate.*	
Other	• *To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:* • *Any identified material naturally occurring risks.* • *The status of material legal agreements and marketing arrangements.* • *The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.*	None
Classification	• *The basis for the classification of the Ore Reserves into varying confidence categories.* • *Whether the result appropriately reflects the Competent Person's view of the deposit.* • *The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).*	No Ore Reserves have been quoted.
Audits or reviews	• *The results of any audits or reviews of Ore Reserve estimates.*	N/A
Discussion of relative accuracy/ confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.*	

Criteria	JORC Code explanation	Commentary
	• *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* • *Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.* • *It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	