9 July 2015

Market Announcements Office
ASX Ltd
4th Floor, 20 Bridge Street, Sydney NSW

ASX code: MUX

High-grade hits of up to 20.5% zinc highlight potential of Red Cap project

Latest assays further highlight Red Cap's potential to be Mungana's second North Queensland project after the high-grade King Vol deposit

Mungana Goldmines (ASX: MUX) is pleased to announce high-grade zinc results from previously unassayed diamond drill holes completed by Kagara Limited (in liquidation) within the Red Cap project, located just 4km from the Company's partially completed base metals concentrator at Chillagoe in North Queensland.

The assay results include:

- **3.0m at 20.5% zinc and 2.9% copper**
- **5.0m at 9.4% zinc and 0.9% copper**
- **2.4m at 13.6% zinc and 1.9% copper**
- **3.7m at 8.7% zinc and 2.1% copper**
- **1.5m at 7.9% zinc and 2.9% copper**
- **3.8m at 8.1% zinc and 0.3% copper**

The intersections vindicate Mungana's strategy to carry out further exploration at Red Cap to assess whether the deposit could provide a second source of ore feed in addition to the proposed King Vol zinc project, located 25km to the north-west of Red Cap. The King Vol project comprises 2.99Mt at 11.9% zinc, 0.8% copper, 0.6% lead and 29.9gpt silver (ASX: 18 June 2015).

Red Cap currently has Inferred Mineral Resources totalling 3.8 million tonnes at 4.8% zinc and 0.7% copper (see Table 1) (ASX: 27 April 2015). This resource estimate does not include Red Cap's Victoria deposit, from which five of the assayed intercepts are derived, or other potential deposits such as Cambourne, Belgravia and Tarantula.

Mungana Managing Director Tony James said the new Red Cap results confirm its potential to become Mungana's second high-grade zinc project, located in close proximity to the base metal concentrate plant which requires completion.

"These assays support our view that there is potential for a high-grade strategy at Red Cap to complement the King Vol project," Mr James said.

"This view is strengthened by what we are seeing within the geology of the individual deposits at Red Cap, representing both the existing defined Mineral Resources and the significant exploration potential."

Details of Red Cap Results

Red Cap consists of several base metal skarn-associated deposits focused along faulted contacts in the Silurian to Devonian aged Chillagoe Formation. Red Cap is located 15km north-west of the town of Chillagoe and only 4km from the partially completed base metals concentrator at the Mungana mine site (Figure 1).

The Red Cap project comprises four northwest striking mineralisation trends are developed along sub-parallel lithological contacts located approximately 300-400m apart (Figure 2). These four trends are Queenslander/Morrisons, Tarantula, Victoria, and Belgravia/ Penzance.

Exploration of the Red Cap area was undertaken by Kagara in 2011 and early 2012 prior to that company going into voluntary administration. A total of six diamond drill holes completed at the time were not assayed by Kagara. Mungana has recently undertaken sampling from these six holes, comprising three holes from Victoria, two holes from Penzance and one hole from Cambourne.

	Red Cap Inferred Mineral Resource - March 2015										
	Tonnes (Mt)	Grade					Contained Metal				
		Zn %	Cu %	Pb %	Au g/t	Ag g/t	Zn (kt)	Cu (kt)	Pb (kt)	Au (Koz)	Ag (Moz)
Penzance (Cu)	0.228	1.3	3.2	0.0	0.2	58	3	7	0	1.5	0.43
Penzance (Zn)	0.085	6.2	0.7	0.2	0.1	19	5	1	0	0	0.05
Queenslander	1.570	4.4	0.5	0.2	0.0	12	69	8	3	0	0.61
Morrisons	1.930	5.4	0.6	0.3	0.1	21	104	11	6	62	1.65
Total	**3.813**	**4.8**	**0.7**	**0.2**	**0.1**	**19**	**181**	**27**	**9**	**63.5**	**2.74**

Table 1 – Red Cap Mineral Resource (Geologically constrained, not reported to cut-off)

Victoria deposit

A detailed analysis of the geology at Victoria, which currently has no defined Mineral Resource, has provided confidence in the continuity of the higher-grade mineralised shoots within the current broader lower-grade deposit.

Victoria lies within the central portion of the Red Cap project area (Figure 2). Historical drilling on an average 100m x 100m drill pattern has outlined a large zone of continuous moderate grade zinc-copper mineralisation over a strike length of 800m. Two main surfaces have been identified at Victoria, being Victoria Main and Victoria South, both situated on the contact of the host limestone with clastic sediments. A cross section (5740mE) is shown in Figure 3, highlighting the presence of some significant high grade intersections (+10% zinc and +2% copper) in the Red Cap area, and the location of the Victoria Main and Victoria South surfaces with respect to the known limestone contacts. In addition, high grade mineralised zones at Tarantula and Morrisons are shown in close proximity to this Victoria mineralisation.

The three recently assayed drill holes at Victoria were designed as infill holes, reducing the overall drill spacing within the central section of Victoria to an approximate 50m x 50m pattern. Positive

assay results were returned from all three holes, confirming the continuity of high grade mineralisation within the Victoria lenses. Results include:

- 3.0m at 20.5% zinc and 2.9% copper from 289.7m in hole 1208W1 (Victoria Main)
- 5.0m at 9.4% zinc and 0.9% copper from 268.4m in hole 1226 (Victoria Main)
- 2.4m at 13.6% zinc and 1.9% copper from 212.6m in hole 1226 (New contact)
- 3.7m at 8.7% zinc and 2.1% copper from 326m in hole 1208 (Victoria Main)
- 1.5m at 7.9% zinc and 2.9% copper from 259.2m in hole 1226 (Victoria South)

Note: Estimated true widths are approximately 65-70 percent of down-hole width.

Although the Red Cap resources are currently considered of moderate grade (<5% zinc and <1% copper) overall, recent detailed geological investigation at Red Cap has identified the major controls to the higher grade shoots, and more importantly confirmed the potential continuity of higher grade mineralisation within these existing resources. Small variations in the strike and dip of the limestone contact are observed to control the overall orientation of these individual higher grade zones.

These same geological controls (and resulting higher grade mineralisation) are also evident at the Victoria deposit. A detailed analysis of the geology at Victoria, which currently has no defined mineral resources, has greatly improved the confidence in the interpretation of the high grade mineralised shoots within the 800m strike length of the deposit. Figure 4 represents a long section of one of the surfaces observed at Victoria (Victoria Main) showing the location of the three recent diamond ore intercepts relative to the interpreted high grade mineralised zones. Further infill drilling is required to increase the overall confidence in this interpretation.

Cambourne deposit

Results from the diamond hole at Cambourne have also confirmed the potential exploration upside in the Red Cap area. Cambourne is associated with small historic surface workings located along the same limestone contact as the Penzance Inferred Resource, situated 600m to the southeast, and the Belgravia prospect, located 500m to the northwest. These shallow workings have only seen minimal, shallow RC drilling, for which the age of drilling and veracity of assay results is uncertain. The presence of high grade zinc mineralisation in the first diamond hole over an untested 1km strike length of a known, well-mineralised contact attests to the significant exploration upside at Red Cap. Results include:

- 3.8m at 8.1% zinc and 0.3% copper from 153.2m in Hole 1229 (Cambourne)

Penzance deposit

The Penzance copper deposit is located adjacent to the historic Penzance copper open pit, defined at surface by numerous old workings. The Penzance deposit is the last resource discovered by Kagara in 2011 prior to going into voluntary administration in 2012. Drilling has defined a zone of mineralisation over an approximate 200m strike length, with a central, high grade, copper-rich core plunging steeply towards the southeast. The two diamond holes assayed at Penzance returned no material results and failed to extend the current strike length, although the mineralisation remains open at depth and requires further drilling at a later date. The location of the two drill holes in relation to the existing resource is shown in Figure 5.

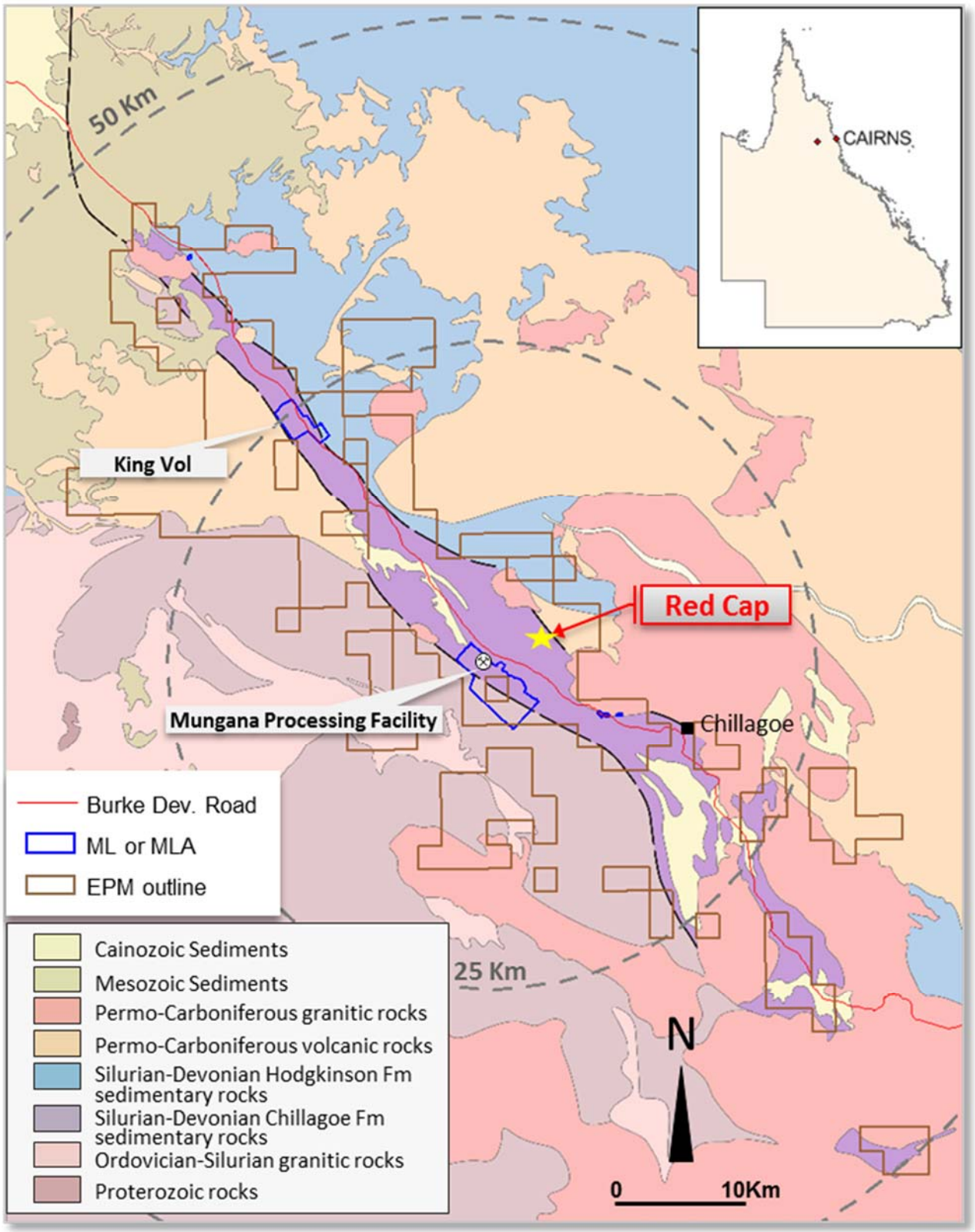

Figure 1 – Red Cap Location Plan and Regional Geology

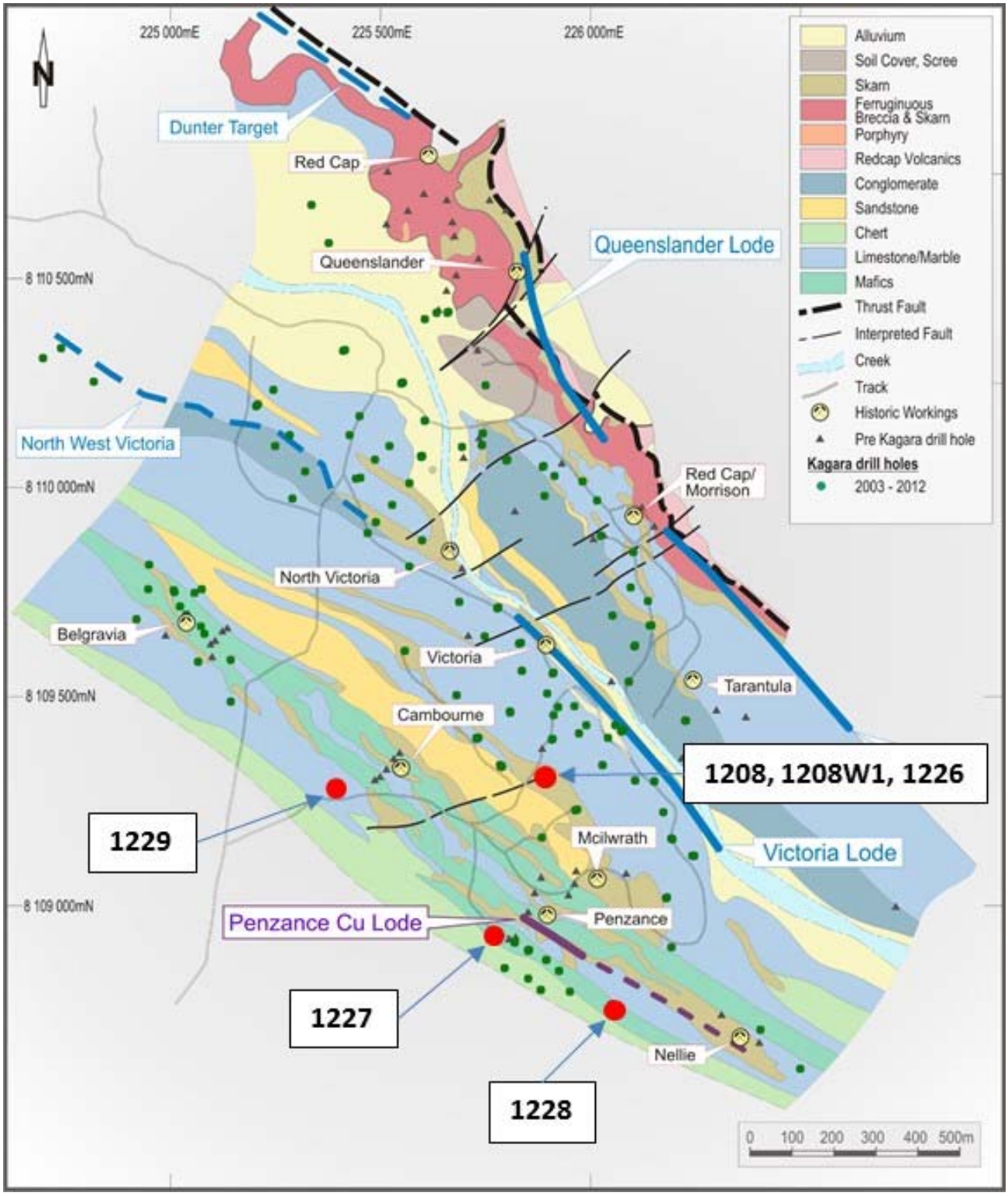

Figure 2 – Local Geology and Drill Hole Collar Locations for the Red Cap Project

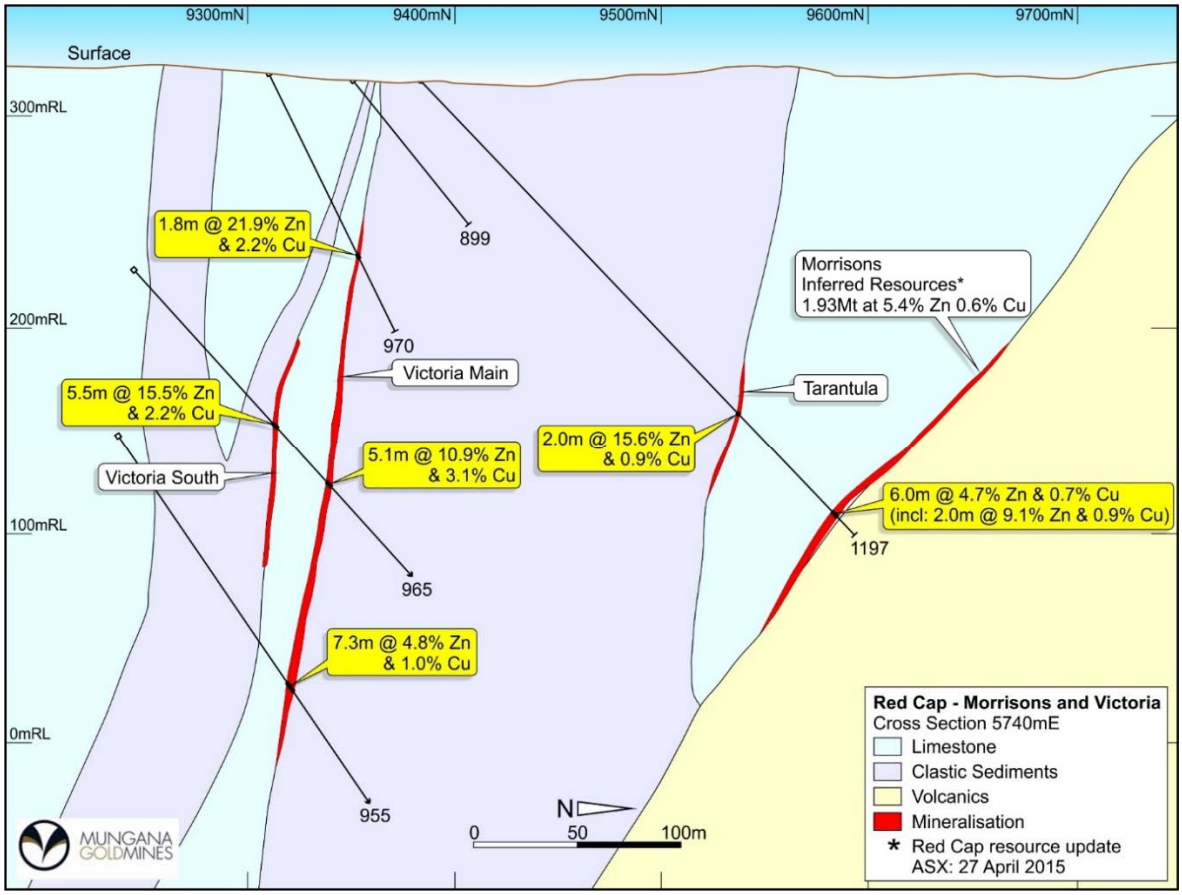

Figure 3 – Cross section 5740mE through the Victoria South, Victoria Main, Tarantula and Morrisons Lodes at the Red Cap Project.

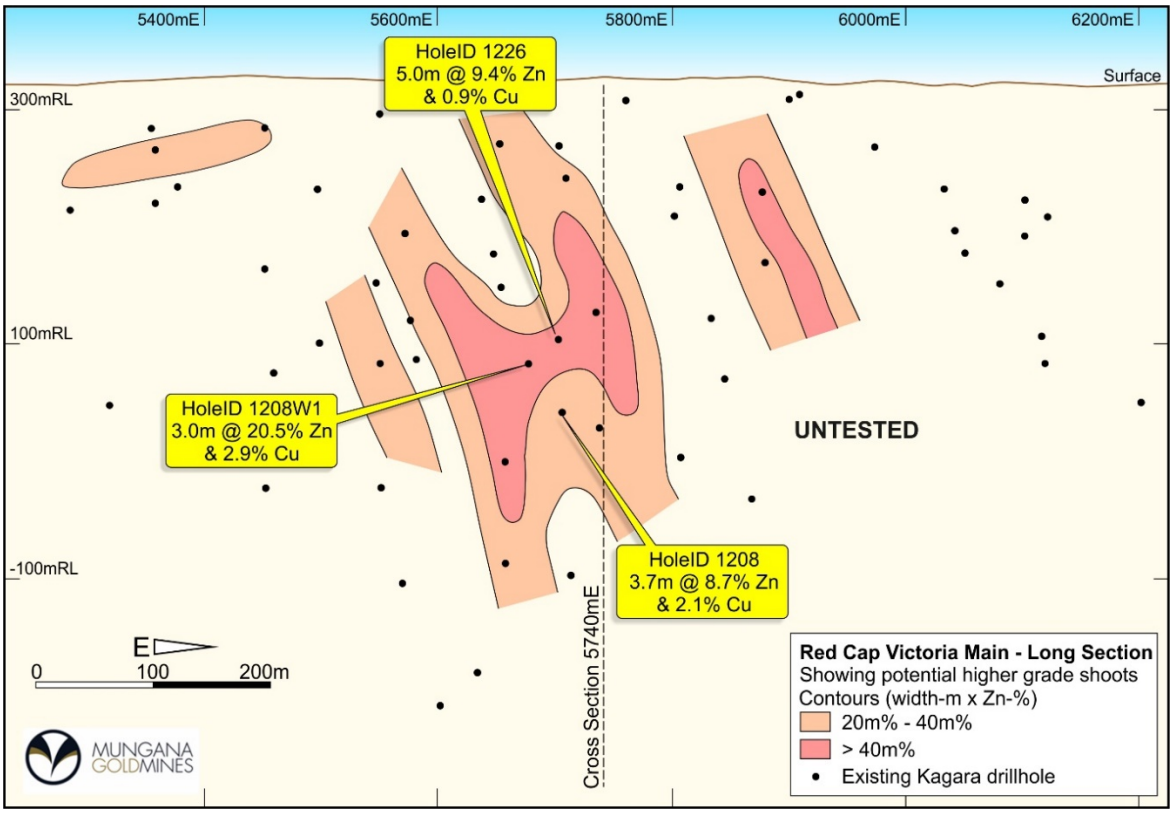

Figure 4 – Long Section looking northeast on the Victoria Main Lode within the Red Cap project, showing the distribution of high grade mineralisation relative to the new drill intercepts.

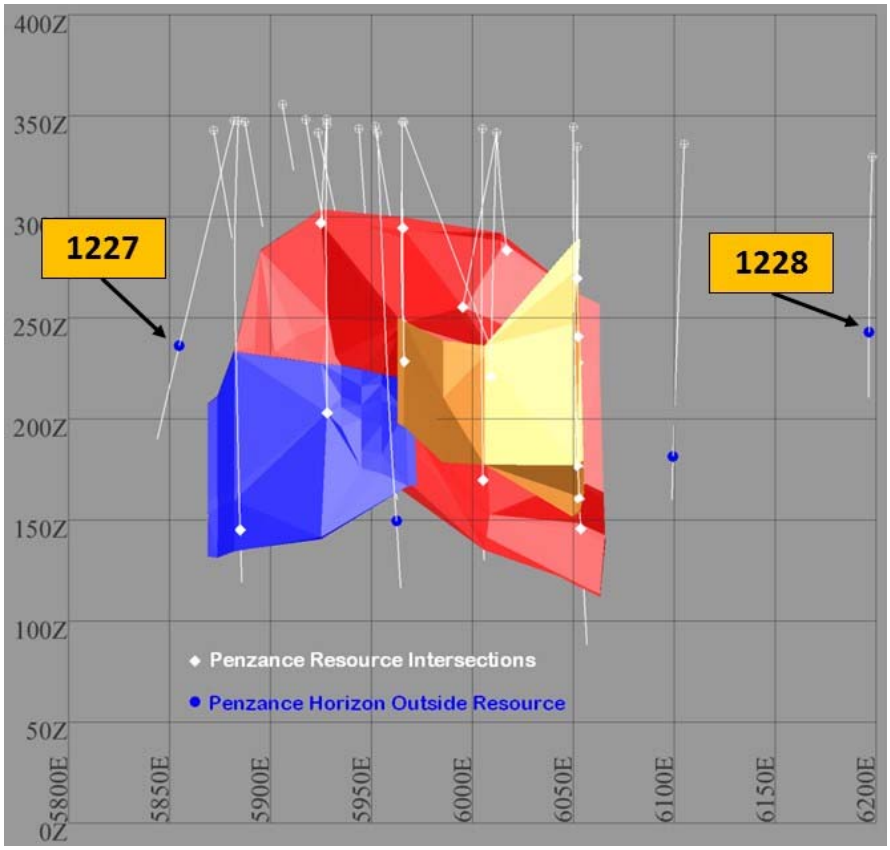

Figure 5 – Long Section of the Penzance deposit at the Red Cap project showing recent sampling results in relation to the Penzance Inferred Resource outline.

		MGA94_55						Mine Grid		
Project	Hole	Northing (m)	Easting (m)	RL (m)	Dip	Azimuth	EOH (m)	Northing (m)	Easting (m)	Azimuth
Victoria	1208	8109320	225890	340	-64	40.1	360.2	9320	5890	357
	1208W1	8109320	225890	340	-64	40.1	336.2	9320	5890	357
	1226	8109320	225890	340	-56	40.1	318.1	9184	5700	357
Penzance	1227	8108930	225771	352	-61	17.1	180.3	8817	5882	334
	1228	8108766	226051	335	-60	40.1	138.1	8890	6198	357
Cambourne	1229	8109285	225395	331	-50	43.1	308.5	9285	5395	0

Table 2 – Kagara Drill hole Information

Project	Hole	From (m)	To (m)	Int (m)	Zinc (%)	Copper (%)	Lead (%)	Silver (ppm)	Gold (ppm)
Victoria	1208	326	329.7	3.7	8.7	2.1	-	31	-
	1208W1	289.7	292.7	3.0	20.5	2.9	-	32	-
	1226	212.6	215	2.4	13.6	1.9	-	44	0.05
		259.2	260.7	1.5	7.9	2.9	0.5	48	0.17
		268.4	273.4	5.0	9.4	0.9	-	13	0.07
Penzance	1227	*No Significant Intersection*							
	1228	*No Significant Intersection*							
Cambourne	1229	153.2	157	3.8	8.1	0.3	-	7	0.18

Table 3 – Mungana Goldmines Assay Results (all individual assay intervals above 5% zinc and/or 2.5% copper). True Widths are estimated at 65-70 percent of downhole widths.

	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 4 – King Vol Mineral Resource (Geologically constrained, not reported to cut-off)

(ASX: 28 Jan 2015)

Exploration Results – Cautionary statement

The exploration results in this announcement are based on assays from six drill holes. Those results are insufficient to define any further mineral resources in the Red Cap area and do not imply that any potentially economic mineralisation has been discovered.

Competent Persons' Statement

Red Cap area

The information in this announcement that relates to Mineral Resources is based on, and fairly represents, the information and supporting documentation prepared by Mr Andrew Beaton, details of which were released to ASX on 27 April 2015. Mr Beaton is a member of the Australasian Institute of Mining and Metallurgy (AusIMM) 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 Beaton was at the time of the 27 April 2015 announcement, a full time employee of Mungana.

Mungana confirms that it is not aware of any new information or data that materially affects the information in relation to the Red Cap area Mineral Resources included in the 27 April 2015 announcement. Mungana confirms that all material assumptions and technical parameters underpinning the Mineral Resources estimates in the 27 April 2015 announcement continue to apply and have not materially changed.

The information in this announcement that relates to Exploration Results is based on, and fairly represents, the information and supporting documentation prepared by Mr Chris Newman. Mr Newman is a full-time employee of Mungana Goldmines Ltd, and is a Fellow of the Australian Institute of Mining and Metallurgy (AusIMM) and a Member of the Australian Institute of Geoscientists (AIG). Mr Newman 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 JORC Code. Mr Newman consents to the inclusion in this announcement of the matters based on this information in the form and context in which it appears.

King Vol deposit

The information in this announcement relating to Mineral Resources within the King Vol deposit is based on information prepared by Mr Brian Wolfe in compliance with the 2012 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code) details of which were released on ASX by the Mungana on 28 January 2015.

Mr Wolfe is a member of the Australian Institute of Geoscientists 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 JORC Code.

Mungana confirms that it is not aware of any new information or data that materially affects the information relating to the King Vol deposit Mineral Resources included in the 28 January 2015 announcement referred to above. Mungana confirms that all material assumptions and technical parameters underpinning the Mineral Resource estimates in the 28 January 2015 announcement continue to apply and have not materially changed.

ENDS

For further information:

Investors

Tony James – Mungana Goldmines
Mobile: +61 8 9226 5550

Media

Read Corporate
Paul Armstrong
+61 8 9388 1474

SECTION 1 SAMPLING TECHNIQUES AND DATA

Criteria	JORC Code Explanation	Commentary
Sampling techniques	*Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.*	All six drill holes have been sampled using diamond core (DD) drilling. Drilling has been carried out on various grid spacing with the majority of drilling at a > 50mx50m spacing. All holes were drilled by Kagara Ltd in January 2012. The NQ2 diamond drill bit size employed to sample the zone of interest is considered appropriate to indicate degree and extent of mineralisation. All holes except 1227 were drilled towards an azimuth of local grid north at a variable dip between -50 and -64 degrees in order to intersect the steep mine grid southerly dipping ore zones at the most optimal angle. All drill core has been geologically logged, magnetic susceptibility, specific gravity measurement recorded every sample, core orientation determined where possible, and photographs taken of all drill core trays. Selected 0.5m to 2.3m intervals of half core were chosen for geochemical laboratory analysis based upon visual observations on lithologies and mineralisation. Intervals not sampled are expected to be un-mineralised.
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used	Collar locations were picked-up by Kagara staff surveyors using a Trimble RTK GPS unit. All collar locations were recorded in the company's SQL database. All drill-holes were routinely surveyed with a Ranger Explorer multi-shot digital downhole camera at varying intervals, usually 30 metres but also more closely spaced intervals, depending on the amount of deviation. Two surveyed base stations were used to test all down-hole cameras for accuracy. Certified standards were inserted into sample sequences according to previous Kagara QAQC procedures. Five base metal certified reference materials were utilised as standards. The QAQC results demonstrate that the sample data is of sufficient quality.
	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	Mineralised diamond core as well as zones adjacent to mineralisation was split using a diamond saw. Half core samples were taken for analysis from all diamond holes. Remaining core has been kept for reference with some quarter core sent to cold storage for future metallurgical studies. Sample intervals ranged from 0.7m to 2.3m, averaging 1.8m, but were nominally 1.5m to 2m with adjustments made to match lithological contacts. All samples were submitted to ALS Minerals Laboratories in Townsville for analysis. Sample preparation involved drying, crushing to 5-6mm and, if necessary, riffle splitting this material to 2.5 to 3kg with 70% passing 6mm. The sample was then pulverised in an LM5 bowl pulveriser, such that >85% of the sample was -75 microns.

Drilling techniques	*Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	Kagara diamond holes were NQ2 sized core. All diamond core was oriented using an ACE tool. All Kagara drillholes had magnetic downhole surveys taken using a Ranger explorer multishot digital camera. Survey intervals were nominally 30m.
Drill sample recovery	*Method of recording and assessing core and chip sample recoveries and results assessed*	Received drill core length was measured and recorded and compared to actual metres drilled as reported by the drill contractor. The ratio of measured length to drilled length is used to calculate total core recovery. Core recoveries of >99% were obtained for the mineralised intervals recorded.
	Measures taken to maximise sample recovery and ensure representative nature of the samples	Ground conditions encountered were very good for diamond drilling and recoveries consistently high. Diamond core was reconstructed into continuous runs for orientation marking as per the Kagara procedure. Depths were checked against the core blocks.
	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.	Sample recovery for diamond holes is generally very high and >99% within the mineralised zones for these 6 drillholes. Ground conditions for drilling were good. No significant bias is expected.
Logging	*Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.*	Diamond core was geotechnically logged for recovery, RQD, weathering, hardness and strength. All diamond core was geologically logged for lithology, mineralogy, and oxidation state and structure. A percentage estimate for key minerals was also recorded along with a summary comment. Diamond core trays are stored on site for future reference.
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	Logging of diamond core recorded primary and secondary lithology, mineralogy, mineralisation, structure (core only), oxidation, and any other significant features. Diamond core was photographed after mark up, before sampling with both dry and wet photographs recorded.
	The total length and percentage of the relevant intersections logged	All drillholes were logged in full
Sub-sampling techniques and sample preparation	*If core, whether cut or sawn and whether quarter, half or all core taken.*	Mineralised diamond core as well as zones adjacent to mineralisation was split using a diamond saw. All core was cut in half with half core being sent for analysis. Selected zones were also cut into quarters and some quarter core is being stored in freezers for future metallurgy test work.
	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	No non-core samples were taken.
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	Sample preparation involved drying, crushing to 5-6mm and, if necessary, riffle splitting this material to 2.5 to 3kg with 75% passing 6mm. The sample was then pulverised in an LM5 bowl pulveriser, such that >85% of the sample was -75 microns. This sampling procedure is considered appropriate for the nature of mineralisation and analytical technique.
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	Field QC procedures involve the use of commercial assay standards. The insertion rate of these averaged 1:20.

	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.	No field duplicates were taken for drill core.
	Whether sample sizes are appropriate to the grain size of the material being sampled.	The sample sizes are considered to be appropriate to correctly represent the base metal skarn mineralisation at Red Cap
Quality of assay data and laboratory test	*The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.*	An initial 33 element standard analysis, with ore grade analysis of Zn, Cu, Ag, Pb and Au at designated levels. Multi acid digestion with HF, ICPAES and ICPMS analysis (ME-MS61) for 33 elements - Ag (0.01) Hf (0.1) Sb (0.05) Al (0.01%) In (0.005) Sc (0.1) As (0.2) K (0.01%) Se (1) Ba (10) La (0.5) Sn (0.2) Be (0.05) Li (0.2) Sr (0.2) Bi (0.01) Mg (0.01%) Ta (0.05) Ca (0.01%) Mn (5) Te (0.05) Cd (0.02) Mo (0.05) Th (0.2) Ce (0.01) Na (0.01%) Ti (0.005%) Co (0.1) Nb (0.1) Tl (0.02) Cr (1) Ni (0.2) U (0.1) Cs (0.05) P (10) V (1) Cu (0.2) Pb (0.5) W (0.1) Fe (0.01%) Rb (0.1) Y (0.1) Ga (0.05) Re (0.002) Zn (2) Ge (0.05) S (0.01%) Zr (0.5). A 0.25g sample is pre-digested for 10-15 minutes in a mixture of nitric and perchloric acids, then hydrofluoric acid is added and the mixture is evaporated to dense fumes of perchloric (incipient dryness). The residue is leached in a mixture of nitric and hydrochloric acids, the solution is then cooled and diluted to a final volume of 25mls. Elemental concentrations are measured using ICP Atomic Emission Spectrometry and ICP Mass Spectrometry. Analysis for Au was by fire assay method Au-AA26, with lead collection from a 50gm charge, acid digest and AAS finish (detection limit 0.01ppm) Samples with results above the upper detection limits were re-assayed by various means as follows; Cu, Zn and Pb > 10,000ppm, and Ag > 100ppm by method OG62 by four acid digest methods with ICPAES analysis. Sulphur was analysed via method IR08 total sulphur by Leco Furnace and Infrared Spectroscopy
	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.	A handheld magnetic susceptibility meter (KT-10) was used to measure magnetic susceptibility for every meter. Data is stored in the drilling database.
	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.	The QAQC data includes standards and blanks. Standards have been added at a ratio of 1:20 and blanks 1:25. QAQC data from the laboratory is also analysed. No laboratory checks are deemed required for such a small sample batch, but will be routinely applied in future sample submissions. No obvious bias is observed in this small sample set.
Verification of sampling and assaying	*The verification of significant intersections by either independent or alternative company personnel.*	All sampling was routinely inspected by senior geological staff at the time. All significant intersections reported were subsequently inspected and verified by the Geology Manager – Mungana Goldmines.
	The use of twinned holes.	No holes have been twinned as the deposits are still considered as early stage exploration (pre-resource estimate).

	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	Logging is undertaken by qualified geologists at the Chillagoe core processing facility. 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.
	Discuss any adjustment to assay data.	No adjustments were applied to any of the assay data.
Location of data points	*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.*	Collar locations were picked-up by Kagara staff surveyors using a Trimble RTK GPS unit. These instruments provide accuracy within 0.6m. All drill-holes have magnetic down-hole surveys taken at approximate 30m intervals using a Ranger explorer multishot digital camera
	Specification of the grid system used.	The grid system is MGA_GDA94, zone 55. A local grid system was established on site.
	Quality and adequacy of topographic control.	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	*Data spacing for reporting of Exploration Results.*	The nominal drill hole spacing varied from a minimum of 50m x 50m at Victoria to +500m at Cambourne.
	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.	The data spacing and distribution is sufficient to demonstrate both geological and grade continuity within the mineralised domains to support an inferred resource estimation at Victoria. However, such estimation has yet to be completed.
	Whether sample compositing has been applied.	No compositing was applied. Individual assay results were calculated using weighted averages with all samples either > 5% zinc or >2.5% copper.
Orientation of data in relation to geological structure	*Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.*	The majority of holes have been drilled towards grid north to intersect the east-west striking ore zones at near perpendicular angles. Holes are predominantly drilled at -60 towards the skarn units to return intervals with true thickness estimated at 65-70 percent of downhole width.
	If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	No orientation based sampling bias has been identified in the data.
Sample security	*The measures taken to ensure sample security.*	Samples were stored in sealed polyweave bags at the Chillagoe core processing facility. They were delivered to ALS Minerals in Townsville by a local transport company.
Audits or reviews	*The results of any audits or reviews of sampling techniques and data.*	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	*Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.*	The Red Cap project is 100% owned by Mungana Goldmines Limited. The project is located within EPM15458, and forms part of an exclusion zone in the Newcrest Expenditure Commitment Agreement.
	The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	The tenement is in good standing.
Exploration done by other parties	*Acknowledgment and appraisal of exploration by other parties.*	Mungana Goldmines Ltd secured 100% ownership of EPM15458 as part of the Chillagoe base metals acquisition from Kagara Ltd in July 2014. Kagara purchased the project in 2003 from Nuigini Mining Australia Pty Ltd as part of the Red Dome acquisition. EPM15458 was previously part of the larger EPM10387 held by Nuigini Mining. Whilst the Penzance deposit was a virgin discovery by Kagara, the greater Red Cap project area, which contains Penzance, Queenslander and Morrisons is an historical mining area. The Queenslander and Morrisons mines which were sizeable underground operations and the Penzance (not the same orebody) open cut contributed ore feed to the Chillagoe smelters in the early 1900's. Kagara successfully defined new mineralisation at several other prospects within the Red Cap project area.
Geology	*Deposit type, geological setting and style of mineralisation.*	At Victoria, the local geology comprises a north west trending, steeply dipping sequence of intercalated fine to medium grained sandstones/siltstones and marble with variable amounts of garnet (+/- pyroxene) skarn alteration. Two limestone/marble contacts dominate known mineralisation at Victoria South and Victoria Main. Victoria South mineralisation is intimately associated with semi-massive sphalerite with minor chalcopyrite on the contact between garnet skarn and marble. Victoria Main high grade mineralisation is intimately associated with semi-massive spahalerite-magnetite-chalcopyrite skarn along the contact of limestone and iron-rich (pyrrhotite) and sphalerite-bearing skarn. At Penzance, the local geology comprises a north west trending, steeply dipping sequence of massive chert, intercalated fine to medium grained sandstones/siltstones and marble with variable amounts of garnet (+/- pyroxene) skarn alteration. Copper dominant mineralisation is developed primarily within the massive garnet skarn at the contact between marble and basalt. Mineralisation is characterised by semi-massive sulphide composed of chalcopyrite and sphalerite with variable amounts of pyrrhotite and pyrite. Cambourne sits in the identical stratigraphic position in relation to Penzance, however mineralisation is associated with massive garnet skarn with semi-massive to heavily disseminated sphalerite.

Drill hole information	*A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:* *• easting and northing of the drill hole collar* *• elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* *• dip and azimuth of the hole* *• down hole length and interception depth* *• hole length.* *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*	All relevant drill hole information is reported in Table 2
Data aggregation methods	*In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.*	Normal weighting average techniques were applied to calculation of individual assay results. All reported intersections were based on weighted average of individual samples with assay results > 5% zinc or >2.5% copper. No cut-off grades were applied.
	Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.	All results reported were aggregated using individual high grade (>5% zinc or >2.5% copper) assay results only.
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	No metal equivalence is reported.
Relationship between mineralisation widths and intercept lengths	*These relationships are particularly important in the reporting of Exploration Results.*	All intercepts are marked up to visual ore boundaries. Hence intercept lengths are equivalent to mineralisation lengths.
	If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.	The majority of holes have been drilled towards grid north to intersect the east-west striking ore zones at near perpendicular angles. Holes are predominantly drilled at -60 towards the skarn units to return intervals with true thickness estimated at 65-70 percent of downhole width.
	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').	True thickness estimated at 65-70 percent of downhole width.

Diagrams	*Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	Refer to the diagrams (plan, long sections, cross section) and tables that have been included in the body of the text.
Balanced reporting	*Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	Only relevant, but all high grade analyses (>5% zinc and >2.5% copper) have been reported from the six drill holes in Table 3.
Other substantive exploration data	*Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	All material information has been reported. No metallurgical testwork has been undertaken, but mineralised samples of quarter core have been placed in cold storage for future testwork.
Further work	*The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).*	Further Infill drilling is planned to improve confidence in the higher grade zones at Victoria, prior to resource estimation. An initial program of approximately 2000m is planned, and if successful, infill drilling will be undertaken to bring the drill spacing down to less than 40m x 40m. Approximately 2000m has been planned at Penzance to determine down plunge continuity of the high grade copper resource. In addition, this drilling will test potentially mineralised hangingwall and footwall limestone contacts. One follow-up diamond drill hole is planned (300m) at Cambourne. Drilling will commence in late 2015 and continue through 2016. Additional drilling is planned on known soil geochemical and geophysical (IP) anomalies and additional conceptual exploration targets.
	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	A detailed drilling plan will be created late in 2015, after drilling is completed at King Vol.