

Metminco positions for delivery of higher grade, lower tonnage, copper mine at Los Calatos, Peru

Metminco Limited (“Metminco” or the “Company”) (ASX: MNC; AIM: MNC) announces that, following the new detailed geological modelling of the Los Calatos Porphyry Complex, an updated Mineral Resource Estimate has been completed, which has identified a new higher grade copper development opportunity.

KEY HIGHLIGHTS

- ❖ **Total mineral resource of 352 million tonnes at 0.76% Cu and 318 ppm Mo at a 0.5% Cu cut-off, which comprises all resource categories, as summarised in Table 1 below.**
- ❖ **Potential for a higher grade, lower tonnage, copper mine at Los Calatos targeting:-**
 - **126 million tonnes at 1.03% Cu and 351 ppm Mo (using a 0.75% Cu cut-off) located entirely within the modelled breccia units**
 - **Mining and milling rate of 6 million tonnes p.a.**
 - **50,000 tonnes of copper metal production p.a.**
- ❖ **Mining study by Runge Pincock Minarco (RPM) to determine new mine associated economics scheduled for completion mid-July 2015**

Mr William Howe, Managing Director said “This is a very exciting development for Metminco shareholders as the Company can now focus on optimising the new economics for developing their major copper asset in South America.

Capital costs for the more focussed, smaller, mining operation are expected to be approximately 50% lower, and the copper grade mined significantly higher, than those provided for by RPM in August 2013 for the larger tonnage mining scenario previously envisaged for Los Calatos. Mine life is expected to be greater than 20 years at these production rates.

Subject to the outcome of this new mining study, Metminco will advance the development of Los Calatos by commencing permitting and Feasibility and Environmental Impact studies as an important next step.”

Table 1: Mineral Resource Statement for the Los Calatos Copper - Molybdenum Project, Peru. SRK Consulting (Chile) S.A., June 15, 2015.

Cu Cut-off grade	Measured			Indicated			Measured & Indicated			Inferred		
	Mt	Cu (%)	Mo (ppm)	Mt	Cu (%)	Mo (ppm)	Mt	Cu (%)	Mo (ppm)	Mt	Cu (%)	Mo (ppm)
0.5%	73	0.73	513	64	0.73	345	137	0.73	434	216	0.78	245

LOS CALATOS PROJECT

Introduction

In February 2013 SRK Consulting (Chile) S.A. completed a Mineral Resource Estimate for the Los Calatos Project, which incorporated the drilling results from 134 drill holes totalling 125,376 metres.

This mineral resource estimate provided for an open pittable mineral resource of 493 million tonnes at 0.38% Cu and 0.023% Mo (0.15% CuEq cut-off) to a vertical depth of 700 metres below surface, and an underground bulk mining mineral resource of 926 million tonnes at 0.51% Cu and 0.022% Mo (0.35% CuEq cut-off) commencing at an elevation of 2,300 metres (2013 Mineral Resource Estimate). The mineral resource estimate and associated block model subsequently formed the basis of mining studies completed by Ingeniería y Construcción Ltda, and optimised by Runge Pincock Minarco (RPM).

The optimised RPM mining study mined 811 million tonnes at 0.48% Cu and 0.03% Mo over a 34 year mine life.

New Detailed Geological Model

The three dimensional modelling of the geology of the Los Calatos Porphyry Complex resulting from the recently completed core re-logging exercise has significantly improved the understanding of the spatial and temporal development of the main geological components of the porphyry complex, and their respective effects on the nature and extent of the copper and molybdenum mineralisation.

The most significant development has been the delineation of a series of laterally and vertically persistent hydrothermal breccias, which host the high-grade copper and molybdenum mineralisation (Figures 1 and 2). Wireframe modelling of the bounding surfaces of these zones was used to constrain the high grade mineralisation associated with the breccias for estimation purposes. It is important to note that these zones fall within the confines of the more generalised constraining wireframe that was used for the 2013 Mineral Resource Estimate.

As outlined in Figure 2 below, the hydrothermal breccias extend from the surface to depths in excess of 1,800 metres. While the associated copper mineralisation has been leached by weathering processes from the uppermost approximately 50 metres depth, it has been remobilised through supergene enrichment processes into a supergene zone which extends to depths ranging from 50 metres to 350 metres below surface. The supergene zone extends deeper within the more permeable breccias, resulting in significant copper grades associated with chalcocite mineralisation. This zone will be the focus of open pit mining studies.

Figure 1: Geological plan (2,050m RL) depicting geology and the nature and extent of the hydrothermal breccias.

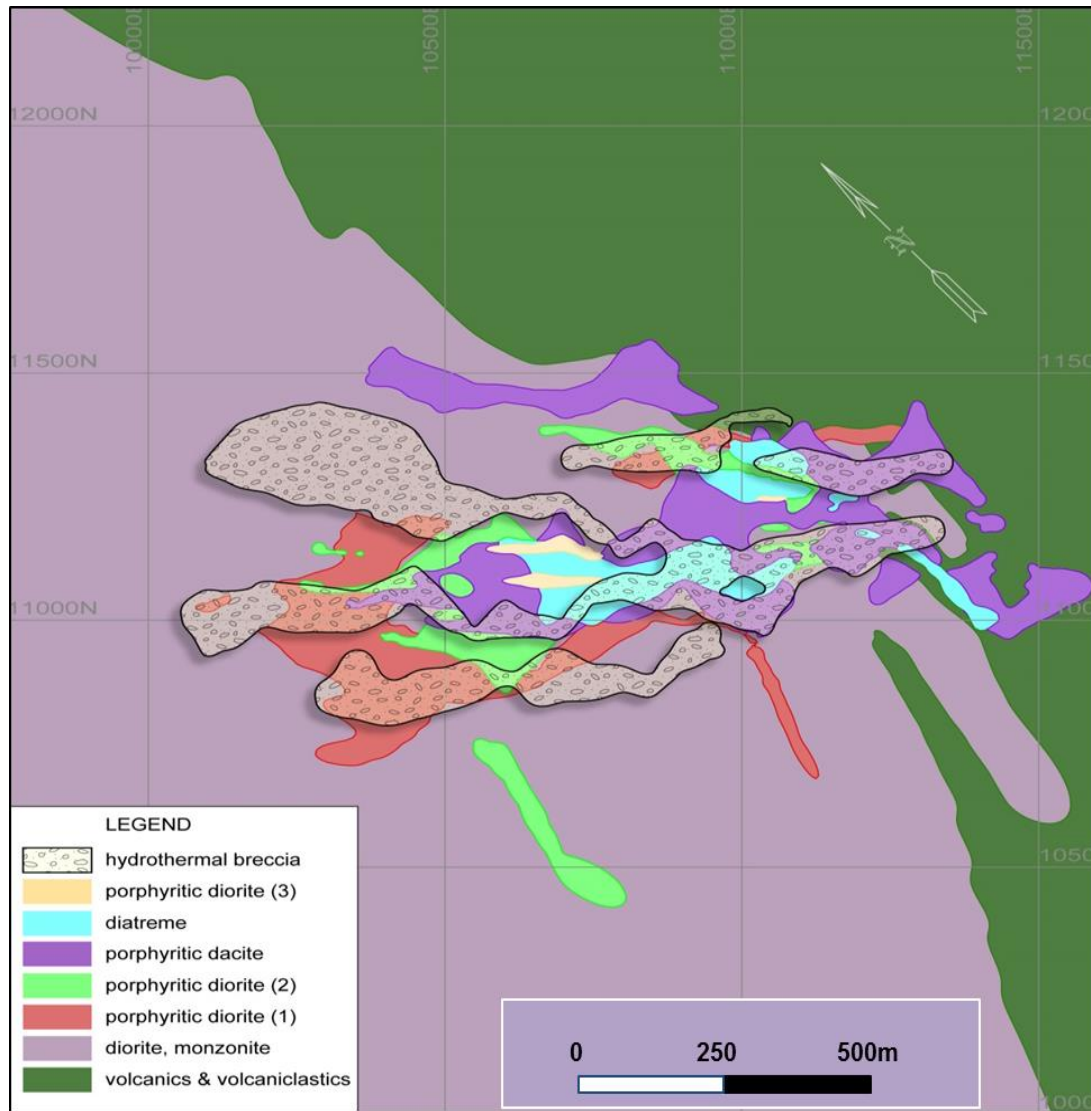
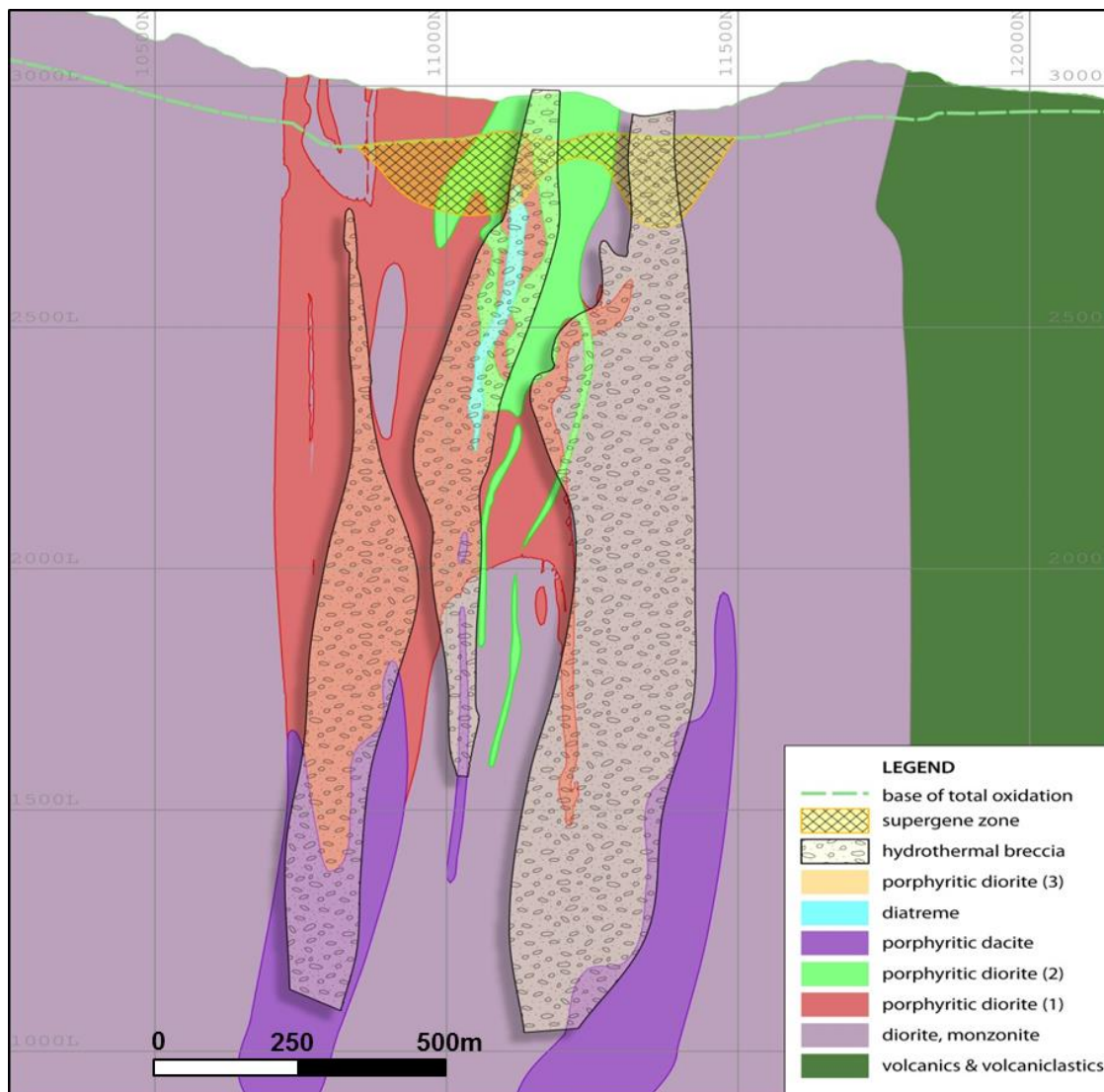


Figure 2: Geological Section 10350 E (Looking West) showing vertical extent of the hydrothermal breccias.



2015 Mineral Resource Estimate

A 3-D Geological Model was constructed for the Los Calatos Porphyry Complex on the basis of the detailed geology, which incorporated lithology, alteration type and structure (breccias) that developed in response to an evolving porphyry system. The model, and the supporting drill hole dataset, was provided to SRK Consulting (Chile) S.A. (SRK) to produce an updated Mineral Resource Estimate in accordance with the guidelines of the JORC Code, 2012 Edition. The JORC 2012 Edition Table 1 Report in support of the Mineral Resource Estimate for the Los Calatos Project is included as Appendix 4 of this release.

At a cut-off grade of 0.5% Cu, the Measured and Indicated Mineral Resource is 137 million tonnes at 0.73% Cu and 434 ppm Mo, with an Inferred Mineral Resource of 216 million tonnes at 0.78% Cu and 244 ppm Mo (Table 2).

Table 2: Mineral Resource Statement* for the Los Calatos Copper - Molybdenum Project, Peru. SRK Consulting (Chile) S.A., June 15, 2015.

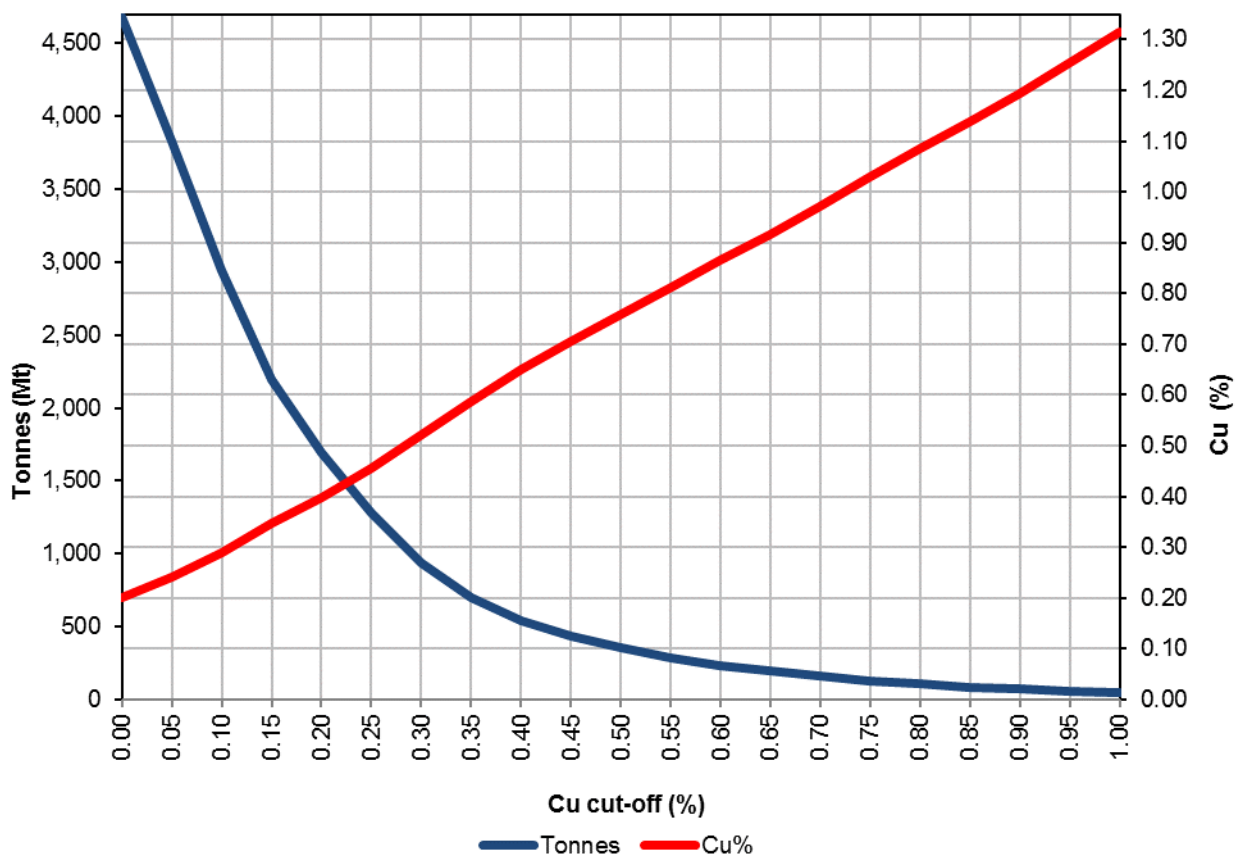
Resource Classification	Tonnage (metric)	Cu (%)	Mo (ppm)
Measured	72,824,639	0.734	512.9
Indicated	63,700,257	0.733	344.8
Total Measured & Indicated	136,524,896	0.734	434.5
Inferred	215,769,978	0.776	244.5

* Reported at a cut-off of 0.5% copper.

Appendix 1 shows the sensitivity of the mineral resources by resource category to the copper cut-off grade.

A grade – tonnage curve is provided below (Figure 3) to demonstrate the grade – tonnage relationship for the total mineral resource (inclusive of Inferred Mineral Resources) at different Cu cut-off grades.

Figure 3: Grade – Tonnage Curve for Total Mineral Resource*.



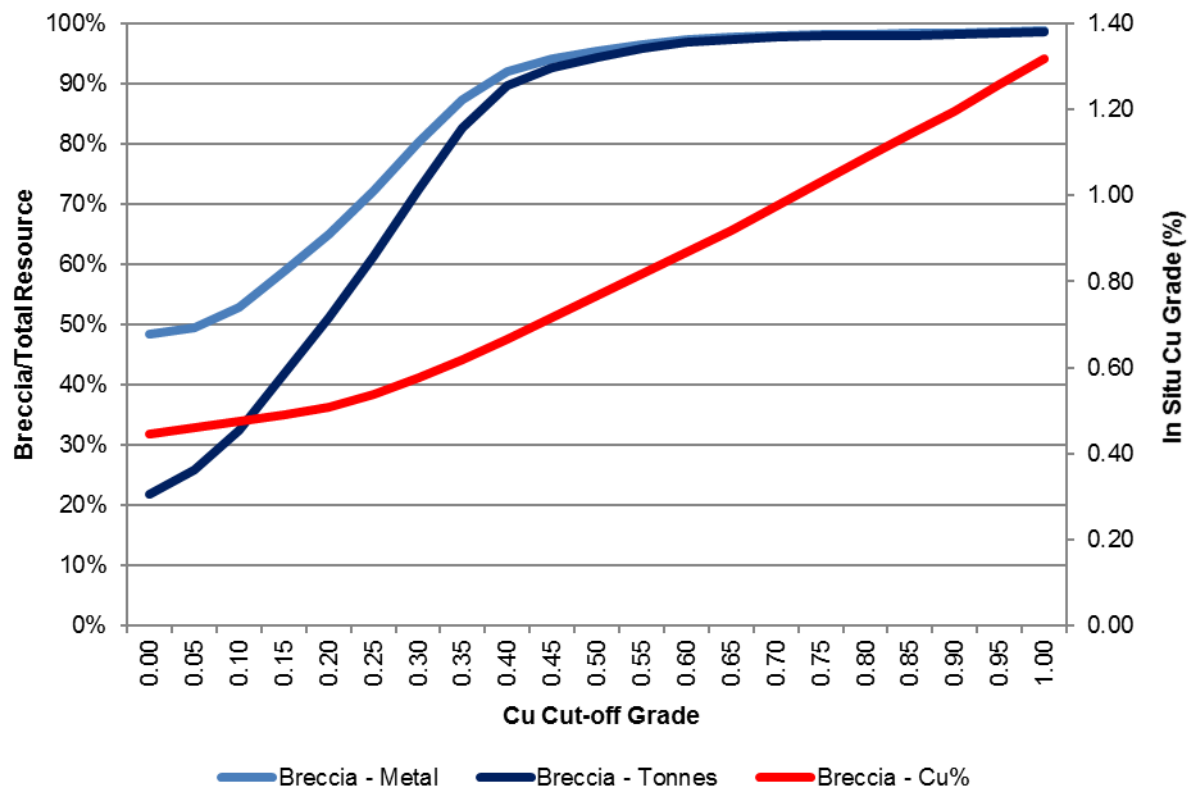
* Includes Measured, Indicated and Inferred Mineral Resource categories.

Implications of work completed - high grade, lower tonnage, mining option

The results of the work completed indicate that the high copper and molybdenum grades are largely restricted to the defined hydrothermal breccia zones. This is demonstrated by Figure 4 where, at a 0.5% Cu

cut-off grade, 95% of the estimated total contained copper metal for the deposit reports into the breccia zones.

Figure 4: Tonnes and contained copper metal (Breccia) as a percentage of the total mineral resource.



Note: Total mineral resource includes Measured, Indicated and Inferred Mineral Resource categories.

Appendix 2 summarises the mineral resources associated with hydrothermal breccias at various Cu cut-off grades. At a Cu cut-off grade of 0.75%, the estimated mineral resource (all resource categories) for the hydrothermal breccias is **126 million tonnes at 1.03% Cu and 351 ppm Mo**. At this cut-off, the *in situ* copper grade of 1.03% would deliver the head grade required (after applying modifying factors) to achieve the targeted annual copper production. Further, at this cut-off grade, the breccias host 98% of the contained copper metal (Figure 4), which in conjunction with the brecciated nature of mineralised zones, present attractive bulk mining (block caving and sub-level caving) targets.

Appendix 3 provides a graphical representation of the copper grades in excess of 0.75% Cu within the defined hydrothermal breccias.

The mining study by RPM will focus on the high grade mineral resources associated with the breccia zones, using as its reference base the recently completed 3D Block Model. The broad scope of the mining study will be to attain the following:

- An *in situ* copper grade of approximately 1.0%;
- A mining and milling production rate of approximately 6 million tonnes per annum;
- Production of 50,000 tonnes of copper metal in concentrate annually;
- Minimise pre-production capital;
- Optimise the underground mining method;

- Minimise operating costs; and
- Optimise free cash flow.

By-product credits will include molybdenum, gold, silver and rhenium. The gold and silver will report into a copper concentrate while the rhenium will report into a molybdenum concentrate. Due to the higher copper grades likely to be delivered to the concentrator, copper recovery is expected to be approximately 92%, while the overall molybdenum recovery into a molybdenum concentrate is expected to be approximately 68%. Further metallurgical test work is required to confirm / refine these parameters, and will be undertaken as part of the planned Feasibility Study.

Capital costs are expected to reduce substantially from the “Optimised L3 Model” completed by RPM, and are expected to be approximately 50% lower than those estimated in August 2013, while operating costs should be positively impacted by the higher copper grade. Mine life is expected to be greater than 20 years.

Briefing sessions have been conducted with RPM in this regard, and a full Scope of Work has been finalised.

Exploration Target TD2

The re-logging and re-interpretation of the Los Calatos drill core has resulted in the development of a structural model for the evolution of the Los Calatos Porphyry Complex, and the associated mineralisation, which led to the identification of a mineralised hydrothermal breccia immediately southwest of the Los Calatos deposit (Target TD2) (Figure 5).

Figure 5: Schematic cross section showing the position of Target TD2 relative to the main Los Calatos deposit.

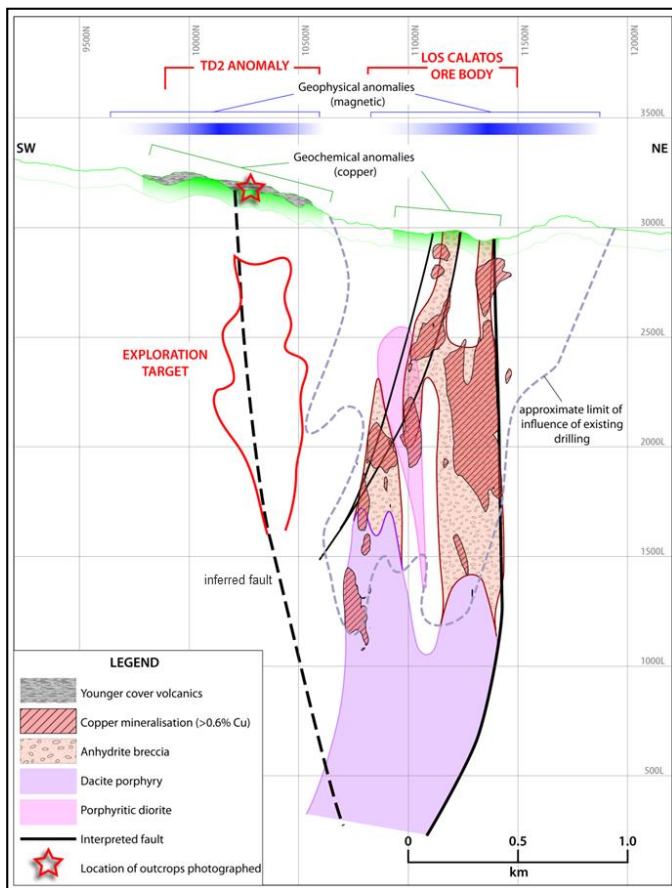


Photo Insert: Outcropping shallow-level hydrothermal breccia containing chrysocolla (hydrated copper cyclosilicate) mineralisation.



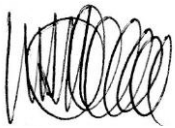
A field inspection of the TD2 Target area revealed the presence of outcropping, shallow-level, hydrothermal breccias containing chrysocolla (hydrated copper cyclosilicate) mineralisation. In addition, the presence of cryptocrystalline quartz is indicative of the upper levels of a hydrothermal system, possibly developed above a porphyry system.

Based on the results of the updated Mineral Resource Estimate, it is clear that the hydrothermal breccias host the majority of the base metal mineralisation associated with the Los Calatos Porphyry Complex. Hence, Target TD2 represents a significant exploration target. Accordingly, a provisional drilling program has been planned to assess the mineralisation potential of the target.

Way Forward

With the completion of the updated Mineral Resource Estimate, Metminco have now provided RPM with the new block model which will be used for the revised mining study. RPM will determine the best mining method (or methods) for the extraction of the high grade zones associated with the breccias, develop production schedules and associated operating and capital costs. These parameters will form the basis for a revised life of mine financial model for the project.

Further exploration work is planned for Exploration Target TD2 with the objective of confirming the geology and mineralisation potential, by virtue of its similarity with the presently defined Los Calatos deposit. To this effect, a preliminary drilling program has been planned and budgeted for the TD2 Target.



William Howe

Managing Director

Company Background

Metminco is a dual ASX and AIM listed company with a portfolio of copper, molybdenum and gold projects in Peru and Chile.

Projects and Mineral Resources

The Los Calatos Project, located in southern Peru, has a total estimated mineral resource of 352 million tonnes at 0.76% Cu and 318 ppm Mo at a cut-off grade of 0.5% Cu, comprising a Measured and Indicated Mineral Resource of 136 million tonnes at 0.73% Cu and 434 ppm Mo, and an Inferred Mineral Resource of 216 million tonnes at 0.78% Cu and 244 ppm Mo.

The Chilean assets include the Mollacas Copper Project with a Mineral Resource of 15.5 million tonnes consisting of a Measured Resource of 11.2 million tonnes at 0.55% Cu and 0.12g/t Au and an Indicated Resource of 4.3 million tonnes at 0.41% Cu and 0.14g/t Au (at a 0.2% copper cut-off); and the Vallecillo Project with a Mineral Resource of 8.9 million tonnes consisting of a Measured Resource of 5.5 million tonnes at 0.84g/t Au, 9.99g/t Ag, 1.12% Zn and 0.32% Pb, an Indicated Resource of 2.6 million tonnes at 0.80g/t Au, 10.23g/t Ag, 0.94% Zn and 0.35% Pb and an Inferred Resource of 0.8 million tonnes at 0.50g/t Au, 8.62g/t Ag, 0.48% Zn and 0.17% Pb (at a cut-off grade of 0.2g/t Au).

The Company also has a number of early stage exploration projects where initial exploration activities have identified anomalous copper, molybdenum and gold values.

Competent Persons Statement

The information in this report that relates to Exploration Results and Mineral Resources is based on information compiled by Gavin Daneel BSc, MSc, who is a Member of the Australasian Institute of Mining and Metallurgy, and is engaged as a Consultant in Australia.

Gavin Daneel is a consultant to the Company and has sufficient experience which is relevant to the style of mineralisation, 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' (JORC 2012). Mr Daneel, as Competent Person for this announcement, has consented to the inclusion of the information in the form and context in which it appears herein.

SRK Consulting (Chile) S.A. (SRK)

Metminco supplied SRK with a geological model and supporting drill hole data. Copper and molybdenum grades were estimated into a block model using ordinary kriging with VULCAN software.

The information provided in this ASX Release as it relates to Exploration Results and Mineral Resources of the Los Calatos copper deposit is based on information compiled by Joled Nur, Principal Mining Engineer (Geostatistics and Resources Estimation) SRK. Mr Nur, a Qualified Person for JORC 2012 compliant statements, reviewed the technical information presented in this document. Mr Nur, Principal Mining Engineer with SRK, performed the resource estimation. Mr Nur has sufficient experience that is relevant to the style of mineralisation and type of mineral deposit under consideration, and to the activity which was undertaken, to make the statements found in this report in the form and context in which they appear. Mr Nur has consented to be named in this announcement and inclusion of information attributed to them in the form and context in which it appears herein.

Forward Looking Statement

All statements other than statements of historical fact included in this announcement including, without limitation, statements regarding future plans and objectives of Metminco are forward-looking statements. When used in this announcement, forward-looking statements can be identified by words such as "anticipate", "believe", "could", "estimate", "expect", "future", "intend", "may", "opportunity", "plan", "potential", "project", "seek", "will" and other similar words that involve risks and uncertainties.

These statements are based on an assessment of present economic and operating conditions, and on a number of assumptions regarding future events and actions that, as at the date of this announcement, are expected to take place. Such forward-looking statements are not guarantees of future performance and

involve known and unknown risks, uncertainties, assumptions and other important factors, many of which are beyond the control of the Company, its directors and management of Metminco that could cause Metminco's actual results to differ materially from the results expressed or anticipated in these statements.

The Company cannot and does not give any assurance that the results, performance or achievements expressed or implied by the forward-looking statements contained in this announcement will actually occur and investors are cautioned not to place undue reliance on these forward-looking statements. Metminco does not undertake to update or revise forward-looking statements, or to publish prospective financial information in the future, regardless of whether new information, future events or any other factors affect the information contained in this announcement, except where required by applicable law and stock exchange listing requirements.

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APPENDIX 1

Los Calatos Project: Mineral Resources by copper cut-off grade - SRK Consulting (Chile) S.A (June 15, 2015)

Cut-off Cu (%)	Measured			Indicated			Total M + I			Inferred		
	Tonnes (Mt)	Cu (%)	Mo (ppm)	Tonnes (Mt)	Cu (%)	Mo (ppm)	Tonnes (Mt)	Cu (%)	Mo (ppm)	Tonnes (Mt)	Cu (%)	Mo (ppm)
0.00	646	0.23	170	1,251	0.17	74	1,898	0.19	107	2,788	0.21	75
0.05	525	0.28	204	1,008	0.21	89	1,533	0.23	128	2,299	0.25	87
0.10	420	0.34	247	709	0.26	116	1,128	0.29	165	1,814	0.29	103
0.15	345	0.38	287	499	0.32	146	844	0.34	204	1,352	0.35	123
0.20	285	0.42	323	361	0.38	174	646	0.40	239	1,045	0.40	141
0.25	231	0.47	355	261	0.43	202	491	0.45	274	788	0.46	162
0.30	183	0.52	387	187	0.50	234	371	0.51	310	564	0.53	190
0.35	145	0.58	422	135	0.56	267	280	0.57	347	423	0.60	210
0.40	114	0.63	460	101	0.63	296	215	0.63	382	327	0.66	228
0.45	90	0.68	489	80	0.68	323	170	0.68	411	265	0.72	235
0.50	73	0.73	513	64	0.73	345	137	0.73	434	216	0.78	245
0.55	59	0.79	532	52	0.78	363	110	0.78	452	177	0.83	253
0.60	47	0.84	545	42	0.83	374	89	0.83	464	147	0.88	258
0.65	38	0.89	556	34	0.88	382	72	0.88	473	122	0.94	257
0.70	31	0.94	566	28	0.92	393	59	0.93	483	99	1.00	261
0.75	25	0.99	572	23	0.97	405	48	0.98	492	81	1.06	259
0.80	20	1.04	581	19	1.00	412	39	1.02	499	66	1.12	257
0.85	16	1.09	593	16	1.04	422	32	1.07	509	55	1.18	250
0.90	13	1.14	603	13	1.08	426	26	1.11	516	47	1.24	243
0.95	10	1.20	625	10	1.13	441	20	1.17	536	39	1.30	236
1.00	8	1.26	650	7	1.18	461	16	1.22	561	33	1.36	232

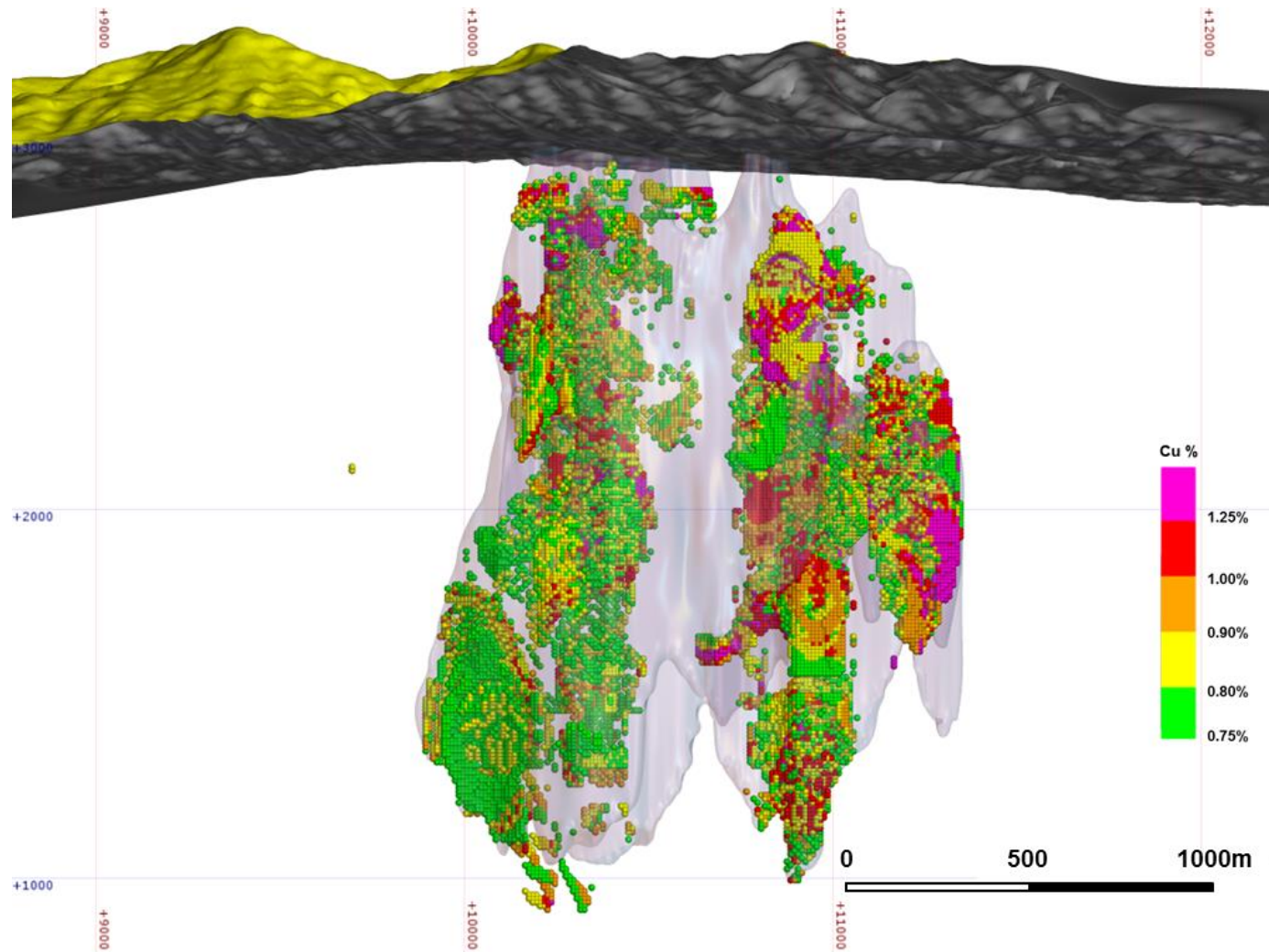
APPENDIX 2

Los Calatos Project: Grade / Tonnage Table - Hydrothermal Breccias.

Cut-off Cu (%)	Measured			Indicated			Total M + I			Inferred			Total		
	Tonnes (Mt)	Cu (%)	Mo (ppm)	Tonnes (Mt)	Cu (%)	Mo (ppm)	Tonnes (Mt)	Cu (%)	Mo (ppm)	Tonnes (Mt)	Cu (%)	Mo (ppm)	Tonnes (Mt)	Cu (%)	Mo (ppm)
0.00	237	0.42	366	179	0.44	252	416	0.43	317	608	0.46	189	1,023	0.45	241
0.05	233	0.43	370	175	0.45	255	409	0.44	321	582	0.48	195	990	0.46	247
0.10	224	0.44	382	169	0.46	262	393	0.45	331	558	0.49	200	951	0.48	254
0.15	216	0.46	391	163	0.47	268	378	0.46	338	536	0.51	204	914	0.49	260
0.20	202	0.48	402	152	0.49	276	354	0.48	348	509	0.52	209	863	0.51	266
0.25	178	0.51	418	138	0.52	285	316	0.51	360	466	0.55	217	782	0.54	274
0.30	151	0.55	438	120	0.56	298	271	0.55	376	404	0.59	229	675	0.58	288
0.35	126	0.60	462	101	0.60	316	226	0.60	397	353	0.63	235	579	0.62	298
0.40	103	0.65	489	83	0.65	333	187	0.65	419	298	0.68	241	485	0.67	310
0.45	85	0.69	510	69	0.69	354	154	0.69	440	248	0.73	244	402	0.72	319
0.50	70	0.74	527	57	0.74	371	127	0.74	457	205	0.79	252	332	0.77	330
0.55	57	0.79	540	47	0.79	385	104	0.79	470	171	0.84	259	275	0.82	338
0.60	46	0.84	551	38	0.83	396	84	0.84	481	144	0.89	261	229	0.87	342
0.65	37	0.89	561	31	0.88	406	69	0.89	490	120	0.94	259	189	0.92	343
0.70	30	0.94	569	26	0.92	418	56	0.93	500	98	1.00	263	154	0.98	350
0.75	25	0.99	574	21	0.97	430	46	0.98	508	80	1.06	261	126	1.03	351
0.80	20	1.04	583	17	1.01	439	37	1.03	515	66	1.12	259	103	1.09	352
0.85	16	1.09	595	14	1.05	449	30	1.07	526	55	1.18	252	85	1.14	349
0.90	13	1.14	605	12	1.09	453	25	1.12	533	46	1.24	244	71	1.20	345
0.95	10	1.20	627	9	1.14	469	19	1.17	554	39	1.30	237	58	1.26	343
1.00	8	1.26	651	7	1.19	489	15	1.23	578	33	1.36	233	48	1.32	342

APPENDIX 3

Los Calatos: Longitudinal Section (looking north) showing Cu% distribution within the hydrothermal breccias (grey envelopes).



APPENDIX 4

JORC Code, 2012 Edition – Table 1 Report

Section 1: Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (eg '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 (eg submarine nodules) may warrant disclosure of detailed information. 	<ul style="list-style-type: none"> Diamond Drilling was used to obtain 1m samples which were derived from half core from a mix of PQ, HQ and NQ size. Early drilling by Phelps Dodge included rock chips from Reverse Circulation drilling. Diamond core was photographed, geologically and geotechnically logged prior to cutting and sampling. Core was half core sampled. Early Phelps Dodge Reverse Circulation material was riffle or cone split to produce a smaller sample to be sent to the laboratory for analysis.
+Drilling techniques	<ul style="list-style-type: none"> Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc). 	<ul style="list-style-type: none"> Metminco acquired the project in 2007 and has drilled 95 angled Diamond Drill holes for a total of 117,059m in 4 phases of drilling. The diamond core was not orientated. The majority of Metminco holes were collared in PQ size core, reducing to HQ after a few hundred metres and then further reducing to NQ for the deeper holes (>1km). Pre-2007 drilling undertaken by Phelps Dodge and Barrick consisted of 26 vertical Reverse Circulation drill holes and 13 vertical Diamond Drill holes. Many of these holes were drilled outside the main mineralised zone.
Drill sample recovery	<ul style="list-style-type: none"> Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material. 	<ul style="list-style-type: none"> DD core loss (in metres) was measured in the core trays and core loss and recovery (%) recorded in geotechnical records. 8% of sample intervals measured had core losses of 5%. No analysis on relationship between sample core recovery and grade has been undertaken due to low percentage of data affected by poor recovery.
Logging	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> Diamond drill core has been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation.

Criteria	JORC Code explanation	Commentary
	<p><i>studies.</i></p> <ul style="list-style-type: none"> <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i> <i>The total length and percentage of the relevant intersections logged.</i> 	<ul style="list-style-type: none"> A total of 120,356 metres of drill core were re-logged during November and December 2014 by a team comprising 10 geologists, 7 of which were contracted for that purpose. The focus of this work was largely to establish an improved understanding of the controls on the high grade mineralisation. Logging has been conducted both qualitatively and quantitatively – full description of lithologies, alteration and comments are noted, as well as percentage estimates on alteration, veining and sulphide amount. Detailed high resolution core photos have been taken of all diamond drill core
<p>Sub-sampling techniques and sample preparation</p>	<ul style="list-style-type: none"> <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i> <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i> <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i> <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i> <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> <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i> 	<ul style="list-style-type: none"> Diamond drill core was half core sampled. The core was cut longitudinally along its length for sampling and assay. Samples were then taken every 1m in length. The upper parts of diamond holes collared outside the main zone of mineralisation were only sampled every 10m. Phelps-Dodge RC drill holes were typically sampled on 2m intervals. For all sample types, the nature, quality and appropriateness of the sample preparation technique is industry standard. Sample size of 2-3 kg is appropriate for grain size of mineralised material.
<p>Quality of assay data and laboratory tests</p>	<ul style="list-style-type: none"> <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i> <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> <i>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</i> 	<ul style="list-style-type: none"> Original laboratory records for all Metminco drilling are available and were received as both hard copy and spreadsheet files which were directly uploaded into the drilling database. For drilling prior to 2007, original laboratory records are unavailable. A total of 97,366 primary samples were submitted to the ACME laboratory in Lima, Peru for analysis. Samples were analysed for copper and molybdenum. Samples were crushed, split and pulverised to 200 mesh and then analysed using AAS. Drill holes prior to 2007 - Descriptions of quality control procedures are based on previous resource reports and historical documents. The absence of original laboratory quality control records has meant that results of quality control analyses could not be checked and verified. QAQC consisted of systematic submission of field duplicates, standards and blanks into the sample stream. For the 4 phases of Metminco drilling, a total of 4174 blanks, 3762 standards and 1082 core

Criteria	JORC Code explanation	Commentary
		<p>duplicates were submitted to the ACME laboratory in Lima.</p> <ul style="list-style-type: none"> From the reported information the samples showed acceptable levels of accuracy and precision. Upon completion of Phase 4 sample pulps from the primary laboratory, ACME, were selected from all four drilling phases for check analysis at a second laboratory, the SGS laboratory in Lima, Peru. Samples were analysed for Cu and Mo using the same analytical method as for the primary core samples. Results strongly support the validity of the primary assays carried out at Acme laboratory, with a suggestion of a slight undervaluation at the higher Cu values.
Verification of sampling and assaying	<ul style="list-style-type: none"> <i>The verification of significant intersections by either independent or alternative company personnel.</i> <i>The use of twinned holes.</i> <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i> <i>Discuss any adjustment to assay data.</i> 	<ul style="list-style-type: none"> The digital database was maintained by SRK in Santiago until the start of the third phase of drilling. There has been no independent check of the drill hole assay data against the original hardcopy laboratory assay reports. Twining of Phelps Dodge Reverse Circulation drill holes with diamond drill holes was undertaken by Phelps Dodge and shows good correlation with the significant intersections. For the resource estimate, twinned RC holes were removed from the database. Drill hole data prior to 2007 – there are some laboratory reports for the diamond drill holes and these were checked against the digital data provided by Phelps Dodge and Barrick. All data below detection limit (0.001 % Cu and Mo) have been entered as 0.0005 % Cu and 0.0005 % Mo. Samples not received or missing have had the interval left blank in the database.
Location of data points	<ul style="list-style-type: none"> <i>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</i> <i>Specification of the grid system used.</i> <i>Quality and adequacy of topographic control.</i> 	<ul style="list-style-type: none"> The initial position of the drill hole collar was located in the field using a hand-held GPS unit. Following completion of each phase of drilling, the drill hole collars were accurately surveyed by an independent surveying company called Geomat using a differential GPS receiver who provided the collar co-ordinates in the UTM projection system in both PSAD56 and WGS84 datum's. Geomat provided Hampton with a detailed report including photographs of each of the drill hole collars surveyed and a digital version of the hole co-ordinates which was imported directly into the drill hole database for collar location and RL using a theodolite. For the phase 4 drilling, an independent downhole survey company (DGS) was contracted to survey the holes using a North Seeking Gyro (NSG) with measurements taken every 10m down the hole. The NSG instrument is the most accurate and reliable survey tool available with all measurements

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		<p>referenced to geographic north. Unlike the Flexit Smart tool, the NSG is not affected by magnetic interference and so as a check on the Flexit Smart tool measurements, the NSG was used to re-survey all of the phase 1, 2 and 3 drill holes and the original Flexit surveys were adjusted to the NSG measurements.</p> <ul style="list-style-type: none"> • For each drill hole surveyed, DGS provided Hampton with a spreadsheet containing the finalised downhole survey measurements which were imported directly into the drill hole database. • For phases 1 and 2, all of the inclined Hampton drill holes were oriented either True North or South. However, in October 2010, a detailed geophysical survey indicated a strong north-west trending lineament and a decision was made to setup a local grid at 40° to True North and orient all future drilling to local grid north or south. • Holes drilled by Phelps Dodge and Barrick were all vertical. • The digital topography is an ALOS Prism DSM produced at 5m cell size from an ALOS PRISM triplet collected on the 8th June 2008 and locally adapted to match the differential GPS surveyed collar elevations. This topography is adequate for resource estimation. • Visual inspection in 3D graphics did not identify any inaccuracies with the spatial position of the drill holes.
Data spacing and distribution	<ul style="list-style-type: none"> • <i>Data spacing for reporting of Exploration Results.</i> • <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> • <i>Whether sample compositing has been applied.</i> 	<ul style="list-style-type: none"> • Drill data spacing is variable but is approximately 50m x 50m within the main part of the deposit. This spacing is adequate to determine the geological and grade continuity for reporting of Mineral Resources. • Samples were composited to 2m over the full length of the drill hole intervals within the mineralised domains. The samples were then flagged with the domain number.
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> • <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> • <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> 	<ul style="list-style-type: none"> • For phases 1 and 2, all of the inclined Hampton drill holes were oriented either True North or South. Phases 3 and 4, which represent the majority of the drilling, were oriented perpendicular to the general strike of the deposit. • The deposit is vertical, so all phases of the Metminco drilling used for resource estimation were inclined at between 50° and 71° to traverse the mineralised zones.
Sample security	<ul style="list-style-type: none"> • <i>The measures taken to ensure sample security.</i> 	<ul style="list-style-type: none"> • Metminco staff collected the diamond core from the drill rig and transferred it to an on-site central processing area for logging, sampling and documentation. Drill core was then stored in the central core shed, located at the project site which is in a 24 hour security controlled area. • Once assaying was complete the results were returned in digital format to the Company's

Criteria	JORC Code explanation	Commentary
		Database Administrator where they were uploaded directly into the main database. A PDF of the assay results was also sent by the laboratory which are stored on the Company's secure central filing system
Audits or reviews	<ul style="list-style-type: none"> The results of any audits or reviews of sampling techniques and data. 	<ul style="list-style-type: none"> SRK conducted a data compilation review and validation prior to resource estimation which involved checks for duplicate surveys, downhole surveys errors, assays and geological intervals beyond drill hole total depths, overlapping intervals, and gaps between intervals.

Section 2: Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area. 	<ul style="list-style-type: none"> The Los Calatos Project covers an area of 234 km² and is located on state owned land. In July 2013, the Peruvian Government approved an increase in the area that Metminco may purchase under the Project of National Interest designation from 2,800 ha to 12,700 ha to accommodate the surface infrastructure required to exploit the deposit. The tenements comprise 28 granted Mining Concessions and all are in good standing. Metminco has 100% interest in all tenements through its Peruvian subsidiary company, Minera Hampton Peru SAC.
Exploration done by other parties	<ul style="list-style-type: none"> Acknowledgment and appraisal of exploration by other parties. 	<ul style="list-style-type: none"> The Los Calatos deposit was discovered by David Lowell who noticed a concentric colour anomaly out the window of an airplane when he was working for Phelps Dodge in the early 1990's. Using co-ordinates obtained from the airplanes GPS system, Lowell visited the area and named the project Los Calatos after a geographical name on the map. At that stage, the ground was held by Arequipa Resources so in 1995 Phelps Dodge negotiated an option over Los Calatos and completed limited geological, geochemical and geophysical surveys prior to drilling 26 RC drill holes (4,188m) and 5 diamond drill holes (2,183m). Two of the RC drill holes (RC-02 and RC-04) intersected significant copper mineralisation with 6 others intersecting zones of weak mineralisation and the remaining 18 holes were barren. Three of the diamond holes were used to twin the mineralised RC holes. In September 1996, the Phelps Dodge option lapsed and in the meantime, Arequipa had sold its assets to Barrick who in early 1997 drilled 8 diamond drill holes (1,946m) to test the main mineralised zone that had been

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		<p>identified by Phelps Dodge on a 100m x 100m spacing.</p> <p>In 2007, Minera Hampton acquired Los Calatos and since then has completed four distinct phases of diamond drilling commencing in July 2008.</p>
Geology	<ul style="list-style-type: none"> • <i>Deposit type, geological setting and style of mineralisation.</i> 	<ul style="list-style-type: none"> • Los Calatos is located within the western slopes or Cordillera Occidental of the southern Peruvian Andes, regionally defined as the Main Arc magmatic domain. This region has experienced convergent plate interaction and orogenesis throughout the Phanerozoic. The Main Arc domain, which underlies the Cordillera Occidental, comprises uppermost Triassic to Quaternary Andean volcanic and plutonic rocks primarily of mantle origin, with a significant range of contributions from the upper and middle continental crust producing both calc-alkaline and weakly alkaline (shoshonitic) affinities. The intrusive and volcanic igneous rocks of the Main Arc consist essentially of by-products of subduction, and were emplaced throughout the Mesozoic and Cenozoic interspersed with dormant periods of up to 25 m.y. The Toquepala segment of this region has been documented to host at least eight episodes of felsic intrusive rocks, ranging in age from the Middle Jurassic (ca. 185 Ma), Late Jurassic (ca. 160-165 Ma), latest Jurassic (ca. 145 Ma), mid-Cretaceous (ca. 95-110 Ma) age, Late Cretaceous (ca. 80 Ma), latest Cretaceous (ca. 63-66 Ma), late Paleocene (ca. 59-62 Ma) and middle to late Eocene (ca. 40-46 Ma) ages. <p>Los Calatos is located on the NW-extension of the NW-SE trending Toquepala-Quellaveco-Cuajone district, which comprises an inland belt of younger intrusions spanning the latest Cretaceous to Late Eocene period. Importantly, these are all associated with hydrothermal mineralisation. In addition, the emplacement of subvolcanic polyphase dacite, and probably, dacitic porphyry stocks and associated porphyry copper deposits occurred in the early Eocene.</p> <p>Porphyry Cu-Mo mineralisation at Toquepala is associated with a complex intrusive centre dominated by polyphase porphyritic dacite plugs, a dacite diatreme, and extensive hydrothermal breccias, dated at 57 Ma +5 Ma. Cuajone has been documented as being of latest early Eocene age.</p> <p>Another significant factor considered to be important to the timing and location of these economically significant felsic intrusives is that they all fall within the confines of the Incapuquio Fault Zone (IFZ) which affects a 25km wide belt extending for 250km in a NW-</p>

Criteria	JORC Code explanation	Commentary
		<p>trend from the Pucamarca Mine in the SE to beyond the Cerro Verde Mine in the NW.</p> <p>Regionally, these plutonic rocks intruded into a stratigraphic sequence comprising a thick (3,500m) sequence of sandstones interlayered with volcanics (Chocolate Fm) which were deposited from the Triassic period to the Early Jurassic on the Paleozoic basement. After emersion and erosion, a sequence of layered marine sandstones and carbon-rich lutites interlayered with andesitic volcanics flows (Socosani Fm, Puente Fm, Cachios Fm, Gramadal Fm and Labra Fm) were deposited during the Upper Jurassic, followed by andesitic volcanic rocks comprising the Hualhauni Fm. and Matalaque Fm which were deposited in the first half of the Upper Cretaceous. After erosion, the Matalaque Fm was overlaid discordantly by the ignimbrite flows of the lower member of the Toquepala Group. (second half of Upper Cretaceous), followed by andesite-dacitic volcanics flows for the upper member of the Toquepala Group (Upper Cretaceous, early Paleocene).</p> <p>Following a protracted period of relative quiescence during the middle Tertiary period, ignimbrite eruption was initiated at ca. 25.5 Ma, (uppermost Oligocene) resulting in the outpouring of a thick sequence of tuffs, ignimbrites, ashes intercalated with coarse clastic sediments (Moquegua Fm), sealing the paleotopography. Further ignimbritic events interspersed with the erosion and/or deposition of volcanoclastics occurred during the mid-Miocene, upper-Miocene and early Pliocene.</p> <p>The Los Calatos porphyry complex has been sequentially intruded into a structurally-prepared site developed along a zone of brittle failure which extends into a dioritic to monzo-dioritic plutonic body (pre-cursor pluton) which had earlier intruded the Toquepala Group. The pre-cursor pluton forms the southern, western and northwestern host rocks to the Los Calatos porphyry complex, while the Toquepala Group forms the northeastern and eastern boundaries.</p> <p>Five magmatic phases consisting of ten discrete magmatic pulses (intrusive events), each of them with their own lithotype, have been identified from core logging.</p> <p>The extent, grade and timing of both copper and molybdenum mineralisation is closely related to the evolution of the felsic porphyry complex developed at Los Calatos, generally conforming to typical Andean porphyry Cu-Mo deposit formation processes. Four stages of mineralisation have been</p>

Criteria	JORC Code explanation	Commentary
		<p>identified from detailed and semi-detailed core logging undertaken by company geologists:</p> <p>1 - <u>Pre-main stage</u>: pyrite - chalcopyrite (minor molybdenite) associated with K alteration of early felsic stocks, generally low-grade (0.075% Cu – 0.25% Cu)</p> <p>2 - <u>Main stage</u>: pyrite – chalcopyrite – bornite - molybdenite (B veinlets) associated with chlorite-sericite alteration of shallower portions of the pre-main and main stage felsic intrusive stocks, magmatic hydrothermal breccias including the economically important anhydrite-bearing veins and breccias, generally medium to high-grade (>0.25% Cu)</p> <p>3 - <u>Transitional stage</u>: pyrite – chalcopyrite(minor?) – digenite - primary chalcocite - primary covellite - molybdenite associated with magmatic hydrothermal breccias having fluids of a higher sulfidation state than earlier fluids; likely to include scavenging, remobilisation of earlier mineralisation into higher-grade zones of brecciation</p> <p>4 - <u>Late stage</u>: pyrite - tennantite – chalcopyrite – sphalerite – galena.</p>
<p>Drill hole Information</p>	<ul style="list-style-type: none"> • 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: <ul style="list-style-type: none"> ○ 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. 	<ul style="list-style-type: none"> • Detailed information in relation to the previously reported drill holes forming the basis of this Mineral Resource estimate are not included in this report. The information is not material in the context of this report and its exclusion does not detract from the understanding of this report. For the sake of completeness, the following background information is provided in relation to the drill holes. • Easting, Northing and RL of the drill hole collars are in local Mine Grid coordinates. • Dip is the inclination of the hole from the horizontal. For example a vertically down drilled hole from the surface is -90°. Azimuth is reported in magnetic degrees as the direction toward which the hole is drilled. • Down hole length of the hole is the distance from the surface to the end of the hole, as measured along the drill trace. Interception depth is the distance down the hole as measured along the drill trace. Intersection width is the downhole distance of an intersection as measured along the drill trace. • Drill hole length is the distance from the surface to the end of the hole, as measured along the drill trace. • It is the opinion of the Competent Person that the exclusion of the historic drilling data does not detract from the understanding of the report.
<p>Data</p>	<ul style="list-style-type: none"> • In reporting Exploration Results, weighting 	<ul style="list-style-type: none"> • Detailed information in relation to data

Criteria	JORC Code explanation	Commentary
aggregation methods	<p><i>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> <ul style="list-style-type: none"> Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. The assumptions used for any reporting of metal equivalent values should be clearly stated. 	<p>aggregation methods is not relevant as no exploration results are being reported in this Mineral Resource report. The information is not material in the context of this report and its exclusion does not detract from the understanding of this report.</p>
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known'). 	<ul style="list-style-type: none"> Detailed information in relation to mineralisation and intercept widths is not relevant as no exploration results are being reported in this Mineral Resource report. The information is not material in the context of this report and its exclusion does not detract from the understanding of this report.
Diagrams	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Maps and sections are included in the mineral resource report. There has been no recent drilling which has not already been reported to the market and there are no new significant discoveries being reported.
Balanced reporting	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Drill holes and resource blocks with significant results are shown in cross section as examples of the resource.
Other substantive exploration data	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> The Company conducted a combination of soil and rock-chip geochemistry over the Los Calatos Porphyry Complex and adjacent areas during 2010. This survey comprised the taking of 200g samples from approximately 30cm depth within the soil profile, or from the outcrop, at 100m spacing along north-south oriented lines spaced 100m apart, covering an area of 12.5km². These samples were all analysed by ACME-Peru using the ICP Group 1D X 15 (37 elements) method. The location of the samples was determined using a handheld GPS and the coordinates were recorded in PSAD 56 Datum, Zone 19 South and material exploration data has been reported. Molybdenum is considered to be the best or most relevant pathfinder element for Cu-Mo type porphyry deposits. Similarly, the Cu/Zn ratio also highlights the surface expression of the mineralised Cu-Mo porphyry complex, reflecting the relative mobility of these elements in response to the effects of weathering and supergene

Criteria	JORC Code explanation	Commentary
		<p>processes.</p> <ul style="list-style-type: none"> The distribution of samples returning a relative depletion of Zn and Pb also coincide with the surface expression of the mineralised Cu-Mo porphyry complex. Au shows an interesting areal distribution spatially related with the Los Calatos Porphyry Complex, in particular with the outcropping portions of the diatreme. A study of the early RC drill holes (include Cu, Mo, Au, Ag, Pb & Zn analysis) suggest that this may be only a surface enrichment effect. In November 2010, Quantec Geoscience completed a Titan 24 DCIP & MT survey over the Los Calatos Deposit. The survey consisted of eleven DC, IP & MT lines with a total of 45,800 line metres of data acquired. The exploration objective of the Titan-24 DCIP & MT survey was to detect copper and molybdenum porphyry mineralisation hosted in intrusives thought to be related to dilation zones along the northwest striking Incapuquio fault and associated east striking splay or 'horsetail' structures. The intersection of these trends is thought to have caused emplacement of the intrusives and subsequent alteration and mineralisation.
Further work	<ul style="list-style-type: none"> <i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i> <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> 	<ul style="list-style-type: none"> Metminco is currently formulating its strategy for infill drilling, particularly near surface drilling to test the extent of the supergene zone. However, no detailed plans are available for reporting at this time. Two high priority exploration targets have been identified (TD2 and TD3) in close proximity to the Los Calatos deposit, of which the TD2 Target is drill ready. A provisional drilling program has been devised to assess the mineralisation potential of this target.

Section 3: Estimation and Reporting of Mineral Resources

Criteria	JORC Code explanation	Commentary
Database integrity	<ul style="list-style-type: none"> <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> <i>Data validation procedures used.</i> 	<ul style="list-style-type: none"> The database is maintained by Metminco in a secure Micromine GeoBank database. The relevant drill hole data required to complete the Mineral Resource Estimate was downloaded from GeoBank into a Microsoft Access database. SRK removed 4 Reverse Circulation drill holes that had been twinned by diamond drilling. SRK completed validation checks on the database comparing collar points to the topography, maximum hole depths, checks between tables and the collar data. SRK also verified the data using visual inspection of the drill holes in 3D to identify inconsistencies of

Criteria	JORC Code explanation	Commentary
		drill hole traces.
Site visits	<ul style="list-style-type: none"> • <i>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</i> • <i>If no site visits have been undertaken indicate why this is the case.</i> 	<ul style="list-style-type: none"> • While the Competent Person for the 2015 Resource Estimation has not visited the project, the chief geologist of SRK and the Competent Person for the 2013 Resource Estimate visited the project during 2012, and found no issues of concern.
Geological interpretation	<ul style="list-style-type: none"> • <i>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</i> • <i>Nature of the data used and of any assumptions made.</i> • <i>The effect, if any, of alternative interpretations on Mineral Resource estimation.</i> • <i>The use of geology in guiding and controlling Mineral Resource estimation.</i> • <i>The factors affecting continuity both of grade and geology.</i> 	<ul style="list-style-type: none"> • The recent re-logging program has significantly improved the understanding of the spatial and temporal development of the main geological components of the porphyry complex, and their respective effects on the nature and extent of the copper and molybdenum mineralisation. As a result, confidence in the interpretation is high. • The porphyry complex is now known to have formed from five discrete magmatic phases, each comprising one or more separate intrusive events or pulses. Three of these phases have contributed to the mineralisation to various degrees, of which two are associated with hydrothermal breccias. The location and shape of each of the intrusive events are all influenced by a strong structural control resulting in the curvilinear NW-SE trending lenticular-shaped features which characterise the deposit. • The most significant development has been the delineation of a series of laterally and vertically persistent hydrothermal breccia zones which contain the high-grade copper and molybdenum mineralisation. • Wire-frame modelling of the bounding surfaces of these zones has been completed and used to constrain the estimation of the high grade mineralisation. It is important to note that these zones fall within the confines of the more generalised constraining wire-frame used for the 2013 mineral resource estimate, and will limit the dilutive effects of the lower grade mineralisation associated with earlier porphyritic intrusions that were included in the 2013 estimate. • Based on the work completed to-date, it is clear that the high grade copper and molybdenum mineralisation is largely restricted to the anhydrite breccias (Stage 2 mineralisation). • Furthermore, the re-logging of the Los Calatos drill core has facilitated the improved definition of the boundaries of the anhydrite breccia zones, and the strike and depth continuity thereof, which is an important consideration from a mining perspective.
Dimensions	<ul style="list-style-type: none"> • <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> 	<ul style="list-style-type: none"> • The block model has been aligned with the Los Calatos local grid which is rotated 40° from True North. • The dimensions of the model blocks are: 2,400m from 9200E to 11600E, 2,300m from 10000N to 12300N and 2,300m in elevation

Criteria	JORC Code explanation	Commentary
		from 900mRL to 3200mRL.
Estimation and modelling techniques	<ul style="list-style-type: none"> • <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> • <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> • <i>The assumptions made regarding recovery of by-products.</i> • <i>Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).</i> • <i>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</i> • <i>Any assumptions behind modelling of selective mining units.</i> • <i>Any assumptions about correlation between variables.</i> • <i>Description of how the geological interpretation was used to control the resource estimates.</i> • <i>Discussion of basis for using or not using grade cutting or capping.</i> • <i>The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</i> 	<ul style="list-style-type: none"> • The model has been has estimated using Ordinary Kriging within Vulcan and Surpac for copper and molybdenum, which have been domained and estimated separately. <p>Domains are controlled by lithology, alteration, structure and grade.</p> <p>The drill hole database was flagged with each domain code as defined by the wireframe boundaries and copper and molybdenum composites were extracted for each domain into 2m lengths which were used to estimate the corresponding domain using hard boundaries.</p> <p>High grades within the domains were controlled using restricted search ranges.</p> <p>Directional variograms were used for copper and molybdenum in all domains and these were used to constrain the search distances used in the block interpolation.</p> <p>The orientation of the breccia domains varied considerably along strike and down dip, so a Dynamic Anisotropy method utilising the Ordinary Kriging function in Surpac version 6.7 was used to interpolate the blocks within the breccia domain for copper. For molybdenum, only the blocks in the low grade domains were interpolated using Dynamic Anisotropy. This method enables the search ellipse and variogram model to be dynamically oriented for each block to follow the trend of the mineralisation within the domain.</p> <p>The estimate of the other domains was undertaken using the Ordinary Kriging function in Vulcan version 9.1 with a single search ellipsoid and variogram model defined for each domain.</p> <p>All domains (including the Dynamic Anisotropy Estimation in the breccias) were estimated using 4 passes with increasing search ranges, as well as changing restrictions on the minimum and maximum number of samples and minimum number of drill holes allowed to interpolate a block.</p> <ul style="list-style-type: none"> • This Mineral Resource Estimate is a revision of a previous estimate announced in February 2013. Within the breccia domain, the tonnes and grade have improved. • No assumptions have been made on the recovery of by-products in the 2015 Resource

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		<p>Estimation</p> <ul style="list-style-type: none"> No potentially deleterious elements have been estimated. The block size used was 10 (Easting) x 5 (Northing) x 10 (Elevation) metres. This block size is smaller than the previous estimate, with the objective of improving the dilution grade from underground mining. The selection of units is primarily based on lithology and structure, however, an outer grade envelope of 0.075% total copper was used to limit the estimation and the molybdenum domain within the Breccia was sub-dominated on the basis of grade. Copper and Molybdenum were estimated independently. There is a good distribution of grades within the Breccia domain where the best grades of copper and molybdenum are located. Geostatistically derived domains, developed by consolidating those regions defined by 7 lithology units, 6 alteration units, 3 structure units and 3 mineral zones, having similar characteristics were used to control the resource estimates separately for copper and molybdenum. The estimations for both copper and molybdenum were undertaken using grade capping restrictions. Validations were performed using the nearest neighbour with top cutting of the high grades. The overall bias and drift for each unit was reviewed. A visual check of the block model with the drill hole database was also performed. Checks between traditional kriging and kriging with Dynamic Anisotropic in Breccia units were also performed, giving very similar results in terms of grade and tonnage although the distribution of the interpolated blocks was significantly better using the Dynamic Anisotropy method.
Moisture	<ul style="list-style-type: none"> Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content. 	<ul style="list-style-type: none"> Moisture was not considered in the density assignment. The mineralisation modelled in this resource estimate predominantly occurs entirely within the fresh or sulphide zone and is estimated as dry tonnes.
Cut-off parameters	<ul style="list-style-type: none"> The basis of the adopted cut-off grade(s) or quality parameters applied. 	<ul style="list-style-type: none"> Cut-off grade for reporting is 0.5% total copper, and is based on preliminary economic considerations, documented and reported in the 2013 RPM Mining Study. A complete tonnage – grade table from 0 to 1% is also reported, separating each resource category.

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Mining factors or assumptions	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> No mining factors were considered during the interpretation and 3D modelling of the mineralisation. However, mining factors have been accounted for in reporting the cut-off criteria. Minimum mining widths were not considered during the interpretation and 3D modelling of the mineralisation. A minimum width of 5m was used in the interpretation of the mineralisation in order to preserve 3D wireframe integrity and continuity.
Metallurgical factors or assumptions	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> No metallurgical factors were considered during the interpretation and 3D modelling of the mineralisation however metallurgical factors have been accounted for in the reporting the cut-off criteria.
Environmental factors or assumptions	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> No assumptions were made regarding environmental restrictions.
Bulk density	<ul style="list-style-type: none"> Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples. The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit. Discuss assumptions for bulk density estimates used in the evaluation process of the different materials. 	<ul style="list-style-type: none"> Drill holes were selected for on-site relative density estimation so as to give a spread across the strike and depth of the deposit, and also to cover all lithologies. Drill holes from all four drilling phases were included. In each drill hole, samples deemed by visual inspection to be representative of a particular interval were taken at a minimum interval of 1 sample per 20m down-hole depth, commencing approximately 150m down-hole, on the assumption that samples above this depth were porous. Samples that could not be demonstrated as being non-porous during the on-site determination were sent to the SGS laboratory in Lima together with those samples from the upper (<150m) porous zone for bulk density determinations using the paraffin wax method. On site determinations on the remaining samples were based on the simple Archimedes method, with samples

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		<p>being weighed in air and water using a Precisa XB 6200D precision balance accurate to 0.1g.</p> <ul style="list-style-type: none"> A total of 5,410 relative density (RD) determinations were carried out comprising 4,892 non-porous determinations on site and 518 porous samples at the SGS laboratory in Lima. For internal QAQC purposes, a total of 210 samples, some 4.3% of the on-site determinations, were selected across the RD range and a second RD determination carried out using the same protocol as for the original determinations. Given the repeatability of the on-site determinations, the extremely good coincidence of site and laboratory weight measurements and the slightly conservative RD values (relative to the independent laboratory RDs determined by a slightly different method) used in the resource model, it is considered that the RD values used are appropriate. An Inverse distance squared method was used to estimate density. The separation of units by lithology, alteration and mineralisation was performed. For the blocks lying within the Toquepala, as well as the Pre-cursor diorite (viz. outside the mineralised envelope), average densities were calculated for the lithology and assigned directly. Also, due to the limited amount of information below the 2100mRL elevation, average densities were assigned separated by lithology.
<p>Classification</p>	<ul style="list-style-type: none"> <i>The basis for the classification of the Mineral Resources into varying confidence categories.</i> <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> <i>Whether the result appropriately reflects the Competent Person's view of the deposit.</i> 	<ul style="list-style-type: none"> The classification of mineral resources is based on the level of confidence that can be ascribed to the estimate based on the data support. A Measured Mineral Resource has the highest level of confidence, and hence the greatest data support, whereas an Inferred Mineral Resource has the lowest level of confidence due to the least data support. Resource categories were assigned based on the modelled variography for each domain. Within the main Breccia domain, Measured blocks were restricted to a variogram range of 70 metres with a minimum of 3 drill holes required to interpolate a block. A search range of 100m with a minimum of 2 drill holes was used to classify Indicated blocks and Inferred blocks where the variogram range exceeded 100 metres. The classification of the mineral resource based on the range of the modelled variography is considered to be appropriate, although the geological continuity (along strike and vertically), has been considered to a limited extent. Other classification methods based on production blocks and estimation

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		<p>error can be applied, but these are best done with a larger amount of data once there is certainty on the method by which the deposit will be exploited.</p> <p>Additional drilling is required to upgrade the lower confidence resource categories based on the improved understanding of the geology and its control on the distribution of the base metal mineralisation, and the current understanding of the modelled variography.</p>
Audits or reviews	<ul style="list-style-type: none"> <i>The results of any audits or reviews of Mineral Resource estimates.</i> 	<ul style="list-style-type: none"> There is good correlation between lithology, alteration, structure and mineralisation. Directional variograms and resource estimation by domain have been performed based on traditional methods, and limits have been imposed on the influence of high grades. The classification of mineral resources is based on variography and the minimum data support from at least 2 drill holes. This approach has resulted in a robust estimate that would satisfy any subsequent audit.
Discussion of relative accuracy/confidence	<ul style="list-style-type: none"> <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> <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> <i>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</i> 	<ul style="list-style-type: none"> The procedures adopted to estimate the mineral resource is consistent with those methods, and levels of accuracy, applied to similar porphyry hosted deposits. That is, directional variograms and ordinary kriging have been applied over four estimation passes to classify the resource, with minimum / maximum samples and drill holes being required for an estimate. Further, grade thresholds have been applied to limit the impact of high grades. The estimation has been performed for the deposit within a broad envelope constrained by a 0.075% (Total Copper) isograde. However, in some instances the area was expanded to accommodate lithologies containing the more significant mineralisation. The main unit modelled was the Breccia unit. Here additional effort was made to model the high-grade molybdenum separately using an indicator. Not applicable at this time.