ACN 129 954 365 | ASX: KBL, KBLGA | Level 3, 2 Elizabeth Plaza, Nth Sydney NSW 2060. PO Box 98, Nth Sydney 2059 | www.kblmining.com.au

ASX RELEASE **16 June 2016**

Pearse North Mineral Resource Update and Maiden Ore Reserve

- Maiden Open Cut Ore Reserve estimated for the Pearse North deposit
  - **179kt at 2.5g/t gold and 21g/t silver** (*at a cut-off of 1g/t Au for Oxide & 1.5g/t for Transitional and Fresh*)[1]
- New Mineral Resource Estimate for the Pearse North deposit **298kt at 2.7g/t gold and 26g/t silver** *(at a cut-off of 1g/t Au for Oxide & 1.5g/t for Transitional and Fresh)*. The Mineral Resource is inclusive of the Ore Reserve and consists of Measured, Indicated and Inferred Resource categories

KBL Mining Limited (ASX: "KBL" or "the Company") is pleased to announce a new Mineral Resource and maiden open cut Ore Reserve for the Pearse North deposit following the successful completion of infill and extensional drilling. This represents an important milestone in the development pathway of the project with the approvals process having commenced in March 2016.

Pearse North

The Pearse North deposit, approximately 200 metres northwest of the operating Pearse open cut gold mine (which had a pre-mining reserve of 235 thousand tonnes at 6.9g/t gold and 71.7g/t silver[2]), is a shear-hosted epithermal gold–silver deposit of the same style as Pearse. At the Pearse deposits, gold is associated with a fine-grained pyrite–arsenopyrite–stibnite assemblage hosted in altered siliceous volcaniclastic rocks within a zone marked by a strong shear fabric.

The progression of the approvals process is expected to coincide with an increased exploration effort across the broader Pearse corridor initially focussing on shallow RAB drilling and geochemical sampling in an area of poor outcrop, between and to the east and south of the Pearse deposits.

Mineral Resource Estimate

An updated Mineral Resource estimate incorporating new drill results and additional geological data was completed during May in support of the reported Ore Reserve estimation and mine planning. This resource comprises **298kt at 2.7g/t gold and 26g/t silver** *(at a cut-off of 1g/t Au for Oxide & 1.5g/t for Transitional and Fresh)*[3] and is inclusive of the maiden Ore Reserve estimate of **179kt at 2.5g/t gold and 21g/t *silver*** *(at a cut-off of 1g/t Au for Oxide & 1.5g/t for Transitional and Fresh)*.

[1] The Pearse North Mineral Reserve estimate of 179kt at 2.5g/t gold and 21g/t silver (at a cut-off of 1g/t Au for Oxide & 1.5g/t for Transitional and Fresh) is inclusive of Proven and Probable Reserve categories. Please refer to Table 2 for a complete summary of reserve classification.

[2] The Pearse Mineral Reserve estimate of 235kt at 6.9g/t Au & 71.7g/t Ag is inclusive of Proven and Probable Reserve categories and has not yet been depleted for mining activities. Production records indicate that approximately 161kt at 6.4g/t gold and 52g/t silver was mined up to April 30 2016.

[3] The updated Mineral Resource Estimate for the Pearse North deposit of 293kt at 2.8g/t gold and 26g/t silver (at a cut-off of 1g/t Au for Oxide & 1.5g/t for Transitional and Fresh) is inclusive of Measured, Indicated & Inferred resource categories. Please refer to Table 1 for a complete summary of resource classification.

Table 1. The updated Mineral Resource estimate for the Pearse North deposit (at a cut-off of 1g/t Au for Oxide & 1.5g/t for Transitional and Fresh) detailed by Resource category and oxidation state. Note small rounding errors may have occurred in the compilation of this table.

Classification	Tonnes (thousands)	Density	Grade				Contained Metal	
			Au (g/t)	Ag (g/t)	As ppm	Sb ppm	Au (oz)	Ag (oz)
Measured	65	2.53	2.4	19	2435	383	5,100	39,300
Indicated	206	2.59	2.9	30	2281	462	19,500	196,700
Inferred	27	2.56	2	16	1851	475	1,700	13,600
Total	**298**	**2.57**	**2.7**	**26**	**2276**	**446**	**26,300**	**249,600**

Oxidation	Tonnes (thousands)	Density	Grade				Contained Metal	
			Au (g/t)	Ag (g/t)	As ppm	Sb ppm	Au (oz)	Ag (oz)
Oxide	97	2.45	2.1	12	2082	301	6,500	36,900
Transitional	47	2.57	4.1	30	2375	461	6,100	45,700
Fresh	154	2.65	2.8	34	2368	533	13,600	167,000
Total	**298**	**2.57**	**2.7**	**26**	**2276**	**446**	**26,300**	**249,600**

As expected, the increased drilling density allowed improved definition of high grade gold lenses which contributed to an overall upgrade of the deposit compared to the initial wholly Inferred Mineral Resource estimate released 25 July 2013 comprising 203kt at 2.1g/t Au & 21.1Ag[4].

Ore Reserve Estimate

The maiden Ore Reserve estimate was completed through the assessment of modifying factors on the Measured and Indicated components of the updated Mineral Resource estimate completed in May 2016 and reported in this announcement.

Table 2. The maiden Ore Reserve estimate for the Pearse North deposit (at a cut-off of 1g/t Au for Oxide & 1.5g/t for Transitional and Fresh) detailed by Reserve category and oxidation state. Note small rounding errors may have occurred in the compilation of this table.

Classification	Tonnes (thousands)	Density	Grade				Contained Metal	
			Au (g/t)	Ag (g/t)	As ppm	Sb ppm	Au (oz)	Ag (oz)
Proved	55	2.54	2.3	17	2348	372	4,000	31,100
Probable	124	2.54	2.6	22	2122	402	10,500	87,100
Total	**179**	**2.54**	**2.5**	**21**	**2192**	**393**	**14,500**	**118,200**

Oxidation	Tonnes (thousands)	Density	Grade				Contained Metal	
			Au (g/t)	Ag (g/t)	As ppm	Sb ppm	Au (oz)	Ag (oz)
Oxide	80	2.45	1.9	11	2140	313	4,900	27,800
Transitional	43	2.57	3.5	27	2100	401	4,800	37,400
Fresh	57	2.65	2.6	29	2335	499	4,800	53,000
Total	**179**	**2.54**	**2.5**	**21**	**2192**	**393**	**14,500**	**118,200**

[4] The Pearse North Inferred Mineral Resource estimate of 203kt at 2.1g/t Au & 21.1Ag (at a Cut-off Grade of 1g/t Au Oxide-Transitional & 2g/t Au Fresh) is as released 25 July 2013 under JORC2004.

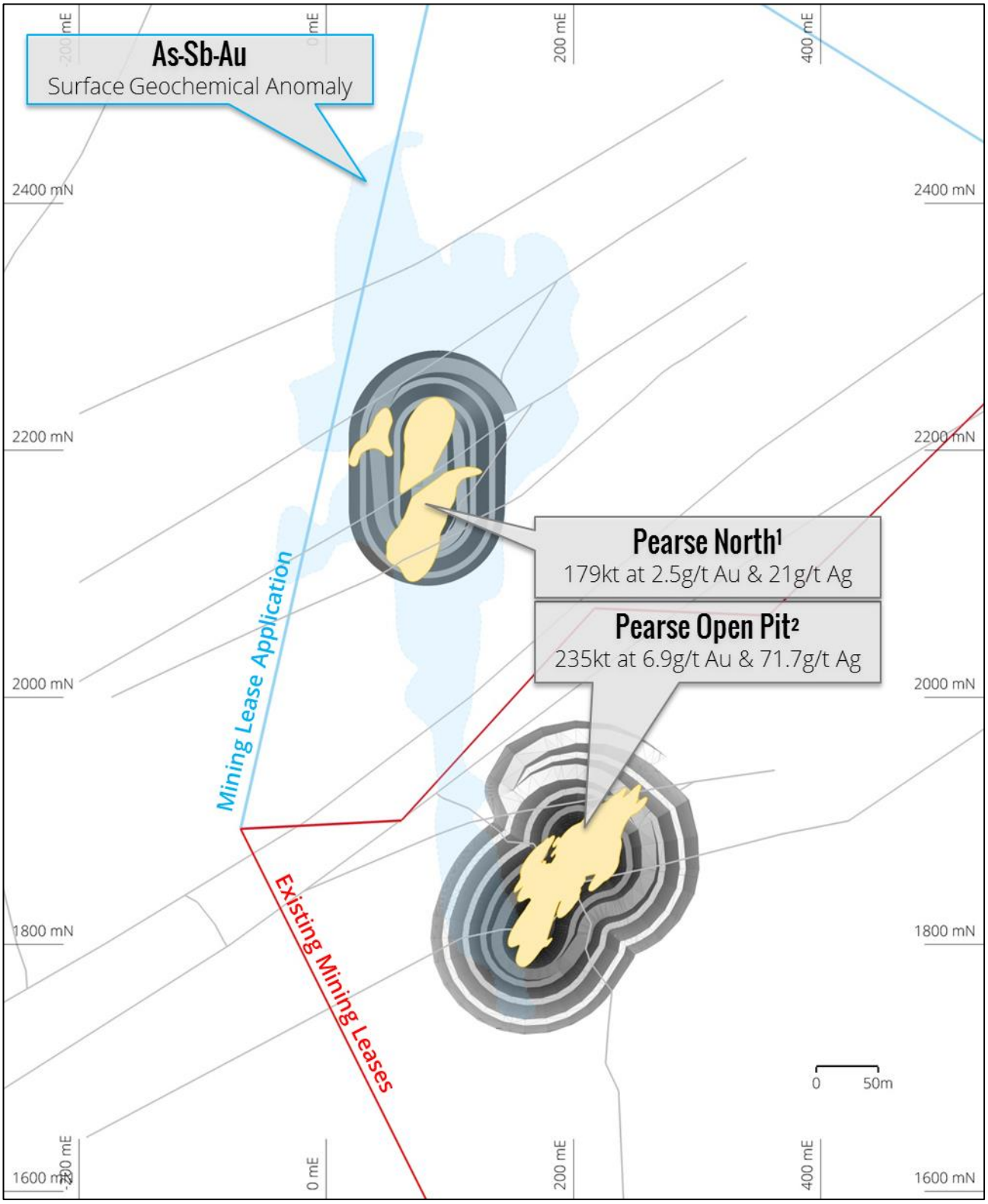

Figure 1. The Pearse-Pearse North corridor illustrating the current Pearse Open Pit relative to the Pearse North proposed open pit as supported by the Ore Reserve Estimate. Note the Mining Lease application over the Pearse North deposit was lodged in March 2016.

Additional Information – Mineral Resource Estimate

Sampling & Sub-Sampling Techniques

- Diamond Drilling
    - Diamond drilling is used to obtain core from which intervals, defined by geological logging, are submitted for base metals analysis using nitric aqua regia digestion and a conventional ICP–AES methodology. A 50g charge is produced for fire assay and AAS analysis for gold
- Reverse Circulation (RC) Drilling
    - RC drilling was used to obtain a representative sample by means of riffle splitting. Historically, four metre composites were submitted for assay with one metre riffle split sub samples analysed where identified as anomalous through the use of a portable XRF or re-analysed in the case of significant assay
    - In the 2016 KBL drilling, a representative riffle-split sub sample of each one metre drilled interval was submitted to the assay laboratory

Drilling Techniques

- The updated Mineral Resource estimate considers a total of sixty six *(66)* drill holes completed by reverse-circulation percussion *(62) (RC)* and diamond core *(4)* drilling techniques *(predominantly standard diameter HQ and NQ, with HQ3 and NQ3 (triple-tube) used during recent surface drilling)*

Sample Analysis Method

- All drilling samples are currently assayed at Australian Laboratory Services (ALS) in Orange, NSW. ALS is a NATA Accredited Laboratory and qualifies for JAS/ANZ ISO 9001:2008 quality systems
- KBL have routinely assayed for copper, lead, zinc, silver, arsenic, antimony, and bismuth using ALS Method ME-ICP41, with pulps returning over 10000ppm for Cu, Pb, Zn or 100ppm for Ag, reanalysed with the ore-grade method ME-OG46. Gold is analysed with the 50g fire-assay–AAS finish method Au-AA26

Mineral Resource Classification

- The resources are initially classified on search criteria including the search pass, number of drill holes sampled, and average distance of samples to block centre
- Refinement of the classification subsequently relies on the judgement of the Competent Person taking into account all relevant information such as drill spacing, quality of drill sample and confidence in orientation and continuity of mineralisation

Mineral Resource Estimation Methodology

- The Pearse North Mineral Resource was estimated by ordinary Kriging utilising geologically based grade domains and oxidation boundaries

Mineral Resource Cut-Off Grade

- The resources are reported at a cut-off of 1 g/t for oxide material and 1.5g/t Au for transitional and fresh material
- These values are based on the mining cut-off grade employed at the nearby Pearse deposit at the time of resource estimation

Material Modifying Factors

- Pearse North is located on Exploration Lease EL1999 and an application for a Mining Lease over the deposit has been submitted (see Market Release "Pearse North Mining Lease Application Lodged – Further Drilling Results Pending", 22 March 2016)
    - The Pearse North resources were estimated on the assumption that the material will be mined by conventional open pit load and haul, drill and blast with a selective mining unit (SMU) of 2.5×2.5×2.5m (E, N, RL respectively)

- The mineralisation at Pearse undergoes conventional crush–grind–froth flotation with CIL finish for total recoveries of approx. 60-65%
- Mining at Mineral Hill has occurred in the past and the infrastructure to deal with environmental impacts from waste-rock storage and tailings is already in place. The cut-off grade was selected with a good understanding of the costs involved regarding the treatment of potentially environmentally harmful by-products

Additional Information – Ore Reserve Estimate

Material Assumptions

- Mineral Hill is an operating mine with the Pearse open cut currently being mined 200m south of Pearse North. Site operating costs and modifying factors for Pearse open cut have been used as the basis for determining the Ore Reserve at Pearse North. Corporate financing has not been included in the assessment. On this basis, the study is considered to be at a Pre-Feasibility Study level

Ore Reserve Classification

- The Proved and Probable Reserves are based on the Measured and Indicated Resources respectively, that are located within the detailed mine design
- No Probable Ore Reserves were derived from Measured Mineral Resources

Mining Method & Assumptions

- As the Mineral Hill Mine is currently in production at the Pearse open pit, any mining factors and or assumptions applied as part of the Ore Reserve estimate are based on actual data collected during operations
- The Pearse North deposit outcrops on the surface and therefore is amenable to conventional drill & blast, load and haul, open pit operations
- Mining dilution of 0.3m at diluting block grade, calculated on 5m mining benches, per bench and assumption of total material recovery have been applied
- A minimum mining width of 20m was used

Processing Method & Assumptions

- The mineralisation at Pearse undergoes conventional crush–grind–froth flotation to CIL finish with the Pearse North Ore Reserve estimate assuming an equivalent processing pathway. Metallurgical test samples are being tested in house
- Recovery is assumed to be:
    - Flotation + CIL
        - Gold 74%
        - Silver 62%
    - CIL only:
        - Gold 75%
        - Silver 2%

Ore Reserve Cut-Off Grade

- The ore reserves are reported at a cut-off of 1 g/t for oxide material and 1.5g/t Au for transitional and fresh material
- These values are based on the mining cut-off grade employed at the nearby Pearse deposit at the time of ore reserve estimation

Material Modifying Factors

- The existing open pit mining infrastructure for Pearse will be available for Pearse North
- Pearse North is located on Exploration Lease EL1999 and an application for a Mining Lease over the deposit has been submitted (see Market Release “Pearse North Mining Lease Application Lodged – Further Drilling Results Pending”, 22 March 2016)

- The completed Pearse open pit is the current destination for the waste to be removed at Pearse North. The Pearse orebody is considered to be closed off at depth and along strike. However, sterilisation drilling as part of a planned regional exploration program around the Pearse pit will ensure no potential resources are compromised by placing the waste as backfill into the pit. While no ARD is expected from Pearse North, it will be contained within the Pearse backfill
- The US dollar to Australian dollar exchange rate of $0.73 in May 2016 was used
- Metal prices and exchange rates during May 2016 were used. US$1,300/oz gold and US$17.00/oz silver

For further information, please contact:

Greg Starr
Managing Director
KBL Mining Limited
Ph: +61 2 9927 2000

About KBL Mining

KBL Mining is an Australian Resource Company listed on the ASX (KBL and KBLGA) with a current focus on producing precious metals. KBL's main assets include the Mineral Hill copper-gold-silver-lead-zinc mine near Condobolin in New South Wales and Sorby Hills lead-silver-zinc project in Western Australia. The Company has been operating the refurbished processing plant at Mineral Hill since October 2011 to produce copper-gold concentrates and in 2015 commenced producing a gold-silver concentrate and bullion. KBL also holds Sorby Hills (KBL holds 75% with Henan Yuguang Gold & Lead Co. Ltd (HYG&L) holding 25%) is a large near surface undeveloped silver-lead deposit close to port infrastructure and a short distance from Asian markets.

More information can be found on KBL's website at www.kblmining.com.au.

Competent Persons Statement

The information in this report that relates to drilling results and Mineral Resources is based on information compiled by Owen Thomas, BSc (Hons), who is a Member of the Australian Institute of Mining and Metallurgy and is a full time employee of the Company. Mr Thomas has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2004 & 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves.' Mr Thomas consents to the inclusion in the announcement of the matters based on his information in the form and context that the information appears.

The information in this report that relates to Ore Reserve Estimation is based on information compiled by Peter Gilligan, BSc Eng.(Hons)(Lond),ARSM,MBA who is a Member of the Australian Institute of Mining and Metallurgy and is a full time employee of the Company. Mr Gilligan has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2004 & 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves.' Mr Gilligan consents to the inclusion in the announcement of the matters based on his information in the form and context that the information appears.

JORC Code, 2012 Edition – Table 1 report

Pearse North Diamond and RC Drilling

Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (e.g. 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 (e.g. '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 (e.g. submarine nodules) may warrant disclosure of detailed information.*	**Diamond Drilling** Diamond drilling is used to obtain core from which intervals ranging from approximately 0.2-1.5m in length are submitted for base metals analysis using nitric aqua regia digestion and a conventional ICP–AES methodology. A 50g charge is produced for fire assay and AAS analysis for gold. All diamond drill core drilled by KBL is sampled in intervals based on geological logging. All HQ and NQ diameter core is cut, with half core typically sent as the geochemical sample to ALS, Orange. The remaining core is stored at the Mineral Hill core yard. In the case of metallurgical testing, half core is typically sent to the testing laboratory, quarter core to ALS for assay and quarter core retained at site. KBL regards these sampling practices as 'industry standard'. **Reverse Circulation (RC) Drilling** Historically (Triako era), rock chip samples from RC drilling were first collected and assayed as four metre composites. Composite samples returning significant assay results were then resampled in one metre intervals using a riffle splitter and re-assayed. Subsequently (CBH and KBL era), samples were either submitted in one metre intervals, split off the cyclone; or a portable XRF analyser was used to determine the sampling intervals. In the latter case, samples with XRF readings regarded as anomalous were submitted for assay as one metre intervals with at least two metres either side also collected as one metre samples. The remainder of samples were submitted for assay in four metre composites collected by spearing or riffle splitting. Any four metre composites returning anomalous laboratory assays were re-

Criteria	JORC Code explanation	Commentary
		submitted for assay as one metre samples. In the 2016 KBL drilling, a representative riffle-split sub sample of each one metre interval was submitted to the assay laboratory. Representative chip samples for each metre of RC drilling at Mineral Hill are collected in trays and stored at site.
Drilling techniques	• *Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. 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.).*	Drilling carried out at Mineral Hill has been predominantly reverse-circulation percussion (RC) and diamond core (commonly with RC or Rotary Mud pre-collars of varying lengths). Core diameters are mostly standard diameter HQ and NQ, with HQ3 and NQ3 (triple-tube) used during recent surface drilling. Drilling completed at the Pearse North deposit includes 62 RC holes and 4 diamond holes. Orientation has been attempted on the diamond drill holes with mostly good results. Methods used over time have included traditional spear & marker and modern orientation tools attached to the core barrel.
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.*	Triple-tube core barrels are used where possible in diamond drilling to maximise sample recovery and quality. Core recovery is measured for the complete hole based on the driller's mark-up, checked during core mark-up in one metre intervals by the geologist. Drill core is measured (actual measured core recovered vs. drilled intervals) to accurately quantify sample recovery. Good core recovery is typically achieved during drilling at Mineral Hill. Where recovery is insufficient to produce a representative sample the interval is assigned a zero grade when reporting drilling results. The average core recovery achieved for the three HQ diamond holes completed in the recent most (2015-16) drill program was 97.7%. There is no known relationship between sample recovery and grade. The lowest recoveries are typically associated with near-surface weathered intervals, and fault and shear zones which may or may not be mineralised.
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support*	A qualified geoscientist logs the geology of all holes in their entirety (including geotechnical features). All drill core is geologically and

Criteria	JORC Code explanation	Commentary
	appropriate Mineral Resource estimation, mining studies and metallurgical studies. • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.* • *The total length and percentage of the relevant intersections logged.*	geotechnically logged to a level of detail considered to accurately support Mineral Resource estimation. The parameters logged include lithology with particular reference to deformation fabric, veining, mineralogy, alteration, and grain size. Magnetic susceptibility measurements are available for some recent drill holes. Some core holes have down-hole core orientation and these holes are subject to detailed structural logging. Routine structural logging is carried out on all core holes recording bedding, schistosity and fault angles to core. All core trays are photographed in both wet and dry states. Recent digital photos and scans of film photography are stored electronically. All of the holes included in the Pearse North Mineral Resource Estimation have been logged in the entirety.
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.*	**Diamond Drilling** Core drilled by KBL is fully sampled (as sawn half core for HQ and NQ, full core for BQ and LTK48) and submitted for assay. All cored sections of KBL surface drill holes are assayed unless the volume of rock is deemed to have been effectively sampled by a pre-existing drill hole, for example in the case of wedging where the wedge hole trajectory is close (typically <5m) from the parent hole. There is no standard procedure regarding the line of cutting with any veins and structural fabrics. However, an attempt is made to obtain an equivalent sample of mineralised material in both halves of the core. Poorly mineralised core is typically cut perpendicular to any dominant fabric. Oriented core is cut close to the orientation line, but far enough away so as to preserve the line on the retained half or quarter core. Water used in the core cutting is unprocessed and unlikely to introduce contamination to the core samples. A typical 1m half HQ core sample weighs approximately 3.5–4.5 kg. The HQ and HQ3 diameter core is deemed by KBL to provide a representative sample of the Pearse North sulphide mineralisation which generally comprises fine-grained (<5mm) clots, veinlets and crystals of sulphide phases such as arsenopyrite, pyrite, and stibnite; with quartz–mica–carbonate gangue.

Criteria	JORC Code explanation	Commentary
		RC Drilling During the recent program, sub sampling of RC chips was achieved using a riffle splitter directly off the cyclone. Dry sampling is ensured by use of a booster air compressor when significant groundwater is encountered. The 4 ½ " diameter bit, used as standard in RC drilling, collects a typical bulk sample weighing up to 30kg per metre drilled, from which a split 1/10 sub-sample typically weighing between 1.5 and 2.5 kg is submitted for assay. The split sub-sample is deemed representative of the entire metre sampled. Field duplicates were periodically assayed by Triako and CBH, but KBL has not routinely submitted duplicates for analysis.
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 (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.*	All drilling samples are currently assayed at Australian Laboratory Services (ALS) in Orange, NSW. ALS is a NATA Accredited Laboratory and qualifies for JAS/ANZ ISO 9001:2008 quality systems. ALS maintains robust internal QA/QC procedures (including the analysis of standards, repeats and blanks) which are monitored with the analytical data by KBL geologists through the Webtrieve™ online system. KBL have routinely assayed for copper, lead, zinc, silver, arsenic, antimony, and bismuth using ALS Method ME-ICP41, with pulps returning over 10000ppm for Cu, Pb, Zn or 100ppm for Ag, reanalysed with the ore-grade method ME-OG46. The aqua regia ME–ICP41 and ME-OG46 methods are regarded as a total digestion technique for the ore minerals present at Pearse North. Gold is analysed with the 50g fire-assay–AAS finish method Au-AA26. **Diamond and RC Drilling** In the recent most (2015-16) Pearse North drilling program, two standards were inserted every 30 samples in the sample stream. The standards comprise Certified Ore Grade base and precious metal Reference Material provided by Geostats Pty Ltd. Blanks were also regularly inserted in the sample batches. The analyses of standards and blanks are checked upon receipt of batch results—Should the analysis of standards from a series of sample batches show a trend towards falling outside of two SD or being strongly high or low, the assay laboratory is

Criteria	JORC Code explanation	Commentary
		contacted and it is assessed whether reanalysis is required. Re-assay of each sample run with questionable standard results is the usual procedure. Results from such assay batches are not released until KBL geologists are satisfied that any questions as to assay grade reliability are resolved and there are no further QA/QC issues. Based on the historical results of standard analysis, in addition to the internal QA/QC standards, repeats and blanks run by ALS, the laboratory is deemed to provide an acceptable level of accuracy and precision.
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.*	Significant intersections are checked by the Senior Exploration Geologist and Chief Geologist. Original laboratory documents exist of primary data, along with laboratory verification procedures. The Mineral Hill drilling database exists in electronic form as a Microsoft Access database. The assay data are imported directly into the database from digital results tables sent by the laboratory. The Senior Mine Geologist and Chief Geologist manage the drill hole assay database. 3D validation of drilling data and underground sampling occurs whenever new data is imported for visualisation and modelling by KBL geologists in Micromine™ software. No adjustment has been made to assay data received from the laboratory.
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.*	KBL Mining Ltd drill hole collars were either surveyed relative to established site survey pegs or by real-time differential GPS (DGPS) in areas at surface distant from reliable survey stations. Down-hole surveying is typically performed at 30m depth intervals with modern camera survey tools. Coordinates are recorded in a local Mine Grid (MHG) established by Triako in which MHG North has a bearing of 315 relative to True North (MGA Zone 55). The local grid origin has MGA55 coordinates of 498581.680 mE, 6394154.095 mN. Topographic control is good with elevation surveyed in detail over the mine site area and numerous survey control points recorded.
Data spacing	• *Data spacing for reporting of Exploration Results.*	Prior to the recent most (2015-16) drilling, the Pearse North deposit had

Criteria	JORC Code explanation	Commentary
and distribution	• *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.*	an average drill spacing of 25–30m. The spacing has now been reduced to approximately 15m and is deemed sufficient for the purposes of Mineral Resource estimation. No sample compositing has been applied to the drill holes reported in the release.
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.*	Mineralisation at Mineral Hill occurs around discrete structures, typically faults, in a series of en echelon dilational zones within a NNW/SSE[1] trending corridor up to 1.5km wide. There is a variety of mineralisation styles present within this zone, reflecting multiple phases of mineralisation. Most drilling occurs with an east-dipping orientation and -60 to -80 degrees dip to best intersect the mineralisation. Surface drill hole designs at Pearse North mostly dip between 60 and 75 degrees to the to the east, collared on a regular grid and intersecting the mineralisation at a spacing of approximately 15m. Three west dipping RC 'scissor holes' have been drilled at the northern extent of the prospect to more reliably 'close off' the mineralisation along strike. Based on orientation data collected from recent diamond drill holes the high-grade part of the deposit is interpreted to fall in a number of schist zones which strike north to north northeast. In the north, the mineralisation is interpreted to be sub-vertical whereas in the south it dips at approximately 80 degrees to the west. Several spaced 40–60 degree west-dipping shear zones were also encountered which may have a bearing on the distribution of mineralisation. The drill pattern to date is deemed to have adequately tested the interpreted orientation of mineralisation and is unlikely to have introduced any sampling bias. A third orientation of major shearing encountered in KMHDD032 in the centre of the deposit, combined with the results of KMHRC165 suggests the southern of two Au-rich lenses may be open to the ENE. This hypothesis is yet to be tested. [1] All bearings in this JORC Table 1 document are given relative to the Mineral Hill Mine Grid (MHG) in which north is oriented towards a bearing of 315 degrees (NW) relative to MGA Grid north.
Sample	• *The measures taken to ensure sample security.*	Drill core samples are collected in calico sample bags marked with a unique sample number and are tied at the top. Sampling record sheets

Criteria	JORC Code explanation	Commentary
security		are scanned and stored digitally. Samples are couriered by independent contractors from the mine site to the ALS Laboratory, Orange, NSW.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	The historical data base, quality control procedures, survey, sampling and logging methods were reviewed by Barret, Fuller and Partners (BFP) in June 2005 on behalf of Triako Resources Ltd. The BFP report was authored by C.E. Gee and T.G. Summons and concluded that the Triako database and procedures were of "normal industry practice". CBH Resources, and subsequently KBL Mining Ltd have maintained the Triako drilling and sampling procedures, with numerous improvements such as those outlined in this document. A detailed QA/QC review of the Mineral Hill drill hole database was carried out in 2013-2014 by independent consultant geologist, Mr Garry Johansen. This work was performed as an integral part of building a 3D digital geological model of the Mineral Hill district.

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 Pearse North deposit is located within EL1999 which is due to expire on 3 March 2017. A Mining Lease application (MLA523) over the Pearse North deposit was lodged in March 2016 (see ASX Announcement 'Pearse North Mining Lease Application Lodged - Further Drilling Results Pending' released 22 March 2016). KBL are not aware of any impediments which may affect the granting of the aforementioned MLA.

Criteria	JORC Code explanation	Commentary
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	Coincident Au–As soil anomalism and low grade Au–Ag mineralisation was discovered at Pearse North by Triako Resources Ltd in the 1990s. 50m+ spaced drilling at the prospect by Triako during the period 1999–2005 several intercepts significant Au grade. Follow-up drilling by Kimberley Metals Ltd (now KBL Mining Ltd) in 2010 served to better define a number of high grade lenses at the prospect.
Geology	• *Deposit type, geological setting and style of mineralisation.*	The Pearse North deposit at Mineral Hill is interpreted to be an epithermal shear-hosted Au–Ag within the Late Silurian to Early Devonian Mineral Hill Volcanics, a pile of proximal rhyolitic volcaniclastic rocks with minor reworked volcaniclastic sedimentary rocks. The sulphide mineralisation, comprising predominantly pyrite, arsenopyrite and stibnite, is typically disseminated within quartz–mica (sericite) schist. At the Pearse deposit to the south, analysis by Laser Ablation ICP-MS has found that fine-grained gold is mostly concentrated in arsenopyrite and fine-grained 'spongy' (melnikovite) pyrite with lower concentrations of gold hosted by crystalline pyrite. Mineralisation at Pearse North is inferred to have a similar character.

Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:*
	  ○ *easting and northing of the drill hole collar*
	  ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar*
	  ○ *dip and azimuth of the hole*
	  ○ *down hole length and interception depth*
	  ○ *hole length.*
	• *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*
		Locations and orientations of all drill holes included in the Pearse North Mineral Resource estimate are tabulated below.

Hole	Depth	Collar Coordinates			Hole Orientation		Company
		East	North	RL	Azimuth	Dip	
KMHDD030	106.0	55.00	2212.00	332.04	90	-60	KBL Mining Ltd
KMHDD031	89.3	65.00	2137.10	330.24	90	-60	KBL Mining Ltd
KMHDD032	99.9	50.00	2187.00	331.6	90	-60	KBL Mining Ltd
KMHRC001	130.0	22.46	2174.08	332.43	85.2	-60.6	KBL Mining Ltd
KMHRC002	120.0	47.75	2175.92	331.46	82.3	-60.6	KBL Mining Ltd
KMHRC003	100.0	23.45	2200.01	332.48	87.1	-59.5	KBL Mining Ltd
KMHRC079	118.0	31.00	2220.60	332.7	95.3	-60.3	KBL Mining Ltd
KMHRC080	118.0	60.00	2225.00	332.5	96.9	-60	KBL Mining Ltd
KMHRC085	121.0	24.86	2123.21	331.85	97.2	-60.2	KBL Mining Ltd
KMHRC087	85.0	60.36	2117.60	329.89	92.6	-60.2	KBL Mining Ltd
KMHRC088	85.0	65.70	2176.22	331.14	91.2	-58.1	KBL Mining Ltd
KMHRC089	73.0	79.14	2121.32	329.63	93.8	-60.9	KBL Mining Ltd
KMHRC090	73.0	90.14	2151.49	330.41	94.1	-59.6	KBL Mining Ltd
KMHRC091	109.0	86.86	2176.03	331	92.6	-60.6	KBL Mining Ltd
KMHRC092	85.0	72.61	2197.22	331.76	94.6	-59.3	KBL Mining Ltd
KMHRC093	91.0	97.60	2199.37	332.58	93.3	-59.8	KBL Mining Ltd
KMHRC094	97.0	78.00	2225.00	333.63	91.6	-60	KBL Mining Ltd
KMHRC095	61.0	28.00	2250.00	332	91.1	-60.5	KBL Mining Ltd

Criteria	JORC Code explanation	Commentary							
		KMHRC096	61.0	111.14	2252.69	335.06	95.2	-59.3	KBL Mining Ltd
		KMHRC097	97.0	43.50	2121.64	330.78	95.5	-59.3	KBL Mining Ltd
		KMHRC104	100.0	139.27	2251.50	333.41	97.2	-59.5	KBL Mining Ltd
		KMHRC105	82.0	135.56	2226.92	333.67	94.4	-57.8	KBL Mining Ltd
		KMHRC106	76.0	139.44	2274.59	333.19	94.7	-59.2	KBL Mining Ltd
		KMHRC107	70.0	149.48	2324.44	330.51	97.3	-59.6	KBL Mining Ltd
		KMHRC160	100.0	74.54	2214.63	332.46	90	-60	KBL Mining Ltd
		KMHRC161	106.0	30.72	2210.62	332.34	90	-60	KBL Mining Ltd
		KMHRC162	100.0	78.80	2269.50	334.23	95	-60	KBL Mining Ltd
		KMHRC163	94.0	67.23	2241.07	333.47	90	-60	KBL Mining Ltd
		KMHRC164	100.0	47.95	2241.99	332.65	90	-60	KBL Mining Ltd
		KMHRC165	94.0	98.74	2187.49	332.03	90	-60	KBL Mining Ltd
		KMHRC166	94.0	67.30	2188.96	331.55	90	-60	KBL Mining Ltd
		KMHRC167	94.0	80.22	2162.31	330.69	90	-60	KBL Mining Ltd
		KMHRC168	88.0	58.90	2162.07	330.92	90	-60	KBL Mining Ltd
		KMHRC169	106.0	43.10	2134.29	330.95	90	-60	KBL Mining Ltd
		KMHRC170	100.0	50.22	2082.25	329.44	90	-60	KBL Mining Ltd
		KMHRC171	100.0	6.76	2210.18	333.45	90	-60	KBL Mining Ltd
		KMHRC172	112.0	16.33	2190.86	333.03	90	-60	KBL Mining Ltd
		T325	100.0	136.88	2300.63	331.8	270	-60	Triako Resources Ltd
		T326	100.0	37.74	2300.99	330.87	90	-60	Triako Resources Ltd
		T339	146.0	1.94	2300.52	330.79	90	-60	Triako Resources Ltd
		T342	150.0	6.25	2248.98	332.67	90	-60	Triako Resources Ltd
		T343	200.0	-70.49	2145.19	339.9	90	-60	Triako Resources Ltd
		T344	105.0	246.46	2301.77	326.27	270	-60	Triako Resources Ltd
		T345	100.0	158.28	2300.82	330.77	90	-60	Triako Resources Ltd
		T353	250.0	-46.98	2253.70	335.65	90	-60	Triako Resources Ltd
		T354	150.0	0.47	2194.99	333.91	90	-60	Triako Resources Ltd
		T356	159.0	0.63	2152.15	333.96	90	-60	Triako Resources Ltd
		T357	150.0	-0.60	2347.07	328.94	90	-60	Triako Resources Ltd
		T358	150.0	32.38	2149.95	331.93	90	-60	Triako Resources Ltd
		T359	150.0	49.81	2102.54	330.07	90	-60	Triako Resources Ltd
		T360	120.2	53.11	2149.98	330.86	90	-60	Triako Resources Ltd
		T361	191.0	-1.01	2102.37	333.26	84	-65	Triako Resources Ltd
		T362	200.0	-19.23	2152.83	335.43	86	-60	Triako Resources Ltd
		T363	180.0	-49.43	2195.62	339.03	86	-60	Triako Resources Ltd
		T364	150.0	50.76	2196.57	331.78	86	-60	Triako Resources Ltd
		T365	60.0	85.74	2197.29	332.12	90	-60	Triako Resources Ltd

Criteria	JORC Code explanation	Commentary

T366	150.0	55.94	2251.73	333.13	90	-60	Triako Resources Ltd
T367	150.0	87.61	2299.58	332.79	86	-60	Triako Resources Ltd
T368	247.0	-53.18	2100.10	336.58	86	-65	Triako Resources Ltd
T369	154.0	47.39	2048.00	328.55	90	-60	Triako Resources Ltd
T372	200.0	-23.13	2297.80	331.87	86	-65	Triako Resources Ltd
T373	150.0	96.99	2098.76	328.45	86	-60	Triako Resources Ltd
T374	60.0	76.93	2147.52	330.47	86	-60	Triako Resources Ltd
T375	60.0	96.38	2249.10	335.66	90	-60	Triako Resources Ltd
T376	250.0	-103.76	2249.76	337.43	86	-65	Triako Resources Ltd
T381	100.0	-55.00	2300.00	333.02	90	-60	Triako Resources Ltd

Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.* • *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	Drill hole intercept grades are generally reported as down-hole length-weighted averages with any non-recovered core within the reported intervals treated as no grade. The cut-off used for selecting significant intersections is chosen to reflect the overall tenor of the mineralisation, in most cases, 1g/t gold or a 30g/t Ag, with 0.5g/t used for some low grade intervals. No top cuts have been applied when calculating average grades. When aggregating assay intervals the incorporation of more than two consecutive metres of low grade (below cut-off) material or internal waste is avoided. No metal equivalent values are reported in the release.
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*	Measurements made on oriented core suggest that the main foliation of the host shear zones are steeply dipping to sub-vertical and strike north to north northeast. To estimate the true thickness of significant intercepts, it is assumed that the mineralisation shares this orientation. While this assumption is likely to hold in general, local variations in the orientation of mineralisation may occur.

Criteria	JORC Code explanation	Commentary
	hole lengths are reported, there should be a clear statement to this effect (e.g. '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.*	Appropriate views are presented in the release.
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.*	Only mineralised intersections regarded as highly anomalous, and therefore of economic interest, are reported. The proportion of each hole represented by the reported intervals can be ascertained from the sum of the reported intervals divided by the hole depth.
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.*	There is no additional exploration data regarded as meaningful and material to the presentation of the information provided in the release.
Further work	• *The nature and scale of planned further work (e.g. 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*	The scope of planned future work is described in the release.

Criteria	JORC Code explanation	Commentary
	areas, provided this information is not commercially sensitive.	

Pearse North Resource Estimate

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.*	Assay results are received in a standard format data sheet from the laboratory and loaded into a MS Access database using an update query so there is no manual entry or manipulation of the assay data. After DGPS survey and entry into the drill hole database, collar locations are checked visually against historical survey points and base data using GIS and mining software (ArcGIS™, Micromine™ and Surpac™). Hole trajectories from down-hole survey data are visually validated in 2D section and 3D for excessive apparent hole deviation. Poor surveys (often determined though irregularities in magnetic susceptibility readings at time of survey) are removed from the database. Validation of drill hole data for excessive hole deviation, missing assay intervals, surveys beyond hole depth, and completeness of geological logging is routine when working with the drill hole data in Micromine™ software Limited validation of the drill hole database was conducted in 2012 by H&S Consultants (H&SC) to ensure internally consistency. Validation included checking that no assays, density measurements or geological logs occur beyond the end of hole and that all drilled intervals have been geologically logged. The minimum and maximum values of assays and density measurements were checked to ensure values are within expected ranges.
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.*	Owen Thomas, the Competent Person for this release and a full time employee of KBL, conducts regular site visits and was directly involved in lithological and structural logging of the diamond core, and logging of RC chips in the 2015–16 drill program.
Geological	• *Confidence in (or conversely, the uncertainty of)*	Pearse North shares many geological features with the Pearse deposit which is also

Criteria	JORC Code explanation	Commentary
interpretation	*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.*	extensively drilled and has been recently exposed through open cut mining. By analogy with the Pearse deposit, it is assumed that the local shear zone is the primary control on the distribution of gold at Pearse North. Elevated gold assays coincide with rock logged as schist (dark grey in fresh rock) or as having a strong or very strongly developed foliation. As a result, the mineralisation domains used to constrain the grade distribution during resource estimation were thoroughly checked against relevant subsets of the lithology data including\intervals logged as schist or having a strong degree of foliation development. A peripheral zone of strong calcite alteration and veining is a useful indicator of proximity to mineralisation. Schistosity, shear fabric and structural boundary orientations measured directly in diamond drill core were used to constrain grade domain boundaries. It is acknowledged that Pearse North is structurally complex at the scale of drilling with two main orientations of major shearing, and fracturing and jointing in a wide variety of attitudes. In particular, the local effect of inferred steeply-dipping cross faults is not fully understood as drilling focussed on the shear zones has been undertaken on east–west lines, albeit closely spaced. Oblique structures have the potential to truncate, offset and/or localise gold mineralisation at a variety of scales. Cross faults may also be important for exploration as dislocations and repeats of the mineralisation at the deposit and district scale may lead to the discovery of new deposits.
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 resources at the reported Au cut-offs span a length of around 200m in the direction of strike (NNE) and extend to approximately 120m below surface. The geometry of the deposit can generally be described as a ‘flower structure’ in section, with a wide footprint of mineralisation (up to 120m across strike) near the surface, thinning with depth to a 10m thick steeply-dipping shear zone. Overall, Au grades are less consistent between drill holes in the upper part of the deposit where significant oxide and transitional material is present. The grade becomes more consistent at depth where the parent shear zone becomes more focussed.
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*	Pearse North is the same type of mineralisation as the Pearse deposit, which has been exposed in an open pit during mining by KBL in 2015–16. The Pearse resource was estimated by ordinary Kriging constrained by two geologically based grade domains with oxidation boundaries constructed to allow variable treatment of residual vs mobile elements in the weathering profile. A similar approach was applied at Pearse North with local modifications, such as

Criteria	JORC Code explanation	Commentary
	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 (e.g. 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.*	the use of lower Au cut-offs (0.1g/t and 0.5 g/t Au vs 0.25g/t and 1g/t used for Pearse) to construct the grade domains where a clear cut geological boundary (e.g. shear zone) was absent. This modification reflects the lower mean grade and less pronounced positive skewness of the Au grade distribution at Pearse North compared to Pearse. In both deposits, a low grade Au halo surrounds a higher grade core where Au grades are localised within the parent shear zone. The initial 2012 Pearse North resource estimate employed multiple indicator Kriging (MIK), however this technique has not been established to give better estimates than ordinary Kriging for Pearse style mineralisation. After compositing the drill hole assay data to 1m lengths (minimum 0.5m), analysis of composite statistics by domain suggested that top-cuts should be applied to the Pearse North composite data. After examination of all potential high grade outliers on boxplots a top cut of 13.6g/t Au was selected for the high grade domain (0.5g/t cut-off). A 2.7g/t Au top cut was applied to the surrounding low grade domain (0.1g/t cut-off). Following analysis of grade domain statistics and review of earlier models using a variety of block dimensions, Kriging neighbourhood analysis (KNA) was undertaken as part of the peer review process and block dimensions of 10m×10m×10m (E, N, RL respectively) were regarded as optimal with 2.5m×2.5m×2.5m sub blocks used to align with the selective mining unit (SMU). 1.25m×1.25m×1.25m sub blocks were used to honour the topography as an accurate DTM is available. The final resource estimation was performed in Micromine™ software using ordinary Kriging to interpolate block grades. The variogram axes were oriented at 52/300; -12/014; and 35/095 (major; semi-major; minor, respectively). The search ellipse axes were aligned to the variogram axes with dimensions proportional to the geostatistical range in each direction. Three search passes were employed with progressively larger radii and/or less demanding search criteria. For example, a 20m×15m×17m ellipse (major, semi-major, minor, respectively) was used for Au in the high grade domain followed by 32m×24m×27m, then 50m×37.5m×42m. KNA suggested that the use of more than 20 samples to estimate a 10m×10m×10m block was unnecessary. The search criteria were therefore selected to populate as many blocks as possible using around 20 samples with declustering introduced through the use of four ellipse sectors, and discretisation of 3×3×3m. The search strategy successfully populated all blocks within the high-grade domain, which contains all resources reported in the release. Blocks in other domains that could not be populated were assigned

Criteria	JORC Code explanation	Commentary
		background (typically ½ detection limit) grades. Ag, As, Sb, and S were not subject to further detailed variography and were estimated by ordinary Kriging using the parameters from the 2012 resource model by H&SC. Several check estimates were undertaken in Micromine™ and Maptek Vulcan™ by inverse distance (IDW) and ordinary Kriging. The particular estimation method and variogram model used produced minor local variation in grade distribution but had little effect on estimated contained Au metal of approximately 25koz. All check estimates were within 10% of this value at a nominal 1.5g/t Au cut-off. Model validation formed part of the peer review process. See 'Audits or reviews', below.
Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	Tonnages of the Mineral Resource are estimated on a dry weight basis.
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	The resources are reported at a cut-off of 1 g/t for oxide material and 1.5g/t Au for transitional and fresh material. These values are based on the mining cut-off grade employed at the nearby Pearse deposit at the time of resource estimation.
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.*	The Pearse North resources were estimated on the assumption that the material will be mined by conventional open pit load and haul, drill and blast with a selective mining unit (SMU) of 2.5×2.5×2.5m (E, N, RL respectively).
Metallurgical factors or assumptions	• *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining*	The mineralisation at Pearse undergoes conventional crush–grind–froth flotation with CIL finish for total Au recoveries of approx. 60-65%. Similar Au recoveries are expected from the Pearse North mineralisation.

Criteria	JORC Code explanation	Commentary
	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.	
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.*	Mining at Mineral Hill has occurred in the past and the infrastructure to deal with environmental impacts from waste-rock storage and tailings is already in place. The cut-off grade was selected with a good understanding of the costs involved regarding the treatment of potentially environmentally harmful by-products.
Bulk density	• *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.* • *The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, 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.*	The Pearse area dataset includes 226 Archimedean density measurements with 73 from Pearse North. As Pearse North occurs wholly in pumiceous volcaniclastic rocks of the Mineral Hill Volcanics, measurements from reworked sedimentary rocks at the Pearse deposit were removed from the dataset before average density values were calculated for each oxidation domain. The possibility of systematic variation in density with increasing sulfide content or position in the weathering profile was investigated but results were equivocal and it is concluded that the density of the Pearse rocks is controlled mainly by the lithology and general degree of weathering. The average bulk density reading for each of the three oxidation domains (oxide 2.45g/cm^3, transitional 2.57g/cm^3, fresh 2.65 g/cm^3) were assigned to the blocks within that domain. The Mineral Resources are reported on a dry, in situ basis.

Criteria	JORC Code explanation	Commentary
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.*	The resources are initially classified on search criteria including the search pass, number of drill holes sampled, and average distance of samples to block centre Refinement of the classification subsequently relied on the judgement of the Competent Person taking into account all relevant information such as drill spacing, quality of drill sample and confidence in orientation and continuity of mineralisation. The volume of each resource category was consolidated to remove any 'spotted dog' of 'spaghetti block' effects. KBL believes the confidence in tonnage and grade estimates, the continuity of geology and grade, and the distribution of the data reflect the Measured, Indicated and Inferred categorisation. The estimate appropriately reflects the Competent Person's view of the deposit.
Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	The resource estimate and methodology was peer reviewed by independent consulting geologist Geoff Reed of ReedLeyton Consultants. A check model run by the reviewer produced similar tonnes and grade (using the same Au cut-offs) to the KBL resource estimate. The outcomes of the review also included updated gold variography and Kriging neighbourhood analysis provided by Conarco Consulting. Valuable feedback on the domain statistics, optimal block size and search criteria after assessment of an earlier resource model was incorporated in the final resource estimation presented in this release. Mr Reed is a Member of the Australasian Institute of Mining and Metallurgy and has over 15 years of diverse mining and exploration industry experience with various major mining and junior exploration companies in Australia, Sweden, Finland, Spain, Portugal, Angola, Mongolia, China, Indonesia and Canada. Mr Reed's strength is in the analysis and calculation of resources for both operating mines and new developments. Mr Reed is familiar with the mineralisation style of the Pearse Deposits having performed several reviews of the Pearse resource estimate and block model prior to commencement of mining in 2015.
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*	Improvements in the geological dataset since the initial Pearse North resource estimation in 2012 have increased the level of confidence in the updated Mineral Resource. These include: • 15m×15m drill spacing over the main deposit area

Criteria	JORC Code explanation	Commentary
	of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate. • *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* • *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	• expanded density dataset • orientation data and improved knowledge of the indicators and controls on mineralisation from exposure at Pearse open cut • comparison of reconciled production against the Pearse reserve Experience at the Pearse open cut has demonstrated that the resource estimation methodology is appropriate for the style of mineralisation. No statistical or geostatistical procedures were used to quantify the relative accuracy of the resource. The Mineral Resource estimate of the deposit is sensitive to the cut-off grade applied and is considered to be a local estimate.

Pearse North Reserve Estimate

Section 4 Estimation and Reporting of Ore Reserves

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

Criteria	JORC Code explanation	Commentary
Mineral Resource estimate for conversion to Ore Reserves	• *Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.* • *Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.*	The Mineral Resource estimate used as the basis for this Ore Reserve estimate was completed internally by KBL Mining Ltd and subject to peer review by independent consulting geologist, Geoff Reed of ReedLeyton Consultants. The Mineral Resource estimate is summarised in Table 1 of this release. The same block model used to estimate the Mineral Resource was also used to estimate the reported Ore Reserve. Any Proven and Probable Ore Reserve estimates are converted from the Measured and Indicated Mineral Resource categories from the block model data.

Criteria	JORC Code explanation	Commentary
		The Mineral Resources are reported inclusive of the reported Ore Reserve.
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.*	Peter Gilligan, the Competent Person for this release and a full time employee of KBL, conducts regular site visits and is directly involved in the management and execution of mining operations at the Mineral Hill Mine. Mr Gilligan is employed in the capacity of General Manager, Mineral Hill Mine.
Study status	• *The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.* • *The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.*	Mineral Hill is an operating mine with the Pearse open cut currently being mined 200m south of Pearse North. Site operating costs and modifying factors for Pearse open cut have been used as the basis for determining the Ore Reserve at Pearse North. Corporate financing has not been included in the assessment. On this basis, the study is considered to be at a Pre-Feasibility Study level.
Cut-off parameters	• *The basis of the cut-off grade(s) or quality parameters applied.*	The ore reserves are reported at a cut-off of 1 g/t for oxide material and 1.5g/t Au for transitional and fresh material. These values are based on the mining cut-off grade employed at the nearby Pearse deposit at the time of ore reserve estimation.
Mining factors or assumptions	• *The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).* • *The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.* • *The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling.* • *The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).*	As the Mineral Hill Mine is currently in production at the Pearse open pit, any mining factors and or assumptions applied as part of the Ore Reserve estimate are based on actual data collected during operations. The Pearse North deposit outcrops on the surface and therefore is amenable to conventional drill & blast, load and haul, open pit operations. Pit slope configurations used at historic open pits like the Eastern Ore Zone were used at Pearse. The same configurations have been used for Pearse North. As the Pearse North deposit occurs wholly in Mineral Hill volcaniclastics with no overlying sediments, which is similar to the EOZ pit, it is expected that this configuration will be stable, and no repeats of the failures experienced in Pearse are expected. A geotechnical assessment will confirm this. Mining dilution of 0.3m at diluting block grade, calculated on 5m mining

Criteria	JORC Code explanation	Commentary
	• *The mining dilution factors used.* • *The mining recovery factors used.* • *Any minimum mining widths used.* • *The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.* • *The infrastructure requirements of the selected mining methods.*	benches, per bench and assumption of total material recovery have been applied. A minimum mining width of 20m was used. No Inferred Mineral Resources were considered in this study. The existing open pit mining infrastructure for Pearse will be available for Pearse North.

Metallurgical factors or assumptions	• *The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.*
	• *Whether the metallurgical process is well-tested technology or novel in nature.*
	• *The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.*
	• *Any assumptions or allowances made for deleterious elements.*
	• *The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole.*
	• *For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?*
		The mineralisation at Pearse undergoes conventional crush–grind–froth flotation to CIL finish with the Pearse North Ore Reserve estimate assuming an equivalent processing pathway. Metallurgical test samples are being tested in house.
		
		Recovery is assumed to be:
		• Flotation + CIL
		  ○ Gold 74%
		  ○ Silver 62%
		• CIL only:
		  ○ Gold 75%
		  ○ Silver 2%
		
		Crush–grind–froth flotation to CIL finish is a common technology and has been utilised at the Mineral Hill operation since commissioning of the new CIL plant in late 2015.

Environmental	• *The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.*	The completed Pearse open pit is the current destination for the waste to be removed at Pearse North. The Pearse orebody is considered to be closed off at depth and along strike. However, sterilisation drilling as part of a planned regional exploration program around the Pearse pit will ensure no potential resources are compromised by placing the waste as backfill into the pit. While no ARD is expected from Pearse North, it will be contained within the Pearse backfill. The Pearse North deposit is located within EL1999 which is due to expire on 3 March 2017. A Mining Lease application (MLA523) over the Pearse North deposit was lodged in March 2016 (see ASX Announcement 'Pearse North Mining Lease Application Lodged - Further Drilling Results Pending' released

Criteria	JORC Code explanation	Commentary
		22 March 2016). KBL are not aware of any impediments which may affect the granting of the aforementioned MLA.
Infrastructure	• *The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed.*	Pearse North will utilise the existing infrastructure at Mineral Hill and will not require additional facilities.
Costs	• *The derivation of, or assumptions made, regarding projected capital costs in the study.* • *The methodology used to estimate operating costs.* • *Allowances made for the content of deleterious elements.* • *The source of exchange rates used in the study.* • *Derivation of transportation charges.* • *The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.* • *The allowances made for royalties payable, both Government and private.*	It has been assumed the pit will be mined by a contractor and hence no earth moving equipment capital is required. Operating costs including concentrate transport and treatment and refining charges have been calculated for the current operation of the Pearse open pit. Arsenic and antimony grades have been estimated. While upper limits are included in the concentrate specifications, these are not expected to be exceeded with mitigation measures available on site. The US dollar to Australian dollar exchange rate of $0.73 in May 2016 was used. The NSW state ad-valorem royalty has been applied. No other corporate financing arrangements have been accounted for.
Revenue factors	• *The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.* • *The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.*	Metal prices and exchange rates during May 2016 were used. US$1,300/oz gold and US$17.00/oz silver Concentrate and doré transportation and treatment charges, penalties and net smelter returns for the current Pearse open pit have been used. Head grades are estimated based on the geological block model as scheduled modified for dilution and mining losses.
Market assessment	• *The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.* • *A customer and competitor analysis along with the identification of likely market windows for the product.*	Long term sales contract is in place for the gold-rich concentrate.

Criteria	JORC Code explanation	Commentary
	• *Price and volume forecasts and the basis for these forecasts.* • *For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.*	
Economic	• *The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.* • *NPV ranges and sensitivity to variations in the significant assumptions and inputs.*	The life of the pit is less than one year of plant throughput. Inflation is considered zero and a discount rate was not used. The pit is sensitive to variations in the significant inputs. However, the estimation methodology is robust and proven at Pearse and production is expected to transition from there to Pearse North without undue delay. The impact of corporate financing that was not considered in this study is unknown.
Social	• *The status of agreements with key stakeholders and matters leading to social licence to operate.*	Mineral Hill has been operating since 1989 and is a key employer in the area. It maintains positive relationships with regulatory and local authorities and the community to ensure it is able to continue to operate.
Other	• *To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:* • *Any identified material naturally occurring risks.* • *The status of material legal agreements and marketing arrangements.* • *The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.*	As outlined above, the metallurgical and geotechnical assumptions used are reasonable but are yet to be assessed independently. While KBL are not aware of any impediments which may affect the granting of the aforementioned MLA, any delays to the expected approval will delay the start of mining. Corporate financing arrangements have not been considered as part of this study.
Classification	• *The basis for the classification of the Ore Reserves into varying confidence categories.* • *Whether the result appropriately reflects the Competent Person's view of the deposit.*	The Proved and Probable Reserves are based on the Measured and Indicated Resources respectively, that are located within the detailed mine design. No Probable Ore Reserves were derived from Measured Mineral Resources.

Criteria	JORC Code explanation	Commentary
	• *The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).*	
Audits or reviews	• *The results of any audits or reviews of Ore Reserve estimates.*	The Ore Reserve has been reviewed internally.
Discussion of relative accuracy/ confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.* • *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* • *Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.* • *It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	The factors and estimates used are based on the current operation at Pearse and are considered relevant and transferable to Pearse North subject to the assumptions outlined above, particularly the geotechnical and metallurgy assumptions. Corporate financing arrangements have not been considered as part of this study.