Hawthorn RESOURCES
ABN 44 009 157 439

Company Announcement

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30 October 2013

Anglo Saxon – Indicated Mineral Resource Upgrade

Hawthorn Resources Limited (ASX : HAW) is pleased to announce to shareholders an updated Indicated and Inferred Mineral Resource estimate for the ***Anglo Saxon*** deposit, located in the Eastern Goldfields of Western Australia.

This Mineral Resource estimate furthers our objective of progressing the ***Anglo Saxon*** deposit toward project development.

- ***Indicated Mineral Resource – 599,000t at 3.3 g/t gold for 63,700 oz***
- ***Inferred Mineral Resource – 1,687,000t at 4.1 g/t gold for 221,800 oz***

The Indicated Mineral Resource is located within the oxide and transition (weathered) horizons of the deposit and is:

- ***near surface, in soft host rocks, and***
- ***is of good gold grade for this style of deposit***

The Inferred Mineral Resource mostly underlies the Indicated Mineral Resource at depth and is composed of mostly fresh rock examples of the gold mineralisation at Anglo Saxon.

Anglo Saxon is the main prospect within the contributory Trouser Legs Joint Venture between Hawthorn Resources (70%) and Gel Resources (30%).

Updated Resource Calculation

Exploration by Hawthorn in the Anglo Saxon area recommenced in late 2012 with numerous strong gold results obtained from reverse circulation (RC) drilling within and outside the existing 2011 Indicated and Inferred Mineral Resource area.

A second round of RC drilling during June 2013 and diamond core (DC) drilling in August and September 2013 has further confirmed the initial results and aided in refining the geological interpretation and increased the confidence in the gold mineralisation.

The Mineral Resource estimation has been undertaken by AMC Consultants Pty Ltd (AMC) and reported in accordance with the JORC Code[1]. See the table below. Further details regarding the estimation are provided in the JORC Code Table 1 document attached.

[1] Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore, 2012 Edition, sets out minimum standards, recommendations and guidelines for public reporting in Australasia of Exploration Results, Mineral Resources and Ore Reserves. Prepared by the Joint Ore Reserves Committee of The Australian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and the Minerals Council of Australia.

Anglo Saxon Mineral Resource as at 30 October 2013

Classification	Material	COG Au (g/t)	Tonnage (t)	Au (g/t)	Au (oz)
Indicated	Oxide	0.5	233,000	3.0	22,500
Indicated	Transition	0.5	366,000	3.5	41,200
Total Indicated			***599,000***	***3.3***	***63,700***
Inferred	Oxide	0.5	9000	5.8	1,700
Inferred	Transition	0.5	13,000	1.4	600
Inferred	Primary	0.5	1,665,000	4.1	219,500
Total Inferred			***1,687000***	***4.1***	***221,800***
Total Indicated and Inferred			***2,286,000***	***3.9***	***285,500***

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/top cap of 25 g/t gold has been used in oxide, 35 g/t gold in the transition and 43 g/t gold in the primary*
6. *The base of the Indicated Mineral Resource is 280m RL, approximately 100 m below surface*

The Indicated Mineral Resource, located within the oxide and transition horizons, near surface and of good gold grade enhances the potential of the Anglo Saxon deposit to be economically mined.

Potential exists to expand the project, along strike and at depth. Conversion of the Inferred Mineral Resource to an Indicated Mineral Resource will be a key driving factor in further exploration and development of the project.

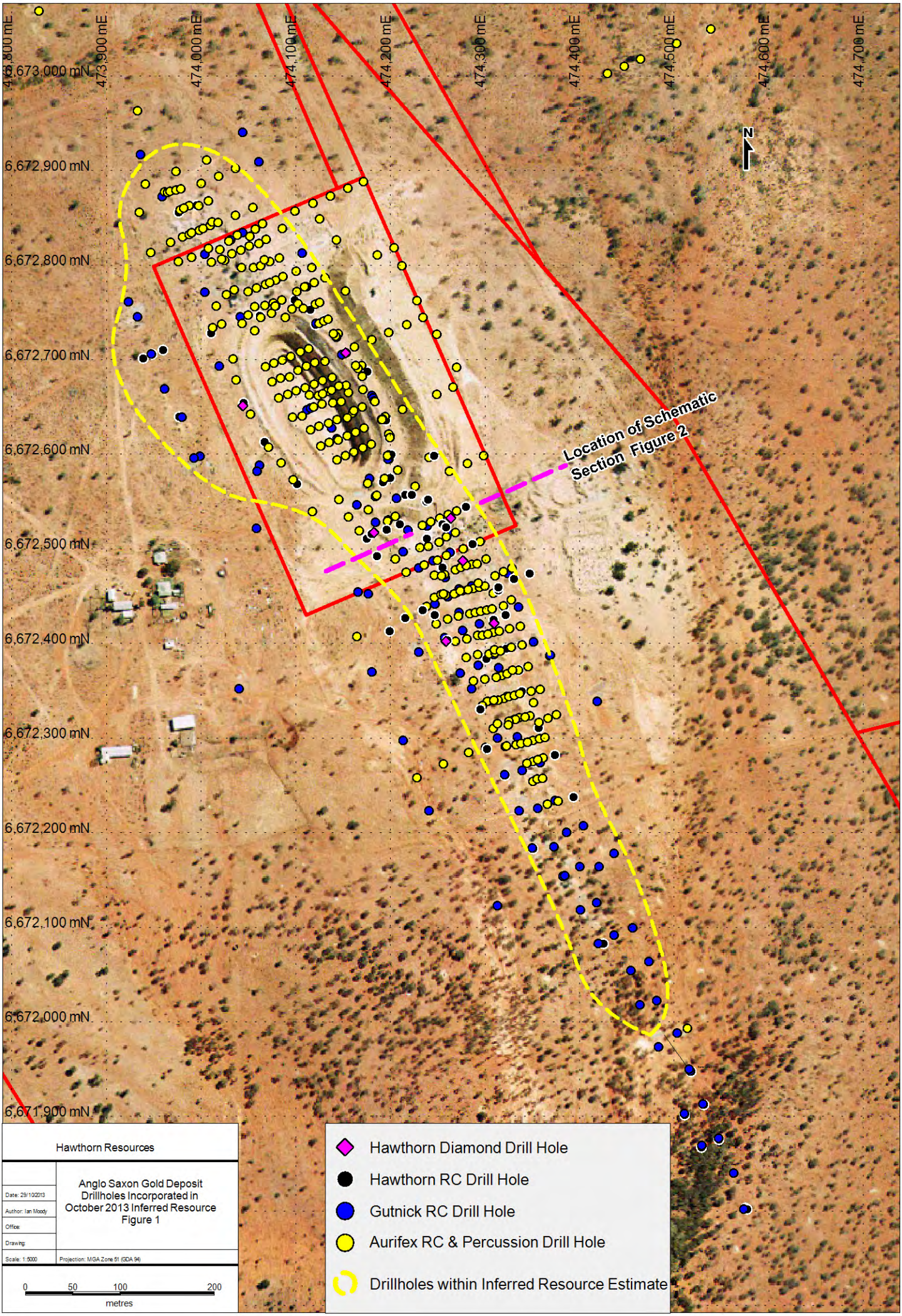
Mining optimization and other studies have commenced on the Indicated Mineral Resource that, if positive, will lead Hawthorn to further develop a mining plan.

Hawthorn will continue to keep shareholders informed of its progress towards production that, if economically and technically viable, is scheduled to commence in early 2014.

For further information please contact
Mourice Garbutt Company Secretary 03 9605 5917

The information in this report that relates to Mineral Resources 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 estimation is based on information compiled by Ms T Burrows, a Competent Person who is a Member and Registered Professional Geologist of The Australasian Institute of Geoscientists. Ms Burrows is employed by AMC Consultants Pty Ltd. Ms Burrows has been engaged as an external independent consultant by Hawthorn Resource Limited. Ms Burrows 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'. Ms T Burrows consents to the inclusion in the report of the matters based on her information in the form and context in which it appears.


473,800 mE
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6,672,400 mN
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6,672,200 mN
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Location of Schematic Section Figure 2
Hawthorn Resources
Anglo Saxon Gold Deposit
Drillholes Incorporated in
October 2013 Inferred Resource
Figure 1
Date: 29/10/2013
Author: Ian Moody
Office:
Drawing:
Scale: 1:5000
Projection: MGA Zone 51 (GDA 94)
0
50
100
200
metres
Hawthorn Diamond Drill Hole
Hawthorn RC Drill Hole
Gutnick RC Drill Hole
Aurifex RC & Percussion Drill Hole
Drillholes within Inferred Resource Estimate

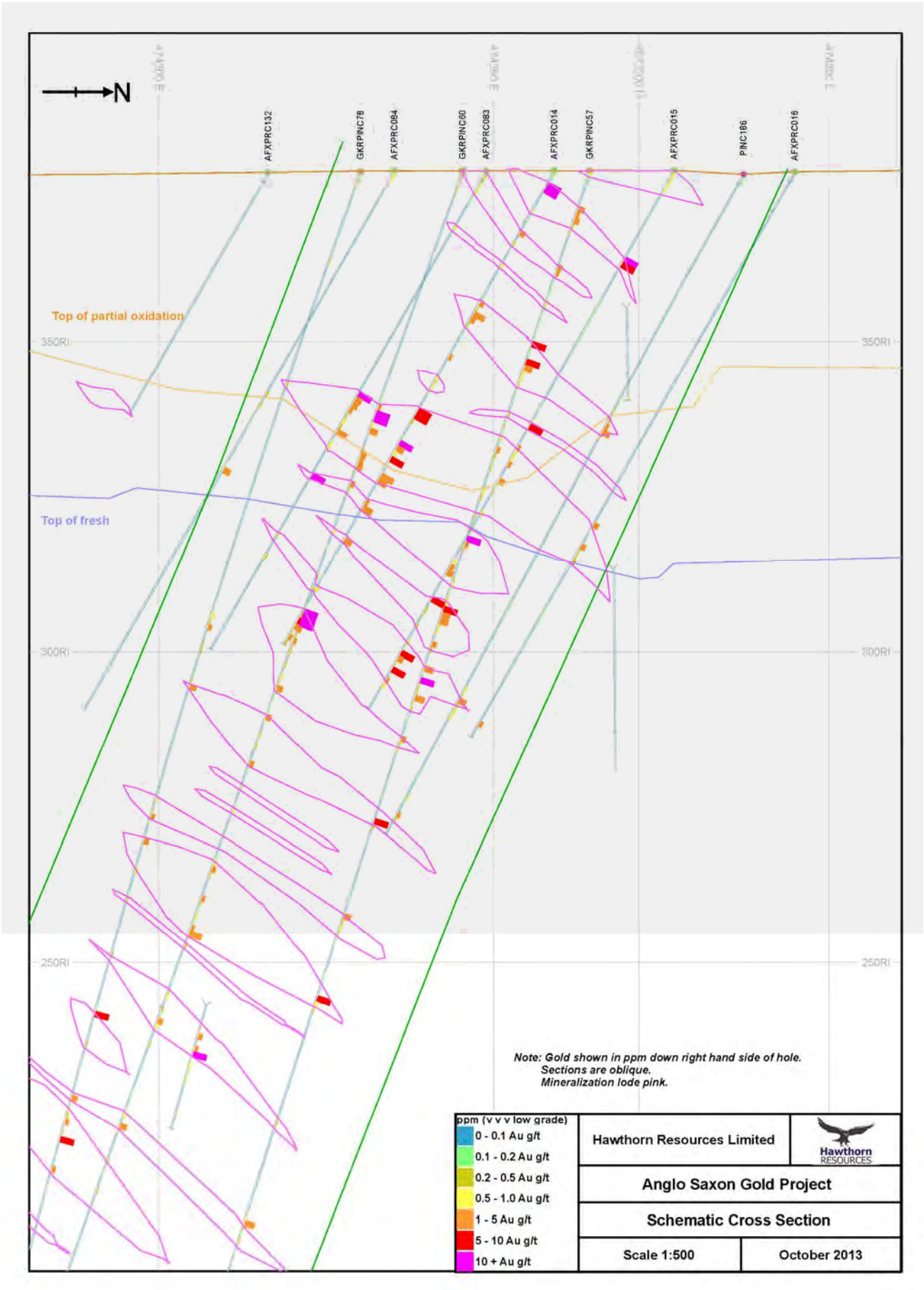

Figure 2. Schematic Cross Section - Mineralised Lodes – Anglo Saxon Deposit October 2013

THE 2012 AUSTRALASIAN CODE FOR REPORTING EXPLORATION RESULTS, MINERAL RESOURCES AND ORE RESERVES (THE JORC CODE)

Table 1 Checklist of Assessment and Reporting Criteria

Table 1 is a checklist or reference for use by those preparing Public Reports on Exploration Results, Mineral Resources and Ore Reserves.

In the context of complying with the Principles of the Code, comment on the relevant sections of Table 1 should be provided on an 'if not, why not' basis within the Competent Person's documentation and must be provided where required according to the specific requirements of Clauses 19, 27 and 35 for significant projects in the Public Report. This is to ensure that it is clear to the investor whether items have been considered and deemed of low consequence or have yet to be addressed or resolved.

As always, relevance and Materiality are overriding principles that determine what information should be publicly reported and the Competent Person must provide sufficient comment on all matters that might materially affect a reader's understanding or interpretation of the results or estimates being reported. This is particularly important where inadequate or uncertain data affect the reliability of, or confidence in, a statement of Exploration Results or an estimate of Mineral Resources or Ore Reserves.

The order and grouping of criteria in Table 1 reflects the normal systematic approach to exploration and evaluation. Criteria in Section 1 'Sampling Techniques and Data' apply to all succeeding sections. In the remainder of the table, criteria listed in preceding sections would often also apply and should be considered when estimating and reporting.

It is the responsibility of the Competent Person to consider all the criteria listed below and any additional criteria that should apply to the study of a particular project or operation. The relative importance of the criteria will vary with the particular project and the legal and economic conditions pertaining at the time of determination.

In some cases it will be appropriate for a Public Report to exclude some commercially sensitive information. A decision to exclude commercially sensitive information would be a decision for the company issuing the Public Report, and such a decision should be made in accordance with any relevant corporations regulations in that jurisdiction. For example. in Australia decisions to exclude commercially sensitive information need to be made in accordance with the Corporations Act 2001 and the ASX listing rules and guidance notes.

In cases where commercially sensitive information is excluded from a Public Report, the report should provide summary information (for example the methodology used to determine economic assumptions where the numerical value of those assumptions are commercially sensitive) and context for the purpose of informing investors or potential investors and their advisers.

JORC Code, 2012 Edition – Table 1 report template

Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report.* • *In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.*	• 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	• *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).*	• 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	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	• For drilling from 2011 onwards assessment of RC recovery is by visual means. DH drilling recovery is logged. Recovery is good there is no relationship between recovery and mineralisation grade in DH. The grade distribution of the DH and the RC is the same for both drilling methods port 2011. • For holes pre 2011 no recovery data has been located.
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.*	• Chip and core samples have been geologically logged for all relevant geological and some structural data. Logging is onto paper and data is manually transcribed. The aim is update to digital logging as soon as possible.

Criteria	JORC Code explanation	Commentary
	• *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• 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 deposit. • Half core has been submitted for analysis for DH holes pre 2011. DH holes post 2011 has not been assayed at this time as the samples will be used for metallurgical test work. The intersections of interest do in some instances contained gold, visible under a hand lens.
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* • *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	• Samples are assay by Fire Assay , 30 g charge. • 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.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• 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 have not been assayed at this time. • Laboratory data is supplied electronically to site. • Geological logging is entered by non-technical staff and reviewed by geologists for correctness. • Project data is currently stored at the head office of the company data

Criteria	JORC Code explanation	Commentary
		backup protocols are under review and are planned to be improved.
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• 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. There is a proposed surface survey to be undertaken before the end of 2013
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* • *Whether sample compositing has been applied.*	• 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. • Samples were not composited for the purpose of assaying.
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	• 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 by these holes and by select vertical and sub-vertical drilling. It is understood, at this time, that there is no significant mineralisation associated with these structures and no significant structural offsets. • It is understood that there is no bias introduced by the drilling direction.
Sample security	• *The measures taken to ensure sample security.*	• 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.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• To the competent person for the mineral resource estimations knowledge there have been no audits or reviews of sampling

Criteria	JORC Code explanation	Commentary
		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	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	• The mineral tenements M31/79 and M31/284 are under a joint venture agreement, with Hawthorn Resource Limited having a 70% ownership. There are no known issues and the tenements are in good standing.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• 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 correctly. • 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 • Gutnick Resources NL drilled 23,566 m RC and 912.7 m DD.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• 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 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 with more prominent veins being followed for 70 to 80m.
Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:* o *easting and northing of the drill hole collar* o *elevation or RL (Reduced Level – elevation above sea level in*	• All drillholes have previously been reported at the time of their drilling.

Criteria	JORC Code explanation	Commentary
	metres) of the drill hole collar o *dip and azimuth of the hole* o *down hole length and interception depth* o *hole length.* • *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*	
Data aggregation methods	• *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.* • *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.*	• There has been no aggregation, compositing, or top-cutting applied.
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	• The majority of holes was drilled perpendicular to dip, and are believed to be representative of the true thickness of mineralization.
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	• Refer to Figures 1 and 2
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	• Not applicable
Other substantive exploration data	• *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	• A total of 237 bulk density samples where submitted for analysis from the 2013 DH drilling programme. The samples where waxed where required and the Archimedes method was used. The bulk density calculation and results provided by the laboratory were reviewed.

Criteria	JORC Code explanation	Commentary
Further work	• *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• Further exploration is proposed to test along strike at depth in primary material.

Section 3 Estimation and Reporting of Mineral Resources

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

Criteria	JORC Code explanation	Commentary
Database integrity	• *Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.* • *Data validation procedures used.*	• Logging is undertaken onto paper logs and the data is then transcribed into digital spreadsheets. Data is reviewed and amended as required. In the future it is planned that digital data capture will be used. • Data was validated by checking: o All collar co-ordinates were within the tenement area. o Overlapping FROM and TO values in the geology, assay, density and geotechnical tables. o Downhole survey dip and bearing angles appear reasonable. o Duplicate records or duplicate drillholes. o If there were any anomalous assay values.
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits have been undertaken indicate why this is the case.*	• Mr Moody regularly visits the site and directs work in his role as Exploration Manager.
Geological interpretation	• *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.* • *Nature of the data used and of any assumptions made.* • *The effect, if any, of alternative interpretations on Mineral Resource estimation.* • *The use of geology in guiding and controlling Mineral Resource estimation.* • *The factors affecting continuity both of grade and geology.*	• 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 however this is believed not to be material to the overall tonnage, grade and contained metal of the deposit. • All available geological data including RD, DH, PC drilling, channel

Criteria	JORC Code explanation	Commentary
		samples and existing pit mapping has been used in the interpretation. • It is understood that there are no known factors which would affect the geological continuity and grade.
Dimensions	• *The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	• The zone of mineralization extends 800 m along strike, 30 to 55 m across strike and 170 m vertically.
Estimation and modelling techniques	• *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.* • *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.* • *The assumptions made regarding recovery of by-products.* • *Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).* • *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.* • *Any assumptions behind modelling of selective mining units.* • *Any assumptions about correlation between variables.* • *Description of how the geological interpretation was used to control the resource estimates.* • *Discussion of basis for using or not using grade cutting or capping.* • *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.*	• There are no by-products. • At this time there has been no estimation for deleterious elements as the data collection is ongoing. • 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. • Datamine software was used for the estimation. • Block model cell sizes of 5 mE x 20 mN x 2 mZ where used with subcells in the vertical direction to 0.5 m. • Gold top caps of 25 g/t for oxide, 35 g/t for transition and 43 g/t for fresh was used. These values were taken from the probability curve at the 95th percentile. • Drillholes were flagged with the individual lode number. Reasonable semi-variograms could not be established • The block model was flagged with a lode number and oxidation state. • The block model was flagged as greater than 0.5 g/t gold using inverse distance squared estimation method (ID2). The search was in the average direction of mineralisation which is dipping 40 degrees at 335 degrees. Where the flagged value exceeded 0.5 g/t an indicator was established for blocks above and below 0.5 g/t gold. • A second estimation was undertaken for estimating the gold grade. Where the cells where flagged as above 0.5 g/t estimation using ID2 and only samples greater than 0.5 g/t was run. Where the cells where flagged as below 0.5 g/t estimation using ID2 and only samples less than 0.5 g/t was run. • Each lode had its own average strike and dip for the ID2 estimation. • The search range used encompassed one to two drilled section in each direction. • Only samples from within each lode where used to estimate that lode. • Model validation included visual validation of the grade, the volume of the model and solids were compared and swath plots where produced.

Criteria	JORC Code explanation	Commentary
		• The model was depleted for previous mining.
Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	• Tonnage has been calculation on a dry bulk density. No allowance for moisture has been made.
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	• The geological interpretation is continuous from approximately 0.2 g/t gold. 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.
Mining factors or assumptions	• *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.*	• Small scale open pit mining is proposed. At this time mining is anticipated to be free dig without a requirement for blasting, hence lower mining and treatment costs. It is anticipated there will not be a requirement for major capital expenditure hence lower start-up costs.
Metallurgical factors or assumptions	• *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.*	• Previous studies have indicated that the gold mineralization can be recovered in a conventional CIP plant with recoveries in excess of 90%. • Further work is ongoing to confirm that there are no deleterious properties.
Environmen-tal factors or assumptions	• *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.*	• Work is ongoing to confirm that there will be no impact from acid rock drainage (ARD) from waste material. • It is understood that tailings placement will be the responsibility of a third party and the material will not be stored on site.
Bulk density	• *Whether assumed or determined. If assumed, the basis for the*	• A total of 237 bulk density samples where submitted for analysis. The

Criteria	JORC Code explanation	Commentary
	assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples. • *The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.* • *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	samples where 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 mineral resource estimation. • Bulk density measurements where 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 between oxidation and waste.
Classification	• *The basis for the classification of the Mineral Resources into varying confidence categories.* • *Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).* • *Whether the result appropriately reflects the Competent Person's view of the deposit.*	• A Mineral Resource classification of Indicated is based on geological and grade continuity, close spaced drilling, mineralization exposed from past mining, successful processing test work and a deep weathering profile providing free dig • No Measured Mineral Resources were classified due to possible variability in the location of the pre 2011 drillholes, uncertainty with respect the dip of some lodes, work being required at a higher level of detail for mining to take place. • The Mineral Resource classification of Inferred is based on more broadly spaced drill data thus less certainty around the continuity of mineralization and oxidation at depth. Gold grades at depth are higher but might not be high enough to justify greater production cost with the dip of the orebody creating a significant potential strip ratio at depth.
Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	• There have been not audits or reviews at this time.
Discussion of relative accuracy/ confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.* • *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* • *These statements of relative accuracy and confidence of the estimate should be compared with production data, where*	• Historic production data records exist as a single table of information. It is not clear what mineralization was defined as ore and as waste. As such it is not possible to reconcile past production to the current block model. • The estimation is a global estimation and detailed grade control will be required to mine successfully. This is due to mineralisation: o Not being able to be defined visually. o Being narrow in nature. o Reasonable variability in gold grade. o Increased data spacing along the margins. • At this time the Indicated Mineral resource only is being considered for technical economic evaluation.

Criteria	JORC Code explanation	Commentary
	available.	