

Mineral Hill Southern Ore Zone Resource Report

- Southern Ore Zone Resource Estimate of:
1.98 Mt at 1.2% Cu, 1.8 g/t Au, 19 g/t Ag, 1.4% Pb & 1.1% Zn¹
- Resource less than 300m from surface and remains open along strike and down dip

KBL Mining Limited ("KBL" or "the Company") is pleased to provide the final report supporting the Southern Ore Zone ("SOZ") Resource upgrade released 19 August 2014. With the improved production profile, this polymetallic resource delivers opportunity to secure long term production at Mineral Hill.

As a result of a successful infill and extensional drilling program at SOZ an upgraded Resource Estimate was undertaken by H&S Consultants Pty Ltd during the September quarter and a summary released 19 August 2014. The resource estimate covers six mineralised breccia zones, or 'Lodes' that occur within a 200m wide steeply west-dipping envelope. A, B & D Lodes are polymetallic (Cu-Pb-Zn-Au-Ag) structures, and C, G & H Lodes host copper-gold mineralisation. All Lodes are currently less than 300m from surface and remain open along strike and down dip.

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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 www.kblmining.com.au.

¹ As released 19 August 2014. All material information was set out in the previous release and the company is not aware of any new information that materially affects the resource estimate presented in this release.

Competent Persons Statement

The information in this report that relates to the data used for estimating Mineral Resources is based on information compiled by Robert Besley, BSc (Hons), who is a Member of the Australian Institute of Geoscientists and is a full-time employee of the Company. Robert Besley 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 Besley consents to the inclusion in the announcement of the matters based on his information in the form and context that the information appears.

Resource Estimation of the Southern Ore Zone, Mineral Hill New South Wales

Prepared for KBL Mining Limited

by

H&S Consultants Pty Ltd

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Reviewer: Arnold van der Heyden, MAusIMM(CP Geol), MAIG

28 June 2014

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Executive Summary

- H&S Consultants Pty Ltd (H&SC) was commissioned by KBL Mining Limited (KBL) to complete mineral resource estimates for the Southern Ore Zone (SOZ), part of the Mineral Hill gold and base metal group of deposits in the Lachlan fold belt of central-western New South Wales.
- H&SC has accepted the drill hole database from KBL in good faith. H&SC has not assessed the reliability of the sampling and assaying or completed a detailed review of the validity or adequacy of the drill hole database. KBL accepts responsibility for these aspects of the resource estimates.
- The estimation was conducted using Ordinary Kriging to estimate Cu, Pb, Zn and Ag grades and Multiple Indicator Kriging to estimate Au grades on nominally one metre composited samples using Micromine. The estimation of mineralised bodies was constrained using six broad wireframes created by H&SC but based on tighter wireframes provided by KBL to outline areas of higher grade mineralisation. The upper and western boundaries are constrained by a fault surface called the Top Shear.
- Variograms were constructed using the geostatistical software GS3. Top cuts based on the 99.5th percentile were applied to Ag, Pb and Zn grades. No top cut to Cu was considered necessary and top cutting the Au was avoided by using Multiple Indicator Kriging.
- Density was estimated using a formula provided by KBL based on the estimated Cu, Pb and Zn grades for each block in the model. Due to the lack of sufficient sulphur assays H&SC was unable to satisfactorily estimate the sulphur content of each block. The calculated density therefore does not take pyrite into account and may consequently be conservative in some places.
- The estimated resources at a Cu Equivalent cut-off of 1.5% are presented in Table 1. The Cu Equivalent was calculated from estimated Cu, Au, Ag and Pb grades using the following formula provided by KBL:

$$Cu\ Equivalent = Cu(\%) + (Au(ppm) \times 0.467) + (Ag(ppm) \times 0.008) + (Pb(\%) \times 0.136)$$

Table 1: Estimated resources at Cu Equivalent cut-off of 1.5%

Class	Tonnes (Kt)	Density (t/m ³)	Cu Eq (%)	Cu (%)	Zu (ppm)	Ag (ppm)	Pb (%)	Zn (%)
Measured	553	2.70	2.28	1.18	1.98	12.0	0.55	0.45
Indicated	705	2.74	2.22	1.07	1.62	21.9	1.63	1.33
Inferred	726	2.74	2.43	1.20	1.79	21.0	1.67	1.43
Total	1,985	2.73	2.31	1.15	1.78	18.8	1.35	1.12

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1 Introduction and Summary

1.1 Introduction

H&S Consultants Pty Ltd (H&SC) was commissioned by KBL Mining Limited (KBL) to complete mineral resource estimates for the Southern Ore Zone (SOZ), part of the Mineral Hill gold and base metal group of deposits in the Lachlan fold belt of central-western New South Wales. For the purposes of this report the ESOZ and SOZ deposits, previously estimated separately have been combined and are referred to simply as the SOZ deposit. This is due to recent interpretation by KBL supported by new drilling data that suggests geological continuity between the historical SOZ and ESOZ mineralisation.

The current estimates are based on sampling and drill hole data provided by KBL. H&SC has not assessed the reliability of the sampling and assaying or completed a detailed review of the validity or adequacy of the drill hole database. KBL accepts responsibility for these aspects of the resource estimates.

H&SC previously estimated the mineral resources at SOZ in November 2011, and again in November 2013. KBL have conducted a significant amount of underground drilling and since the November 2013 estimate the assays from an additional 51 drill holes have been received. This report summarises the available sampling data, and provides details of the estimation methodology and results of the current estimates.

The work reported here was undertaken by Rupert Osborn, MAIG, and assessed by Arnold van der Heyden, MAIG, who are both full-time employees of H&SC. Mr Osborn is a Member of the Australian Institute of Geoscientists and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration to qualify as a Competent Person in terms of JORC standards for resource estimation.

1.2 Summary

H&SC has not reviewed the quality or validity of the SOZ sampling data. Only brief checks were to ensure internal drill hole database consistency such as checking for overlapping intervals unassayed drill holes etc. The current estimates are based on RC and core sampling, and exclude the results of sludge hole and channel sampling.

The estimation was conducted using Ordinary Kriging to interpolate Cu, Pb, Zn and Ag grades and Multiple Indicator Kriging to estimate Au grades, using nominal one metre composited samples in Micromine. The estimation of mineralised bodies was constrained using six broad wireframes created by H&SC but based on tighter wireframes provided by KBL to outline areas of higher grade mineralisation. The upper and western boundaries were constrained by a fault surface called the Top Shear.

Variograms were constructed using the geostatistical software GS3. Top cuts based on the 99.5th percentile were applied to Ag, Pb and Zn grades. No top cut to Cu was considered necessary and top cutting the Au was avoided by using Multiple Indicator Kriging. Density was estimated using a formula based on the estimated Cu, Pb and Zn grades for each block in the model.

H&SC accepts responsibility for classifying the current estimates as Measured, Indicated and Inferred, providing KBL nominates a Competent Person, or Persons to accept responsibility for the data on which the estimates are based. Rupert Osborn visited the Mineral Hill site in May 2014 immediately preceding the start of the mineral resource estimate.

2 Available Data

2.1 Supplied Data Files

KBL provided H&SC with data including drill hole database files, wireframes of breccia zones and interpreted faults. H&SC also had a series of wireframes of high grade zones as well as historical reports and files related to previous resource estimates that had been provided when H&SC had previously estimated SOZ. All the current data were given to H&SC between 19 and 27 May 2014. Only the salient data is mentioned in this report.

Five Micromine data files containing drill hole data for the SOZ deposit were supplied by KBL. These files contained collar locations, down hole surveys, assays, lithology and additional information regarding mineralised intercepts such as texture and angle to core.

KBL supplied H&SC with 268 density measurements collected from the drilling conducted in 2013 and 2014 to add to the 24 density measurements received in 2011. KBL also supplied H&SC with an equation to calculate the density based on Cu, Pb and Zn concentrations.

A series of ten Micromine wireframes were supplied by KBL outlining zones of interpreted brecciation within the A, B, C, D, G and H lodes. These wireframes were constructed from geological logs, predominantly from the recent core drilling. These wireframes were used to guide the creation of broader mineralisation wireframes and often formed cores to the interpreted mineralised envelopes; they also guided the orientation of search and variogram directions during estimation.

Eleven Micromine wireframes representing fault surfaces were supplied by KBL although, with the exception of the top shear fault, these surfaces were not used in the estimates as no obvious or significant displacement of mineralisation was observed across these faults. The top shear fault represents a fault that is interpreted to truncate the upper limits of mineralisation.

KBL supplied three wireframes representing the mine development, stopes and expanded stopes. The mine development and stope wireframes represent the volumes of material that has already been mined and were used to discount the resources. The wireframe of expanded stopes is a wireframe in which the stope boundaries have been moved outwards by 2 m or, if greater, by 20% of the stope width. This wireframe was used to classify any material close to the stope as Inferred because the edges are poorly defined as the stopes have not been surveyed and may have been subject to caving.

Topography data was not needed as no estimated blocks came near the surface. The upper limit of the block model is constrained by the Top Shear.

2.2 Database Construction and Modifications

The drill hole database supplied to H&SC included all drill hole data from the Mineral Hill group of deposits. Only core and RC drill holes were used for estimation purposes and the following review is based only on this data. Figure 1 shows a plan view of the drill holes and intervals assayed for Au. Table 2 summarises this data.

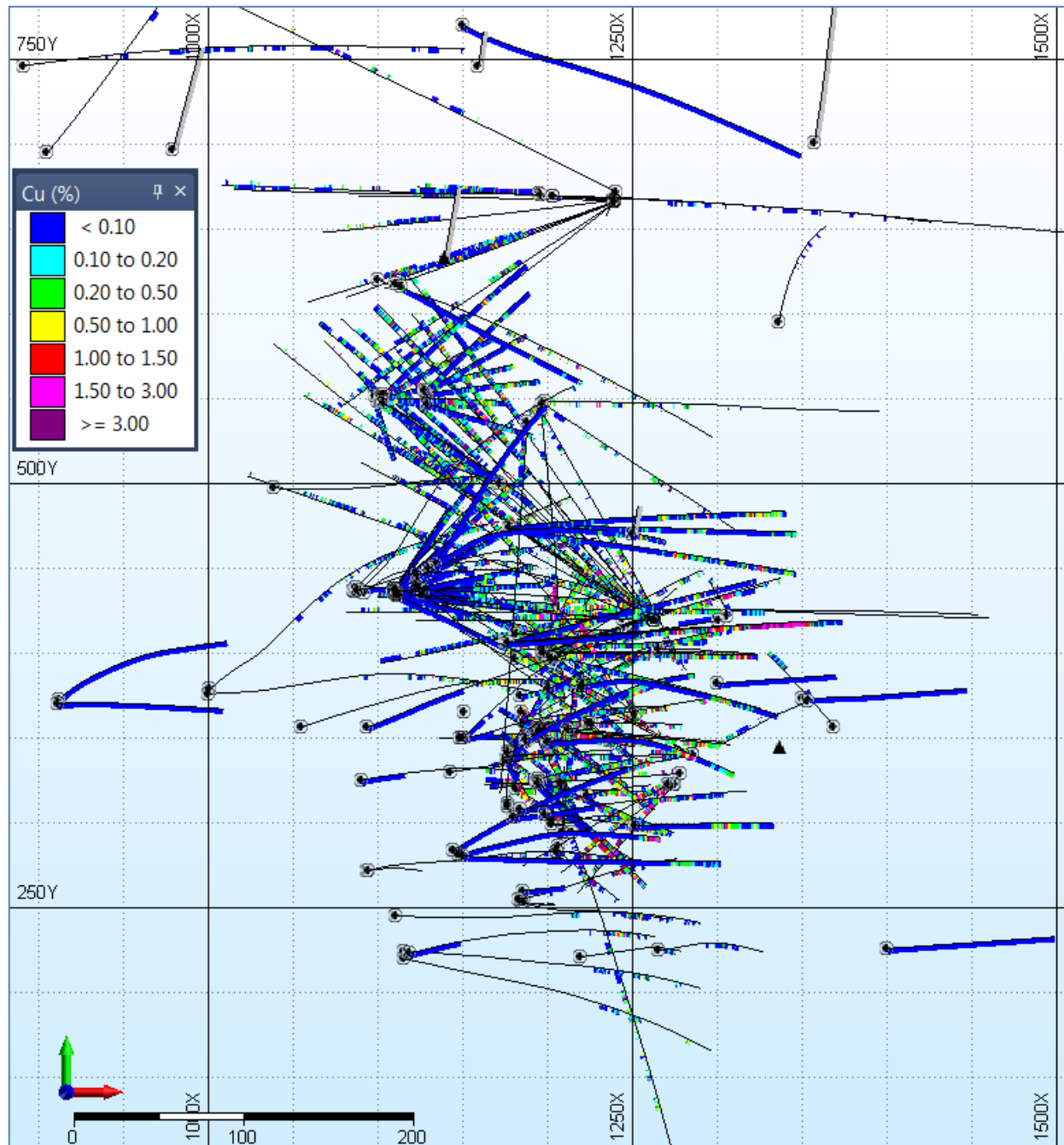


Figure 1: Plan view of drill hole data showing Au grades

KBL specified that the current study was not required to include a thorough review of database validity, and H&SC have completed only limited consistency checks. Inconsistencies noted by this review were generally limited to descriptive field entries, with no direct impact on resource estimates.

No obvious errors, such as overlapping intervals, were observed in the assay or lithology data.

Table 2: Summary of drill hole data

	Collar records	Down hole surveys	Assays	Lithology	Density
Drill holes	237	237	213	214	17
Records	237	3,170	21,199	5,087	292
Metres	44,562	N/A	20,921	38,770	288

2.3 Wireframe Construction

H&SC constructed six wireframes representing zones of mineralisation called ABC, D, G, H, I and J. The ABC, D, G and H mineralised zones are named in line with the high grade lode names that KBL use. The I and J mineralised zones represent additional zones of mineralisation further to the west. The mineralisation wireframes generally strike N-S (local grid) and dip around 62° to the west. The wireframes of the ABC, D, G and H mineralised zones encapsulate the ten wireframes provided by KBL outlining zones of interpreted brecciation within the A, B, C, D, G and H lodes. These wireframes were constructed from geological logs, predominantly from the recent underground core drilling. Where no drill data exists along strike, the mineralisation wireframes were extended ten metres north and south of last drill hole intercept. Figure 2 shows an oblique view of the mineralised zone wireframes.

H&SC also constructed nine domain wireframes that enclosed volumes in which the mineralisation was interpreted to maintain a similar orientation. These domains were largely based on the shape of the interpreted brecciation wireframes provided by KBL which are thought to have a significant control on mineralising fluid flow.

H&SC is aware that alternative interpretations of the mineralised zones are possible but consider the wireframes to adequately approximate the locations of the mineralised zones for the purposes of resource estimation. Alternative interpretations may impact the resource estimate but are unlikely to have an excessive impact.

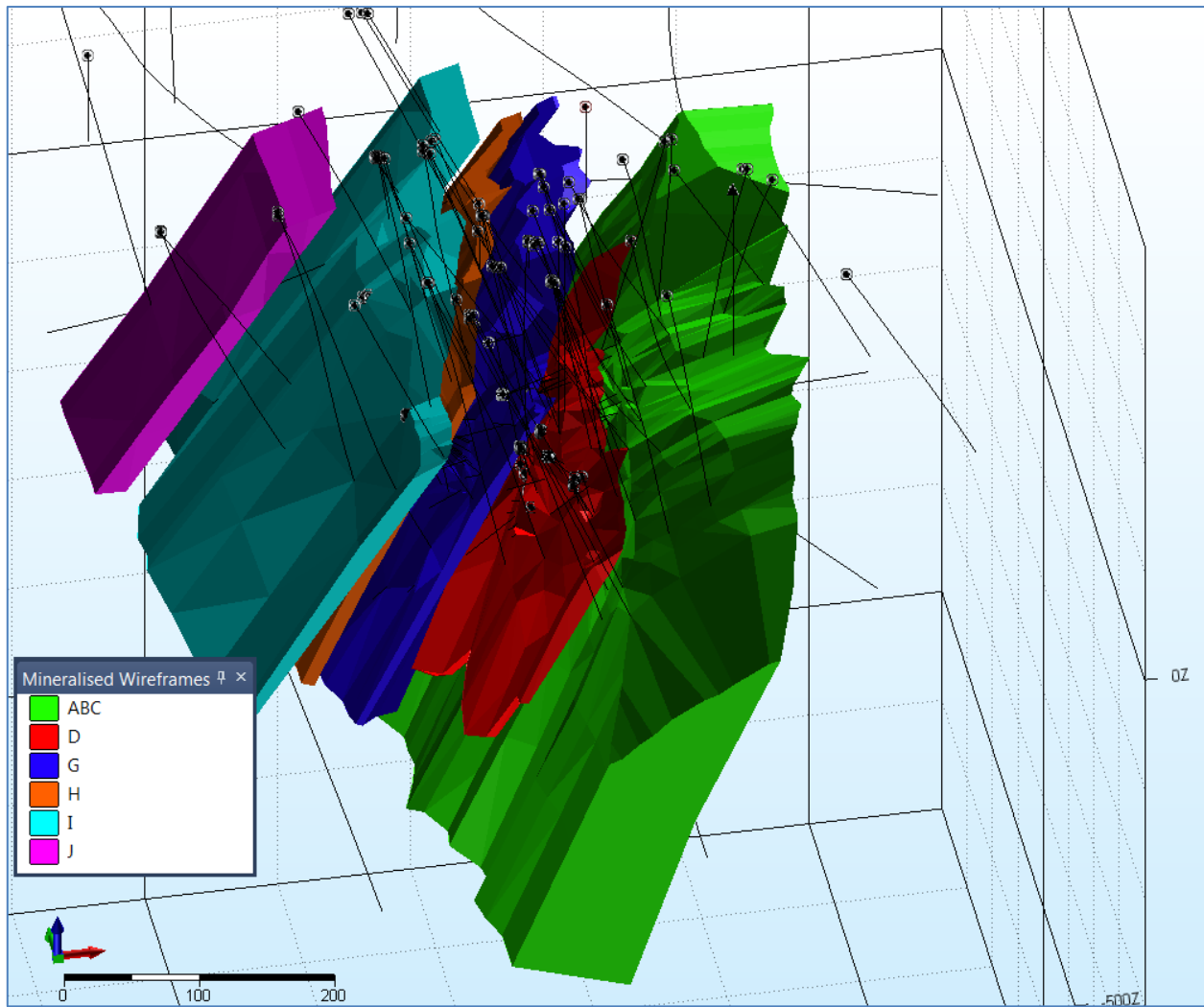


Figure 2: Oblique view of mineralised zone wireframes and drill holes

The wireframes of the fault surfaces were compared against the distribution of mineralisation and it was decided that all but one surface had insignificant displacement at the scale used for resource estimation. The fault surface called the 'Top Shear' is obviously important as it forms an upper surface that truncates all mineralisation. H&SC modified the fault surface used in the November 2013 estimation using the interpretation provided by KBL.

2.4 Density Data

In total 292 density measurements have been collected from the SOZ area. 268 of these density measurements were carried out on drill core collected in the recent phase of drilling (2013-2014). The density of the rocks at SOZ is variable and strongly influenced by the proportion of sulphide mineralisation including chalcopyrite, galena, sphalerite and pyrite mineralisation. The number and spatial distribution of density measurements is not considered to be sufficient to directly and accurately estimate the density for each block, considering the variability of grades and density. H&SC therefore used a formula derived by KBL personnel to estimate the density for each block using the estimated Cu, Pb and Zn grades. The formula employed uses the Cu, Pb and Zn grades to estimate the amount of chalcopyrite, galena and sphalerite respectively and attributes a density according to the proportions calculated. The remaining mass is attributed to gangue with a density of 2.65 g/cm³. This is similar to the approach used by H&SC in the 2011 and 2013 resource estimates.

but is slightly improved by the fact that the proportion of gangue component is weighted using a volume proportion rather than a mass proportion.

Density (t/m³) =

$$100 / \left(\frac{(0.688 \times \text{Cu}) + (0.153 \times \text{Pb}) + (0.391 \times \text{Zn}) + ((100 - ((2.89 \times \text{Cu}) + (1.155 \times \text{Pb}) + (1.563 \times \text{Zn))))}{2.65} \right)$$

The estimated density was then compared to the 292 density measurements and the correlation was considered acceptable. The estimated density represents dry bulk density.

One obvious omission of this approach is that the formula does not take into account other sulphides such as pyrite that do not contain Cu, Pb or Zn. The presence of sulphides such as pyrite would consequently result in a higher density than that calculated and the density estimates are therefore considered to be conservative. KBL inform H&SC that much of the material at SOZ is relatively low in pyrite but there are some areas where pyrite mineralisation is significant. H&SC has not investigated this issue further but recommends this issue be investigated to improve the estimates of density.

The density calculation employed also assumes that all Cu is found in chalcopyrite and not in other Cu bearing minerals such as bornite. The relationship between estimated and measured densities is shown in Figure 3.

H&SC recommends that KBL increase the number of density samples and assay the density samples directly to further investigate and improve the estimation of density. H&SC also recommends that the density data be assessed as several of the points above the line in Figure 3 are concerning and may represent errors in the data or indicate additional factors that have not been considered.

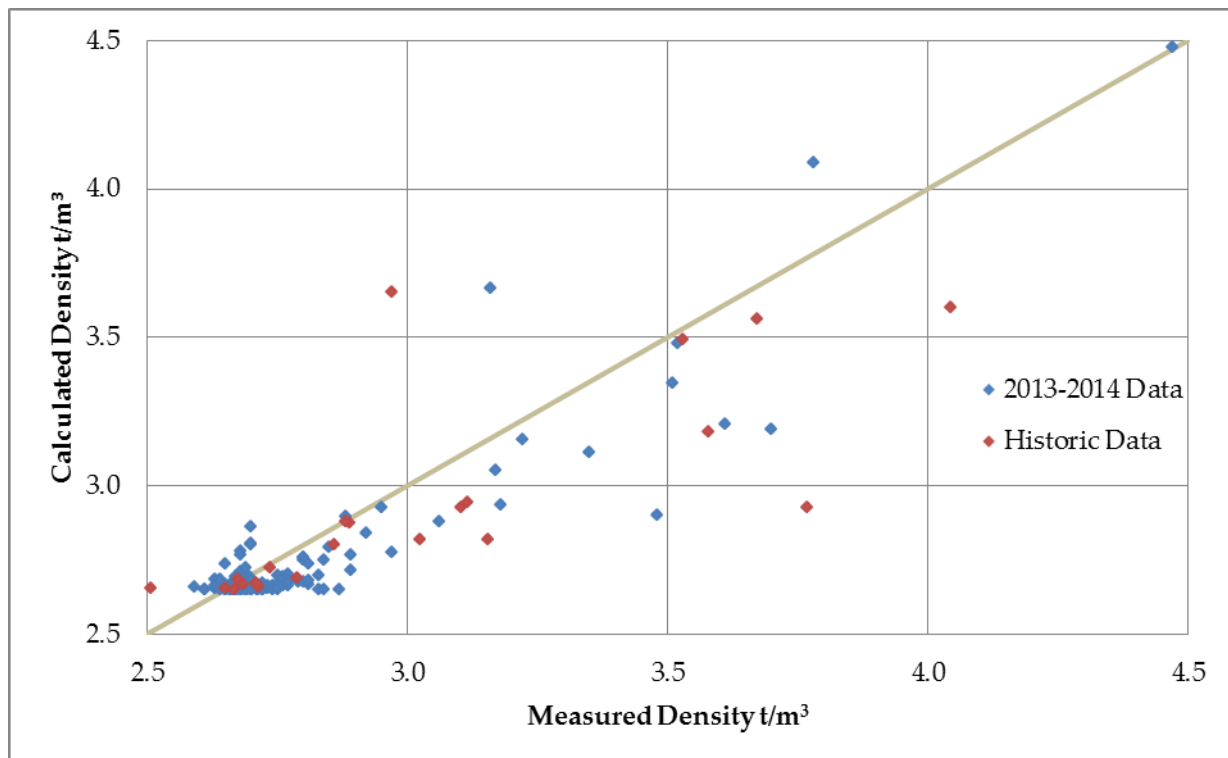


Figure 3: Correlation between measured and calculated density

2.5 Composites Used For Estimation

Some drill holes had been sampled in their entirety, however the vast majority of drill holes had only been sampled where signs of mineralisation occurred. For this reason, H&SC populated all unsampled intervals with low default grades, set at the detection limits for each element. Table 3 shows the default low grades assigned to unassayed intervals. KBL maintain that some unsampled intervals may contain significant grades especially for Au. The approach of assigning low grades to unsampled intervals is therefore likely to be conservative.

The majority of samples were around 1 m in length and therefore the samples were composited to nominal 1 m intervals with a minimum composite length of 0.5 m.

Table 3: Default grades

Element	Cu (%)	Au (ppm)	Ag (ppm)	Pb (%)	Zn (%)
Default grades	0.00025	0.003	0.5	0.00025	0.00025

The composite grades are highly variable and average Au, Ag, Pb and Zn grades are influenced by a few high grade outliers. H&SC applied a top cut based on the 99.5th percentile for each of the six mineralised zones as well as the surrounding waste rock. The 99.5th percentile corresponds approximately to a distinct break in the grade populations. Table 4 shows the top cuts applied for each zone.

Table 4: Top cuts applied to each mineralised zone

Zone	Ag (ppm)	Pb (%)	Zn (%)
ABC	168	14.27	11.84
D	NA	14.90	7.10
G	NA	0.78	1.26
H	NA	1.32	1.05
I	NA	0.78	1.08
Outside	NA	0.56	0.64

Composites above the top shear surface were flagged and were not used in the estimation. Table 5 shows the statistics of all the composite samples used in the estimation.

Table 5: Statistics of the composite samples used for estimation

Parameter	Cu (%)	Au (ppm)	Ag (ppm)	Pb (%)	Zn (%)
No. Samples	29,414	29,414	29,414	29,414	29,414
Minimum	0.00025	0.003	0.5	0.00025	0.00025
Maximum	21.9	481.5	351.0	14.9	11.8
Mean	0.3	0.5	3.5	0.2	0.2
Variance	0.8	33.9	139.6	0.8	0.6
Std Dev	0.9	5.8	11.8	0.9	0.8
CV	3.0	12.7	3.4	4.7	4.4

*For all zones including waste, with default low values

2.6 Variogram Models

The variogram models were created in GS3 using the 1 m composite data from the SOZ mineralised body ABC domains 10 and 11 as this zone contained the most data.

The details of the variogram parameters are shown in Table 6. MIK uses 14 different indicator variograms for the different bins so only the median indicator is presented. All variograms were rotated to be parallel to each mineralised zone according to the orientations shown in Table 9.

An example of the semi-variograms and a 3D representation of the variogram model produced for Cu are shown in Figure 4.

Table 6: Variogram parameters

Axis	Structure	Parameter	Cu	Au*	Ag	Pb	Zn
		Nugget	0.2	0.12	0.23	0.1	0.1
Along Strike	Structure 1	Range (m)	9	15	14	9	9
		Sill	0.42	0.36	0.57	0.58	0.58
	Structure 2	Range (m)	17	33	32	20	9
		Sill	0.28	0.42	0.1	0.22	0.25
	Structure 3	Range (m)	125	79	400	180	305
		Sill	0.1	0.1	0.1	0.1	0.07
Down Dip	Structure 1	Range (m)	10	20	9	11	11
		Sill	0.42	0.36	0.57	0.58	0.58
	Structure 2	Range (m)	11	56	30	11	14
		Sill	0.28	0.42	0.1	0.22	0.25
	Structure 3	Range (m)	82	126	400	225	305
		Sill	0.1	0.1	0.1	0.1	0.07
Across Strike	Structure 1	Range (m)	2	3	2	3	2.5
		Sill	0.42	0.36	0.57	0.58	0.58
	Structure 2	Range (m)	11	17.5	17	32	23
		Sill	0.28	0.42	0.1	0.22	0.25
	Structure 3	Range (m)	35	22	350	155	23
		Sill	0.1	0.1	0.1	0.1	0.07

*Au variogram presented is the median indicator variogram

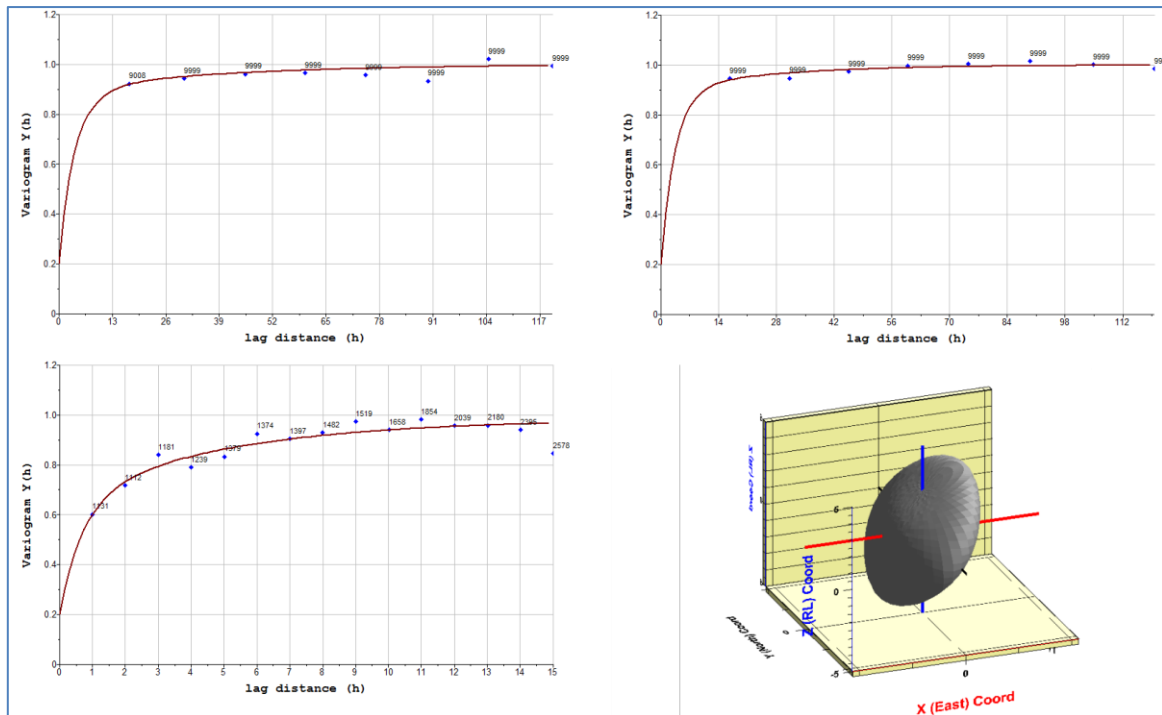


Figure 4: Cu directional variograms and variogram model

Top Left: Along strike, Top Right: Down dip, Bottom Left: Across Strike, Bottom Right: 3D Variogram model

2.7 QAQC

H&SC has not assessed the QAQC data for sampling and assaying from SOZ as this lies outside the scope of work requested by KBL. Therefore KBL take responsibility for QAQC as they do for the validity and adequacy the drill hole database.

3 Resource Estimates

H&SC considers MIK to be a more appropriate technique than OK for estimating elements with highly skewed grade distributions, as it deals better with extreme high grades. The mineralised zones in the SOZ deposit have CVs of the Au grades ranging from 4.7 to 11.5 and are therefore considered to be highly skewed. Pb, the second most skewed dataset, for example has values ranging from 2.8 to 3.9 for the mineralised zones. H&SC therefore used MIK to estimate the Au and OK to estimate the Cu, Ag, Pb and Zn concentrations. All estimates were carried out using the Micromine software.

The MIK estimation methodology employed by H&SC divides the data for each mineralised zone into 14 bins based on probability thresholds and, for each of the bins, estimates the proportion of samples that exceed the bin threshold for each block. The mean grade of each bin is then applied to the proportion within each bin in order to estimate the overall grade.

The top indicator bin (highest grade) represents 1% of the data and contains the anomalously high Au grades. There can be a large difference between the mean and median grades for the top bin for highly skewed datasets. In each of the zones at SOZ, using uncut Au composites, the median value for the top indicator is generally around half the mean value due to the highly skewed distribution

of grades. The resources reported here represent the models in which the median values for the top indicator bin were applied.

Estimates from within mineralised zone J were removed following discussion with KBL geologists.

3.1 Block model

A table showing the details of the block model is shown in Table 7. Coordinates represent position of block centroids and are in KBL's local grid system.

Table 7: Block model details

	East	North	RL
Minimum coordinate	981.25	117.5	-247.5
Maximum coordinate	1418.75	802.5	247.5
Block size (m)	2.5	5	5
Number of blocks	176	138	100

Blocks above the top shear surface were deleted in order to reduce processing time.

Blocks were assigned to the mined drives and stopes separately. A block factor was recorded for the amount of material within each type of mine development and recoded in fields Factor_In_Drive and Factor_In_Stope. A calculation was then applied to estimate the total amount of un-mined material for each block and recorded in the field Rock_Factor. No sub-blocking was applied.

3.2 Search criteria

The search criteria used for estimation include four progressively relaxed search passes the details of which are shown in Table 8. Declustering was carried out by the use of search sectors. The search ellipsoids are flattened in the direction across the strike of mineralisation and were aligned in the same direction as the variograms according to the directions shown in Table 9. Discretisation of blocks is based on 5x5x2 (E N RL) divisions.

Table 8: Search Criteria

Axis	Pass 1	Pass 2	Pass 3	Pass 4
Along Strike	25 m	50 m	50 m	75 m
Down Dip	25 m	50 m	50 m	75 m
Across Strike	5 m	10 m	10 m	15 m
Composite Data Requirements				
Minimum data points (total)	16	16	12	8
Maximum points per sector	8	8	8	12
Sectors	4	4	4	4
Minimum Hole Count	4	4	2	1
Maximum data per drill hole	6	6	6	12

The mineralised wireframes were treated as hard boundaries so that composites within a mineralised wireframe were only used to estimate the grade within that particular wireframe. Composites outside the mineralised wireframes were only used to estimate blocks outside the wireframes.

The search ellipses and variogram models were rotated parallel to mineralisation for each of the domains according to the directions (in the local mine grid) shown in Table 9. The local mine grid has a bearing of 315° relative to MGA55 north.

Table 9: Local mine grid orientation of search ellipse and variogram models

Zone	Domain	Along Strike		Down Dip		Across Strike	
		Azimuth	Dip	Azimuth	Dip	Azimuth	Dip
Outside	0	180	0	270	62	90	28
ABC	10	185	0	275	63	95	27
ABC	11	205	0	295	65	115	25
ABC	12	180	0	270	45	90	45
ABC	13	180	0	270	40	90	50
D	20	195	0	285	70	105	20
D	21	160	0	250	30	70	60
D	22	180	0	270	30	90	60
D	23	160	0	250	60	70	30
D	24	318	0	48	75	228	15
G	30	175	0	265	65	85	25
G	31	198	0	288	60	108	30
H	40	175	0	265	65	85	25
H	31	198	0	288	60	108	30
H	41	160	0	250	55	70	35
I	50	180	0	270	55	90	35
I	31	198	0	288	55	108	30
I	41	160	0	250	55	70	35

Figure 5 shows a cross section and plan view of the rotated Pass 1 search ellipses with respect to the Domains and breccia wireframes associated with the ABC mineralisation.

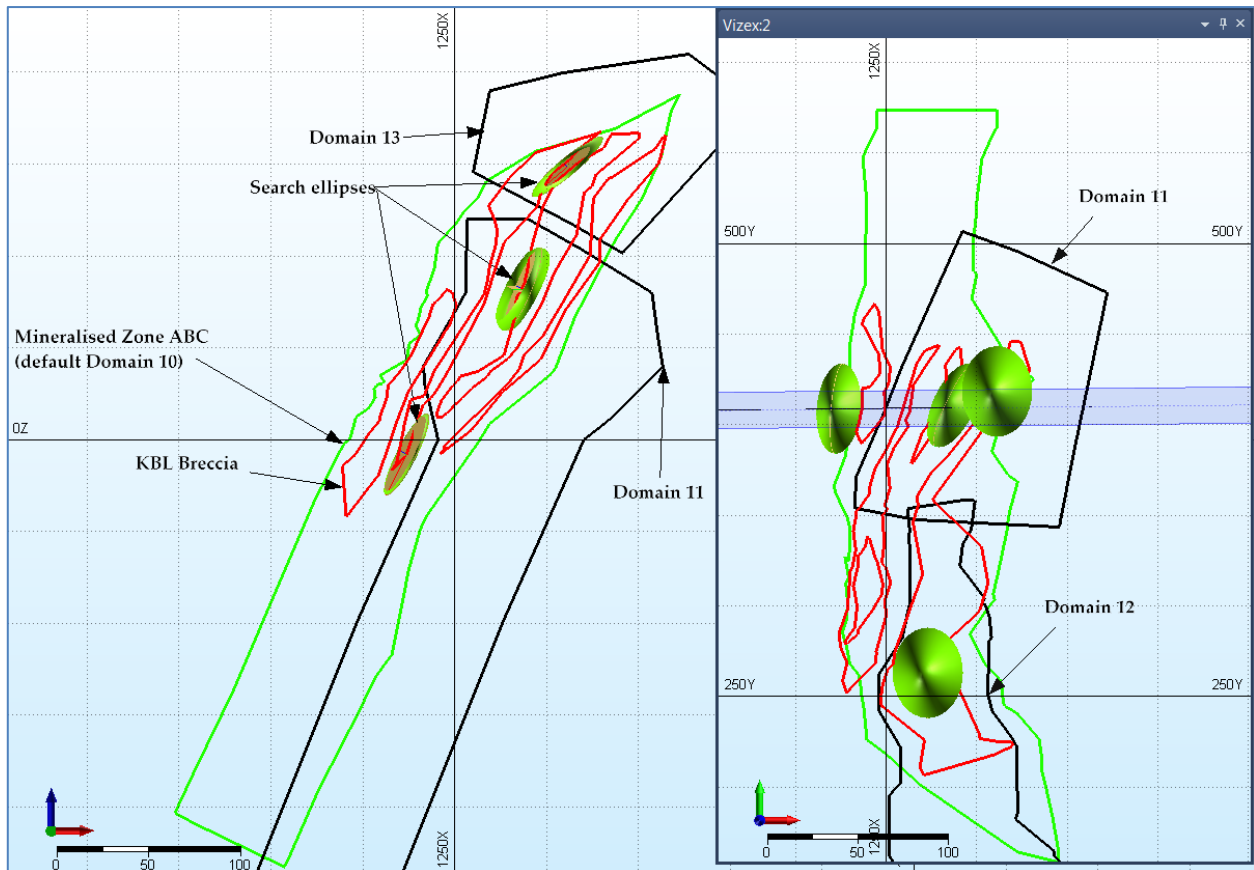


Figure 5: Cross section and plan view showing search ellipses and domains associated with the ABC Zone and breccias

3.3 Resource classification

The resources are classified entirely on search criteria with blocks populated in Pass 1 classified as Measured, Pass 2 classified as Indicated and Pass 3 and Pass 4 classified as Inferred. Estimates in blocks with an average distance to samples of over 50 m were deleted to avoid resources being estimated too far. Estimates include isolated blocks which may not be viable in a realistic underground mining scenario. Estimates also include material bordering existing stopes. Material within the expanded stope wireframes is downgraded to Inferred at the request of KBL because the edges are poorly defined as the stopes have not been surveyed and may have been subject to caving. The wireframe of expanded stopes is a wireframe in which the stope boundaries have been moved outwards by 2 m or, if greater, by 20% of the stope width. This downgrade of the classification of resources was not applied in the November 2013 resource estimate but a similar method was used in the November 2011 estimates.

KBL state that the stopes are planned to be surveyed and H&SC recommends KBL to carry this out in order to provide greater confidence in the location of the stope boundaries. Figure 6 shows the effect reclassification of resources within the enlarged stope wireframes on a cross section with the blocks coloured by resource classification.

Figure 7 shows an oblique view of the block model at a cut-off of 1.5% Cu Equivalent.

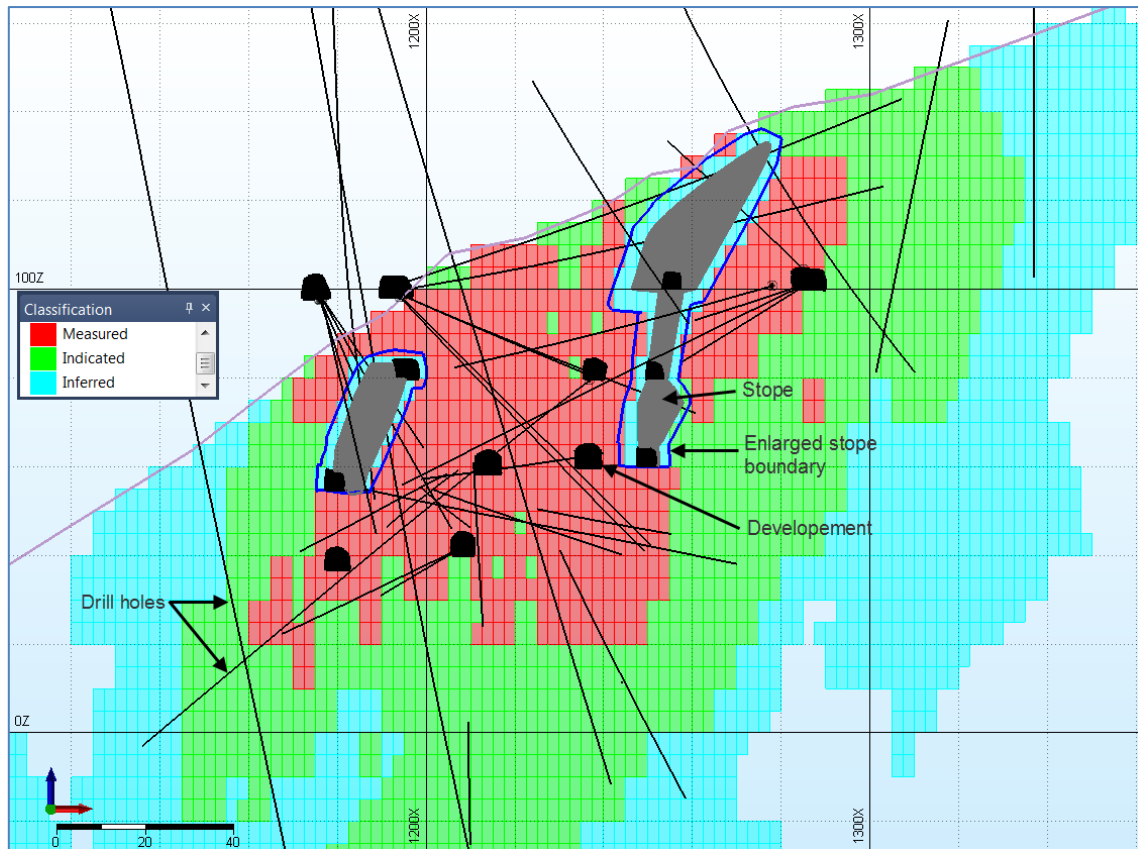


Figure 6: Cross section showing classification and enlarged stope boundaries

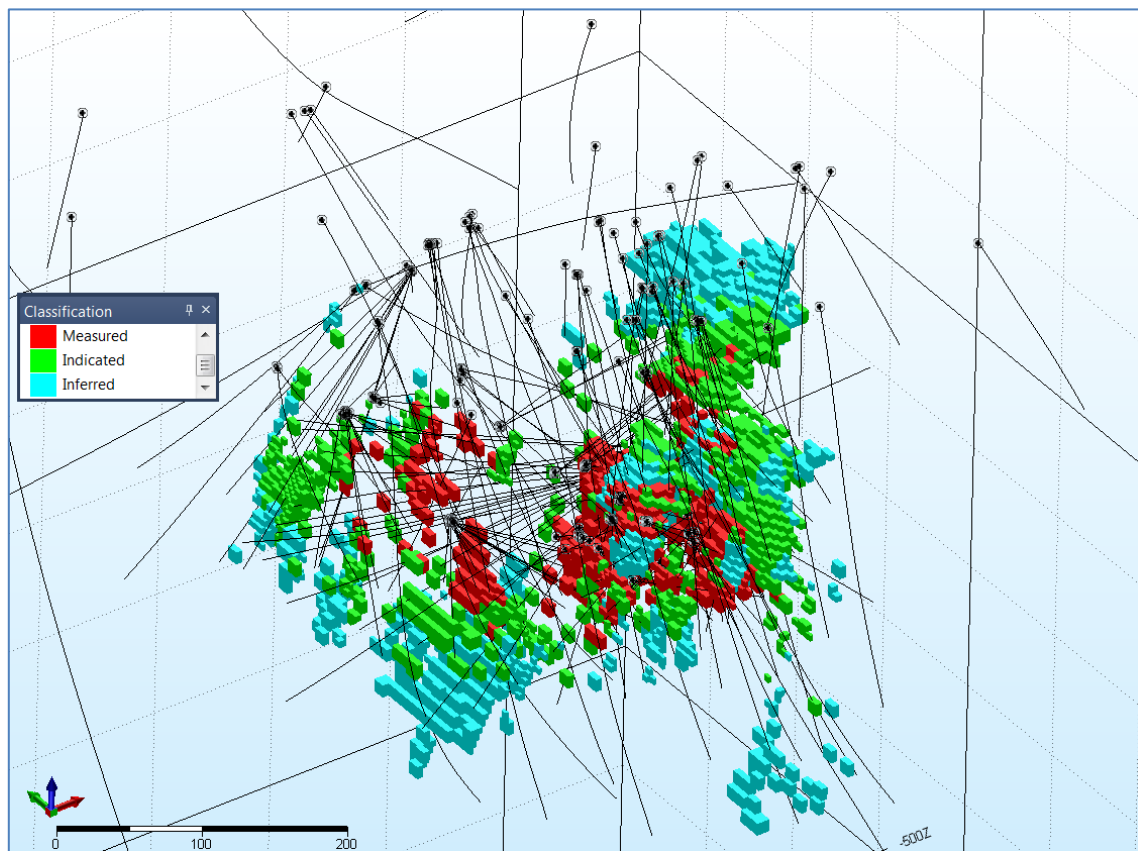


Figure 7: Oblique view of classification of the block model at a cut-off of 1.5% Cu Equivalent

3.4 Block model validation

The estimation procedure was reviewed as part of an internal H&SC peer review. No check models by a different operator were conducted in this round of estimation as resources are in line with the resources estimated in November 2013.

H&SC encourage KBL to reconcile mine records with the current resource estimate in order to further test the accuracy of the estimation.

The H&SC block model was reviewed visually by H&SC and KBL geologists and it was concluded that the block model fairly represents the grades observed in the drill holes. A cross section showing the Cu Equivalent block and composite grades is shown in Figure 8. H&SC also validated the block model statistically using a variety of histograms, boxplots, swath plots, contact plots and summary statistics.

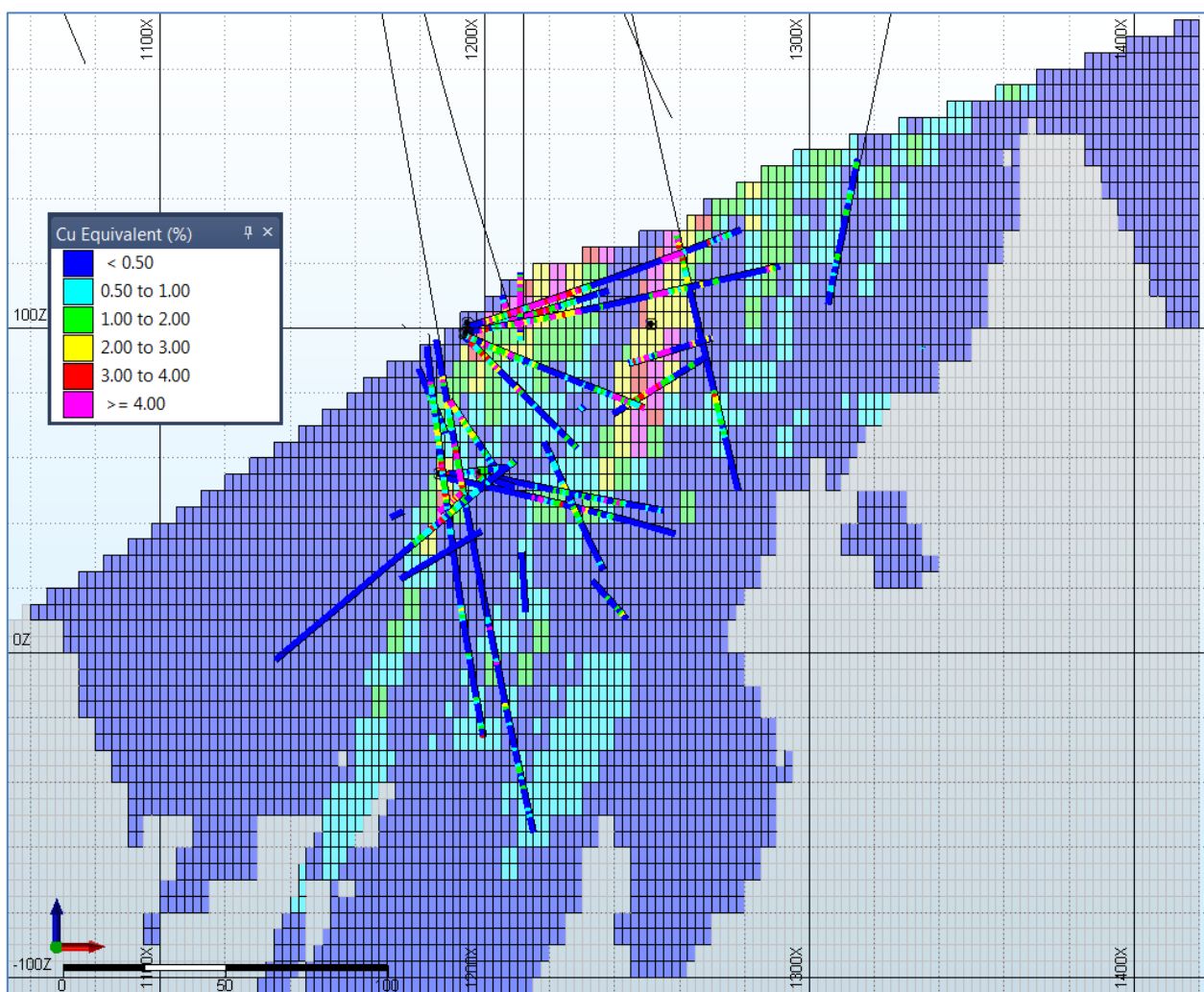


Figure 8: Cross section, looking grid north, of block and composite Cu Equivalent grades

Figure 10, Figure 9, Figure 11 and Figure 12 show histogram plots of the block and composite grades from within the mineralised zones for Cu, Au, Pb and Zn respectively.

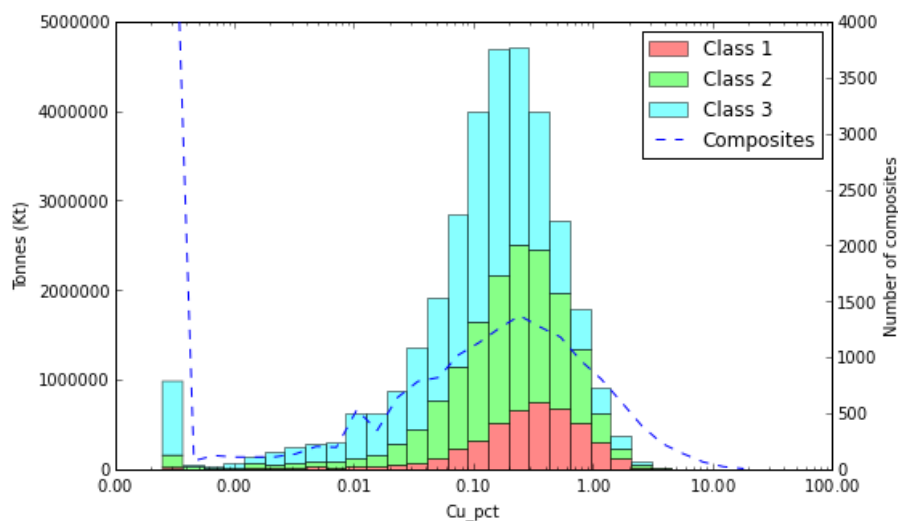


Figure 9: Histogram plot of Cu block and composite grades within the mineralised zones

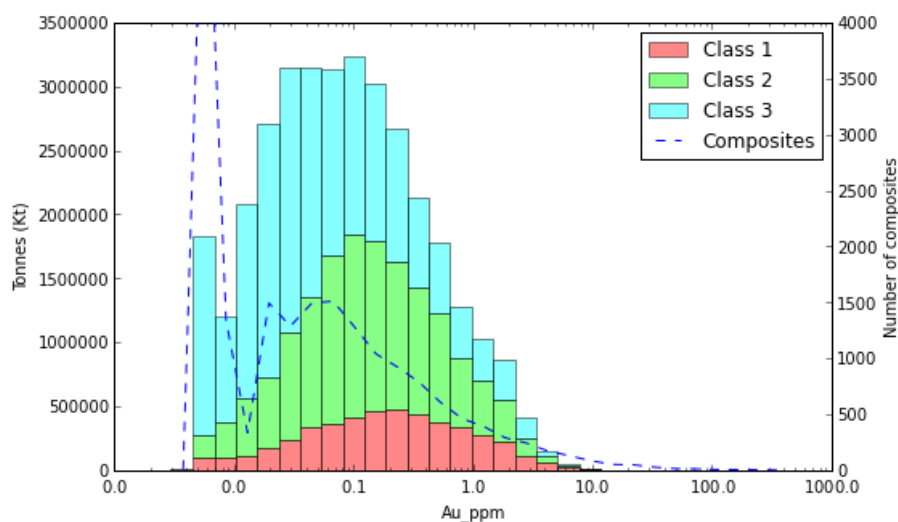


Figure 10: Histogram plot of Au block and composite grades within the mineralised zones

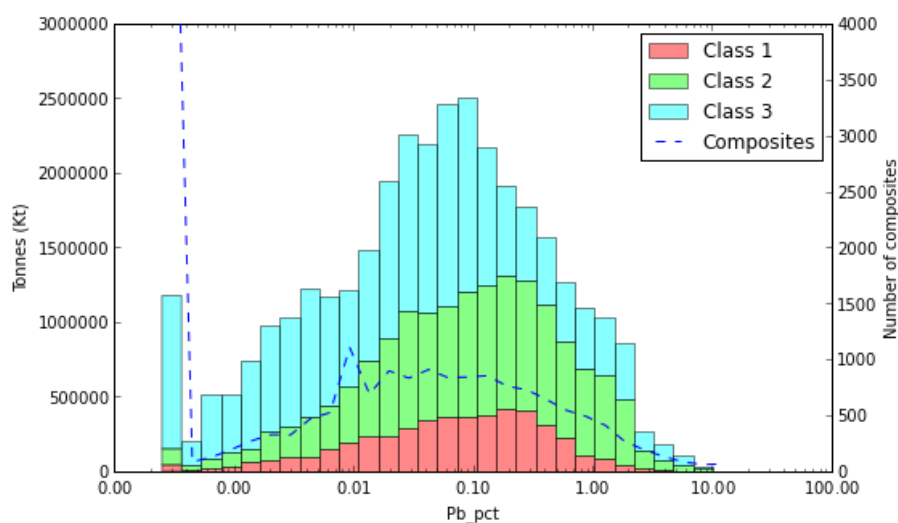


Figure 11: Histogram plot of Pb block and composite grades within the mineralised zones

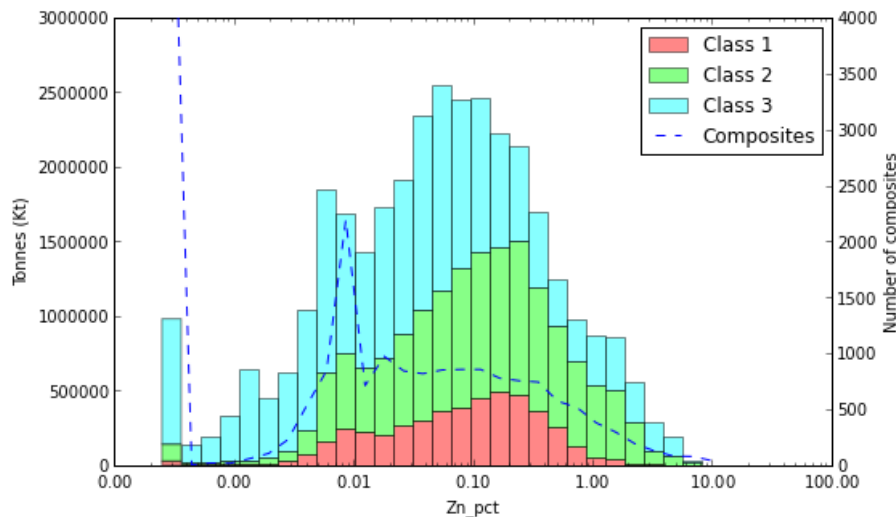


Figure 12: Histogram plot of Zn block and composite grades within the mineralised zones

3.5 Estimated resources

The estimated resources at a Cu Equivalent cut-off of 1.5% are presented by classification and mineralised zone in Table 10 and summarised by mineral zone in Table 11. The Cu Equivalent was calculated from estimated Cu, Au, Ag and Pb grades using the following formula provided by KBL:

$$Cu\ Equivalent = Cu(\%) + (Au(ppm) \times 0.467) + (Ag(ppm) \times 0.008) + (Pb(\%) \times 0.136)$$

H&SC have not been informed of the exact rationale behind the copper equivalent formula but consider it to be reasonable. The cut-off grade adopted was selected by KBL based on knowledge.

Table 10: Estimated resources by Classification and Zone at a Cu Equivalent cut-off of 1.5%

Class	Zone	Tonnes (Kt)	Density (t/m ³)	Cu Eq (%)	Cu (%)	Au (ppm)	Ag (ppm)	Pb (%)	Zn (%)
Measured	ABC	329	2.71	2.3	1.2	1.8	12	0.5	0.6
	D	143	2.71	2.4	1.2	1.9	17	0.9	0.4
	G	78	2.68	2.3	0.9	2.9	4	0.03	0.04
	H	3	2.69	2.3	1.2	2.2	5	0.04	0.03
Indicated	ABC	474	2.76	2.3	1.1	1.4	28	2.3	1.9
	D	64	2.71	2.2	1.3	1.5	22	1.0	0.5
	G	99	2.67	2.0	0.8	2.4	4	0.03	0.04
	H	68	2.68	1.9	1.0	1.9	4	0.02	0.02
Inferred	ABC	475	2.76	2.4	1.0	1.9	27	2.4	2.1
	D	58	2.72	2.4	1.5	1.4	26	1.1	0.6
	G	161	2.7	2.5	1.8	1.5	4	0.01	0.02
	H	33	2.68	1.8	1.0	1.7	3	0.01	0.01
Total		1,985	2.73	2.3	1.2	1.8	19	1.4	1.1

Table 11: Estimated resources by Zone at a Cu Equivalent cut-off of 1.5%

Zone	Tonnes (Kt)	Density (t/m³)	Cu Eq (%)	Cu (%)	Au (ppm)	Ag (ppm)	Pb (%)	Zn (%)
ABC	1,277	2.75	2.3	1.1	1.7	24	1.9	1.6
D	265	2.71	2.3	1.3	1.7	20	0.9	0.5
G	339	2.69	2.3	1.3	2.1	4	0.02	0.03
H	104	2.68	1.9	1.0	1.9	3	0.02	0.01
Total	1,985	2.73	2.3	1.2	1.8	19	1.4	1.1

Inferred Resources are extrapolated up to 50 m along strike and down dip from drill hole data.

The resources at a cut-off of 1.5% Cu Equivalent span a length of around 650 m in a NNW direction, consisting of several en echelon north-south striking bodies that dip to the west on the local mine grid. The plan width of the resource varies from 25 m to 355 m and contains significant lenses of material below cut-off. The upper limit of the mineralisation occurs at 120 m below the surface and the lower limit of the resource extends to a depth of 445 m below the surface.

4 Conclusions and Recommendations

H&SC has estimated the mineral resources of SOZ using all suitable data that is available to date. Estimates were constrained using wireframes outlining broad zones of mineralisation that were based largely on wireframes provided by KBL. This estimate supersedes the estimate produced by H&SC in November 2013. Assay data from 213 drill holes was used including 51 new drill holes that were not used in the previous estimate.

The resources presented here have been classified according to JORC 2012 guidelines, however H&SC has accepted the drill hole database from KBL in good faith. H&SC has not assessed the reliability of the sampling and assaying or completed a detailed review of the validity or adequacy of the drill hole database. KBL accepts responsibility for these aspects of the resource estimates.

The author of this report visited the Mineral Hill in May 2014 immediately preceding the start of the mineral resource estimate.

The vast majority of drill holes have only been sampled where signs of mineralisation occurred. For this reason H&SC populated all unsampled intervals with default grades set at the detection limits for each element. H&SC has been informed that some unsampled intervals may contain significant grades especially for Au. The approach of assigning low grades to unsampled intervals is therefore likely to be conservative. KBL inform H&SC that the unsampled intervals are currently being cut and assayed.

Only 293 density measurements from 17 drill holes have been taken at SOZ. KBL provided H&SC with a normative formula to calculate the density of each block from estimated Cu, Pb and Zn grades. Unfortunately insufficient S assays are available to estimate S concentrations, so the effect of sulphides such as pyrite that do not contain Cu, Pb or Zn is not taken into account. The presence of sulphides such as pyrite would result in a higher density than that calculated and the density estimates are therefore considered to be conservative. H&SC recommends that KBL continue to

increase the number of density samples and assay the density samples to further investigate and improve the estimation of density.

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