

## QUARTERLY ACTIVITIES REPORT & APPENDIX 5B 3 MONTHS TO 31 DECEMBER 2013

Activities for the quarter ending 31 December 2013 largely focused on advancing the Mollacas Copper Leach Project, and preparatory work for the planned Pre-Feasibility Study at Los Calatos.

#### Mollacas Project - Chile

Results from the column leach testwork recently completed by SGS (Chile), and supervised by an independent expert, concluded the following:

- A recovery rate of approximately 85% of the average "sequential" assayed copper grade for the deposit should be attained;
- The recovery rate for the supergene ore could be as high as 90%;
- Low acid consumption in the range of 12 kg/t to 14 kg/t of ore leached was achieved, a significant reduction on the previous testwork. Additional testwork is planned to ascertain whether this acid consumption rate can be reduced further by limiting the acid dosage in agglomeration.

These results will have a significant, positive, impact on the economics of the project.

The results from this testwork will form the basis for the detailed mine and processing design which is required to complete a Feasibility Study and the Environmental Impact Study (EIS), both of which are expected to be completed during the 4<sup>th</sup> quarter of 2014.

The Company expects a final determination on the issue of its 1<sup>st</sup> Extension "Servidumbre" (Right to Access) for the Mollacas Project during the 1<sup>st</sup> quarter of 2014.

#### Los Calatos Project – Peru

On 12 August 2013, the Company announced the results of further optimisation work undertaken by RungePincockMinarco at its 100% owned Los Calatos Project, the key results of which are summarised as follows:

- Life of Mine of 34-years;
- Comprises an open pit and underground block cave operation;
- Total tonnes treated over Life of Mine of 811Mt at 0.47% copper and 0.03% molybdenum;
- Annual copper in concentrate production of 98.4kt; and,
- Cash operating costs of US\$1.12/lb Cu inclusive of by-product credits.

Discussions with a number of interested parties on the future funding of Los Calatos are advancing, certain of which are to be held in Peru during February 2014.

#### Corporate

Cash position as at 31 December 2013 was approximately A\$7.8 million (US\$6.9 million);

Mr William Howe, Managing Director commented: "The December quarter saw the successful completion of the metallurgical testwork at Mollacas, a major milestone in progressing the project towards production. The results from the column leach testwork have confirmed 85% copper recoveries with low acid consumption rates, which significantly enhance the economics of the project. Additional metallurgical testwork is to commence shortly to determine the potential to further reduce these low acid consumption rates.

The Company is well advanced with the planning for the completion of a Feasibility Study and Environmental Impact Study, which is required for mining approval at Mollacas, and expects to complete these studies by late 2014."

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#### **KEY RESULTS**

#### Mollacas Copper Leach Project

#### **Testwork Results**

The Phase 3 metallurgical testwork undertaken by SGS in Santiago (Chile), and supervised by an independent expert, was designed to evaluate the Mollacas copper leach process at a Feasibility Study level and to provide the information required for the completion of the design phase of the project, as well as the operating information for the submission of the requisite Environmental Impact Assessment.

The mineralisation tested consisted of oxide ore (mostly malachite with traces of chrysocolla and brochantite) and supergene ore (mainly chalcocite and covellite, with minor chalcopyrite and significant pyrite).

The proposed Mollacas copper recovery process will consist of primary, secondary and possibly tertiary crushing (dependent on final recommendations regarding optimum crush size), agglomeration, heap leaching (LX), solvent extraction (SX) and electrowinning (EW) aimed at producing LME Grade "A" copper cathode as an end-product (Appendix 1).

The results from the recently completed column leach testwork concluded the following:

- A recovery rate of approximately 85% of the average "sequential" assayed copper grade for the deposit is attainable. The recovery rate for the supergene ore could be as high as 90%;
- Acid consumption is expected to be in the range of 12 kg/t to 14 kg/t ore leached based on this testwork. Further testwork will be conducted concurrent with the completion of an EIS and Feasibility Study to determine whether this acid consumption rate can be reduced further by limiting the acid dosage in the agglomeration stage.

The primary leach design parameters resulting from the metallurgical testwork are:

- Crush size: P<sub>80</sub> 12 mm to 16 mm;
- Agglomeration acid addition: 10 kg/t (may be reduced after further testing);
- Stacked ore depth: 6 metres;
- Stacked dry-bulk density (maximum): 1.7 t/m<sup>3</sup>
- Two-stage leach
  - > 150-day Primary Leach Stage: 5 L/hm<sup>2</sup> @ 6 g/L H<sub>2</sub>SO<sub>4</sub>; followed by a
  - > 150-day Secondary Leach Stage: 2.5 L/hm<sup>2</sup> @ 3 g/L H<sub>2</sub>SO<sub>4.</sub>

The staged leach and acid concentration values can be met with a series/parallel solvent extraction configuration, where the Primary Leach PLS feeds the two in-series solvent extraction stages, and the Secondary Leach PLS feeds the parallel extraction stage.

#### Assessment of operating and capital costs

Operating and capital costs for the planned Mollacas copper leach project are being re-evaluated based on the latest information available. To this extent mining contractors and equipment suppliers have been approached in Chile to provide preliminary cost estimates for a mining operation with a planned maximum production rate of 8,000 tpa of cathode copper over 8-year life of mine.

These costs, in conjunction with the results of the current column leach testwork, will form the basis of a revised life of mine financial model.

#### Future Work

The Company is completing all necessary environmental monitoring requirements with the assistance of a number of consulting firms with the objective of submitting an EIS to the relevant government authorities by late 2014.

Additional work being undertaken includes:

- Testwork aimed at reducing acid consumption; and
- Evaluation of the effect of crush size on the hydraulic properties of the Mollacas ore.

#### LOS CALATOS PROJECT

#### Introduction

In March 2013 Metminco announced the results of an independent Scoping Study conducted by NCL Ingeniería y Construcción Ltda ("NCL") on the Los Calatos Project, located in southern Peru (Appendix 2).

The mining scenario evaluated as part of the Scoping Study provided for an open pit with a life of 7-years, and a subsequent underground block cave operation with a life of 24-years, at an average life of mine production rate of 60ktpd (Appendix 3).

Since the completion of the Scoping Study, additional optimisation work has been completed by RungePincockMinarco ("RPM"), who focussed primarily on evaluating the opportunity to increase production rates for both the open pit and underground block cave operations. RPM confirmed that production rates of 75ktpd and 70ktpd are achievable for the open pit and underground block cave operations respectively ("Optimised L3\_Model") (Appendix 4). Furthermore, RPM adjusted operating and capital cost estimates to accommodate the increased production rates and resultant 'ore' flow.

#### Optimised L3 Model – Life of Mine

The key operating parameters for the Optimised L3\_Model are summarised in Table 1 below, and the development and production schedule is graphically depicted in Appendix 4.

#### Table 1: Life of Mine – Key operating parameters Optimised L3\_Model.

Parameter	Optimised L3_Model
Total tonnes milled (millions)	811
Average annual tonnes milled (millions)	23.9
Average annual copper in concentrate (kt)	98.4
Average annual payable molybdenum (kt)	4.8
Strip Ratio (open pit)	3.36:1
Mining costs (US\$/t)	7.72
Processing costs (US\$/t)	4.58
G & A costs (US\$/t)	0.51
By - product credit (US\$/lb payable Cu)	0.73
Cash operating costs net of credits (US\$/lb copper)	1.12
Pre-production capital (US\$ millions)	1,243

Note:

*i)* Cash operating costs exclude government royalties, but include all other costs and royalties.

- *ii)* By-product credits based on commodity prices Cu = US\$2.95/lb, Mo = US\$12.78/lb, Au = US\$1,348/oz, Ag = US\$25.00/oz and Re = US\$5,773/kg.
- *iii)* Open pit grade revised from 0.39% Cu and 0.026% Mo to 0.37% Cu and 0.023% Mo following subsequent refinement of ore flow model. This impacted marginally on metal content and hence cash operating costs.

The envisaged development schedule for the Optimised L3\_Model can be summarised as follows:

The project development schedule allows for construction of the surface infrastructure and the metallurgical plant to be undertaken simultaneously with the development of the open pit operation.

The life of the open pit is estimated to be 14-years. During this period a stockpile will be established to supplement production from the underground operation during the underground ramp-up stage (Years 11 to 19).

The annual contained copper and molybdenum metal in concentrate is expected to average 98.4kt and 4.8kt respectively over the life of mine.

Cash operating costs, net of by-product credits, are expected to average US\$1.12/lb of copper over the life of mine, and compare favourably with global cash costs, ranking the project in the lowest quartile of global producers.

The initial capital requirement for the establishment of the open pit, surface infrastructure and metallurgical plant is estimated at US\$1,320 million, which includes a contingency of 25% by virtue of the current developmental status of the project. Sustaining capital will be funded from cashflow while the development of the underground mining operation may well be financed through a combination of debt and equity to maximise project returns and free up cashflow from the operation.

The underground mine infrastructure will consist of a twin decline system, one for personnel and equipment, and an adjacent conveyor system for ore extraction. Four vertical raise-bored ventilation shafts will support the underground operation. Ore will be crushed through a primary crusher to be located underground.

#### **Current Activities**

A second, more detailed, metallurgical testwork program (conducted at a Pre-Feasibility Study level) has been planned, which will include 9 geo-metallurgical samples that represent the main ore-types which are to be mined during the open pit phase at Los Calatos, as well as Level 2005 of the underground block cave operation.

The geo-metallurgical composites have been selected on the basis of those criteria that may impact on the copper extraction process such as low grade and high grade copper equivalent zones, supergene and primary material, lithology, alteration type, and the possible presence of deleterious elements.

#### Future Work

The Company continues with detailed investigations that are a pre-requisite for the commencement of a Pre-Feasibility Study. To this end, the following work has been completed continues.

- Design of an in-fill drilling program for the identified supergene zone, geotechnical work, as well as the sterilisation drilling required for the establishment of the requisite mine infrastructure;
- Geotechnical studies in support of the optimised pit and underground block cave operation;
- Phase 2 detailed metallurgical testwork;
- Identifying the optimal location for the planned tailings dam;
- Positioning of an infrastructure corridor to the coast; and
- Oceanographic studies for the positioning of loading facilities at the coast.

### CORPORATE

#### Cash Position and Funding

Metminco's cash position as at 31 December 2013 was A\$7.8 million (US\$6.9 million).

Expenditure during the December 2013 quarter was approximately A\$1.3 million lower than the September 2013 quarter due to the previously announced corporate restructure and the scaling down of some activities.

The Company is progressing its 100% owned Mollacas Copper Leach Project with the Phase 3 metallurgical testwork having being completed during the quarter, and the ongoing preparatory work for the EIS.

The Company continues to evaluate opportunities to fund the development of the Los Calatos and Mollacas projects and is in negotiations with a number of interested parties.

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.

#### Premier project - Los Calatos copper-molybdenum project

Two studies have recently been completed at Los Calatos by external consultants, namely NCL (March 2013), and RPM (August 2013), which have confirmed the potential of the project as a long-life, low cost, copper producer. Both studies have focussed on the preferred mining scenario, which incorporates the estimated mineral resources for Targets 1 and 2 at Los Calatos.

The prospectivity of the broader tenement holding position remains largely untested, and as such has the potential to contribute additional material to any future mining operation developed in context of the preferred mining scenario. That is, the Company has only drill tested two of the eight targets identified to-date over a total project area of 224 km<sup>2</sup>, where the latter is located in a recognised mining district characterised by the development of structurally controlled porphyry clusters.

Peru is proving to be an investment friendly jurisdiction, in which the Government is actively encouraging responsible mine development with a projected, significant, increase in long term copper production supported by competitive power costs. Mining investment in Peru over the period 2012 to 2020 is estimated to be US\$53 billion, of which 70% relates to new copper mines, and extensions to existing mines. Los Calatos remains highly deliverable, being located on State-owned land in a desert environment without competing land usage, its status as Project of National Interest, and its proximity to existing infrastructure and the coast. Metminco's strategy to access seawater for metallurgical processing purposes has been widely accepted by both local and regional authorities.

From a commodity perspective, the long-term fundamentals of the copper market remain sound, and it is anticipated that global copper production will struggle to keep pace with demand growth. With the support of a funding partner, Los Calatos has the ability to deliver copper into the global market at a time when incremental supply-demand dynamics will be dictated by production emanating from new 'possible' projects, the success of which will be heavily influenced by factors such as socio-political issues, restrictive legislation and technical issues (e.g. unit operating costs). Against the global backdrop of diminishing long life copper projects in mining friendly jurisdictions, and with the benefit of low unit operating costs, Los Calatos is well placed to command significant strategic interest.

#### Projects and mineral resources

The Los Calatos Project, located in southern Peru, has an open pittable Mineral Resource of 304 million tonnes at 0.36% Cu and 0.018% Mo (at cut-off grade of 0.15% CuEq) to a vertical depth of 500 metres below surface and an underground bulk mining Mineral Resource of 1,058 million tonnes at 0.51% Cu and 0.024% Mo (at a cut-off grade of 0.35% CuEq) commencing at an elevation of 2,500 metres (approximately 500 metres below surface).

The Chilean assets include the Mollacas Project with a Mineral Resource of 34.3 million tonnes consisting of a Measured Resource of 19.4 million tonnes at 0.45% Cu and 0.16g/t Au, an Indicated Resource of 9.4 million tonnes at 0.34% Cu and 0.16g/t Au, and an Inferred Resource of 5.5 million tonnes at 0.26% Cu and 0.15g/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 Colin Sinclair, BSc, MSc, who is a Member of the Australasian Institute of Mining and Metallurgy and is employed by the Company as Exploration Manager - Chile.

Colin Sinclair has sufficient experience (over 30 years) 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 2004 Edition of the 'Australasian Code for Reporting of Exploration Results'. Mr Sinclair, as Competent Person for this announcement, has consented to the inclusion of the information 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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## Provisional (Schematic) Mine Layout – Mollacas Copper Leach Project





#### Locality Plan – Los Calatos Copper Project

## Scoping Study - Preferred Mining Scenario

Schematic section looking northwest showing the open pit, underground bulk stopes and the associated development (NCL).



Schematic section looking northwest showing the surface DTM, open pit, underground bulk stopes and the mineralised envelope at a 0.35% CuEq cut-off (purple) constraining the bulk mining stopes.



#### Production & Development Schedule – Optimised L3\_Model.



## ABBREVIATED GLOSSARY

#### Assay

An analysis to determine the presence, absence or quantity of one or more chemical components.

#### Base Metal

A metal, such as copper, lead, nickel, zinc or cobalt.

#### Block caving

A method of underground mining in which large blocks of ore are undercut, causing the ore to break or cave under its own weight enabling extraction of the ore at a relatively low cost.

#### Breccia

Rock fragmented into angular components.

#### Cash operating costs / lb copper (net of credits)

Cash operating costs include a 2% net smelter return payable to a third party less by-product credits received from the sale of molybdenum, gold, silver and rhenium, divided by the copper produced over the defined period.

#### CIM N1 43-101 Code

The Canadian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves sets out minimum standards, recommendations and guidelines for Public Reporting of Exploration Results, Mineral Resources and Ore Reserves.

#### Circuit

A processing facility for removing valuable minerals from the ore so that it can be processed and sold.

#### Copper (Cu)

A ductile, malleable base metal with a myriad of uses in construction (piping, wire) and electronics due to its high electrical and thermal conductivity and good resistance to corrosion.

#### Copper equivalent (CuEq)

Copper equivalent is based on the recovered value of the non-copper by-products (gold and molybdenum) relative to the recovered value of copper. For example, at a long term copper price of US\$2.75/lb with Cu recovery of 87% and a molybdenum price of US\$15.00/lb with recovery of 68%, 1 pound of molybdenum is equivalent to 4.2633 pounds of copper (Cu:Mo ratio of 1:4.2633).

#### Diamond drilling / drill hole

A method of obtaining a cylindrical core of rock by drilling with a diamond impregnated bit.

#### Diatreme

A diatreme is a breccia-filled volcanic pipe that was formed by a gaseous explosion. Diatremes often breach the surface and produce a tuff cone, a filled relatively shallow crater known as a Maar, or other volcanic pipes.

#### **Drill core**

The long cylindrical piece of rock brought to surface by diamond drilling.

#### Environmental impact study (EIS)

A written report, compiled prior to a production decision that examines the effects proposed mining activities will have on the natural surroundings.

#### Exploration

Prospecting, sampling, mapping, diamond drilling and other work involved in searching for ore.

#### **Feasibility Study**

A feasibility study is an evaluation of a mineral resource to determine whether it can be mined effectively and profitably. It includes the detailed study of reserve estimation, mining methods evaluation, processing technique analysis, capital and operating cost determination and the process effect on the environment and community. This detailed study forms the basis for capital estimation, and provides budget figures for the development of the project. It requires a significant amount of formal engineering work and an accuracy within 10 to 15%.

#### Geo-domain

Homogeneous geological domains within a deposit identified on the basis of spatial continuity of grades and geological features such as lithology, mineralogy and alteration.

#### Gold (Au)

A heavy, soft, ductile, malleable precious metal used in jewellery, dentistry, electronics and as an investment.

#### Grade

The amount of valuable metal in each tonne or ore, expressed as grams per tonne for precious metals and percent in the case of copper and parts per million (ppm) in the case of molybdenum. *Cut-off grade* – is the minimum metal grade at which a tonne of rock can be processed on an economic basis. *Recovered grade* – is the actual metal grade realised by the metallurgical process and treatment of ore, based on actual experience or laboratory testing.

#### ICP

Inductively Coupled Plasma. Analytical technique used for the detection of trace elements in soils.

#### Isograde

Line of equal grade, often used to delineate a material change in grade across a geological boundary.

#### **Indicated Mineral Resource**

An 'Indicated Mineral Resource' is that part of a Mineral Resource for which tonnage, densities, shape, physical characteristics, grade and mineral content can be estimated with a reasonable level of confidence. It is based on exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes. The locations are too widely or inappropriately spaced to confirm geological and/or grade continuity but are spaced closely enough for continuity to be assumed.

#### Inferred Mineral Resource

An 'Inferred Mineral Resource' is that part of a Mineral Resource for which tonnage, grade and mineral content can be estimated with a low level of confidence. It is inferred from geological evidence and assumed but not verified geological and/or grade continuity. It is based on information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes which may be limited or of uncertain quality and reliability.

#### JORC Code

The Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves sets out minimum standards, recommendations and guidelines for Public Reporting in Australasia of Exploration Results, Mineral Resources and Ore Reserves.

#### Los Calatos Mining Study (the "Study")

The Mining Study completed by NCL has been conducted at a scoping level with a level of accuracy of ±35%.

#### Leachable (soluble) copper

Total acid and cyanide soluble copper.

#### Leaching

A chemical process for the extraction of valuable minerals from ore.

#### **Measured Mineral Resource**

A 'Measured Mineral Resource' is that part of a Mineral Resource for which tonnage, densities, shape, physical characteristics, grade and mineral content can be estimated with a high level of confidence. It is based on detailed and reliable exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes. The locations are spaced closely enough to confirm geological and grade continuity.

#### Metallurgy

The science and technology of extraction of metals from their ores and the refining of metals.

#### Mineralisation

The concentration of metals and their chemical compounds within a body of rock.

#### Mineralised envelope

The boundary constraining the extent of the identified mineralisation, as delineated by a nominated grade or cut-off.

#### **Mineral Resource**

A concentration or occurrence of material of intrinsic economic interest in or on the Earth's crust in such form, quality and quantity that there are reasonable prospects for eventual economic extraction. The location, quantity, grade, geological characteristics and continuity of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge. Mineral Resources are sub-divided, in order of increasing geological confidence, into Inferred, Indicated and Measured categories.

#### Molybdenum (Mo)

Molybdenum is commonly a by-product of copper mining. It has the ability to withstand extreme temperatures and has a high resistance to corrosion. Molybdenum is widely used as an alloy agent in stainless steel. It is also used to manufacture aircraft parts and industrial motors.

#### NPV

Net present value is the difference between the present value of a future cash flow from an investment and the amount of investment, where the present value of the expected cash flow is computed by discounting the cash flow at the required rate of return.

#### Open Pit

A mine that is entirely on surface. Also referred to as open-cut or open-cast mine.

#### Ore

Rock containing mineral(s) or metals that can be economically extracted to produce a profit.

#### **Ordinary Kriging**

A geostatistical approach to estimating grades. Instead of weighting nearby data points by some power of their inverted distance, ordinary kriging relies on the spatial correlation structure of the data to determine the weighting values. This is a more rigorous approach to modelling, as correlation between data points determines the estimated value at an unsampled point.

#### Orebody

Generally, a solid and fairly continuous mass of ore, which may include low-grade ore and waste as well as pay ore, but is individualised by form or character from adjoining country rock.

#### Oz

Troy ounce (31.1035 grams).

#### Pit optimisation study

Pit optimisation studies are used for open pit mine planning to determine those pit limits and mining sequences that yield maximum financial returns based on defined technical parameters, operating costs and commodity prices.

#### Porphyry

A rock consisting of larger crystals embedded in a more compact finer grained groundmass.

#### Porphyry copper deposit

A copper deposit which is associated with porphyritic intrusive rocks and the fluids that accompany them during the transition and cooling from magma to rock. Porphyry copper deposits are typically mined by open-pit methods.

#### PPM

Parts per million, also grams/tonne.

#### PLS

Pregnant Leach Solution is the acidic metal-laden water generated from heap leaching. Pregnant Leach Solution is used in the SX/EW process.

#### **Pre-feasibility study**

A preliminary assessment of the technical and economic viability of a proposed project. Alternative approaches to various elements of the project are compared, and the most suitable alternative for each element is recommended for further analysis. Costs of development and operations are estimated. Anticipated benefits are assessed such that some preliminary economic criteria for evaluation can be calculated. Preliminary feasibility studies are completed by a small group of multi-disciplined technical individuals and have an accuracy within 20 to 30%.

#### Recovery

A term used in process metallurgy to indicate the proportion of valuable material obtained in the processing of an ore. It is generally stated as a percentage of valuable metal in the ore that is recovered compared to the total valuable metal present in the ore.

#### Reverse circulation drilling (RC drilling)

Percussion drilling method using a rotating bit and high pressure air to sample sub-surface material through the recovery of broken rock fragments ('rock chips').

#### Solvent extraction and electrowinning (SX/EW)

A metallurgical technique, so far applied only to copper ores, in which metal is dissolved from the rock by organic solvents and recovered from solution by electrolysis.

Strip ratio The ratio of tonnes removed as waste relative to the number of tonnes of ore removed from an open-pit mine.

Rule 5.3

# **Appendix 5B**

# Mining exploration entity quarterly report

Introduced 1/7/96. Origin: Appendix 8. Amended 1/7/97, 1/7/98, 30/9/2001.

Name of entity

#### **Metminco Limited**

ABN

43 119 759 349

Quarter ended ("current quarter")

31 Dec 2013

#### Consolidated statement of cash flows

Cash	flows related to operating activities	Current quarter \$A'000	Year to date 12 months \$A'000
1.1	Receipts from product sales and related debtors		
1.2	Payments for:		
	<ul><li>(a) exploration and evaluation</li><li>(b) development</li><li>(c) production</li></ul>	(826)	(6,077)
	(d) administration	(991)	(4,490)
1.3	Dividends received	-	-
1.4	Interest and other items of a similar nature received	37	162
1.5	Interest and other costs of finance paid	-	-
1.6	Income taxes paid	-	-
1.7	Other (Peruvian IGV (GST) recovery)	-	3,332
	Net Operating Cash Flows	(1,780)	(7,073)
		(1,700)	(1,010)
	·	(1,700)	(',)
1.8	Cash flows related to investing activities	(1,700)	(1,010)
1.8	Cash flows related to investing activities Payment for purchases of:	-	
1.8	Cash flows related to investing activities Payment for purchases of: (a) prospects	-	-
1.8	Cash flows related to investing activities Payment for purchases of:		(412)
	Cash flows related to investing activities Payment for purchases of: (a) prospects (b) other fixed assets		-
	Cash flows related to investing activities Payment for purchases of: (a) prospects (b) other fixed assets Proceeds from sale of:		-
1.9	Cash flows related to investing activities Payment for purchases of: (a) prospects (b) other fixed assets Proceeds from sale of: (a) prospects (b) equity investments (c)other fixed assets	- - - - 34	-
1.9 1.10	Cash flows related to investing activities Payment for purchases of: (a) prospects (b) other fixed assets Proceeds from sale of: (a) prospects (b) equity investments (c) other fixed assets Loans to other entities	- - - - -	(412) - -
1.9 1.10 1.11	Cash flows related to investing activities Payment for purchases of: (a) prospects (b) other fixed assets Proceeds from sale of: (a) prospects (b) equity investments (c)other fixed assets Loans to other entities Loans repaid by other entities	- - - - -	(412) - -
1.9 1.10	Cash flows related to investing activities Payment for purchases of: (a) prospects (b) other fixed assets Proceeds from sale of: (a) prospects (b) equity investments (c)other fixed assets Loans to other entities Loans repaid by other entities Other	- - - - - - - - - - - - -	(412) - - 100 - - - -
1.9 1.10 1.11	Cash flows related to investing activities Payment for purchases of: (a) prospects (b) other fixed assets Proceeds from sale of: (a) prospects (b) equity investments (c)other fixed assets Loans to other entities Loans repaid by other entities	- - - - -	(412) - -

<sup>+</sup> See chapter 19 for defined terms.

1.13	Total operating and investing cash flows (brought forward)	(1,746)	(7,385)
1.14	Cash flows related to financing activities Proceeds from issues of shares, options, etc.	-	-
	Costs of issue	-	-
1.15	Proceeds from sale of forfeited shares	-	-
1.16	Proceeds from borrowings	-	-
1.17	Repayment of borrowings	-	-
1.18	Dividends paid	-	-
1.19	Other (proceeds from equity swap)	-	-
	Net financing cash flows	-	-
	Net increase (decrease) in cash held	(1,746)	(7,385)
1.20	Cash at beginning of quarter/year to date	9,408	14,484
1.21	Exchange rate adjustments to item 1.20	146	709
1.22	Cash at end of quarter	7,808	7,808

#### Payments to directors of the entity and associates of the directors Payments to related entities of the entity and associates of the related entities

		Current quarter \$A'000
1.23	Aggregate amount of payments to the parties included in item 1.2	297
1.24	Aggregate amount of loans to the parties included in item 1.10	-

1.25	Explanation necessary for an understanding of the transactions
	Item 1.23 includes aggregate amounts paid to directors for the period
	01 Oct 13 – 31 Dec 13 for:
	Directors' fees: \$285,000
	Directors' services and consulting fees: \$12,042

#### Non-cash financing and investing activities

- 2.1 Details of financing and investing transactions which have had a material effect on consolidated assets and liabilities but did not involve cash flows

   None
- 2.2 Details of outlays made by other entities to establish or increase their share in projects in which the reporting entity has an interest None

<sup>+</sup> See chapter 19 for defined terms.

#### Financing facilities available

Add notes as necessary for an understanding of the position.

	Amount available \$A'000	Amount used \$A'000
3.1 Loan facilities	-	-
3.2 Credit standby arrangements	-	-

## Estimated cash outflows for next quarter

		\$A'000
4.1	Exploration and evaluation	1,000
4.2	Development	-
4.3	Production	-
4.4	Administration	800
	Total	1,800

#### Reconciliation of cash

show	nciliation of cash at the end of the quarter (as n in the consolidated statement of cash ) to the related items in the accounts is as vs.	Current quarter \$A'000	Previous quarter \$A'000
5.1	Cash on hand and at bank	7,808	9,408
5.2 Deposits at call		-	-
5.3	Bank overdraft	-	-
5.4	Other (provide details)	-	-
	Total: cash at end of quarter (item 1.22)	7,808	9,408

#### Changes in interests in mining tenements

		Tenement reference	Nature of interest (note (2))	Interest at beginning of quarter	Interest at end of quarter
6.1	Interests in mining tenements relinquished, reduced or lapsed				
6.2	Interests in mining tenements acquired or increased				

<sup>+</sup> See chapter 19 for defined terms.

**Issued and quoted securities at end of current quarter** Description includes rate of interest and any redemption or conversion rights together with prices and dates.

		Total number	Number quoted	Issue price per security (see note 3) (cents)	Amount paid up per security (see note 3) (cents)
7.1	Preference +securities (description)				
	Changes during quarter: (a) Increases through Issues				
7.2	(b) Decreases through returns of capital, buy backs, redemptions				
7.3	+Ordinary securities	1,749,543,023	1,749,543,023		
	Changes during Quarter: (a) Increases through Issues				
7.4	(b) Decreases through returns of capital, buy backs, redemptions				
7.5	+Convertible Debt securities (description)				
7.6	Changes during quarter: (a) Increases through issues (b) Decreases through Securities matured, converted				
	Options (description	<u>Unlisted:</u> 2,500,000 2,500,000	<u>Unlisted:</u> 2,500,000 2,500,000	Exercise price A\$ 0.215 A\$ 0.260	Expiry date: 05 Dec 2014 05 Dec 2014
7.7	and conversion factor)	2,000,000 2,000,000 250,000 250,000	2,000,000 2,000,000 250,000 250,000	A\$ 0.175 A\$ 0.210 A\$ 0.075 A\$ 0.089	15 Jun 2015 15 Jun 2015 28 Jan 2016 28 Jan 2016
7.8	Issued during quarter	230,000	230,000	Αφ 0.003	20 Jan 2010
7.9	Exercised during quarter				

<sup>+</sup> See chapter 19 for defined terms.

7.10	Expired during quarter	16,250,000 16,250,000	16,250,000 16,250,000	A\$ 0.44 A\$ 0.525	06 Dec 2013 06 Dec 2013
7.11	Debentures(totals only)				
7.12	Unsecured notes (totals only)				

#### **Compliance statement**

- 1 This statement has been prepared under accounting policies which comply with accounting standards as defined in the Corporations Act or other standards acceptable to ASX (see note 4).
- 2 This statement does give a true and fair view of the matters disclosed.

Sign here:

(Company secretary) Philip Killen

Print name:

#### Notes

1 The quarterly report provides a basis for informing the market how the entity's activities have been financed for the past quarter and the effect on its cash position. An entity wanting to disclose additional information is encouraged to do so, in a note or notes attached to this report.

Date: 31.01.2014

- 2 The "Nature of interest" (items 6.1 and 6.2) includes options in respect of interests in mining tenements acquired, exercised or lapsed during the reporting period. If the entity is involved in a joint venture agreement and there are conditions precedent which will change its percentage interest in a mining tenement, it should disclose the change of percentage interest and conditions precedent in the list required for items 6.1 and 6.2.
- 3 **Issued and quoted securities:** The issue price and amount paid up is not required in items 7.1 and 7.3 for fully paid securities.
- 4 The definitions in, and provisions of, *AASB 1022: Accounting for Extractive Industries* and *AASB 1026: Statement of Cash Flows* apply to this report.
- 5 **Accounting Standards:** ASX will accept, for example, the use of International Accounting Standards for foreign entities. If the standards used do not address a topic, the Australian standard on that topic (if any) must be complied with.

<sup>+</sup> See chapter 19 for defined terms.