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PENNY'S FIND GOLD MINE
NEW UNDERGROUND RESOURCE ESTIMATE

Highlights:

- **New underground resource estimate for Empire's Penny's Find open-pit gold mine near Kalgoorlie, WA**
- **Comprises 248,000 tonnes @ 7.04g/t Au for 56,000oz**
- **Final feasibility study for underground mining due end of March 2018**
- **Mineralisation remains open at depth**

An inventory of 56,000 ounces of gold at robust grades has been announced by gold miner Empire Resources Ltd ('Empire', ASX code: ERL) under a new 2012 JORC compliant underground resource estimation for the Company's Penny's Find gold mine, 50 kilometres northeast of Kalgoorlie in Western Australia.

The new underground reportable mineral resource of **248,000 tonnes @ 7.04g/t Au** (Table 1) extends from the planned base of the current open pit operation (max. 85m depth) to at least 250m below surface and remains open at depth (Figure 1).

This underground resource only reports fresh mineralisation and is defined by a 1.5g/t Au lower cut-off wireframe model. It also reflects only those parts of the mine's total resource which have the potential to be economically viable for extraction by underground mining methods

Table 1 : Penny's Find Gold Mine
Reportable in situ Mineral Resource below ultimate pit design
Fresh mineralisation only

Class	Tonnes	Au g/t	Ounces
Indicated	**147,000**	**8.06**	**38,000**
Inferred	**101,000**	**5.57**	**18,000**
TOTAL	**248,000**	**7.04**	**56,000**

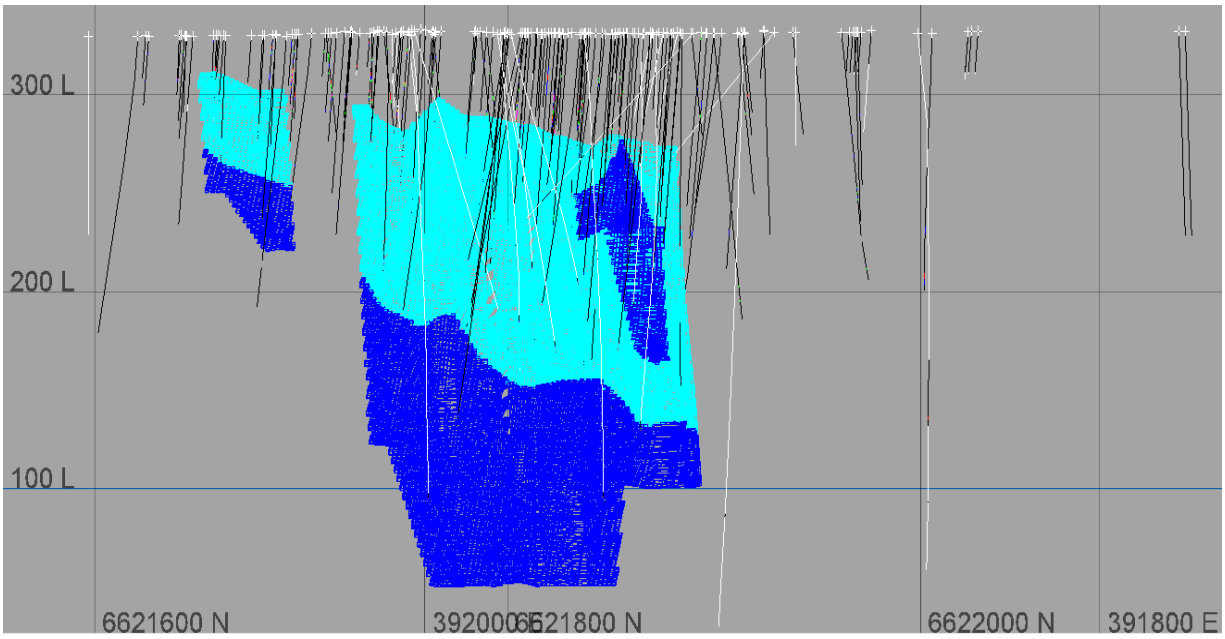

Figure 1: Long Section (looking west) shows all blocks by classification.
Light Blue – Indicated, Blue – Inferred

The new resource estimation was calculated by DataGeo Geological Consultants ('DataGeo') and incorporates results from recent diamond drilling reported to the ASX on 6 November 2017. The data, interpretation and techniques utilised in the estimate of the mineral resource are summarised in Appendix 1.

JORC 2012 tables pertinent to the resource estimation are shown in Appendix 2.

The Penny's Find Joint Venture partners expect the current final underground feasibility study to be completed by end of first quarter, calendar 2018.

Empire's Managing Director, Mr David Sargeant said:

"It is particularly pleasing to see a robust resource in terms of tonnes and grade existing beneath the currently operating open pit. As the resource remains open at depth, further deeper drilling will be required from underground, assuming the final feasibility is positive".

About Penny's Find

Empire Resources Ltd holds 60% equity in the Penny's Find gold deposit with Brimstone Resources Ltd holding the remaining 40% equity in the project.

High grade gold mineralization at Penny's Find is hosted by quartz veins at the contact between sediments and basalt.

Metallurgical test work has shown fresh mineralization to be free milling with a high gravity recoverable gold component and a total gold recovery of >96%.

The Penny's Find gold mine and deposit is situated on granted Mining Lease 27/156.

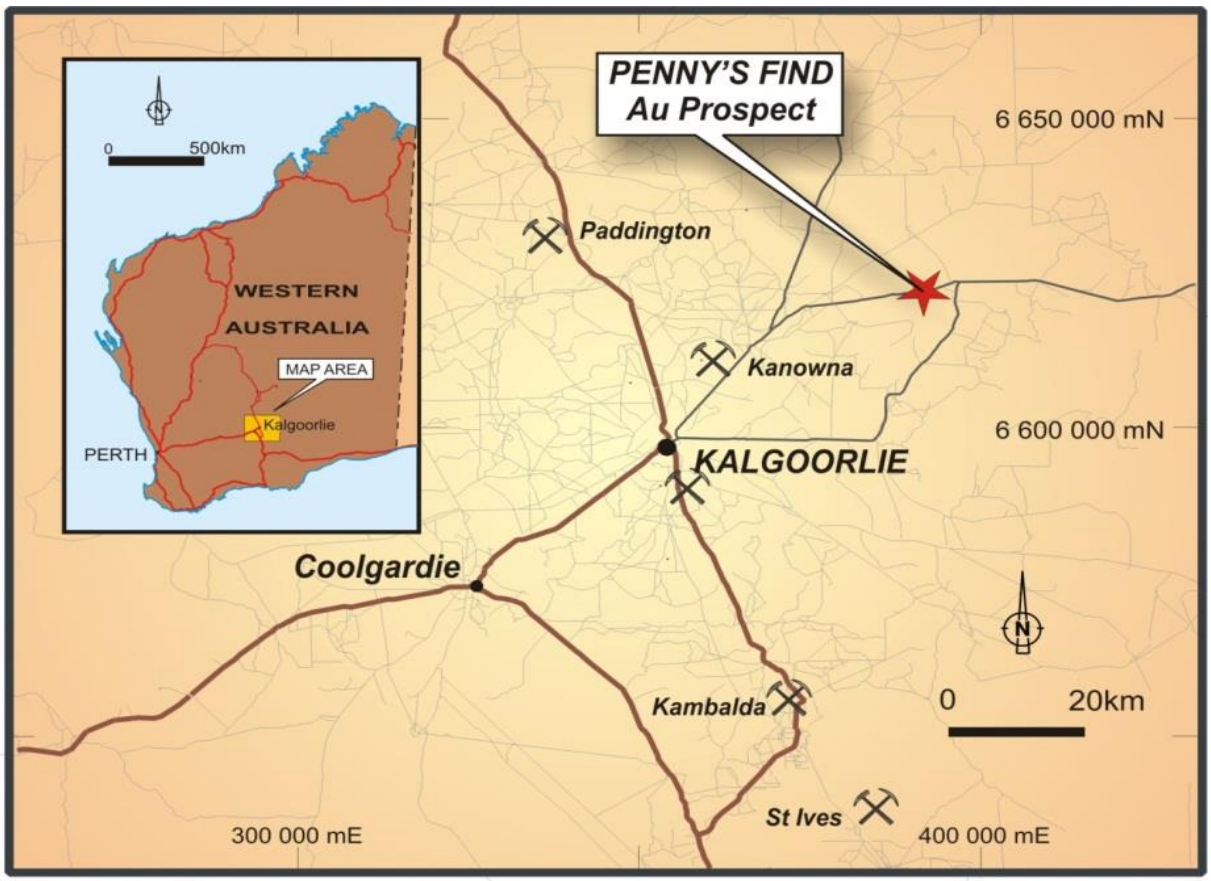

Figure 2 – Location Penny's Find deposit

DAVID SARGEANT
MANAGING DIRECTOR

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Competent Person - Mineral Resource Estimate

The information is this release concerning the Mineral Resources for the Penny's Find Deposit have been estimated by Mr Peter Ball B.Sc who is a director of DataGeo Geological Consultants and is a member of the Australasian Institute of Mining and Metallurgy (AusIMM). Mr Ball has sufficient experience which is relevant to the style of mineralization and type of deposit under consideration and qualifies 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 Ball consents to the inclusion in this public release of the matters based on his information in the form and context in which it appears.

APPENDIX 1 - Summary of Penny's Find Resource Reporting Criteria

The data and interpretation utilised and the resultant mineral resource estimate for the Penny's Find Deposit is summarised as follows: -

- Geology and Mineralisation Interpretation
    - The deposit consists of a moderate to steeply north-easterly dipping north-west to south-east striking (relative to a GDA grid) sheared quartz/carbonate zone which is anomalous in gold. Within the shear in the fresh rock are zones of similarly orientated higher-grade with the largest zone occurring over a strike length of 180m, and extending for 220m down dip with a true width averaging 2.2m. These were interpreted on 20m spaced sections along strike. The Deposit remains open at depth although appears to be thinning.
    - The mineralised zones are defined using a nominal 1.5g/t Au boundary without a minimum length. These zones are wireframed as solids.
    - The weathering profile is positioned by the drill log information and represented by wireframed surfaces, including base of soil cover.
    - The main lithological units are interpreted on section and wireframed as solids
- Drill Information and Sampling
    - The deposit has been drilled from surface using RAB, reverse circulation (RC) and diamond coring. Only RC and diamond drilling from 2007 onwards has been used in this estimate. A total of 54 RC and diamond holes containing 7,642m intersect the mineralisation.
    - The diamond core recovery is generally very good, averaging more than 95%. The RC sample recovery for the 2007 and 2012 drilling is erratic being described as good (thought to be >75% recovery) in dry conditions which is most of the time and within the mineralised zone to poor (thought to be < 25%) in wet conditions. For the 2015 drilling it averaged 84%. The recovery for the mineralised zone within the hole drilled in 2016 was in excess of 95%.
    - All hole collars were surveyed by DGPS and the orientation and inclination at collar is set out using compass and clinometer. Down hole survey for the 2007 series holes was by down hole camera measuring dip only except for the last holes of the program where dip and azimuth were measured. The 2012 program was down hole surveyed by camera with dip only recorded. Diamond tails were surveyed by gyroscopic methods. For the 2015 drilling collars were positioned by tape and compass (from existing holes) or by handheld GPS. The inclined hole was orientated using compass, sighter pegs and clinometer. For the 2016 and 2017 holes the collars were pickup up by the site surveyor using a DGPS and the down hole orientation was measured with a Reflex Ezi-shot tool.
    - The drilling and sample collection techniques for RC was that chips were collected at 1m intervals via the cyclone into sample bags with on most occasions a rotary or cone splitter used to collect a smaller sample at the same time. Samples for dispatch were either composites (individual samples speared and 4 consecutive samples were combined) or individual (the 1m rotary or cone split samples were sent initially if the material returned was obviously mineralised). If the 4m composites returned an assay above a threshold then the large samples were re-speared or the rotary splitter sample was taken and submitted individually. The RC chips are logged for mineral content and geology. For the diamond holes the core is stored in core boxes labelled with the hole number and length contained. The core is transported to the core storage area where it is logged geologically and intervals for analysis are marked up by the site geologist. The intervals selected for analysis had the core ½ed at site or at a laboratory facility in Kalgoorlie (2017 program) and then sent for preparation and analysis. In the 2012, 2015 and 2017 drilling programs Standards and Blanks were included with the samples dispatched for analysis.

- Sample Preparation and Analysis
    - Drill samples have been prepared and analysed at commercial accredited laboratories in Western Australia
    - the preparation is dependent on sample type by drying, crushing, riffling and pulverising.
    - gold content is determined FA techniques with atomic absorption or ICP finish. Some SFA analysis has been carried out.
    - When utilised QAQC protocols included a standard or a blank with between 10 to 14 routine samples (approximately) submitted to the laboratory, this number was dependant on the program being considered. An umpire laboratory was occasionally used as were field duplicates to assist in analytical validation
    - Duplicate sampling for some RC holes was undertaken.
- Estimation Methodology
    - The drill hole information is composited within the mineralisation interpretation to the most common sample length within the dataset – 1m down hole
    - Grade is estimated by ordinary kriging for the largest zone with demonstrated continuity and sufficient composite information from composite data top-cut to the 98%ile. Other zones are estimated by inverse distance to the power of 3 techniques. The estimation is constrained by a hard boundaries representing the extent of the mineralisation. The grade is estimated into a block model with a parent cell size of 2.5mE x 20mN x 2.5mRL.
    - Specific gravity is assigned to the block model by weathering profile position and, in the fresh zone, by reference to the position of the shear zone. A background value is assigned by rock type.
- Validation and Classification
    - The block grade estimates are validated against the composites both globally (for all zones) and spatially for the largest zone
    - The block estimates are classified according to geological confidence, length of search, number of composites, number of holes and quality of the input data.
- Reporting
    - No reporting cut-off has been applied to this resource which by its design targets underground extraction and used a mineralisation boundary of 1.5g/t to define the mineralisation. Material to be reported will be below the planned depth of the open cut mine.
- Mining and metallurgy
    - Metallurgical test work has been conducted on a representative fresh “ore” sample (taken from RC drilling) with the results indicating very high gravity recovery and an overall gold recovery of 99% using typical gravity separation and cyanide leaching techniques.
    - Scoping studies on the 2015 mineral resource estimates indicated that underground mining beneath the currently operating open cut may be economic. The indicated that an undiluted grade of 5.2g/t Au (diluted 4.9g/t) could be achieved. The pit is designed (at this time) to an RL of 245m a depth of 85m below the surface.

APPENDIX 2 JORC Code 2012 - Table 1

Section 1: Sampling Techniques and Data		
Criteria	**Explanation**	**Comments**
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.*	Overall the deposit has been drilled and sampled by diamond coring, reverse circulation and rotary air blast methods with holes on variable spacings over a 500m strike length, the closest being a 20mE x 10m N grid. The mineralisation being assessed for underground mining potential occurs in 3 zones the largest striking over 180m and extending down dip for approximately 220m in fresh rock. These zones are defined for grade estimation purposes by 44 RC and 10 diamond holes totalling 7,642m. The holes are drilled mostly to the west to intersect the relatively steeply east dipping north-south orientated mineralisation.
	• *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.*	The RC samples are collected from the cyclone of the rig with some split to smaller samples using a rotary or cone splitter attached to the cyclone or spear sampled from the large sample. Sample representivity was governed by sample recovery which can be erratic in wet conditions. Diamond core was collected into core trays with acceptable recovery.
	• *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.*	The diamond core was HQ sized near surface and NQ sized in the mineralised zones. Core was halved and 1/2 sent for sample preparation by crushing, pulverising and splitting to produce between a 30gm to 50gm charge size dependent on the Laboratory. RC drilling collected samples at 1m intervals down hole. These 1m samples were either composited to 4m intervals by spear sampling or submitted as 1m samples each of approximately 2.5 to 4Kg. These samples were dried, crushed and pulverised and either a 30gm, 40gm or 50gm sub-sample (dependent on laboratory) selected for FA assay.

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 drilling is mostly NQ sized through the mineralised zone with the holes totalling 2,145m including any pre-collar. The core from the recent holes were orientated. The RC holes were all 135mm diameter and drilled with a face sampling bit, the total number of holes is 54 and total metres is 5,497.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.*	The core recovery recorded is length recovered per run, the recovery is in excess of 95%. The RC sample recovery is either recorded descriptively as good, medium or poor (testing by weighing samples determined that good recovery was in excess of 75% and poor recovery was usually less than 25% which occurred mostly in wet ground) and in later programs recorded by visual estimates of %recovery which was usually in excess of 90% .
	• *Measures taken to maximise sample recovery and ensure representative nature of the samples.*	For RC drilling the collar was sealed and air pressure was used to maximise return. The cyclone was cleaned between rod changes.
	• *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.*	No assessment has been made of grade v RC sample recovery but based on the descriptive assessment the majority of mineralisation was returned dry and thus usually with good recovery. The competency of the core demonstrates that there should be minimal potential for sampling bias.

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.*	Core and chips have been geologically logged recording lithology, mineralisation, veining, alteration, weathering and some geotechnical features (core only) like RQD. The geological logging is appropriate to the style of the Deposit.
	• *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography*	Geological logging is both in summary (comments) and detailed by interval for the information listed above.
	• *The total length and percentage of the relevant intersections logged.*	The entire length of all diamond and RC holes, apart from surface casing, has been logged.
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.*	All core to be sampled was 1/2ed using a mechanical saw. It is not known if the core was consistently taken from one side of the stick.
	• *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.*	RC samples are collected from the cyclone into a plastic sample bag. In addition a smaller sample is split using a rotary or cone splitter attached to the cyclone. The cyclone was cleaned with air and any loose material scrapped off between rod changes. Sub-samples of the larger samples are taken with a spear.
	• *For all sample types, the nature, quality and appropriateness of the sample preparation technique.*	All samples (approx. 2.5 to 4Kg for the RC samples and 1/2 NQ core up to 1m long) are provided to a commercial accredited laboratory facility for the preparation of samples using industry standard practises of drying, crushing and pulverising to allow sub-sampling by riffle or rotary splitter to a 30 to 50gm charge size.

	• *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.*	Empire did not include Standards or Blanks for the 2007 drill program with their routine samples submitted to the Laboratory but used an Umpire Laboratory and SFA v FA comparisons to provide control on quality. Brimstone included Standards and Blanks at rates of approximately 1 QAQC sample to 12 Routine samples or better. Whilst there was some evidence of bias of the lower grade Standard (1.3g/t) the majority of these results can be considered acceptable. Empire included Standards and Blanks in their 2015 and 2017 drilling campaign at a similar rate to Brimstone with results generally acceptable from small numbers. Empire used duplicate sampling as QAQC for the RC hole drilled in 2016 again with acceptable results.
	• *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.*	Duplicate RC sampling was conducted in 2007 and 2016 and the results were supportive of the original results. No 1/2nd half core duplicate assay results have been observed.
	• *Whether sample sizes are appropriate to the grain size of the material being sampled.*	Whilst there is coarse gold in the system the outlier grades returned are not excessive and as such the sampling appears to be representative and thus the global grade is being fairly represented.
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.*	The assay techniques applied for the measurement of gold content is appropriate for the determination of the level of gold in the sample. Comparison between SFA and FA methods are reasonable this indicating that the analytical methods adopted report total gold content.

	• *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.*	None applied
	• *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.*	Standards and Blanks were included at approximately 1 in 12, 1 in 10 and 1 in 14 of the number of samples submitted for the 2012, 2015 and 2017 holes. The results whilst showing that the lower grade Standards had a potential high grade bias (2012 program only - Lab not used in latter programs) were generally acceptable. Umpire laboratory checking provided support for the original results.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.*	Mineralisation intercepts have been determined by previous and current company personnel and appear correct
	• *The use of twinned holes.*	No specific twinning program has been conducted.
	• *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols*	Primary data was recorded directly onto electronic spread sheets and validated against expected codes. Assay information in electronic form from the laboratories was merged with sample interval data on sample number
	• *Discuss any adjustment to assay data.*	None applied

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.*	The collar positions were surveyed by contractors after the completion of the 2012 drilling using an RTKGPS on the GDA 94 Zone 51 Datum and the AHD. This survey included some of the 2007 drill collars which confirmed the location of these holes. A surface survey in 2015 according to the GDA Grid picked up the 2015 collars and confirmed the location of previous holes. The 2016 and 2017 collars were surveyed by the site surveyor. The orientation and dip at the start of the hole was recorded for all holes. Down hole information was recorded by single shot camera that measured dip only for most RC holes with the exception of later part of the 2007 RC program where azimuth was also measured. The diamond tails were measured for dip and azimuth using a gyroscopic inclinometer. The 2015 drill hole collars were DGPS surveyed post drilling but no down orientation was undertaken due to the holes relatively short length and/or vertical orientation. The down hole orientations of the 2016/2017 holes were measured with a Reflex Ezi-shot tool. The 2017 core was orientated.
	• *Specification of the grid system used.*	The regional grid is GDA94 Zone 51 and the Deposit is drilled and modelled on this grid
	• *Quality and adequacy of topographic control.*	Topographic control is taken from the 2015 site survey.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.*	Drill spacing varies with position in the deposit from 10mN x 20mE to in excess of 50m.

	• *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.*	Successive drilling programs have in filled and extended (at depth) the previous drilling and on the majority of occasions drilling has returned mineralisation in the expected locations. This provides a high degree of confidence in the geological continuity.
	• *Whether sample compositing has been applied.*	The sampling reflects the geological conditions. For mineral resource estimation a 1m composite length was chosen given that this is the dominant sample length.
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.*	The drilling is oriented as best as possible perpendicular to the structure/geology containing or controlling the mineralisation.
	• *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.*	No sampling bias is considered to have been introduced.
Sample security	• *The measures taken to ensure sample security.*	The chain of custody adopted by operators of the project appears appropriate and is based on responsibility and documentation.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	A brief audit of assay records revealed no data errors.

Section 2 : Reporting of Exploration Results		
Criteria	**Explanation**	**Comments**
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.*	Empire Resources Ltd holds a 60% interest in the Penny's Find gold project with the remaining 40% interest held by unlisted Brimstone Resources Ltd. Empire acts as manager for the project.
	• *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	Mining lease and necessary approvals to operate an open cut mine are in place; the mining lease is held in the names of Brimstone Resources and Empire Resources
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	Whilst numerous companies have explored and drilled the Deposit only the information collected by Empire and Brimstone since 2007 has been used in this estimate.
Geology	• *Deposit type, geological setting and style of mineralisation.*	The Penny's Find Deposit overall consists of gold in a sheared quartz host which is moderately to steeply north-east dipping. In the fresh rock the shear is expressed as quartz veins which are adjacent to the mafics on most occasions, the largest zone of these veins varies between 0.3m and 8m in true width over a strike of 180m along strike and is drill defined over 220m down dip.
Drill hole	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes : easting and northing of the drill hole collar*	The drill hole details are in Appendix 1 and 2 of the report
Information	• *easting and northing of the drill hole collar*	
	• *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar*	
	• *dip and azimuth of the hole*	

	• *down hole length and interception depth*	
	• *hole length.*	
	• *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly 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.*	Mineralised intercepts are reported down hole by length weighting of the individual sample intervals if appropriate. No top-cuts are applied
	• *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.*	All intercepts aggregation is to the full down hole length of the hole within the mineralisation envelopes which has a nominal Au boundary grade of 1.5g/t.
	• *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	Equivalents not utilised
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.*	The true width is approximately 2/3rd of the down lengths 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').*	

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.*	Sections at 20m spacing have been generated for the mineralisation interpretation. The report contains plans and long sections of the drill data.
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.*	All intercepts within the mineralisation are included within the report
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.*	Metallurgical test work has shown that the samples tested had excellent overall gold recovery (99%) with both high gravity recoverable gold and rapid leach times. Open pit mining has been and is being conducted successfully to date on the first 60m from surface of the deposit but no reconciliation with model or mill has been provided to ascertain performance. Minor groundwater seepage only is seen in the pit.
Further work	• *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).*	At this time the mineral resource generated from this data will be reviewed for mining potential. Once this is done future work (if any) can be determined.
	• *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	These mineralised zones are open down dip

Section 3 : Estimation and Reporting of Mineral Resources		
Criteria	**Explanation**	**Comments**
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.*	An Access database file has been created by site to store drill information, it contains the information which was in the previous excel spreadsheets. Data from logging, sample submission and the assay laboratory is combined in many spreadsheets. Previously (2015) key holes utilised in the mineral resource assessment had their sample submission and assay laboratory data re-entered and compared to the data within the supplied spreadsheet and no errors were found. Assay data from the 2016/17 programs was reviewed and found to reflect the laboratory data. There has been no exhaustive review just sufficient to give confidence that the data to be utilised is accurate with respect to the supporting information.
	• *Data validation procedures used.*	Data is validated when combined from the various sources described above. The "audits" described above provided sufficient confidence in the data contents to state that it most likely accurately represents the drill information.
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.*	DataGeo visited the site on March 26th 2014 and was able to establish that the drill holes were correctly positioned, the old workings and position of the shear was appropriate; the topography was generally flat with fall to the east and a rise existed at the southern central end of the area. Also RC chips, chip trays and diamond core was reviewed to establish the support for the mineralisation. No site visit to inspect the recent drilling programs was felt necessary

	• *If no site visits have been undertaken indicate why this is the case.*	Not applicable
Geological interpretation	• *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.*	The confidence in the geological interpretation is considered good as it is supported by surface mapping and corroboration of the surface positions with the close spaced drilling. The Penny's Find Shear is a major outcropping feature and the quartz associated gold mineralisation within the deeper fresh material adjacent to the mafics contact (as modelled) appears consistent based on the drilling.
	• *Nature of the data used and of any assumptions made.*	Only physical data obtained in the field was utilised.
	• *The effect, if any, of alternative interpretations on Mineral Resource estimation.*	The application of hard boundaries to reflect the position of the zones which host the mineralisation is supported by the field and drilling observations. This interpretation is thought to be appropriate to the style of mineralisation being modelled (i.e. high-grade adjacent to the mafics).
	• *The use of geology in guiding and controlling Mineral Resource estimation.*	The overall position of the shear provides the geological control, this combined with presence of gold in quartz adjacent to the mafics is used to constrain the interpretation.
	• *The factors affecting continuity both of grade and geology.*	The higher-grade gold zones modelled occur sub-parallel to Shear and adjacent the mafics. The position and style of mineralisation impacts the grade continuity.
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 main mineralisation within the Deposit occurs over a 450m strike length and extends some 250m down dip and varies between 2 and 10m in width. The largest zone modelled in this exercise within the fresh rock strikes over 180m, is drill defined down dip for 220m and averages 2.2m in true width. The deposit remains open at

		depth although thinning.
Estimation	• *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 largest high-grade zone contained in excess of 200 composites and provided a reasonable continuity model which supported the use of ordinary kriging. The composites were top-cut to the 98%ile to guard against outlier influence. Zones with fewer composites (insufficient data to perform a continuity assessment) had grade estimated using inverse distance to the power of 3 to reflect the relatively high nugget within the Deposit. Grade estimation was carried out in Vulcan™ application. Density was assigned based on, for fresh rock, representative measurements made from what core was available. 1m composites were created within each zone and input to the grade estimation was restricted to those composites which were within the zone being assessed. Estimated blocks were informed in a three step strategy with orientation set to the orientation of the zone being estimated. The initial (primary) search was 30m x 20m x 2m in strike, dip and across dip-strike plane with a NW plunge. This search range was expanded by double the length for blocks which were not informed in the primary search and again in the final search strategy. This strategy informed on average 64% of the blocks within the zones to be estimated in the primary and secondary search.

and modelling techniques	• *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.*	There is no mining history. The previous model was significantly larger in tonnes with lower grade above cut-off due to the modelling of the entire higher grade part of the shear zone. Check estimates for the largest zone using the same parameters in a strike orientated model provided a similar result.
	• *The assumptions made regarding recovery of by-products.*	No assumptions made.
	• *Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).*	No assessment of deleterious elements has been made.
	• *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.*	The block model was constructed using blocks which were 2.5mE x 20mN x 2.5mRL with sub-celling to 0.5mE x 5mN x 0.5mRL the block size in each direction adopted to ensure accurate volume representation of the various surface and zones. The model was constructed orthogonal to the grid, i.e. not with strike set to the strike of the deposit. Grade estimation was to the parent block size.
	• *Any assumptions behind modelling of selective mining units.*	None undertaken
Estimation	• *Any assumptions about correlation between variables.*	No assessment undertaken
and modelling techniques (continued)	• *Description of how the geological interpretation was used to control the resource estimates.*	Hard boundaries were applied to the Zones. Grade was estimated within these boundaries.

	• *Discussion of basis for using or not using grade cutting or capping.*	Statistical analysis indicated that because the interpretation was dealing with mostly only the high-grade component of the deposit an almost normal grade distribution occurred. Minor number of more extreme outliers were cut to the 98%ile.
	• *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.*	Volume validation was carried out by comparison of the solids representing the mineralisation to the block model. Grade validation was carried by both global comparison of the average estimated grade to the average input grade and spatially by comparison of the estimated grades to the input grades by position for the largest zone. Also visual comparison was used.
Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	The tonnages were estimated using specific gravity determined by weight in air measurements for fresh rock. This data was then assigned to the appropriate positions in the block model by rock type. Indicative values were assigned to the weathered profile.
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	The margin of the zones of mineralisation is a combination of lithology and grade. Given the model targeted higher grade anomalous gold is considered to be the 1.5g/t and above. For mineral resource reporting no cut-off is applied as the in situ has the potential to support underground mining based on studies to date.

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.*	In 2016 underground mining studies determined that an undiluted head grade of 5.2g/t Au could provide positive economics using a decline from the open pit.
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.*	Metallurgical test work to determine gold recovery (by gravity and cyanide leaching) indicates that the recovery would be in excess of 95%, possibly as high as 99% as the gold is free milling with a high gravity component.

Environmental factors or assumptions	• *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.*	The Deposit is located on a granted mining license. Whilst DataGeo is unaware of the details of environmental and land use studies they must be positive given open cut mining is in progress.
Bulk density	• *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.*	Density has been assumed based on a limited number of core sample measurements using weight in the air and weight in water technique. The results were applied to the appropriate locations in the model. Assumptions were made as the density of the material in the weathered profile.
	• *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.*	The rocks do not display significant porosity thus the technique adopted is appropriate.

	• *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	The material is generally fairly uniform as evidenced by the consistency in what specific gravity information is available.
Classification	• *The basis for the classification of the Mineral Resources into varying confidence categories.*	The classification is based on the quality and amount of input data; the spatial arrangement of the drill data and its supported position; the grade continuity for the largest zone and confidence in the geological interpretation which is supported by field observation and drilling. Whilst QAQC information is lacking for the 2007 drilling comprehensive programs for the 2012, 2015 and 2017 drilling combined with duplicate sampling from the 2016 hole was mostly supportive. Higher confidence areas have more supporting data, areas of lower geological support reflect a lower classification.
	• *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).*	The input data particularly the more recent is consistent and closely spaced enough to support the projection of the geological interpretation at depth which in terms of style of mineralisation is consistent with other deposits within the same or similar geological setting. Later drilling programs have successfully in filled earlier programs in mineralised locations predicted by the initial programs - this is particularly the case with all drilling post 2014. The estimated grade correlates reasonably well with the input data given the nature of the mineralisation.
	• *Whether the result appropriately reflects the Competent Person's view of the deposit.*	The Mineral Resource estimate reflects the Competent Persons understanding of the Deposit.

Audits or reviews.	• *The results of any audits or reviews of Mineral Resource estimates.*	None undertaken
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 mineral resource is volume constrained by the geological interpretation thus in a global sense there is no sensitivity. Given only the high-grade with quartz is being assessed in a zone adjacent to the mafics and that the grade statistics are near normal it is anticipated that in a global sense the result is representative for an exploration model. The confidence in the mineral resource is defined by the classification adopted as per the guidelines of the 2012 JORC code.
	• *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.*	The statement relates to global estimates of tonnes and grade.
	• *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	No production information either from the old workings or the current open cut is available.