

Company Announcement

20 June 2017

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Maiden Ore Reserve for Anglo Saxon Gold Project

Hawthorn Resources Limited (ASX:HAW) is pleased to announce a maiden **Ore Reserve** for the Anglo Saxon Gold Project ("ASGP") at the Trouser Legs JV (HAW 70%, Gel Resources 30%) of:

- **Probable Ore Reserve:**
 - **730,000 t at 2.66 g/t Au - 62,000 Ounces of Gold**

This initial Ore Reserve is derived from the significantly increased Indicated Resource base contained in the updated **Mineral Resource** of:

- **Indicated & Inferred Resource:**
 - **4,132,000 t at 2.17 g/t Au - 288,500 Ounces of Gold**

The announcement of this initial Ore Reserve highlights the robust economics and significant potential of the project.

Study highlights include:

- **Low C1 Cash Cost of \$1,010 per ounce**
- **Low capital expenditure requirement via Toll Treatment model**
- **18 month initial mine-life**
- **Significant potential to increase Ore Reserves within the current resource base**
- **Significant potential to upgrade and increase the current Mineral Resource which is open at depth**

Updated Mineral Resource

Hawthorn Resources, as manager of the Trouser Legs Joint Venture in the Eastern Goldfields of Western Australia, has finalised the technical and economic assessment of the ASGP, de-risking the project and allowing finalisation of the project budget and schedule.

A revised Resource Model has been constructed by independent consultant's **BM Geological Services** that better reflects the proposed mining methods and fleet likely to be used when mining commences.

This Mineral Resource estimate supersedes the previous estimation "**Anglo Saxon Indicated Mineral Resource Upgrade**" announced in October of 2013 and completed by **AMC Consultants**.

The results of the updated resource estimate are tabulated in Table 1.

Table 1. ASGP Mineral Resource Estimate – 20 June 2017

Classification	COG Au (g/t)	Tonnage (t)	Au (g/t)	Au (ounces)
Total Indicated Resource	0.5	2,107,000	2.15	145,600
Total Inferred Resource	0.5	2,025,000	2.27	147,800
Total Resources	0.5	4,132,000	2.21	293,400

Classification	COG Au (g/t)	Tonnage (t)	Au (g/t)	Au (ounces)
Total Indicated	1.0	1,443,000	2.79	129,600
Total Inferred	1.0	1,430,000	2.90	133,300
Total Resources	1.0	2,873,000	2.85	262,900

Classification	COG Au (g/t)	Tonnage (t)	Au (g/t)	Au (ounces)
Total Indicated	2.0	723,200	4.17	96,900
Total Inferred	2.0	736,000	4.26	100,800
Total Resources	2.0	1,459,000	4.21	197,700

Notes:

- 1 The Mineral Resource is reported in accordance with the 2012 Edition of the JORC Code
- 2 Contained metal is rounded to the nearest 100 oz
- 3 All resources have been rounded to the nearest 1,000 tonnes
- 4 COG is defined as cut-off grade
- 5 Top-cut of grade = 25g/t Au (oxide), 35g/t Au (transition) and 43 g/t Au (fresh)
- 6 The base of the Indicated Mineral Resource is 260m RL, approximately 125 m below surface

This new Mineral Resource estimate varies from the previous version in that:

- Indicated Resource increased by 128% - inclusion of suitable Fresh ore blocks to a 125 m vertical depth.
- Tonnage increased by 81% - internal dilution of ore blocks re-assessed to account for mining methodology proposed.

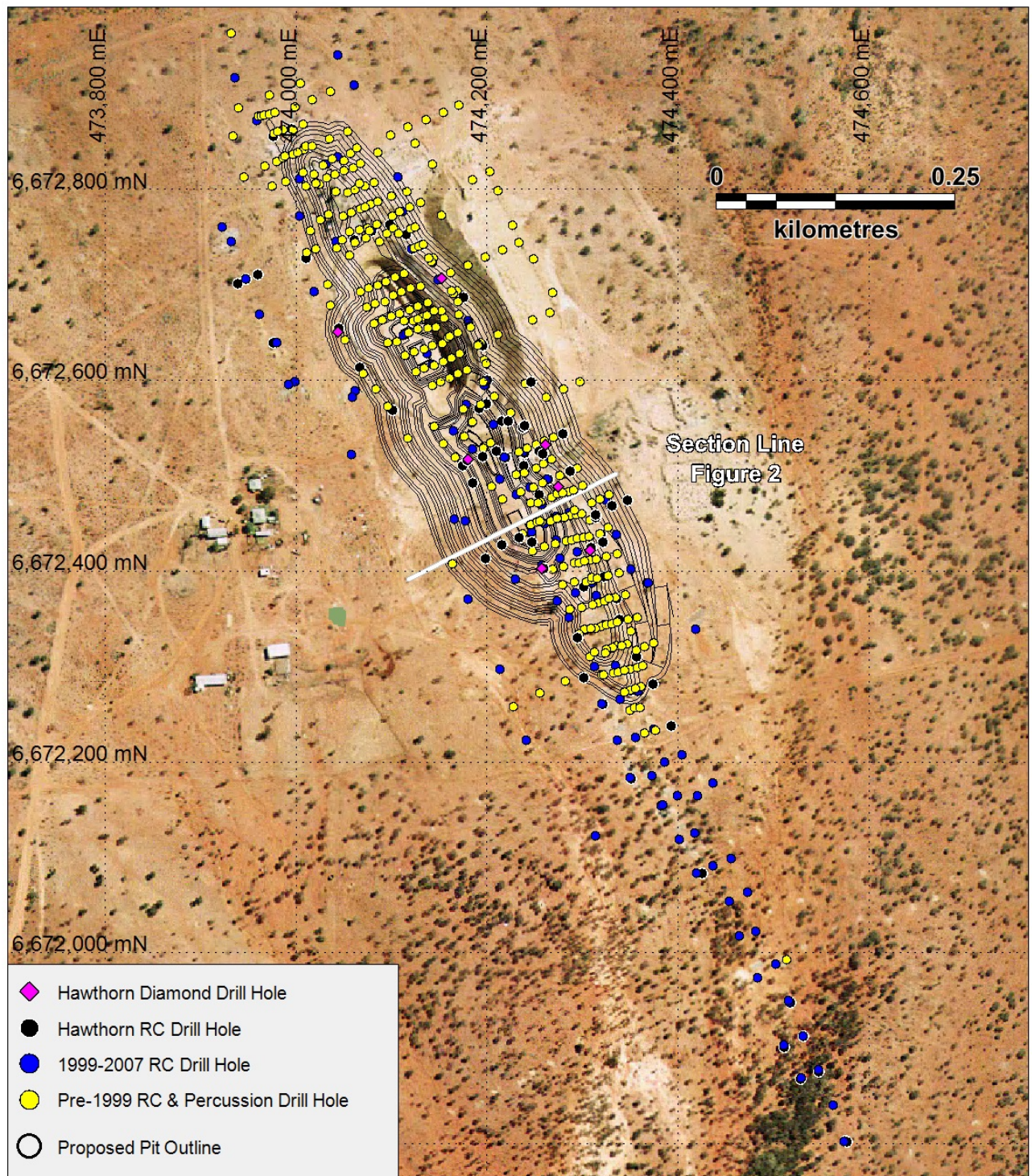


Figure 1: Plan View ASGP Resource Drilling and Reserve pit design.

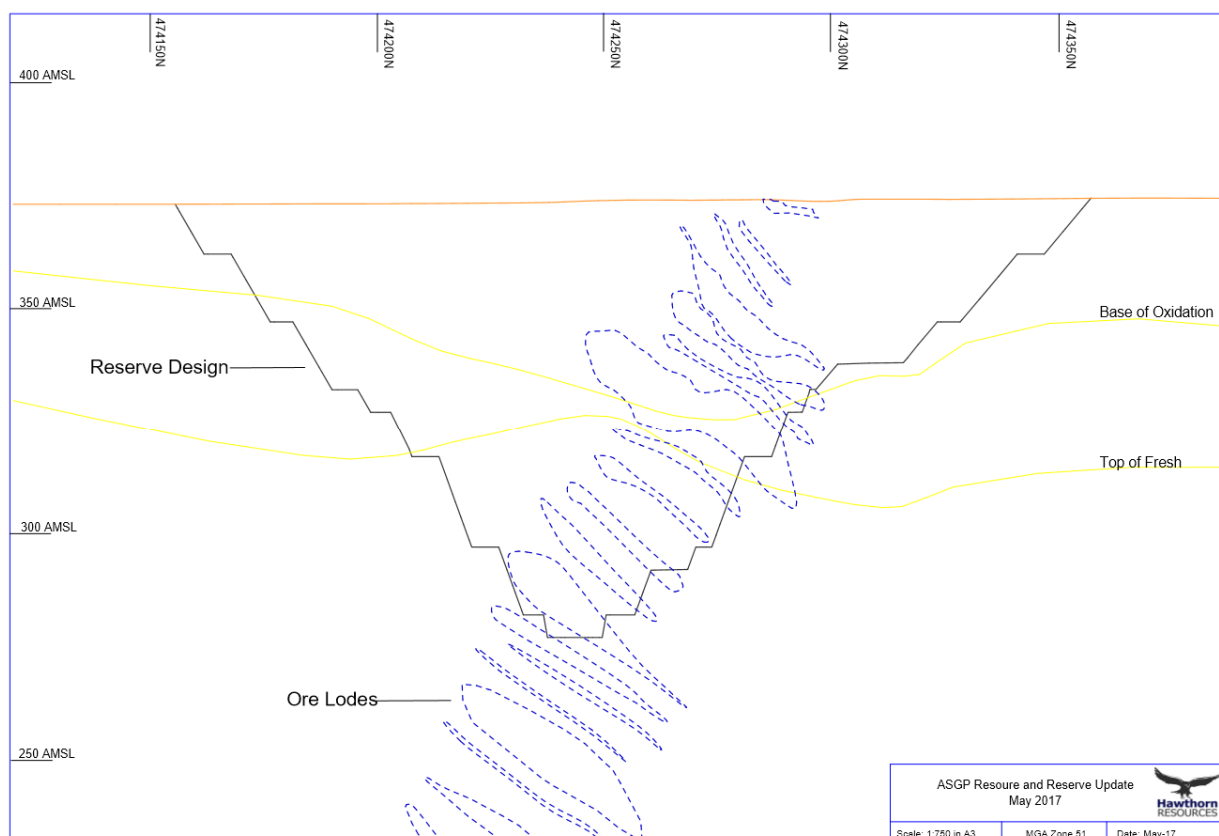


Figure 2: Typical cross section of the ASGP resource, showing the Ore Reserve pit design.

Open Pit Ore Reserve

An Ore Reserve estimate for the ASGP was undertaken utilising the updated Resource Model. Mining study inputs were updated to a pre-feasibly level, with independent mining consultant's **BM Mining** delivering the Ore Reserve outlined in Table 2 below:

Table 2. ASGP Ore Reserve – 20 June 2017

Classification	Tonnage (t)	Au (g/t)	Ounces
Proven Ore Reserve	0	0	0
Probable Ore Reserve	730,000	2.66	62,000
Total Ore Reserve	730,000	2.66	62,000

The associated cashflow model delivers robust returns and early cashflow from near surface ore following mine and haul road construction. Contracts for haul road construction are to be awarded in the upcoming quarter with mining contracts to follow.

An additional 23,000 ounces of Indicated Mineral Resource contained within the pit optimisation have been excluded from the initial Open Pit Ore Reserve as preliminary underground mining studies suggest that improved economics may be achieved by utilising underground mining methods.

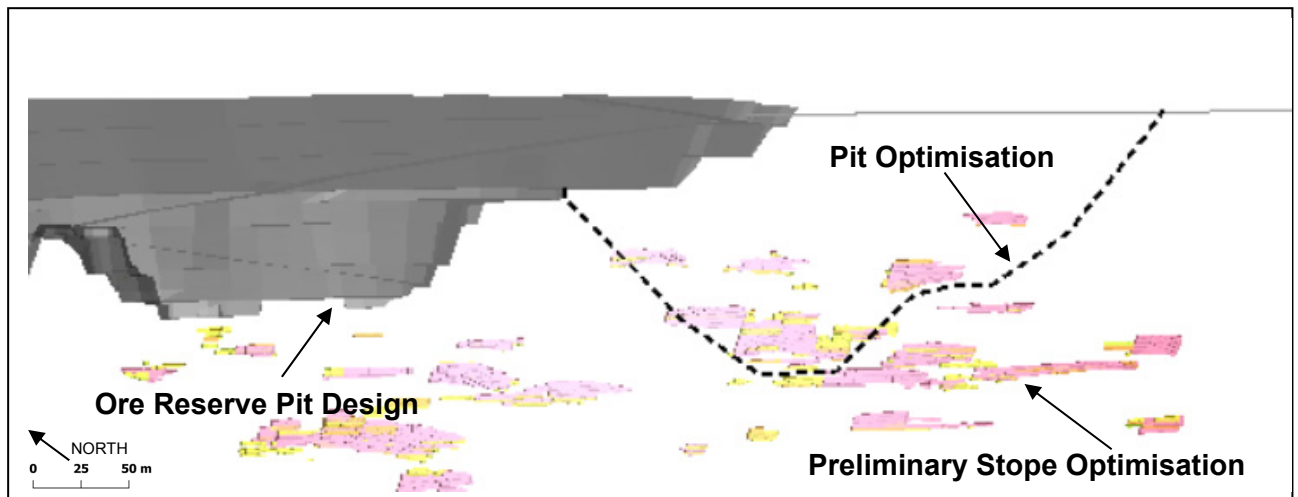


Figure 3: Southern extent of the ASGP pit design showing the \$1,600 per ounce optimised shell and conceptual underground stope designs at a 5g/t cutoff. Resources at greater than 8g/t shown in magenta.

A preliminary stope optimisation utilising a conservative cutoff grade of 5g/t indicates that approximately 40,000 ounces of Indicated and Inferred Mineral Resource may be recoverable by a combination of long hole open stoping and overhand cut and fill mining. Work on a maiden Underground Ore Reserve will begin once open pit mining has commenced.

For further information please contact

Mourice Garbutt	Company Secretary	03 9605 5917
Ian Moody	Exploration Manager	03 9605 5951

The information in this report that relates to Exploration Results is based on information compiled by Mr Ian Moody, who is a member of the Australasian Institute of Mining and Metallurgy and a full time consultant geologist with First Principle Mineral Exploration Company Pty Ltd. Mr Moody has sufficient experience as a geologist which is relevant to the style of mineralization and the type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 edition of the Australasian Code of Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Moody 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 the Mineral Resource estimate is based on information compiled by Mr Andrew Bewsher, a Competent Person who is a Member of The Australasian Institute of Geoscientists. Mr Bewsher is employed by BM Geological Services. Mr Bewsher has been engaged as an external independent consultant by Hawthorn Resource Limited. Mr Bewsher has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Bewsher consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The information in this report that relates to the Ore Reserve estimate is based on information compiled by Mr William Lloyd, a Competent Person who is a Member of Australasian Institute of Mining and Metallurgy. Mr Lloyd is employed by BM Mining. Mr Lloyd has been engaged as an external independent consultant by Hawthorn Resource Limited. Mr Lloyd has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Lloyd consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Appendix 1

JORC Code, 2012 Edition – Anglo Saxon Resource Estimation Data

Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> <i>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.</i> <i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i> <i>Aspects of the determination of mineralisation that are Material to the Public Report.</i> <i>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.</i> 	<ul style="list-style-type: none"> There have been different generations of drilling by three different project managers. Drill methods for each generation include reverse circulation (RC), diamond core (DH), and percussion with 86% of the holes by length being RC. Channel sampling has occurred on various benches of a small pit mined over the top of the deposit during the 1980's. All holes were sampled in 1m intervals. Sampling technique discussed over page in sub sampling technique section.
Drilling techniques	<ul style="list-style-type: none"> <i>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).</i> 	<ul style="list-style-type: none"> Diamond core drilling since 2011 uses triple tube and core is oriented for structural logging. Post 2011 RC is 5.5 inch hammer drilling and DH is HQ size in diameter.
Drill sample recovery	<ul style="list-style-type: none"> <i>Method of recording and assessing core and chip sample recoveries and results assessed.</i> <i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i> <i>Whether a relationship exists between sample recovery and grade</i> 	<ul style="list-style-type: none"> For drilling from 2011 onwards assessment of RC recovery is by visual means and recorded. DH drilling recovery is logged. Recovery is in general good in both forms of drilling.

Criteria	JORC Code explanation	Commentary
	<i>and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</i>	<ul style="list-style-type: none"> There is no relationship between recovery and mineralisation grade in both RC and DH. The grade distribution of the DH and the RC is the same for both drilling methods post 2011. For holes pre 2011 limited recovery data has been located.
Logging	<ul style="list-style-type: none"> <i>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.</i> <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i> <i>The total length and percentage of the relevant intersections logged.</i> 	<ul style="list-style-type: none"> Chip samples have been geologically logged for all relevant geological and some structural data. Logging for this program has been digitally captured, and are capable of being included in a Mineral Resource Estimation. Chips are retained in chip trays Every metre is individually logged All DDH core is logged and photographed
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i> <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i> <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i> <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i> <i>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.</i> <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i> 	<ul style="list-style-type: none"> Reverse circulation samples were split on site. Pre 2011 holes were split using a riffle splitter, post 2011 holes were split using a rotary splitter. All samples are dry. Samples weigh approximately 25 kg and are split down to 3 kg and dispatched to the laboratory. Field duplicates from the rotary split have been submitted for holes post 2011, correlation is reasonable for a field duplicate in a moderately nugget style of deposit. Half core was submitted for analysis for DH holes pre 2011. DH holes post 2011 were assayed (half core) except for intervals selected for metallurgical test work where the entire core was submitted for testwork. The combined grade of these intervals has been recorded. Most samples are dry (>97.9%). If Wet samples are sent through the rotary splitter the splitter is cleaned between wet sample metres Bulk Samples are collected in appropriate sized plastic bags Sample splits are collected in appropriately sized calico bags with drawstring ties

Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> CRM standards, blanks and duplicates submitted with assays
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i> <i>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.</i> <i>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.</i> 	<ul style="list-style-type: none"> Samples collected post 2011 are assayed by Fire Assay, 30 g charge at Bureau Veritas, Kalgoorlie A range of five different gold grade standards have been submitted. Some sample batches had individual standards in excess of 2 standard deviations but overall the performance of the standard assays was adequate. Extremely low grade standards < 0.1g/t gold did not perform well for both pre and post 2011 drilling. All other standards perform reasonably. Blanks have been submitted these have performed reasonably with results less than 0.01 g/t gold, approx. 4% of samples returning grades up to 0.1g/t gold. These blanks are not located immediately after high grade samples. Samples collected pre – 2011 were assayed at a variety of laboratories – original hardcopy Assay Notifications are in Hawthorn's possession
Verification of sampling and assaying	<ul style="list-style-type: none"> <i>The verification of significant intersections by either independent or alternative company personnel.</i> <i>The use of twinned holes.</i> <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i> <i>Discuss any adjustment to assay data.</i> 	<ul style="list-style-type: none"> No specific twinned holes have been drilled however four diamond holes have been drilled within 3m of post 2011 reverse circulation holes. The diamond holes have exhibited gold visible under a hand lens in the expected locations such that it correlates with the grade in the reverse circulation holes. These DH were assayed with a good correlation to the RC results. Laboratory data was supplied electronically to site and to the company head office. Geological logging is entered by both technical and non-technical staff and reviewed by geologists for correctness. Project data was stored at the head office of the company and in onsite laptops, with a weekly offsite backup of all data. Samples for assay were collected from drillsites upon completion of drillholes and transported to a camp until a batch is despatched for assay by Hawthorn staff to

Criteria	JORC Code explanation	Commentary
		the laboratory.
Location of data points	<ul style="list-style-type: none"> • <i>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.</i> • <i>Specification of the grid system used.</i> • <i>Quality and adequacy of topographic control.</i> 	<ul style="list-style-type: none"> • The grid used is GDA 94 Zone 51. • Post 2011 collars have been picked up by registered surveyors. • Old holes were located in a mix of local grid and AMG. • All old holes have been converted to GDA 94 Zone 51. • A selection of old holes have been located on ground and have been picked up by registered surveyors during 2012 and 2013. The pickup supports the location of the transformed data, showing that the transformed holes are where they were expected to be within +/- 0.5 m. • Due to the age of the data it is understood that some holes may not be in the location expected. New drilling, post 2011, has validated the geological interpretation and grade continuity. • Surface land form is gently sloping and surveyed drillholes have been incorporated into the topographic surface. • A surface survey was undertaken as was a laser survey of the interior of the existing open-cut pit
Data spacing and distribution	<ul style="list-style-type: none"> • <i>Data spacing for reporting of Exploration Results.</i> • <i>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.</i> • <i>Whether sample compositing has been applied.</i> 	<ul style="list-style-type: none"> • Data is sufficiently closely spaced to ensure geological and grade continuity. With drilling spaced 15 m to 100 m along strike, 15 m to 50 m across strike and 1 m intervals sampled downhole. • A significant portion of the Indicated Resource is in area where drilling is at < less 20 metres along strike • Samples were not composited for the purpose of assaying..
Orientation of data in	<ul style="list-style-type: none"> • <i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known,</i> 	<ul style="list-style-type: none"> • The majority for drilling is at 60 to 70 degrees which is perpendicular to the dominant dip of the geology. Potentially steeper structures have been intersected

Criteria	JORC Code explanation	Commentary
relation to geological structure	<p><i>considering the deposit type.</i></p> <ul style="list-style-type: none"> <i>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.</i> 	<p>by these holes and by select vertical and sub-vertical drilling.</p> <ul style="list-style-type: none"> It is understood that there is no bias introduced by the drilling direction.
Sample security	<ul style="list-style-type: none"> <i>The measures taken to ensure sample security.</i> 	<ul style="list-style-type: none"> All RC samples submitted to the laboratory are collected directly from the splitter with the sample bag tied. During sample collection for all holes a staff member is always present. Samples are delivered to the laboratory by company staff. 1M Sample bags are kept on drill site until initial assay and QAQC results are completed. Assay pulps are recovered from laboratory and stored in locked storage sheds
Audits or reviews	<ul style="list-style-type: none"> <i>The results of any audits or reviews of sampling techniques and data.</i> 	<ul style="list-style-type: none"> To the competent person for the mineral resource estimations knowledge there have been no audits or reviews of sampling techniques and data.

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> <i>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</i> <i>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.</i> 	<ul style="list-style-type: none"> The mineral tenements M31/79 and M31/284 that host the Resource are under a joint venture agreement with private company Gel Resources Ltd, with Hawthorn Resource Limited having a 70% ownership. There are no known issues and the tenements are in good standing. A Mining Proposal (Reg Id 55291) has been approved by the Western Australian Department of Mines and Petroleum A Project Management Plan for the Anglo Saxon Gold Deposit has been approved by the Western Australian Department of Mines and Petroleum
Exploration done by other parties	<ul style="list-style-type: none"> <i>Acknowledgment and appraisal of exploration by other parties.</i> 	<ul style="list-style-type: none"> Significant exploration has been undertaken by other parties. The data has been reviewed for both location and grade distribution. To date the post 2011 and the pre 2011 data grade distribution is almost identical. A selection of pre 2011 drillholes have been surveyed in the current coordinate system and are located

Criteria	JORC Code explanation	Commentary
		<p>correctly.</p> <ul style="list-style-type: none"> Aurifex/Newmont/Amoco/Picon/Little River drilled 14,150 m RC, 438 m DD, 4,572 m percussion and 398.3 m of channel samples pre-1999 Gutnick Resources NL drilled 23,566 m RC and 912.7 m DD between 1999 and 2008
Geology	<ul style="list-style-type: none"> <i>Deposit type, geological setting and style of mineralisation.</i> 	<ul style="list-style-type: none"> Mineralization occurs in a broad shear bound alteration zone within a felsic schist unit that dips west from 55 to 70 degrees and ranges from 20 to 100 m in width. The mineralization is interpreted to dip from 38 to 75 degrees and occurs in a number of fairly discrete packages, stacked above each other, broadly similar to a ladder vein system. Gold mineralization appears to be related to thin quartz veins which vary in thickness from 2 mm to 80 cm but occur in sub parallel groups. A small pit mined during the mid to late 1980's provides good exposure for mapping mineralized veins. Many veins can be followed 30 to 50 m along strike with more prominent veins being followed for up to 80m.
Drill hole Information	<ul style="list-style-type: none"> <i>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:</i> <ul style="list-style-type: none"> <i>easting and northing of the drill hole collar</i> <i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i> <i>dip and azimuth of the hole</i> <i>down hole length and interception depth</i> <i>hole length.</i> <i>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.</i> 	<ul style="list-style-type: none"> All post 2012 drillholes carried out by Hawthorn have previously been reported to the ASX at the time of drilling.
Data	<ul style="list-style-type: none"> <i>In reporting Exploration Results, weighting averaging</i> 	<ul style="list-style-type: none"> Intervals reported during the exploration phase were generally greater than 2.00

Criteria	JORC Code explanation	Commentary
aggregation methods	<p>techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</p> <ul style="list-style-type: none"> 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. 	<p>gram x metres – unless geologically significant</p> <ul style="list-style-type: none"> Exploration results were also reported with a maximum of 2.0 metres of <0.5 g/t Au waste per reported interval No top cutting was undertaken Compositing and top cutting was carried out in the Mineral Resource Estimation (see Section 3 below)
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> 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 (eg 'down hole length, true width not known'). 	<ul style="list-style-type: none"> The majority of holes were drilled perpendicular to dip, and are believed to be representative of the true thickness of mineralization
Diagrams	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Refer to Figures 1 and 2 of the ASX Announcement “30/10/2013_AngloSaxon Mineral Resource Upgrade”
Balanced reporting	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Not applicable
Other substantive exploration data	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> A total of 237 bulk density samples were submitted for analysis from the 2013 DH drilling programme at Bureau Veritas Kalgoorlie. The samples were waxed coated where required and the Archimedes method was used. The bulk density calculation and results provided by the laboratory were reviewed. Metallurgical testwork on drillcore (including BWi, Gravity and Cyanide Leach Recovery, Reagent consumption and optimal Grind Sizing at ALS Laboratories, Perth Hydrogeology and hydrology studies were carried out in the Resource area by

Criteria	JORC Code explanation	Commentary
		<p>Rockwater Pty Ltd, Perth</p> <ul style="list-style-type: none"> Geotechnical studies of the Resource (drillcore and existing open cut) by AMC Limited and Green Geotechnical. Drill core was submitted to Western Australian School of Mines Geomechanics Laboratory for comprehensive Rock Properties Testwork Waste Rock Characterisation and ARD studies were carried out by Soilwater Group, Perth
Further work	<ul style="list-style-type: none"> <i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i> <i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i> 	<ul style="list-style-type: none"> Further exploration is proposed to test along strike and at depth in primary material. This work will be carried out while grade control is undertaken in the upcoming mining phase to test the potential for known Inferred Resources at depth to be upgraded and either mined in a deeper open cut or via underground access. Results from this program will be announced when undertaken

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	<ul style="list-style-type: none"> <i>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.</i> <i>Data validation procedures used.</i> 	<ul style="list-style-type: none"> All data is in digital spreadsheets. Data used in the 2013 Resource estimation was reviewed by BM Geological Services in 2017 and imported into an Access database and queries or corrupted data was amended or deleted as required. The Datamine block models, wireframes, a converted Datamine composite string file, and the 2014 written report by AMC ("Anglo Saxon Block Model Estimation") was supplied to BM Geological Services Data was validated and mapped before use in Surpac <ul style="list-style-type: none"> All collar co-ordinates were within the tenement area. Overlapping FROM and TO values in the geology, assay, density and geotechnical tables. Downhole survey dip and bearing angles appear reasonable. Duplicate records or duplicate drillholes.

Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> ○ If there were any anomalous assay values.
Site visits	<ul style="list-style-type: none"> • <i>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</i> • <i>If no site visits have been undertaken indicate why this is the case.</i> 	<ul style="list-style-type: none"> • Mr Moody was on site during the data collection periods in 2012-2014 and in 2016 and directs work in his role as Exploration Manager. • Mr William Lloyd, who carried out the accompanying Reserve calculation, and two other geologists from BM Geological Services have also visited and carried out works on site
Geological interpretation	<ul style="list-style-type: none"> • <i>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</i> • <i>Nature of the data used and of any assumptions made.</i> • <i>The effect, if any, of alternative interpretations on Mineral Resource estimation.</i> • <i>The use of geology in guiding and controlling Mineral Resource estimation.</i> • <i>The factors affecting continuity both of grade and geology.</i> 	<ul style="list-style-type: none"> • Gold mineralisation is predominantly confined to quartz and quartz-carbonate veins with the presence of saprolitic mineralization near the surface. The veins are variable in dip from 38 to 75 degrees. The average vein width is less than 1 m and down to 1 cm. The veins are stacked. Where veins are in close proximity the geological interpretation includes intervening low grade / waste material. The variable dip may mean alternative interpretations are possible on a local scale and this partially contributes to the changes in the overall tonnage and grade of the deposit. The contained metal content of the deposit has not changed significantly. • All available geological data including RD, DH, PC drilling, channel samples and existing pit mapping were used in the interpretation original 2013-14 interpretation and block model constructed by AMC. • This current 2017 Resource Estimation by BM Geological Services has used the same raw data as used by in the 2013-14 Resource Estimation.
Dimensions	<ul style="list-style-type: none"> • <i>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.</i> 	<ul style="list-style-type: none"> • The zone of exploration and mineralization assessed in this 2017 Resource Estimation extends 1400 m in a N-S orientation, 560 m in an E-W orientation and 275 m vertically below surface.
Estimation and modelling techniques	<ul style="list-style-type: none"> • <i>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.</i> • <i>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource</i> 	<ul style="list-style-type: none"> • There are no by-products. • There are no deleterious elements known. • There is no correlation between gold grades and any other element. • There is no relationship between grade and structure, depth or lithological features. Higher grades do not appear to be preferential to the footwall or hangingwall of the veins.

Criteria	JORC Code explanation	Commentary
	<p><i>estimate takes appropriate account of such data.</i></p> <ul style="list-style-type: none"> <i>The assumptions made regarding recovery of by-products.</i> <i>Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).</i> <i>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</i> <i>Any assumptions behind modelling of selective mining units.</i> <i>Any assumptions about correlation between variables.</i> <i>Description of how the geological interpretation was used to control the resource estimates.</i> <i>Discussion of basis for using or not using grade cutting or capping.</i> <i>The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</i> 	<ul style="list-style-type: none"> Surpac software was used for the estimation. Block model cell sizes of 5 mE x 20 mN x 2 mZ were used Gold top caps of 25 g/t for oxide, 35 g/t for transition and 43 g/t for fresh were used. These values were taken from the probability curve at the 95th percentile. Due to the proposed open pit method of mining and the relatively flatly dipping nature of lodes the current estimation (using inverse distance squared estimation method "ID2") utilized all composites flagged as ore inside ore lode wireframes. Model validation included visual validation against raw drillhole intersections and a statistical analysis between block grades and composite grade on a global and local scale. All lodes were successfully validated with blocks representing composite grades. Visual validation confirmed the estimation search parameters to be acceptable. The model was depleted for previous mining.
Moisture	<ul style="list-style-type: none"> <i>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</i> 	<ul style="list-style-type: none"> Tonnage has been calculation on a dry bulk density. No allowance for moisture has been made.
Cut-off parameters	<ul style="list-style-type: none"> <i>The basis of the adopted cut-off grade(s) or quality parameters applied.</i> 	<ul style="list-style-type: none"> A geological cut-off of 0.5 g/t gold has been used as the mineralization is close to surface and highly weathered to a depth of between 90 to 120m below surface A range of cut-off grade models have been produced – with 0.5, 1.0 & 1.5 g/t Au reported in this announcement.
Mining factors or assumptions	<ul style="list-style-type: none"> <i>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</i> 	<ul style="list-style-type: none"> Small scale open pit mining is proposed. Mining is anticipated to be free dig in both the oxide and transition zones without a requirement for blasting, hence lower mining and treatment costs. Some blasting may be required in fresh rock zones although this is yet to be confirmed It is anticipated there will not be a requirement for major capital expenditure hence lower start-up costs.

Criteria	JORC Code explanation	Commentary
	<i>explanation of the basis of the mining assumptions made.</i>	
Metallurgical factors or assumptions	<ul style="list-style-type: none"> <i>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.</i> 	<ul style="list-style-type: none"> Studies carried out in 2014 at ALS Perth have indicated that the gold mineralization can be recovered in a conventional CIP plant with recoveries in excess of 95% in oxide and transition material Limited testwork on high gold grade fresh rock samples has indicated that combined gravity circuit recovery followed by cyanide leaching can return gold recoveries > 98% No deleterious properties have been reported from this testwork.
Environmental factors or assumptions	<ul style="list-style-type: none"> <i>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.</i> 	<ul style="list-style-type: none"> Studies carried out in 2014 at Soilwater Perth indicated that material in a waste rock dump was <ul style="list-style-type: none"> Unlikely to generate acidic or metalliferous drainage. Majority of samples had a negative Net Acid Production Potential (i.e acid consuming) Low salinity levels Total Metal concentrations as expected on average Unlikely to inhibit plant growth post mining As no onsite processing is planned no tailings will be generated and store on-site.
Bulk density	<ul style="list-style-type: none"> <i>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.</i> <i>The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.</i> <i>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</i> 	<ul style="list-style-type: none"> A total of 237 bulk density samples were submitted for analysis. The samples were waxed where required and the Archimedes method was used. The bulk density calculation provided by the laboratory was reviewed by the competent person for the exploration data. No vugs or voids – other than minor historic underground workings are known Bulk density measurements were flagged with oxidation state and then averaged within each oxidation zone. This value was applied to both mineralization and waste, with there being no difference in bulk density identified between ore and waste.

Criteria	JORC Code explanation	Commentary
Classification	<ul style="list-style-type: none"> <i>The basis for the classification of the Mineral Resources into varying confidence categories.</i> <i>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).</i> <i>Whether the result appropriately reflects the Competent Person's view of the deposit.</i> 	<ul style="list-style-type: none"> This 2017 Resource Estimation was classified in line with JORC2012 guideline An elevation boundary 125 m below surface (250 mRL) was used as a lower vertical constraint for Indicated material, based upon pit optimisation studies that imply that material at greater than 125 m was uneconomic to extract using open cut methods. This re-classification differs from the earlier 2013 Resource estimation in that Fresh rock lodes that meet criteria are also included. Classification (Indicated / Inferred) of individual lodes was carried out on the basis of <ul style="list-style-type: none"> Sample density Geological understanding Grade continuity Estimation pass All in-situ interpreted mineralisation was either classified as either Indicated or Inferred resources.
Audits or reviews	<ul style="list-style-type: none"> <i>The results of any audits or reviews of Mineral Resource estimates.</i> 	<ul style="list-style-type: none"> The current 2017 Update of the Anglo Saxon Resource is an update and replaces the Resource estimation announced to the ASX <i>"30/10/2013_AngloSaxon Mineral Resource Upgrade"</i>
Discussion of relative accuracy/ confidence	<ul style="list-style-type: none"> <i>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.</i> <i>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</i> 	<ul style="list-style-type: none"> Following further technical evaluation, including updated geotechnical, metallurgical, economic and mining method factors this updated Mineral Resource Estimation has formed the site specific resource basis behind the Reserve Calculation announced in this report

Criteria	JORC Code explanation	Commentary
	<p><i>should include assumptions made and the procedures used.</i></p> <ul style="list-style-type: none"> • <i>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</i> 	

JORC TABLE 1

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	<ul style="list-style-type: none"> <i>Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.</i> <i>Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.</i> 	<ul style="list-style-type: none"> The Mineral Resource described in this release was used for Ore Reserve calculations. The ASGP Ore Reserve lies entirely within the announced Mineral Resource. For consistency with the Mineral Resource, a deduction of 7,063 tonnes the local resource grade was made to the Ore Reserve, reflecting historical underground depletion. This historical production may or may not lie within the detailed pit design.
Site visits	<ul style="list-style-type: none"> <i>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</i> <i>If no site visits have been undertaken indicate why this is the case.</i> 	<ul style="list-style-type: none"> A site visit was undertaken by the competent person for the reserve estimation.
Study status	<ul style="list-style-type: none"> <i>The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.</i> <i>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.</i> 	<ul style="list-style-type: none"> The estimation of JORC (2012) Ore Reserves was prepared to a Pre-Feasibility Study level.
Cut-off parameters	<ul style="list-style-type: none"> <i>The basis of the cut-off grade(s) or quality parameters applied.</i> 	<ul style="list-style-type: none"> A gold price of \$1550 was used for cut off grade calculations.

Criteria	JORC Code explanation	Commentary
Mining factors or assumptions	<ul style="list-style-type: none"> <i>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).</i> <i>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.</i> <i>The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling.</i> <i>The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).</i> <i>The mining dilution factors used.</i> <i>The mining recovery factors used.</i> <i>Any minimum mining widths used.</i> <i>The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.</i> <i>The infrastructure requirements of the selected mining methods.</i> 	<ul style="list-style-type: none"> A detailed pit design was utilised in the Mining Study, optimised for a \$1,300 AUD gold price. A trade off study will be undertaken to determine if additional tonnes will be added to the open pit Reserve or a maiden underground Reserve at current gold prices. The open pit mining method used to convert Mineral Resource to Reserve was a selective truck and excavator method suitable for narrow vein mining. Ore extends to surface however higher grades and tonnes are mined near the pit base. Access to the mine and processing facility is via a fully permitted and approved haul road that is yet to be constructed. Independent geotechnical consultants, Green Geotechnical, have produced a geotechnical assessment of the ASGP pit wall slopes to a feasibility level of confidence. The Mineral Resource described in this release was used as the basis for the Ore Reserve estimate. Mining dilution of between 20% and 30% has been allowed for, supported by a mine shape optimisation. A mining recovery of 95% was used, supported by a statistical analysis of the orebody geometry. No minimum mining width has been applied as part of the Ore Reserve estimation process. All Inferred Mineral Resource has been treated as waste. Site preparation, haul road and camp construction are required prior to the commencement of mining.
Metallurgical factors or assumptions	<ul style="list-style-type: none"> <i>The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.</i> <i>Whether the metallurgical process is well-tested technology or novel in nature.</i> <i>The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.</i> <i>Any assumptions or allowances made for deleterious elements.</i> <i>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.</i> <i>For minerals that are defined by a specification, has the ore reserve</i> 	<ul style="list-style-type: none"> Processing via gravity concentration and conventional CIL at a third party mill has been proposed. Gravity concentration and carbon leaching are well proven and their application to the ASGP ore body is supported by the metallurgical test work undertaken to date. Lab scale test work modelling recoveries for oxide, transitional and primary material have been undertaken on composites considered reflective of the orebody in its entirety. No significant concentrations of deleterious elements have been identified in the metallurgical work undertaken to date.

Criteria	JORC Code explanation	Commentary
	<p><i>estimation been based on the appropriate mineralogy to meet the specifications?</i></p>	
Environmental	<ul style="list-style-type: none"> <i>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.</i> 	<ul style="list-style-type: none"> The Mining Proposal was approved in 2016. Minor amendments may be required as the project progresses. Waste rock characterisation has been performed and the proposed waste dump designs were incorporated into the approved Mining Proposal. Tailings storage will be in an approved, third party facility.
Infrastructure	<ul style="list-style-type: none"> <i>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.</i> 	<ul style="list-style-type: none"> All associated mine infrastructure was approved in the 2016 Mining Proposal. Construction costs have been allowed for in the cost model. The open pit mine and offices are located on a Crown Common Reserve and are fully permitted and approved at a state level. The haul road is approved and crosses various Pastoral Leases. Determination of compensation by the Mining Warden may be required but should not materially affect the Ore Reserve.
Costs	<ul style="list-style-type: none"> <i>The derivation of, or assumptions made, regarding projected capital costs in the study.</i> <i>The methodology used to estimate operating costs.</i> <i>Allowances made for the content of deleterious elements.</i> <i>The source of exchange rates used in the study.</i> <i>Derivation of transportation charges.</i> <i>The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.</i> <i>The allowances made for royalties payable, both Government and private.</i> 	<ul style="list-style-type: none"> Camp costs have been based on quotes from suitably qualified contractors. Haul road construction costs have been estimated from construction costs of similar haul roads in the area. Further studies are required to increase confidence to a feasibility level. Operating costs have been derived from the detailed project budget with preliminary quotes for major goods and services. No allowance has been made for deleterious elements. All costs have been modelled in AUD. Transport charges have been based on quotes from third party contractors.

Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> Ore treatment charges have been based on the terms of the draft agreement. All relevant royalty payments have been allowed for in the derivation of the reserve.
Revenue factors	<ul style="list-style-type: none"> <i>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.</i> <i>The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.</i> 	<ul style="list-style-type: none"> Ore treatment charges have been based on the terms of the draft agreement. C1 Cash Costs are estimated at AUD\$1,010 per ounce of gold metal. Cash cost are shown after a global deduction for historical underground production, which may or may not be located within the current pit design.
Market assessment	<ul style="list-style-type: none"> <i>The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.</i> <i>A customer and competitor analysis along with the identification of likely market windows for the product.</i> <i>Price and volume forecasts and the basis for these forecasts.</i> <i>For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.</i> 	<ul style="list-style-type: none"> Market assessment has not been conducted as the gold metal will be sold on the open market.
Economic	<ul style="list-style-type: none"> <i>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.</i> <i>NPV ranges and sensitivity to variations in the significant assumptions and inputs.</i> 	<ul style="list-style-type: none"> A base case discount rate of 7% has been used. A sensitivity analysis was completed on all inputs, prices and costs and indicates that the Ore Reserve is resilient to a +/-15% variation of all input parameters. Maximum sensitivity was found to be to gold price.

Criteria	JORC Code explanation	Commentary
Social	<ul style="list-style-type: none"> <i>The status of agreements with key stakeholders and matters leading to social licence to operate.</i> 	<ul style="list-style-type: none"> A Mining Proposal was approved by the Department of Mines and Petroleum in 2016. The ASGP area does not coincide with any registered Native Title application or determination under the Native Title Act 1993. Stakeholder compensation may require determination by the state Wardens Court.
Other	<ul style="list-style-type: none"> <i>To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:</i> <i>Any identified material naturally occurring risks.</i> <i>The status of material legal agreements and marketing arrangements.</i> <i>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.</i> 	<ul style="list-style-type: none"> Major processing, haul road and operational contracts require finalisation and commitment. All tenements required for the operation of the project are granted and in good standing. The Mining Proposal was approved in 2016. Minor amendments may be required for operational reasons. Haul road development agreements require finalisation. Determination of compensation by the state Warden's Court may be required but should not material impact project economics.
Classification	<ul style="list-style-type: none"> <i>The basis for the classification of the Ore Reserves into varying confidence categories.</i> <i>Whether the result appropriately reflects the Competent Person's view of the deposit.</i> <i>The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).</i> 	<ul style="list-style-type: none"> Indicated Resources have been converted to Probable Ore Reserves with the application of the selected mining dilution and recovery assumptions. The classification is consistent with the Competent Person's view of the deposit. No Measured Mineral Resource has been included in the Reserve. Internal reviews were conducted on the application of the data provided into the optimisation and design process and the Ore Reserve was found to meet the requirements set by JORC 2012.
Audits or reviews	<ul style="list-style-type: none"> <i>The results of any audits or reviews of Ore Reserve estimates.</i> 	<ul style="list-style-type: none"> Internal reviews were conducted on the application of the data provided into the optimisation and design process and the Ore Reserve was found to meet the requirements set by JORC 2012.

Criteria	JORC Code explanation	Commentary
Discussion of relative accuracy/confidence	<ul style="list-style-type: none"> • <i>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.</i> • <i>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.</i> • <i>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.</i> • <i>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.</i> 	<ul style="list-style-type: none"> • Inputs within the stated confidence limits have been utilised and a sensitivity analysis to +/-15% conducted. • The location of historic underground production cannot be accurately determined. Although possibly depleted during historic open pit mining, 7,064t of ore has been deducted from the global reserve, in line with the Mineral Resource estimate.