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## **Hawthorn Resources Limited**

### **Trouser Legs Gold Project – Western Australia Mineral Resource Update**

#### ***Highlights***

- Stage 3 and 4 together with Stage 3 infill drilling by the TLGP Joint Venture confirms an underground JORC Mineral Resource Estimate (MRE) of 157,000oz.
- Planning for resource extension drilling recommendation is underway – orebody is open down dip and down plunge
- The Joint Venture Underground Mining Proposal approved by WA Department of Mines, Industry Regulation and Safety (DMIRS) April 2020
- Mining contracts and toll milling initial discussions progressing.
- As Manager, the Company is continuing its review for participants consideration a budget regarding the feasibility of the underground project and the risk return dimensions.

*Table 1: Trouser Legs 2020 October Mineral Resource at a top cut of 45 g/t Au cut and uncut*

<b>October 2020 Mineral Resource</b>	<b>Tonnes</b>	<b>Au (g/t) (Cut)</b>	<b>Ounces (Cut)</b>	<b>Au (g/t) (Uncut)</b>	<b>Ounces (Uncut)</b>
Indicated	449,000	6.9	99,000	8.3	119,000
Inferred	347,000	5.2	58,000	5.4	60,000
<b>Grand Total</b>	<b>796,000</b>	<b>6.1</b>	<b>157,000</b>	<b>7.0</b>	<b>179,000</b>

## Underground Mineral Resource

Hawthorn Resources Limited ASX: HAW (“Hawthorn” or the “Company”) in its capacity as a participant and as Project Manager is pleased to update shareholders and the market following the completion of the Stage 3 in-fill drilling at the Trouser Legs JV gold project at Pinjin in Western Australia undertaken jointly by the Company (70 per cent) and Gel Resources Pty Ltd (30 per cent). The Project area is 140 km north-east of Kalgoorlie in Western Australia and incorporates tenements:

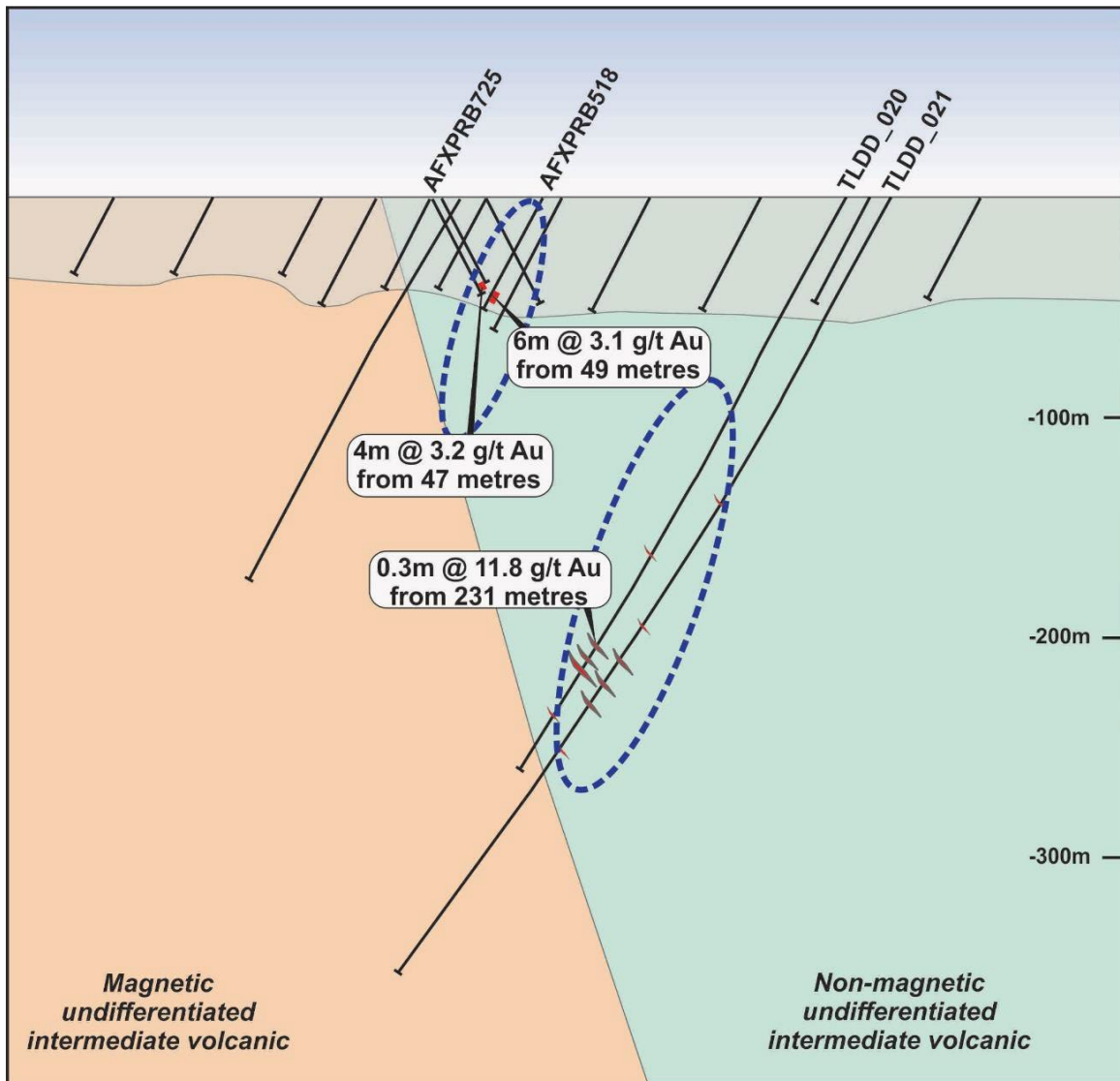
G 31/4; L 31/32; L 31/65; L 31/66; L 31/68; M31/78; M 31/79; M 31/88; M 31/113; M 31/284



Figure 1. Area Location map: Trouser Legs underground gold project 140 kms N-E of Kalgoorlie, W A.

**An underground JORC 2012 compliant Mineral Resource Estimate (MRE) totaling 157,000 ounces (cut) at Trouser Legs has been confirmed.**

The MRE is based on 691 reverse circulation and 33 diamond core holes completed by the JV partners, historical explorers and additional drill data gained from the recent Stage 3 (3 holes for 913 meters) and stage 4 (2 holes for 715.8 meters) diamond drill programs and the Stage 3 RC infill (10 holes for 2,348 meters) drilling program completed to the south of the Trouser Legs open pit. Assays were received in October 2020 and significant intercepts are tabulated in Appendix 1 as attached to this announcement.



*Figure 2: Cross Section of the Stage 4 Drill Program*



Figure 3: An example of visibly impressive d4 quartz vein of TLDD\_020 that returned unremarkable assay results

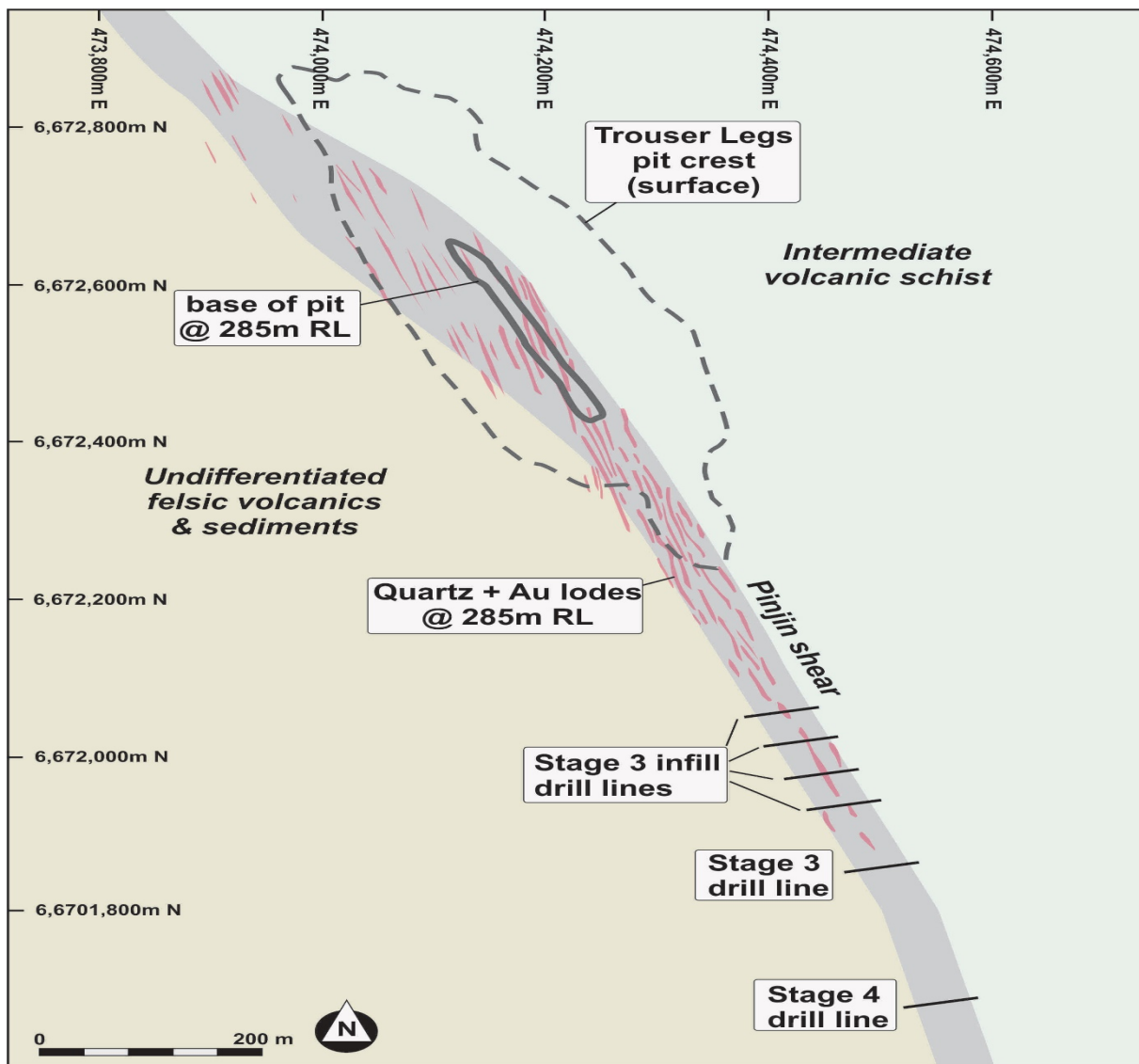


Figure 4: Plan view of the Mineral Resource at 285mRL

The orebody consists of a series of stacked, narrow 0.2 to 1.5-metre-wide quartz-pyrite veins which dip to the east between -40 to -70 degrees and strike at approximately 330 degrees. The individual veins are hosted within a broad shear bound alteration zone that dips west from 55 to 70 degrees and ranges from 20 to 100 meters in width. Mineralization has been defined to a depth of 250 vertical meters and is open down dip and down plunge to the south. Gold mineralization is almost entirely hosted within the quartz veins; the enveloping host rock is a strongly foliated, fine-grained quartzo-feldspathic micaceous schist, derived from strongly altered acid to intermediate volcanics or volcanoclastics with minor sedimentary rocks.

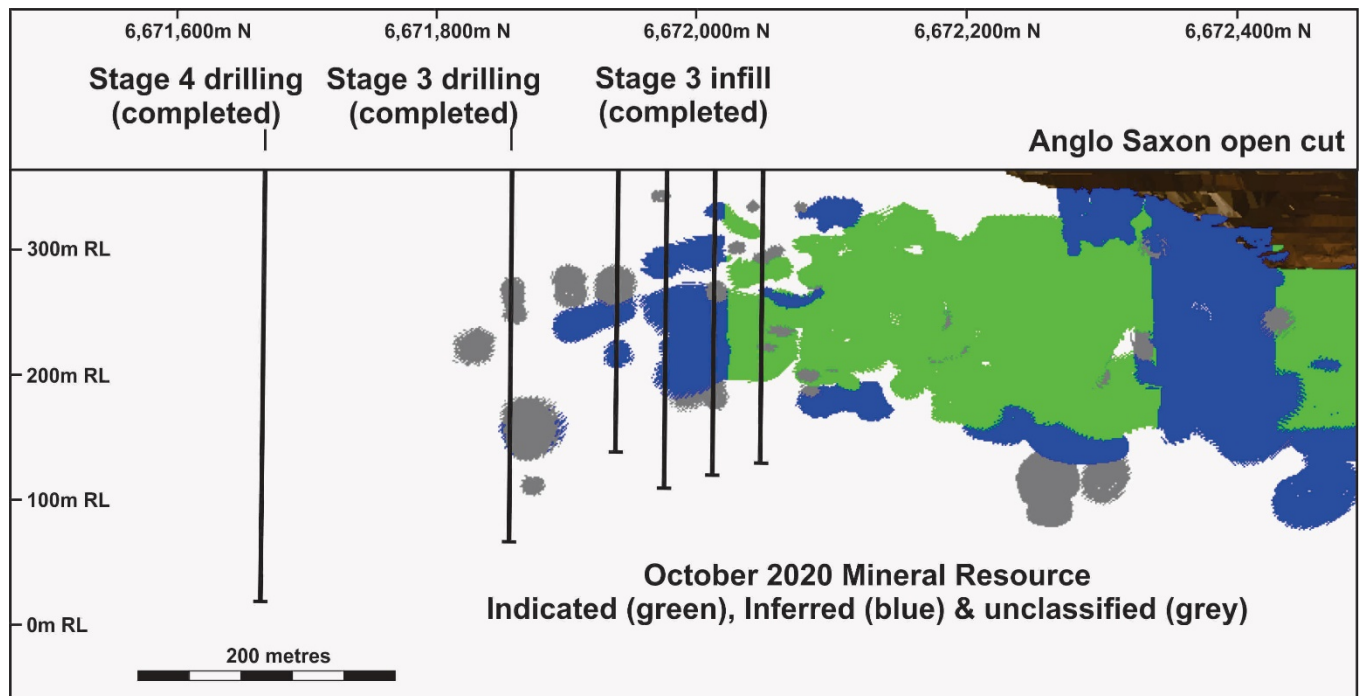
The MRE has been drilled out using both reverse circulation (RC) and diamond core (DD) drilling techniques. The resource estimate was carried out using 691 RC holes and 33 (DD) drilled to create 3-dimensional (3D) mineralization wireframes; built using the Leapfrog Geo software package (Leapfrog). The wireframe interpretation was designed based on nominal 1m lode widths and observations taken from recent mining and observations from the diamond drilling.

RC samples were collected through a cyclone and split through a rig mounted riffle splitter. 1.0 and 0.5 meter samples were collected to obtain a 3 to 4 Kg sample. Diamond core samples were logged and sampled to geological intervals. All samples were pulverized to typically 95% passing -75µm to produce either a 40g or 50g charge for Fire Assay with an AAS finish.

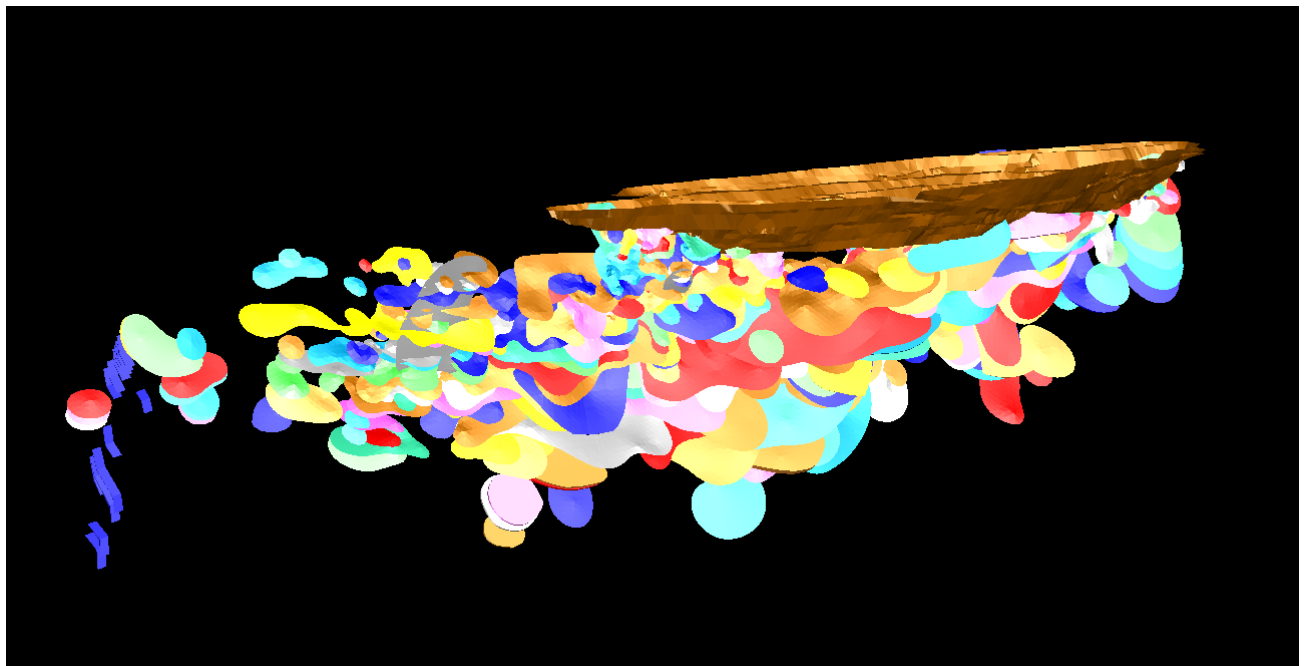
The drilling has been completed on a 20mN x 10mE pattern over the entire deposit. The density of drilling for this style of deposit has given sufficient confidence to categorize the Mineral Resource predominantly as Indicated and Inferred under the JORC code 2012.

Grade estimation was completed using ordinary Kriging. A nested spherical variogram with two structures was derived for each domain using Snowden Supervisor software. The variogram was created as normal scores and was back transformed for use with 3DS Surpac. A top cut of 45 g/t Au was applied to the composited data for use in the estimation process. The tonnes, grade and ounces have been reported at a block grade cutoff of 3 g/t Au.

The mining method considered at this stage would utilize mechanized development with handheld stoping. The current defined MRE is situated entirely within granted Mining Leases M31/79 and M31/284 and within the existing Crown Reserve. The tenements are jointly owned by Hawthorn Resources Limited (70%) and Gel Resources Pty Ltd (30%).



*Figure 5: Long section view of the TLGP Mineral Resource interpretation.*



*Figure 6: Isometric view of the TLGP Mineral Resource interpretation.*



## Underground Mining Proposal Approved

Formal approval for the Joint Venture's underground Mining Proposal relating to the first phase of underground mining at the TLGP was been received from DMIRS in April 2020. Mining studies to a PFS level have commenced and are nearing completion. Discussions with toll treatment providers and contractors are progressing along with preliminary site works.

For further information, please contact Mourice Garbutt or Mark Kerr on (03) 9605-5902.



**Mark Kerr**  
**Managing Director**



**Mourice Garbutt**  
**Company Secretary**

*This announcement was authorised for release by the Managing Director, Hawthorn Resources Limited.*

*The information in this report that relates to Exploration Results and Mineral Resources has been compiled by Mr Darryl Mapleson, a full-time employee of BM Geological Services. Mr Mapleson is a Fellow of the Australian Institute of Mining and Metallurgy. Mr Mapleson have been engaged as a consultant by Hawthorn Resources. Mr Mapleson has sufficient experience that is relevant to the style of mineralization 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 Mapleson 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 – DRILLING

### Hole Coordinates

Hole ID	Easting	Northing	RL	Max Depth	Dip	Azimuth	Hole Type
TLDD_017	474548.87	6671867.5	369.484	245.8	-59.01	244.75	D
TLDD_018	474565.1	6671875.3	369.608	324.2	-60.74	244.59	D
TLDD_019	474582.74	6671883.6	369.809	343	-61.4	246.15	D
TLDD_020	474621.27	6671679.2	367.882	298.6	-60.08	247.62	D
TLDD_021	474640.63	6671687.3	368.02	417.2	-59.86	249.21	D
TLRC_001	474460.23	6672058.3	371.051	254	-63.12	249.19	RC
TLRC_003	474457.31	6672011.5	370.864	253	-63.4	253.29	RC
TLRC_004	474480.77	6672021.7	370.9	271	-63.23	250.88	RC
TLRC_005	474494.79	6672027.6	370.986	289	-63.06	246.08	RC
TLRC_006	474479.53	6671977.3	370.43	205	-67.41	247.17	RC
TLRC_007	474489.94	6671981.8	370.494	275	-65.7	249.26	RC
TLRC_009	474496.38	6671941	370.214	205.5	-63.29	244.99	RC
TLRC_010	474508.28	6671946.3	370.302	105.5	-70.82	246.58	RC
TLRC_017	474524.05	6671857	369.406	242	-59.14	252.76	RC
TLRC_020	474462.26	6671969.9	370.308	248	-63.87	247.22	RC



## Significant Intercepts

Hole ID	Depth From	Depth To	Interval	Au
TLDD_017	118.7	119.1	0.4	25.4
TLDD_017	123.45	123.8	0.35	8.75
TLDD_017	131.45	132	0.55	46.87
TLDD_017	146.3	146.65	0.35	51.25
TLDD_018	244.3	244.6	0.3	10.2
TLDD_018	247	247.5	0.5	4.33
TLDD_019	158.35	158.55	0.2	2.78
TLDD_019	259.2	259.5	0.3	3.84
TLDD_019	268.25	268.6	0.5	8.86
TLDD_019	269.7	270.4	0.7	9.27
TLDD_019	304.6	304.8	0.2	3.26
TLDD_019	305.75	305.95	0.2	16.55
TLDD_019	315.8	316.3	0.5	2.06
TLRC_001	96.5	97	0.5	24.85
TLRC_001	111	111.5	0.5	18.35
TLRC_001	118.5	120	1.5	8.5
TLRC_001	127	129	2	21.25
TLRC_001	135.5	136.5	1	46.04
TLRC_001	146.5	147.5	1	9.98
TLRC_001	165	166	1	5.23
TLRC_004	24.5	25	0.5	12.85
TLRC_005	145.5	147	1.5	5.68
TLRC_005	154	154.5	0.5	14.2
TLRC_005	185	185.5	0.5	43
TLRC_005	95	195.5	100.5	7.63
TLRC_005	224.5	227	2.5	1.98
TLRC_006	169	169.5	0.5	6.47
TLRC_007	105	105.5	0.5	10.03
TLRC_007	171.5	172	0.5	24.55
TLRC_007	190	190.5	0.5	6.88
TLRC_007	206	206.5	0.5	7.49
TLRC_009	69	70	1	4.03
TLRC_009	98.5	100	1.5	3.55
TLRC_009	128	128.5	0.5	10.38
TLRC_010	86	86.5	0.5	30.8
TLRC_010	97	97.5	0.5	13.4

# JORC Code, 2012 Edition – Trouser Legs October 2020 Mineral Resource

## Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
<b>Sampling techniques</b>	<ul style="list-style-type: none"> <li>Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul style="list-style-type: none"> <li>Sampling was conducted using a Reverse Circulation (RC) drilling rig and Diamond drilling rig (DD).</li> <li>RC samples were collected at every 1m and 0.5m interval using a cyclone and cone splitter to obtain a ~3kg representative sub-sample for each 1m interval. The cyclone and splitter were cleaned regularly to minimize contamination.</li> <li>Diamond core was cut using an Almonte automated core saw on selected geological intervals. The core was cut in half and one half of the core was submitted for gold analysis.</li> <li>Field duplicates were collected at a rate of twice per hole.</li> <li>Samples were pulverised to produce a 40g charge for fire assay.</li> <li>Sampling and QAQC procedures are carried out using Hawthorn protocols as per industry best practice.</li> </ul>
<b>Drilling techniques</b>	<ul style="list-style-type: none"> <li>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</li> </ul>	<ul style="list-style-type: none"> <li>Reverse circulation (RC) drilling was carried out using a face sampling hammer with a 143mm (5 5/8") drill bit.</li> <li>Diamond drilling core was HQ diameter</li> </ul>
<b>Drill sample recovery</b>	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	<ul style="list-style-type: none"> <li>RC sample recoveries are visually estimated qualitatively on a metre and 0.5 metre basis and recorded in the database.</li> <li>Diamond core sample recovery was measured and calculated during the logging, using standard RQD logging procedures.</li> <li>Drilling contractors adjust their drilling approach to specific conditions to maximise sample recovery.</li> <li>No sample recovery issues have impacted on potential sample bias.</li> </ul>

Criteria	JORC Code explanation	Commentary
<b>Logging</b>	<ul style="list-style-type: none"> <li><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></li> <li><i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i></li> <li><i>The total length and percentage of the relevant intersections logged.</i></li> </ul>	<ul style="list-style-type: none"> <li>All drillholes are logged in full.</li> <li>RC holes were logged at 1m and 0.5m intervals for the entire hole from drill chips collected and stored in chip trays.</li> <li>DD holes were logged geologically and structurally.</li> <li>Data was recorded for regolith, lithology, veining, fabric (structure), grain size, colour, sulphide presence, alteration and oxidation state.</li> <li>Logging is both qualitative and quantitative in nature depending on the field being logged.</li> </ul>
<b>Sub-sampling techniques and sample preparation</b>	<ul style="list-style-type: none"> <li><i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></li> <li><i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i></li> <li><i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></li> <li><i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></li> <li><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></li> <li><i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></li> </ul>	<ul style="list-style-type: none"> <li>All RC samples were passed through cyclone and cone split, and a ~3kg split sample is collected for each 1m or 0.5m interval, depending on depth.</li> <li>DD half core samples were collected at intervals of 1m or less if geologically relevant.</li> <li>Field duplicate samples were collected twice per hole through mineralised zones and certified reference standards were inserted at a rate of 1 per every 50 samples. Blank samples were inserted every 50 samples directly after a standard and also after potential ore zones.</li> <li>Sample preparation was conducted at Bureau Veritas Laboratory in Kalgoorlie using a fully automated sample preparation system. Preparation commences with sorting and drying. Oversized samples are crushed to &lt;3mm and split down to 3kg using a rotary or riffle splitter. Samples are then pulverized and homogenized in LM5 Ring Mills and ground to ensure &gt;90% passes 75µm.</li> <li>200g of pulverized sample is taken by spatula and used for a 40g charge for Fire Assay for gold analysis. A high-capacity vacuum cleaning system is used to clean sample preparation equipment between each sample.</li> <li>The sample size is considered appropriate for this type and style of mineralisation.</li> </ul>
<b>Quality of assay data and laboratory tests</b>	<ul style="list-style-type: none"> <li><i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></li> <li><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></li> </ul>	<ul style="list-style-type: none"> <li>Fire Assay is an industry standard analysis technique for determining the total gold content of a sample. The 40g charge is mixed with a lead based flux. The charge/flux mixture is 'fired' at 1100oC for 50mins fusing the sample. The gold is extracted from the fused sample using Nitric (HNO3) and Hydrochloric (HCl) acids. The acid solution is then subjected to Atomic Absorption Spectrometry (AAS) to determine gold content. The detection level for the Fire Assay/AAS technique is 0.01ppm.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li><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></li> </ul>	<ul style="list-style-type: none"> <li>Laboratory QA/QC controls during the analysis process include duplicates for reproducibility, blank samples for contamination and standards for bias.</li> </ul>
<b>Verification of sampling and assaying</b>	<ul style="list-style-type: none"> <li><i>The verification of significant intersections by either independent or alternative company personnel.</i></li> <li><i>The use of twinned holes.</i></li> <li><i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></li> <li><i>Discuss any adjustment to assay data.</i></li> </ul>	<ul style="list-style-type: none"> <li>All drilling and significant intersections have been assessed by Mine Geology staff at the Anglo Saxon Gold Mine.</li> <li>No pre-determined twin holes were drilled during this program.</li> <li>Geological logging was captured digitally for each hole.</li> <li>No adjustments or calibrations were made to any assay data reported.</li> <li>Initial assays of &gt;0.4 g/t Au are requested for duplicate assay.</li> </ul>
<b>Location of data points</b>	<ul style="list-style-type: none"> <li><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></li> <li><i>Specification of the grid system used.</i></li> <li><i>Quality and adequacy of topographic control.</i></li> </ul>	<ul style="list-style-type: none"> <li>The grid is GDA 94 Zone 51</li> <li>Drillhole collar locations are surveyed before and after by a qualified surveyor using sophisticated DGPS with a nominal accuracy of +/- 0.05m for north, east and RL (elevation)</li> <li>Down-hole surveying was completed using a Li Hue north seeking gyroscope at the end of the program</li> </ul>
<b>Data spacing and distribution</b>	<ul style="list-style-type: none"> <li><i>Data spacing for reporting of Exploration Results.</i></li> <li><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></li> <li><i>Whether sample compositing has been applied.</i></li> </ul>	<ul style="list-style-type: none"> <li>Drillholes were located on 20-40m spaced traverses at 10m centres between and along strike from previous drillholes.</li> <li>Drilling was designed to update the Mineral Resource in this area and test the continuity of gold mineralisation.</li> <li>The drill spacing is considered sufficient for the style of mineralisation.</li> <li>No sample compositing has been applied to mineralised intervals.</li> </ul>
<b>Orientation of data in relation to geological structure</b>	<ul style="list-style-type: none"> <li><i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i></li> <li><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></li> </ul>	<ul style="list-style-type: none"> <li>Drilling was perpendicular to the strike of the main mineralised structure targeted for this program. All reported intervals are however reported as downhole intervals and not true-width.</li> <li>No drilling orientation and/or sampling bias have been recognized in the data at this time.</li> </ul>
<b>Sample security</b>	<ul style="list-style-type: none"> <li><i>The measures taken to ensure sample security.</i></li> </ul>	<ul style="list-style-type: none"> <li>During sampling of all drill holes, a staff member was always present. Samples were delivered to the laboratory in batches by staff.</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li><i>The results of any audits or reviews of sampling techniques and data.</i></li> </ul>	<ul style="list-style-type: none"> <li>No audits or reviews have been conducted on sampling techniques and data at this stage.</li> </ul>

## Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
<b>Mineral tenement and land tenure status</b>	<ul style="list-style-type: none"> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul>	<ul style="list-style-type: none"> <li>The mineral tenements M31/79 and M31/284 with a PoW and Mining Approval in place. The tenement is in a 70:30 contributory JV with Gel Resources.</li> <li>The tenements are in good standing.</li> </ul>
<b>Exploration done by other parties</b>	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>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 drill holes have been surveyed in the current coordinate system and located correctly.</li> <li>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.</li> <li>Gutnick Resources NL drilled 23,566 m RC and 912.7 m DD.</li> </ul>
<b>Geology</b>	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul style="list-style-type: none"> <li>Mineralization occurs in a broad shear bound alteration zone that dips west from 55 to 70 degrees and ranges from 20 to 100 m in width. The mineralisation 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 is related to thin quartz veins which vary in thickness from 2 mm to 80 cm but occur in sub parallel groups. The geology was confirmed during the mining operation between December 2017 to December 2019. Many veins can be followed for 50 to 80 metres with more prominent veins being followed for up to 120m.</li> <li>Open pit mining of the deposit has taken place and vein orientation maps were produced.</li> </ul>
<b>Drill hole Information</b>	<ul style="list-style-type: none"> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: <ul style="list-style-type: none"> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Drill hole information for the drilling discussed in this report is listed in Appendix 1 in the context of this report.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li>○ hole length.</li> <li>• If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</li> </ul>	
<b>Data aggregation methods</b>	<ul style="list-style-type: none"> <li>• In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>• Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> <li>• The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul style="list-style-type: none"> <li>• There has been no aggregation, compositing or top capping applied.</li> </ul>
<b>Relationship between mineralisation widths and intercept lengths</b>	<ul style="list-style-type: none"> <li>• These relationships are particularly important in the reporting of Exploration Results.</li> <li>• If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>• If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</li> </ul>	<ul style="list-style-type: none"> <li>• The majority of the holes were drilled perpendicular to the ore body and are believed to be representative of the true thickness if mineralisation.</li> </ul>
<b>Diagrams</b>	<ul style="list-style-type: none"> <li>• Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</li> </ul>	<ul style="list-style-type: none"> <li>• Appropriate plans and sections have been included in the body of this report.</li> </ul>
<b>Balanced reporting</b>	<ul style="list-style-type: none"> <li>• Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</li> </ul>	<ul style="list-style-type: none"> <li>• No misleading results have been reported in this program.</li> </ul>
<b>Other substantive exploration data</b>	<ul style="list-style-type: none"> <li>• Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</li> </ul>	<ul style="list-style-type: none"> <li>• Drill holes have all been surveyed using a Li Hue north seeking gyroscope at 5m intervals by Kalgoorlie based ABIM Solutions.</li> </ul>
<b>Further work</b>	<ul style="list-style-type: none"> <li>• The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> </ul>	<ul style="list-style-type: none"> <li>• A single programme of three surface diamond drill holes stepping out 200 metres from the last section of known mineralisation has been planned.</li> </ul>



Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li><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></li> </ul>	

### 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
<b>Database integrity</b>	<ul style="list-style-type: none"> <li><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></li> <li><i>Data validation procedures used.</i></li> </ul>	<ul style="list-style-type: none"> <li>Database inputs were logged electronically at the drill site. The collar metrics, assay, lithology and down-hole survey interval tables were checked and validated by BMGS staff.</li> <li>The database was checked for duplicate values, from and to depth errors and EOH collar depths.</li> <li>A 3D review of collars and hole surveys was completed in Surpac to ensure that there were no errors in placement of dip and azimuths of drill holes.</li> </ul>
<b>Site visits</b>	<ul style="list-style-type: none"> <li><i>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</i></li> <li><i>If no site visits have been undertaken indicate why this is the case.</i></li> </ul>	<ul style="list-style-type: none"> <li>No sites visits were undertaken by the Competent Person; however, the project was organised and overseen by BMGS staff who adequately described the geological processes used for the collection of geological and assay data.</li> </ul>
<b>Geological interpretation</b>	<ul style="list-style-type: none"> <li><i>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</i></li> <li><i>Nature of the data used and of any assumptions made.</i></li> <li><i>The effect, if any, of alternative interpretations on Mineral Resource estimation.</i></li> <li><i>The use of geology in guiding and controlling Mineral Resource estimation.</i></li> <li><i>The factors affecting continuity both of grade and geology.</i></li> </ul>	<ul style="list-style-type: none"> <li>Mineralisation is defined by a westerly dipping shear zone that contains numerous parallel lodes that dip to the east between 40-80°.</li> <li>There appears to be a sharp boundary on the eastern edge of the mineralised shear zone, but the western edge appears to be less defined.</li> <li>Confidence in the geological interpretation is high based on measurement from diamond drilling, observations made in the open pit and infill drilling aligning well with previous interpretations.</li> <li>The geological interpretation was created using a downhole width of 1 meter for lode widths based on the assumption that veins at Anglo Saxon are 0.2 -0.6 meters wide and accounting for minimum underground mining widths. Much thicker zones of mineralisation are often present in RC drilling (2-3 meters compared to the 20cm veins seen in diamond holes) most likely caused by the thin high grade veins being smeared across consecutive 1m samples and also separate veins occurring close enough for it to appear that there is consistent wide areas of mineralisation. Previous interpretations often incorporated these wide areas of mineralization resulting in inflated</li> </ul>



Criteria	JORC Code explanation	Commentary
		<p>lode sizes. To account for this the current interpretation used surrounding diamond holes and vein logging in RC holes to target the interval that the vein is most likely to sit. Any surrounding mineralisation that was reasonably thought to be part of the lode that was smeared across samples was flagged in a second round of interpretation to be included in the compositing process.</p> <ul style="list-style-type: none"> <li>• A lower mineralisation cut-off of 0.5 g./t was used.</li> <li>• Wireframes have been created for weathering surfaces including base of complete oxidation and top of fresh rock and mineralised domains.</li> <li>• RC, DD and AC drilling data has been used to inform the wireframes.</li> </ul>
<b>Dimensions</b>	<ul style="list-style-type: none"> <li>• <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></li> </ul>	<ul style="list-style-type: none"> <li>• The Anglo Saxon deposit has a strike length of 1.2 km and the stacked narrow veins are hosted in a shear zone which is nominally 150 meters wide, with a strike of 330°. The deposit is currently open at depth with the current mineralisation continuing to 310 vertical metres below surface.</li> </ul>
<b>Estimation and modelling techniques</b>	<ul style="list-style-type: none"> <li>• <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></li> <li>• <i>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</i></li> <li>• <i>The assumptions made regarding recovery of by-products.</i></li> <li>• <i>Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).</i></li> <li>• <i>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</i></li> <li>• <i>Any assumptions behind modelling of selective mining units.</i></li> <li>• <i>Any assumptions about correlation between variables.</i></li> <li>• <i>Description of how the geological interpretation was used to control the resource estimates.</i></li> <li>• <i>Discussion of basis for using or not using grade cutting or capping.</i></li> <li>• <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></li> </ul>	<ul style="list-style-type: none"> <li>• Composites were created at a length of 1 meter using assays that were flagged in the two-stage interpretation. Where samples were flagged over 2 meters as a part of a 1-meter lode due to smearing, the gold grades were added together and divided by the width of the lode, which in most cases was 1 meter. This ensured the metal content stayed the same for the interval, but the relative grade increased due to the tightening of the lode width.</li> <li>• Estimations were performed using Ordinary Kriging (OK). Hard boundaries were used for all estimation. In order to prevent over-estimation and smearing of high-grade samples, top capping was applied to some domains.</li> <li>• A top cap of 45 g/t was applied to the dataset. Selection of a top cap value was based on statistical analysis of the individual domains and the whole dataset.</li> <li>• During the estimation, ellipsoidal searches orientated along the approximate strike and dip of the mineralisation were used. The X axis was orientated along strike, the Y axis across strike in the plane of mineralisation, and the Z axis perpendicular to the plane of mineralisation.</li> <li>• The block model extents have been extended to allow for a minimum of 50m in all directions past the extent of known mineralisation.</li> <li>• The block model was rotated to strike towards 330° to better represent the orientation of mineralisation.</li> </ul>

Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> <li>The block model was built with 10m North 5m East and 5m elevation parent block cells with sub blocks of 1.25m North 0.625m East and 0.625m elevation.</li> <li>No estimation has been completed for other minerals or deleterious elements.</li> <li>The model has been checked by comparing composite data with block model grades in swath plots (north/East/elevation) on each estimated domain. The block model visually and statistically reflects the input data.</li> </ul>
<b>Moisture</b>	<ul style="list-style-type: none"> <li>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</li> </ul>	<ul style="list-style-type: none"> <li>Tonnages have been estimated on a dry basis.</li> </ul>
<b>Cut-off parameters</b>	<ul style="list-style-type: none"> <li>The basis of the adopted cut-off grade(s) or quality parameters applied.</li> </ul>	<ul style="list-style-type: none"> <li>The Mineral Resource has been quoted using a lower cut-off grade of 3 g/t.</li> <li>This lower cut grade is in line with the assumption of extraction of material using underground mining methodology.</li> <li>A variety of other cut-off grades were also presented to highlight the viability of a potential underground resource and financial analysis</li> </ul>
<b>Mining factors or assumptions</b>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>The Mineral Resource has been reported based on utilising underground airleg mining methods.</li> </ul>
<b>Metallurgical factors or assumptions</b>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Previous toll treatment for the Anglo Saxon open pit mine through third party processing plants indicated no issues with metallurgical recoveries as there is no material change below the open pit. However, it is the intent of HAW to undertake further metallurgical test work on the diamond core drilled in Stages 1 and 2.</li> </ul>
<b>Environmental factors or assumptions</b>	<ul style="list-style-type: none"> <li>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</li> </ul>	<ul style="list-style-type: none"> <li>It is considered that there are no significant environmental factors, which would prevent the eventual extraction of gold from the Anglo Saxon underground project as evidenced by the Anglo Saxon open pit operation.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<p><i>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></p>	
<b>Bulk density</b>	<ul style="list-style-type: none"> <li>• <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></li> <li>• <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></li> <li>• <i>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Densities were taken from the 2013 AMC resource report as no new density information has been collected. The densities were applied based on the weathering profile.</li> </ul>
<b>Classification</b>	<ul style="list-style-type: none"> <li>• <i>The basis for the classification of the Mineral Resources into varying confidence categories.</i></li> <li>• <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></li> <li>• <i>Whether the result appropriately reflects the Competent Person's view of the deposit.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The Mineral Resource is classified as an Indicated and Inferred Resource under the JORC 2012 code. This classification is considered appropriate given the confidence that can be gained from the existing data density, results from drilling and geological observations made during the open pit mining phase.</li> <li>• Areas classified as Indicated were based on having a drill spacing of at least 10m by 20m and the lode intersecting a diamond hole or recent RC hole sampled at 0.5m to lend veracity to the method used for interpretation and calculation of grades used in this resource.</li> <li>• Areas supported by drill spacings of less than 20m by 50m have been classified as Inferred.</li> <li>• Data integrity has been analysed and a high level of confidence has been placed on the dataset and resultant resource estimation.</li> <li>• The Mineral Resource classification and results appropriately reflect the Competent Person's view of the deposits and the current level of risk associated with the project to date</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>• <i>The results of any audits or reviews of Mineral Resource estimates.</i></li> </ul>	<ul style="list-style-type: none"> <li>• No audits have been completed on this Mineral Resource estimate.</li> </ul>
<b>Discussion of relative accuracy/ confidence</b>	<ul style="list-style-type: none"> <li>• <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</i></li> </ul>	<ul style="list-style-type: none"> <li>• There is good confidence in the data quality, drilling methods and analytical results. The available geology and assay data correlate well, and the geological continuity has been demonstrated.</li> <li>• Additional drilling of the Anglo Saxon deposit will improve the geological and grade understanding of the deposit.</li> </ul>

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