

28 January 2015

Company Announcement Office
Australian Stock Exchange Ltd
4th Floor, 20 Bridge Street, Sydney NSW

ASX code: MUX

KING VOL ZINC DEPOSIT – JORC 2012 RESOURCE UPDATE

HIGHLIGHTS

- **Updated JORC 2012 compliant Mineral Resource estimate completed for the high grade King Vol zinc deposit in North Queensland, comprising:**
 - *Indicated Resource of 1.05Mt grading 14.7% Zn, 0.9% Cu, 0.7% Pb and 36.5g/t Ag, containing 154Kt of zinc, 9Kt of copper, 7Kt of lead and 1.23Moz of silver; and*
 - *Inferred Resource of 1.94Mt grading 10.4% Zn, 0.7% Cu, 0.5% Pb and 26.4g/t Ag, containing 202Kt of zinc, 13Kt of copper, 10Kt of lead and 1.65Moz of silver.*
- **The updated Mineral Resource paves the way for the commencement of development studies.**
- **The deposit remains open at depth and along strike to the northwest.**

Mungana Goldmines Limited (ASX: MUX) is pleased to report an updated JORC 2012 compliant Mineral Resource estimate for its flagship **King Vol zinc deposit**, part of its 100%-owned Chillagoe base metals project located 210km west of Cairns in North Queensland (Figure 1).

The updated Mineral Resource – which totals **2.99Mt grading 11.9% zinc, 0.8% Cu, 0.6% Pb and 29.9g/t Ag** for **356,000t of contained zinc**, 22,000t of contained copper, 17,000t of contained lead and 2.88Moz of contained silver – was undertaken by independent geological consultants International Resource Solutions based in Perth. The King Vol Mineral Resource estimate is set out in Table 1 below.

King Vol Mineral Resource – January 2015									
	Tonnes (Mt)	Grade				Contained Metal			
		Zn%	Cu%	Pb%	Ag g/t	Zn (kt)	Cu (kt)	Pb (kt)	Ag (Moz)
Indicated	1.05	14.7	0.9	0.7	36.5	154	9	7	1.23
Inferred	1.94	10.4	0.7	0.5	26.4	202	13	10	1.65
Total	2.99	11.9	0.8	0.6	29.9	356	22	17	2.88

Table 1 – King Vol Mineral Resource (geologically constrained, not reported to cut-off)

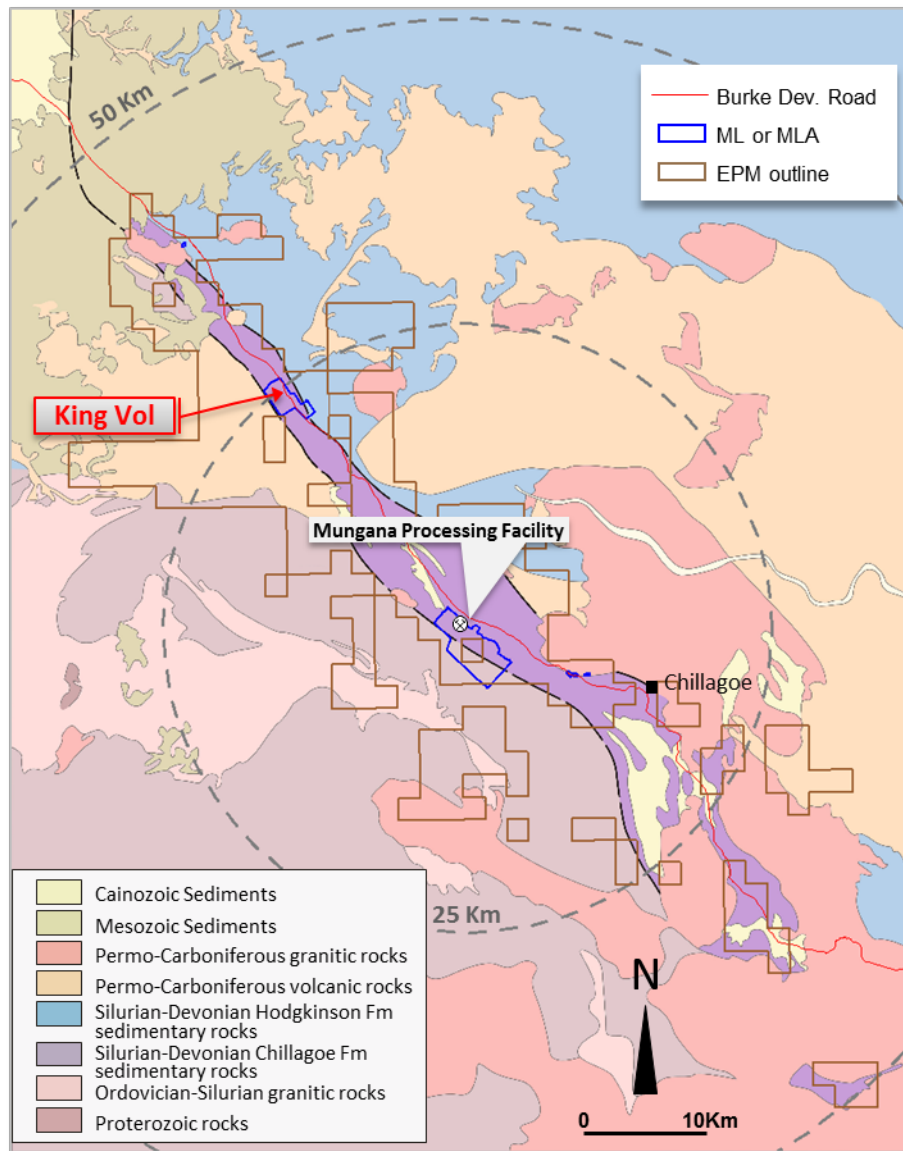


Figure 1 – King Vol Location Plan

The King Vol deposit is the cornerstone asset within the Chillagoe base metals project, which MUX purchased from the liquidators of Kagara Ltd (KZL) in July 2014.

The Mineral Resource is based on 193 intersections from 108 drill holes, with 86% of intersections derived from diamond core and 14% from reverse circulation percussion (RC) drilling, as shown in Figures 2, 3 and 4 below.

Whilst no new drilling has been carried out by MUX since purchasing the project, several batches of sample pulps were re-assayed to comply with QAQC protocols and additional density measurements were undertaken on diamond core.

The Mineral Resource estimate has been completed in accordance with the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves, The JORC Code 2012 Edition. A summary of information used in the King Vol Mineral Resource estimate is provided in Appendix 1.

The high grade King Vol zinc deposit, which is located 25km from the partially completed Mungana base metals concentrator, is expected to underpin the Company's zinc development strategy in North Queensland.

Geology

The King Vol polymetallic base metal deposit is entirely hosted within sediments and carbonate rocks of the Chillagoe Formation (Figure 1). Mineralisation is located along sheared contacts and within limestone units associated with skarn alteration. The current Mineral Resource estimate includes mineralisation on three separate horizons, the Eastern Mineralised Contact Zone (EMCZ), the Eastern Mineralised Replacement Zone (EMRZ) and the King Vol Zone (KVZ).

Sphalerite is the main zinc sulphide mineral found, often in the iron rich form of marmatite. Copper is generally in the form of chalcopyrite and lead in the form of galena. Sulphides are generally massive to semi-massive, with clean contacts, often associated directly with garnet and/or pyroxene skarn, and sometimes brecciated. Gangue sulphide minerals include arsenopyrite, pyrite, pyrrhotite and marcasite.

The geometry of the King Vol deposit is amenable to sub-vertical narrow ore mining methods currently employed in many operations in similar deposits around the world, including the nearby Mungana deposit which was successfully mined from underground over several years.

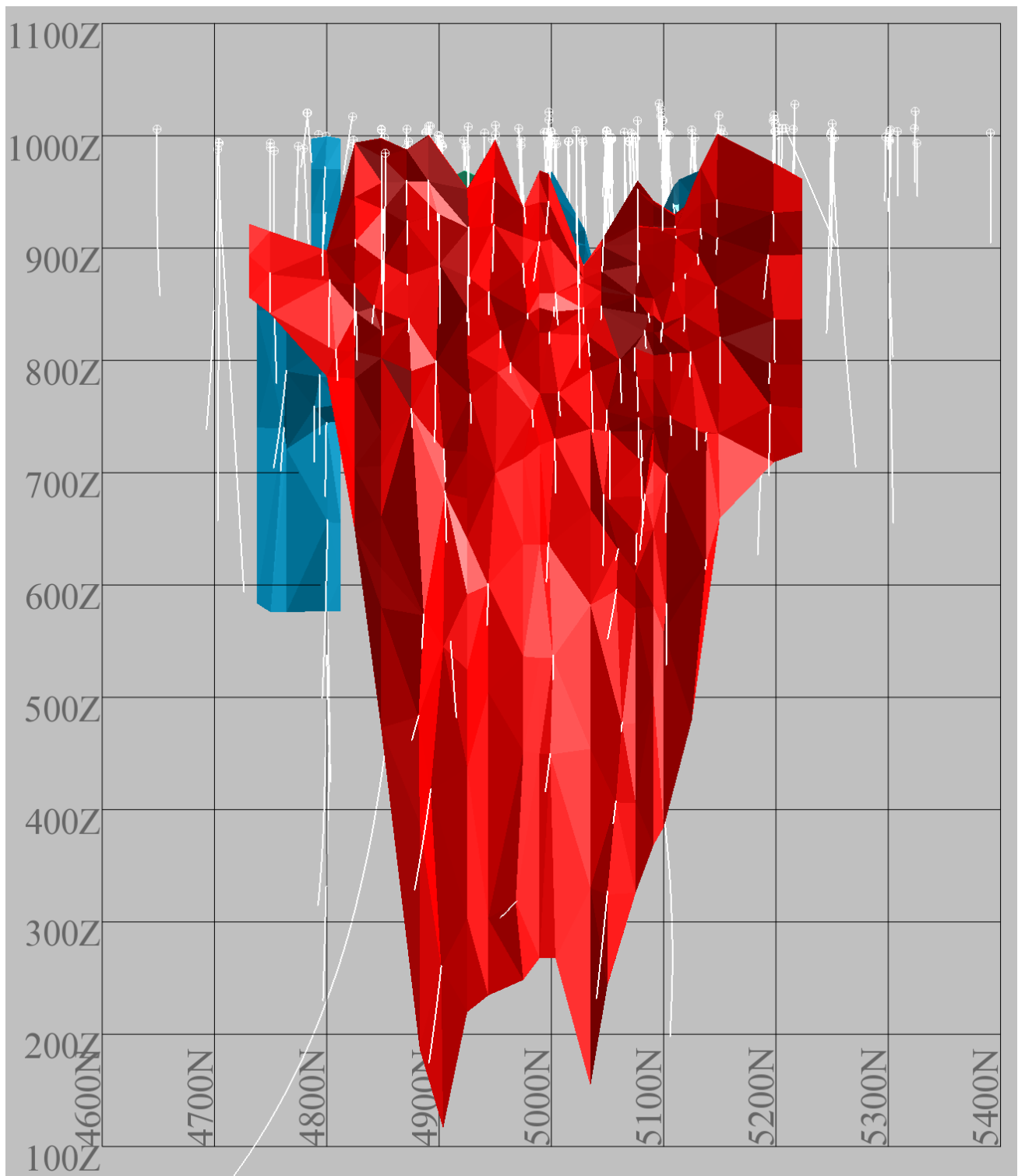


Figure 2 – Long Section of the King Vol deposit showing drill traces in white

The red wireframe in Figures 2 and 3 represents ECMZ, which occurs at the contact between the eastern limestone unit and the ISH unit. The ECMZ hosts over 85% of the contained zinc metal within the Mineral Resource.

The blue unit (largely obscured in Figure 2) is the EMRZ, hosting approximately 14% of the contained zinc metal within the Mineral Resource. The KVZ is completely obscured in the long section view and hosts less than 1% of the contained zinc metal within the Mineral Resource.

The EMRZ and KVZ can be seen along with the ECMZ in cross-section in Figure 3, while drill hole collar locations are shown on Figure 4.

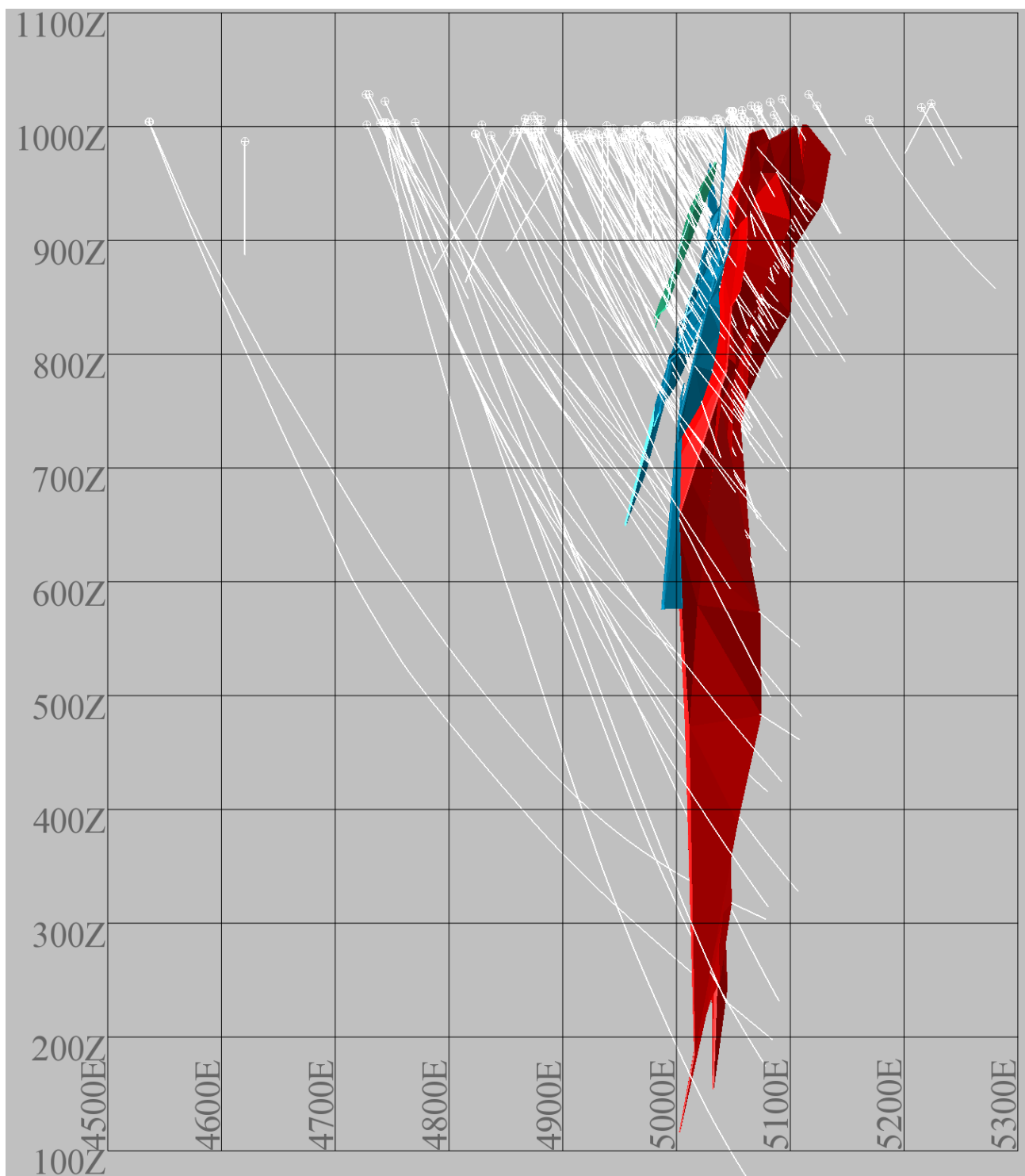


Figure 3 – Cross Section of the King Vol deposit showing drill traces in white

Drilling

The King Vol project area drill hole database contains 210 individual holes. A total of 14 RC and 94 DD holes (NQ and HQ) totalling 1,965m and 23,467m respectively, were utilised in the King Vol resource estimate. Intersections from 8 of the diamond pre-collars were also utilised. Drilling campaigns on the project were conducted by Aztec Resources between 1989 and 1991, Perilya Ltd between 1992 and 1997 and Kagara Ltd between 1999 and 2011. The bulk of the holes into the King Vol Mineral Resource were drilled by Kagara Ltd.

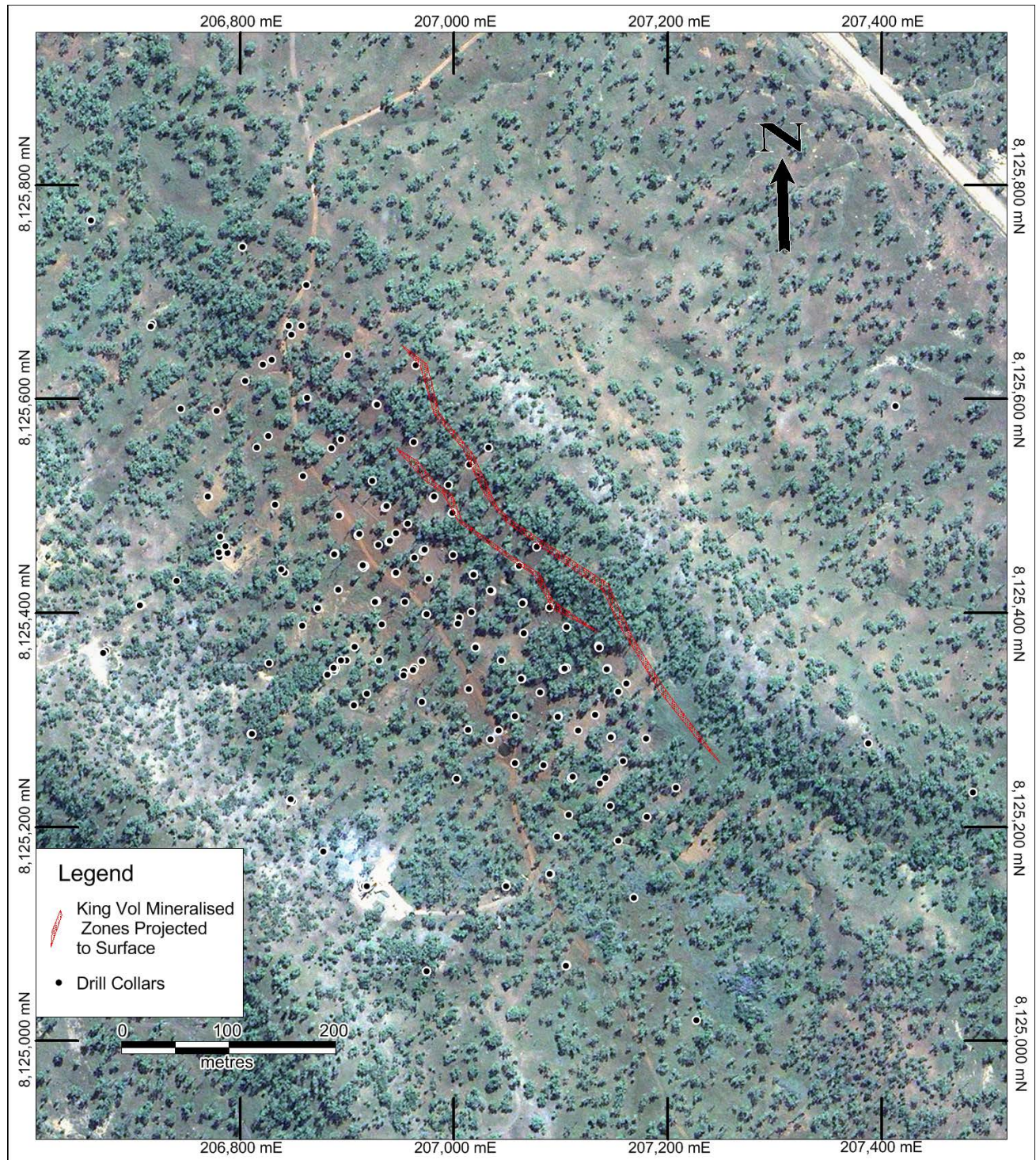


Figure 4 – Collar Locations for King Vol Project

Comments

Mungana Goldmines Chairman, Mr John Fitzgerald, said the completion of the updated Mineral Resource represented another important step in the Company's North Queensland zinc strategy.

"The completion of the King Vol updated Mineral Resource enables us to move forward with feasibility studies to optimise development of this exceptional, high grade zinc deposit," he said

Competent Person's Statement

The information in this report that relates to Mineral Resources is based on information compiled by Mr Brian Wolfe. Mr Wolfe is a member of the Australian Institute of Geoscientists (AIG) and has sufficient experience 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 (the "JORC Code"). Mr Wolfe is a full time employee of International Resource Solutions Pty Ltd and is acting as a consultant to Mungana Goldmines Ltd. Mr Wolfe consents to the inclusion in this report of the Mineral Resources in the form and context in which they appear.

ENDS

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SECTION 1 SAMPLING TECHNIQUES AND DATA

Criteria	JORC Code Explanation	Commentary
Sampling techniques	<i>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.</i>	<p>The King Vol deposit has been sampled using diamond core (DD) and Reverse Circulation (RC) percussion drilling. Drilling has been carried out on a nominal 25m x 25m grid spacing with 12.5m spacings in high priority areas and broader spacings at depth. A total of 14 RC and 94 DD holes (NQ and HQ) totalling 1,965m and 23,467m respectively, were utilised in the King Vol resource estimate. Intersections from 8 of the diamond pre-collars were also utilised.</p> <p>All holes were drilled towards an azimuth of approximately 40 degrees magnetic (local grid east) to avoid drilling through the barren chert, at an average dip of -63.6 degrees in order to intersect the steep westerly dipping ore zones at the most optimal angle.</p>
	<i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used</i>	<p>Collar locations for historical holes and Kagara holes up to 2007 were picked-up by licensed surveyors using a Differential GPS. Post 2007 collar locations were picked-up by Kagara staff surveyors using a Trimble RTK GPS unit, or using a Trimble S6 Total Station once survey control was established. All collar locations were recorded in the companies SQL database.</p> <p>All drill-holes have magnetic down-hole surveys taken at approximate 30m intervals using a single shot down-hole survey instrument. Two surveyed base stations were used to test all down-hole cameras for accuracy.</p> <p>Certified standards were inserted into sample sequences according to Kagara QAQC procedures. Duplicate samples for selected RC samples were also taken. Some standards in the 2011 drilling program did not perform within acceptable ranges and as a result several batches of samples were re-submitted by MUX for assay. The QAQC results from the re-assayed batches were acceptable and these assays have been incorporated into the current resource estimate.</p>
	<i>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</i>	<p>Mineralised diamond core as well as zones adjacent to mineralisation was split using a diamond saw. One quarter core samples were taken from 25 of the diamond holes and half core samples were taken from 66 of the diamond holes. Remaining core has been kept for reference or sent to cold storage for future metallurgical studies. Sample intervals were nominally 1m with adjustments made to match lithological contacts. Approximately 70% of sample intervals utilised in the resource estimate were 1m or less.</p> <p>Sample widths in RC holes ranged from 0.5m to 4m with the majority of ore zones being 1m. Bulk samples were collected in plastic bags over one metre intervals directly from a rig mounted cyclone. In most cases, composite or individual spear or grab samples were collected from the bulk bags to produce a 3kg sample for analysis. Spear sampling was used over dry intervals and grab sampling was used for wet intervals not suitable for spear sampling. Subsequently, significantly mineralised intervals were re-sampled over one metre intervals through a 75:25 Jones riffle splitter for further analysis after wet samples had dried (and been manually pulverised if required).</p> <p>Kagara samples were submitted to SGS Laboratories in Townsville for base metal analysis by ICP OES and gold analysis by 50gm Fire Assay.</p>

Drilling techniques	<i>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.).</i>	<p>Prior to Kagara ownership previous operators (BP Minerals, Aztec and Perilya) drilled a total of 25 diamond holes and 20 RC percussion holes in five campaigns between 1989 and 1992. Diamond holes ranged in depth from 72m to 426m, averaging 298m and RC holes ranged in depth from 30m to 153m, averaging 74m.</p> <p>Kagara completed 109 diamond drillholes and 24 RC percussion holes in 7 campaigns between 1999 and 2011. Diamond holes ranged in depth from 39m to 1029.8m, averaging 304m and RC holes ranged in depth from 46m to 200m, averaging 130m.</p> <p>Kagara diamond holes were NQ2 or HQ/HQ3. All diamond core was oriented using a spear up until 2006 and an ACE tool thereafter.</p> <p>Kagara RC percussion holes were drilled with a 133mm or 140mm face sampling hammer.</p> <p>All Kagara drillholes had magnetic downhole surveys taken using an Eastman single shot camera, an ER simple shot digital camera or a Ranger explorer multishot digital camera. Survey intervals were nominally 30m. Stainless steel rods were used at the base of the RC percussion rod string for accurate magnetic surveys.</p>
Drill sample recovery	<i>Method of recording and assessing core and chip sample recoveries and results assessed</i>	<p>Diamond core recovery is logged and recorded in the database. No significant core loss issue exists. The average core recovery is 98.7% and is over 99% for samples from the mineralised zones.</p> <p>Minimum logging of RC recovery was performed; however no significant recovery issues were experienced.</p>
	<i>Measures taken to maximise sample recovery and ensure representative nature of the samples</i>	<p>HQ3 triple tube was utilised to help improve and record sample recovery when ground conditions dictated. Diamond core was reconstructed into continuous runs for orientation marking as per the Kagara procedure. Depths were checked against the core blocks.</p> <p>RC samples were taken through a cyclone and spear samples were used to collect a uniform sample. These were routinely cleaned.</p>
	<i>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.</i>	<p>Sample recovery for diamond holes is generally very high (over 99%) within the mineralised zones. Ground conditions for RC drilling were good. No significant bias is expected.</p>
Logging	<i>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.</i>	<p>Diamond core was geotechnically logged for recovery, RQD, weathering, hardness and strength.</p> <p>Both diamond core and RC samples were geologically logged for lithology, mineralogy, and oxidation state and structure. An percentage estimate for key minerals was also recorded along with a summary comment.</p> <p>Diamond core trays and RC chip trays are stored on site for future reference.</p>
	<i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.</i>	<p>Logging of diamond core and RC chip samples recorded primary and secondary lithology, mineralogy, mineralisation, structure (core only), oxidation, and any other significant feature. Diamond core was photographed after mark up, before sampling with both dry and wet photographs recorded.</p>
	<i>The total length and percentage of the relevant intersections logged</i>	<p>All drillholes were logged in full</p>
Sub-sampling techniques and sample preparation	<i>If core, whether cut or sawn and whether quarter, half or all core taken.</i>	<p>Mineralised diamond core as well as zones adjacent to mineralisation was split using a diamond saw. Of the diamond holes utilised in the resource estimate one quarter core samples were taken from 25 of the holes and half core samples were taken from 66 of the holes.</p>

	<i>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</i>	RC samples were collected on the rig using a cyclone into large plastic bags. The bags were then speared if dry and grab sampled if wet to produce approximately 3kg of sample. Subsequently, significantly mineralised intervals were re-sampled over one metre intervals through a 75:25 Jones riffle splitter for further analysis after wet samples had dried (and been manually pulverised if required).
	<i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i>	Samples were prepared by firstly being dried to a core temperature of approximately 120°C, crushed to 6mm via jaw crusher and split if the sample was greater than 3kg. Samples were then pulverised in LM5 pulverisers to >85% passing 75µm and a 200g split placed into a pulp packet for sub-sample analysis.
	<i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i>	Field QC procedures involve the use of commercial assay standards. The insertion rate of these averaged 1:20.
	<i>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.</i>	No field duplicates were taken for drill core. At total of 67 duplicates were collected from RC samples.
	<i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i>	The sample sizes are considered to be appropriate to correctly represent the base metal skarn mineralisation at King Vol, the thickness and consistency of the intersections, the sampling methodology and percent value assay ranges for the primary elements.
Quality of assay data and laboratory test	<i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i>	Chemical analysis was via 3 acid digest. A 0.3g sample was digested using hydrochloric, nitric and perchloric acid (SGS ICP21R method). The solution is diluted and presented to an ICPOES for analysis. Over upper detection limit samples are redigested with an ore grade 3 acid digest (SGS DIG23Q method) and analysed with an ICPOES (SGS ICP23Q method). Fire assay method FAA505 (SGS) was used to obtain Gold grade. A 50g sample is fused at 1060°C, the resultant product is digested in Aqua Regia and the solution analysed by AAS. A four acid digest (SGS method IMSS4Q) with the resulting product being presented to an ICP mass spectrometer was used for low level antimony, tungsten, tin and tellurium analysis.
	<i>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.</i>	A handheld magnetic susceptibility meter (KT-10) was used to measure magnetic susceptibility for every meter. Data is stored in the drilling database.
	<i>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.</i>	The QAQC data includes standards, blanks, some duplicates and laboratory checks. Standards have been added at a ratio of 1:20 and blanks 1:25 (blanks only used in the most recent MUX re-sampling program).
Verification of sampling and assaying	<i>The verification of significant intersections by either independent or alternative company personnel.</i>	All sampling was routinely inspected by senior geological staff. Significant intersections are inspected by senior geological staff and corporate staff. The independent geologist signing off on the mineral resource estimate completed a site visit and inspected numerous significant intersections from King Vol.
	<i>The use of twinned holes.</i>	No holes have been specifically twinned, but the intense drilling to at times less than 12m centres, indicates good continuity of grade in the main zones.

	<i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i>	Logging is undertaken by qualified geologists at either the Chillagoe core processing facility or more recently at the remote core logging area set up on site. Data is initially recorded on paper before being entered into standard Excel templates. Data is then sent to a database administrator for validation and storage in the Datashed relational database.
	<i>Discuss any adjustment to assay data.</i>	No adjustments were made to assay data used in this estimate.
Location of data points	<i>Accuracy and quality of surveys used to locate drillholes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</i>	Collar locations for historical holes and Kagara holes up to 2007 were picked-up by licensed surveyors using a Differential GPS. Post 2007 collar locations were picked-up by Kagara staff surveyors using a Trimble RTK GPS unit, or using a Trimble S6 Total Station once survey control was established. These instruments provide accuracy within 0.6m. All drill-holes have magnetic down-hole surveys taken at approximate 30m intervals using a single shot down-hole survey instrument.
	<i>Specification of the grid system used.</i>	The grid system is MGA_GDA94, zone 55. A local grid system was established on site.
	<i>Quality and adequacy of topographic control.</i>	AAMHatch Pty Limited (AAM) was commissioned to fly aerial photography of the area in December 2005 to obtain a detailed topographic surface. AAM provided a Digital Terrain Model (DTM) surface with a vertical and horizontal accuracy of 0.1m
Data spacing and distribution	<i>Data spacing for reporting of Exploration Results.</i>	The nominal drill hole spacing is 25m x 25m, with spacing down to 12.5m in high priority zones and much broader spacing at depth.
	<i>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.</i>	The data spacing and distribution is sufficient to demonstrate both geological and grade continuity within the mineralised domains to support the definition of Indicated/Inferred Mineral Resources under the 2012 JORC code.
	<i>Whether sample compositing has been applied.</i>	1m assay composites were utilised.
Orientation of data in relation to geological structure	<i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i>	The majority of holes have been drilled towards grid east to intersect the north-south striking ore zones at near perpendicular angles. Holes are predominantly drilled at -60 towards the skarn units to return intervals with thickness as true as possible.
	<i>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.</i>	No orientation based sampling bias has been identified in the data.
Sample security	<i>The measures taken to ensure sample security.</i>	Samples were stored in sealed polyweave bags at the Chillagoe core processing facility. They were delivered to SGS laboratories in Townsville by a local transport company.
Audits or reviews	<i>The results of any audits or reviews of sampling techniques and data.</i>	Sampling techniques are consistent with industry standards. No external audits or reviews of sampling techniques have been carried out.

SECTION 2 REPORTING OF EXPLORATION RESULTS

Criteria	JORC Code Explanation	Commentary
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.</i>	The King Vol project is 100% owned by Mungana Goldmines Limited. The project is located within EPM7672 and is subject to Mine Lease Application MLA 20658.
	<i>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.</i>	The tenement is in good standing.
Exploration done by other parties	<i>Acknowledgment and appraisal of exploration by other parties.</i>	<p>Mungana Goldmines Ltd secured 100% ownership of EPM7672 as part of the Chillagoe base metals acquisition from Kagara Ltd in July 2014.</p> <p>Kagara purchased the project in 2000 from Perilya Mines who had been exploring the region from 1992. Prior to Perilya Mines, Aztec Mining Co. Ltd held the lease.</p> <p>A total of 25 diamond holes and 20 percussion holes had been drilled across the King Vol project prior to Kagara taking ownership. Of these holes, 16 diamond and 1 percussion, were used in the King Vol Mineral Resource estimate.</p> <p>Some minor shallow historical mining was carried out at King Vol in association with the larger Mungana project in the early 20th Century. A small remnant open cut still exists.</p>
Geology	<i>Deposit type, geological setting and style of mineralisation.</i>	Information relating to the geology and interpretation are included in Section 3.
Drill hole information	<p><i>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:</i></p> <ul style="list-style-type: none"> <i>• easting and northing of the drill hole collar</i> <i>• elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i> <i>• dip and azimuth of the hole</i> <i>• down hole length and interception depth</i> <i>• hole length.</i> <p><i>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.</i></p>	<p>No exploration results are being reported, and thus, this section is not material to this report on Mineral Resources.</p> <p>Notes relating to drill hole information relevant to the Mineral Resource estimate have been included in Section 1.</p> <p>A table containing all drill intersections utilised in the Mineral Resource estimate is included as Appendix 1.</p>
Data aggregation methods	<i>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.</i>	<p>No exploration results are being reported, and thus, this section is not material to this report on Mineral Resources.</p> <p>Some high grade cuts were utilised in the Mineral Resource estimate and these are discussed in Section 3.</p>
	<i>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.</i>	Not applicable.

	<i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i>	Not applicable.
Relationship between mineralisation widths and intercept lengths	<i>These relationships are particularly important in the reporting of Exploration Results.</i>	No exploration results are being reported, and thus, this section is not material to this report on Mineral Resources.
	<i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i>	Drill hole angles and the orientation of mineralisation is covered in Section 1.
	<i>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').</i>	Not applicable.
Diagrams	<i>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.</i>	Refer to the diagrams that have been included in the body of the text.
Balanced reporting	<i>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.</i>	No exploration results are being reported, and thus, this section is not material to this report on Mineral Resources.
Other substantive exploration data	<i>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.</i>	No exploration results are being reported, and thus, this section is not material to this report on Mineral Resources.
Further work	<i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i>	No exploration results are being reported, and thus, this section is not material to this report on Mineral Resources.
	<i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i>	No exploration results are being reported, and thus, this section is not material to this report on Mineral Resources.

SECTION 3 ESTIMATION AND REPORTING OF MINERAL RESOURCES

Criteria	JORC Code Explanation	Commentary
Database integrity	<i>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.</i>	A set of standard Excel templates are used to capture the data. These sheets are then sent to a database administrator for validation and storage in Datashed. Data used in the Mineral Resource estimate is sourced from a dataset provided in the form of an MS Access database, from the companies Datashed relational database. Relevant tables from the database are exported to the relevant format for use in the Mineral Resource estimate.
	<i>Data validation procedures used.</i>	Validation of data occurs during import into Datashed. The checks include overlapping intervals, missing survey data, missing collars, duplicate sample numbers and incorrectly recorded assay data.
Site visits	<i>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</i>	The competent person has visited the project for a total of 3 days between 21st and 23rd October 2014. Drill core from the project was reviewed and field visits to the project area were undertaken.
	<i>If no site visits have been undertaken indicate why this is the case.</i>	Not applicable
Geological interpretation	<i>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</i>	Confidence in the geological interpretation of the King Vol deposit is considered to be good. The deposit is located on the skarnified sheared contacts and within the sediments of the Chillagoe formation. The sediment sequence is well understood and drill density is sufficient to allow reasonable levels of confidence in the continuity of the massive to semi-massive sulphide lenses that makeup the Mineral Resource. Confidence in the model decrease at depth in line with the paucity of drilling.
	<i>Nature of the data used and of any assumptions made.</i>	Drilling data has provided information on lithology, alteration and mineralisation that has formed the basis of the geological interpretation.
	<i>The effect, if any, of alternative interpretations on Mineral Resource estimation.</i>	The most recent infill drilling continued to support the geological interpretation of the King Vol deposit.

	<i>The use of geology in guiding and controlling Mineral Resource estimation.</i>	<p>The King Vol Deposit is located on the sheared contacts and within the sediments of the Chillagoe formation. Numerous separate lenses have been identified on a minimum of 4 mineralized horizons. The sediment sequence, from West to East comprises of the Western Limestone (WL), the Arkose (ARK), the Eastern Limestone (EL), Interbedded Sandstones and Shales (ISH) and the Chert.</p> <ul style="list-style-type: none"> • The WL is comprised mostly of light to medium grey foliated limestones, fossiliferous in parts with interbedded olive green sheared chloritic basalts. • The ARK is a more massive unit of light to medium grey, fine grained, poorly bedded siliceous sandstones. It displays various degrees of chlorite and sericite alteration. Skarn alteration in the unit can vary from strong retrograding garnet skarn to massive pyroxene and feldspar skarn. • The EL is very similar to the WL. Comprised mainly of foliated limestone's, rarely fossiliferous and interbedded with sheared chloritic shales. • The ISH unit is very specific to the King Vol deposit. It's comprised of thinly bedded siltstones and sandstones, occasionally with minor mafic horizons, is typically highly disrupted and brecciated in appearance. • The Chert unit is mostly massive, with some wispy shale partings and variable degrees of fracture and brecciation.
		The mineralised zones are either found on the contacts of these units associated with skarn or replacing limestone within the sequence. Contacts between ore and waste are well defined, sharp and clearly distinguishable.
	<i>The factors affecting continuity both of grade and geology.</i>	The Eastern Limestone and Western Limestone contacts that host the bulk of the Mineral Resource can be traced for kilometres. Continuity of grade is much more localised within the King Vol deposit. The replacement mineralisation in particular occurs in discontinuous pods and has only been included in the Mineral Resource estimate where multiple drill intersections support the model.
Dimensions	<i>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</i>	The King Vol Mineral Resource is contained within numerous lenses along 4 mineralised horizons. It stretches for approximately 500m along strike. The widths of the various lenses vary from over 15m to less than 1m. Mineralisation commences at 50m below surface and extends to over 800m below surface.

Estimation and modelling techniques	<i>The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.</i>	<p>Grade estimation was by Ordinary Kriging (OK) using Vulcan software. The elements estimated were Zn%, Pb%, Cu% and Ag ppm.</p> <p>Drill hole sample data was flagged using domain codes generated from three dimensional wireframes of the mineralised domains that make up the resource. Sample data was composited to 1m best fit downhole lengths.</p> <p>The influence of extreme sample distribution outliers was reduced by top-cutting where required. The top cut levels were determined using a combination of top-cut analysis tools (log probability and frequency plots, histograms and cumulative frequency plots, and CV's). Minimal amounts of top cutting were deemed necessary.</p> <p>Assay and composite data was checked for clustering. Spatial observation of the dataset indicates only minor to no clustering exists and as such, no de-clustering process was deemed necessary.</p> <p>Variography was undertaken on all elements using data in the relevant domains. Short range variation, or nugget effect, was analysed via downhole variography.</p>
	<i>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</i>	The results of previous Mineral Resource estimates for the King Vol deposit are available. These results were compared with this most recent estimate and grades are similar with a slight increase in tonnage.
	<i>The assumptions made regarding recovery of by-products.</i>	No assumptions have been made.
	<i>Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).</i>	Estimation of As and Sb were previously carried out as these are potential penalty elements and this has not been updated as part of the current resource.
	<i>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</i>	<p>The deposit was drilled on nominal 25m-spaced east-west (local grid) sections, with spacing closing to 12.5m in high priority areas. The block model was constructed using a 10mN by 5mE by 5mRL parent block size with sub-blocking to 1.25mN by 0.625mE by 0.625mRL for domain volume resolution. All estimation was completed at the parent cell scale. Discretisation was set to 3 by 3 by 3 for all domains.</p> <p>The size of the search ellipse for each domain was based on the nominal drillhole spacing for the deposit and variogram ranges.</p>
	<i>Any assumptions behind modelling of selective mining units.</i>	No selective mining units were assumed in this estimate
	<i>Any assumptions about correlation between variables.</i>	Correlation coefficients between the various elements have been calculated as part of the statistical analysis undertaken. Correlation coefficients range from well correlated to poorly correlate and are variable depending on the relevant domain.
	<i>Description of how the geological interpretation was used to control the resource estimates.</i>	The geological interpretation was the basis of the mineralisation domains. These domains were used as hard boundaries to select sample populations for grade estimation.
	<i>Discussion of basis for using or not using grade cutting or capping.</i>	Top cutting was only deemed necessary for a small number of assays for Cu and Ag after statistical analysis that included log probability plots, cumulative frequency plots and CV evaluation. These cuts only applied to a small number of extreme outliers and have only minor effect on the mean grades where applicable.

	<i>The process of validation, the checking process used the comparison of model data to drillhole data, and use of reconciliation data if available.</i>	A volumetric comparison of the resource wireframes and the block model showed no abnormalities. Domain block estimate grades were compared to average composite grades and showed good correlation. Visual validation of grade trends and metal distributions were carried out. No reconciliation data is available.
Moisture	<i>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</i>	The tonnages are estimated on a dry basis.
Cut-off parameters	<i>The basis of the adopted cut-off grade(s) or quality parameters applied</i>	The reported Mineral Resource estimate is reported as the total material within the mineralised domains, so no cut-off grade has been adopted for reporting purposes.
Mining factors or assumptions	<i>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.</i>	Mining of the King Vol deposit will be predominantly by underground mining methods. The geometry of the deposit will make it amenable to sub-vertical narrow ore mining methods currently employed in many operations in similar deposits around the world, including the nearby Mungana deposit which was successfully mined by Kagara over several years. No assumptions in mining methodology have been made when estimating this Mineral Resource.
Metallurgical factors or assumptions	<i>The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.</i>	Metallurgical flotation test work carried out on King Vol drill core samples has indicated recoveries of 93.6% Zn, 63.7% Pb and 44.5% Cu at concentrate grades of 52.1%, 57.1% and 23.2% for Zn, Pb and Cu respectively. No significant penalty elements are present in the concentrates produced in the test work. No assumptions in metallurgical amenability have been made when estimating this Mineral Resource.
Environmental factors or assumptions	<i>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</i>	No assumptions have been made.
Bulk density	<i>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.</i>	Bulk density of the mineralised material was estimated via ordinary kriging of diamond drillhole bulk density determinations. A bulk density database has been supplied containing a total of 573 data within mineralised wireframes. The density values for each sample were calculated by the Archimedes Principle (mass of the sample in air divided by the difference between the mass of the sample in air and the mass of the sample in water). Density measurements were generally taken on the entire sample interval of uncut drill core within the assay interval. Some later density measurements were taken on the entire sample interval of cut core within the assay interval. A standard rock was used to check reliability of measurements.

	<i>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.</i>	The majority of samples taken were fresh and did not contain voids. Whilst some porosity can be expected the bulk density assigned is considered to be reasonable.
	<i>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</i>	The same methods have been used to assign bulk density values to the various waste rock types.
Classification	<i>The basis for the classification of the Mineral Resources into varying confidence categories.</i>	The Mineral Resource classification of Indicated or Inferred for King Vol is based on the level of confidence in the geological and grade continuity, along with the drill density. Quality of grade estimate as indicated by slope of regression and kriging quality is also taken into account during the classification process.
	<i>Whether appropriate account has been taken of all relevant factors (i.e. 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).</i>	The Inferred and Indicated classification has taken into account all available geological and sampling information, and the classification level is considered appropriate for the current stage of this project.
	<i>Whether the result appropriately reflects the Competent Person's view of the deposit.</i>	The Mineral Resource estimate appropriately reflects the view of the Competent Person.
Audits or reviews	<i>The results of any audits or reviews of Mineral Resource estimates.</i>	No audits of the Mineral Resource estimate have been undertaken at this time.
	<i>Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.</i>	The relative accuracy of the Mineral Resource estimate is reflected in the reporting of the Mineral Resource to an Inferred and Indicated classification as per the guidelines of the 2012 JORC Code.
	<i>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.</i>	The statement relates to global estimates of tonnes and grade.
	<i>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</i>	No production data is available.

Appendix 1: King Vol Mineral Resource Drill Hole Summary

Hole ID	Easting (m)	Northing (m)	AHD (m)	Dip	Azi (mag)	From (m)	To (m)	Interval (m)	Cu (%)	Pb (%)	Zn (%)	Ag (ppm)
KVD001	207082	8125327	251.9	-60	40	51	51.8	0.8	6.0	18.0	25.1	751.0
KVD001						63	65.2	2.2	0.4	3.1	5.2	33.5
KVD001						102.78	110.78	8	0.8	0.0	5.9	22.8
KVD001						124	126	2	0.7	0.1	10.1	13.0
KVD002	207005	8125391	254.7	-65	40	163.38	174.41	11.03	0.0	0.1	4.6	4.0
KVD002						184.18	191.1	6.92	0.9	0.0	16.9	40.3
KVD003	206972	8125356	249.5	-60	40	186.6	187.6	1	0.8	0.1	20.0	30.0
KVD004	207035	8125283	246.3	-61	40	225.27	226.16	0.89	1.5	0.1	25.3	49.0
KVD005	206893	8125423	253.0	-65	40	197.75	207.13	9.38	0.9	1.7	3.9	53.8
KVD005						258.63	260.13	1.5	0.0	0.1	15.7	4.1
KVD005						278.03	280.91	2.88	1.7	0.1	21.2	26.9
KVD006	206834	8125503	257.1	-65	40	265	270.57	5.57	0.1	0.0	25.5	3.1
KVD007	206955	8125346	249.1	-70	40	211	216.85	5.85	2.2	1.5	2.9	71.5
KVD007						286.46	289.36	2.9	0.9	0.1	18.6	16.3
KVD010	206886	8125555	260.2	-63	40	175.8	177	1.2	0.0	2.6	7.2	60.0
KVD010						189	189.64	0.64	0.0	0.0	10.0	3.0
KVD012	206787	8125464	263.0	-70	40	251.45	254.75	3.3	0.0	2.8	6.6	66.9
KVD013	206859	8125389	257.4	-70	40	269.2	269.97	0.77	0.2	14.0	20.0	196.0
KVD013						318.16	322.3	4.14	0.0	0.1	13.1	6.5
KVD013						344.74	362.57	17.83	1.1	0.1	24.8	26.2
KVD013						379.36	380.06	0.7	1.2	0.1	26.0	20.0
KVD015	207004	8125246	248.4	-72	40	208.44	210.75	2.31	0.4	0.5	17.8	18.2
KVD015						277.37	279.41	2.04	0.4	0.1	12.4	94.7
KVD015						292.55	293.54	0.99	0.2	0.1	15.7	31.9
KVD016	207004	8125246	248.4	-72	40	200.2	203.05	2.85	0.0	0.0	6.7	2.0
KVD016						259.6	260.2	0.6	0.4	2.7	4.1	30.0
KVD016						267.35	269.45	2.1	1.1	0.1	17.2	17.3
KVD017	207109	8125212	243.8	-62	40	201.5	227.57	26.07	0.2	0.0	5.0	6.6
KVD023	206874	8125406	255.3	-65	40	241.64	246.45	4.81	0.3	3.1	7.2	30.3
KVD023						316.96	320	3.04	0.1	0.1	11.6	10.7
KVD024	206908	8125370	253.3	-63	40	221	221.5	0.5	0.5	13.4	24.7	235.0
KVD024						272.45	276.75	4.3	1.3	0.3	25.9	34.3
KVD025	206839	8125442	257.2	-59	40	211.47	218.66	7.19	1.6	1.4	1.4	59.0
KVD025						309	310.18	1.18	0.7	0.0	6.0	9.0

Hole ID	Easting (m)	Northing (m)	AHD (m)	Dip	Azi (mag)	From (m)	To (m)	Interval (m)	Cu (%)	Pb (%)	Zn (%)	Ag (ppm)
KVD026	206955	8125412	252.2	-59	40	171.62	173	1.38	2.9	0.0	16.8	52.8
KVD027	207046	8125357	253.5	-61	40	75	77	2	1.2	6.7	13.4	89.0
KVD027						107	113	6	0.4	0.1	12.2	23.0
KVD027						129	130	1	0.8	3.6	3.4	66.0
KVD027						161.34	162.47	1.13	0.4	0.1	16.2	15.0
KVD028	206828	8125354	257.8	-71	39	381.33	384.2	2.87	0.3	1.7	9.3	74.9
KVD030	207015	8125330	249.9	-63	37	123.67	125	1.33	0.5	6.0	3.8	39.7
KVD030						150	151.65	1.65	0.4	2.1	3.3	28.5
KVD030						202.6	203.05	0.45	2.0	0.0	36.8	33.0
KVD031	206894	8125493	257.6	-67	38	203.67	204.07	0.4	0.1	0.0	11.1	2.6
KVD033	206963	8125348	249.2	-67	37	155	157	2	0.1	1.8	7.8	2.9
KVD033						200.33	202.63	2.3	2.8	1.1	4.3	143.1
KVD033						256.45	256.9	0.45	0.0	0.0	25.9	2.6
KVD034	206934	8125390	250.7	-68	39	148.06	149.31	1.25	0.1	2.7	1.1	103.6
KVD034						220.08	221.79	1.71	0.5	0.1	26.5	18.5
KVD039	206901	8125357	250.1	-68	35	259.24	259.49	0.25	4.9	0.0	9.7	52.0
KVD039						349.25	353.18	3.93	1.8	0.1	31.9	27.7
KVD041	206917	8125444	253.8	-65	37	142	143	1	1.0	5.1	7.8	45.4
KVD041						195	196.2	1.2	0.0	0.1	23.8	18.5
KVD041						211.65	216.38	4.73	0.9	0.0	17.8	18.0
KVD042	206915	8125445	253.8	-57	39	123	126	3	0.1	8.1	16.1	191.0
KVD042						164	174.78	10.78	0.8	0.1	22.7	19.0
KVD042						200.24	202.11	1.87	1.5	0.8	23.2	54.3
KVD043	206916	8125446	253.8	-48	39	120.95	122.94	1.99	0.4	17.6	30.2	483.5
KVD043						149.85	153.72	3.87	1.5	0.5	14.5	34.1
KVD043						178.45	179.81	1.36	2.7	0.1	22.6	38.9
KVD046	206860	8125529	257.4	-66	39	208.9	210.27	1.37	0.2	0.6	10.3	23.8
KVD046						227.72	228.46	0.74	1.4	0.1	31.8	42.5
KVD047	206893	8125492	257.6	-55	39	120	120.6	0.6	0.4	6.3	9.5	35.0
KVD047						160.02	160.23	0.21	0.3	9.6	9.9	197.0
KVD047						168.28	169.72	1.44	2.1	0.3	30.6	45.5
KVD048	206947	8125476	259.6	-48	29	26.5	29.5	3	0.2	1.1	6.0	28.3
KVD048						92	92.97	0.97	0.5	5.2	6.2	78.0
KVD048						115.95	121.82	5.87	0.9	0.1	23.5	15.5
KVD048						133.04	135.38	2.34	0.4	0.5	5.4	18.3

Hole ID	Easting (m)	Northing (m)	AHD (m)	Dip	Azi (mag)	From (m)	To (m)	Interval (m)	Cu (%)	Pb (%)	Zn (%)	Ag (ppm)
KVD049	207085	8125259	246.9	-59	39	134.65	135.23	0.58	0.2	3.4	5.8	81.0
KVD049						142.76	143.53	0.77	0.8	1.4	12.0	42.9
KVD050	207160	8125263	250.5	-57	40	74.8	76.38	1.58	1.2	0.0	46.5	43.0
KVD051	207138	8125241	247.3	-62	38	140.64	141.54	0.9	0.3	0.3	6.5	3.0
KVD052	207155	8125189	243.0	-63	39	165.03	165.4	0.37	0.6	0.1	41.6	7.7
KVD055	206911	8125474	256.8	-58	39	116	117	1	0.2	3.2	5.1	79.0
KVD055						187.5	187.98	0.48	1.8	0.2	21.3	12.0
KVD056	206913	8125475	256.9	-48	39	110	111	1	0.3	15.1	27.1	400.0
KVD056						139.4	140.47	1.07	1.1	1.5	18.6	44.0
KVD056						163.06	163.22	0.16	1.3	0.1	12.6	21.0
KVD057	206946	8125438	255.1	-64	34	175.16	177.35	2.19	1.2	0.1	33.0	19.5
KVD057						194.83	196.21	1.38	0.1	2.6	11.2	31.9
KVD058	206947	8125439	255.1	-57	34	157.21	163.55	6.34	0.8	0.0	23.4	18.2
KVD058						185.86	187.49	1.63	0.4	0.5	9.8	15.8
KVD059	206973	8125459	258.9	-58	33	78	80	2	0.7	5.7	8.6	239.5
KVD059						112.49	113.08	0.59	0.7	0.1	28.3	15.0
KVD059						136.78	140.98	4.2	0.0	0.4	6.5	7.0
KVD060	206974	8125460	259.0	-49	33	103.57	104.16	0.59	0.5	0.3	22.7	21.0
KVD060						125.63	129.45	3.82	0.7	0.5	15.1	73.0
KVD061	206937	8125500	261.8	-56	33	94	95	1	0.6	5.4	11.2	127.0
KVD061						115.93	116.38	0.45	0.8	1.8	18.4	57.0
KVD061						132.07	133.99	1.92	0.9	0.1	21.6	16.0
KVD062	206938	8125501	261.9	-45	33	91.3	92.33	1.03	0.3	0.1	20.0	6.0
KVD062						106.73	109.67	2.94	1.0	0.7	21.9	42.3
KVD062						122.83	123.13	0.3	0.2	0.0	9.6	6.0
KVD064	206918	8125144	259.8	-75	25	798.5	799.01	0.51	0.0	1.1	20.9	9.0
KVD064W1	206918	8125144	259.8	-75	25	624.2	635.7	11.5	0.5	0.4	7.2	24.9
KVD064W2	206918	8125144	259.8	-75	25	684	686.7	2.7	0.8	0.5	3.3	66.2
KVD066	206659	8125110	260.5	-65	38	846.73	880.06	33.33	0.4	0.2	6.1	9.8
KVD069	206941	8125468	258.5	-71	35	107.3	109.25	1.95	0.1	4.9	11.1	207.3
KVD069						151.17	163.05	11.88	0.5	0.1	12.2	14.4
KVD069						190.83	192.8	1.97	1.1	0.2	20.6	32.8
KVD069W1	206941	8125468	258.5	-71	35	191.28	192.62	1.34	0.6	0.1	24.3	17.3
KVD069W2	206941	8125468	258.5	-71	35	107.9	109.08	1.18	0.1	12.7	14.6	251.2
KVD071	206849	8125227	259.7	-68	24	612.6	633.4	20.8	0.5	0.1	9.2	10.6

Hole ID	Easting (m)	Northing (m)	AHD (m)	Dip	Azi (mag)	From (m)	To (m)	Interval (m)	Cu (%)	Pb (%)	Zn (%)	Ag (ppm)
KVD073	206812	8125288	259.8	-62	37	481	481.9	0.9	2.4	0.0	21.4	32.0
KVD073W1	206812	8125288	259.8	-62	37	419.2	419.9	0.7	3.8	0.2	27.6	72.0
KVD073W1						432.1	449.4	17.3	0.2	0.1	5.2	10.4
KVD073W2	206812	8125288	259.8	-62	37	450.5	455.04	4.54	1.6	0.0	35.3	22.9
KVD074	207050	8125146	248.9	-60	34	293.9	299.9	6	0.5	2.5	16.8	44.4
KVD075	207050	8125146	248.8	-68	34	373.9	375.4	1.5	1.4	0.1	10.7	40.0
KVD080	206879	8125178	259.1	-56	36	495.7	502.8	7.1	0.2	0.0	9.7	3.9
KVD081	206851	8125225	259.5	-63	34	547.5	549.5	2	0.5	0.0	9.6	10.0
KVD082	207015	8125292	246.5	-62	36	194.7	201.75	7.05	0.1	0.0	5.0	3.5
KVD082						224.7	229.45	4.75	0.1	3.3	4.4	164.8
KVD082						251.9	258.35	6.45	0.9	0.1	19.4	29.0
KVD083	207022	8125369	253.6	-61	37	176.2	181.9	5.7	1.7	0.0	41.1	33.0
KVD084	206931	8125357	250.5	-63	35	170.5	171.7	1.2	0.7	0.8	0.4	392.0
KVD084						238.4	240.2	1.8	0.3	0.0	18.3	5.3
KVD085	206971	8125318	248.1	-63	35	165	165.5	0.5	0.0	3.3	6.2	40.2
KVD085						273.2	279.2	6	0.1	0.0	6.7	3.3
KVD087	207065	8125410	263.0	-70	33	122.8	132.3	9.5	0.6	0.5	14.5	25.9
KVD088	207021	8125369	253.6	-71	37	213.8	214.37	0.57	1.4	0.0	26.7	28.0
KVD091	207065	8125340	252.7	-61	37	65.45	69.5	4.05	0.9	1.8	3.7	13.8
KVD091						172.4	174	1.6	0.2	0.1	2.2	7.3
KVD092	207064	8125340	252.7	-70	37	75.25	78.5	3.25	0.9	5.5	10.5	20.2
KVD092						145.2	155.6	10.4	1.6	1.5	5.0	57.1
KVD092						175.4	177.82	2.42	0.2	0.1	6.7	6.2
KVD093	207020	8125438	261.0	-61	37	56.8	58.2	1.4	2.8	7.2	7.3	151.0
KVD095	207107	8125388	264.5	-60	37	60.8	62.86	2.06	0.0	0.1	18.4	11.0
KVD095						100	105.1	5.1	0.1	0.0	3.3	8.2
KVD096	207107	8125388	264.5	-75	37	132.3	138.9	6.6	1.7	0.0	20.1	44.0
KVD097	206975	8125400	253.3	-62	36	127.7	128.8	1.1	0.2	3.0	4.4	48.0
KVD097						171.8	173.9	2.1	0.5	0.1	15.3	28.0
KVD098	206975	8125400	253.4	-69	36	192	192.4	0.4	0.4	0.0	7.2	26.0
KVD099	206929	8125412	251.7	-64	33	154.3	156.1	1.8	0.2	13.9	24.4	251.0
KVD099						197.8	213.1	15.3	0.2	0.0	6.8	9.4
KVD100	206928	8125412	251.7	-72	33	161.4	163.5	2.1	0.2	4.5	4.0	141.0
KVD100						180.7	184.15	3.45	2.6	12.1	16.1	489.6
KVD100						236	236.4	0.4	0.4	3.8	13.7	107.0

Hole ID	Easting (m)	Northing (m)	AHD (m)	Dip	Azi (mag)	From (m)	To (m)	Interval (m)	Cu (%)	Pb (%)	Zn (%)	Ag (ppm)
KVD100						260.2	277.5	17.3	1.3	0.1	30.8	22.4
KVD100W1	206928	8125412	251.7	-72	33	185.9	192.1	6.2	0.7	8.8	18.8	169.6
KVD100W1						282.95	300.8	17.85	1.2	0.1	27.9	23.0
KVD100W1						343.45	343.75	0.3	3.3	0.1	20.8	68.0
KVD101	207006	8125397	255.0	-64	37	171.1	175.6	4.5	0.2	0.3	9.2	22.6
KVD103	207000	8125495	269.7	-60	38	71.7	71.9	0.2	0.8	0.1	39.6	21.0
KVD104	206964	8125453	257.6	-63	38	38.85	47.2	8.35	0.7	5.1	19.0	151.5
KVD104						95.05	95.65	0.6	1.3	11.4	15.1	919.0
KVD104						136.45	138.3	1.85	0.7	0.1	14.1	20.0
KVD104						161.65	162.5	0.85	0.5	0.5	6.1	30.0
KVD105	207058	8125305	249.0	-69	37	169.4	170.6	1.2	0.3	0.2	7.0	10.0
KVD108	207111	8125247	246.9	-63	36	167.25	168.9	1.65	0.8	1.4	17.0	47.0
KVD109	207149	8125286	252.9	-61	36	101.7	105.5	3.8	0.1	0.1	15.6	9.2
KVD110	207148	8125285	252.8	-74	36	132	136.4	4.4	0.6	0.1	13.5	19.3
KVD111	207145	8125349	262.7	-60	38	51.8	54.5	2.7	2.3	2.0	0.5	78.0
KVD112	207144	8125348	262.6	-77	38	85.35	86.4	1.05	0.1	0.1	25.2	17.0
KVD113	206890	8125456	254.7	-63	39	153.6	154.1	0.5	0.3	4.5	8.5	49.0
KVD113						220.55	223.5	2.95	0.7	0.1	31.7	30.6
KVD114	206890	8125456	254.7	-69	39	284.05	284.35	0.3	0.3	0.5	24.1	16.0
KVD115	206982	8125509	269.7	-61	40	38.6	43.6	5	0.6	2.0	4.3	55.5
KVD116	207147	8125221	245.3	-75	35	218.95	238.8	19.85	0.5	0.1	8.6	14.1
KVD116						238.8	240.45	1.65	1.7	0.0	39.5	25.0
KVD116						240.45	243.3	2.85	0.1	0.5	1.8	11.8
KVD117	206928	8125412	251.6	-65	33	132.3	134.2	1.9	0.1	3.0	3.8	186.0
KVD117						161.1	161.9	0.8	0.1	0.3	13.1	15.0
KVD117						208.4	231.3	22.9	0.5	0.0	11.4	10.9
KVD118	206927	8125412	251.6	-70	32	160.4	165	4.6	0.3	9.8	11.7	249.2
KVD118						243.6	260.65	17.05	0.6	0.1	24.0	15.6
KVD119	206895	8125357	254.6	-64	36	273.8	277.23	3.43	0.1	1.4	5.8	33.4
KVD119						300.5	301.3	0.8	1.2	0.1	29.2	27.0
KVD120	207098	8125192	246.0	-60	39	240.8	241.75	0.95	0.2	0.0	22.4	7.0
KVD121	207091	8125157	247.4	-61	40	245.95	246.5	0.55	0.0	0.0	17.1	6.0
KVD122	207091	8125157	247.4	-68	40	280.4	281.9	1.5	0.4	0.1	5.6	22.0
KVD123	206920	8125146	259.7	-64	34	542.7	545.9	3.2	0.1	0.1	2.5	7.0
KVD124	207058	8125261	245.7	-69	35	256.1	260.6	4.5	0.3	0.1	32.5	9.8

Hole ID	Easting (m)	Northing (m)	AHD (m)	Dip	Azi (mag)	From (m)	To (m)	Interval (m)	Cu (%)	Pb (%)	Zn (%)	Ag (ppm)
KVP032	207181	8125284	255.9	-60	39	26	34	8	0.4	0.0	5.7	20.0
KVP033	206983	8125510	269.8	-50	39	40	41	1	0.6	5.1	2.3	15.0
KVP034	206964	8125561	274.6	-64	39	36	40	4	0.4	5.9	1.4	54.0
KVP034						66	85	19	3.4	1.0	5.8	336.7
KVP035	206929	8125596	270.2	-54	39	92	100	8	6.5	0.6	7.5	415.6
KVP036	206896	8125563	260.6	-53	39	60	64	4	0.6	3.8	5.0	128.0
KVP037	206925	8125525	262.3	-52	39	73	75	2	0.8	10.1	10.4	222.4
KVP037						106	113	7	1.0	3.9	4.6	112.9
KVP037						121	125	4	0.4	0.6	13.4	30.5
KVP042	207018	8125402	255.1	-53	39	107	118	11	1.0	0.2	9.2	53.2
KVP043	207036	8125422	260.0	-50	39	81	83	2	1.4	0.1	12.1	41.5
KVP045	207091	8125407	265.6	-50	39	56	61	5	0.1	0.2	6.5	19.2
KVP046	207105	8125349	256.5	-57	39	77	81	4	1.1	0.2	17.3	60.8
KVP047	207103	8125348	256.4	-57	39	78	82	4	2.1	0.4	10.3	69.8
KVP048	207137	8125369	265.2	-57	39	47	59	12	1.1	0.2	7.5	52.8
KVP051	207117	8125291	250.8	-60	39	82	83	1	0.8	1.1	6.3	27.0
KVP051						86	97	11	3.0	1.4	17.3	125.5
KVP051						102	106	4	1.8	1.3	19.0	58.3
KVP053	207182	8125210	245.8	57.5	38.5	136	137	1	1.9	0.2	2.4	17.9

Note: The mineralised interval lengths of intercepts shown in the above table are down-hole distances and are not corrected for angle of dip. True width is approximately 60% of downhole width.