

ASX Release

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KBL Pearse Gold Project: Drilling, Optimising Metallurgy and First Gold Production

- Four diamond drill holes recently completed at the Pearse deposit for metallurgical optimisation samples confirms the high grade nature of both gold and silver in the deposit. Significant intercepts include:
 - **18.5m at 13 g/t Au and 182 g/t Ag;** and
 - **32.1m at 6.4 g/t Au and 131 g/t Ag** (*KMHDD024*)
 - 6.5m at 16.2 g/t Au and 11 g/t Ag; and
 - **37m at 13 g/t Au and 99 g/t Ag;** (*KMHDD025*)
 - **26m at 7 g/t Au and 218 g/t Ag;** and
 - **10.1m at 11.2 g/t Au and 172 g/t Ag** (*KMHDD026*)
 - 27m at 9.3 g/t Au and 158.3 g/t Ag (KHMDD027)
- Metallurgical test work achieves concentrate grades over 100g/t gold & 750g/t silver through flotation of Pearse primary ore
- Project on track for first gold ore treatment in August

KBL Mining Limited (ASX: "KBL" or "the Company") is pleased to advise that the Pearse open cut is on schedule for delivery of first sulphide ore to the plant in August and that early results from the Pearse process optimisation have improved confidence for forecast production from sulphide ore. KBL's Managing Director, Brian Wesson commented "The planning and execution of the Pearse open cut over the last 6 weeks is testimony to the motivation and capability of the new KBL team and MAAS contractors. In August KBL will move to processing the first gold ore from Pearse."

Pearse Drilling and Metallurgy

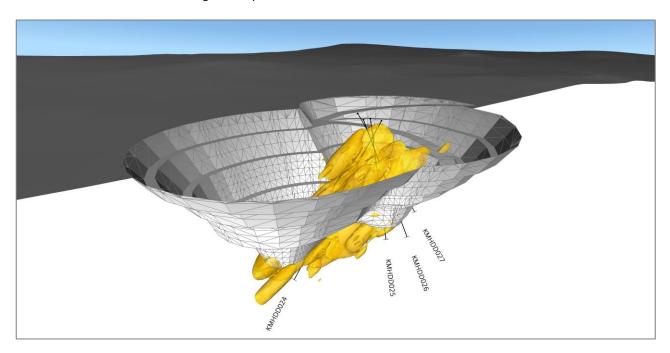
The recently completed four-hole diamond drilling program at the Pearse deposit encountered exceptional high grade Au–Ag mineralisation and confirms their presence within the deposit. Significant intersections from these drill holes are detailed in Table 1. The drilling was designed to obtain metallurgical sample for the optimisation of the process plant flow-sheet for sulphide ore.

Metallurgical testing of the Pearse primary gold ore is being undertaken at the Australian Minmet Metallurgical Laboratory (AMML). This comprises grinding, flotation for a gold/silver concentrate and cyanide leaching of the flotation tailings. Consultant Metallurgist, Rodney Elvish commented *"Early results gave flotation recoveries of 70 to 75% for both gold and silver. Concentrate grades vary with the head grade from 45 g/t to over 100 g/t gold and typically contain 750 g/t silver. Significantly arsenic and antimony grades in these concentrate are consistently well below acceptable sales levels. Cyanide leaching of the flotation tailings takes overall gold and silver recoveries to well over 80% from this refractory gold ore." Work is progressing to optimise flotation conditions ahead of planned production from these ores in August.*

Table 1. Significant intersections from the recently completed diamond drilling at Pearse.

Hole	Interval (m)	Au g/t	Ag g/t	From (m)
KMHDD024	18.5	13	182	12.9
including	6.7	15.2	254	19
and	2.7	41.6	532	27.7
	32.1	6.4	131	46.5
including	3	21.8	0.9	48
and	2	16.8	0.1	53
KMHDD025	6.5	16.2	10.9	6.5
including	2	49.9	19.9	8.5
	37	13	98.9	16
including	11	25.4	234.6	19
	8	1.6	1	56
	15.95	3.5	99.9	69.05
including	2.6	9.1	481.9	71.4
KMHDD026	26	7	217.6	6
	10.1	11.2	172.1	43.4
	14.5	4.2	323.2	64.5
KHMDD027	27	9.3	158.3	42

Note: The intervals represent drill hole intersections at various directions through the deposit as shown in Figure 1. The holes were drilled for metallurgical samples.





Pearse Development

Open cut development is on schedule for August sulphide ore delivery with the CIL plant on schedule for a November completion.

Mining contractor, MAAS Group Pty Ltd, has exceeded early performance expectations for stripping waste from the Pearse pit and first ore extraction is forecast for August. In parallel Westech is on schedule to commission the CIL plant in November. Currently, the CIL plant foundations are well advanced with July expected to see the arrival of Sun Engineering Pty Ltd for commencement of construction.



Pearse open cut development



CIL plant foundations

For further information, please contact:

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About KBL Mining

KBL Mining is an Australian resource company listed on the ASX (KBL and KBLGA) with a focus on producing precious and base 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 2013 commenced producing a separate lead-silver concentrate. 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. A PFS for stage 1 of the project (400,000tpa open cut ore processed) was released on 6 December 2012 Environmental approvals for stage 1 were granted in 2014. A BFS is in progress to be followed by project financing.

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

Competent Persons Statement

The information in this report that relates to drilling results 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 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.

JORC Code, 2012 Edition – Table 1 report

Pearse Diamond Drilling

Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling	Nature and quality of sampling (eg cut channels, random	Diamond Drilling
techniques	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.	Diamond drilling is used to obtain core from which intervals ranging from approx. 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.
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	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.
	 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 	In the case of metallurgical testing, such as for the reported drill holes, half core is typically sent to the testing laboratory, quarter core to ALS for assay, and quarter core retained at site.
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.	KBL regards these sampling practices as 'industry standard'.	
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).	Drilling carried out at Mineral Hill has been predominantly reverse- circulation percussion (RC) and diamond core (commonly with RC or Rotary Mud precollars 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 deposit includes 125 RC holes and 13 diamond holes.
		Orientation has been attempted on numerous diamond drill holes with mostly good results. Methods used over time have included traditional spear and 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. 	Triple-tube core barrels are used where possible in diamond drilling to maximise sample recovery and quality.

Criteria	JORC Code explanation	Commentary				
	 Measures taken to maximise sample recovery and ensure representative nature of the samples. 	Core recovery is measured for the complete hole based on the driller's mark-up, checked during core mark-up in 1m intervals by the geologist.				
	 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. 	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 HQ core recovery achieved for the recent Pearse drilling program was 99%.				
		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 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 	A qualified geoscientist logs the geology of all holes in their entirety (including geotechnical features). Drill core is geologically and routinely geotechnically logged to a level of detail considered to accurately support Mineral Resource estimation. The parameters logged include lithology with particular reference to veining, mineralogy, alteration, and grain size. Magnetic susceptibility measurements are available for some recent drill holes.				
	logged.	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 with results mentioned in the release have been logged in their entirety.				
Sub-	• If core, whether cut or sawn and whether quarter, half or all	Diamond Drilling				
sampling techniques and sample preparation	 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 	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				

Criteria	JORC Code explanation	Commentary
	of the sample preparation technique.Quality control procedures adopted for all sub-sampling	example in the case of wedging where the wedge hole trajectory is close (typically <5m) to the parent hole.
	 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. 	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 the a representative sample of the Pearse sulphide mineralisation which generally comprises fine-grained (<5mm) clots, veinlets and crystals of sulphide phases such as arsenopyrite, pyrite, stibnite, and myargyrite; with quartz–mica–carbonate gangue.
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. 	All drilling/underground rock chip 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.
	 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. 	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 SOZ. Gold is analysed with the 50g fire-assay– AAS finish method Au-AA26.
		Diamond Drilling
		In the Pearse 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. The analysis of standards is checked upon receipt of batch results—For example, all base metal standards analysed with

Criteria	JORC Code explanation	Commentary
		samples during a 5780m underground drilling campaign in 2013-2014 had ore elements within two standard deviations (SD) of the provided mean standard grade with 53% of these having all ore element concentrations within one SD. 95% of gold standards analysed during the current drilling program were within two SD of the standard mean with 67% within one SD. Similar analysis of standards is continuing in the current drilling program.
		Should the analysis of standards from a series of sample batches show a trend towards falling outside of two SD, the laboratory will be contacted and it will be assessed whether reanalysis is required. This has not occurred to date.
		Based on the 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	The verification of significant intersections by either independent or alternative company personnel.	Significant intersections presented in the release were checked by the Senior Exploration Geologist and Chief Geologist.
and assaying	 The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. 	Original laboratory documents exist of primary data, along with laboratory verification procedures.
	 Discuss any adjustment to assay data. 	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. 	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.
	Specification of the grid system used.Quality and adequacy of topographic control.	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

Criteria	JORC Code explanation	Commentary
		(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 and distribution	 Data spacing for reporting of Exploration Results. Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. Whether sample compositing has been applied. 	Drilling at the Pearse deposit has an average spacing of 12.5m × 12.5m over the main deposit area with a closer spacing in the high-grade core because several additional holes have been drilled for metallurgical purposes. This spacing is deemed sufficient for the purposes of Mineral Resource and Ore Reserve 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 	Mineralisation at Mineral Hill occurs around discrete structures 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 element. Most drilling occurs with an east-dipping orientation and -60 to -80 degrees dip to best intersect the mineralisation.
	reported if material.	Surface drill hole designs at Pearse 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 $12.5m \times 12.5m$.
		The high-grade part of the deposit is interpreted to fall in a local kink of the parent fault zone and strikes towards a bearing of approximately 037 ¹ with a steep westerly dip. The tightly spaced drilling is deemed not to have introduced any sampling bias.
		¹ Bearings in this 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 security	• 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 are scanned
		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	The historical data base, quality control procedures, survey, sampling and logging methods were reviewed by Barret, Fuller and Partners (BFP)

Criteria	JORC Code explanation	Commentary
	and data.	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	J	ORC Code explanation	Commenta	ry						
<i>Mineral tenement and land tenure status</i>		Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. 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 drilling results are from the Pearse deposit which is partially within Mining Leases ML338 and ML339 which are due to expire on 14 March 2033, and ML1712 which is due to expire on 28 May 2036.							
Exploration done by other parties			0s. Follow-u Pearse Sou	p drilling th) which was						
Geology	•	 Deposit type, geological setting and style of mineralisation. 	The Pearse deposit at Mineral Hill is an epithermal shear-hosted Au–Ag deposit centred on a bend in a major shear zone within the Late Silurian to Early Devonian Mineral Hill Volcanics, a pile of proximal rhyolitic volcaniclastic rocks with minor reworked volcaniclastic sedimentary rocks.							
		The sulfide stibnite, is ty Laser Ablati arsenopyrite concentratio	/pically o on ICP-l e and fin	dissemin MS has f e-graine	ated withi ound that d 'spongy	n quartz–r fine-grain (melnikov	nica (seri ed gold is vite) pyrite	cite) schist. s mostly con	Analysis by	
Drill hole	٠	A summary of all information material to the		Locations and orientations of the reported drill holes are tabulated below.						
Information	nformation	understanding of the exploration results including a tabulation of the following information for all Material drill		_	Max	Co	ollar Coordinat	tes	Hole Or	ientation
		holes:	Hole	Туре	Depth (m)	East	North	RL	Azimuth	Dip
	 easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above se lavel in matrice) of the drill hole collar 		KMHDD024	DDH	133	210.17	1879.90	323.6	224	-57
		 level in metres) of the drill hole collar dip and azimuth of the hole 	KMHDD025	DDH	90.7	202.39	1877.78	325.0	127	-75
		 down hole length and interception depth hole length. 	KMHDD026	DDH	96.7	197.44	1877.08	324.0	90	-67
	٠	If the exclusion of this information is justified on the basis								

Criteria	JORC Code explanation	Commentary			
	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.	KMHDD027 DDH 63.7 187.54 1896.87 324.3 83 -58			
Data aggregation methods	 In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated. Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. The assumptions used for any reporting of metal equivalent values should be clearly stated. 	Drill hole intercept grades are 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 1g/t gold. 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 material or internal waste is avoided. Significant high grade intersections within the main aggregated intervals are also reported in the results table in the body of the release. 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 hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known'). 	The context of the reported intercepts relative to the interpretation of the mineralisation is presented in figures in the release. Down-hole widths of mineralisation only are reported. The holes were deliberately drilled parallel to the plane of mineralisation to maximise high grade sample, and therefore it is not possible to calculate a true thickness.			
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, have been included in the results tables. 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,	The results of metallurgical test work are discussed in the release.			

Criteria	JORC Code explanation	Commentary
	groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	
Further work	 The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale stepout drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. 	The scope of planned future work is described in the release.