
THIS CIRCULAR IS IMPORTANT AND REQUIRES YOUR IMMEDIATE ATTENTION

If you are in any doubt as to any aspect of this circular or as to the action to be taken, you should consult your stockbroker or other licensed securities dealer, bank manager, solicitor, professional accountant or other professional adviser.

If you have sold or transferred all your shares in China Molybdenum Co., Ltd.*, you should at once hand this circular to the purchaser or the transferee or to the bank, stockbroker or other agent through whom the sale or transfer was effected for transmission to the purchaser or the transferee.

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洛陽欒川鉬業集團股份有限公司

China Molybdenum Co., Ltd. *

(a joint stock company incorporated in the People's Republic of China with limited liability)

(Stock Code: 03993)

**(1) CONNECTED AND MAJOR TRANSACTION
RELATING TO ACQUISITION OF INDIRECT INTEREST
IN WORLD-CLASS COPPER AND COBALT MINE
(2) LIABILITY INSURANCE FOR DIRECTORS, SUPERVISORS
AND SENIOR MANAGEMENT**

A letter from the Board is set out on pages 1 to 48 of this circular.

An amended notice convening the EGM to be held at 1:00 p.m. on Friday, 14 April 2017 together with the amended form of proxy are set out on pages X-1 to X-2 of the Circular. The relevant reply slip was despatched to H Shareholders on 25 January 2017. Such reply slip was also published on the websites of the Hong Kong Stock Exchange (<http://www.hkexnews.hk>) and the Company (<http://www.chinamolyc.com>).

Whether or not you are able to attend the EGM in person, you are requested to complete, sign and return the reply slip and proxy form applicable to the EGM in accordance with the instructions printed thereon. For H Shareholders, the proxy form applicable to the EGM should be returned to the Company's H Share registrar in Hong Kong, Computershare Hong Kong Investor Services Limited, at 17M Floor, Hopewell Centre, 183 Queen's Road East, Wanchai, Hong Kong, as soon as possible but in any event not less than 24 hours before the time appointed for holding the EGM or any adjournment thereof. Completion and return of the proxy form applicable to the EGM will not preclude you from attending and voting in person at the EGM or any adjournment thereof should you so wish.

H Shareholders who intend to attend the EGM in person or by proxy should return the reply slip to the office of the Board at the Company's principal place of business in the PRC, at North of Yihe, Huamei Shan Road, Chengdong New District, Luanchuan County, Luoyang City, Henan Province, the PRC, 20 days before the meeting, i.e. before Saturday, 25 March 2017 by hand, by post or by fax.

* For identification purposes only

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IMPORTANT

FORWARD-LOOKING STATEMENTS

Certain information contained in this circular constitutes forward-looking statements. Investors and Shareholders are cautioned that forward-looking statements are inherently uncertain and involve risks and uncertainties that could cause actual results, performance or achievements of the Enlarged Group or Tenke to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements. These forward-looking statements include, without limitation, statements relating to the business strategies, ability to integrate Tenke, future business development, financial conditions and results of operations. No assurance can be given that such forward-looking statements will prove to have been correct. In addition, specific reference is made to the section headed “Risk Factors” in this circular. Whilst the Company may elect to update the forward-looking information at any time, the Company does not undertake to update it at any particular time or in response to any particular event. Investors and Shareholders are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date of this circular.

DEFINITIONS

In this circular, the following expressions have the following meanings unless the context requires otherwise:

“AAFB”	Anglo American Fosfatos Brasil Limitada, a company incorporated in Brazil
“AANB”	Anglo American Nióbio Brasil Limitada, a company incorporated in Brazil
“A Share(s)”	domestic share(s) with a nominal value of RMB0.20 each issued by the Company which are listed on the SSE and traded in Renminbi (stock code: 603993)
“A Shareholder(s)”	holder(s) of A Share(s)
“ARMC”	Amended and Restated Mining Convention dated 28 September 2005 between Gécamines, TFHL, TFM and the DRC
“ARMC-A1”	Addendum No. 1 (to the Amended and Restated Mining Convention) dated 11 December 2010 between Gécamines, TFHL, TFM and the DRC
“ARSA”	Amended and Restated Shareholders’ Agreement dated 28 September 2005 between Gécamines, TFHL, TFM and the DRC
“ARSA-A1”	the Amended and Restated Shareholders’ Agreement as amended by Addendum No. 1 dated 11 December 2010 between Gécamines, TFHL, TFM and the DRC
“Articles of Association”	the articles of association of the Company, as amended, modified or otherwise supplemented from time to time
“BHR”	BHR Newwood Investment Management Limited, a company incorporated in the British Virgin Islands
“BHR Shareholder(s)”	the existing and future shareholder(s) of BHR
“BHR Shareholders Cooperation Agreement”	the cooperation agreement dated 20 January 2017 entered into between the Company, KAIFEI and BHR
“Board”	the board of Directors

DEFINITIONS

“Bohai”	渤海華美瑞琪（深圳）投資管理有限公司 (Bohai Huamei Ruiqi (Shenzhen) Investment Management Co. Limited*), a limited company incorporated in PRC
“Call Option”	the right granted to the Company, to purchase shares in BHR, the subsidiary of BHR or the holding company of BHR, which will hold a 24% indirect interest in TFM, at the exercise price upon the exercise date pursuant to the Framework Agreement, the BHR Shareholders Cooperation Agreement, the Shareholders of BHR Shareholders Cooperation Agreement, the Hantang Cooperation Agreement, the Design Time Cooperation Agreement and the CNBC Cooperation Agreement
“Call Payment Period”	from the date of payment of the Subscription Money to the date of exercise of the Call Option
“CAMI”	The Mining Registry of the DRC, the cadastre minier
“Central African Copperbelt”	a region in Central Africa that runs through northern Zambia and the southern DRC and represents the largest and most prolific mineralized sediment-hosted copper province in the world
“CFC”	鴻商產業控股集團有限公司 (Cathay Fortune Corporation*), a controlling shareholder of the Company
“CMB”	the Shanghai branch of China Merchants Bank Co., Ltd., China Merchants Bank Co., Ltd., a joint stock company established in PRC with limited liability, and its shares are listed and traded on the main board of the Hong Kong Stock Exchange and the Shanghai Stock Exchange
“CMOCDRC” or “FMDRC”	CMOC International DRC Holdings Ltd., a Bermuda exempted company (formerly known as Freeport-McMoRan DRC Holdings Ltd.)
“CNBC”	CNBC (Hong Kong) Investment Limited, a limited company incorporated in Hong Kong
“CNBC Cooperation Agreement”	the Cooperation Agreement dated 3 March 2017 entered into between the Company, BHR and CNBC

DEFINITIONS

“Company”	洛陽樂川鎢業集團股份有限公司 (China Molybdenum Co., Ltd.*), a joint stock company incorporated in PRC with limited liability, the A Shares and H Shares of which are listed on the SSE and the Hong Kong Stock Exchange, respectively
“Competent Person”	has the meaning ascribed to it under Chapter 18 of the Listing Rules
“Competent Person’s Report”	has the meaning ascribed to it under Chapter 18 of the Listing Rules, the competent person’s report, dated 29 March 2017 prepared by RungePincockMinarco
“controlling shareholder”	has the meaning ascribed to it under the Listing Rules
“Cooperation Arrangement”	the entering into of the Framework Cooperation Agreement, the BHR Shareholders Cooperation Agreement, the Shareholders of BHR Shareholders Cooperation Agreement, the Hantang Cooperation Agreement, the Design Time Cooperation Agreement, the CNBC Cooperation Agreement, the Syndicated Loans Agreement and the Guarantee together with the transactions contemplated thereunder
“Design Time”	Design Time Limited, a limited company incorporated in the British Virgin Islands
“Design Time Cooperation Agreement”	the cooperation agreement dated 3 March 2017 entered into between the Company, BHR and Design Time
“Dingyuan”	定元（上海）投資管理中心 (Dingyuan (Shanghai) Investment Management Center*), a limited liability partnership registered in the PRC
“Director(s)”	the director(s) of the Company
“DRC”	the Democratic Republic of the Congo
“EGM”	the extraordinary general meeting of the Company (and any adjournment thereof) to be held at 1:00 p.m. on Friday, 14 April 2017 at the International Conference Room of Mudu-Lee Royal International Hotel at No. 239, Kaiyuan Street, Luolong District, Luoyang City, Henan Province, PRC

DEFINITIONS

“Enlarged Group”	the Group immediately after the completion of the Potential Acquisition
“Framework Cooperation Agreement”	the Framework Cooperation Agreement dated 20 January 2017 entered into between the Company and BHR
“Gécamines”	La Générale des Carrières et des Mines S.A, a mining company owned by the DRC
“Group”	the Company and its subsidiaries
“Guarantee”	the guarantee agreement dated 21 March 2017 entered into by the Company in favour the Lenders
“H Share(s)”	overseas listed foreign share(s) with a nominal value of RMB0.20 each in the share capital of the Company which are listed on the main board of the Hong Kong Stock Exchange and are traded in Hong Kong dollars
“H Shareholder(s)”	holder(s) of H Share(s)
“Hantang”	Hantang Iron Ore Investment Limited, a limited company incorporated in the British Virgin Islands
“Hantang Cooperation Agreement”	the cooperation agreement dated 3 March 2017 entered into between the Company, BHR and Hantang
“HKD” or “HK\$”	Hong Kong dollars, the lawful currency of Hong Kong
“Hong Kong”	the Hong Kong Special Administrative Region of the PRC
“Hong Kong Stock Exchange”	The Stock Exchange of Hong Kong Limited
“Investor(s)”	the BHR Shareholders and the Shareholders of BHR Shareholders
“KAIFEI”	KAIFEI Investment (Hong Kong) Limited (開非投資(香港)有限公司), a limited company incorporated in Hong Kong
“Latest Practicable Date”	27 March 2017, being the latest practicable date prior to the printing of this circular for the purpose of ascertaining certain information referred to in this circular

DEFINITIONS

“Lenders”	China Construction Bank Corporation, Henan Branch and China Merchants Bank Co., Ltd., Shanghai Branch, Tianshan Sub-branch
“Listing Rules”	the Rules Governing the Listing of Securities on the Hong Kong Stock Exchange
“LMG”	洛陽礦業集團有限公司 (Luoyang Mining Group Co., Ltd.*), a controlling shareholder of the Company
“Lundin Consideration”	the amount payable to THL in the sum of is USD1.15 billion (equivalent to approximately HKD8.97 billion) (subject to customary adjustments) under the Stock Purchase Agreement by BHR for the acquisition of the entire issued share capital of Lundin DRC Holdings Ltd.
“Lundin DRC”	Lundin DRC Holdings Ltd., a limited company incorporated in Bermuda
“Lundin Mining Corporation”	Lundin Mining Corporation, a company whose shares are listed on the Toronto Stock Exchange
“Plan”	an asset management plan arranged by CMB and such plan is also a limited partner of Dingyuan
“Mining Convention”	the Mining Convention currently in force between the DRC, Gécamines and TFHL and TFM, as last amended by addendum No. 1 dated 11 December 2010
“Mining Code”	the Mining Code of the DRC
“Mining Regulations”	the Mining Regulations of the DRC
“PRC” or “China”	the People’s Republic of China, which for the purpose of this circular only, excludes Hong Kong, Macau Special Administrative Region of the PRC and Taiwan
“Potential Acquisition”	the further acquisition of a 24% indirect interest in the Tenke Fungurume Mining Complex upon the exercise of the Call Option or the Put Option as contemplated under the Cooperation Arrangement

DEFINITIONS

“Put Option”	the right granted by the Company to BHR, Shareholders of BHR and Shareholders of BHR Shareholders to sell the interests in BHR, Shareholders of BHR or BHR subsidiaries which will hold a 24% indirect interest in TFM, to the Company at the exercise price upon the exercise date pursuant to the Framework Agreement, the BHR Shareholders Agreement, the Shareholders of BHR Shareholders Agreement, the Hantang Cooperation Agreement, the Design Time Cooperation Agreement and the CNBC Cooperation Agreement
“Put Payment Period”	from the date of payment of the Subscription Money to the date of exercise of the Put Option
“PwC (Canada)”	PricewaterhouseCoopers LLP in Toronto, Canada
“RMB”	Renminbi, the lawful currency in PRC
“Share(s)”	A Share(s) and H Share(s)
“Share Subscription and Shareholders’ Agreement”	a share subscription and shareholders’ agreement to be entered into between BHR and all the relevant Investors
“Shareholder(s)”	shareholder(s) of the Company
“Shareholders of BHR Shareholders”	the existing and future shareholder(s) of BHR Shareholder(s)
“Shareholders of BHR Shareholders Cooperation Agreement”	the cooperation agreement dated 20 January 2017 entered into between the Company, CMB, Dingyuan, Bohai and BHR
“SNEL”	Société Nationale d’Electricité, being the national electricity company of the DRC
“SSE”	the Shanghai Stock Exchange
“Stock Purchase Agreement”	the Stock Purchase Agreement dated 15 November 2016 entered into between BHR, THL, Lundin Mining Corporation in relation to the sale and purchase of the all the issued share capital of Lundin DRC
“Subscription Money”	payment(s) to be made by the Investor(s) to directly or indirectly subscribe for the share capital of BHR

DEFINITIONS

“Syndicated Loans”	loan(s) to be extended by bank(s) for the payment of the Lundin Consideration for the sum not exceeding USD700 million
“Syndicated Loans Agreement”	the loan facilities agreement dated 21 March 2017 entered into between BHR, the Company and the Lenders in relation to the Syndicated Loans
“Target Group”	BHR, Lundin DRC, TFHL and TFM and its subsidiaries
“Tenke Fungurume Deposits”	the mining deposits located at Kwatebala, Fungurume, Fwaulu, Kansalawile, Mambilima, Mwandinkomba, Pumpi, Tenke, Fungurume VI, Kazinyanga, Kato L3K, Shinkusu, Zikule, and Mudilandima in the DRC
“Tenke” or “Tenke Fungurume Mining Complex”	Tenke Fungurume copper-cobalt mine, a resource mining complex located in the southeast region of the DRC
“TFHL”	TF Holdings Limited, a Bermuda exempted company
“TFM”	Tenke Fungurume Mining S.A., a public limited liability company under the laws of the DRC
“THL”	Tenke Holdings Ltd., a Bermuda exempted company, which is ultimately owned by Lundin Mining Corporation, a company whose shares are listed on the Toronto Stock Exchange
“USD” or “US\$”	United States dollars, the lawful currency of the United States of America
“Valuation Report”	has the meaning ascribed to it under Chapter 18 of the Listing Rules, the valuation report dated 29 March 2017 prepared by Censere (Far East) Limited
“%”	per cent.

Unless otherwise stated, the translation of USD into HKD throughout this circular is based on the exchange rate of USD1.00 to HKD7.75 and is provided for information purposes only.

* For identification purposes only

GLOSSARY

This glossary contains explanations of certain technical terms used in this circular in connection with the Enlarged Group. As such, these terms and their meanings may not correspond to standard industry meaning or usage of these terms.

“Co”	the chemical symbol for cobalt
“Cu”	the chemical symbol for copper
“grade”	the concentration, commonly expressed as percentage or grams per tonne, of useful elements, minerals or their components in any ore or concentrate
“Indicated (resource)”	as defined by the JORC Code, a mineral resource for which tonnage, densities, shape, physical characteristics, grade and mineral content can be estimated with a reasonable level of confidence 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, of which 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 (resource)”	as defined by the JORC Code, a mineral resource for which tonnage, densities, shape, physical characteristics, 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 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”	the Joint Ore Reserves Committee of the Australasian Institute of Mining and Metallurgy
“JORC Code”	the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves, 2012 Edition
“km”	a thousand meters
“kt”	a thousand metric tonnes

GLOSSARY

“m”	meters
“Measured (resource)”	mineral resource that has been intersected and tested by drill holes or other sampling procedures at locations close enough to confirm continuity and where geoscientific data are reliably known, as defined by the JORC Code
“Mineral Resources”	concentration or occurrence of material of intrinsic economic interest upon or inside the Earth’s crust in such form, quality and quantity that there are reasonable prospects for eventual economic extraction. Resources, or mineral resources, are subdivided, in order of increasing geological confidence, into “inferred”, “indicated” and “measured” categories
“Mt”	million tonnes
“mtpa”	million metric tonnes per annum
“M&I”	Measured and Indicated
“ore”	mineral bearing rock that can be mined and treated profitably under current or immediately foreseeable economic conditions
“Ore Reserves”	the economically mineable part of a measured and/or indicated resource, including diluting materials and allowances for losses which may occur when the material is mined
“Probable Ore Reserves”	those measured and/or indicated mineral resources, which are not yet “Proved” reserves but of which detailed technical and economic studies have demonstrated that extraction can be justified at the time of the determination and under specified economic conditions
“Proved Reserves”	those measured mineral resources of which detailed technical and economic studies have demonstrated that extraction can be justified at the time of the determination and under specified economic conditions
“t”	metric tonnes(s)
“tpa”	tonnes per annum

LETTER FROM THE BOARD



洛陽欒川鉬業集團股份有限公司
China Molybdenum Co., Ltd. *

(a joint stock company incorporated in the People's Republic of China with limited liability)

(Stock Code: 03993)

Executive Directors:

Li Chaochun (Chairman)
Li Faben

Non-executive Directors:

Ma Hui (Vice Chairman)
Yuan Honglin
Cheng Yunlei

Independent Non-executive Directors:

Bai Yanchun
Xu Shan
Cheng Gordon

Registered office:

North of Yihe
Huamei Shan Road
Chengdong New District
Luanchuan County
Luoyang City
Henan Province
The People's Republic of China

Principal place of business in Hong Kong:

Level 54
Hopewell Centre
183 Queen's Road East

29 March 2017

To the Shareholders

Dear Sir or Madam,

**(1) CONNECTED AND MAJOR TRANSACTION
RELATING TO ACQUISITION OF INDIRECT INTEREST
IN WORLD-CLASS COPPER AND COBALT MINE
(2) LIABILITY INSURANCE FOR DIRECTORS, SUPERVISORS
AND SENIOR MANAGEMENT**

INTRODUCTION

Reference is made to the announcement dated 17 November 2016 and the circular dated 8 September 2016 of the Company in relation to, among others, the acquisition of Freeport-McMoRan Inc.'s copper

* For identification purposes only

LETTER FROM THE BOARD

and cobalt businesses in DRC. As disclosed in the announcement dated 17 November 2016, the Company has acquired all the issued shares in FMDRC, which holds 70% interest in TFHL, which in turn holds 80% interest in TFM, which in turn holds the Tenke Fungurume Mining Complex. As at the date of this circular, the Company effectively holds a 56% indirect interest in the Tenke Fungurume Mining Complex.

As disclosed in the announcement dated 22 January 2017 of the Company and pursuant to the Stock Purchase Agreement, BHR agreed to acquire all the issued share capital of Lundin DRC, which holds a 30% interest in TFHL, which in turn holds an 80% interest in TFM, which in turn holds the Tenke Fungurume Mining Complex. Upon completion, BHR will hold a 24% indirect interest in the Tenke Fungurume Mining Complex.

The purpose of this circular is to provide you with, among others, (a) further information on the Cooperation Arrangement, the Call Option together with the provision of assistance in securing the Syndicated Loans (including a guarantee) and the Put Option together with the provision of assistance in securing the Syndicated Loans (including a guarantee) (b) the financial information of the Target Group; (c) the pro forma financial information on the Enlarged Group; (d) the Competent Person's Report; (e) the Valuation Report; and (f) the purchase of liability insurance for Directors, supervisors and senior management, to enable you to make an informed decision on whether to vote for or against the resolutions proposed for voting at the EGM.

COOPERATION ARRANGEMENT

Reference is made to the announcements dated 22 January 2017, 10 February 2017, 17 February 2017, 24 February 2017, 6 March 2017 and 22 March 2017 of the Company in relation to the Cooperation Arrangement. On 20 January 2017 and 3 March 2017, the Company entered into the Cooperation Arrangement with BHR and the Investors. Under the Cooperation Arrangement, the Company will assist BHR to effect the completion of the Stock Purchase Agreement. In the event that the Company decides to exercise the Call Option, or is required by BHR and/or the Investors to purchase the 24% indirect interest in TFM, as the case may be, the Company will own an 80% indirect interest in aggregate in the Tenke Fungurume Mining Complex.

Upon the exercise of the Call Option or the Put Option, Lundin DRC will become a wholly owned subsidiary of the Company, and the Company will own a further 24% indirect interest, and a total of 80% indirect interest in TFM, which owns the Tenke Fungurume Mining Complex.

(i) Framework Cooperation Agreement

Date

20 January 2017

LETTER FROM THE BOARD

Parties

- (i) the Company; and
- (ii) BHR.

The principal terms and conditions of the Framework Cooperation Agreement are as follows:

A. Fund raising

If any Investor is unable to make timely capital contributions to BHR in accordance with the payment notice issued by the Company for the payment of the Subscription Money to satisfy the Lundin Consideration, the Company undertakes to assist BHR in financing the shortfall, if any, including by introducing additional investor(s) to BHR and/or to BHR Shareholders. If the Company is unable to procure sufficient financing to meet any shortfall: 1) the Company will compensate BHR for the losses it suffers as a result of any breaches of the terms and conditions of the Stock Purchase Agreement; and 2) the Company will also indemnify those Investors who have paid the Subscription Money in accordance with a payment notice for all direct losses suffered (excluding losses arising from expected gain). The Company will have the right to recourse against those Investor(s) who fail to pay Subscription Money pursuant to a payment notice.

B. Assistance to BHR to effect the completion of the Stock Purchase Agreement

Prior to the completion of the Stock Purchase Agreement, potential investors may invest in the share capital of BHR and/or BHR Shareholders. To facilitate the investment process by such investor(s), the Company may make recommendations to BHR Shareholders on issues pertaining to the injection of capital into BHR and/or BHR Shareholders, and the Company will enter into cooperation agreement(s) with such investors, if necessary, to facilitate the investment process.

In addition, the Company may also enter into separate cooperation agreement with each of the Investors, depending on the needs of the respective Investors. The respective cooperation agreements will stipulate the conditions precedent (unless waived by the relevant Investors) to the payment of Subscription Money. Upon receiving a payment notice from the Company, the Investors will make payment in the form of Subscription Money under the respective cooperation agreements such that BHR will be able to pay the Lundin Consideration and acquire a 30% interest in TFHL, which in turn holds an 80% interest in TFM, which in turn holds the Tenke Fungurume Mining Complex.

LETTER FROM THE BOARD

In addition, the Company undertakes to assist BHR in securing the Syndicated Loans, the maximum amount of which will not exceed USD700 million, which represents approximately 60% of the Lundin Consideration. The Company and/or its designee, if requested, would provide the relevant security to the relevant financial institutions for the Syndicated Loans, including a guarantee. As disclosed in the announcement of the Company dated 22 January 2017, the maximum amount of the Syndicated Loans was originally expected to be not exceeding USD690 million. Upon further negotiation with the relevant banks and considering the fact that the amount of working capital adjustment to be made to the Lundin Consideration, the maximum amount of the Syndicated Loans was slightly increased by USD10 million to USD700 million.

C. *Acceptance of the Call Option*

Subject matter : BHR granted the Call Option to the Company, pursuant to which the Company or its designee will have the right to purchase a 24% indirect interest in TFM, whether through acquiring all the issued share capital in BHR, BHR's subsidiary or Shareholder of BHR.

Premium and exercise price : No premium is payable for accepting the Call Option.

The exercise price for the Call Option is calculated as follows:

$$\text{Subscription Money} \times (1 + \text{exclusive return rate for the Call Option (specific for each individual investor)} \times \text{Call Payment Period} \div 360) - \text{return received by the Investors} - \text{dividend or the like indirectly derived from TFM (excluding the return received by the Investors)}.$$

Exercise date : Any time following the date falling on the first anniversary of the receipt of all the Subscription Money by BHR.

Other terms and conditions : Upon the exercise of the Call Option, the Investors will be entitled to an exclusive return rate (specific to each individual Investor) for their direct or indirect investment in the share capital of BHR.

LETTER FROM THE BOARD

D. Grant of the Put Option

Subject matter : BHR and/or the Investors will have the right to sell the 24% indirect interest in TFM to the Company upon the exercise date.

Premium and exercise price : No premium is payable for the grant of the Put Option.

The exercise price for the Put Option is calculated as follows:

$$\text{Subscription Money} \times (1 + \text{exclusive return rate for the Put Option (specific for each individual investor)} \times \text{Put Payment Period} \div 360) - \text{return received by the Investors} - \text{dividend or the like indirectly derived from TFM (excluding the return received by the Investors)}.$$

Exercise date : Any time after 90 days immediately prior to the date falling on the third anniversary of the receipt of all the Subscription Money by BHR.

Other terms and conditions : The Investors will also be entitled to an exclusive annual rate of return (specific to each individual Investor) for their direct or indirect investment in the share capital of BHR.

E. Undertakings

(a) Pursuant to the Framework Cooperation Agreement, BHR undertakes to the Company, among others, that:

1. BHR will not directly or indirectly transfer, dispose of or create any encumbrance (other than the Syndicated Loans) on any interest in Lundin DRC, TFHL and its subsidiary, without the prior written approval from the Company;
2. Written approval will be sought from the Company prior to the appointment of any directors, supervisors and members of the senior management at Lundin DRC, TFHL and any of the subsidiary of BHR;

LETTER FROM THE BOARD

3. BHR will procure the directors and senior management of its subsidiary (if any) and Lundin DRC to act in accordance with the instructions reasonably given by the Company;
 4. Written approval will be sought from the Company prior to shareholders and/or investors at Lundin DRC, TFHL and any of the subsidiary of BHR exercising any of its/his/her powers; and
 5. No change will be made to the constitutional documents of Lundin DRC, TFHL and any of the subsidiary of BHR without the prior written approval of the Company.
- (b) Pursuant to the Framework Cooperation Agreement, the Company undertakes to Lundin DRC, BHR and BHR's subsidiary, among others, that:
1. In exercising the rights conferred by BHR as mentioned above, the Company undertakes not to misuse the rights given that would materially affect BHR's interests;
 2. The Company will compensate BHR if Lundin DRC institutes legal actions against the BHR for breach of certain representations and warranties pursuant to the Stock Purchase Agreement; and
 3. Except for losses incurred as a result of material breach of the obligations of BHR pursuant to the Framework Cooperation Agreement, the Company undertakes to be held responsible for, among others, material assets disposal, overseas investment, provision of guarantee, corporate reorganisation, dissolution, amalgamation involving BHR, Lundin DRC, TFHL and BHR's subsidiary.

(ii) BHR Shareholders Cooperation Agreement

To facilitate the implementation of the Framework Cooperation Agreement, the Company entered into the BHR Shareholders Cooperation Agreement.

Date

20 January 2017

LETTER FROM THE BOARD

Parties

- (i) the Company;
- (ii) KAIFEI; and
- (iii) BHR.

The principal terms and conditions of the BHR Shareholders Cooperation Agreement mainly reflect the terms and conditions stipulated in the Framework Cooperation Agreement. Please refer to the section headed Framework Cooperation Agreement for details. The following additional principal terms and conditions were stipulated in the BHR Shareholders Cooperation Agreement:

(1) *Amount of Subscription Money payable*

KAIFEI shall pay a sum of USD150 million (subject to adjustments) by way of cash to BHR.

(2) *Conditions precedent to the payment of the Subscription Money*

Payment of the Subscription Money payable by KAIFEI is conditional upon the fulfillment or waiver thereof (as the case may be) of a number of conditions, including, among others, the following:

1. the Shareholders having approved entering into the BHR Shareholders Cooperation Agreement;
2. all conditions precedent pursuant to the Stock Purchase Agreement having been fulfilled (except for conditions precedent that can only be fulfilled at completion of the Stock Purchase Agreement) or otherwise validly waived;
3. the agreement(s) in relation to the Syndicated Loans having been executed and the terms of which are not prejudicial to the interest of KAIFEI; and
4. the drawdown conditions under the Syndicated Loans (except for payment of the Subscription Money) having been fulfilled or otherwise validly waived.

LETTER FROM THE BOARD

(3) *Exclusive return rates for the Call Option and the Put Option*

As KAIFEI will be paying the Subscription Money denominated in USD, KAIFEI will be entitled to an exclusive return rate at 6% for each of the Call Option and the Put Option (as the case may be). Accordingly, the exercise price for the Call Option and Put Option would be adjusted as follow:

Call Option:

Exercise price : The exercise price for the Call Option is calculated as follows:

$$\text{Subscription Money} \times (1 + 6\% \times \text{Call Payment Period} \div 360) - \text{return received by KAIFEI} - \text{dividend or the like indirectly derived from TFM (excluding the return received by KAIFEI)}.$$

Put Option:

Exercise price : The exercise price for the Put Option is calculated as follows:

$$\text{Subscription Money} \times (1 + 6\% \times \text{Put Payment Period} \div 360) - \text{return received by KAIFEI} - \text{dividend or the like indirectly derived from TFM (excluding the return received by KAIFEI)}.$$

(4) *Annual rate of return prior to the exercise of Call Option or Put Option, whichever is earlier*

As KAIFEI will be paying the Subscription Money denominated in USD, KAIFEI will be entitled to a 6% of the amount of the Subscription Money paid per annum, being the annual rate of return prior to the exercise of the Call Option or the Put Option, whichever is earlier.

LETTER FROM THE BOARD

(iii) Shareholders of BHR Shareholders Cooperation Agreement

To facilitate the implementation of the Framework Cooperation Agreement, the Company entered into the Shareholders of BHR Shareholders Cooperation Agreement.

Date

20 January 2017

Parties

- (i) the Company;
- (ii) BHR;
- (iii) CMB;
- (iv) Dingyuan (a limited partnership); and
- (v) Bohai (as the general partner of Dingyuan).

The principal terms and conditions of the Shareholders of BHR Shareholders Cooperation Agreement mainly reflect the terms and conditions stipulated in the Framework Cooperation Agreement. Please refer to the section headed Framework Cooperation Agreement for details. The following additional principal terms and conditions were stipulated in the Shareholders of BHR Shareholders Cooperation Agreement:

(1) Amount of Subscription Money payable

Dingyuan shall pay in RMB the equivalent to the sum of USD470 million (subject to adjustment) by way of cash to BHR.

(2) Conditions precedent to the payment of the Subscription Money

1. The Plan having paid its subscription price for its interests in Dingyuan;

LETTER FROM THE BOARD

2. Payment of the subscription price payable by the Plan to Dingyuan for subscription of the partnership interests in Dingyuan is conditional upon the fulfillment or waiver thereof (as the case may be) of a number of conditions, including, among others, the following:
 - a. the Shareholders having approved entering into the Shareholders of BHR Shareholders Cooperation Agreement;
 - b. all conditions precedent pursuant to the Stock Purchase Agreement having been fulfilled (except for conditions precedent that can only be fulfilled at completion of the Stock Purchase Agreement) or otherwise validly waived;
 - c. Dingyuan having obtained all the regulatory approvals on outbound investment from the National Development and Reform Commission of PRC and the Ministry of Commerce of PRC;
 - d. the agreement(s) in relation to the Syndicated Loans having been executed and the terms of which are not prejudicial to the interests of CMB; and
 - e. the drawdown conditions under the Syndicated Loans (except for payment of the Subscription Money) having been fulfilled or otherwise validly waived.

In the event that Dingyuan is not able to pay the Subscription Money to BHR due to foreign exchange control policy, the parties would negotiate an alternative payment structure. And in the event that the parties agree to arrange for offshore financing as the alternative, the regulatory approvals on the outbound investment will cease to be a condition precedent to the payment of the Subscription Money.

LETTER FROM THE BOARD

(3) *Exclusive return rates for the Call Option and the Put Option*

As Dingyuan will be paying the Subscription Money denominated in RMB, the Plan (through Dingyuan) will be entitled to an exclusive return rate at 8.5% for each of the Call Option and the Put Option (as the case may be). Accordingly, the exercise price for the Call Option and Put Option would be adjusted as follow:

Call Option:

Exercise price : The exercise price for the Call Option is calculated as follows:

$$\text{Subscription Money} \times (1 + 8.5\% \times \text{Call Payment Period} \div 360) - \text{return received by the Plan (through Dingyuan) - dividend or the like indirectly derived from TFM (excluding the return received by the Plan (through Dingyuan))}.$$

Put Option:

Exercise price : The exercise price for the Put Option is calculated as follows:

$$\text{Subscription Money} \times (1 + 8.5\% \times \text{Put Payment Period} \div 360) - \text{return received by the Plan (through Dingyuan) - dividend or the like indirectly derived from TFM (excluding the return received by the Plan (through Dingyuan))}.$$

(4) *Annual rate of return prior to the exercise of Call Option or Put Option, whichever is earlier*

As Dingyuan will be paying the Subscription Money denominated in RMB, the Plan (through Dingyuan) and Dingyuan will be entitled to a 8.5% of the amount of the Subscription Money paid per annum, being the annual rate of return prior to the exercise of the Call Option or the Put Option, whichever is earlier.

LETTER FROM THE BOARD

(iv) **Hantang Cooperation Agreement**

The Company entered into the Hantang Cooperation Agreement to facilitate the implementation of the Framework Cooperation Agreement.

Date

3 March 2017

Parties

- (i) the Company;
- (ii) BHR; and
- (iii) Hantang.

The principal terms and conditions of the Hantang Cooperation Agreement mainly reflect the terms and conditions stipulated in the Framework Cooperation Agreement. Please refer to the section headed Framework Cooperation Agreement for details. The following additional principal terms and conditions were stipulated in the Hantang Cooperation Agreement:

(1) *Amount of Subscription Money*

Hantang has agreed to subscribe for shares in BHR in the principal amount of USD250 million (subject to adjustments as stipulated in the Hantang Cooperation Agreement) in the form of cash.

(2) *Conditions precedent to the payment of the Subscription Money*

Payment of the Subscription Money by Hantang is conditional upon the fulfillment or waiver thereof by Hantang (as the case may be) of a number of conditions, including, among others, the following:

1. the Hantang Cooperation Agreement has been validly approved at a general meeting of the Company (or has been validly approved by the Board where the Board has been authorised at a general meeting of the Company to do so);

LETTER FROM THE BOARD

2. completion of the sale and purchase agreement dated 9 May 2016 entered into between the Company, CMOG Limited and Phelps Dodge Katanga Corporation and Freeport-McMoRan Inc. in relation to the acquisition of a 70% indirect interest in TFHL;
3. all conditions precedent pursuant to the Stock Purchase Agreement having been fulfilled (except for conditions precedent that can only be fulfilled at completion of the Stock Purchase Agreement) or otherwise validly waived;
4. the agreement(s) in relation to the Syndicated Loans having been executed and the terms of which are not materially prejudicial to the interest of Hantang;
5. the drawdown conditions under the Syndicated Loans (except for payment of the Subscription Money) having been fulfilled or otherwise validly waived;
6. the Company having issued a written confirmation to Hantang stating expressly the date of completion of the Stock Purchase Agreement, and such date shall not exceed 90 days from the date of the request for payment of the Subscription Money;
7. no material litigation or dispute having occurred under the Stock Purchase Agreement which may affect the Company, BHR or Hantang or their respective related parties; and
8. Hantang having entered into the Share Subscription and Shareholders' Agreement.

LETTER FROM THE BOARD

(3) *Exclusive return rates for the Call Option and the Put Option*

As Hantang will be paying the Subscription Money denominated in USD, Hantang will be entitled to an exclusive return rate at 6% for each of the Call Option and the Put Option (as the case may be). Accordingly, the exercise price for the Call Option and Put Option would be adjusted as follow:

Call Option:

Exercise price : The exercise price for the Call Option is calculated as follows:

$$\text{Subscription Money} \times (1 + 6\% \times \text{Call Payment Period} \div 360) - \text{return received by Hantang} - \text{dividend or the like indirectly derived from TFM (excluding the return received by Hantang).}$$

Put Option:

Exercise price : The exercise price for the Put Option is calculated as follows:

$$\text{Subscription Money} \times (1 + 6\% \times \text{Put Payment Period} \div 360) - \text{return received by Hantang} - \text{dividend or the like indirectly derived from TFM (excluding the return received by Hantang).}$$

(4) *Annual rate of return prior to the exercise of Call Option or Put Option, whichever is earlier*

As Hantang will be paying the Subscription Money denominated in USD, Hantang will be entitled to a 6% of the amount of the Subscription Money paid per annum, being the annual rate of return prior to the exercise of the Call Option or the Put Option, whichever is earlier.

LETTER FROM THE BOARD

(v) **Design Time Cooperation Agreement**

The Company entered into the Design Time Cooperation Agreement to facilitate the implementation of the Framework Cooperation Agreement.

Date

3 March 2017

Parties

- (i) the Company;
- (ii) BHR; and
- (iii) Design Time.

The principal terms and conditions of the Design Time Cooperation Agreement mainly reflect the terms and conditions stipulated in the Framework Cooperation Agreement. Please refer to the section headed Framework Cooperation Agreement for details. The following additional principal terms and conditions were stipulated in the Design Time Cooperation Agreement:

(1) *Amount of Subscription Money*

Design Time has agreed to subscribe for shares in BHR in the principal amount of USD50 million (subject to adjustments as stipulated in the Design Time Cooperation Agreement) in the form of cash.

(2) *Conditions precedent to the payment of the Subscription Money*

Payment of the Subscription Money by Design Time is conditional upon the fulfillment or waiver thereof (as the case may be) of a number of conditions, including, among others, the following:

1. the Design Time Cooperation Agreement has been validly approved at a general meeting of the Company (or has been validly approved by the Board where the Board has been authorised at a general meeting of the Company to do so);

LETTER FROM THE BOARD

2. completion of the sale and purchase agreement dated 9 May 2016 entered into between the Company, CMOC Limited and Phelps Dodge Katanga Corporation and Freeport-McMoRan Inc. in relation to the acquisition of a 70% indirect interest in TFHL;
3. all conditions precedent pursuant to the Stock Purchase Agreement having been fulfilled (except for conditions precedent that can only be fulfilled at completion of the Stock Purchase Agreement) or otherwise validly waived;
4. the agreement(s) in relation to the Syndicated Loans having been executed and the terms of which are not materially prejudicial to the interest of Design Time;
5. the drawdown conditions under the Syndicated Loans (except for payment of the Subscription Money) having been fulfilled or otherwise validly waived;
6. the Company having issued a written confirmation to Design Time stating expressly the date of completion of the Stock Purchase Agreement, and such date shall not exceed 90 days from the date of the request for payment of the Subscription Money;
7. no material litigation or dispute having occurred under the Stock Purchase Agreement which may affect the Company, BHR or Design Time or their respective related parties; and
8. Design Time having entered into the Share Subscription and Shareholders' Agreement.

LETTER FROM THE BOARD

(3) *Exclusive return rates for the Call Option and the Put Option*

As Design Time will be paying the Subscription Money denominated in USD, Design Time will be entitled to an exclusive return rate at 6% for each of the Call Option and the Put Option (as the case may be). Accordingly, the exercise price for the Call Option and Put Option would be adjusted as follow:

Call Option:

Exercise price : The exercise price for the Call Option is calculated as follows:

$$\text{Subscription Money} \times (1 + 6\% \times \text{Call Payment Period} \div 360) - \text{return received by Design Time} - \text{dividend or the like indirectly derived from TFM (excluding the return received by Design Time)}.$$

Put Option:

Exercise price : The exercise price for the Put Option is calculated as follows:

$$\text{Subscription Money} \times (1 + 6\% \times \text{Put Payment Period} \div 360) - \text{return received by Design Time} - \text{dividend or the like indirectly derived from TFM (excluding the return received by Design Time)}.$$

(4) *Annual rate of return prior to the exercise of Call Option or Put Option, whichever is earlier*

As Design Time will be paying the Subscription Money denominated in USD, Design Time will be entitled to a 6% of the amount of the Subscription Money paid per annum, being the annual rate of return prior to the exercise of the Call Option or the Put Option, whichever is earlier.

LETTER FROM THE BOARD

(vi) **CNBC Cooperation Agreement**

The Company entered into the CNBC Cooperation Agreement to facilitate the implementation of the Framework Cooperation Agreement.

Date

3 March 2017

Parties

- (i) the Company;
- (ii) BHR; and
- (iii) CNBC.

The principal terms and conditions of the CNBC Cooperation Agreement mainly reflect the terms and conditions stipulated in the Framework Cooperation Agreement. Please refer to the section headed Framework Cooperation Agreement for details. The following additional principal terms and conditions were stipulated in the CNBC Cooperation Agreement:

(1) *Amount of Subscription Money*

CNBC has agreed to subscribe for shares in BHR in the principal amount of not more than USD300 million (subject to adjustments as stipulated in the CNBC Cooperation Agreement) in the form of cash.

(2) *Conditions precedent to the payment of the Subscription Money*

Payment of the Subscription Money by CNBC is conditional upon the fulfillment or waiver thereof (as the case may be) of a number of conditions, including, among others, the following:

1. the CNBC Cooperation Agreement has been validly approved at a general meeting of the Company (or has been validly approved by the Board where the Board has been authorised at a general meeting of the Company to do so);

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2. completion of the sale and purchase agreement dated 9 May 2016 entered into between the Company, CMOC Limited and Phelps Dodge Katanga Corporation and Freeport-McMoRan Inc. in relation to the acquisition of a 70% indirect interest in TFHL;
3. all conditions precedent pursuant to the Stock Purchase Agreement having been fulfilled (except for conditions precedent that can only be fulfilled at completion of the Stock Purchase Agreement) or otherwise validly waived;
4. the agreement(s) in relation to the Syndicated Loans having been executed and the terms of which are not materially prejudicial to the interest of CNBC;
5. the drawdown conditions under the Syndicated Loans (except for payment of the Subscription Money) having been fulfilled or otherwise validly waived;
6. the Company having issued a written confirmation to CNBC stating expressly the date of completion of the Stock Purchase Agreement, and such date shall not exceed 90 days from the date of the request for payment of the Subscription Money;
7. no material litigation or dispute having occurred under the Stock Purchase Agreement which may affect the Company, BHR or CNBC or their respective related parties; and
8. CNBC having entered into the Share Subscription and Shareholders' Agreement.

LETTER FROM THE BOARD

(3) *Exclusive return rates for the Call Option and the Put Option*

As CNBC will be paying the Subscription Money denominated in USD, CNBC will be entitled to an exclusive return rate at 6% for each of the Call Option and the Put Option (as the case may be). Accordingly, the exercise price for the Call Option and Put Option would be adjusted as follow:

Call Option:

Exercise price : The exercise price for the Call Option is calculated as follows:

$$\text{Subscription Money} \times (1 + 6\% \times \text{Call Payment Period} \div 360) - \text{return received by CNBC} - \text{dividend or the like indirectly derived from TFM (excluding the return received by CNBC).}$$

Put Option:

Exercise price : The exercise price for the Put Option is calculated as follows:

$$\text{Subscription Money} \times (1 + 6\% \times \text{Put Payment Period} \div 360) - \text{return received by CNBC} - \text{dividend or the like indirectly derived from TFM (excluding the return received by CNBC).}$$

(4) *Annual rate of return prior to the exercise of Call Option or Put Option, whichever is earlier*

As CNBC will be paying the Subscription Money denominated in USD, CNBC will be entitled to a 6% of the amount of the Subscription Money paid per annum, being the annual rate of return prior to the exercise of the Call Option or the Put Option, whichever is earlier.

LETTER FROM THE BOARD

Syndicated Loans and the provision of Guarantee

To facilitate the implementation of the Framework Cooperation Agreement, on 21 March 2017, the Company entered into the Syndicated Loans Agreement as sponsor and the Guarantee as guarantor.

Set out below are the principle terms of the Syndicated Loans Agreement and the Guarantee.

Borrower	:	BHR
Mandated Lead Arranger, Bookrunner, Facility Agent & Security Agent	:	China Construction Bank Corporation, Henan Branch
Lenders	:	China Construction Bank Corporation, Henan Branch (the sum of term loan facility to be made available amounts up to USD600 million) China Merchants Bank Co., Ltd., Shanghai Branch, Tianshan Sub-branch (the sum of term loan facility to be made available amounts up to USD100 million)
Term of the Syndicated Loans	:	7 years from the date of utilisation of the Syndicated Loans
Guarantor	:	the Company
Guaranteed amount	:	the total principal amount not exceeding USD700 million
Guaranteed period	:	Up to 2 years after satisfaction of the Borrower's obligations under the Syndicated Loans Agreement
Guaranteed obligations	:	the Company agreed to guarantee all obligations of the Company itself, BHR or any other guarantee provider (separately or in aggregate) under the Syndicated Loans Agreement, including but not limited to the principal, any interest, default interest and other expenses.

LETTER FROM THE BOARD

Assets to be Acquired Upon the Exercise of the Call Option or the Put Option

In the event that the Company decides to exercise the Call Option, or is required by BHR and/or the Investors to purchase the 24% indirect interest in TFM, as the case may be, Lundin DRC will become a wholly owned subsidiary of the Company, and the Company will own a further 24% indirect interest in TFM. Effectively, the Company will own an 80% indirect interest in aggregate in TFM, which owns the Tenke Fungurume Mining Complex.

Further information on the Tenke Fungurume Mining Complex is set out below in the section headed “Information on The Tenke Fungurume Mining Complex”.

Payment of the Consideration for the Exercise Price Payable under the Call Option or the Put Option

The Company will satisfy the consideration for exercising the Call Option or the Put Option through a combination of the Group’s existing cash reserves and undrawn credit facilities. The said consideration will not be funded by proceeds to be raised from the proposed non-public issuance of A Shares as disclosed in the announcement published by the Company dated 20 May 2016, the circular dated 8 September 2016 and the poll results announcement dated 25 September 2016 of the Company. The Cooperation Arrangement and the proposed non-public issuance of A Shares are not inter-conditional. Proceeds raised from the non-public issuance of A Shares would be used to replenish the funds applied by the Company to satisfy the consideration for the exercise price payable for the Call Option or the Put Option. As at Latest Practicable Date, the Company has no other fund raising plan other than the proposed non-public issuance of A Shares.

The terms and conditions of the Cooperation Arrangement, including the formulas for the determination of the exercise prices for the Call Option and the Put Option, were determined on an arm’s length basis following the financial analysis by the Company and its professional advisors of information on the Tenke Fungurume Mining Complex, and by reference to, among others, the reserves and resources, mine plan and projected cash flows of the Tenke Fungurume Mining Complex, financial terms of certain other transactions involving producing copper assets, and the Company’s assessment of the benefits of the Tenke Fungurume Mining Complex to the future earnings per share of the Company.

In addition, the terms and conditions of the Cooperation Arrangement, including the formulas for the determination of the exercise prices for the Call Option and the Put Option were determined by various analyses, including, but not limited to assessing the potential future growth of the Target Group. The Company and its advisers arrived at projected cash flows by developing a life-of-mine operating plan, including forecast production, costs, capital expenditures and working capital requirements based on their due diligence of current and historic operating results, underlying geology and mineralogy, potential copper price forecasts. Future growth potential was evaluated through the construction and study of a resource model and exploration drilling and sampling results.

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Further, the Valuation Report has concluded that the fair market value of a 24% interest of Tenke is approximately USD1.07 billion to USD1.34 billion (equivalent to approximately HKD8.29 billion to HKD10.39 billion as of 31 December 2016). The fair market value is assessed on the basis of the estimated amount (or the cash equivalent of some other consideration) for which the asset underlying Tenke should exchange on the date of valuation between a willing buyer and a willing seller in an arm's length transaction after appropriate marketing where the parties had each acted knowledgeably, prudently and without compulsion. The Valuation Report, including details of the assumptions, basis and methodology of the valuation and assumptions are contained in Appendix VI to this circular.

The amount of the Lundin Consideration i.e. (being USD1.15 billion but subject to customary adjustment) is consistent with the estimated market value of the 24% interest of Tenke as assessed by Censere (Far East) Limited. Given that Subscription Money and the Syndicated Loans will be applied by BHR to satisfy the Lundin Consideration, the total amount of the Subscription Money and the Syndicated Loans would not exceed USD1.17 billion, taking into account the expenses incurred in relation to the execution of the Cooperation Arrangement, the amount payable under the Lundin Consideration and the adjustment thereof. In light of the USD700 million will be made available to BHR under the Syndicated Loans Agreement, the total amount of the Subscription Money to be allocated among the Investors would not exceed USD470 million, the maximum exercise prices for the Call Option and the Put Option (assuming the Call Option and Put Option will be exercised 3 years after the payment of Subscription Money) are each at approximately USD591.6 million. Accordingly, the maximum exercise prices for the Call Option and Put Option would be calculated as follow:

Call Option:

Maximum exercise price : The maximum exercise price for the Call Option is calculated as follows:

$\text{Subscription Money} \times (1 + \text{the highest exclusive return rate for the Call Option} \times \text{Call Payment Period} \div 360) - \text{return received by the Investors} - \text{dividend or the like indirectly derived from TFM (excluding the return received by the Investors)}.$

The maximum amount of the Subscription Money payable by all the Investors would be capped at USD470 million:

Maximum amount of the Subscription Money = USD470,000,000

Highest exclusive return rate for the Call Option is 8.5%.

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Call Payment Period:

After the payment of the Subscription Money, the Call Option may be exercised at any time between 1 year and 3 years thereafter.

Assuming the maximum Call Payment Period is 3 years
= 3 x 365.25 (days)
= 1,095.75 days

Return received by the Investors:

Assume it is 'zero' ('0').

The amount of dividend or the like indirectly derived from TFM (excluding the return received by the Investors)

Assume it is 'zero' ('0').

Based on the above, the maximum exercise price of the Call Option is USD591,597,812.50
(i.e., USD470,000,000 x (1+8.5% x1,095.75/360) – 0 – 0)

Put Option:

Maximum exercise price : The maximum exercise price for the Put Option is calculated as follows:

Subscription Money × (1 + highest exclusive return rate for the Put Option × Put Payment Period ÷ 360) – return received by the Investors – dividend or the like indirectly derived from TFM (excluding the return received by the Investors).

The maximum amount of the Subscription Money payable by all the Investors would be capped at USD470 million:

Maximum amount of the Subscription Money = USD470,000,000

Highest exclusive return rate for the Put Option is 8.5%.

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Put Payment Period:

After the payment of the Subscription Money, the Put Option would be exercised 3 years thereafter.
= 3 x 365.25 (days)
= 1,095.75 days

Return received by the Investors:

Assume it is 'zero' ('0').

The amount of dividend or the like indirectly derived from TFM (excluding the return received by the Investors)

Assume it is 'zero' ('0').

Based on the above, the maximum exercise price of the Put Option is USD591,597,812.50
(i.e., USD470,000,000 x (1+8.5% x1,095.75/360) – 0 – 0)

The allocation of the Subscription Money pursuant to the Cooperation Arrangement among the Investors is at the discretion of the Board. The Board takes the view that this allocation mechanism would provide greater flexibility and security to the funding of the Subscription Money by introducing more Investors to participate into the Cooperation Arrangement.

Given that the Valuation Report was prepared in compliance with the Listing Rules following the entering into the Cooperation Arrangement, no reference was made to the Valuation Report when determining the terms and conditions of the Cooperation Arrangement, including the formulas for the determination of the exercise prices of the Call Option and the Put Option.

In addition to financial analysis, the Board took into account the following factors when determining the appropriate formulas for the determination of the Call Option and the Put Option as the further acquisition of the 24% indirect interest in Tenke will:

1. offer compelling opportunity for the Group to maintain the stability of the ownership of the Target Group and to have the option to increase the size of its interest in the Tenke Fungurume Mining Complex;
2. be consistent with the strategy of acquiring high-quality growth assets that provide earnings and commodity;
3. strengthen the Group's portfolio in high-quality growth assets;

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4. strengthen the Group's position as a leading copper producer and one of the largest cobalt producers globally;
5. position the Group to benefit from growing demand for cobalt, particularly from electric vehicles; and
6. further enhance the Group's earnings, given Tenke's lowest-quartile cost position in the industry.

UNDERTAKINGS BY CONTROLLING SHAREHOLDERS

CFC, a controlling shareholder of the Company who as at the Latest Practicable Date holds approximately 31.58% equity interest in the Company, has undertaken to vote in favour of the resolutions to approve the Cooperation Arrangement.

LMG, a controlling shareholder of the Company who as at the Latest Practicable Date hold approximately 31.56% equity interest in the Company, has undertaken to vote in favour of the resolutions to approve the Cooperation Arrangement.

Accordingly, CFC and LMG, who as at the Latest Practicable Date in aggregate hold approximately 63.14% equity interest in the Company, have separately undertaken to vote in favour of the resolutions to approve the Cooperation Arrangement.

INFORMATION ON THE TENKE FUNGURUME MINING COMPLEX

Tenke is a world-class, producing copper-cobalt mine located in the DRC within the prolific Central African Copperbelt. In 2015, Tenke produced 204kt of copper and 16kt of cobalt (100% basis) at a net cash cost of approximately US\$1.21 per pound of copper. As of 31 December 2016, Tenke had Proved and Probable Ore Reserves of approximately 4.6Mt of contained copper and 0.6Mt of contained cobalt contained within 181.6Mt of Ore which support a reserve life of approximately 35 years. The ore Reserves are contained within measured and indicated resources of 14.6Mt of contained copper and 1.4Mt of contained cobalt, and inferred resources of 9.5Mt of contained copper and 0.9Mt of contained cobalt (100% basis), which represent substantial upside potential. In addition to the insitu Mineral Resources, a total of

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48.2Mt at 1.31% TCu, 1.16% AsCu, 0.31% TCo and 0.26% AsCo occurs in stockpiles for a total of 0.6Mt of contained copper and 0.1Mt of contained cobalt. The following are noted in reference to the tables below:

- TCu/TCo – Refers to Total Cu-Co which is contained within the material. This Total is inclusive and not additional to AsCu/AsCo (see below).
- AsCu/AsCo – Refers to grade of the Cu-Co which is acid soluble by the test method used, which is critical for the leach processing used for the Oxide material. The difference between the AsCu and TCu is not expected to be recovered through leaching.
- It is noted the underground potential outlined below will utilise a different method as outlined in the Competent Person's Report in Appendix V to this circular.

Statement of JORC Ore Reserves Estimate as at 31 December, 2016

Area	Quantity (Mt)	TCu (%)	TCo (%)	AsCu (%)	AsCo (%)	TCu (Mlbs)	TCo (Mlbs)	AsCu (Mlbs)	AsCo (Mlbs)
Open Pits									
Proven	76.9	3.1	0.32	2.8	0.25	5,285.5	544.0	4,691.2	427.7
Probable	56.5	2.7	0.30	2.4	0.25	3,365.3	376.1	3,002.6	308.7
Sub Total	133.4	2.9	0.31	2.6	0.25	8,650.7	920.0	7,693.8	736.4
Ore Stockpiles									
Proven	48.2	1.3	0.31	1.2	0.26	1,389.6	326.6	1,236.4	281.4
Probable		0.0	0.0						
Sub Total	48.2	1.3	0.31	1.2	0.27	1,389.6	326.6	1,236.4	281.4
Combined									
Proven	125.1	2.4	0.32	2.2	0.26	6,675.1	870.5	5,927.6	709.1
Probable	56.5	2.7	0.30	2.4	0.25	3,365.3	376.1	3,002.6	308.7
Grand Total	181.6	2.5	0.31	2.2	0.25	10,040.4	1,246.6	8,930.2	1,017.7

Notes:

1. All Mineral Resources figures reported in the table above represent estimates at 31 December 2016. Mineral Resource estimates are not precise calculations, being dependent on the interpretation of limited information on the location, shape and continuity of the occurrence and on the available sampling results. The totals contained in the above table have been rounded to reflect the relative uncertainty of the estimate. Rounding may cause some computational discrepancies.
2. The reported Mineral Resource are based on a cashflow profit cut-off grade basis, which is based on the Ore Reserve parameters and a price of 2.88/lb Cu and 12.40/Lb Co as detailed in the Competent Person's Report in Appendix V.

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Statement of Mineral Resources as at 31 December 2016

Area	Classification	Quantity (Mt)	Tcu (%)	Tco (%)	AsCu (%)	AsCo (%)	Cu Metal (Mt)	Co Metal (Mt)
Stockpile	Measured	48.2	1.31	0.31	1.16	0.26	0.6	0.1
Open Cut	Measured	170.8	3.06	0.30	2.13	0.21	5.2	0.5
	Indicated	192.3	2.66	0.26	1.76	0.19	5.1	0.5
	Inferred	57.7	2.06	0.21	1.38	0.14	1.2	0.1
Underground	Measured	12.2	3.19	0.25	1.95	0.16	0.4	<0.1
	Indicated	125.4	3.09	0.27	1.61	0.15	3.9	0.3
	Inferred	277.7	3.00	0.28	1.27	0.12	8.3	0.8

1. Tonnages are metric tonnes reported on a dry basis.
2. Copper price: \$3.50/lb and Cobalt price: \$15.00/lb.
3. Ore stockpiles include working-in-progress stockpiles balance as in the 31 December 2016.
4. Figures reported are rounded which may result in small tabulation errors. Ore Reserves have been estimated under the 2012 Edition of the JORC Code.

The above statement of ore reserves and mineral resources need to be read in conjunction with the Competent Person's Report in Appendix V, which contains the required JORC Code and Chapter 18 of the Listing Rules disclosures.

Exploitation Permits held by TFM

TFM is the holder of the Tenke (Mining Concession No. 198) and Fungurume (Mining Concession No. 199) exploitation permits. The mining rights are valid through 16 September 2020 for Concession No. 198 and 12 August 2026 for Concession No. 199. Both are in good standing and there is no objective element that creates doubt in respect of their validity.

Renewal of the Exploitation Permits

As advised by the Company's DRC counsel, they are not aware of any evident impediment for the renewal of the exploitation permits on Tenke and Fungurume. The DRC counsel further advised that although pursuant to Article 24 paragraph 3 et seq. of the 1981 Mining Law (applicable to the mining rights held by TFM in accordance with the Mining Convention), the maximum validity period of mining concessions is 40 years (including two renewals), in accordance with the Mining Convention, the DRC government has undertaken to grant new exploitation rights governed by the 1981 Mining Law to TFM, even after the expiry of the above mentioned 40-year period. In view of the above interpretations (but subject to interpretation by the DRC government), the DRC counsel confirms that TFM can continue to exploit

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the perimeters initially covered by Mining Concessions No. 198 and 199 until depletion of the relevant deposits.

The financial results attributable to the Target Group (100% basis) for the three years ended 31 December 2015 and nine months ended 30 September 2016, are as follows:

	2013		2014		2015		30 September 2016	
	US\$ (millions)	HK\$ (million) ⁽¹⁾	US\$ (millions)	HK\$ (million) ⁽¹⁾	US\$ (million)	HK\$ (million) ⁽¹⁾	US\$ (million)	HK\$ (million) ⁽¹⁾
Revenue	1,637	12,687	1,558	12,075	1,385	10,734	944	7,319

⁽¹⁾ US\$ to HK\$ exchange rate of 1.00 to 7.75.

The Board takes the view that the decreasing revenue trend of the Target Group is the result of decreasing commodity prices for both copper and cobalt, not of the quality of the operations, which have been improving and growing. Commodity markets are cyclical and the further acquisition of the indirect interest in TFM during a period of depressed prices offers greater future value potential to the Company.

Tenke includes surface mining, leaching and solvent extraction and electrowinning operations, and its copper-cobalt deposits are among the largest known copper-cobalt resources in the world. The deposits are located on contiguous concessions which total approximately of 1,500 square kilometers in the southeast region, DRC, approximately 175 kilometers northwest of Lubumbashi, the provincial capital.

The Company holds a 56% indirect interest in TFM, Lundin DRC holds a 24% indirect interest in TFM and Gécamines holds a 20% free carried interest in TFM. Capital funding is provided by the Company and Lundin DRC on the basis of 70% and 30%, respectively.

In 1996, TFM was established under the DRC Companies Act, and received a controlling interest in the concessions of Tenke from Gécamines in exchange for commercial and development commitments. Construction started in late 2006, and initial copper production commenced in March 2009. Targeted copper production rates were achieved in September 2009 and the cobalt and sulphuric acid plants were commissioned in third-quarter 2009. TFM completed its second phase expansion project in early 2013, which included increasing mine, mill and processing capacity. Construction of a second sulphuric acid plant is substantially complete.

Capital expenditures are forecast to average approximately US\$80 million per annum over the next 10 years, and working capital requirements are forecast to average approximately US\$9 million per annum over the next 10 years on the Tenke Fungurume Mining Complex. Capital expenditures and working capital requirements are expected by the Company to be funded with operating cash flow of the Target Group.

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INFORMATION ON THE COUNTERPARTIES

CMB

The Shanghai branch of China Merchants Bank Co., Ltd. is a branch of China Merchants Bank Co., Ltd. China Merchants Bank Co., Ltd., is a joint stock company established in PRC with limited liability. China Merchants Bank Co., Ltd., is principally engaged in the provision of banking and other related financial services.

BHR

BHR is an investment holding company with limited liability incorporated in the British Virgin Islands.

Dingyuan

Dingyuan is a limited liability partnership registered in PRC. Dingyuan is principally engaged in the provision of investment management. Bohai is the general partner of Dingyuan.

Bohai

Bohai is a limited company incorporated in PRC. Bohai is principally engaged in the provision of investment management, investment advisory and asset management.

KAIFEI

KAIFEI is an investment holding company with limited liability incorporated in Hong Kong, and an affiliate of China-Africa Fund for Industrial Cooperation.

Hantang

Hantang is a company with limited liability incorporated in the British Virgin Islands, whose principal business activity is foreign investment.

Design Time

Design Time is an investment holding company with limited liability incorporated in the British Virgin Islands.

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CNBC

CNBC is a company with limited liability incorporated in Hong Kong whose principal business activities are investment and money lending.

China Construction Bank Corporation, Henan Branch

China Construction Bank Corporation, Henan Branch is a branch of China Construction Bank Corporation. China Construction Bank Corporation, is a joint stock company established in PRC with limited liability. China Construction Bank Corporation, is principally engaged in the provision of banking and other related financial services.

China Merchants Bank Co., Ltd., Shanghai Branch, Tianshan Sub-branch

China Merchants Bank Co., Ltd. Shanghai Branch, Tianshan Sub-branch is a branch of China Merchants Bank Co., Ltd. China Merchants Bank Co., Ltd., is a joint stock company established in PRC with limited liability. China Merchants Bank Co., Ltd., is principally engaged in the provision of banking and other related financial services.

The Directors confirm that to the best of their knowledge, information and belief after having made all reasonable enquiries, there is no prior transaction with each of the BHR, KAIFEI, CMB, the Plan, Bohai, Dingyuan, Hantang, Design Time, CNBC, China Construction Bank Corporation, Henan Branch, China Merchants Bank Co., Ltd., Shanghai Branch, Tianshan Sub-branch and their respective ultimate beneficial owners which is required to be aggregated with the participation of the Cooperation Arrangement and the transactions contemplated thereunder pursuant to Rule 14.22 of the Listing Rules.

INFORMATION ON THE COMPANY

The Group is primarily engaged in the mining, processing and marketing of mineral products. The Group is one of the world's largest molybdenum and tungsten producers, and Australia's fourth largest producer of copper. The Group's key operating assets include Sandaozhuang molybdenum-tungsten mine and facilities located in Luoyang, PRC, the Northparkes copper-gold mine located near Parkes, New South Wales, Australia, the niobium and phosphates businesses in Brazil as well as the holding a 56% indirect interest in the Tenke copper-cobalt mine located in the southeast region in the DRC. The Group is dual-listed on the Hong Kong Stock Exchange (HK3993) and the SSE (SH603993).

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REASONS AND BENEFITS OF THE POTENTIAL ACQUISITION CONTEMPLATED UNDER THE COOPERATION ARRANGEMENT

The Company proposed to acquire a right to purchase a 24% interest in TFM through entering into the Cooperation Arrangement, together with the Call Option and Put Option contemplated thereunder, with BHR and the Investors rather than purchasing the said interest directly from Lundin DRC, because BHR is the entity that entered into the Stock Purchase Agreement to acquire the 24% indirect interest in TFM. In addition, BHR entered into the Stock Purchase Agreement prior to the Company entering into any definitive agreement with Lundin Mining Corporation in relation to the sale and purchase of the 24% interest in TFM.

The Potential Acquisition contemplated under the Cooperation Arrangement offers a compelling opportunity for the Group to maintain the stability of the ownership of the Target Group and to have the option to increase the size of its interest in the Tenke Fungurume Mining Complex. Upon completion of the Potential Acquisition, the Group will own 80% indirect interest in aggregate in TFM, which owns the Tenke Fungurume Mining Complex. As 80% of the issued share capital of TFM will be indirectly owned by the Group, it would further enhance the Group to exercise control over the composition of the board of directors of TFM, thus exercising a greater degree of control and supervision over daily management and the mining operation of the Tenke Fungurume Mining Complex. It is expected that the Potential Acquisition, once proceeded, will enhance the Group's business and performance in the following aspects:

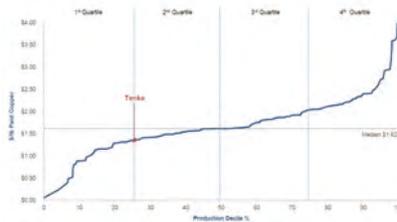
Adds to the Group's portfolio a scarce, world-class producing copper-cobalt mine with substantial upside

The Board believes that Tenke represents a world-class producing copper-cobalt asset, given its large-scale, long-lived and low-cost attributes, with substantial upside through exploration—and such world-class assets are rarely available for acquisition. Tenke is an open pit mine that has produced copper cathode and cobalt hydroxide since 2009. In 2015, Tenke produced 204kt of copper and 16kt of cobalt (100% basis) at a net cash cost of approximately US\$1.21 per pound of copper, rating it among the top 20 copper mines in 2015, based on copper production. Tenke's 2017 all-in cost (i.e., cash cost and capital expenditures per pound of copper produced) is expected to be among the first quartile of the global cost curve. As of 31 December, 2016, Tenke had Proved and Probable Ore Reserves of 4.6Mt of contained copper and 0.6Mt of contained cobalt (100% basis), which support an Ore Reserve mine life of approximately 35 years. The Ore Reserves are contained within a total Measured and Indicated resources of 14.6Mt of contained copper and 1.4Mt of contained cobalt, and inferred resources of 9.5Mt of contained copper and 0.9Mt of contained cobalt (100% basis), which represent substantial upside potential. For

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further details on the Ore Reserves on Tenke, please refer to the Competent Person's Report in the Appendix V attached to this circular.

2017 All-In Sustaining Cash Cost Curve (US\$/lb payable Cu)



Source: Wood Mackenzie

Strengthen the Group as a leading copper producer and one of the largest cobalt producers globally

The Potential Acquisition will strengthen the Company's position as an eminent global producer of both copper and cobalt. The Company is currently a top 25 copper producer globally and the second large cobalt producer globally upon the completion of the acquisition of a 56% indirect interest in Tenke in November 2016. As of 31 December 2016, Tenke has reserves of 10,040Mlbs and 1,246.6Mlbs in copper and cobalt respectively. The Company believes the opportunity of acquiring further interest in TFM will improve and strengthen the Company's portfolio significantly.

The Target Group are primarily engaging in mining and producing copper and similar to that of its Northparkes operation, albeit a different geography. The commodities business is largely a global one, and the Company chosen to pursue growth via high-quality operations and resources. The location of the Target Group business is in one of the most geologically perspective copper belts in the world.

The copper industry has attractive long-term fundamentals; Wood Mackenzie forecasts that copper demand is expected to be underpinned by strong demand from Africa, the Middle East and some Asian countries which will outweigh a fall in demand from western countries, with resultant global demand growth averaging 1.2% from 2016 to 2035. Please refer to the section headed "Industry Overview" for details.

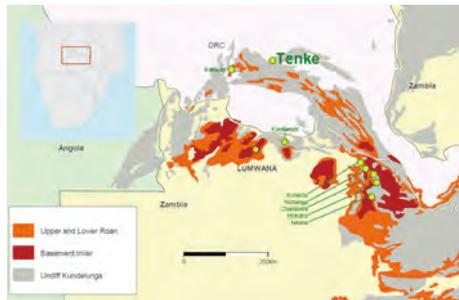
The Company regularly considers acquiring mining resource from different countries, as exemplified by its recent acquisition of niobium and phosphates businesses in Brazil as completed on 1 October 2016 and disclosed in the circular published by Company on 8 September 2016 and the acquisition of a 56% indirect controlling interest in Tenke Fungurume Mining Complex as completed in November 2016 and disclosed in the circular published by the Company on 8 September 2016.

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Strengthen the Group's strategic position in the Central African Copperbelt

The Company has current operations in China, Australia and DRC, and the Potential Acquisition would strengthen the ownership and control of Tenke where is geographically located in Africa, and, more specifically, the prolific Central African Copperbelt. The Central African Copperbelt is a region in Central Africa that runs through northern Zambia and the southern DRC and represents the largest and most prolific mineralized sediment-hosted copper province in the world. The region hosts approximately 40% of the world's cobalt concentration and 50% of copper hosted in sedimentary deposits (the second most important source of copper after porphyry copper deposits). Other major assets in the area include the Kamao copper development project, Lumwana copper mine, and Kansanshi mine, among many others.

Central African Copperbelt

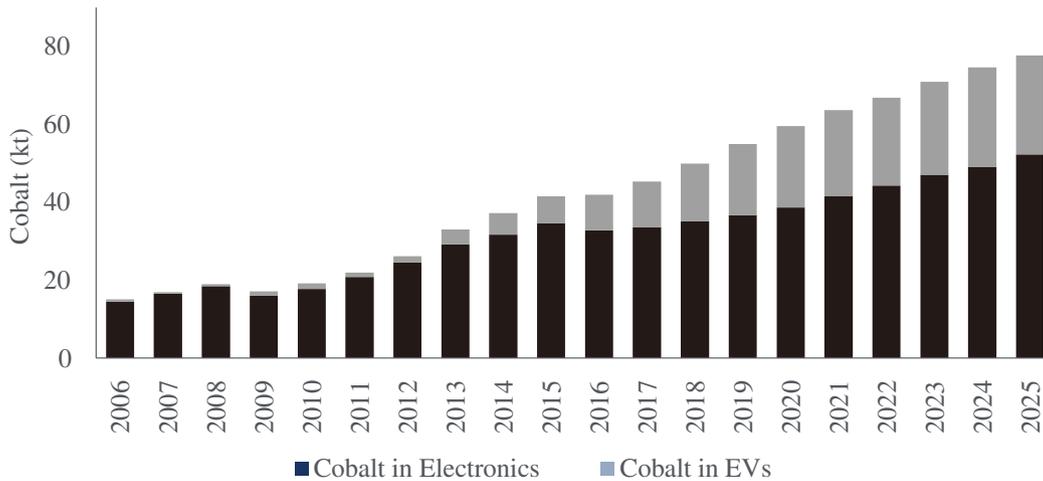


Positions the Group to further benefit from growing demand for cobalt, particularly from electric vehicles

Upon the completion of the Potential acquisition, the Company will acquire the further 24% interest in Tenke which is one of the largest cobalt producers globally, and the Company will further benefit from the growing demand for cobalt. Cobalt is important in an increasing number of applications apart from just rechargeable batteries, including aero-engines, coal-based power generators, floating liquefaction gas platforms and permanent magnets for wind turbines. Cobalt is playing an increasingly vital role in delivering energy efficiencies across several industrial sectors. Since 2000, world consumption of cobalt has more than doubled. More recently, rapid changes have been taking place in cathode chemistry in rechargeable batteries and advancements are being made in electric vehicles. Energy requirements from electric vehicles are expected to grow at 16% per annum over the next ten years. With the increased usage of phones, computers, and electric vehicles (including Tesla's electric cars), the demand for cobalt is projected by CRU International Limited to grow at a 5.1% compounded annual growth rate over the next 5 years. CRU International Limited also projects that the overall supply demand balance will progressively tighten over the next 5 years. With movement into a period of undersupply, historical trends suggest that cobalt prices will rise over this period.

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Batteries, Especially EVs, Will Define the Cobalt Market



Source: CRU International Limited

Enhances the Group's earnings per share, given Tenke's lowest-quartile cost position in the industry

Due to the low cost nature of Tenke, the Board expects the Potential Acquisition will enhance the Group's earnings per share due to the Tenke's lowest quartile cost position in the industry. Historically, Tenke's copper C1 cash costs have consistently been low and, per Wood Mackenzie estimates, are projected to remain low at an average of \$1.15/lb over the next 10 years. It is estimated by Wood Mackenzie that the next 10-year average C1 cash costs is US\$1.15/lb Cu. Annual estimates are as follows: 2017: US\$1.27/lb, 2018: US\$1.11/lb, 2019: US\$1.16/lb, 2020: US\$1.17/lb, 2021: US\$1.17/lb, 2022: US\$1.17/lb, 2023: US\$1.16/lb, 2024: US\$1.15/lb, 2025: US\$1.14/lb, 2026: US\$1.04/lb.

The Potential Acquisition represents a compelling fit with the Company's strategy of acquiring high-quality growth assets that provide earnings, commodity and geographic diversification.

Taking into account the reasons and benefits underlying in the Cooperation Arrangement, the Board is of the unanimous view that the terms of the transactions contemplated under the Cooperation Arrangement are fair and reasonable and are in the best interest of the Company and the Shareholders as a whole.

The terms and conditions of the Cooperation Arrangement were determined on an arm's length basis following the financial analysis by the Company and its professional advisors of information on the Tenke Fungurume Mining Complex, and by reference to, among others, the reserves and resources, mine plan and projected cash flows of the Tenke Fungurume Mining Complex, financial terms of certain other transactions involving producing copper assets, and the Company's assessment of the benefits of the Tenke Fungurume Mining Complex to the future earnings per share of the Company.

LETTER FROM THE BOARD

EFFECTS OF THE POTENTIAL ACQUISITION

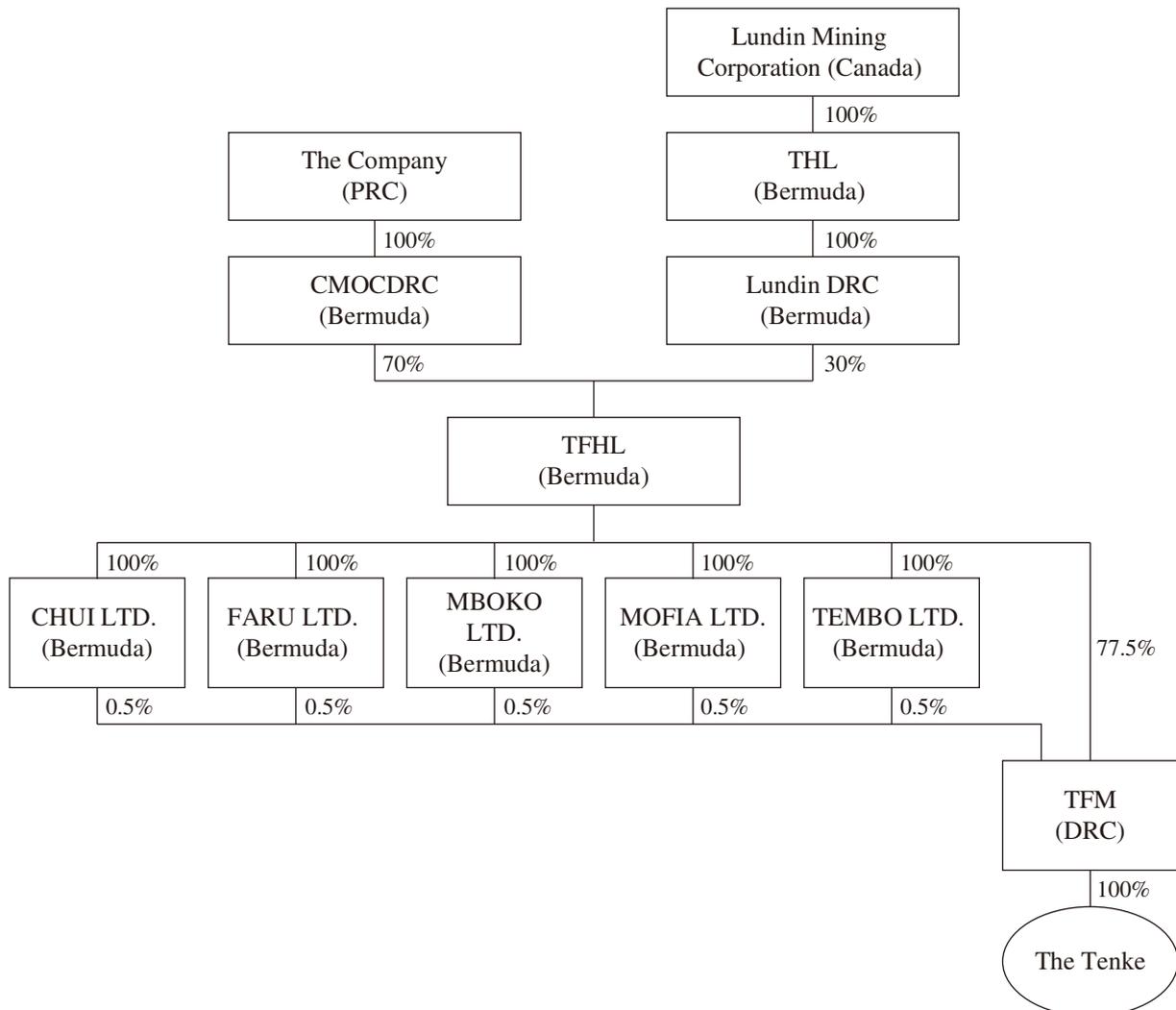
Shareholding structure

The Directors confirm that there will be no change in control of the Company as a result of the Potential Acquisition.

Structure of the Business

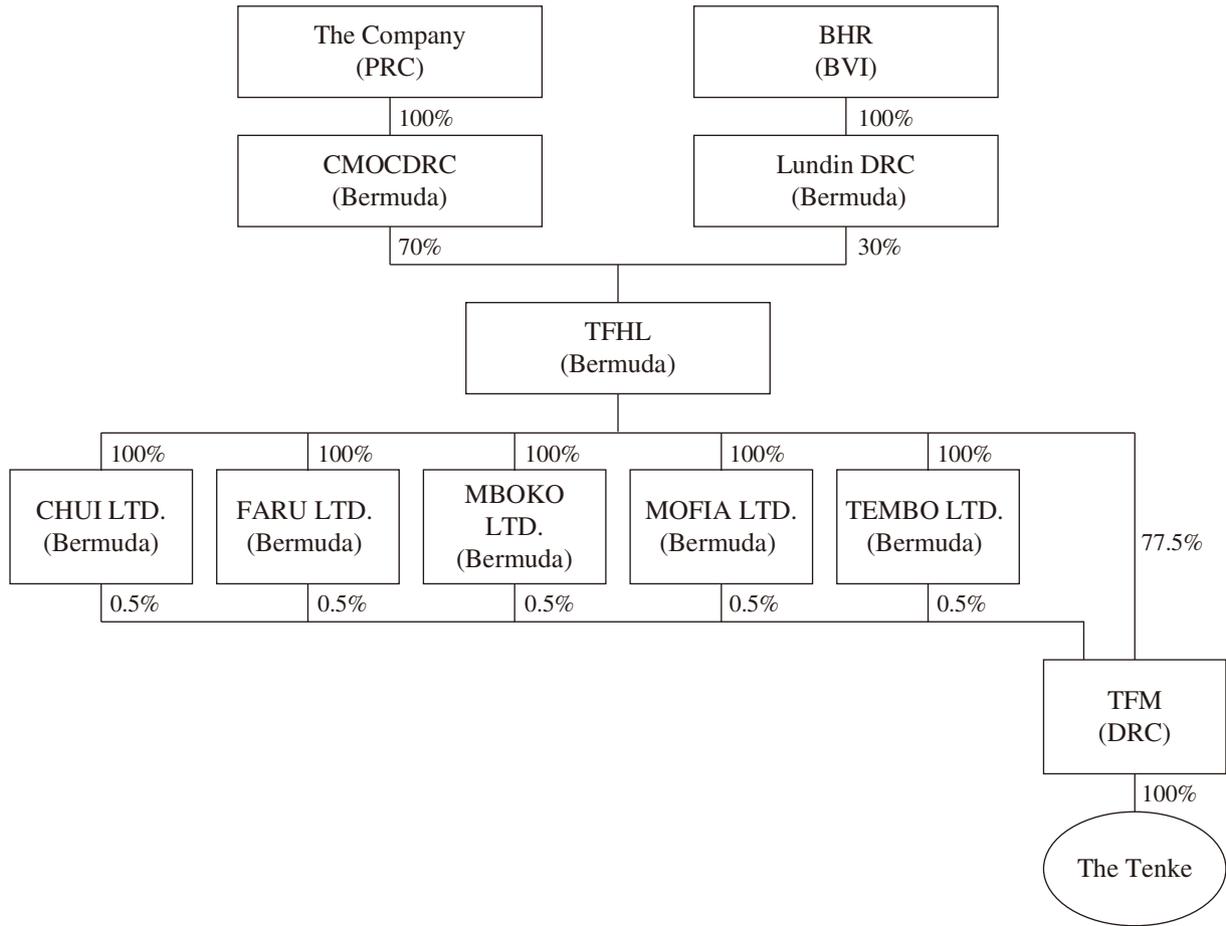
Assuming no changes in the holding of participating interests in the Target Group between the Latest Practicable Date and the date of the completion of the Potential Acquisition, the simplified structure of the Company and Target Group as at the Latest Practicable Date and immediately upon the completion of the Potential Acquisition are illustrated as follows:

As at the Latest Practicable Date:



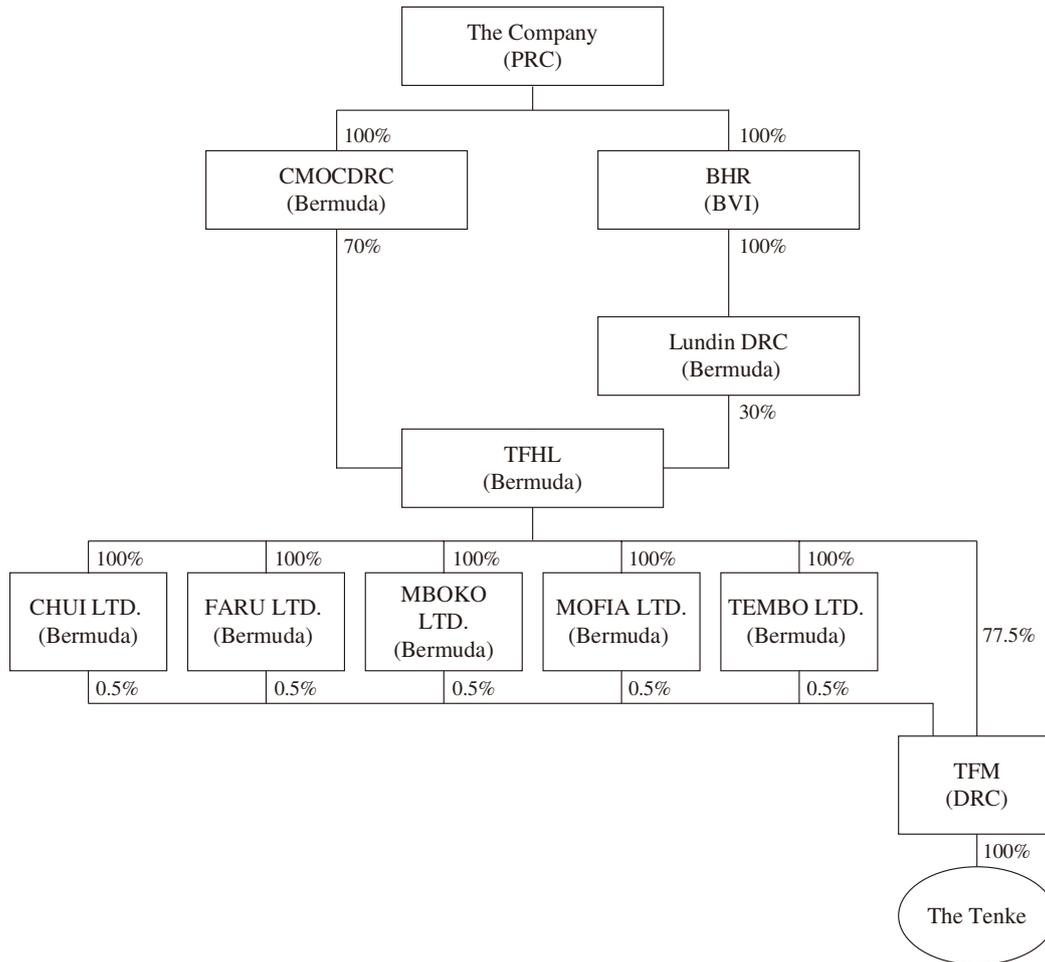
LETTER FROM THE BOARD

Immediately after the completion of the Stock Purchase Agreement:



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Immediately after the exercising of the Call Option or the Put Option (assuming the Company acquired the shares in BHR):



Financial effects of the Potential Acquisition

Reference is made to the circular of the Company dated 8 September 2016 in relation to, among other things, the proposed acquisition of Freeport-McMoRan Inc.'s copper and cobalt businesses. On 9 May 2016, the purchaser, a wholly owned subsidiary of the Company, entered into a stock purchase agreement with Phelps Dodge Katanga Corporation and Freeport-McMoRan Inc., pursuant to which the purchaser has agreed to purchase all of the issued and outstanding ordinary shares of FMDRC, which holds 70% interest in TFHL, which in turn holds 80% interest in TFM, which in turn owns the Tenke Fungurume Mining Complex. As disclosed in the announcement dated 17 November 2016 of the Company, the acquisition of Freeport-McMoRan Inc.'s copper and cobalt businesses was completed.

Upon completion of the Potential Acquisition, Lundin DRC will become a wholly owned subsidiary of the Company, and the Company will indirectly own a 30% equity interest in TFHL (i.e. a further 24% indirect interest in the Tenke Fungurume Mining Complex). Effectively, the Company will own an 80% indirect interest in aggregate in TFM, which owns the Tenke Fungurume Mining Complex.

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The following tables set out, for illustrative purposes only, the key financials of the Group (as if the acquisition of 56% indirect interest in Tenke from Freeport-McMoRan Inc. was completed on 30 June 2016) and the unaudited pro forma financial information of the Enlarged Group after completion of the Potential Acquisition as if the Potential Acquisition had been completed as at 30 June 2016 for pro forma consolidated statement of financial position. The unaudited pro forma financial information of the Enlarged Group has been prepared based on the judgments and assumptions of the Directors for illustrative purposes only. It may not reflect the true financial position of the Enlarged Group as at 30 June 2016 or any future date due to its hypothetical nature.

As the estimated fair values of the assets, liabilities and contingent liabilities of Tenke used in the unaudited preparation of the pro forma financial information of the Enlarged Group might differ from their respective actual fair values upon the completion of the Potential Acquisition, the actual financial effects of the Potential Acquisition might be materially different from the financial position as shown in Appendix IV of this circular.

Consolidated Statement of Financial Performance

Consolidated Statement of Financial Position

	Unaudited consolidated statement of financial position of the Group (as if the acquisition of 56% indirect interest in Tenke from Freeport-McMoRan Inc. was completed on 30 June 2016) as at 30 June 2016 RMB (million) (approx.)	Unaudited pro forma consolidated statement of financial position of the Enlarged Group as at 30 June 2016 (as disclosed in Appendix IV) RMB (million) (approx.)
Total current assets	9,555	9,555
Total assets	52,177	52,177
Total current liabilities	14,103	21,738
Total liabilities	26,495	34,130
Total equity	25,682	18,047

For further information, please refer to Appendix IV to this circular for the unaudited pro forma financial information of the Enlarged Group.

LETTER FROM THE BOARD

The unaudited consolidated net assets of the Group (as if the acquisition of 56% indirect interest in Tenke from Freeport-McMoRan Inc. was completed on 30 June 2016) as at 30 June 2016 were approximately RMB25,682 million, comprising total assets of approximately RMB52,177 million and total liabilities of approximately RMB26,495 million. As extracted from the audited consolidated financial statements of the Company for the year ended 31 December 2015, the total net profit of the Group for the financial year ended 31 December 2015 was approximately RMB703 million.

According to the unaudited pro forma financial information of the Enlarged Group as set out in Appendix IV to this circular, the unaudited pro forma net assets of the Enlarged Group as at 30 June 2016 would be approximately RMB18,047 million, comprising pro forma total assets of approximately RMB52,177 million and pro forma total liabilities of approximately RMB34,130 million.

The unaudited pro forma consolidated statement of financial position of the Enlarged Group as at 30 June 2016 was prepared based on (i) the unaudited pro forma financial information of the Group (as if the acquisition of 56% indirect interest in Tenke from Freeport-McMoRan Inc. was completed on 30 June 2016 and in accordance with the unaudited pro forma financial information as set out in the Appendix IV to circular of the Company dated 8 September 2016 in relation to acquisition of Freeport-McMoRan Inc.'s copper and cobalt businesses) as at 30 June 2016, after incorporating pro forma adjustments described in the accompanying notes as set out in Appendix IV to this circular, assuming the proposed Potential Acquisition were completed on 30 June 2016.

Financial and Trading Prospects of the Group and the Enlarged Group

The Group and the Enlarged Group will continue to focus on its goal of becoming a substantial base, precious and specialty metals producer. We will focus on managing our assets effectively and on extracting operational efficiencies to maximise our profitability. We will continue to evaluate opportunities for further project development and expansion as they arise, subject to supportive market conditions.

We will also continue to leverage our strong marketing capabilities in the PRC and in other countries, utilizing our strong network of relationships globally. The Enlarged Group will continue to source new customers and suppliers to expand the portfolio of our trading business and to strengthen our revenue-generating ability.

The Enlarged Group will have a larger platform to pursue further acquisitions overseas. We will continue to evaluate acquisition opportunities that present compelling value to the Company. The Enlarged Group will have substantial access to funding, which will enable it to pursue value accretive acquisitions in precious, base and specialty metals. In particular, the Enlarged Group will consider acquisitions of producing mines or near production assets, where the risk associated with construction/development is limited.

LETTER FROM THE BOARD

The Enlarged Group will continue to monitor global financial markets and its own capital structure, and will continually reassess the optimal capital structure for its business. This may or may not involve the negotiation of new bank facilities, the renegotiation of existing bank facilities, and may involve accessing the public equity and debt capital markets. At all times the Enlarged Group will seek to have in place a capital structure that supports its strategic objectives, whilst minimising its cost of capital.

Business Plan and Strategy

Tenke is a world-class copper-cobalt mine in the DRC and has been in continuous operation since 2009. Given the mature mining operations at Tenke, the Company expects that capital expenditures would mainly be associated with development for continued operations, and maintaining the plant and infrastructure. The Company expects that the cash flow generated by Tenke will be able to fund its own capital expenditure and working capital requirements. Upon the completion of the acquisition of FMDRC in November 2016, the Company has been conducting a review of Tenke's business and putting in place a budget and medium term plans covering up to 2021, which will be reviewed annually. The budget and medium term plan will include a review the funding position of Tenke. To the extent there is expected to be a shortfall in the overall funding position of Tenke, the Company will contribute funding through internal resources or such other means as the Company considers appropriate. Consistent with the Company's business strategy, the Company intends to focus on maximizing shareholder value, which includes a disciplined approach to capital allocation. The Company continually reviews investment opportunities organically and by acquisition. The Company's acquisition criteria include:

- producing or near producing assets;
- high quality and low cash cost position;
- potential to cut costs and improve operational efficiency;
- meaningful additional expansion potential;
- exploration upside with potential for a long life operation;
- adequate risk mitigation in difficult jurisdictions;
- potential for beachhead position offshore with multiple synergistic future acquisitions;
- accretive to Shareholders; and
- leverages the Company's operational excellence, while acquiring additional technical expertise.

LETTER FROM THE BOARD

Acquisition of Anglo American plc's Niobium and Phosphates Businesses

Reference is made to the circular of the Company dated 8 September 2016 in relation to, among other things, the proposed acquisition of Anglo American plc's niobium and phosphates businesses. On 27 April 2016, a wholly owned subsidiary of the Company entered into a sale and purchase agreement pursuant to which the Company will acquire all the businesses of AAFB and AANB, including their related subsidiaries and associated marketing functions. As disclosed in the announcement of the Company dated 2 October 2016, the acquisition of Anglo American plc's niobium and phosphates businesses was completion on 1 October 2016.

The aggregate consideration for the transaction is USD1.5 billion (equivalent to approximately HKD11.625 billion), subject to standard adjustments for a transaction of this nature. The Group satisfied the consideration payable on completion through a combination of the Group's existing cash reserves and undrawn credit facilities.

The niobium business is an important strategic addition to the Company's existing core molybdenum and tungsten business as it is a critical value-added input for specialised alloys and steel production.

The phosphates business provides strategically important diversification benefits to the Company's metals portfolio. The phosphate sector has attractive long-term fundamentals and positive outlook due to robust demand and supply dynamics in Brazil. The country represents the third largest phosphate consumer for the production of agricultural products including soybeans, coffee and sugarcane; Brazil has the largest potential arable land in the world. The remuneration payable to and benefits in kind receivable (if any) by the Directors have not been varied in consequence of this acquisition.

Acquisition Freeport-McMoRan Inc.'s Copper and Cobalt Businesses

Reference is made to the circular of the Company dated 8 September 2016 in relation to, among other things, the proposed acquisition of Freeport-McMoRan Inc.'s copper and cobalt businesses. On 9 May 2016, the purchaser, a wholly owned subsidiary of the Company, entered into a stock purchase agreement with Phelps Dodge Katanga Corporation and Freeport-McMoRan Inc., pursuant to which the purchaser has agreed to purchase all of the issued and outstanding ordinary shares of FMDRC, which holds 70% interest in TFHL, which in turn holds 80% interest in TFM, which in turn owns the Tenke Fungurume Mining Complex. The consideration is USD2.65 billion (equivalent to approximately HKD20.67 billion) (subject to customary adjustments) plus certain contingent purchase price (up to USD120 million, if any) (equivalent to approximately HKD936 million). As disclosed in the announcement dated 17 November 2016 of the Company, the acquisition of Freeport-McMoRan Inc.'s copper and cobalt businesses was completed. The Group satisfied the consideration payable on completion through a combination of the Group's existing cash reserves and undrawn credit facilities. The remuneration payable to and benefits in kind receivable by (if any) the Directors have not been varied in consequence of this proposed acquisition.

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IMPLICATIONS UNDER LISTING RULES

Connected transactions

As at the Latest Practicable Date, BHR has entered into the Stock Purchase Agreement to acquire all the issued share capital in Lundin DRC, which holds 30% interest in TFHL (an indirect non-wholly owned subsidiary of the Company). Although as at the Latest Practicable Date, BHR has yet to own any shares in TFHL, BHR would become a connected person (as defined in the Listing Rules) of the Company following completion of the Stock Purchase Agreement. Therefore, the provision of assistance in securing the Syndicated Loans (including a guarantee), the grant of the Put Option by the Company to (i) BHR, (ii) BHR Shareholders, (iii) Shareholders of BHR Shareholders, and the acceptance of the Call Option by the Company from (i) BHR, (ii) BHR Shareholders, (iii) Shareholders of BHR Shareholders would constitute connected transactions of the Company under Chapter 14A of the Listing Rules.

Pursuant to Rule 14A.101 of the Listing Rules, a connected transaction between the listed issuer's group and a connected person at the subsidiary level on normal commercial terms or better is exempt from the circular, independent financial advice and shareholders' approval requirements if: (1) the listed issuer's board of directors have approved the transactions; and (2) the independent non-executive directors have confirmed that the terms of the transaction are fair and reasonable, the transaction is on normal commercial terms or better and in the interests of the listed issuer and its shareholders as a whole. None of the Directors has a material interest in the Cooperation Arrangement and was required to abstain from voting at the meeting of the Board approving the Cooperation Arrangement and the transactions contemplated thereunder.

The Company has obtained the approval from the Board regarding the provision of assistance in securing the Syndicated Loans (including a guarantee), grant of the Put Option and the acceptance of the Call Option and the independent non-executive Directors have confirmed that the terms of the transaction in relation to the provision of assistance in securing the Syndicated Loans (including a guarantee), grant of the Put Option and acceptance of the Call Option are fair and reasonable, such transactions are on normal commercial terms or better and in the interests of the Company and the Shareholders as a whole. As such, the provision of assistance in securing the Syndicated Loans (including a guarantee), the grant of the Put Option and acceptance of the Call Option are exempted from the circular, independent financial advice and shareholders' approval requirements by virtue of Rule 14A.101 of the Listing Rules.

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Notifiable transactions

Pursuant to Rule 14.74(1) of the Listing Rules, the grant of the Put Option (the exercise of which is not at the Company's discretion) will be classified as if the Put Option had been exercised in the maximum exercise price approximately at USD591.6 million. As one or more of the applicable percentage ratios (as defined under the Listing Rules) when aggregated under Rule 14.22 of the Listing Rules in respect of the exercise of the Put Option and the provision of assistance in securing the Syndicated Loans (including a guarantee) would be more than 25% but less than 100%, the exercise of the Put Option and the provision of assistance in securing the Syndicated Loans (including a guarantee) constitute a major transaction for the Company under Chapter 14 of the Listing Rules.

In respect of the Call Option granted to the Company, since the exercise of which is at the discretion of the Company and for which no premium is required to be paid by the Company, the acceptance of the Call Option granted to the Company does not constitute a notifiable transaction of the Company under the Listing Rules. However, as the Directors consider that it would be prudent for the Company to have received all necessary approvals to exercise the Call Option, the Company proposed to comply with the relevant requirements under the Listing Rules at the time of accepting the Call Option, as if the Call Option had been exercised in the maximum exercise price approximately at USD591.6 million. Consequently, given the maximum exercise price payable by the Company, the value of the underlying assets, and the profits and revenue attributable to such assets as at the date of this announcement, the exercise of the Call Option, when aggregated under Rule 14.22 of the Listing Rules with the provision of assistance in securing the Syndicated Loans (including a guarantee), will also constitute a major transaction for the Company under the Listing Rules.

To the best of the Directors' knowledge, information and belief, having made all reasonable enquiries, no Shareholder has a material interest in the Cooperation Arrangement. Therefore, no Shareholder is required to abstain from voting on the relevant resolutions to be proposed at the EGM to approve the Cooperation Arrangement and the transactions contemplated thereunder. If any of counterparties to the Cooperation Arrangement or Lundin Mining Corporation, and their close associate (as defined in the Listing Rules) hold any Shares on the date of the EGM, they will be required to abstain from voting on the relevant resolutions to be proposed at the EGM in relation to the Cooperation Arrangement and the transactions contemplated thereunder.

LETTER FROM THE BOARD

Waiver from strict compliance with Rule 4.03 of the Listing Rules

In accordance with Rule 4.03 of the Listing Rules, an accountant's report on Lundin DRC which is included in this circular must be prepared by certified public accountants who are qualified under the Professional Accountants Ordinance (Chapter 50 of the Laws of Hong Kong). Rule 4.03 of the Listing Rules also provides that, in the case of a circular issued by a listed issuer in connection with acquisition of an overseas company, the Hong Kong Stock Exchange may be prepared to permit the accountants' report to be prepared by a firm of practicing accountants which is not so qualified but which is acceptable to the Hong Kong Stock Exchange. Such firm must normally have an international name and reputation and be a member of a recognised body of accountants.

The underlying assets of Lundin DRC are situated in DRC. Given that certain books and records in relation to Tenke and Lundin DRC are situated in DRC and the United States, PwC (Canada) is engaged to conduct an audit on the underlying financial information of Lundin DRC covering from 3 August 2016 (the date of its incorporation) to 30 September 2016, including, by way of note, the summarised financial information of TFHL for the nine months ended 30 September 2016 and the three years ended 31 December 2013, 2014 and 2015 prepared in accordance with International Financial Reporting Standards, the tight timetable for the publication of this circular as agreed among the parties to the Cooperation Arrangement, it is therefore more cost and time effective to engage PwC (Canada) to issue the accountants' report of Lundin DRC in accordance with the International Financial Reporting Standards. Although PwC (Canada) is not registered under the Professional Accountants Ordinance (Chapter 50 of the Laws of Hong Kong), it is registered under the applicable laws of Canada, PwC (Canada) is a member of the Chartered Professional Accountants of Ontario and a registered firm with the Canadian Public Accountability Board. It is also the member firm of a reputable international accounting practice of PricewaterhouseCoopers. The Board is of the view that it is more appropriate to appoint PwC (Canada) instead of professional accountants who are qualified under the Professional Accountant Ordinance (Chapter 50 of the Laws of Hong Kong) as reporting accountants for the purpose of issuing the accountants' report of Lundin DRC to be included in this circular. The Company has therefore applied to the Hong Kong Stock Exchange for a waiver from strict compliance with Rule 4.03 of the Listing Rules to allow PwC (Canada) to prepare the accountants' report of Lundin DRC for the inclusion in this circular. Such waiver has been granted by the Hong Kong Stock Exchange on 8 March 2017.

LETTER FROM THE BOARD

DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT LIABILITY INSURANCE

The Directors, supervisors and senior management may incur liabilities in the course of performing their duties owed to the Company. The Company considers that such liabilities amongst the Directors, supervisors and senior management may arise from making management decisions, litigation risks and regulatory investigations from disclosure issues. In light of the recent completion of overseas acquisitions, the risks associated with their duties have been increased.

In order to fulfill their duties and responsibilities amongst the Directors, supervisors and senior management of the Company, to provide incentive for the Directors, Supervisors and senior management to work hard and fulfill their respective duties and to avoid the litigation risks arising from the performance of their duties, the Company proposes to purchase a liability insurance for its Directors, supervisors and senior management with an annual coverage up to USD30,000,000. The annual premium payable for the liability insurance shall not exceed USD50,000. The scope of insurance shall cover i) management liabilities amongst the Directors, supervisors and senior management, ii) compensation payable by the Company for securities losses, iii) the Company's liabilities arising from employments. The Board seeks a mandate from the Shareholders authorising the management of the Company to deal with the insurance matters, the mandate of which shall include but not limit to the following powers i) to determine, within the limit stated above, the annual cap of compensation and premium payable under the liability insurance; ii) duration of the liability insurance; iii) scope of coverage; iv) choice of insurance institutions; v) execution of the relevant documents and vi) all ancillary matters related to the above matters.

According to the requirements of the Company Law of PRC, the Articles of Association and the Shanghai Stock Exchange Listing Rules, the Board put forward the resolution of liability insurance for the Directors, supervisors and senior management, as an ordinary resolution, for the approval by the Shareholders at the EGM.

EGM

The Board proposed to seek the Shareholders' approval at the EGM to approve the Cooperation Arrangement. Amended notice of the EGM is set out on pages IX-1 to IX-3 of this circular.

LETTER FROM THE BOARD

LMG and CFC, who as at the Latest Practicable Date in aggregate hold approximately 63.14% equity interest in the Company, have separately irrevocably undertaken to vote in favour of the resolution to approve the Cooperation Arrangement and the transactions contemplated thereunder.

CLOSURES OF REGISTER OF MEMBERS

In order to determine the list of H Shareholders who will be entitled to attend and vote at the EGM, the Company's register of members of H Shares is closed from Saturday, 11 February 2017 to Friday, 14 April 2017 (both days inclusive) during which period no transfer of shares would be effected. H Shareholders whose names appear on the register of members of H Shares of the Company at 4:30 p.m. on Friday, 10 February 2017 are entitled to attend and vote at the EGM. In order for the H Shareholders to qualify for attending and voting at the EGM, Shareholders whose H Shares are not registered in their names should complete and lodge their respective instruments of transfer with the relevant H Share certificates with Computershare Hong Kong Investor Services Limited, the Company's H Share registrar in Hong Kong, at Shops 1712–1716, 17th Floor, Hopewell Centre, 183 Queen's Road East, Wanchai, Hong Kong, and in any case no later than 4:30 p.m. on Friday, 10 February 2017.

PROXY ARRANGEMENT

Amended form of proxy applicable to the EGM is set out on pages X-1 to X-2 of this circular.

For H Shareholders, whether or not you are able to attend the EGM in person, you are requested to complete the proxy form applicable to the EGM in accordance with the instructions printed thereon, and return it to the Company's H Share registrar in Hong Kong, Computershare Hong Kong Investors Services Limited, at 17M Floor, Hopewell Centre, 183 Queen's Road East, Wanchai, Hong Kong, as soon as possible but in any event not less than 24 hours before the time appointed for holding the EGM or any adjournment thereof. Completion and return of the proxy form applicable to the EGM will not preclude you from attending and voting in person at the EGM or any adjournment thereof should you so wish.

VOTING BY WAY OF POLL

Pursuant to Rule 13.39 of the Listing Rules, any votes of the Shareholders at the EGM must be taken by poll except where the chairman, in good faith, decides to allow a resolution which relates purely to a procedural or administrative matter to be voted on by a show of hands. The poll results announcement will be announced by the Company after the EGM in the manner prescribed under Rule 13.39(5) of the Listing Rules.

LETTER FROM THE BOARD

The Company will offer a platform to A Shareholders (including Northbound Investors) to vote online through the general meeting online voting system of the SSE. Please refer to the relevant announcements published by the Company on the SSE for details.

RECOMMENDATIONS

The Board considers that the special resolutions in relation to the Cooperation Arrangement, the Call Option together with the provision of assistance in securing the Syndicated Loans (including a guarantee), the Put Option together with the provision of assistance in securing the Syndicated Loans (including a guarantee) and the ordinary resolution in relation to the purchase of liability insurance for the Directors, supervisors and senior management are in the best interests of the Company and the Shareholders as a whole. Accordingly, the Board recommends the Shareholders to vote in favour of the relevant resolutions to be proposed at the EGM as set out in the amended notice of EGM.

Yours faithfully,
By Order of the Board
China Molybdenum Co., Ltd.*
Li Chaochun
Chairman

INFORMATION ON THE TENKE FUNGURUME MINING COMPLEX

OVERVIEW

Upon the completion of the acquisition of all the issued share capital of FMDRC in November 2016, the Company has acquired a 56% indirect interest in TFM and the mining operation of Tenke has been under the control and management of the Company.

Tenke is a copper-cobalt operation which is believed to host one of the world's largest copper-cobalt resources. The mine is situated approximately 175km northwest of the city of Lubumbashi in the southeast region of the DRC. Lubumbashi has a population of 1.8 million and is the capital of the newly designated province of Haut-Katanga, which has a population of 4.0 million.

Tenke is located in a hilly region between Tenke and Fungurume. Tenke and Fungurume are both urban centers serving as primary transportation centers and marketplaces for the region. Between Tenke and Fungurume there are numerous villages, fields, forests and mineralized lands.

TFM was established in December 1996 under the DRC Companies Act and formed for the purpose of developing the deposits of copper, cobalt, and associated minerals. The Company indirectly owns 56% of TFM and is the operating partner. Lundin Mining Corporation indirectly owns 24% and Gécamines holds a repayable carried 20% interest in the property.

Construction of Tenke was initially approved by the Phelps Dodge Katanga Corporation prior to the end of 2006. The Phelps Dodge Katanga Corporation was acquired by the Freeport-McMoRan Inc. in 2007. The project was first commissioned in the first half of 2009. The first copper cathodes were stripped in March and first cobalt hydroxide was produced in May.

Currently, Tenke includes the mining, processing and general infrastructure on the Tenke concession for the exploitation, initially, of oxide ores. Copper and cobalt will be recovered from Kwatebala, Fungurume, Fwaulu, Kansalawile, Mambilima, Mwandinkomba, Pumpi, Tenke, Fungurume VI, Kazinyanga, Kato L3K, Shinkusu, Zikule, and Mudilandima deposits. The deposits are found within mineral concessions totaling 1,437km².

Initially, the operation was designed to process 8,000tpd of ore for the production of 115,000tpa copper cathode and >8,000tpa of cobalt as hydroxide. Debottlenecking, plant upgrades, and Phase 2 Expansion, which was completed in 2014, all have allowed for an increase in throughput of 14,800tpd for production

INFORMATION ON THE TENKE FUNGURUME MINING COMPLEX

of 195,000tpa copper cathode and 15,000tpa of cobalt as hydroxide. Construction of a second sulphuric acid plant has been substantially completed.



Source: Competent Person's Report

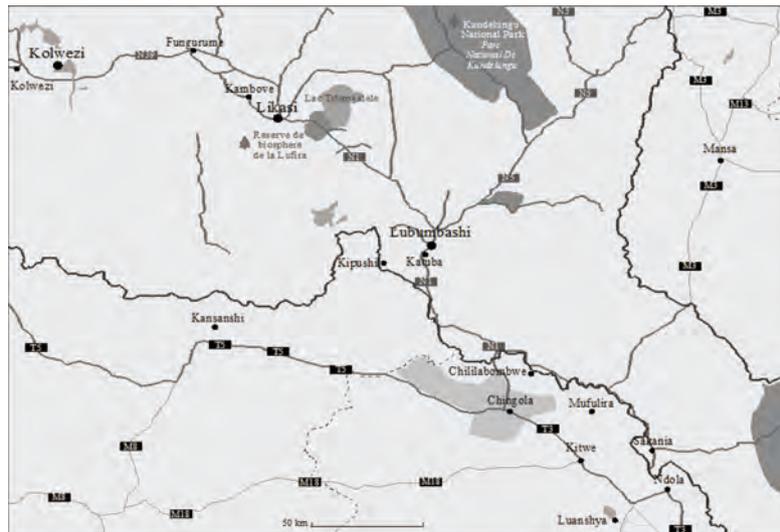
ACCESS

There are several forms of access to Tenke. The copper and cobalt product are primarily transported by truck between the mine and ports in South Africa via transport hubs in Ndola and Chingola, Zambia. An airstrip constructed on the concession accommodates up to a medium sized aircraft and is used to transport employees and contractors. TFM maintains this air strip in good condition.

Due to the lack of viable port facilities in the area, usage of ports in South Africa is necessary. Access routes to ports are through Zambia, Botswana, and Zimbabwe. Within the DRC, road access varies in quality, though generally are all comprised of hardened dirt roads.

INFORMATION ON THE TENKE FUNGURUME MINING COMPLEX

Regional Map Showing Access Routes from Zambia to Tenke

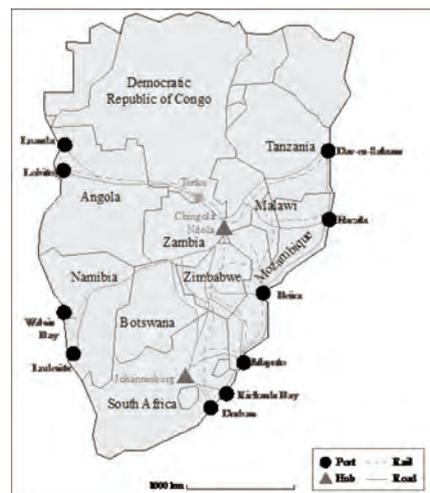


Source: Competent Person's Report

There is also a rail system comprised of a single track that services Tenke and Fungurume. The track accommodates two trains per week but is inadequate for projected project requirements.

There are several roads and ports in proximity to Tenke. The image below is an overview of these railroad, road and port locations.

Railroad, Road, and Port Locations



Source: Technical Report

INFORMATION ON THE TENKE FUNGURUME MINING COMPLEX

Upon completion of the Stock Purchase Agreement, Lundin DRC will become a wholly owned subsidiary of BHR, and BHR will own a 24% indirect interest in TFM, which owns Tenke.

Upon the completion of the Potential Acquisition as contemplated under the Cooperation Arrangement, the Company will be able to acquire the 24% indirect interest of TFM from BHR and/or the Investors. Effectively, the Company will own a 80% indirect interest in TFM, which owns Tenke.

TFM's current operations consist primarily of exploration, mining, processing and ancillary operations, including marketing, of refinable mineral substances produced from the mining concession areas near Tenke and Fungurume in the DRC. TFM began producing copper cathodes in March 2009 and began producing cobalt, in the form of cobalt hydroxide, in September 2009. Substantially all of TFM's assets are located in the DRC.

Mining rights held by TFM

TFM operates Mining Concession No. 198 and Mining Concession No. 199 pursuant to:

- the 1996 Mining Convention as subsequently amended and which is now the Mining Convention comprising the ARMC and the ARMC-A1; and
- the Agreement for the Formation of TFM as amended and restated by the ARSA and ARSA-A1.

Mining Concession No. 198 and Mining Concession No. 199 were granted under the former mining legislation – the Mining Law and the 1967 Mining Regulations. The latter mining legal regime was applicable prior to the entry into force of the Mining Code and the Mining Regulations, which constitute the current mining regime.

As TFM did not opt for the application of the provisions of the Mining Code to the mining rights in accordance with the Mining Code, therefore the mining rights held by TFM are still governed by the Mining Law and the 1967 Mining Regulations. Our local DRC counsel confirms that Mining Concession No. 198 and Mining Concession No. 199 are in good standing and there is no objective element that creates doubt in respect of their validity.

INFORMATION ON THE TENKE FUNGURUME MINING COMPLEX

The acquisition of Tenke exploitation permits by TFM

TFM acquired Mining Concession No. 198 from Gécamines by Ministerial Order No. 368/CAB.VPM/MINES/96 of 9 December 1996 of the Minister of Mines which authorised the transfer.

- The first validity period of mining concession No. 198, designated as exploitation permit No. 123, expired on 16 September 2005.
- The renewal of Exploitation Permit No. 123 was granted by Ministerial Order No. 1896/CAB.MIN./MINES/01/2006 of 10 October 2006 for a duration of 15 years, from 17 September 2005 to 16 September 2020.
- CAMI delivered the exploitation certificate No. CAMI/CE/940/2004 relating to exploitation permit No. 123, with the statement of its renewal for a duration of 15 years, from 17 September 2005 to 16 September 2020.
- Pursuant to the subsequent division of exploitation permit No. 123 into three exploitation permits No. 123, No. 9707 and No. 9708, exploitation certificates No. CAMI/CE/5569/09, No. CAMI/CE/5570/09 and No. CAMI/CE/5571/09 were issued in 2009 stating that exploitation permits No. 123, 9707 and 9708 are valid from 17 September 2005 to 16 September 2020.
- In relation to Tenke exploitation permits, the surface areas covered by the three exploitation permits, ie Exploitation Permit No. 123, Exploitation Permit No. 9707 and Exploitation Permit No. 9708, as reflected in the exploitation certificates dated 2 October 2009 are as follows:

Exploitation Permits	Number of squares (carrés)	Approximate area covered (in hectares)	
		Estimated on the basis of the supposed area of each square (84.955 hectares) pursuant to Article 39 of the Mining Regulations	Expiry date
Exploitation Permit No. 123	448	38,059.84	16 September 2020
Exploitation Permit No. 9707	405	34,406.78	16 September 2020
Exploitation Permit No. 9708	134	11,383.97	16 September 2020
Total	987	83,850.59	

INFORMATION ON THE TENKE FUNGURUME MINING COMPLEX

The acquisition of Fungurume exploitation permits by TFM

TFM acquired Mining Concession No. 199 from Gécamines by Ministerial Order No. 367/CAB.VPM/MINES/96 of 9 December 1996 of the Minister of Mines which authorised the transfer. The transfer was duly transcribed on the certificate of mining concession No. 199 delivered to TFM.

- The first validity period of mining concession No. 199, now designated as exploitation permits No. 159, No. 4728 and No. 4729, expired on 13 August 2011.
- Ministerial Orders No. 0009/CAB.MIN/MINES/01/2012, No. 0010/CAB.MIN/MINES/01/2012 and No. 0011/CAB.MIN/MINES/01/2012 of 31 January 2012 granting the renewal of exploitation permits No. 159, No. 4728 and No. 4729.
- Following the notification of the Ministerial Orders granting the renewal of exploitation permits No. 159, No. 4728 and No. 4729 TFM transmitted, on 8 March 2012, to the CAMI the original of exploitation certificates No. CAMI/CE/2405/2006 (EP No. 159), No. CAMI/CE/2406/2006 (EP No. 4729) and No. CAMI/CE/2407/2006 (EP No. 4728) were originally issued on 4 August 2006 and on the back of which the CAMI transcribed the first renewal of exploitation permits No. 159, No. 4728 and No. 4729 for a duration of fifteen years, from 13 August 2011 to 12 August 2026.
- In relation to the Fungurume exploitation, the surface areas covered by the three exploitation permits, ie Exploitation Permit No. 159, Exploitation Permit No. 4728 and Exploitation Permit No. 4729, as reflected in the exploitation certificates dated 15 March 2012 are as follows:

Exploitation Permits	Number of squares (carrés)	Approximate area covered (in hectares)	
		Estimated on the basis of the supposed area of each square (84.955 hectares) pursuant to Article 39 of the Mining Regulations	Expiry date
Exploitation Permit No. 159	435	36,955.43	12 August 2026
Exploitation Permit No. 4728	135	11,468.93	12 August 2026
Exploitation Permit No. 4729	322	27,355.51	12 August 2026
Total	892	75,779.86	

AVAILABILITY AND SOURCES

I. Power

The power supply to the plant site is provided through a high voltage overhead line from the Fungurume substation to a switchyard at the plant site. Power is also supplied to the village from the Fungurume substation through a different line.

The electrical load has been interconnected to the Fungurume substation in the Katanga grid, which is supplied by hydroelectric power from SNEL.

TFM has a long-term contract with SNEL for supply of electricity from the Nseke Power Station located west of Tenke by Kolwezi. In addition, TFM has five agreements with SNEL:

- (i) one long-term purchased power agreement to set the price TFM will pay for power;
- (ii) two finance agreements to finance improvements to the power system infrastructure;
- (iii) one maintenance agreement to ensure system reliability; and
- (iv) one administration agreement to implement the finance and maintenance agreements.

II. Water

Within a reasonable distance of the mine site and the plant, there is a reliable source of water supply. Wells in three different sub-catchments that surround Kwatebala can sustain the mining and plant processes with enough capacity. Additional water supply is sourced from the tailings-storage facility supernatant return water and run-off stormwater collected from waste rock stockpiles and plant site.

Independent wells are also located at Fungurume. These wells source water to supply to the permanent village located north of Fungurume.

III. Tailings and Mine Waste Storage

A tailings facility lies to the west of the process plant and northwest of the Kwatebala pit. Other areas have been identified for future tailings storage. Waste rock is placed in several sites to the north and south of the plant site. There are dedicated facilities for tailings, waste rock, and domestic, industrial, and hazardous waste. Hazardous waste is transported off the site.

INFORMATION ON THE TENKE FUNGURUME MINING COMPLEX

HISTORY

Date	Event
1917–1921 & 1942–1968	Union Minière du Haut Katanga drilling, trenching, pitting and adit development at Fungurume and Tenke
1969–1970	Gécamines limited drilling at Fungurume and Tenke
1971	Société Minière de Tenke Fungurume (SMTF) operating Arm of partners Charter Consolidated Limited (28%), Amoco Minerals Co (28%), Tempelsman and Son (3%), Omnimine (7%), Mitsui (14%) and the Zairian Government (20%) assumed control
1971–1976	\$280 million expended for exploration, various studies, equipment and site infrastructure
1976	SMTF terminated interest due to deteriorating political and social situation, falling copper price and delays in construction of a power line through the region control reverted to Gécamines
1994	Lundin Holding Limited commenced discussions with Gécamines
1994	Lundin commissioned SNC Lavalin Ltd's Mining and Metallurgical Division to assist in completing technical evaluation
December 1994	Gécamines issued invitations for proposals to develop property
January 1995	Gécamines issued invitations to five additional companies and extended the deadline to April 1995
July 1996	Lundin Holding Limited was advised they were the successful bidder
November 1996	TFM Mining Convention and Formation Agreement executed
December 1996	TFM Mining Convention and formation of TFM formally approved by Decrees of the Prime Minister
January 1997	KSLE, wholly owned company in SNC Lavalin Group, started bankable feasibility study using seven sub-consultants. Lundin Holding Limited was supported by nine specialty sub-consultants

INFORMATION ON THE TENKE FUNGURUME MINING COMPLEX

Date	Event
December 1998	BHP enters into Exclusive Option to Purchase Lundin Holding Limited Shares
February 1999	Lundin Holding Limited halts Feasibility Study work and declares force majeure
2000	BHP commissioned Bateman to conduct conceptual study
December 2000	The Phelps Dodge Katanga Corporation enters into option agreement to acquire one-half of BHP's interest
September 2002	The Phelps Dodge Katanga Corporation acquires remaining interest in the Exclusive Option to Purchase Lundin Holding Limited Shares
January 2003	The Phelps Dodge Katanga Corporation commissions Bateman Engineering to prepare a scoping study
September 2003	The Phelps Dodge Katanga Corporation and TMC submit formal proposal to amend the existing project agreements
2004–2005	The Phelps Dodge Katanga Corporation supports TFM negotiations with DRC for ARMC
September 2005	ARMC and ARSA executed by DRC government and Gécamines
October 2005	Presidential Decree formally approving the ARMC
November 2005	The Phelps Dodge Katanga Corporation exercises option to take 70% direct interest in Lundin Holding Limited
November 2005	Force majeure lifted by Lundin Holding Limited
2005–2006	Feasibility Study conducted by GRD Minproc; ESIA conducted by Golder
February–December 2006	16,000 meter core drilling program by The Phelps Dodge Katanga Corporation
August 2006	Commenced detailed design

INFORMATION ON THE TENKE FUNGURUME MINING COMPLEX

Date	Event
December 2006	The Phelps Dodge Katanga Corporation Board conditionally approved construction
February 2007	Civil work mobilized on site
March 2008	Open pit stripping commences
March 2009	Pre-commissioning and plant startup
March 2009	First copper production
October 2010	Addendum No. 1 to the ARMC and the ARSA executed
April 2011	Addendum No. 1 to the ARMC formally approved by Ordinance of the President
November 2011	Announcement of the Phase 2 Expansion of Tenke to increase daily throughput to 14,000tpd
March 2012	President and Prime Minister of the DRC signed an Ordinance formally approving the bylaw changes for TFM. Lundin ownership is reduced to 24.0%
January–March 2013	Phase 2 Expansion substantially completed
December 2013	Full year production exceeds 200,000tpa
October 2014	Construction of a new acid plant at Tenke begins; the plant will significantly reduce need to import third-party acid
August 2015	Freeport-McMoRan Inc. announces a revised plan to reduce capital spending in 2016 by 50%
May 2016	Freeport-McMoRan Inc. announces proposed sale of its 56% stake in Tenke to the Company
November 2016	Lundin Mining Corporation announces proposed sale of its 24% stake in Tenke to BHR and the Company acquires the 56% indirect interest in Tenke from Freeport-McMoRan Inc.

INFORMATION ON THE TENKE FUNGURUME MINING COMPLEX

DEPOSIT CHARACTERISTICS

The Tenke Fungurume Deposits are sediment-hosted copper and cobalt deposits with oxide, mixed oxide-sulphide and sulphide mineralizations. The mineralization is mainly associated with two 5m–15m thick dolomitic shale horizons separated by 20m of silicified dolomite. The dominant oxide minerals are malachite, pseudomalachite and heterogenite. Sulphide minerals consist of bornite, carrollite, chalcocite, and chalcopyrite. Dolomite and quartz are the main gangue minerals. Fourteen deposits within the concession contribute to the resource base.

Generally, there is not a clear transition between oxide and sulphide mineralization at Tenke. There are large zones of transitional material at varying depths. In the transitional and sulphide mineral resources, approximately 68% of the resource is transitional.

The Tenke Fungurume Deposits are mined using continuous surface miners combined with conventional drill-blast, load and haul open pit techniques.

The Statement of Ore Reserves and Mineral Resource below need to be read in conjunction with the Competent Person's Report in Appendix V, which contains the required JORC Code and Chapter 18 of the Listing Rules disclosures.

In addition to the in situ Mineral Resource presented below, a total of 48.2Mt at 1.3% TCu, 1.2% AsCu, 0.31% TCo and 0.26% AsCo occurs in stockpiles on the ROM pad and classified as Measured. This material is estimated based on survey controls, truck counts and grade control data.

INFORMATION ON THE TENKE FUNGURUME MINING COMPLEX

JORC Ore Reserves as at 31 December 2016

Area	Quantity (Mt)	TCu (%)	AsCu (%)	TCo (%)	AsCo (%)	TCu (Mlbs)	TCo (Mlbs)
All Open Pits							
Proved	76.9	3.1	0.32	2.8	0.25	5,285.5	544.0
Probable	56.5	2.7	0.30	2.4	0.25	3,365.3	376.1
Sub Total	<u>133.4</u>	<u>2.9</u>	<u>0.31</u>	<u>2.6</u>	<u>0.25</u>	<u>8,650.7</u>	<u>920.0</u>
Ore Stockpiles							
Proved	48.2	1.3	0.31	1.2	0.26	1,389.6	326.6
Probable	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sub Total	<u>48.2</u>	<u>1.3</u>	<u>0.31</u>	<u>1.2</u>	<u>0.26</u>	<u>1,389.6</u>	<u>326.6</u>
All Areas							
Proved	125.1	2.4	0.32	2.2	0.26	6,675.1	870.5
Probable	56.5	2.7	0.30	2.4	0.25	3,365.3	376.1
Grand Total	<u>181.6</u>	<u>2.5</u>	<u>0.31</u>	<u>2.2</u>	<u>0.25</u>	<u>10,040.4</u>	<u>1,246.6</u>

Notes:

1. Tonnages are metric tonnes reported on a dry basis.
2. Copper price: \$2.88/lb and Cobalt price: \$12.4/lb.
3. Ore stockpiles include working-in-progress stockpiles balance as at 31 December 2016.
4. Figures reported are rounded which may result in small tabulation errors. Ore Reserves have been estimated under the 2012 Edition of the JORC Code.

INFORMATION ON THE TENKE FUNGURUME MINING COMPLEX

JORC Open Pit Mineral Resources as at 31 December 2016

Ore Type	Classification	Quantity (Mt)	TCu (%)	TCo (%)	AsCu (%)	AsCo (%)
Leach Cap	Measured	1.4	0.6	0.45	0.4	0.39
	Indicated	2.7	0.4	0.43	0.2	0.37
	Inferred	2.3	0.2	0.40	0.2	0.35
	Sub Total	6.4	0.4	0.43	0.2	0.37
Oxide	Measured	117.7	2.8	0.30	2.5	0.24
	Indicated	119.3	2.4	0.26	2.1	0.21
	Inferred	34.5	2.0	0.19	1.8	0.16
	Sub Total	271.4	2.5	0.27	2.2	0.22
Mixed	Measured	39.2	3.5	0.30	1.7	0.17
	Indicated	52.5	3.1	0.26	1.5	0.15
	Inferred	13.8	2.1	0.24	1.1	0.14
	Sub Total	105.4	3.1	0.27	1.5	0.16
Sulphide	Measured	12.6	4.4	0.29	0.7	0.12
	Indicated	17.8	3.6	0.22	0.6	0.07
	Inferred	7.1	2.8	0.17	0.3	0.02
	Sub Total	37.6	3.7	0.23	0.6	0.08

Notes:

- All Mineral Resources figures reported in the table above represent estimates at 31 December 2016. Mineral Resource estimates are not precise calculations, being dependent on the interpretation of limited information on the location, shape and continuity of the occurrence and on the available sampling results. The totals contained in the above table have been rounded to reflect the relative uncertainty of the estimate. Rounding may cause some computational discrepancies.
- The reported Mineral Resource are based on a cashflow profit cut off grade basis, which is based on the Ore Reserve parameters and a price of 3.50/lb Cu and 15.00/Lb Co as detailed in the Competent Person's Report in Appendix V.

INFORMATION ON THE TENKE FUNGURUME MINING COMPLEX

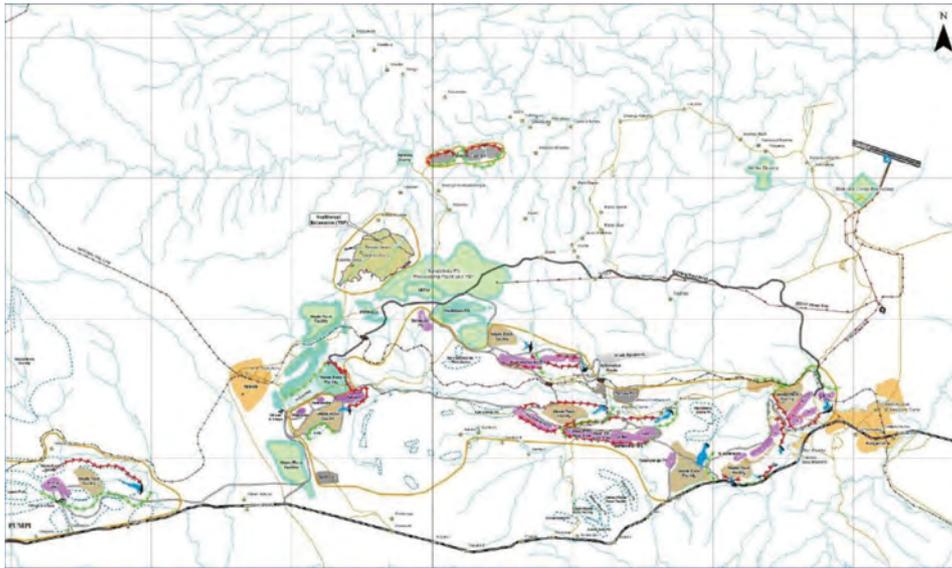
JORC Underground Mineral Resources as at 31 December 2016

Ore Type	Classification	Quantity (Mt)	TCu (%)	TCo (%)	AsCu (%)	AsCo (%)
Oxide	Measured	4.7	2.8	0.32	2.5	0.24
	Indicated	30.7	2.9	0.30	2.5	0.23
	Inferred	14.7	3.0	0.28	2.6	0.20
	Sub Total	50.1	2.9	0.30	2.5	0.22
Mixed	Measured	6.6	3.4	0.19	1.7	0.12
	Indicated	68.1	3.2	0.27	1.5	0.15
	Inferred	169.1	3.0	0.30	1.4	0.16
	Sub Total	243.7	3.1	0.29	1.5	0.15
Sulphide	Measured	0.9	3.2	0.28	0.70	0.06
	Indicated	26.6	3.0	0.22	0.8	0.05
	Inferred	93.9	3.0	0.25	0.8	0.05
	Sub Total	121.4	3.0	0.24	0.8	0.05

Notes:

- All Mineral Resources figures reported in the table above represent estimates at 31 March 2016. Mineral Resource estimates are not precise calculations, being dependent on the interpretation of limited information on the location, shape and continuity of the occurrence and on the available sampling results. The totals contained in the above table have been rounded to reflect the relative uncertainty of the estimate. Rounding may cause some computational discrepancies.
- The reported Mineral Resource are based on a cash flow profit cut off grade basis, which is based on the Ore Reserve parameters and a price of 3.50/lb Cu and 15.00/Lb Co as detailed in the Competent Person's Report in Appendix V.

Location of Deposits



Source: Technical Report

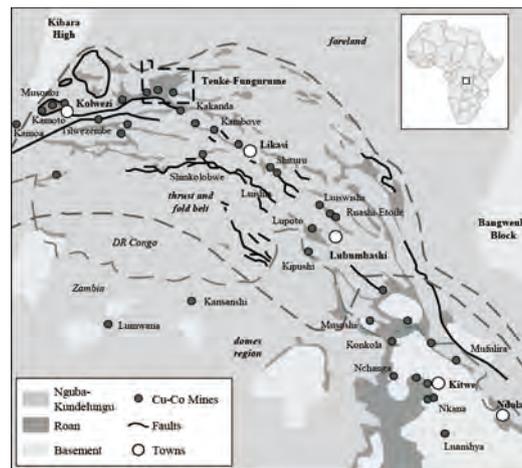
GEOLOGY

The Tenke Fungurume Deposits are typical of those that comprise the Central African Copperbelt which is located in the Lufilian Arc, a 500km geological structure that stretches from southern DRC to Zambia. The Tenke Fungurume Deposits are located at the north of the arc, which formed between the Angolan Plate to the southeast and Congo Plate to the northwest during the Neoproterozoic (650–600 million years before present). Tenke sediment hosted copper-cobalt deposits occur near the base of a thick succession of sedimentary rocks belonging to the Katanga Supergroup of Neoproterozoic Age (880–570 million years before present). The older rocks of the basement complex belong to the Kibara Supergroup while the ore-hosting Roan sedimentary rocks' erosional source is the Bangweulu basement block. The stratigraphic column is divided into the Kundelungu Supergroup (younger) and Roan Supergroup (older) in the area.

The Tenke Fungurume Deposits lie in Roan Group rocks. This window is the largest tectonic window of the Roan Group rock in the Central African Copperbelt and is surrounded by Ngubu and Kundelungu lithotectonic assemblages.

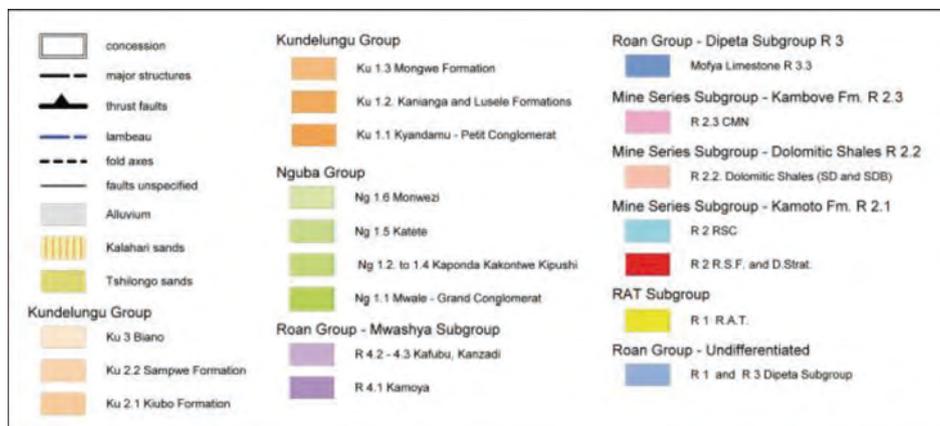
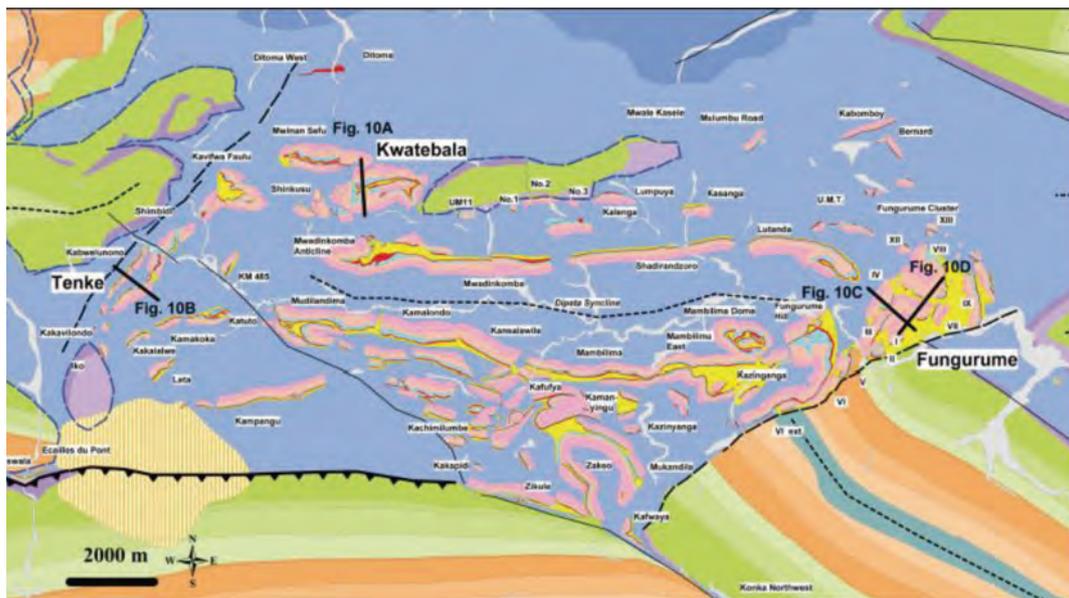
INFORMATION ON THE TENKE FUNGURUME MINING COMPLEX

Regional Geology



Source: Technical Report

Property Geology



Source: Competent Person's Report

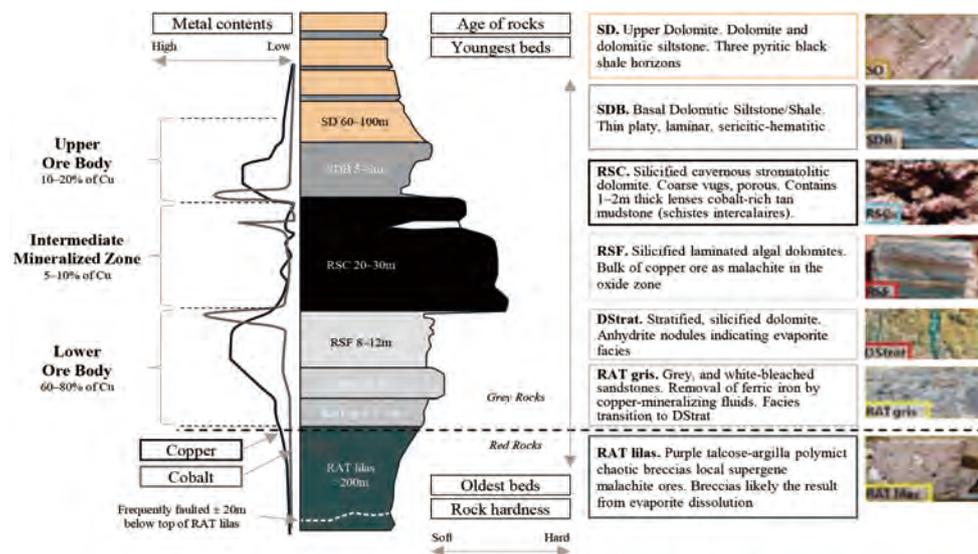
INFORMATION ON THE TENKE FUNGURUME MINING COMPLEX

MINERALIZATION

The copper-cobalt mineralization at Tenke is mainly associated with two dolomitic shale horizons (RSF and SDB) separated by cellular silicified dolomite (RSC). Primary copper and cobalt mineralogy is predominantly chalcocite (Cu_2S), digenite (Cu_9S_2), bornite (Cu_5FeS_4), and carrollite (CuCo_2S_4). Oxidation has resulted in widespread alteration producing malachite ($\text{Cu}_2\text{CO}_3(\text{OH})_2$), pseudomalachite ($\text{Cu}_5(\text{PO}_4)_2(\text{OH})_4$), chrysocolla (hydrated copper silicate) and heterogenite ($\text{Co}_3+\text{O}(\text{OH})$).

The relative distribution of copper and cobalt in the Mine Series is shown below:

Mine Series Copper and Cobalt Distributions (Schuh)



Source: Competent Person's Report

MINING OPERATIONS

Tenke mines copper-cobalt oxides through open-pit mining techniques. Additionally, drill and blast is used in both ore and waste rock. Conventional loaders and trucks are the main form of transportation of ore to crusher or stockpiles and waste to dumps. To increase mining rates, larger mining equipment is starting to be introduced. In 2015, Fwaulu, Tenke, Fungurume and Mwandinkomba orebodies were the sources of production. Over the mine life, other orebodies are scheduled to be mined in a number of different phases.

Copper is extracted through the usage of semi-autogenous grinding milling, sulphuric acid leach, and solution extraction and electrowinning ("SX-EW") to produce copper cathode. Iron, manganese and aluminum are removed from a low grade residue stream from the tankhouse and a cobalt rich solution is recovered which purified before the cobalt hydroxide product is precipitated out. Cobalt is sold as cobalt hydroxide under contract and on the spot market while copper is marketed through the Company's copper marketing program.

INFORMATION ON THE TENKE FUNGURUME MINING COMPLEX

EXPLORATION

(Source: Public Filings)

Over time, the mineral concessions at Tenke have faced multiple phases of exploration. In 2008 and 2009, the concessions were subject to geophysical and seismic surveys in addition to trenching and diamond drill programs. In 2013, the concessions were subject to additional airborne geophysical surveys. Through these surveys, electromagnetic and radiometric data was gathered and interpreted for future exploration targeting.

In 2016, exploration is being targeted on locating additional mineable, high-grade, oxide resources and resource conversion on eight of the fifteen total deposits. Drilling is budgeted at 13,200m in 68 holes. A TITAN 24 DCIP and MT geophysical survey are also planned to be conducted on the east side of the Dipeta syncline. There are also plans to conduct infill drilling at a number of the deposits to convert probable reserves to Proved Reserves. This infill drilling is budgeted at 22,000m in 163 holes.

PROCESSING OVERVIEW

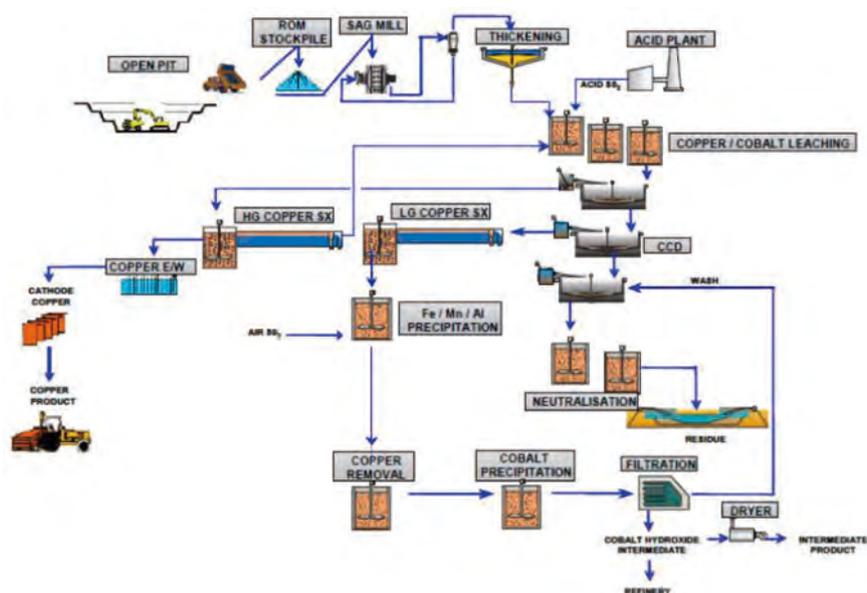
Ore processing consists of atmospheric leaching of ground ore and then SX-EW for copper recovery. Since there is a presence of cobalt in the ore, additional processing operations are necessary.

For the first phase of the project, the 115,000tpa cathode production option was selected and successfully commissioned in 2009. By 2011, the copper production was increased to nearly 135,000tpa through operational experience and slight debottlenecking.

There are different flowsheet options for cobalt including intermediate cobalt hydroxide products, off-site refining to electrowon metal and on-site refining. Initially, on-site refining was considered, but after the March 2013 joint-venture extension to acquire Kokola cobalt refinery and related business for downstream processing for cobalt, that option was pursued.

Phase 2 Expansion completed in 2013 expanded processing operations to a capacity of 195,000tpa of copper and about 15,000tpa of cobalt.

INFORMATION ON THE TENKE FUNGURUME MINING COMPLEX



Source: Competent Person's Report

OTHER INFORMATION

The Competent Person has confirmed that no material changes have occurred since the effective date of the Competent Person's Report.

As at the Latest Practicable Date, the Company was not aware of any legal claims or proceedings which may affect the mining rights being acquired. More specifically, as at the Latest Practicable Date:

1. Project risks arising from environmental, social, and health and safety issues

As at the Latest Practicable Date, the Company has not received written notice and is not aware of any circumstances that would on reasonable grounds be expected to give rise to, any civil, criminal or administrative action, or other proceeding or suit under any environmental law applicable to the Tenke, which is or may be materially prejudicial to the current financial position of the Target Group.

2. Non-governmental organisation impact on sustainability of mineral and/or exploration projects

As at the Latest Practicable Date and so far as the Company was aware, each of the mining tenements held by the Target Group are in force and effect and the Company has not received any notice of default or current claim of expropriation or forfeiture in respect of such mining tenements.

INFORMATION ON THE TENKE FUNGURUME MINING COMPLEX

3. Compliance with host country laws, regulations and permits, and payments made to host country governments in respect of tax, royalties and other significant payments on a country by country basis

As at the Latest Practicable Date and so far as the Company was aware:

- (i) there is no material unremedied breach of the licences;
- (ii) the Company has not done or permitted to be done anything that would be likely to cause the licences to be suspended, revoked, materially varied or terminated; and
- (iii) no party has given written notice to the Company of any matter that would be likely to cause such licences to be suspended, revoked, materially varied or terminated.

4. Sufficient funding plans for remediation, rehabilitation and, closure and removal of facilities in a sustainable manner

The Company conducts the operations in respect of Tenke in the ordinary and usual course. The Target Group maintains the tenements and licences in good standing.

5. Environmental liabilities of its projects or properties

As at the Latest Practicable Date and so far as the Company was aware:

- a. The Target Group are in general compliance with the local environmental regulations
- b. The Target Group and the management team of the Tenke are undertaking all key environment management activities and have responded to compliance matters in consultation with regulatory authorities.

6. Its historical experience of dealing with concerns of local governments and communities on the sites of its mines, exploration properties, and relevant management arrangements

The Company retained the management team at Tenke following the completion of the all issued share capital of FMDRC in November 2016 and maintains Tenke's existing processes in relation to safety, health, environment and community engagement, the Company has been dealing with governments and the local communities in substantially the same manner as the Tenke has historically.

INFORMATION ON THE TENKE FUNGURUME MINING COMPLEX

7. Any claims that may exist over the land on which exploration or mining activity is being carried out, including any ancestral or native claims

As at the Latest Practicable Date, the Company was not aware of any material litigation, prosecution, mediation, arbitration or other proceeding in respect of the Target Group. In addition, so far as the Company was aware the Company has not at the Latest Practicable Date received any written (i) notice or claim threatening the commencement of any material litigation, prosecution, mediation, arbitration or other proceeding in respect of the Target Group, and (ii) notice advising the Company that it has failed to comply in any material respect with any law in connection with the Target Group which would have a material adverse effect on the value of the Tenke.

RISK FACTORS

You should carefully consider all of the information set out in this circular, including the risks and uncertainties described below associated with the Cooperation Arrangement, Tenke and the industry in which it operates before making a decision on how to vote on the resolutions relating to the Cooperation Arrangement at the EGM. The business, financial conditions and results of operations of the Group, Tenke and the Enlarged Group could be materially and adversely affected by any of these risks.

To the best of the Directors' knowledge, the Directors consider the following risks to be the most significant in respect of the assets and operations of Tenke for the Shareholders and potential investors of the Company. However, the risks listed below do not purport to comprise all those risks associated with the Cooperation Arrangement, the Group, Tenke and the Enlarged Group and are not set out in any particular order of priority. Additional risks and uncertainties not currently known to the Directors may also have an adverse effect on the Cooperation Arrangement, the Group, Tenke and the Enlarged Group. If any of the following risks actually occurs, the implementation of the Cooperation Arrangement, the Group, Tenke and the Enlarged Group's operations, financial condition, capital resources, results and/or future operations could be materially and adversely affected.

RISKS ASSOCIATED WITH THE ACQUISITION AND THE ENLARGED GROUP

1. Risks relating to investments in a business in foreign developing jurisdictions

The Potential Acquisition constitutes an investment in a business sector involving the exploration, mining and production of copper and cobalt in the DRC. The Target Group's exploration and future development and operating activities in the DRC are subject to the risks normally associated with the conduct of business in countries with less developed or emerging economies. The DRC has a history of political instability and sometimes unpredictable changes in government policies and laws, social and labour unrest, civil conflict and war. Please refer to the section headed "Risks relating to the political, economic, regulatory, legal and social aspects associated with conducting operations in the DRC" below for more information about the risks relating to conducting business in such a foreign jurisdiction.

If the Enlarged Group is unable to function effectively within the above-mentioned risk environment, its financial condition and operating results may be materially and adversely affected.

Any change in the political and economic conditions in the jurisdictions in which the Target Group operate may also adversely affect the financial and operational results of the Target Group. Consequently, the Target Group is not in a position to assure the timing and amount of any return or benefits that may be received. If the business in the mining sector does not develop or progress as planned, the Target Group may not recover the funds and resources they have invested, and this may adversely affect the Target Group.

RISK FACTORS

2. Risks relating to completion of the Cooperation Arrangement and Potential Acquisition

A number of the conditions precedent to payment of the Subscription Money as set out in the sub-paragraphs headed “Conditions precedent to the payment of the Subscription Money” under the paragraphs headed “BHR Shareholders Cooperation Agreement”, “Shareholders of BHR Shareholders Cooperation Agreement”, “Hantang Cooperation Agreement”, “Design Time Cooperation Agreement” and “CNBC Cooperation Agreement” in the section headed “Letter from the Board” of this circular involve the decision of third parties, including the completion of the Stock Purchase Agreement between Lundin Mining Corporation and BHR, regulatory approvals procured by Dingyuan on outbound investment from the National Development and Reform Commission of PRC and the successful drawdown of the Syndicate Loans. As fulfilment of certain conditions precedent is not within the control of the parties involved in the Cooperation Arrangement, there is no assurance that the Potential Acquisition will be completed as contemplated.

3. Risks relating to potential future acquisitions or investments in other companies

The Enlarged Group may seek to expand its business through acquisitions as it intends to consider and evaluate opportunities for further growth through acquisitions when there are suitable acquisition targets; however, there can be no assurance that the Enlarged Group will find attractive acquisition candidates in the future, or that the Enlarged Group will be able to acquire such candidates on commercially acceptable terms, if at all. Acquisitions may require substantial capital and negotiations of potential acquisitions and the integration of acquired operations could disrupt the Enlarged Group’s business by diverting management, and employees’ attention away from day-to-day operations. The difficulties of integration may be increased by the necessity of coordinating geographically diverse organizations, integrating personnel with disparate backgrounds and combining different corporate cultures.

At times, acquisition candidates may have liabilities or adverse operating issues that the Enlarged Group fails to discover through due diligence prior to the acquisition. If the Enlarged Group consummates any future acquisitions, the Enlarged Group’s capitalisation, and results of operations may change significantly.

Any acquisition involves potential risks, including, among other things: (i) mistaken assumptions about mineral properties, mineral resources and costs, including synergies; (ii) an inability to successfully integrate any operation the Enlarged Group acquires; (iii) an inability to hire, train or retain qualified personnel to manage and operate the operations acquired; (iv) the assumption of unknown liabilities; (v) limitations on rights to indemnity from sellers; (vi) mistaken assumptions about the overall cost of equity or debt; (vii) unforeseen difficulties operating acquired projects, which may be in new geographic areas; and (viii) the loss of key employees and/or key relationships at the acquired project.

RISK FACTORS

Acquisitions or investments may require the Enlarged Group to expend significant amounts of cash, resulting in the Enlarged Group's inability to use these funds for other business purposes. The potential impairment or complete write-off of goodwill and other intangible assets related to any such acquisition may reduce the Enlarged Group's overall earnings and could negatively affect the Enlarged Group's balance sheet.

The occurrence of any of the foregoing could have a material adverse effect on the Enlarged Group's business, financial condition, results of operations or prospects.

RISKS ASSOCIATED WITH THE BUSINESS OF THE TARGET GROUP

4. Risks relating to operation and development of mines

Exploration drilling to establish productive reserves is inherently speculative. The techniques presently available to technical specialists to identify the existence and location of resources are indirect and subject to a wide variety of variables which are subjective in nature. Mineral exploration is highly speculative in nature. The Target Group's exploration projects involve many risks, and success in exploration is dependent upon a number of factors, including, but not limited to, quality of management, quality and availability of geological expertise and availability of exploration capital.

The Target Group cannot give any assurance that their future exploration efforts will result in the discovery of a mineral resource or ore reserve, or that their current and future exploration programs will result in the expansion or replacement of current production with new resources and reserves. The Target Group cannot give assurance that their exploration projects will be able to extend the life of their existing mines or result in the discovery of new producing mines.

In addition, the mining operations, development and exploration of the Target Group's mining assets require significant and continuous operational and capital expenditure. The original budgets that the Target Group initially set aside for these operational and capital expenditure purposes may be exceeded because of factors beyond the Target Group's control.

The business of mining always involves certain risks and hazards, including environmental pollution, accidents or spills, industrial and transportation accidents, unexpected labour shortages and compensatory claims, disputes or strikes, cost increases for contracted and/or purchased goods and services, shortages of required materials and supplies, electrical power interruptions, mechanical and electrical equipment failure, changes in the regulatory environment, challenges from local communities and non-governmental organizations, natural phenomena such as inclement weather conditions, floods and earthquakes, encountering unusual or unexpected climatic conditions which may or may not result from global warming, and encountering unusual or unexpected geological conditions. The occurrence of any of these hazards can delay or interrupt production,

RISK FACTORS

increase production costs at the operating mines and result in liabilities to the Target Group. The Target Group could become liable for pollution or other hazards against which they have not insured or cannot insure, including those in respect of past activities for which they were not responsible. For further details of these environmental and social challenges of the Enlarged Group, please refer to section 14 of the Competent Person's Report set out in Appendix V to this circular.

5. Risks relating to the major capital expenditure programmes

Any major capital expenditure projects that the Target Group's may undertake may not be completed within the expected time frame and budget, or at all, and may not achieve the intended economic results. The Target Group's expenditure may not be fully recovered and any depleted ore reserves may not be replaced. The Target Group intends to invest in projects at their existing operations to increase its production efficiency, as well as to expand and develop its mining and processing capacities.

The capital expenditure projects may also be delayed or adversely affected by a variety of factors, including the failure to obtain the necessary regulatory approvals or sufficient funding, construction difficulties, technical difficulties and manpower or other resource constraints. Costs of these projects may also exceed the Target Group's planned investment budget. Even if the Target Group is able to complete the projects without any delay and within its budget, as a consequence of changes in market circumstances or other factors, the Target Group may not achieve the intended economic benefits of these projects. As a consequence of any delay in completing the Target Group's capital expenditure projects, cost overruns, changes in market circumstances or other factors, the intended economic benefits from these capital expenditure projects may not materialise, and the Target Group's business, financial condition and results of operations may be materially and adversely affected.

The Target Group typically conducts feasibility studies to determine whether to undertake construction projects. Actual results may differ from those anticipated by the feasibility studies. In addition, if a valuable resource is discovered, it could take several years and require capital expenditure to complete the initial phases of exploration and mine development before production commences, and during this period, the capital cost and economic feasibility may change.

6. Risks relating to title and concessions and the inability to obtain, retain or renew concessions, permits or licences

The Target Group's mining and exploration concessions in the DRC may be subject to prior unregistered agreements or transfers and title may be affected by undetected defects or underlying landholdings. Accordingly, other parties could potentially dispute the Target Group's title to its mining and exploration rights. In addition, the acquisition of mining rights in the DRC must comply with precise procedural requirements and, if granted by decree pursuant to the Mining Code and

RISK FACTORS

uncontested in the court system, can be considered binding. Notwithstanding the binding effect, local communities could still assert legal challenges from time to time.

Failure to make certain payments and take certain actions required to keep permits or rights in good standing may result in the loss of such permits or rights. In addition, there can be no assurance that the Target Group has kept proper corporate records or made the necessary filings with the relevant authorities in respect of entities in which the Target Group has an interest.

The Target Group is required under applicable laws and regulations to seek governmental concessions, permits, authorisations, mining, exploitation and prospecting licences and other approvals, including in connection with its operating, producing, exploitation, exploration and development activities. Obtaining these permits, licences or approvals can be a complex and time-consuming process and may involve substantial costs or the imposition of unfavourable pre-grant or post-grant conditions. There can be a considerable delay in obtaining the necessary permits, licenses, approvals and other authorisations and, in certain cases, the relevant government agency may fail to issue such authorisation in a timely manner.

In addition, the duration and success of licence applications is contingent on many factors that are beyond the Target Group's control (including pressure from local communities, non-governmental organizations or media). Certain of the concessions, permits, authorizations, licences or approvals held by the Target Group in respect of its mining operations, production and development projects and exploration projects may be terminated under certain circumstances, which include the following: (i) failure to comply with any of the material, general or special licence conditions (including provision of regular reports and the taking out of appropriate insurance) or gain an extension to the time period required for compliance with such conditions; (ii) minimum expenditure levels or minimum work commitments not undertaken or achieved by the Target Group (or a corresponding penalty is not paid to the appropriate state authority); (iii) environmental, health and safety standards (including payment of contributions and establishment of environmental performance bonds) are not met; (iv) operating in the licensed areas in a manner that violates the laws of the DRC; (v) failure to provide information required or requested by authorities; (vi) liquidation of the immediate licence holder; (vii) failure to comply with any requirement under the mining legislation relating to the mining or prospecting licence; and (viii) not providing or giving false information on recovery of ores and mineral products, production costs or sales.

The Target Group may, in the future, be required to apply for extensions of the exploration licences which they may hold and extensions for the terms of mining permits or licences for their existing assets. There is no assurance that the Target Group will be able to obtain the extensions in respect of any expiring exploration periods or the term of any expiring mining permits or licences. If such extensions are not granted, the Target Group may lose their right of mining in respect of these areas. If these title risks materialise, the business, financial condition and operating results of the Target Group may be materially and adversely affected.

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The Target Group may not be able to continue to comply with applicable laws and regulations due to factors that are beyond their control, and under those circumstances, the licences and permits may be revoked and they may be subject to penalty. Operational income derived under such licences or permits may also be forfeited. To the extent that these laws, regulations and legal requirements are evolving, additional licences and permits may be required or the Target Group may be required to adjust its activities in order to comply with such regulations and in doing so, may incur substantial costs.

7. Risks relating to changes in the estimates of the mineral resources and reserves of the operating mines

The mineral resource and mineral reserve estimates of the operating mines set out in this circular and the Competent Person's Report comply with the JORC Code, but no assurance can be given that any particular level of recovery from ore reserves will in fact be realised or that an identified mineral resource will qualify as a commercially mineable orebody that can be economically exploited.

The estimation of mineral resources and ore reserves involves some interpretation and is a partly subjective process. The accuracy of mineral resource and reserve estimates is a function of the quantity and quality of available data and the assumptions used and judgments made in interpreting engineering and geological information. Data used in the resource estimation may be based on historical data where the quality control methods applied to the data collection are not known to the Enlarged Group and there is a risk that the tonnage or grades are overstated. In addition, resource classification may be based on data drilled by the Enlarged Group's predecessors at the projects and consequently there may be a risk of an incorrect interpretation of geology or grade of the mineral resources.

There is uncertainty in any resource or reserve estimate and the actual deposits encountered and the economic viability of mining a deposit may differ materially from the estimates set out in this circular and the Competent Person's Report. In particular, the mineral resource estimates of the Enlarged Group's assets are largely premised on an average historical copper price which may be higher than the price ruling as at 31 December 2016. While this is acceptable practice in mineral resource estimation, there is a risk that a portion of the estimated resources may not be economically extracted.

The discovery of mineral resources through exploration of mineral tenements is speculative in nature and is frequently unsuccessful. The Target Group may be unable to successfully discover and exploit new reserves to replace those they are mining to ensure the ongoing viability of the Target Group's projects.

RISK FACTORS

Estimated mineral resources or ore reserves may have to be re-calculated based on changes in metals prices, further exploration or development activity or actual production experience. This could have a material adverse effect on estimates of the volume or grade of mineralisation, estimated recovery rates or other important factors that influence resource or reserve estimates. Market price fluctuations for metals, increased production costs, reduced recovery rates or other factors may render the present Proved Reserves and probable reserves of the operating mines uneconomical or unprofitable to develop at a particular site or sites.

8. Risks relating to the power disruptions in the DRC

The Target Group's mining operations are largely dependent on adequate infrastructure, in particular reliable power sources. Tenke requires substantial amounts of electrical power in order for it to sustain its operations. The supply of electric power to Tenke by the DRC's national electricity company SNEL has been erratic due to the poor infrastructure and inadequate maintenance of the national power grids, cables and plants. The mining operations and development activities at Tenke have been disrupted from time to time as a result of such power outages. The lack of constant electricity supply has resulted in the Target Group not being able to operate its mining and processing machinery and equipment optimally.

9. Risks relating to workplace safety, including personal injury, death and legal liability

The Target Group's mining operations are subject to risks related to workplace safety, including damage to, or destruction of, mining equipment and processing facilities, and could also result in personal injury, death, performance delays, monetary losses and legal liability. The Target Group has taken various steps to enhance workplace safety. However, it may be difficult to enforce compliance with the established standards and procedures and workplace accidents may occur from time to time.

The Target Group has implemented a comprehensive health and safety plan in order to improve the compliance with health and safety standards at their projects. A number of procedures governing the behaviour of staff and contractors have been formalised and these were implemented to improve the safety culture and to improve the management of contractors. Notwithstanding these measures, mine site construction, mining and mineral processing and transportation are inherently dangerous activities and there can be no assurance that serious accidents or fatalities would not occur in the future. If the Target Group fails to prevent serious accidents or fatalities, it may be held liable for damages arising therefrom or in connection therewith and there may be delays and disruptions to normal mining operations and schedules. In addition, such accidents or fatalities could have a negative effect on their reputation and its relationship with the local community. Any of the foregoing could have a material adverse effect on the Target Group's results of operations, business, financial condition and prospects.

RISK FACTORS

10. Risks relating to litigation

As with any company, the Target Group is or will be exposed to risks of litigation, including audits and assessments brought against the Target Group by the DRC government and challenges brought by local communities and non-governmental organizations. To the extent such risks is not covered by insurance, an adverse outcome in litigation or the cost of and the management's time spent on responding to potential or actual litigation or negotiating settlement of claims may have a material adverse impact on financial performance. Litigation brought against the Target Group could prove costly and time consuming, requiring the attention of senior management, which could have material adverse effects on the Target Group business, financial condition and results of operation.

11. Risks relating to the ability to attract, retain and train key personnel

The future performance of the Target Group depends, to an extent, upon their ability to continue to attract, retain and motivate key qualified personnel, key senior management and other employees with a variety of skills and experience, including in relation to the development and operation of mineral projects. There is no assurance that these key qualified personnel will continue to provide services to the Target Group or will honour the agreed terms and conditions of their employment or service contracts. The Target Group's success will also depend upon the contributions of qualified technical personnel and the Target Group's ability to attract and retain highly skilled personnel in the DRC in particular. Competition for such personnel is intense, and the Target Group may not be successful in attracting and retaining qualified personnel in the DRC, or in obtaining the necessary work permits to hire qualified expatriates. In the DRC, increased demand for skilled workers has created a shortage of skilled workers and intense competition for these workers, particularly as DRC legislation limits the number of foreign workers at a mine site at 2% to 2.5% of the workforce, with certain positions reserved exclusively for DRC nationals. Any loss of key qualified personnel or failure to recruit and retain personnel may have a material adverse effect on the Target Group's mining business, financial condition, results of operations and future prospects.

In addition, the Target Group's ability to train operating and maintenance personnel is a key to the success of their mining business activities. If the Target Group is not successful in recruiting, training and retaining such personnel, their business and results of operations could be materially and adversely affected.

12. Risks relating to foreign currency exchange rate fluctuations and foreign exchange control regulations

The Target Group's business generates revenue in U.S. dollars from the sales of copper and cobalt, and a material portion of its capital projects and operating costs are incurred in U.S. dollars. However, the Target Group may incur expenditures that are denominated in a foreign currency. The effect of currency exchange fluctuations is impossible to predict with any degree of certainty. The

RISK FACTORS

appreciation of the local currencies of the DRC or other currencies against the U.S. dollar would increase the costs of operations, which could have a material adverse effect on the Target Group's business, financial condition, results of operations or prospects. The Target Group currently has no currency hedging in place and accordingly, is fully exposed to any adverse fluctuations in the relevant exchange rates.

13. Risks relating to the compliance with applicable local content regulations, environmental protection and remediation regulations in the mining industry as well as the implementation of resettlement action plans

The activities of the Target Group are subject to laws and regulations relating to the protection and remediation of the environment. The Target Group will need to perform certain procedures to remedy and rehabilitate the environmental and social impact that its mining operations have on local communities. Remediation, rehabilitation, closure and removal of its facilities will incur various costs which may be substantial and are subject to various risks. In the event of noncompliance with applicable rehabilitation obligations, the Target Group could be subject to a variety of penalties and other administrative actions, including fines, inability to proceed with certain administrative procedures relating to mining permits (including annual inspection, renewal, alteration and mortgage registration), suspension and cancellation of mining permits or ceasing of operations. The provisions or reserves made by the Target Group for the rehabilitation and remediation of their mining assets may not be sufficient to cover its actual liabilities.

In addition, the Target Group's mining operations are subject to risks associated with local content requirements (e.g. requiring employment of DRC nationals and granting preference to DRC companies) and the relocation of communities to the extent that these communities are adversely impacted by their operations.

For example, the Target Group implemented involuntary resettlement activities, which have been challenged by project affected persons and non-governmental organizations in local courts. A number of claims regarding resettlement plans and associated financial compensation are still pending and the estimated liability is unknown.

14. Risks relating to the availability of additional financing in the future

The mining operations of the Target Group are very capital intensive. To fund their current and future operations, capital expenditure requirements, acquisition and investment plans and other funding requirements, the Target Group needs sufficient internal sources of liquidity or access to financing from external sources. The Target Group currently funds their capital expenditures with short-term and long-term bank loans, cash flow from their operating activities and capital contributions and shareholder loans. Their future liquidity, payment of trade and other payables and repayment of their outstanding debt obligations as and when they become due will primarily

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depend on their ability to maintain adequate cash inflows from its operating activities and adequate external financing, and their ability to generate adequate cash inflows from operating activities may be affected by decreasing sales or downward movements in prices for copper and cobalt products. The Target Group's ability to obtain external financing in the future is subject to a variety of uncertainties, including their future financial condition, results of operations and cash flows, the condition of the global and domestic financial markets, changes in bank interest rates and lending practices and conditions, ability to renew or refinance their existing short-term bank loans or secure additional external financing, and downward movement in base metal prices. In particular, the disruptions, uncertainty or volatility in the capital and credit markets resulting from the global financial crisis may limit the Target Group's ability to obtain financing to meet their funding requirements and the Target Group may postpone certain development projects if their directors determine that doing so would be in the interest of the Target Group after taking into consideration the current market conditions, their financial performance and other relevant factors.

15. Mining operations have a limited life and the Target Group is responsible for the eventual closure and rehabilitation of its historical and current projects

The Target Group's existing mining operations have a limited life. The key costs and risks for mine closures are (i) long-term management of permanent engineered structures; (ii) achievement of environmental closure standards (such as rehabilitation requirements); (iii) orderly retrenchment of employees and third-party contractors; and (iv) relinquishment of the sites with associated permanent structures and community development infrastructure and programs to new owners. According to TFM's environmental and social impact assessment as amended in 2014, TFM has implemented an environmental management system certified through third party assessment as compliant with ISO14001, and, subject to the assumptions and qualifications set out therein, the closure cost estimates for TFM are material.

The Target Group is also required to pay out termination benefits in the DRC under the terms of the employment contracts or applicable law at closure of the mines which may be substantial and could materially affect the Target Group's result of operations if such benefits are not adequately provided for or estimated accurately. In addition, there is no assurance that the closure of mines will be successful and without delays or additional costs.

The Target Group may experience a difficult closure, the consequences of which range from increased closure costs, handover delays and conflicts with local communities in relation to ongoing monitoring and environmental rehabilitation costs and damage to the Target Group's reputation if desired outcomes cannot be achieved. In the event of a difficult closure, the Target Group's business, financial condition and results of operations could be materially and adversely affected.

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16. Risks relating to limited insurance coverage that may not be adequate to satisfy all potential claims

Exploration, development and production operations on mineral properties involve numerous risks and hazards, including rock bursts, slides, earthquakes or other adverse environmental occurrence, industrial accidents, labour disputes, political and social instability, technical difficulties due to unusual or unexpected geological formation, failure of pit walls, and flooding and periodic interruptions due to inclement or hazardous weather condition. These risks can result in, among others, damage to, and destruction of, mineral properties or production facilities, personal injuries, environmental damages, delays in mining, monetary losses and legal liability.

Although the Target Group maintains insurance to protect against certain risks in such amounts as they consider to be reasonable and consistent with industry practice in the countries where they operate their business, their insurance will not cover all the potential risks associated with its activities, including any future mining operations. The Target Group may also be unable to maintain insurance to cover their risks at economically feasible premiums, or at all. Insurance coverage may not continue to be available or may not be adequate to cover any resulting liability. Moreover, insurance against risks such as production disruption, environmental pollution, claims of local communities or other hazards as a result of exploration or production may not be available to the Target Group on acceptable terms. The Target Group might also become subject to liability for pollution or other hazards which they are not currently insured against and/or in future may not insure against because of premium costs or other reasons. Losses from these events may cause the Target Group to incur significant costs which could have a material adverse effect on the Target Group's business, financial condition, results of operations or prospects.

17. Risks relating to inclement weather

Inclement weather may cause evacuation of personnel, curtailment of operations, damage to mineral resources, transportation routes and loading facilities. This could in turn result in temporary suspension of operations and a general reduction in productivity. From time to time, the Target Group experiences tropical weather events that can result in their inbound and outbound logistics routes being cut off. There is no assurance that inclement weather will not cause losses to the Target Group in the future. Any damage to the Target Group's projects or delays to their operations by prolonged periods of inclement weather could have a material adverse effect on the Target Group's business, financial condition, results of operations or prospects.

18. Risks relating to change in future plans

Whether the Target Group ultimately implements the production plans and mining schedule of the Target Group or achieves the objectives described in this circular, will depend on a number of factors including, but not limited to, (i) the availability and cost of capital; (ii) current and projected

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prices of copper and cobalt; (iii) copper and cobalt markets; (iv) costs and availability of support services, equipment, supplies and personnel; and (v) changes in estimates of project completion costs.

The Target Group will continue to gather information about their projects, and it is possible that additional information will cause the Target Group to alter its schedule or determine that a project should not be pursued at all. Accordingly, the Target Group's plans and objectives may change from those described in this circular.

19. Risks relating to illegal mining

It is estimated that at least a thousand workers engage in illegal mining near Tenke on a daily basis. During 2015, there were a number of incidents related to illegal mining near Tenke. There were 8 incidents near Tenke that resulted in 11 deaths of illegal miners including 10 deaths due to tunnel collapses and one due to the actions of a member of the Mines Police. Non-life threatening injuries to 3 illegal miners due to encounters with the Mines Police were also noted.

Illegal mining near Tenke remains a significant security risk for the mine. In addition to TFM's established security measures, the issue is being addressed through the combination of ongoing training on the voluntary principles on security and human rights, engagement with the local community security council and investment in economic development programs to promote long-term growth and alternative livelihoods in the communities. TFM continued to partnership with the non-profit organization Search for Common Ground in 2015 to address conflict drivers in the local communities, including illegal mining, through a communications and engagement program. Through this partnership, participatory theater was used to promote dialogue on issues related to illegal mining and targeted over 5,000 people with 20 performances in villages throughout the concession. These performances helped build an understanding of the negative impacts of illegal mining on the community, such as increased violence, and encouraged community members to develop solutions to underlying issues such as limited opportunities for youths.

While the quantities of ore removed are not material to the operation of Tenke, the social and production impact may increase in the future as the various mining areas become more developed.

RISKS RELATING TO THE INDUSTRY

20. Risks relating to fluctuations in the market price of copper and cobalt

The Target Group is focused on the base metal industry, primarily copper and cobalt production and their revenue is generated from the sale of these two products. The price volatility of copper and cobalt may affect the future production, profitability and financial condition of the Target Group. Such factors include, but are not limited to, interest rates, exchange rates, inflation or deflation,

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global supply and demand, and the political and economic conditions of major metal consuming countries throughout the world. The price of most metals including copper and cobalt has fluctuated widely in recent years, and particularly the copper price has fallen since February 2013 due to the weakening copper demand. Future metal price declines could cause development of, and commercial production from, the Target Group's projects to be impracticable or uneconomic. The Target Group expects to derive substantially all of its revenue in the foreseeable future from sales of copper cathode and cobalt hydroxide.

The metals market also tends to move in cycles. Periods of high demand, increasing profits and high capacity utilisation lead to additional capacity through expansion of existing mines and investment in new mines which results in increased production. This growth increases supply until the market is saturated, leading to declining prices and declining capacity utilisation until the cycle repeats. This cyclicity in prices can result in supply/demand imbalances and pressures on mineral prices and profit margins which could have a material adverse effect on the Target Group's business, financial condition, results of operations or prospects.

Depending on the price of copper and cobalt, projected cash flow from planned mining operations may not be sufficient and the Target Group could be forced to discontinue development and may lose their interest in its projects. Future production from the Target Group's mining properties will be dependent on metal prices that are adequate to make these properties economically viable. Furthermore, future mine plans using lower metal prices could result in material write-downs of the Target Group's investment in mining properties.

In addition to adversely affecting the Target Group's current mineral resources estimates and any future mineral reserves estimates and their financial condition, declining commodity prices can impact operations by requiring a reassessment of the feasibility of a particular project. Such a reassessment may be the result of a management decision or may be required under financing arrangements related to a particular project. If such a reassessment determines that any of the projects are not economically viable, then mine development may cease and such projects may never be fully developed or developed at all. Even if the projects are ultimately determined to be economically viable, the need to conduct such a reassessment may cause substantial delays or may interrupt operations until the reassessment can be completed. There may also be changes made to the mine plans of the projects of the Target Group which will require additional capital expenditures or result in delays in production. The occurrence of any of the foregoing could have a material adverse effect on the Target Group's business, financial condition, results of operations or prospects.

21. Risks relating to economic conditions and market demand

The operating and financial performance of the Target Group is influenced by a variety of general business cycles and economic conditions. Changes in business and economic factors, such as

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interest rates, exchange rates, inflation, national demographics, government fiscal, monetary policies in the DRC and accounting and financial reporting standards, could impact the Target Group's business. In addition, the operating and financial performance of the Target Group is also influenced by the worldwide demand for copper and cobalt products. As the PRC is a major purchaser of the world's copper and cobalt products, any adverse change in the PRC's economic and market condition that in turn reduces the demand for the copper and cobalt products mined by the Target Group could materially and adversely affect the Target Group's business and results of operations.

22. Risks relating to competition

The markets for the commodities mined or contemplated to be mined by the Target Group, namely copper and cobalt, are intensely competitive and the Target Group faces competition from Chinese, Mongolian, Australian and other foreign miners. Competition in these markets is based on many factors, including, among others, price, production, capacity, quality, transportation capabilities and costs, blending capability and brand name. Some of the Target Group's competitors may have greater production capacity as well as greater financial, marketing, distribution and other resources, and may benefit from more established brand names in the international market.

The mining industry is also characterised by technological advancements and the introduction of new production processes using new technologies. Some of the Target Group's competitors may develop new technologies and processing methods that are more effective or less costly than those currently used by the Target Group.

Competitive activities in the markets served by the Target Group could have a significant impact on the prices realised for its products and can therefore have a material adverse effect on its results of operations and financial condition. The Target Group's future success will depend on its ability to respond in an effective and timely manner to competitive pressure.

RISKS RELATING TO CONDUCTING OPERATIONS IN THE DRC

23. Risks relating to the political, economic, regulatory, legal and social aspects associated with conducting operations in the DRC

The Target Group's operation is located in the DRC. Similar to other emerging markets, the DRC is subject to certain political, economic, regulatory, legal and social developments that may, individually or in combination, create risks for investors that may be more difficult to predict or measure than in certain developed economies, which could have a material adverse effect on the Target Group's business, financial condition, results of operations or prospects. These risks, which the Target Group believes are significant in the DRC, include, among others, labour unrest, invalidation of governmental orders and permits, corruption, uncertain political and economic

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environments, sovereign risk, war (including within the DRC or with other countries), civil disturbances and terrorist actions, arbitrary changes in laws or policies, the failure of foreign or local parties to honour contractual relations with little or no recourse to local courts, challenges to or reviews of the Target Group's legal and contractual rights, reviews of taxation of foreign companies, changing tax and royalty regimes, non-income taxes and governmental fees, delays in obtaining or the inability to obtain, or the cancellation of, necessary governmental permits, limitations on foreign ownership, limitations on the repatriation of earnings, limitations on mineral exports, price controls, review of taxes on foreign investment, instability due to economic underdevelopment, inadequate infrastructure and increased financing costs. As a result of conflict in the DRC, international governments may impose regulations or sanctions to limit commercial trade activities for and make more burdensome purchases of goods and services originating in the DRC, which could have a material adverse effect on the Target Group's business, financial condition, results of operations or prospects.

The DRC is in transition from a largely state-controlled economy to one based on free market principles, and from a non-democratic political system with a centralised ethnic power base to one based on more democratic principles. The northeast region of the DRC has undergone civil unrest and instability in recent years which could have an impact on political, social or economic conditions in the DRC more broadly. While the government of the DRC is working to extend the central government's authority into the regions, there can be no assurance that such efforts will be successful. In addition, many of the mineral rights and interests of the Target Group in the DRC are subject to government approvals, licences and permits, which, as a practical matter, are subject to the discretion of applicable governments or governmental officials. No assurance can be given that the Target Group will be successful in obtaining, maintaining or renewing any or all of the various approvals, licences and permits required to operate its projects in full force and effect or without modification or revocation. Although the Target Group's projects in the DRC are in the southeast of the country, the effect of unrest and instability on political, social or economic conditions in the DRC could result in the impairment of the Target Group's exploration, future development and prospective mining operations.

General elections in the DRC to be held in the future may lead to a change in the ruling political party and governmental policy relating to foreign investment. DRC laws in respect of Mining Code, tax laws and environmental legislation are susceptible to change, revision or cancellation in connection with any changes in ruling political party or government. Such changes may have a material adverse effect on the Target Group's results of operations and business. Political disruptions and civil unrest that may occur in any neighboring countries could potentially have an adverse effect on the DRC exports and consequently, on the Target Group's business.

Changes in the interpretation or enforcement of the laws and regulations currently in effect in the DRC could adversely affect the Target Group's business and it is difficult to predict the future political, social and economic direction in these countries.

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In addition to the above, operations in the DRC could be affected by the enactment by foreign states or entities (including non-governmental organisations) of laws, rules, regulations or policies that would apply to individuals, entities or operations globally.

24. Risks relating to the prohibition on exports of certain minerals out of the DRC in connection with the Decree of 5 April 2013 issued by the Ministry of Finance and the Ministry of Mines of the DRC

The Target Group, when conducting their mining operations in the DRC, is subject to various applicable laws, regulations and policies relating to the limitations or prohibitions on mineral exports. Any changes or implementation of new laws, regulations and policies in this regard may have a material adverse effect on the Target Group's business, financial condition, results of operation or prospects although the Mining Convention contains a stabilisation provision which should prevent the applicability of such regulations to TFM.

In this connection, the Ministry of Finance and the Ministry of Mines of the DRC had on 5 April 2013 signed a decree purporting to prohibit the export of, inter alia, all merchant mineral products with a humidity of more than 25%, copper concentrates and cobalt concentrates. Whilst an informal statement contained within the decree provided that the decree came into effect immediately (namely, on 5 April 2013), the decree does not have a formal clause stating the date on which it commenced. This decree has been the subject of significant dispute and controversies in the DRC including objections raised by local government and mining operations. Such dispute may ultimately result in amendments to the decree or the decree not coming into effect or being unenforced. Following the issue of the decree, a meeting was held on 10 July 2013 at which the Minister of Mines and the members of the Federation of Congolese Companies Chamber of Mines of the DRC were present and confirmed that the prohibition on export of mineral concentrates would be delayed until 31 December 2013 and that the tax on export of mineral concentrates (with the exception of cobalt hydroxides) would be increased from US\$60 per tonne to US\$100 per tonne from 15 July 2013.

On 30 December 2014, The Ministry of Finance and the Ministry of Mines of the DRC issued a decree indicating that the entry into force of the prohibition of export of copper and cobalt will become effective as from 31 December 2015. On 31 December 2015, a subsequent decree was issued indicating that the prohibition will become effective from 31 December 2016. The implementation of the decree has been further suspended after 31 December 2016 until further notice from the DRC government. It is uncertain at this stage whether this decree will be further amended or effectively enforced in the DRC.

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25. Risks relating to changes in governmental policies and regulation relating to taxation and royalties

The Target Group, when conducting their business operations in the DRC, is subject to various applicable laws, regulations and policies relating to taxation and royalties. There can be no assurance that the DRC government will not review the taxation policies of foreign companies and foreign investment or review and make changes to its royalty regimes to increase the existing tax rates or introduce additional taxes (including withholding taxes on dividends), which may increase the tax/royalty burden. In this connection, the DRC is in the process of reviewing the taxation and royalty regimes of mining companies. Such laws are likely to increase the tax burden of the Target Group and could have a material adverse effect on the results of operation of the Target Group.

26. Risks relating to the limited legal protection in the DRC

The legal system in the DRC has inherent uncertainties that could limit the legal protection available to the Target Group, which include: (i) inconsistencies between and within laws; (ii) limited judicial and administrative guidance on interpreting DRC legislation, particularly that relating to business, corporate and securities laws; (iii) substantial gaps in the regulatory structure due to a delay or absence of enabling regulations or the delay or absence of the publishing or notification of certain regulations; (iv) a lack of judicial independence from political, social and commercial forces; (v) corruption; and (vi) bankruptcy procedures that are subject to abuse, any of which could have a material adverse effect on the Target Group's business, financial condition, results of operations or prospects.

Furthermore, the judicial bodies in the DRC have relatively little experience in enforcing the laws and regulations that currently exist, leading to a degree of uncertainty as to the outcome of any litigation. It may be difficult to obtain swift and equitable enforcement of a judgement made in the DRC, or to obtain enforcement of a judgement by a court of another jurisdiction, which could have a negative impact on the ability of the Target Group to enforce or protect their rights and interests in the DRC and hence an adverse effect on the Target Group's business, financial condition, results of operations or prospects.

27. Risks relating to the direct government intervention in the Target Group's mineral property interests in the DRC

Mineral development is a sensitive political issue in the DRC, and as a result there is a relatively higher risk of direct government intervention in the property rights and title of the Target Group's projects than that of other industries. Such intervention could extend to nationalisation, expropriation or other actions that effectively deprive the Target Group of the benefit of their interest in the projects.

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Any nationalisation, expropriation or similar action would, in most cases, require the government to pay just compensation. However, even if the Target Group did obtain compensation in such a circumstance, there could be no guarantee that the compensation paid would represent the Target Group's view as to the full value of the asset lost. Accordingly, any action to nationalise or expropriate any of the projects or other assets could have a material adverse effect on the Target Group's business, financial condition, results of operations or prospects. Furthermore, any increased perception that nationalisation or expropriation of the projects may occur could have a material adverse effect on the price of the Target Group's securities and their ability to access financing.

28. Limited infrastructure growth in the DRC such as power demand shortfall, logistics capacity mismatch, poor road conditions may negatively affect the Target Group's business and mining activities

The Target Group's mining operations are largely dependent on adequate infrastructure in the DRC. In particular, reliable power sources, water supply, logistics capacity, road conditions and communication facilities are key determinants that are needed to operate a mine. Such infrastructure may be inadequate and insufficient in the countries where the Target Group conducts their mining operations in the DRC.

The management of the Target Group constantly seeks measures to address these infrastructural challenges to ensure that their mining operations are conducted optimally. Any failure by the management to address these infrastructure requirements adequately may have a material adverse effect on the Target Group's business, financial condition and results of operations.

In addition, the Target Group's mining projects also rely on significant amounts of water supplied by local water authorities. If the local water boards impose restrictive requirements on their conditions of supply, the Target Group's profitability and results of operations may be adversely affected. Due to limited logistics capacity and communication facilities in the DRC such as poor road conditions and limited telecommunications penetration, the Target Group has to incur increased transportation and communication costs, which in the long term could have a negative effect on the development of the Target Group's business.

The operating mines utilise road infrastructure to transport consumables and finished products to and from the mine sites, including from ports in South Africa, and historically have not experienced material disruptions to their operations arising from transport infrastructure. The Enlarged Group closely monitors developments associated with transport infrastructure challenges and has implemented a number of measures to reduce disruptions that could be caused by inefficiencies in the transport infrastructure network including carrying appropriate inventory levels of consumables and strategic supplies at its mine sites, pre-clearing trucks whenever possible, reducing the volume of exports in respect of cobalt hydroxide through further drying at the mine site, ensuring documentation is in order prior to trucks arriving at the border, splitting of strategic supply

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contracts across a number of suppliers to reduce delivery risk, and utilising a number of clearing agents to speed up the clearing process.

29. HIV/AIDS, malaria and other diseases pose risks to the Target Group in terms of productivity and costs

HIV/AIDS, malaria and other diseases are prevalent in the DRC and pose a serious threat to the mining companies in these countries, including the Target Group, in terms of potentially reduced productivity, and increased medical and other costs. The per capita incidences of the HIV/AIDS virus in these countries have been estimated as being among the highest in the world. As such, HIV/AIDS remains a healthcare challenge faced by the Target Group's operations and investments in these countries. A significant increase in the incidence of HIV and AIDS infection and HIV and AIDS-related diseases among its workforce over the next several years may limit or disrupt the Target Group's exploration and operation activities or development of future mining operations. Ebola was reported in the DRC in 2014, and could become more prevalent. There can be no assurance that the Target Group will not incur the loss of a significant number of members of their workforce or workforce man-hours or incur increased medical costs, which may have a material adverse effect on the Target Group's operations and financial condition.

30. High rates of inflation in the DRC could have a material adverse effect upon the Target Group's business, financial condition and results of operations

The Target Group's mining operations are located in the DRC which has historically experienced relatively high rates of inflation. Since the Target Group is unable to control the market price at which it purchases its raw materials and auxiliary materials, it is possible that significantly higher inflation in the future in the DRC, without a concurrent devaluation of the local currency against U.S. dollar or an increase in the prices of the Target Group's products, could have a material and adverse effect on the Target Group's business, financial condition and results of operations.

31. Labour disputes, conflicts and disruptions may lead to suspensions of mining and processing operations, which could materially and adversely affect the Target Group's productivity and business

It is possible that the mining and processing operations could be disrupted in the event of any industrial action or work stoppages by the employees and workers on site. Although there has been no material strike in the last 5 years, there is no guarantee that strike will not happen in future.

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32. The Target Group's current and planned mining activities may employ processes and chemicals that may be harmful to the environment and are subject to environmental laws and regulations

As mining companies focusing on the base metal industry, the Target Group is subject to environmental legislations and regulations in the DRC. This legislation and these regulations could impose unexpected costs and burden on the Target Group, the full extent of which cannot always be predicted. Mining activities are generally subject to environmental and safety hazards as a result of the processes and chemicals used in the exploration and production methods.

In addition, environmental hazards may be encountered while products are in transit and when the disposal of waste products occurs. The occurrence of any such safety or environmental incident could delay production and/or increase production costs and may impact on the Target Group's ongoing compliance with environmental legislation and regulations. The Target Group may be liable for losses associated with environmental hazards and rehabilitation, have their licences and permits withdrawn or suspended, face negative reputational consequences or be forced to undertake extensive remedial clean-up in the event of certain discharges into the environment, environmental damage caused by previous operations or noncompliance with environmental laws or regulations.

In terms of the Target Group's planned mining activities, a detailed environmental study will be required before commencing work on a project site, for which site visits have to be conducted and various documents have to be submitted to local authorities. There can be no assurance that the Target Group will be able to obtain all the necessary permits and approvals. Failure to obtain any of such approvals may adversely affect the development and operations of the planned project.

In the future, if additional or more stringent conditions and requirements are imposed under new legislation and regulations in the DRC or new international standards or policies applicable to the Target Group, the Target Group may incur unexpected costs to comply with these requirements, which may include the need to increase and accelerate expenditures on environmental rehabilitation. In that case, the costs of compliance may substantially increase which could have a material and adverse effect on the Target Group's operations and financial condition.

For further details of these environmental and social challenges and rehabilitation plans of the Enlarged Group, please refer to the Competent Person's Report set out in Appendix V to this circular.

INDUSTRY OVERVIEW

This section contains certain information which has been derived from official, market and other sources including Wood Mackenzie, CRU and public company filings. The Directors believe that the sources of this information are appropriate sources for the information. The Directors have exercised reasonable care in selecting and identifying the named information sources and, in compiling, extracting, and reproducing such information, have no reason to believe that such information is false or misleading. This information has not been independently verified by the Directors or any of the Directors' affiliates or advisers or any of their affiliates or advisers and no representation is given as to its accuracy. This information may not be consistent with information from other sources.

COPPER MARKET OVERVIEW

Introduction

Copper is a non-magnetic metal with high conductivity, tensile strength and resistance to corrosion. Copper consumption can be divided into three main product groups: copper wire rods, copper products and copper alloy products.

Copper wire rods are used in wire and cable products such as general and industrial cable, utility power cables, telecommunication cable, other insulated wire and winding wire. In addition, copper has several non-electrical applications such as tubes for air conditioners and refrigerators, foils for printed circuit boards, and other industrial and consumer applications. Copper is also used in a number of alloys, including brass (copper and zinc), bronze (copper and tin), nickel, silver, phosphor bronze and aluminum bronze.

In general, wire and cable and copper products are consumed in five broad sectors: (i) construction, (ii) electric and electronic products, (iii) industrial machinery and equipment, (iv) transportation equipment, and (v) consumer and general products.

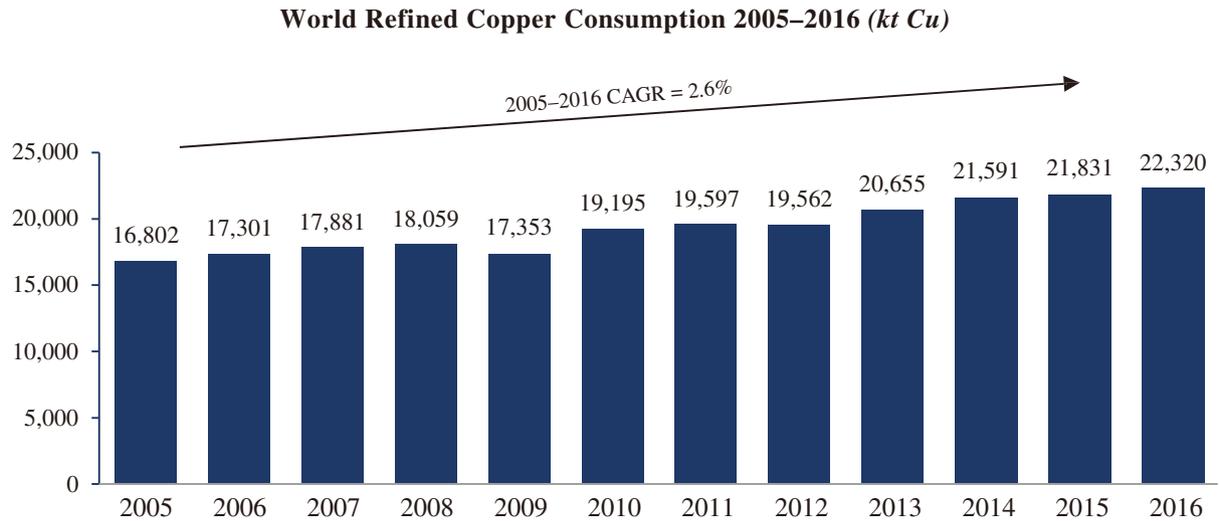
Primary copper production starts with the extraction of copper-bearing ores. There are three basic ways of copper mining: surface, underground mining, and leaching. Copper exists in two broad categories of ore types: sulphide and oxide with two different processes applied to deal with the ores:

- Sulfide minerals are separated from the waste at the ore processing plant to form copper concentrates which is then shipped to a copper smelter which can be local to the mine or in a different country or continent; and
- Copper oxide minerals can be readily leached and copper can be recovered from the resultant pregnant leach solution by an SX-EW process to produce marketable cathodes.

INDUSTRY OVERVIEW

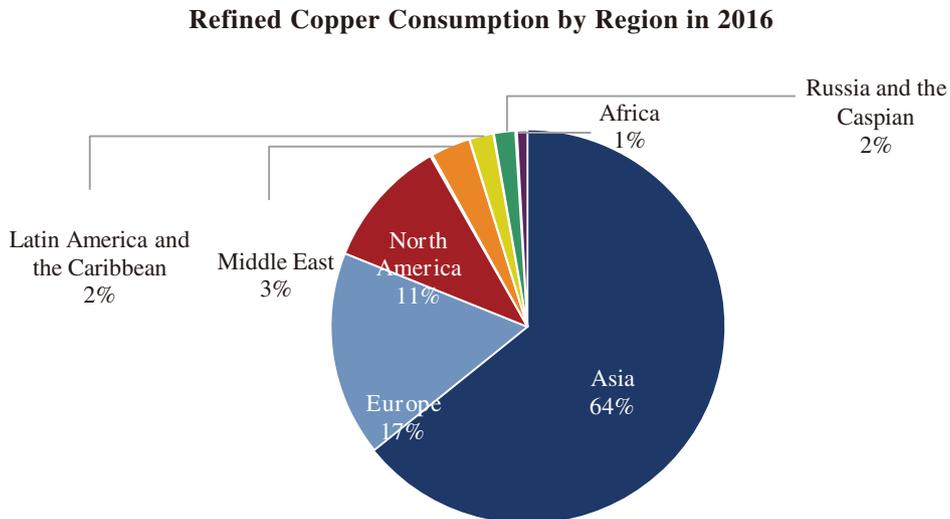
Copper Demand

Copper demand has grown steadily over the last decade, led largely by growth in emerging economies. According to Wood Mackenzie, world refined copper consumption increased from 16.8Mt in 2005 to 22.3Mt in 2016, representing an annual growth rate of 2.6%. The following chart illustrates the ten-year historical data for world refined copper consumption.



Source: Wood Mackenzie

The growth of global refined copper consumption has been driven by Asia which accounts for approximately 64% of global demand. China, exclusively, contributes 48% of total global demand. Refined copper consumption in China increased from 3.7Mt in 2005 to 10.6Mt in 2016, representing an annual growth rate of 10%.

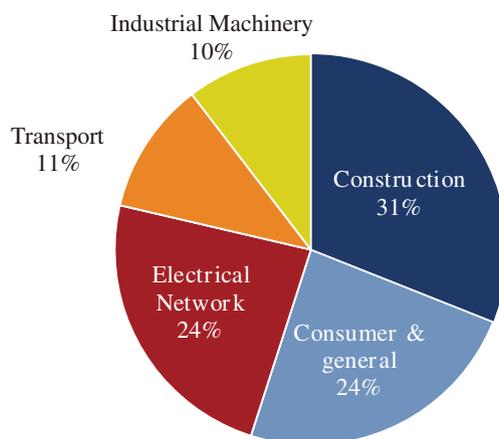


Source: Wood Mackenzie

INDUSTRY OVERVIEW

According to Wood Mackenzie, global copper consumption can be categorized into electrical and electronic products, construction, industrial machinery, transport, and consumer products.

Global Copper Consumption by End User in 2016

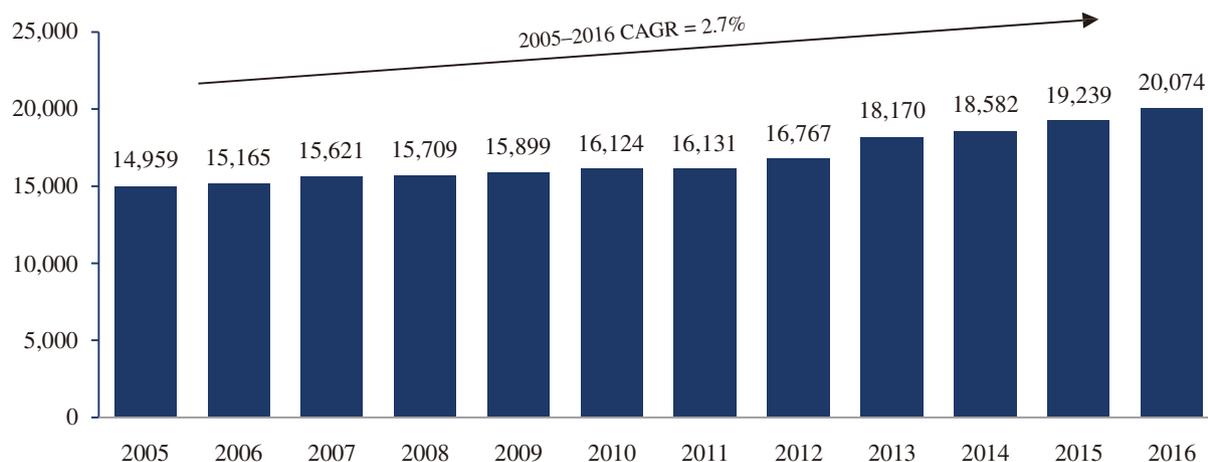


Source: Wood Mackenzie

Copper Mine Supply

Global copper mine production has increased from 15.0Mt in 2005 to 20.1Mt in 2016, representing an annual growth rate of 2.7%.

Copper Mine Production 2005–2016 (kt Cu in concentrate and leach)

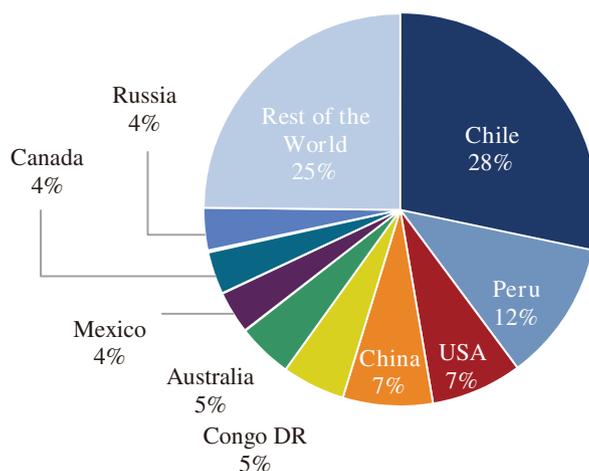


Source: Wood Mackenzie

Chile accounts for the highest copper mine production globally with 28% of total production. Peru and USA are the second and third largest producers with 12% and 7% respectively.

INDUSTRY OVERVIEW

Copper Mine Production 2016 by Country



Source: Wood Mackenzie

The copper mining industry demonstrates a reasonable degree of consolidation with the top 10 copper producers accounting for 47% of total copper production, which includes most of the global major mining companies.

Top 10 Copper Producers in 2016

Rank	Company	Production (kt Cu)	% of World Production %
1	Codelco	1,861	9.3
2	Freeport-McMoRan	1,737	8.7
3	Glencore	1,275	6.4
4	BHP Billiton	1,168	5.8
5	Southern Copper (ex. SPCC)	907	4.5
6	KGHM Polska Miedz	578	2.9
7	Rio Tinto	545	2.7
8	Antofagasta	487	2.4
9	First Quantum Minerals	483	2.4
10	Vale	420	2.1

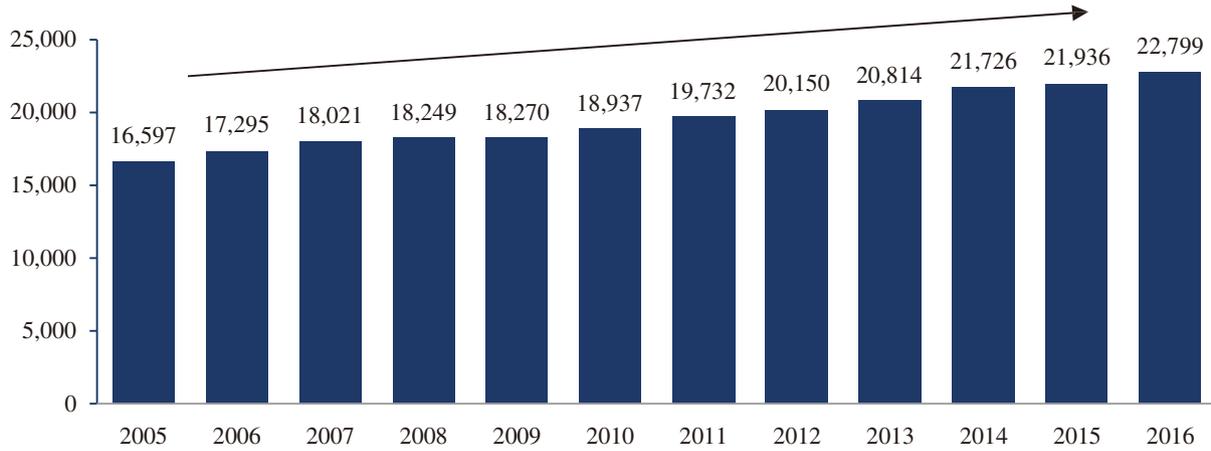
Source: Wood Mackenzie

INDUSTRY OVERVIEW

Refined Copper Supply

Global refined copper production has increased from 16.6Mt in 2005 to 22.8Mt in 2016, representing an annual growth rate of 2.9% per annum.

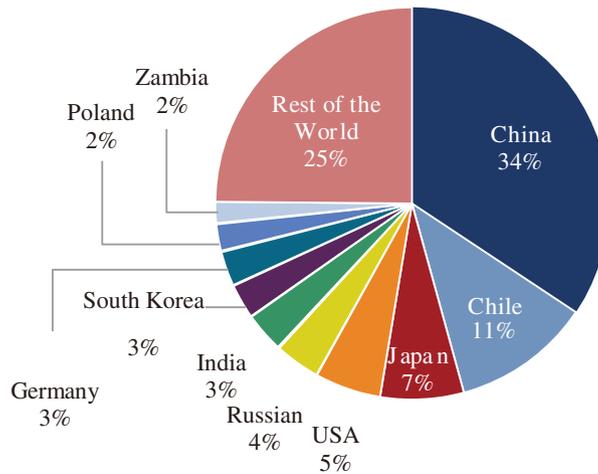
Refined Copper Production 2005–2016 (kt)



Source: Wood Mackenzie

China accounts for the highest refined production globally with 34% of global production, which aligns with China being the largest ultimate consumer of copper.

Refined Copper Production 2016 by Country



Source: Wood Mackenzie

INDUSTRY OVERVIEW

Outlook for Copper

The markets turned decidedly bullish through Q4 2016. This improvement in sentiment in part reflected the collective realisation that Chinese demand in 2016 would be stronger than initial expectations. Higher supply side disruptions during the July–September period, declining exchange inventories and president Trump’s comments on pro-industry policies/potential infrastructure stimulus provided further support and as a wave of speculative money came into the market, copper rose to 17-month highs of over \$6,000/t.

In the near term, it is expected that as output growth slows and demand continues to expand (albeit more modestly), the market will tighten once again. This will drive prices higher and should also encourage more scrap back into the system. The long lead times (7–10 years) required to bring new capacity into production means that there will be a period of consistent supply deficits between 2021 and 2023. Once new supply starts to reach the market, surpluses should emerge from 2024 with prices reversing their upward trend, falling to long-term incentive price level.

Copper Demand

In the near term to 2020, as end-use growth drivers slow in China and increases in labour costs lead manufacturers to gradually seek alternative locations to set up their semis capacity, India and a number of countries in the Association of South East Asian Nations will inherently drive the demand for copper. The Asian region is expected to account for more than three quarters of the copper demand. Near term demand in China may be boosted by China’s stimulus package on infrastructure and transportation. However, this is at the expense of lower demand in the medium to long term.

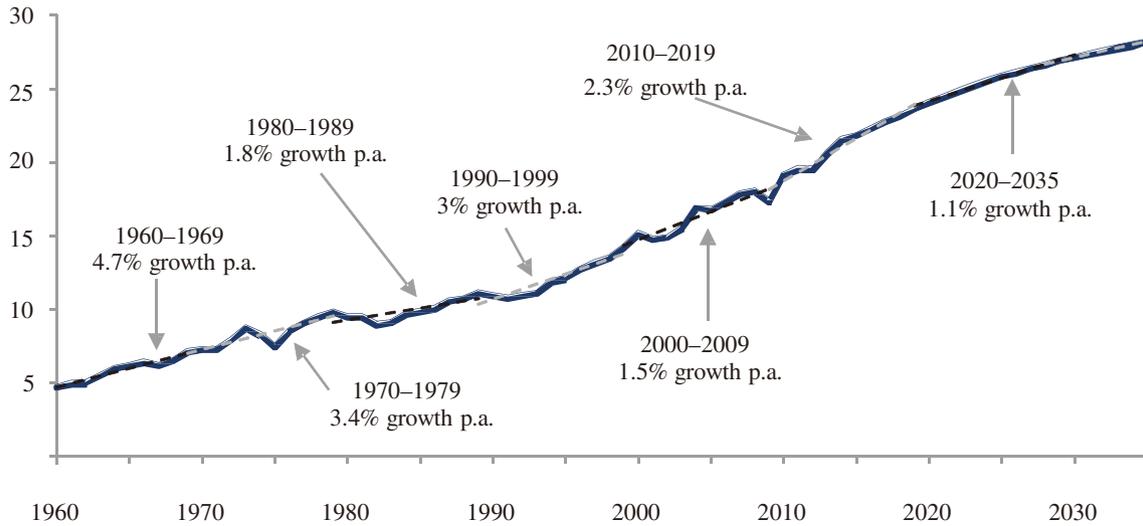
Country	2016–2020 CAGR
Africa	5.8%
Asia (excluding China and Japan)	3.6%
Middle East	2.6%
China	2.3%

Source: Wood Mackenzie

In the longer term, copper demand is expected to be underpinned by strong demand from Africa, the Middle East and some Asian countries which will outweigh a fall in demand from western countries, with resultant global demand growth averaging 1.2% from 2016 to 2035.

INDUSTRY OVERVIEW

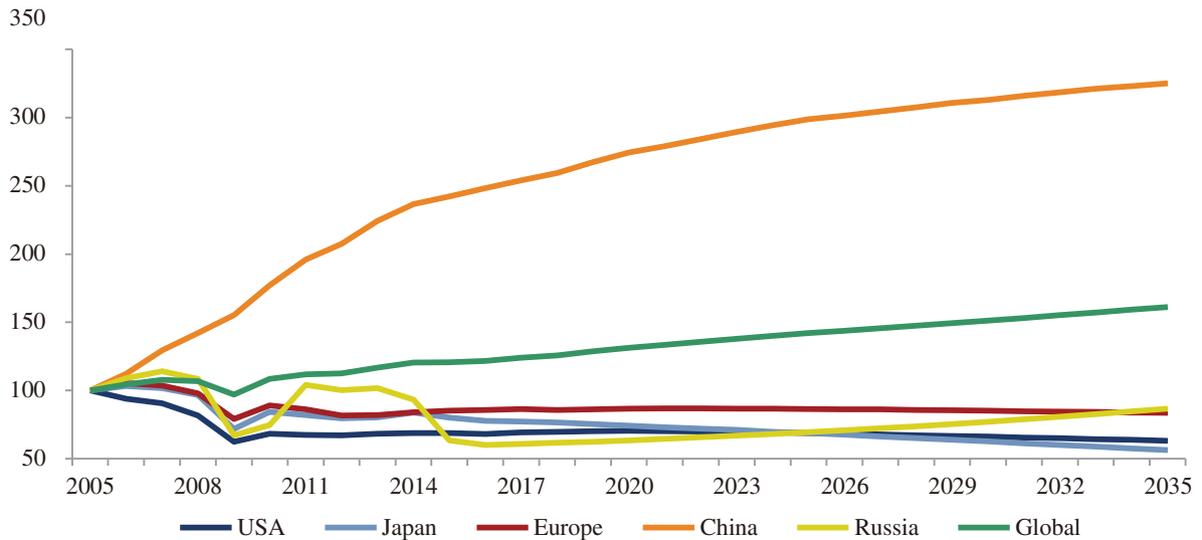
Average Annual Global Refined Copper Consumption (Mt)



Source: Wood Mackenzie

As growth in consumption in China begins to plateau, demand growth in India, Africa, and the Middle East all drive global demand growth. Copper consumption is expected to grow at compounded annual growth rates (“CAGR”s) for 2016–2035 of 6.7%, 5.2%, and 2.4% for India, Africa, and the Middle East respectively.

Indexed Copper Consumption Growth (Index 2005 = 100)



Source: Wood Mackenzie

INDUSTRY OVERVIEW

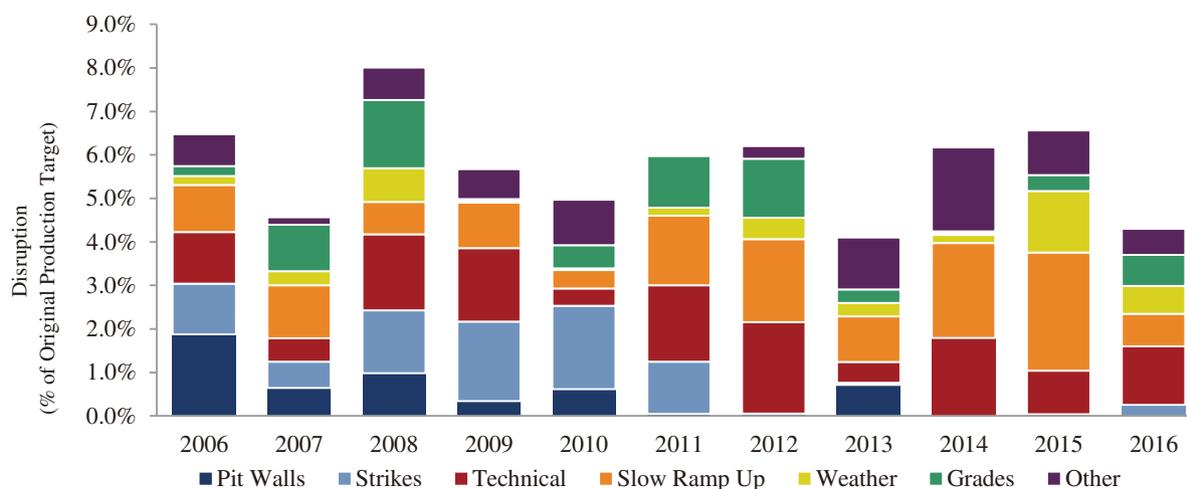
Copper Supply

Copper mine production is projected to grow until 2019 before disruptions. Near term, Wood Mackenzie believes that copper mine production will increase over the next three years to 2019 which will see global production capability (before disruptions) exceeds 21Mt. These additions to mine production during the period from 2015 to 2019 represent an annual CAGR of 2.9%. Beyond 2019, base case mine production is forecasted to decline due to reserve depletion and will reach 17.6Mt by 2025 and 11.9Mt by 2035.

It is projected that mine output will be close to matching demand in 2016 and lack of advanced development projects will lead to tight metal market early in next decade. The production capability of mines is expected to come close to satisfying primary copper demand over the period 2017 to 2019. The average annual deficit over this period is forecasted to be ~0.2Mt. Without meaningful incremental production from new projects, a more significant deficit is expected to rapidly open up from 2020 onwards.

Between 2006 and 2015, disruptions to mine production averaged 1Mt/annum or 5.8% of initial expectations. After running at low levels during 1H 2016 more significant disruptions identified during 2H.

Disruptions Summary (Copper in Concentrate plus SX-EW Cathode)



Source: Wood Mackenzie

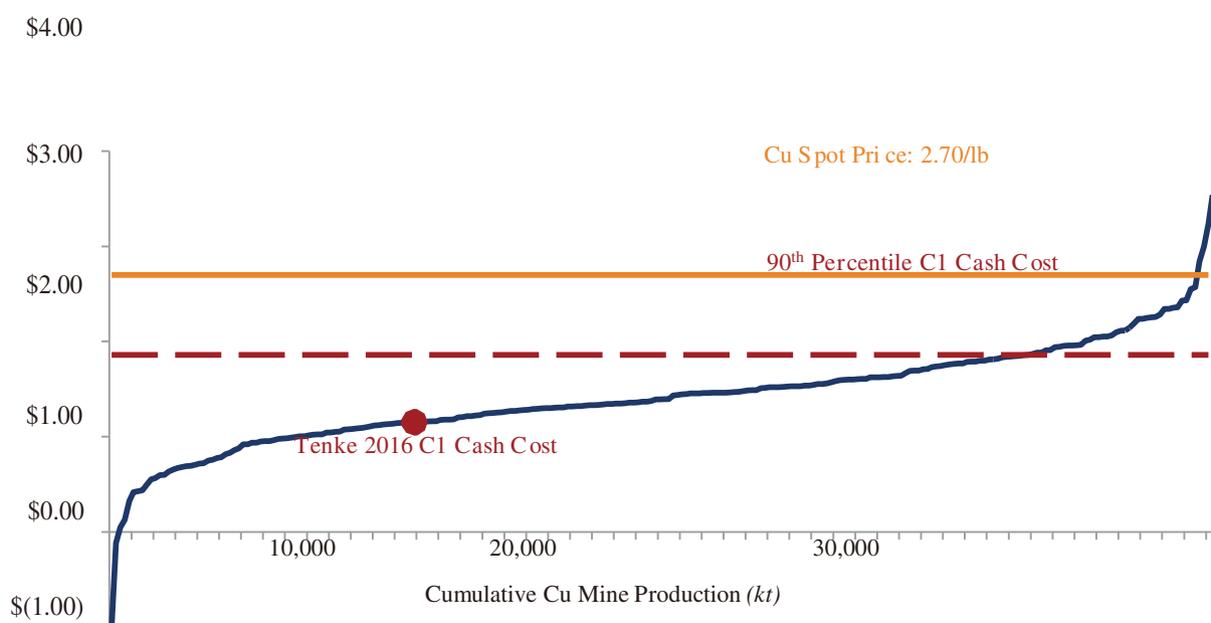
INDUSTRY OVERVIEW

Cost Curve Analysis

The global cost curve for 2016 is shown below. It is clear that, even at current prices, there are still some producers to the right hand of the cost curve who are losing money at current copper prices. It is important to note that this cash cost curve does not include capital charges for development capital spent, which means that a number of projects are uneconomic at today's copper price, even if their cash costs are lower than the spot copper price.

In particular, the cost curve is relatively steep beyond the 90th percentile demonstrating copper price and affording a level of insulation to low cost producers.

2016 Copper C1 Cash Cost Curve (US\$/lb Payable Copper)



Source: Wood Mackenzie, LME

Note: Copper spot price is as of 17 February 2017.

Copper Prices

2016 now looks set to be a turning point in the market. The supply deficit in the near term is expected to drive prices higher. Due to the long lead times required to bring new capacity to balance the market, Wood Mackenzie estimates that copper will advance to a peak of \$8,708/tonne (\$3.95/lb) in constant 2016\$ in 2023. From 2024, surpluses should emerge with prices falling to long-term incentive price level of \$7,275/tonne (\$3.30/lb) in constant 2016\$ by 2026.

INDUSTRY OVERVIEW

Broker Copper Price Forecasts

Broker	Date	Calendar Year		
		2017	2018	2019
Broker 1	2/20/17	\$2.19	\$2.22	\$2.24
Broker 2	2/20/17	\$2.76	\$3.03	
Broker 3	2/14/17	\$2.82	\$2.95	\$2.99
Broker 4	2/9/17	\$2.15	\$2.21	\$3.39
Broker 5	2/9/17	\$2.61	\$2.95	\$3.18
Broker 6	2/8/17	\$2.65		
Broker 7	2/8/17	\$2.39		\$3.74
Broker 8	2/6/17	\$2.49	\$2.74	\$2.87
Broker 9	2/2/17	\$2.61	\$2.72	\$2.72
Broker 10	1/31/17	\$2.61	\$2.95	\$3.18
Broker 11	1/30/17	\$3.45		
Broker 12	1/25/17	\$2.36		
Broker 13	1/24/17	\$2.94		
Broker 14	1/6/17	\$2.46	\$2.54	\$2.63
Broker 15	12/16/16	\$2.59	\$2.72	
Broker 16	12/15/16	\$2.65	\$2.75	\$3.00
Broker 17	12/15/16	\$2.40	\$2.58	\$2.76
Broker 18	11/23/16	\$2.61	\$2.72	\$2.95
Broker 19	10/26/16	\$2.49	\$2.86	\$2.95
Broker 20	9/19/16	\$2.33		
Broker 21	8/17/16	\$2.27	\$2.38	
Broker 22	8/9/16	\$2.95	\$2.95	\$3.18
Median		\$2.60	\$2.73	\$2.97
Average		\$2.58	\$2.70	\$2.98

INDUSTRY OVERVIEW

Historical and Forecast Copper Price (USD/lb)



Source: Wood Mackenzie, LME, Bloomberg

INDUSTRY OVERVIEW

COBALT MARKET OVERVIEW

Introduction

Cobalt is a chemical element that is found in the Earth's crust in chemically combined form. The element produced by reductive smelting is a hard, silver-gray metal. The main source of cobalt is as a by-product of copper and nickel mining. The Central African Copperbelt yields most of the cobalt mined worldwide.

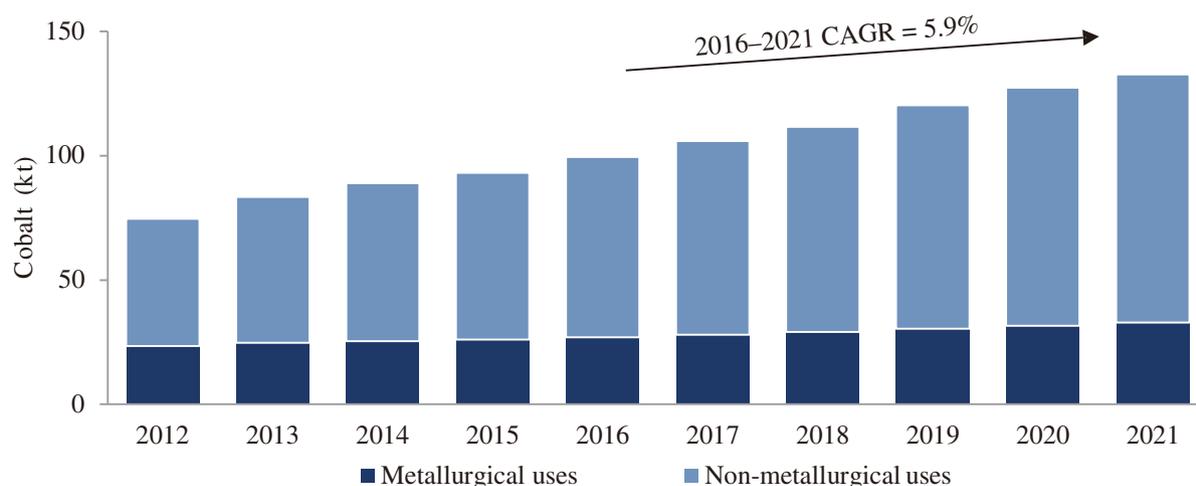
The cobalt market can be split into two major segments, non-metallurgical and metallurgical uses. Non-metallurgical uses accounted for 73% of all cobalt consumed in 2016. Key sectors include Li-ion batteries for consumer electronics (laptops, PCs, smartphones etc.), Li-ion batteries for EVs, polyester and tyres. In recent years non-metallurgical uses take up an ever increasing share of the market as Li-ion batteries have grown in popularity. Metallurgical uses accounted for 27% of cobalt consumed in 2016. Key sectors include superalloys, high-speed steel, carbide and diamond tools and magnets.

Cobalt Demand

World consumption of cobalt has more than doubled since 2000. The rechargeable battery sector has developed into becoming the largest consuming end-use of cobalt over the last 24 years. Since 1990, the number of cells manufactured on an annual basis has increased at rates averaging around 15% per annum. Initially, cobalt was only used in NiCd and NiMH cells, but since 1995, lithium-ion battery has accounted for virtually all of the growth in cobalt consumption in batteries.

Asia's demand share will continue to increase while other regions' demand is forecasted to decline. Structural shift in cobalt consumption growth from developed to emerging regions will remain. Transfer of knowledge from industrialized to industrializing regions will allow the latter to expand high-tech industries that consume cobalt.

Refined Cobalt Consumption

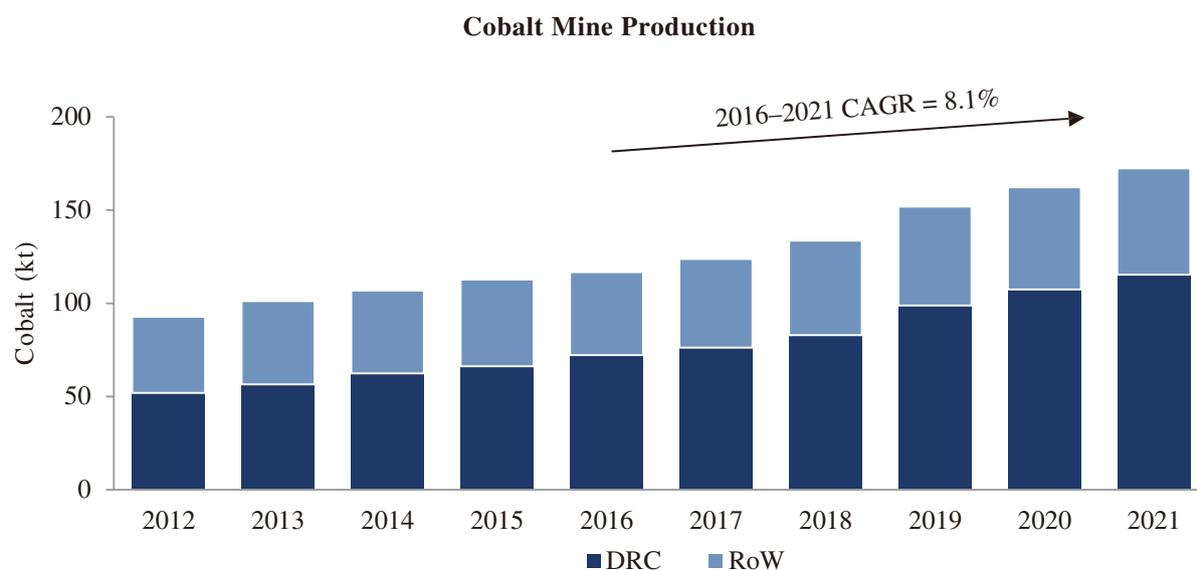


Source: CRU

INDUSTRY OVERVIEW

Cobalt Mine Supply

Over 50% of cobalt reserves are found in the Central African Copperbelt in the form of sediment-hosted stratiform copper-cobalt deposits. The next most important mineral province is the occurrence of nickel laterites found in Australia, Cuba, SE Asia, and the Pacific. Cobalt also occurs in magnetic sulphide deposits in Canada, Russia and Western Australia. Currently 61% of cobalt comes from copper mining and 37% from nickel operations. The remaining 2% comes from primary cobalt mines in Morocco and until recently, in Uganda. Mined production is expected to increase steadily from 117kt of contained cobalt in 2016 to 172kt by 2021.



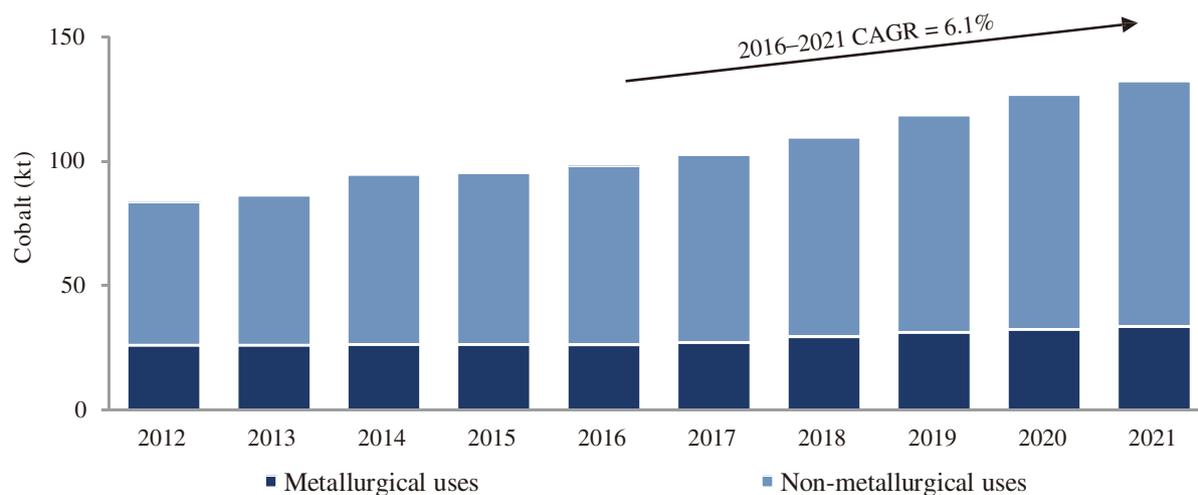
Source: CRU

Refined Cobalt Supply

Refined cobalt supply includes refined metal, bulk and speciality products and secondary supply. Increasing production has been controlled by major chemical refineries in China, which have responded to growing demand from the Li-ion battery sector. Chinese chemical refineries are now responsible for around 78% of global supply of primary bulk and speciality products. Refined cobalt production is expected to increase from 98kt in 2016 to 132kt in 2021.

INDUSTRY OVERVIEW

Refined Cobalt Supply



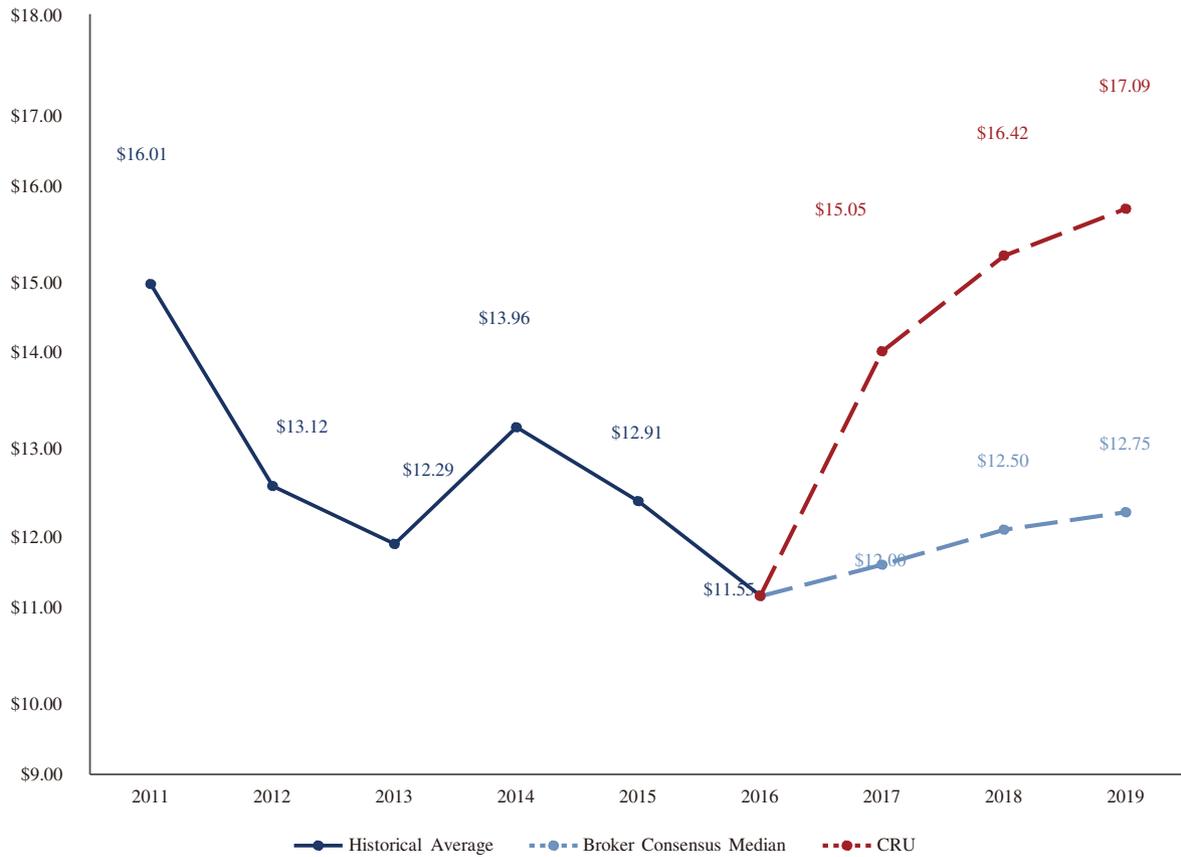
Source: CRU

Cobalt Prices

LME cobalt price has shown stepped increases since July 2016, from \$10.73/lb at the start of the year to over \$16.78/lb in January in 2017. CRU forecasts small deficits in both metallurgical (-704 tonnes) and non-metallurgical (-545 tonnes) supply in 2016 that will grow in 2017. Metal stockpiling activity and tightening mine supply are making the market increasingly tight, which should help lift annual average prices by around 30% y/y in 2017. Prices could exceed \$20/lb if a number of upside risks come into play. These include stronger than expected EV demand growth, decreasing mine and metal supply as a result of a slump in copper and nickel prices, political instability in the DRC and stalling refined chemical growth.

INDUSTRY OVERVIEW

Historical and Forecast Cobalt Price (USD/lb)



Source: LME, CRU, Bloomberg, Broker Research Reports

INDUSTRY OVERVIEW

Broker Cobalt Price Forecasts

Broker	Date	Calendar Year		
		2017	2018	2019
Broker 1	2/13/17	\$13.00	\$11.00	\$11.00
Broker 2	2/8/17	\$17.00	\$17.00	
Broker 3	1/23/17	\$14.00	\$14.00	\$15.00
Broker 4	5/25/16	\$14.00	\$14.00	\$14.00
Broker 5	5/16/16	\$12.00	\$12.50	\$13.00
Broker 6	5/16/16	\$11.50	\$12.00	
Broker 7	5/13/16	\$11.00	\$10.50	\$10.00
Broker 8	5/13/16	\$12.00	\$12.00	\$12.00
Broker 9	5/11/16	\$11.50	\$12.00	
Broker 10	5/9/16	\$12.00	\$12.50	\$12.50
Broker 11	4/20/16	\$12.00	\$12.50	\$13.00
Broker 12	4/15/16	\$12.50	\$13.00	
Median		\$12.00	\$12.50	\$12.75
Average		\$12.71	\$12.75	\$12.56

1. FINANCIAL INFORMATION OF THE GROUP

The financial information of the Group for each of the years ended 31 December 2013, 2014, 2015 and for the first nine months of 2016 ended 30 September 2016 can be referred to in the respective annual reports and unaudited 2016 Third Quarterly Financial Report of the Company, which have been published on both the website of the Stock Exchange (<http://www.hkexnews.hk>) and the website of the Company (<http://www.chinamoly.com>).

- i. annual report of the Company for the year ended 31 December 2013 (pages 57 to 156) at <http://chinamoly.com/06invest/DOC/E-CMOC-AR006-hkex.pdf>; or <http://www.hkexnews.hk/listedco/listconews/SEHK/2014/0324/LTN20140324073.pdf>;
- ii. annual report of the Company for the year ended 31 December 2014 (pages 63 to 204) at <http://chinamoly.com/06invest/DOC/E-CMOC-AR193-HKEx.pdf>; or <http://www.hkexnews.hk/listedco/listconews/SEHK/2015/0429/LTN201504291642.pdf>;
- iii. annual report of the Company for the year ended 31 December 2015 (pages 66 to 204); http://chinamoly.com/06invest/DOC/E_03993_AR009_0426.pdf; or <http://www.hkexnews.hk/listedco/listconews/SEHK/2016/0426/LTN20160426340.pdf>; and
- iv. 2016 Third Quarterly Financial Report for the nine months ended 30 September 2016 (pages 36 to 61) at http://chinamoly.com/06invest/DOC/E_03993_A173_1030.pdf; or <http://www.hkexnews.hk/listedco/listconews/SEHK/2016/1030/LTN20161030105.pdf>.

2. FINANCIAL INFORMATION ON FMDRC

The financial information on FMDRC for each of the years ended 31 December 2013, 2014, 2015 and for the first three months ended 31 March 2016 can be referred to the Appendix II to the circular of the Company dated 8 September 2016 in relation to the acquisition of Freeport-McMoRan Inc.'s copper and cobalt businesses, which has been published on the website of the Stock Exchange (<http://www.hkexnews.hk>).

- i. accountants' report on FMDRC for each of the years ended 31 December 2013, 2014, 2015 and for the first three months ended 31 March 2016 (pages II-4 to II-10) at <http://www.hkexnews.hk/listedco/listconews/SEHK/2016/0908/LTN20160908844.pdf>.

3. FINANCIAL INFORMATION ON THE NIOBIUM AND PHOSPHATES BUSINESSES

The financial information of the niobium and phosphates businesses for each of the years ended 31 December 2013, 2014, 2015 and for the first six months ended 30 June 2016 can be referred to the Appendix IIA and Appendix IIB to the circular of the Company dated 8 September 2016 in relation to the acquisition of Anglo American plc's niobium and phosphates businesses, which has been published on the website of the Stock Exchange (<http://www.hkexnews.hk>).

- i. accountants' report on the niobium business for each of the years ended 31 December 2013, 2014, 2015 and for the first six months ended 30 June 2016 (pages IIA-3 to IIA-10) at <http://www.hkexnews.hk/listedco/listconews/SEHK/2016/0908/LTN20160908840.pdf>.
- ii. accountants' report on the phosphates business for each of the years ended 31 December 2013, 2014, 2015 and for the first six months ended 30 June 2016 (pages IIB-4 to IIB-12) at <http://www.hkexnews.hk/listedco/listconews/SEHK/2016/0908/LTN20160908840.pdf>.

4. STATEMENT OF INDEBTEDNESS OF THE ENLARGED GROUP

At the close of business on 31 January 2017, the Enlarged Group had outstanding borrowings, debt securities and certain contingent liabilities and guarantees, details of which are set out as follows:

The Group

1. Bank loans

	As at 31 January 2017 RMB'000
Unsecured and unguaranteed	9,136,816
Secured and unguaranteed	<u>18,832,893</u>
Total	<u><u>27,969,709</u></u>

The secured bank loans are secured by bank deposits, structured deposits, shares of subsidiaries and other financial assets purchased from the banks.

2. *Debt securities*

	As at 31 January 2017 RMB'000
Unsecured and unguaranteed	
Super Short-term financing bonds (超短期融資券)	2,000,000
Short-term financing bonds (短期融資券)	500,000
Medium term notes (中期票據)	<u>4,000,000</u>
Total	<u><u>6,500,000</u></u>

3. *Other borrowings*

	As at 31 January 2017 RMB'000
Unsecured and unguaranteed	
Gold lease liabilities measured at fair value	<u><u>2,800,153</u></u>

4. *Contingent liabilities and guarantee*

- On 30 January 2013, the Company received relevant documents from the Intermediate People's Court of Luoyang City, Henan Province, stating that West Lead Mine, Yangshuao, Luanchuan County (欒川縣楊樹凹西鉛礦) ("Yangshuao") filed a lawsuit accusing that the tailing storage built by the No. 3 Ore Processing Branch, a branch of the Company, was in its mining area. As the height of the dam of the tailing storage increased and the level of the groundwater rose, the mining facilities and equipment of Yangshuao were damaged. The plaintiff was unable to exploit the defined leadzinc ore and an economic loss was thus incurred. Therefore, the plaintiff made claims that No. 3 Ore Processing Branch shall cease the infringement and compensate the plaintiff for a direct economic loss of approximately RMB18 million. According to the results of judicial authentication, the appraised value of the mining right in the litigation in respect of Yangshuao amounted to RMB1.724 million.

On 21 March 2016, the Company received court decision from Intermediate People Court of Luoyang City, judging that the Company shall pay RMB1.724 million to the plaintiff. The Company has filed a counterclaim with the Higher People's Court of Henan Province.

No provision has been made as at 31 January 2017.

2. As at 31 January 2017, the Group provides guarantee to Australian government agencies through bank for its operation of copper and gold mine businesses in Australia. The amount of the guarantee is Australian dollar 33 million (equivalent to RMB174 million).
3. The Group's operation in Brazil is subject to a series of legal claims relating to tax, labour and other civil matters that arise in the normal course of business. As at 31 January 2017, provisions of US\$18 million (equivalent to RMB124 million) have been made for those tax related claims and labour and civil claims, where the outflow of resources embodying economic benefits is considered probable.

As at 31 January 2017, there are contingent liabilities of US\$88 million (equivalent to RMB604 million) related to those tax related claims and labor and civil claims, where the outflow of resources embodying economic benefits is considered not probable.

4. The Group's operation in the DRC is subject to legal proceedings, claims and liabilities that arise in the normal course of business. Management does not believe, based on currently available information, that the outcome of those matters will have a material adverse effect on the Group's business, financial condition, results of operations or cash flow.

Save as disclosed above or as otherwise mentioned herein, and apart from intragroup liabilities and normal accounts payables in the ordinary course of business, as at 31 January 2017, the Group did not have any debt securities issued and outstanding, and authorized or otherwise created but unissued, and term loans, other borrowings or indebtedness in the nature of borrowing including liabilities under acceptances or acceptance credits or hire purchase commitments, and any mortgages and charges, guarantees and material contingent liabilities.

Target Group

The Target Group is subject to legal proceedings, claims and liabilities that arise in the normal course of business. Management does not believe, based on currently available information, that the outcome of those matters will have a material adverse effect on the Target Group's business, financial condition, and results of operations or cash flow. As at 31 January 2017, the Target Group did not have any significant contingent liabilities to be disclosed in accordance with International Accounting Standards 37 – "Provisions, Contingent Liabilities and Contingent Assets".

Save as disclosed above or as otherwise mentioned herein, and apart from intragroup liabilities and normal accounts payables in the ordinary course of business, as at 31 January 2017, the Group and the Target Group did not have any debt securities issued and outstanding, and authorized or otherwise created but unissued, and term loans, other borrowings or indebtedness in the nature of borrowing including liabilities under acceptances or acceptance credits or hire purchase commitments, and any mortgages and charges, guarantees and material contingent liabilities.

5. WORKING CAPITAL SUFFICIENCY OF THE ENLARGED GROUP

The Directors are of the opinion that, after taking into account the expected completion of the transaction as mentioned in this circular and the financial resources available to the Enlarged Group, including but not limited to its internally generated funds, cash and cash equivalents, other external facilities from financial institutions and the Investors, and in the absence of unforeseen circumstances, the Enlarged Group has available working capital for 125% of its present requirements for the next twelve months from the date of this circular.

6. MATERIAL ADVERSE CHANGE

As at the Latest Practicable Date and to the best of the knowledge and belief of the Directors, there is no material adverse change in the financial or trading position of the Group since 31 December 2015, being the latest published audited financial statements of the Group were made up.

7. MANAGEMENT DISCUSSION AND ANALYSIS OF THE GROUP

Set out below is the management discussion and analysis of the Group for each of the years ended 31 December 2013, 2014 and 2015 as extracted from the annual reports of the Company. The financial data in respect of the Group, for the purpose of this circular, is derived from the audited consolidated financial statements of the Company for the years ended 31 December 2013, 2014 and 2015 and the unaudited consolidated financial statements of the Company for the first three quarter ended 30 September 2016.

A. MANAGEMENT DISCUSSION AND ANALYSIS OF THE GROUP FOR THE YEAR ENDED 31 DECEMBER 2013**BUSINESS REVIEW**

During the year 2013, with the benefits of efficient management, detailed organisation and continued commitment of our staff, the Company fully capitalised on its resources and vertically integrated industrial chain and industrial scale. The Company's production volume of molybdenum remained stable and the production volume of tungsten products achieved a steady growth.

In 2013, the production volume of molybdenum concentrates (including 47% Mo), molybdenum oxides (including 51% Mo), ferromolybdenum (including 60% Mo) and tungsten concentrates (including 100% WO₃) (excluding Luoyang Yulu Mining Co., Ltd.* (洛陽豫鷺礦業有限責任公司)) ("Yulu Company") of the Company amounted to approximately 32,436t, 36,788t, 28,036t and 6,984t, respectively, representing a decrease of 0.1%, and an increase of 7.7%, 9.6% and 27.1% as compared with that of 2012, respectively. The production cost in cash of molybdenum metal (100% Mo) of the Company was RMB68,251/tonne in 2013 and its processing recovery rate was 84.6%; the production cost in cash of tungsten metal (100% WO₃) was RMB21,019/tonne and its processing recovery rate was 75.6%.

OVERVIEW

For the year ended 31 December 2013, the net profit of the Group was RMB1,084.9 million, representing an increase of RMB68.5 million or 6.7% from RMB1,016.4 million for the year ended 31 December 2012. For the year ended 31 December 2013, net profit attributable to the owners of the parent company was RMB1,174.2 million, representing an increase of RMB123.9 million or 11.8% from RMB1,050.3 million for the year ended 31 December 2012.

The comparative analysis for the year ended 31 December 2013 and the year ended 31 December 2012 is as follows:

OPERATING RESULTS

For the year ended 31 December 2013, the Group recorded an operating revenue of RMB5,536.5 million, representing a decrease of RMB174.4 million or 3.1% from RMB5,710.9 million for the year ended 31 December 2012. For the year ended 31 December 2013, the gross profit of the Group was RMB1,803.0 million, representing an increase of RMB101.3 million or 6.0% from RMB1,701.7 million for the same period last year.

APPENDIX I
FINANCIAL INFORMATION OF THE GROUP

The table below sets out the turnover, cost of sales, gross profit and gross profit margin of our products in 2013 and 2012:

Product Name	For the year ended 31 December							
	2013				2012			
	Turnover (RMB million)	Operating cost (RMB million)	Gross profit (RMB million)	Gross profit margin (%)	Turnover (RMB million)	Operating cost (RMB million)	Gross profit (RMB million)	Gross profit margin (%)
Domestic market								
- Molybdenum additive materials	2,455.8	1,697.3	758.5	30.9	2,599.5	1,860.5	739.0	28.4
- Tungsten-related products	1,111.9	136.7	975.2	87.7	929.0	204.6	724.4	78.0
- Deep-processed molybdenum products	75.0	73.3	1.7	2.2	124.6	129.0	(4.4)	(3.5)
- Gold and silver and relevant products	716.5	712.8	3.7	0.5	965.5	805.9	159.6	16.5
- Electrolytic lead	504.2	607.7	(103.5)	(20.5)	578.8	606.5	(27.7)	(4.8)
- Sulfuric acid	10.7	38.7	(28.0)	(262.9)	21.9	41.7	(19.8)	(90.4)
- Others	450.7	360.7	90.0	20.0	447.5	320.3	127.2	28.4
Sub-total	5,324.8	3,627.2	1,697.6	31.9	5,666.8	3,968.5	1,698.3	30.0
International market								
- Molybdenum additive materials	32.7	39.0	(6.3)	(19.1)	33.2	29.7	3.5	10.5
- Deep-processed molybdenum products	1.8	1.7	0.1	4.9	10.9	11.0	(0.1)	(0.9)
- Copper concentrates	172.2	65.6	106.6	61.9	-	-	-	-
- Others	5.0	-	5.0	100	-	-	-	-
Sub-total	211.7	106.3	105.4	49.8	44.1	40.7	3.4	7.7
Total	5,536.5	3,733.5	1,803.0	32.6	5,710.9	4,009.2	1,701.7	29.8

For the year ended 31 December 2013, the Group recorded an operating revenue of RMB5,536.5 million, representing a decrease of RMB174.4 million or 3.1% from RMB5,710.9 million for the year ended 31 December 2012. Such decrease in operating revenue was mainly attributable to: 1) the decrease in operating revenue driven by a significant decline in the market prices of gold and silver in 2013; and 2) the decrease in operating revenue due to the decrease in the selling prices of molybdenum additive materials in this year as affected by the market prices.

For the year ended 31 December 2013, the operating cost of the Group was RMB3,733.5 million, representing a decrease of RMB275.7 million or 6.9% from RMB4,009.2 million for the same period last year. Such decrease in the operating cost was mainly attributable to the fact that the Group intensified the internal control, which lowered the cost of molybdenum concentrates, the raw materials for processing tungsten and ferromolybdenum, and decreased the selling cost. Set out below is the component of cost of the major products of the Company:

Industry	Component of cost	Current period (RMB million)	Percentage over total cost for the current period	Amount for the same period last year (RMB million)	Percentage over total cost for the same period last year	Percentage of changes in amount during the year
Molybdenum-related products	Materials	409.25	25%	505.60	29%	(19%)
	Labor	313.17	19%	304.18	18%	3%
	Depreciation	176.38	11%	173.92	10%	1%
	Energy	262.00	16%	251.65	14%	4%
	Manufacturing	477.81	29%	509.52	29%	(6%)
Tungsten-related products	Materials	65.05	39%	66.80	42%	(3%)
	Labor	46.02	28%	42.79	27%	8%
	Depreciation	16.61	10%	16.35	10%	2%
	Energy	33.37	20%	25.91	17%	29%
	Manufacturing	4.00	2%	5.86	4%	(32%)
Gold and silver-related products	Materials	338.67	53%	418.69	59%	(19%)
	Labor	215.69	33%	202.70	28%	6%
	Depreciation	26.91	4%	24.42	3%	10%
	Energy	18.25	3%	15.51	2%	18%
	Manufacturing	44.52	7%	53.58	8%	(17%)
Electrolytic lead	Materials	493.15	91%	527.78	90%	(7%)
	Labor	11.55	2%	12.08	2%	(4%)
	Depreciation	23.12	4%	24.28	4%	(5%)
	Energy	13.74	3%	20.31	3%	(32%)
	Manufacturing	3.01	1%	3.25	1%	(7%)

For the year ended 31 December 2013, the average gross profit margin of the Group was 32.6%, representing an increase of 2.8% from 29.8% for the same period last year. Such increase was mainly attributable to: 1) the year-on-year increase in the gross profit margin of molybdenum additive materials following the cost reduction of molybdenum-related products as compared with the same period last year; 2) the year-on-year increase in the gross profit margin of tungsten-related products as driven by the price increase of tungsten-related products as compared with the same period last year and the cost reduction in the year; and 3) Northparkes copper and gold mine, in which the Company holds 80% equity interests, contributed RMB106.6 million to the Group's gross profit.

BUSINESS TAXES AND LEVIES

For the year ended 31 December 2013, the Group recorded a business taxes and levies of RMB270.7 million, representing an increase of RMB1.8 million or 0.7% from RMB268.9 million for the same period in 2012, basically levelled off with that of last year.

SELLING EXPENSES

For the year ended 31 December 2013, the selling expenses of the Group amounted to RMB26.9 million, representing an increase of RMB1.6 million or 6% from RMB25.3 million for the same period in 2012. Such increase was mainly attributable to the additional RMB6.0 million from the selling expenses of the subsidiary in Australia in the period.

ADMINISTRATIVE EXPENSES

For the year ended 31 December 2013, the administrative expenses of the Group were RMB686.2 million, representing an increase of RMB252.9 million or 58.4% from RMB433.3 million for the same period in 2012. Such increase was mainly attributable to the stamp duty and professional fees, etc. of RMB298.0 million incurred for the acquisition of the business in Australia made by the Group during the period. Excluding such factors, the domestic administrative expenses decreased by RMB45.1 million as compared with the same period last year.

For the year ended 31 December 2013, the Group's administrative expenses included a technology development fee of RMB103.3 million. The main projects included: the research and production of the new type MoO₃ balls (新型氧化鉬球研製), the research on the integrated technology for the intensified mining of the open pit and treatment of the open-mined areas in Sandaozhuang and specification (三道莊露天礦強化開採與空區處理一體化工藝與規範研究), the research on the application of the shortened floatation column in the selection of molybdenum (浮選柱矮化在選鉬中的應用研究) and the research on the physical and chemical properties of production backwater and its influence on the selection of molybdenum and improvement measures (生產回水的理化性質及其對選鉬效果的影響和改善措施的研究).

FINANCE EXPENSES

For the year ended 31 December 2013, the finance expenses of the Group amounted to RMB103.2 million, representing an increase of RMB53.6 million or 108.1% from RMB49.6 million for the same period in 2012. Such decrease was mainly attributable to the additional financing expenses for the overseas acquisition project and the increased interest expenses due to the medium-term note of the Company.

INVESTMENT INCOME

For the year ended 31 December 2013, the investment income of the Group was RMB373.4 million, representing an increase of RMB222.4 million or 147% from RMB151.0 million for the same period in 2012. Such increase was mainly attributable to the income increase from the investment in treasury products and improvement in results of Yulu Company, an associated company, as compared with the same period last year.

NON-OPERATING INCOME

For the year ended 31 December 2013, the non-operating income of the Group amounted to RMB246.6 million, representing an increase of RMB192.4 million or 355% from RMB54.2 million for the same period last year. Such increase was mainly attributable to recognition of RMB200.5 million in respect of the bargain purchase generated from the acquisition of the business in Australia.

NON-OPERATING EXPENSES

For the year ended 31 December 2013, the non-operating expenses of the Group amounted to RMB20.38 million, representing an increase of RMB16.17 million or 384.09% from RMB4.21 million for the same period in 2012. Such increase was mainly due to the donations of RMB15.0 million made to Luanchuan County People's Government for poverty relief.

INCOME TAX EXPENSES

For the year ended 31 December 2013, the income tax expenses of the Group amounted to RMB151.3 million, representing an increase of RMB70.7 million or 87.7% from RMB80.6 million for the same period last year. Such increase was mainly attributable to a reverse of the income tax of 2011 due to the Company's entitlement to an income tax preferential rate of 15% recognised in last year, which decreased the figures in the same period last year, and the increase in the total profits as compared with the same period last year and the reversed deferred income tax assets including the production safety fee of domestic enterprises and provision for production maintenance fee.

NET PROFIT ATTRIBUTABLE TO OWNERS OF THE PARENT COMPANY

For the year ended 31 December 2013, the net profit of the Group attributable to owners of the parent company amounted to RMB1,174.2 million, representing an increase of RMB123.9 million or 11.8% from RMB1,050.3 million for the year ended 31 December 2012. Such increase was mainly attributable to an increase in the net profit for the year ended 31 December 2013.

MINORITY INTERESTS

For the year ended 31 December 2013, the minority interests of the Group were RMB-89.3 million, representing a decrease of RMB55.4 million or 163% from RMB-33.9 million for the same period last year. Such decrease was mainly attributable to the decrease in the net profit of the Group's non-wholly-owned subsidiaries during the year.

FINANCIAL POSITION

As of 31 December 2013, the total assets of the Group amounted to RMB21,899.1 million, comprising non-current assets of RMB14,726.5 million and current assets of RMB7,172.6 million. Equity attributable to shareholders of the parent company as at 31 December 2013 increased by RMB636.8 million or 5.5% to RMB12,178.3 million from RMB11,541.5 million as at 31 December 2012. Such increase was mainly due to the fact that the earnings in 2013 was more than the profit distribution in the same year.

CURRENT ASSETS

As of 31 December 2013, current assets of the Group decreased by RMB440.8 million or 5.8% to RMB7,172.6 million from RMB7,613.4 million as at 31 December 2012. The decrease in the current assets was mainly attributable to the decrease in the bank balances and cash due to the deposits placed by the Group for the long term borrowings of the subsidiary in Australia and CMOCLimited and the decrease in the raw materials inventories as a result of the strengthened management on the inventory liquidity of the lead smelters.

NON-CURRENT ASSETS

As of 31 December 2013, the non-current assets of the Group amounted to RMB14,726.5 million, representing an increase of RMB6,590.6 million or 81.0% from RMB8,135.9 million as at 31 December 2012. The increase in the non-current assets was mainly attributable to the additional fixed assets and intangible assets of RMB4,867.9 million generated from the Group's acquisition of the business in Australia in the period and the increase in other non-current assets due to the deposits placed by the Group for the long-term borrowings of the subsidiary in Australia and CMOCLimited.

CURRENT LIABILITIES

As of 31 December 2013, the current liabilities of the Group amounted to RMB2,044.0 million, representing an increase of RMB738.4 million or 56.6% from RMB1,305.6 million as at 31 December 2012. The increase in the current liabilities was mainly attributable to the additional current liabilities of RMB579.3 million generated from the acquisition of the business in Australia and the increase in the held-for-trading financial liabilities of RMB357.3 million as a result of the gold lease agreement entered into with the bank in the period.

NON-CURRENT LIABILITIES

As of 31 December 2013, the non-current liabilities of the Group amounted to RMB6,962.5 million, representing an increase of RMB4,890.2 million or 236% from RMB2,072.3 million as at 31 December 2012. The increase in the non-current liabilities was mainly due to the increase in the long-term borrowings of RMB4,664.1 million following the acquisition of the business in Australia.

As at 31 December 2013, the Group had the following contingent liabilities:

On 30 January 2013, the Company received relevant documents from the Intermediate People's Court of Luoyang City, Henan Province, stating that West Lead Mine, Yangshuao, Luanchuan County (樂川縣楊樹凹西鉛礦) ("Yangshuao") filed a lawsuit accusing that the tailing storage built by the No. 3 Ore Processing Branch, a branch of the Company, was in its mining area. As the height of the dam of the tailing storage increased to occupy upwards and the level of the groundwater rose, the mining facilities and equipment of Yangshuao were damaged and its mining needed to be written off. The plaintiff was unable to exploit the defined lead-zinc ore and an economic loss was thus incurred. Therefore, the plaintiff contended that No. 3 Ore Processing Branch shall cease the infringement and compensate the plaintiff for a direct economic loss of approximately RMB18.0 million. The Company and its attorneys reviewed all the evidence submitted by Yangshuao and believed that the existence of the infringement claimed by the plaintiff could not be confirmed. If Yangshuao is unable to submit new evidence to the court, its claim of infringement is unlikely to be supported by the court only based on the existing evidence. Therefore, the Company currently believes that the litigation would not have any significant impact on the financial position of the Company and has not made any provision for an amount claimed in the aforesaid issue in its financial statements for the end of the period.

CONTINGENCY

The Northparkes joint venture of the Group provides indemnities to certain banks in respect of the guarantees given to various government agencies of New South Wales, Australia in relation to the operation of the business. The guarantees amounted to AUD18.36 million (equivalent to RMB100.16 million) as at 31 December 2013. The owners of the joint venture agreed with the enforcement of the guarantees arising from any obligations in relation to the business. As at 31 December 2013, no significant obligations for the guarantees were happened.

ASSETS-LIABILITIES RATIO

The gearing ratio (total liabilities/total assets) of the Group increased to 41.1% as of 31 December 2013 from 21.4% as of 31 December 2012. The increase in the assets-liabilities ratio was mainly attributable to the increase in the long-term borrowings of the Group.

CASH FLOW

As of 31 December 2013, the Group had cash and cash equivalents of RMB1,804.6 million, representing an increase of RMB341.0 million or 23.3% from RMB1,463.6 million as at 31 December 2012.

For the year ended 31 December 2013, net cash inflow generated from operating activities was RMB1,371.7 million; net cash outflow generated from investment activities was RMB4,310.4 million; net cash inflow generated from financing activities was RMB3,284.9 million, including the payment for dividends in 2012 of RMB609.14 million.

During 2013, the Group implemented strict internal management and costs saving measures, thus maintaining sound operation status and healthy financial position. As at the end of 2013, the Company had sufficient capital which enabled it to operate in a virtuous circle or satisfy the liquidity requirement for coping with the variations in the production capacity.

EXPOSURE TO PRICE FLUCTUATIONS OF MAJOR PRODUCTS

The income of the Company is primarily from the sales of molybdenum, tungsten and copper products, including ferromolybdenum, tungsten concentrates, copper concentrates and other molybdenum products. Its operational results are mainly influenced by fluctuations in the market prices of molybdenum, tungsten and copper. In the meantime, the Company sells gold, silver and lead products. Therefore, the price fluctuations of gold, silver and lead also have an impact on the Company. Since the fluctuations of exploration and smelting are relatively not significant, the Company's profit and profit margin in the reporting period are closely related with the price trend of commodities. If the prices of molybdenum, tungsten, copper, gold, silver and lead see a significant fluctuation in the future, the operational results of the Company will become unstable. In particular, if the prices of molybdenum, tungsten and copper plummet, the operational results of the Company will be affected.

EXPOSURE TO THE MINERAL RESOURCES

As an enterprise engaged in mineral exploitation, the Company is dependent on resources. The retained reserves and grade of mineral resources directly affect the Company's operation and development. The exploitation of Mineral Reserves with relatively low grade may be economically infeasible if the cost of production rises due to fluctuations in the market price of metal products, the drop in the recovery rate, inflation or other factors, or restrictions caused by technical problems and natural conditions such as weather and natural disasters in the process of mining. Therefore, full utilisation of the retained reserves of the Company cannot be guaranteed and the production capacity of the Company might be affected.

EXPOSURE TO INTEREST RATE

The exposure to interest rate of the Company is mainly related to our short-term and long-term borrowings and deposits. The outstanding liabilities of the Company are calculated based on the benchmark interest rate amended by The People's Bank of China and the London inter-bank market from time to time. As of the date of this report, the Company has not entered into any type of interest agreement or derivatives to hedge against fluctuations in interest rate or liabilities.

EXPOSURE TO EXCHANGE RATE

The Company's principal operations are in the PRC and recorded in RMB, the lawful currency of the PRC. As the production capacity of the Group increases along with its development in the markets and recovery in the overseas markets of molybdenum, tungsten and copper, export sales to different countries by the Company or through its subsidiary will increase. On 29 September 2013, the Company provided loans of approximately US\$785 million for the mergers and acquisitions of CMOC Limited and CMOC Mining (wholly-owned subsidiaries of the Company). All the assets of CMOC Mining are located in Australia, and its income is denominated in U.S. Dollar while its cost is settled in Australian Dollar. The foreign currency risks of the Company are primarily generated from the sales of products in foreign currencies and the holding of foreign assets and liabilities. Currently, the Company has no formal hedging policy in place. The Company has not entered into any foreign currency exchange contracts or derivatives to hedge against the Company's currency risks.

EMPLOYEES

As at 31 December 2013, the Group had approximately 8,427 full time employees, classified as follows by function and department:

Department	Employees	Proportion
Management & administration	838	9.9%
Quality control, research and development	653	7.8%
Production	5,467	64.9%
Repair and maintenance, safety inspection and environmental protection	1,469	17.4%
Total	8,427	100%

The remuneration policy for the employees of the Company is principally a salary point and performance remuneration system, which determines the remuneration of the employees on the basis of their positions and responsibilities and their quantified assessment results. Performance remuneration is linked to the Company's overall economic efficiency and personal performances, which provides a consistent, fair and impartial remuneration system for all the employees. The Group has participated in the social insurance contribution plans introduced by the PRC local governments. In accordance with the relevant PRC national and local labor and social welfare laws and regulations, the Group is required to pay on behalf of its employees a monthly social insurance premium covering pension insurance, medical insurance, unemployment insurance and housing reserve fund. Pursuant to the current applicable PRC local regulations, the percentage of certain insurance policies are as follows: the pension insurance, medical insurance, unemployment insurance and the contribution to housing reserve fund of our PRC employees represent 20%, 6%, 3% and 5% to 12% of his or her total basic monthly salary respectively. Employees in Australia are enrolled under the requisite pension fund and health scheme as required by Australian law.

USE OF PROCEEDS

As at 31 December 2013, the proceeds raised by the Group from the public offering of H shares in April 2007 of approximately RMB7,694.0 million has been fully applied.

On 9 October 2012, the Group issued 200,000,000 ordinary shares (A shares) publicly on the Shanghai Stock Exchange at an issue price of RMB3.00 per share and the proceeds raised was RMB600.0 million. Deducting the total underwriting commission of RMB30.0 million, the actual proceeds received from the above-mentioned issuance of A shares were RMB570.0 million. After deducting other issuance expenses paid by the Company, the net actual proceeds were RMB558.1 million. The net proceeds from the initial public offering and listing of A shares and its interests were applied in full for the acquisition of 80% interest in Northparkes Joint Venture held by North Mining Limited and certain associated rights and assets, as considered and approved on the first extraordinary general meeting in 2013 held on 25 November 2013. On 25 November 2013, the Company invested the balance of RMB571.28 million (equivalent to US\$93.77 million) in the designated account for proceeds, of which US\$45.8 million was used as investment cost and US\$48.0 million as working capital invested in CMOC Limited, a wholly-owned subsidiary based in Hong Kong, in a one-off manner. On the same day, CMOC Limited transferred the above amount in US dollar in full into the account of CMOC Mining (a wholly-owned subsidiary in Australia), the purchasing entity for the overseas acquisition project. On 29 November 2013, the investment cost of US\$45.8 million was paid to the counterparty of the overseas acquisition project as part of the transaction consideration.

As at 31 December 2013, the balance of the above accounts was RMB40,000, being interests derived from the proceeds.

PROSPECTS

In 2014, based on the future economic and market dynamics, we will tenaciously adhere to the development strategies of the Group to achieve sustainable, rapid and sound growth. Particular efforts will be put into the following areas: 1) spare no efforts in the management over the Group's existing business segments. In 2014, the Company plans to produce approximately 15,100t of molybdenum concentrates (containing 100% MO) with a planned cash cost of production of approximately RMB67,700 per tonne (net of resource tax, depreciation and amortisation, sales and general management), and approximately 7,000t of tungsten concentrates (containing 100% WO₃) with a planned cash cost of production of approximately RMB20,100 per tonne, (net of resource tax, depreciation and amortisation, sales and general management costs); the estimated output of the Northparkes Mine in Australia in 2014: saleable Cu metal approximately 43,000t (80% basis) with C1 cash cost of US\$0.7 per pound. C1 cash cost refers to the cash cost of operation, including mining, processing, site administration expense, logistics, smelting/refining costs and exploitation taxes after deduction of the earnings generated from by-products. In addition, it will further enhance its management standards and operation efficiency, and thus maintain profitability of the Company's existing business segments; 2) adhere to the development strategy of the Company. In respect of its molybdenum and tungsten business, the Company will implement projects such as optimisation of mining and processing locations as soon as possible by taking advantage of the pilot base of the integrated use of tungsten, molybdenum and iron resources in Luanchuan, Henan, so as to improve the economic benefits derived from molybdenum and tungsten sectors. As for its copper business, the Company will maintain a proper management on the operation of Northparkes copper and gold mine in Australia and improve operation quality of its offshore assets, to facilitate the stable, rapid development of the copper and gold mine and to guarantee the expected profit target of this business segment to be achieved; 3) alter its economic growth pattern by adjusting and optimising industrial structure, vigorously conducting scientific and technological innovation and actively advocating energy-saving measures; 4) actively adjust marketing strategy endeavor to expand marketing channels and strengthen reputation and quality of its products, in a bid to increase its market shares; 5) step up human resources management, optimize the Company's talent structure and strive to attract and cultivate talents, in a bid to lay a solid talent base for future development of the Group; and 6) persist on its internationalization strategy. Leveraging on the successful acquisition of Northparkes copper and gold mine in Australia, and making the best of the experience accumulated and the international development platform provided thereof, the Company will provide better and sustained returns while expanding its size and reinforcing its risk aversion through proactive acquisition of quality mining assets with stable cash flow. In the future, the Company will continue its diversification in the field of nonferrous metal to formulate a product portfolio combining base, special and precious metals and become a world-leading mining corporation through the mergers and acquisitions of quality mining resources at home and abroad.

B. MANAGEMENT DISCUSSION AND ANALYSIS OF THE GROUP FOR THE YEAR ENDED 31 DECEMBER 2014**BUSINESS REVIEW**

For the year ended 31 December 2014, the net profit of the Group was RMB1,800.2 million, representing an increase of RMB715.3 million or 65.9% from RMB1,084.9 million for the year ended 31 December 2013. For the year ended 31 December 2014, net profit attributable to the owners of the parent company was RMB1,824.3 million, representing an increase of RMB650.1 million or 55.4% from RMB1,174.2 million for the year ended 31 December 2013, which was primarily due to: (1) the increase in profit contributed by NPM, 80% equity interest of which is held by a subsidiary of the Company as the manager to the Group compared with the same period last year; (2) the increase in revenue of equity transfer after the transfer of the subsidiary in the period; (3) the increase in the overall level of profitability resulting from changing the product structure by means of the disposal of subsidiaries and the suspension of production for repair and maintenance of Luoyang Yongning Gold & Lead Refining Co., Ltd. (“Yongning Gold & Lead”) by the Group; and (4) the offset of adverse effects by the Group regarding the net profit affected by the decrease of market price through the measures of increase in sales and decrease in costs.

FINANCIAL REVIEW

For the year ended 31 December 2014, the net profit of the Group was RMB1,800.2 million, representing an increase of RMB715.3 million or 65.9% from RMB1,084.9 million for the year ended 31 December 2013. For the year ended 31 December 2014, net profit attributable to the owners of the parent company was RMB1,824.3 million, representing an increase of RMB650.1 million or 55.4% from RMB1,174.2 million for the year ended 31 December 2013, which was primarily due to: (1) the increase in profit contributed by NPM, 80% equity interest of which is held by a subsidiary of the Company as the manager to the Group compared with the same period last year; (2) the increase in revenue of equity transfer after the transfer of the subsidiary in the period; (3) the increase in the overall level of profitability resulting from changing the product structure by means of the disposal of subsidiaries and the suspension of production for repair and maintenance of Luoyang Yongning Gold & Lead Refining Co., Ltd. (“Yongning Gold & Lead”) by the Group; and (4) the offset of adverse effects by the Group regarding the net profit affected by the decrease of market price through the measures of increase in sales and decrease in costs.

The comparative analysis for the year ended 31 December 2014 and the year ended 31 December 2013 is as follows:

OPERATING RESULTS

For the year ended 31 December 2014, the Group recorded an operating revenue of RMB6,662.4 million, representing an increase of RMB1,125.9 million or 20.3% from RMB5,536.5 million for the year ended 31 December 2013. For the year ended 31 December 2014, the gross profit of the Group was RMB2,791.0 million, representing an increase of RMB988.0 million or 54.8% from RMB1,803.0 million for the same period last year.

The table below sets out the turnover, cost of sales, gross profit and gross profit margin of our products in 2014 and 2013:

Product Name	2014				2013			
	Operating revenue (RMB million)	Operating cost (RMB million)	Gross profit (RMB million)	Gross profit margin (%)	Operating revenue (RMB million)	Operating cost (RMB million)	Gross profit (RMB million)	Gross profit margin (%)
Domestic market								
- Molybdenum and tungsten-related products	3,558.6	1,925.6	1,632.9	45.9	3,642.7	1,907.4	1,735.3	47.6
- Gold, silver and related products	274.2	273.7	0.5	0.2	716.5	712.8	3.7	0.5
- Electrolytic lead	215.7	246.4	(30.7)	(14.2)	504.2	607.7	(103.6)	(20.5)
- Copper-related products	630.6	305.1	325.5	51.6	0.0	0.0		
- Others	474.7	405.3	69.4	14.6	461.3	399.1	62.2	13.5
Sub-total	5,153.8	3,156.2	1,997.5	38.8	5,324.7	3,627.1	1,697.6	31.9
International market								
- Molybdenum and tungsten-related products	56.5	28.7	27.9	49.3	34.5	40.7	(6.2)	(17.9)
- Copper-related products	1,418.8	686.5	732.3	51.6	172.2	65.6	106.6	61.9
- Others	33.2	0.0	33.2	100.0	5.0	0.0	5.0	100.0
Sub-total	1,508.6	715.2	793.4	52.6	211.7	106.3	105.4	49.8
Total	6,662.4	3,871.4	2,791.0	41.9	5,536.5	3,733.5	1,803.0	32.6

Note: The related products of molybdenum and tungsten of the Company mainly produced in the Sandaozhuang molybdenum and tungsten associated ore, and two products shared the processes of mining, transportation, crushing, tailings discharge and others. In order to reflect the characteristics of the sharing processes of these two products in a more reasonable manner, the Company no longer separately calculates the gross profit margin of these two products.

During the reporting period, NPM realized an income of RMB2,082.7 million in its first full year, which offset the adverse effects of the drop in tungsten and molybdenum product prices, the sale of the gold and silver businesses, and the reduction in relevant business due to Yongning Gold and Lead's suspension of production for repair and maintenance on the Company's realized income. This allowed the Company to realize an operating income of RMB6,662.4 million, which increased 20.3% from the same period last year.

During the reporting period, the sales of copper concentrates from newly acquired NPM achieved high gross profit margin of 51.6% and became a new profit growth momentum of the Company. Meanwhile, the Company decreased efforts to sell gold, silver and electrolytic lead products with lower gross profit margins, so as to achieve the structural adjustment of the Company's products and offset the adverse impact on gross profit and gross profit margin from the decline in market price. The Company effectively reduced production costs through enhancing internal management and implementing various cost control measures, which further improved the market competitiveness of molybdenum and tungsten products.

During the reporting period, the gross profit and gross profit margin of the Company were RMB2,791.0 million and 41.9% respectively, representing an increase of RMB988.0 million and 9.3 percentage points as compared with the same period last year.

The Company has adjusted the provision standard for production maintenance fee of domestic mines from RMB18 per tonne to RMB15 per tonne since 1 January 2014. As domestic mines of the Company have entered into the stage of stable mining, the balance of the provision for a production maintenance fee of the Company increased by RMB83.9 million as of 31 December 2014 as compared with that of the beginning of the year upon the adjustment of provision standard. According to the requirements of the accounting standards, the unused provision for production maintenance fee was directly reflected in the shareholders' equity of the Company, rather than the net profit of the Company for the year, which decreased earnings per share of the Company by RMB0.017 per share.

For the year ended 31 December 2014, the operating cost of the Group was RMB3,871.4 million, representing an increase of RMB137.9 million or 3.7% from RMB3,733.5 million for the same period last year. The effect on the operating cost caused by the increased sales volume at NPM was offset by the decrease in the sales volume of gold, silver and electrolytic lead products during the period which allowed the operating cost to remain similar to the same period last year. Set out below is the component of cost of the major products of the Company:

Product	Component of cost	Current period (RMB million)	Percentage	Amount for the same period last year (RMB million)	Percentage	Percentage
			over total cost for the current period (%)		over total cost for the same period last year (%)	of changes in amount during the year (%)
Molybdenum and tungsten-related products	Materials	524.9	30.4	474.3	26.3	10.7
	Labor	338.3	19.6	359.2	19.9	(5.8)
	Depreciation	180.4	10.5	193.0	10.7	(6.5)
	Energy	237.7	13.8	295.4	16.4	(19.5)
	Manufacturing Fees	445.4	25.8	481.8	26.7	(7.6)
Gold and silver-related products	Materials	200.9	74.6	338.7	52.6	(40.7)
	Labor	41.6	15.4	215.7	33.5	(80.7)
	Depreciation	4.7	1.7	26.9	4.2	(82.7)
	Energy	4.5	1.7	18.3	2.8	(75.3)
	Manufacturing Fees	17.6	6.5	44.5	6.9	(60.5)
Electrolytic lead	Materials	231.1	89.3	493.1	90.6	(53.1)
	Labor	6.8	2.6	11.6	2.1	(40.9)
	Depreciation	10.8	4.2	23.1	4.3	(53.4)
	Energy	7.6	2.9	13.7	2.5	(44.6)
	Manufacturing Fees	2.5	1.0	3.0	0.6	(18.1)
Copper and related products	Materials	342.6	32.4			–
	Labor	162.3	15.3			–
	Depreciation	437.4	41.3			–
	Energy	87.9	8.3			–
	Manufacturing Fees	28.0	2.6			–

BUSINESS TAXES AND LEVIES

For the year ended 31 December 2014, the Group recorded business taxes and levies of RMB350.0 million, representing an increase of RMB79.3 million or 29.3% from RMB270.7 million for the same period in 2013, mainly due to an increase of RMB66.8 million of business taxes and levies related to NPM in this period.

SELLING EXPENSES

For the year ended 31 December 2014, the selling expenses of the Group amounted to RMB99.8 million, representing an increase of RMB72.9 million or 270.9% from RMB26.9 million for the same period in 2013. Such increase was mainly attributable to an increase in selling expenses related to income from NPM during this period.

ADMINISTRATIVE EXPENSES

For the year ended 31 December 2014, the administrative expenses of the Group was RMB448.4 million, representing a decrease of RMB237.8 million or 34.7% from RMB686.2 million for the same period in 2013. Such decrease was mainly attributable to the stamp duties and intermediary expenses of RMB298.0 million incurred in the acquisition of the business in Australia by the Group in the same period last year. No such expense incurred in this year.

For the year ended 31 December 2014, the Group's administrative expenses included a technology development fee of RMB126.6 million. The main projects comprised Research on Applications of Reasonable Ore Mixing with Different Lithological Nature (不同岩性礦石合理配礦應用研究), Research on the Integrated Technology for the Intensified Mining of the Open Pit and Treatment of the Open Areas in Sandaozhuang and Specification (三道莊露天礦強化開採與空區處理一體化工藝與規範研究), Experimental Research on Processing of High Chlorite Molybdenum Raw Mines (高綠泥石鉬原礦選礦試驗研究) and Research on Improvement of the Recycle Rate of Molybdenum Roughing (提高鉬粗選作業回收率的研究) and other technical research and development.

FINANCE EXPENSES

For the year ended 31 December 2014, the finance expenses of the Group amounted to RMB181.7 million, representing an increase of RMB78.5 million or 76.0% from RMB103.2 million for the same period in 2013. Such increase was mainly attributable to interests expenses incurred from newly-added long-term borrowings in the period after the acquisition of NPM at the end of 2013.

INVESTMENT INCOME

For the year ended 31 December 2014, the investment income of the Group was RMB531.8 million, representing an increase of RMB158.4 million or 42.4% from RMB373.4 million for the same period in 2013. Such increase was mainly attributable to the increase in equity transfer income after the disposal of equity interests in a subsidiary during this period.

NON-OPERATING INCOME

For the year ended 31 December 2014, the non-operating income of the Group amounted to RMB66.7 million, representing a decrease of RMB179.9 million or 73.0% from RMB246.6 million for the same period last year. Such increase was mainly attributable to the recognition of RMB200.5 million in respect of the discount on acquisition of the business in Australia in the previous period. There was no such income during this period.

NON-OPERATING EXPENSES

For the year ended 31 December 2014, the non-operating expenses of the Group amounted to RMB56.8 million, representing an increase of RMB36.4 million or 178.6% from RMB20.4 million for the same period in 2013. Such increase was mainly attributable to the suspension of production for repair and maintenance of Yongning Gold & Lead and retirement of part of obsolete fixed assets during this period.

INCOME TAX EXPENSES

For the year ended 31 December 2014, the income tax expenses of the Group amounted to RMB347.9 million, representing an increase of RMB196.6 million or 130.0% from RMB151.3 million for the same period last year. Such increase was mainly attributable to the increase in total amount of profit as compared with the same period last year and a relative high income tax rate of NPM.

NET PROFIT ATTRIBUTABLE TO OWNERS OF THE PARENT COMPANY

For the year ended 31 December 2014, the net profit of the Group attributable to owners of the parent company amounted to RMB1,824.3 million, representing an increase of RMB650.1 million or 55.4% from RMB1,174.2 million for the year ended 31 December 2013. Such increase was mainly attributable to an increase in the net profit for the year ended 31 December 2014.

MINORITY INTERESTS

For the year ended 31 December 2014, the minority interests income of the Group was RMB-24.1 million, representing an increase of RMB65.2 million or 73.1% from RMB-89.3 million for the same period last year. Such increase was mainly attributable to the decrease in loss assumed by minority shareholders during this period.

FINANCIAL POSITION

For the year ended 31 December 2014, the total assets of the Group amounted to RMB28,054.9 million, comprising non-current assets of RMB13,290.0 million and current assets of RMB14,764.9 million. Equity attributable to shareholders of the parent company for the year ended 31 December 2014 increased by RMB2,455.3 million or 20.2% to RMB14,633.6 million from RMB12,178.3 million for the year ended 31 December 2013. Such increase was mainly due to the increase in the profit of the Company and the inclusion of the value of conversion rights into capital reserve resulting from the issuance of the A share convertible corporate bonds during the period.

CURRENT ASSETS

For the year ended 31 December 2014, the current assets of the Group increased by RMB7,592.3 million or 105.9% to RMB14,764.9 million from RMB7,172.6 million for the year ended 31 December 2013. The increase in the current assets was mainly attributable to the issuance of A share convertible corporate bonds, disposal of subsidiaries and increase in bank balances and cash through production and operation during the period.

NON-CURRENT ASSETS

For the year ended 31 December 2014, the non-current assets of the Group amounted to RMB13,290.0 million, representing a decrease of RMB1,436.5 million or 9.8% from RMB14,726.5 million for the year ended 31 December 2013. The decrease in the non-current assets was mainly attributable to the decrease in non-current assets after disposal of subsidiaries by the Group in this period.

CURRENT LIABILITIES

For the year ended 31 December 2014, the current liabilities of the Group amounted to RMB2,999.9 million, representing an increase of RMB955.9 million or 46.8% from RMB2,044.0 million for the year ended 31 December 2013. The increase in the current liabilities was mainly attributable to the increase in short-term financing.

NON-CURRENT LIABILITIES

For the year ended 31 December 2014, the non-current liabilities of the Group amounted to RMB9,910.5 million, representing an increase of RMB2,948.0 million or 42.3% from RMB6,962.5 million for the year ended 31 December 2013. The increase in the non-current liabilities was mainly due to the issuance of A share convertible corporate bonds during the period.

CONTINGENCY

As at 31 December 2014, the Group had the following contingent liabilities:

On 30 January 2013, the Company received relevant documents from the Intermediate People's Court of Luoyang City, Henan Province, stating that West Lead Mine, Yangshuao, Luanchuan County (欒川縣楊樹凹西鉛礦) ("Yangshuao") filed a lawsuit accusing that the tailing storage built by the No. 3 Ore Processing Branch, a branch of the Company, was in its mining area. As the height of the dam of the tailing storage grew and the level of the groundwater rose, the mining facilities and equipment of Yangshuao were damaged and its mining needed to be written off. The plaintiff was unable to exploit the defined lead-zinc ore and an economic loss was thus incurred. Therefore, the plaintiff contended that No. 3 Ore Processing Branch shall cease the infringement and compensate the plaintiff for a direct economic loss of approximately RMB18.0 million. As of 31 December 2014, the court was still reviewing the relevant litigation. The Company and its attorneys reviewed all the evidence submitted by Yangshuao and believed that the existence of the infringement claimed by the plaintiff could not be confirmed. If Yangshuao is unable to submit new evidence to the court, its claim of infringement is unlikely to be supported by the court only based on the existing evidence. Therefore, the Company currently believes that the litigation would not have any significant impact on the financial position of the Company and has not made any provision for an amount claimed in the aforesaid issue in its year-end financial statements.

The NPM business of the Group provided guarantees to government agencies of New South Wales, Australia through certain banks in relation to the operation of the business. The guarantees amounted to AUD28.38 million (equivalent to RMB142.5 million) as at 31 December 2014. The owners of the joint venture agreed with the enforcement of the guarantees arising from any obligations in relation to the business. As at 31 December 2014, no significant obligations for the guarantees occurred.

The Company provided a guarantee of RMB231 million to the bank borrowing of RMB420 million from Luoyang Fuchuan, a subsidiary of the Company's joint venture, Xuzhou Huanyu Molybdenum Co., Ltd.* (徐州環宇鋁業有限公司) ("Xuzhou Huanyu") in accordance with its proportion of capital contribution, the term of which is from the effective date of the contract to two years after the expiry of performance of debts. The Company's management considered such financial guarantee did not have significant impact on its financial statements.

GEARING RATIO

The gearing ratio (total liabilities dividend by total assets) of the Group increased to 46.0% for the year ended 31 December 2014 from 41.1% for the year ended 31 December 2013. The increase in the gearing ratio was mainly attributable to the issuance of A share convertible corporate bonds by the Company during the period.

CASH FLOW

For the year ended 31 December 2014, the Group had cash and cash equivalents of RMB5,625.6 million, representing an increase of RMB3,821.0 million or 211.7% from RMB1,804.6 million for the year ended 31 December 2013.

For the year ended 31 December 2014, net cash inflow generated from operating activities was RMB3,635.0 million; net cash outflow generated from investment activities was RMB4,079.3 million; net cash inflow generated from financing activities was RMB4,289.3 million.

During 2014, the Group implemented strict internal management and costs saving measures, thus maintaining sound operation status and healthy financial position. As at the end of 2014, the Company had sufficient capital which enabled it to operate in a virtuous cycle or satisfy the liquidity requirement for coping with the variations in the production capacity.

EXPOSURE TO PRICE FLUCTUATIONS OF MAJOR PRODUCTS

The income of the Company primarily derived from sales of molybdenum, tungsten and copper products, including ferromolybdenum, tungsten concentrates, copper concentrates and other molybdenum products. Its operational results are mainly influenced by fluctuations in the market prices of molybdenum, tungsten and copper. At the same time, the Company also has some sales of gold, silver and lead products. Therefore, the price fluctuations in gold, silver and lead also have an impact on the Company. Since the fluctuations in exploration and smelting are relatively insignificant, the Company's profit and profit margin in the reporting period are closely related to the price trend of commodities. If there is a significant fluctuation in the prices of molybdenum, tungsten, copper, gold, silver and lead in the future, the operating results of the Company will become unstable. In particular, if the prices of molybdenum, tungsten and copper plummet, the operating results of the Company will be affected.

EXPOSURE TO THE MINERAL RESOURCES

As an enterprise engaged in mineral exploitation, the Company is highly dependent on resources. The retained reserves and grade of mineral resources directly affect the Company's operation and development. The exploitation of Mineral Reserves with relatively low grade may be economically infeasible if the cost of production rises due to fluctuations in the market price of metal products, the drop in the recovery rate, inflation or other factors, or restrictions caused by technical problems and natural conditions such as weather and natural disasters in the process of mining. Therefore, full utilisation of the retained reserves of the Company cannot be guaranteed and the production capacity of the Company might be affected.

EXPOSURE RELATED TO PRODUCTION SAFETY OR NATURAL DISASTERS

The Company and all of its subsidiaries invested substantial resources on safety production, established a relatively sound management body, personnel and systems to form a relatively complete system of production safety management, prevention and supervision. However, safety incidents are unavoidable. As a mining resources development enterprise, large amounts of barren rock and tail slag are produced in the production process. If the management of slag discharge fields and tailing storage is inefficient, small scale of disaster may occur. The Company is required to use explosives in the mining process. If there are defects in the management of storage and use of such materials, there may be possible risk of casualties. In addition, tailing storage and slag discharge fields may be damaged if serious natural disaster happens such as heavy rain and debris flow.

EXPOSURE TO INTEREST RATES

The exposure to interest rates of the Company is mainly related to our short-term and long-term borrowings and deposits. The outstanding liabilities of the Company are calculated based on the benchmark interest rates of the People's Bank of China and the London inter-bank market as amended time to time. As of the date of this report, the Company has not entered into any type of interest agreement or derivatives to hedge against the contingent liabilities arising from fluctuations in interest rate.

EXPOSURE TO EXCHANGE RATE

The Company's principal operations are in the PRC and recorded in RMB, the lawful currency of the PRC. As the production capacity of the Group increases along with its development in the markets and recovery in the overseas markets of molybdenum, tungsten and copper, there will be a relatively large volume of products to be exported by the Company or through its subsidiaries to different countries. As at 31 December 2014, the Company provided loans of approximately US\$765 million in net balance for the mergers and acquisitions of CMOE Limited and CMOE Mining (wholly-owned subsidiaries of the Company). All the assets of CMOE Mining are located in Australia, and its income is denominated in U.S. Dollar while its cost is settled in Australian Dollar. The foreign currency risks of the Company are primarily arisen from the sales of products in foreign currencies and the holding of foreign assets and liabilities. Currently, the Company has no formal hedging policy in place. The Company has not entered into any foreign currency exchange contracts or derivatives to hedge against the Company's currency risks.

EMPLOYEES

As at 31 December 2014, the Group had approximately 7,207 full-time employees, classified as follows by function and department:

Department	Employees	Proportion
Management & administration	689	9.6%
Quality control, research and development	521	7.2%
Production	4,895	67.9%
Finance, sales and other support	1,102	15.3%
Total	7,207	100%

The remuneration policy for the employees of the Company principally consists of a salary point and performance remuneration system, based on the employees' positions and responsibilities and their quantified assessment results. Performance remuneration is linked to the Company's overall economic effectiveness and personal performances, which provides a consistent, fair and impartial remuneration system for all the employees. The Group has participated in the social insurance contribution plans introduced by the PRC local governments. In accordance with the requirements of the laws and policies in the country or area where the employees are located and the requirements of the Company, the Group participates in the requisite social insurance plan and pension fund or health scheme.

USE OF PROCEEDS

As at 31 December 2013, the proceeds of approximately RMB7,694.0 million raised by the Group from the public offering of H shares in April 2007 have been fully applied.

On 9 October 2012, the Group issued 200,000,000 ordinary shares (A shares) publicly on the SSE at an issue price of RMB3.00 per share and the proceeds raised was RMB600.0 million. Deducting the total underwriting commission of RMB30.0 million, the actual proceeds received by the Company from the above-mentioned issuance of A shares were RMB570.0 million. After deducting other issuance expenses paid by the Company, the net actual proceeds were RMB558.1 million. The net proceeds from the initial public offering and listing of A shares and its interests were applied in full for the acquisition of 80% interest in Northparkes Joint Venture held by North Mining Limited and certain associated rights and assets, as considered and approved at the first extraordinary general meeting of the Company in 2013 held on 25 November 2013. On 25 November 2013, the Company invested the balance of RMB571.3 million (equivalent to US\$93.8 million) in the designated account for proceeds, of which US\$45.8 million was used

as investment cost and US\$48.0 million as working capital invested in CMOC Limited, a wholly-owned subsidiary based in Hong Kong, in a one-off manner. On the same day, CMOC Limited transferred the above amount in US dollar in full into the account of the purchasing entity for the overseas acquisition project of CMOC Mining (a wholly-owned subsidiary in Australia). On 29 November 2013, the investment cost of US\$45.8 million was paid to the counterparty of the overseas acquisition project as part of the transaction consideration.

As approved by the approval (Zheng Jian Xu Ke [2014] No. 1246) from China Securities Regulatory Commission (“CSRC”), the Company issued A share convertible corporate bonds on 2 December 2014 with total proceeds raised of RMB4,900,000,000. After deducting the issuance fees of RMB56,452,000, the actual proceeds raised amounted to RMB4,843,548,000. The Proposal in Relation to Replacement of the Internal Financed Funds in Advance by Application of the Proceeds Raised was considered and approved in the twenty-fourth extraordinary meeting of the third session of the Board of the Company, where it was agreed to use the proceeds raised of RMB4,843,548,000 and its yields to replace the internal financed funds initially contributed to the proceeds funded projects. Until now, the Company has cancelled the special accounts for proceeds raised from initial public offering of A Shares and special accounts for proceeds raised from A share convertible corporate bonds. (Please refer to the announcements of the Company dated 18 December 2014 and 25 December 2014 for details).

As at 25 December 2014, the Company had applied all the proceeds raised from the issuance of A shares in the initial public offering and the public issuance of A share convertible bonds. The two abovementioned fund-raising accounts had been cancelled.

PROSPECTS

Based on the future economic and market dynamics, we have confirmed the estimated targets: In 2015, the Company plans to produce 16,323t of molybdenum concentrates (containing 100% MO) with a planned cash cost of production of RMB63,358/tonne (net of resource tax, depreciation and amortisation, sales and general management), and 8,720t of tungsten concentrates (containing 100% WO₃) with a planned cash cost of production of RMB15,912/tonne (net of resource tax, depreciation and amortisation, sales and general management costs); the estimated output of NPM in Australia in 2015: saleable copper metal of 41,614t (calculated based on 80% of equity interests) with C1 cash cost of US\$0.79/pound, and saleable gold of 39,914 ounces (calculated based on 80% of equity interests) C1 cash cost means: cash operating costs (including mining, processing, site administration expenses, logistics and smelting/refining costs) after deduction of the earnings generated from by-products.

For the purpose of realizing the foregoing estimated targets, we will tenaciously adhere to the development strategies of the Group to achieve sustainable, rapid and sound growth in 2015. Particular efforts will be put into the following areas:

1. Spare no efforts in the operation and management over the Group's existing business segments, further enhance the level of management and operating efficiency, maintain the Company's profitability of the existing business segments and ensure that the estimated output for the entire year will be realized. As for molybdenum and tungsten business, the Company will implement projects such as optimisation of mining and processing locations as soon as possible so as to improve the economic benefits derived from molybdenum and tungsten sectors. As for copper business, the Company will maintain a proper management on the operation of NPM in Australia and improve operation quality of its offshore assets and facilitate the stable and rapid development of the copper and gold mine;
2. Continuously prepare and optimise the balance sheet, accelerate the stop-loss, profit making and disposal of invalid assets and inefficient assets, enrich the Company's cash flow, improve operation quality of assets and optimise the allocation of assets;
3. Focusing on cost reduction, optimise the technological process, vigorously conducting scientific and technological innovation, continue to develop experimental research and promotion of new process, and provide technical support for continuously reducing cost and optimising indicators;
4. Further increase the efforts put into marketing research and contribution, establish the mechanism and system of analyzing the marketing research, timely adjust the marketing strategy based on the market changes, endeavour its efforts to adjust product structure, expand marketing channels and study new means of marketing business;
5. Continuously facilitate the reform on human resources system (including personnel system, salary system, and performance system), continue to intensify the reform on leadership system, continuously enhance the energy and competitiveness of the leadership, strengthen the establishment of management talent, and lay a sound and solid talent base for future development of the Group; and
6. Continue to tenaciously implement the development strategies of the Company and fully utilize the successful experience and international reputation and influence derived from the successful acquisition and sound operation of NPM in Australia, consolidate and maintain the competitive cost advantages of the existing business, and with help of the financial strength of the Group and the management and technical teams which have rich experience earned overseas, the Company will prioritize the mergers and acquisitions of and make investment in such mature resources projects which are located at an area with political stability and have good cash flow. The Company will provide better and sustainable returns while expanding its size and reinforcing its risk aversion through proactive acquisition of quality mining assets with stable cash flow.

C. MANAGEMENT DISCUSSION AND ANALYSIS OF THE GROUP FOR THE YEAR ENDED 31 DECEMBER 2015**BUSINESS REVIEW**

During the reporting period, notwithstanding various adverse conditions such as the complicated and ever-changing metal market, the pressure of continued decline in the market price of molybdenum, the gradual decrease in the price of upstream and downstream products under the pressure of weakening demand for tungsten and difficulties in lowering inventory level and intense fluctuation of copper price which resulted in the continuous weak pattern in the industry, the management of the Company, under the leadership of the Board, overcame difficulties, drew on collective wisdom and ideas, and through adopting a series of effective measures including the active promotion of low-efficiency asset stripping, implementing cost reduction and efficiency increase measures, speeding up the promotion of comprehensive recovery of resources, continually strengthening the internal management and paying more efforts on employees' technical training and so forth.

FINANCIAL REVIEW

For the year ended 31 December 2015, the net profit of the Group was reduced from RMB1,800.2 million for the year ended 31 December 2014 to RMB703.1 million, representing a decrease of RMB1,097.1 million or 60.9%. For the year ended 31 December 2015, net profit attributable to the owners of the parent company was RMB761.2 million, representing a decrease of RMB1,063.1 million or 58.3% from RMB1,824.3 million for the year ended 31 December 2014. The decrease was due to the price decline of the Company's major products.

The comparative analysis for the year ended 31 December 2015 and the year ended 31 December 2014 is as follows:

OPERATING RESULTS

For the year ended 31 December 2015, the Group recorded an operating revenue of RMB4,196.8 million, representing a decrease of RMB2,465.6 million or 37.0% from RMB6,662.4 million for the year ended 31 December 2014. For the year ended 31 December 2015, the gross profit of the Group was RMB1,574.4 million, representing a decrease of RMB1,216.6 million or 43.6% from RMB2,791.0 million for the same period last year.

The table below sets out the turnover, cost of sales, gross profit and gross profit margin of our products in 2015 and 2014:

Product Name	2015				2014			
	Operating Revenue (RMB million)	Operating Cost (RMB million)	Gross Profit (RMB million)	Gross Profit Margin (%)	Operating Revenue (RMB million)	Operating Cost (RMB million)	Gross Profit (RMB million)	Gross Profit Margin (%)
Domestic market								
- Molybdenum and tungsten-related products	2,399.4	1,462.2	937.3	39.1	3,558.6	1,925.6	1,632.9	45.9
- Gold, silver and related products	0.0	0.0	0.0	0.0	274.2	273.7	0.5	0.2
- Electrolytic lead	0.0	0.0	0.0	0.0	215.7	246.4	-30.7	-14.2
- Copper-related products	463.3	299.0	164.2	35.5	630.6	305.1	325.5	51.6
- Others	296.7	208.0	88.7	29.9	474.7	405.3	69.4	14.6
Sub-total	3,159.4	1,969.2	1,190.2	37.7	5,153.8	3,156.2	1,997.5	38.8
International market								
- Molybdenum and tungsten-related products	21.7	21.0	0.7	3.1	56.5	28.7	27.9	49.3
- Copper-related products	979.5	632.2	347.3	35.5	1,418.8	686.5	732.3	51.6
- Others	36.2	0.0	36.2	100.0	33.2	0.0	33.2	100.0
Sub-total	1,037.4	653.2	384.2	37.0	1,508.6	715.2	793.4	52.6
Total	4,196.8	2,622.4	1,574.4	37.5	6,662.4	3,871.4	2,791.0	41.9

During the reporting period, due to the price decline of the major products of the Company, sales reduction of the molybdenum products, disposal of electrolytic lead, gold and silver smelting businesses, as well as other factors, the realized operating revenue of the Company was RMB4,196.8 million, representing a decrease of 37.0% as compared with the same period last year.

During the reporting period, through strengthening internal management, implementing various cost control measures, the Company has effectively reduced the production costs, offset part of the adverse impact that the Company confronted due to price decline of the major products.

During the reporting period, the gross profit of the Company was RMB1,574.4 million, representing a decrease of RMB1,216.6 million as compared with the same period last year. Although through product structural adjustment, the Company has sold the electrolytic lead, gold and silver smelting businesses that have a lower gross profit margin, the overall gross profit margin has reduced 4.4 percentage point to 37.5% as compared with the same period last year, due to the continuous decline of the market price of the major products.

For the year ended 31 December 2015, the operating cost of the Group was RMB2,622.4 million, representing a decrease of RMB1,249.0 million or 32.3% from RMB3,871.4 million for the same period last year. The main reasons include the sales decline of molybdenum product, cost decline of unit sales, sales of gold, silver and electrolytic lead business and other factors.

Set out below is the component of cost of the major products of the Company:

Product	Component of cost	Amount for the current period (RMB million)	Percentage	Amount for the same period last year (RMB million)	Percentage	Percentage
			over total cost for the current period (%)		over total cost for the same period last year (%)	of changes in amount during the year (%)
Molybdenum and tungsten-related products	Materials	363.9	26.4	524.9	30.4	(30.7)
	Labor	284.3	20.6	338.3	19.6	(16.0)
	Depreciation	149.6	10.9	180.4	10.5	(17.1)
	Energy	234.2	17.0	237.7	13.8	(1.5)
	Manufacturing fees	345.9	25.1	445.4	25.8	(22.3)
Gold and silver-related products	Materials	-	-	200.9	74.6	(100.0)
	Labor	-	-	41.6	15.4	(100.0)
	Depreciation	-	-	4.7	1.7	(100.0)
	Energy	-	-	4.5	1.7	(100.0)
	Manufacturing fees	-	-	17.6	6.5	(100.0)
Electrolytic lead	Materials	-	-	231.1	89.3	(100.0)
	Labor	-	-	6.8	2.6	(100.0)
	Depreciation	-	-	10.8	4.2	(100.0)
	Energy	-	-	7.6	2.9	(100.0)
	Manufacturing fees	-	-	2.5	1.0	(100.0)
Copper and related products	Materials	182.0	18.7	342.6	32.4	(46.9)
	Labor	189.1	19.5	162.3	15.3	16.5
	Depreciation	468.0	48.1	437.4	41.3	7.0
	Energy	83.9	8.6	87.9	8.3	(4.6)
	Manufacturing fees	49.5	5.1	28.0	2.6	76.5

BUSINESS TAXES AND LEVIES

For the year ended 31 December 2015, the Group recorded business taxes and levies of RMB242.5 million, representing a decrease of RMB107.5 million or 30.7% from RMB350.0 million for the same period in 2014, mainly due to the change of the national resources tax policy: changing from fixed levies on amounts to levies on fixed rate ad valorem, resulting the decrease in the resource tax borne by the Company, and also due to the price decline in this period's products.

SELLING EXPENSES

For the year ended 31 December 2015, the selling expenses of the Group amounted to RMB84.7 million, representing a decrease of RMB15.1 million or 15.2% from RMB99.8 million for the same period in 2014, mainly due to the decrease in transportation fees of relevant products during this period.

ADMINISTRATIVE EXPENSES

For the year ended 31 December 2015, the administrative expenses of the Group was RMB357.2 million, representing a decrease of RMB91.2 million or 20.3% from RMB448.4 million for the same period in 2014. The decrease in administrative expenses was mainly due to the completion of some technical research and development projects, representing the impact of an expense reduction in research and development compared with the same period last year, and the change in the scope of consolidation for disposing subsidiaries in 2015.

For the year ended 31 December 2015, the Group's administrative expenses included a technology development fee of RMB80.2 million. The main projects comprised Research on the Integrated Technology for the Intensified Mining of the Open Pit and Treatment of the Open Areas in Sandaozhuang and Specification (三道莊露天礦強化開採與空區處理一體化工藝與規範研究), Research on Application of Thickening of Reclaimed Water for Tungsten Processing Prior to Treatment at the Treatment Plants (選鎢回水廠前濃密應用研究), Applied Research on Improvement of Winter Recycle Rate of Molybdenum Processing (提高鎢粗選冬季回收率應用研究), Experimental Research on Improvement of Recycle Rate of Molybdenum Roughing (提高鎢粗選回收率試驗研究), Ore-dressing Technical Development Research on Tungsten Fluorite Flotation Tailings Comprehensive Recovery (鎢浮選尾礦螢石綜合回收選礦技術開發研究) and other projects of the Group.

FINANCE EXPENSES

For the year ended 31 December 2015, the finance expenses of the Group amounted to RMB46.2 million, representing a decrease of RMB135.5 million or 74.6% from RMB181.7 million for the same period in 2014. Mainly due to the increase of the structured deposit, the respective interest income of the Company increased during the period.

INVESTMENT INCOME

For the year ended 31 December 2015, the investment income of the Group was RMB116.6 million, representing a decrease of RMB415.2 million or 78.1% from RMB531.8 million for the same period in 2014, mainly due to in the same period of last year, a rather significant increase in equity transfer income after the disposal of equity interests in a subsidiary.

NON-OPERATING INCOME

For the year ended 31 December 2015, the non-operating income of the Group amounted to RMB50.2 million, representing a decrease of RMB16.5 million or 24.8% from RMB66.7 million for the same period of 2014, mainly due to a decrease of RMB17.6 million in profits of disposal of non-current assets as compared with the same period of last year.

NON-OPERATING EXPENSES

For the year ended 31 December 2015, the non-operating expenses of the Group amounted to RMB94.6 million, representing an increase of RMB37.8 million or 66.6% from RMB56.8 million for the same period in 2014. Such increase was mainly attributable to the exemption of Luoyang Kunyu Mining Co., Ltd. (the “Kunyu Mining”) dividends receivable for RMB28.5 million during this period.

INCOME TAX EXPENSES

For the year ended 31 December 2015, the income tax expenses of the Group amounted to RMB-20.3 million, representing a decrease of RMB368.2 million or 105.8% from RMB347.9 million for the same period of 2014. Such decrease was mainly due to the decrease in profit in this period as compared with the same period last year and the recognised deductible loss in equity and debt arising from the disposal of Luomu Precious Metals and Yongning Gold & Lead during the period.

NET PROFIT ATTRIBUTABLE TO OWNERS OF THE PARENT COMPANY

For the year ended 31 December 2015, the net profit of the Group attributable to owners of the parent company amounted to RMB761.2 million, representing a decrease of RMB1,063.1 million or 58.3% from RMB1,824.3 million for the year ended 31 December 2014. Such decrease was mainly due to a decrease in the net profit for the year ended 31 December 2015.

MINORITY INTERESTS

For the year ended 31 December 2015, the minority interests of the Group were RMB-58.1 million, representing a decrease of RMB34.0 million or 141.3% from RMB-24.1 million for the same period last year. Such decrease was mainly due to the increase in loss assumed by minority shareholders during this period.

FINANCIAL POSITION

For the year ended 31 December 2015, the total assets of the Group amounted to RMB30,880.5 million, comprising non-current assets of RMB15,148.7 million and current assets of RMB15,731.8 million. Equity attributable to shareholders of the parent company for the year ended 31 December 2015 increased by RMB2,719.9 million or 18.6% to RMB17,353.5 million from RMB14,633.6 million for the year ended 31 December 2014. Such increase was mainly due to the conversion of the A share convertible corporate bonds issued at the end of 2014.

CURRENT ASSETS

For the year ended 31 December 2015, the current assets of the Group increased by RMB966.9 million or 6.6% to RMB15,731.8 million from RMB14,764.9 million for the year ended 31 December 2014. The increase in the current assets was mainly attributable to the increase in monetary fund resulting from operation of production and issuance of short-term financing bonds.

NON-CURRENT ASSETS

For the year ended 31 December 2015, the non-current assets of the Group amounted to RMB15,148.7 million, representing an increase of RMB1,858.7 million or 14.0% from RMB13,290.0 million for the year ended 31 December 2014. The increase in the non-current assets was mainly attributable to the increase in foreign equity investment and asset management plan by the Group in this period.

CURRENT LIABILITIES

For the year ended 31 December 2015, the current liabilities of the Group amounted to RMB8,768.9 million, representing an increase of RMB5,769.0 million or 192.3% from RMB2,999.9 million for the year ended 31 December 2014. The increase in the current liabilities was mainly attributable to the increase in short-term financing and long-term loans due within one year.

NON-CURRENT LIABILITIES

For the year ended 31 December 2015, the non-current liabilities of the Group amounted to RMB4,294.9 million, representing a decrease of RMB5,615.6 million or 56.7% from RMB9,910.5 million for the year ended 31 December 2014. The decrease in the non-current liabilities was mainly due to the issuance of A share convertible corporate bonds in 2014 and the transference of long-term loans due within one year into current liabilities.

CONTINGENCY

As at 31 December 2015, the Group had the following contingent liabilities:

On 30 January 2013, the Company received relevant files from the Intermediate People's Court of Luoyang City, Henan Province, stating that West Lead Mine, Yangshuao, Luanchuan County (欒川縣楊樹凹西鉛礦) ("Yangshuao") filed a lawsuit accusing that the tailing storage built by the No. 3 Ore Processing Branch, a branch of the Company, was in its mining area. As the height of the dam of the tailing storage grew and the level of the groundwater rose, the mining facilities and equipment of Yangshuao were damaged and its mining needed to be written off. The plaintiff was unable to exploit the defined lead-zinc ore and an economic loss was thus incurred. Therefore, the plaintiff contended that No. 3 Ore Processing Branch shall cease the infringement and compensate the plaintiff for a direct economic loss of approximately RMB18.0 million and loss of obtainable profits. According to the results of judiciary appraisal, the assessed value of the mining rights of Yangshuao related to this litigation is RMB1.724 million.

The first instance of the case started in December 2015. The trial has now completed but the court judgment is pending. The Company is of the opinion that, in accordance with the existing situation and the submitted evidence, the existence of tort alleged by Yangshuao cannot be confirmed; meanwhile, the Company has filed a counterclaim, requesting the court, in accordance with law, to order the immediate cessation of tort infringed by Yangshuao against the Company's land use rights within the afore-mentioned range of mining area. The Company currently believes that the litigation would not have any significant impact on the financial position of the Company and has not made any provision for an amount claimed in the aforesaid issue in its year-end financial statements.

The NPM business of the Group provided guarantees to government agencies of New South Wales, Australia through certain banks in relation to the operation of the business. The guarantees amounted to AUD28.38 million (equivalent to RMB134.6 million) as at 31 December 2015. The owners of the joint venture agreed with the enforcement of the guarantees arising from any obligations in relation to the business. As at 31 December 2015, no significant obligations for the guarantees occurred.

As at 31 December 2015, the Company provided the maximum guarantee of RMB148.5 million in aggregate to Luoyang Fuchuan, a subsidiary of the Company's joint venture, Xuzhou Huanyu Molybdenum Co., Ltd.* (徐州環宇鎢業有限公司) ("Xuzhou Huanyu") in accordance with its proportion of capital contribution, the term of which is from the effective date of the contract to two years after the expiry date of performance of debts. The Company's management considered such financial guarantee did not have significant impact on its financial statements.

GEARING RATIO

The gearing ratio (total liabilities divided by total assets) of the Group decreased to 42.3% for the year ended 31 December 2015 from 46.0% for the year ended 31 December 2014. The decrease in the gearing ratio was mainly due to the issuance of A share convertible corporate bonds by the Company in 2014.

CASH FLOW

For the year ended 31 December 2015, the Group had cash and cash equivalents of RMB8,982.2 million, representing an increase of RMB3,356.6 million or 59.7% from RMB5,625.6 million for the year ended 31 December 2014.

For the year ended 31 December 2015, net cash inflow generated from operating activities was RMB1,358.8 million; net cash outflow generated from investment activities was RMB-165.5 million; net cash inflow generated from financing activities was RMB2,074.2 million.

During 2015, the Group implemented strict internal management and costs saving measures, thus maintaining sound operation status and healthy financial position. As at the end of 2015, the Company had sufficient capital which enabled it to operate in a virtuous cycle or satisfy the liquidity requirement for coping with the variations in the production capacity.

EXPOSURE TO RISKS RELATED TO PRICE FLUCTUATIONS OF MAJOR PRODUCTS

The income of the Company primarily derived from sales of molybdenum, tungsten and copper products, including ferromolybdenum, tungsten concentrates, copper concentrates and other molybdenum products. Its operational results are mainly influenced by fluctuations in the market prices of molybdenum, tungsten and copper. At the same time, the NPM copper and gold mine of the Company also has certain ancillary business of sales of gold. The price fluctuations in gold also have an impact on the Company. Since the fluctuations in exploration and smelting of relevant resources are relatively insignificant, the Company's profit and profit margin in the reporting period are closely related to the price trend of commodities. If there is a significant fluctuation in the prices of molybdenum, tungsten, copper and gold in the future, the operating results of the Company will become unstable. In particular, if the prices of molybdenum, tungsten and copper plummet, the operating results of the Company will fluctuate significantly.

EXPOSURE TO RISKS RELATED TO RELIANCE ON MINERAL RESOURCES

As the primary operation of the Company is mineral resources exploitation, the Company is highly dependent on mineral resources. The retained reserves and grade of mineral resources directly affect the Company's operation and development. The exploitation of Mineral Reserves with relatively low grade may be economically infeasible if the cost of production rises due to fluctuations in the market price of metal products, the drop in the recovery rate, inflation or other factors, or restrictions caused by technical problems and natural conditions such as weather and natural disasters in the process of mining. Therefore, full utilization of the retained reserves of the Company cannot be guaranteed and the production capacity of the Company might be affected.

EXPOSURE TO RISKS RELATED TO PRODUCTION SAFETY OR NATURAL DISASTERS

The Company and all of its subsidiaries invested substantial resources on safety production, established a relatively sound management body, personnel and systems and continuously push forward the safety standardization management to form a relatively complete system of production safety management, prevention and supervision. However, safety incidents are unavoidable. As a mining resources development enterprise, large amounts of barren rock and tail slag are produced in the production process. If the management of slag discharge fields and tailing storage is inefficient, small scale of disaster may occur. The Company is required to use explosives in the mining process. If there are defects in the management of storage and use of such materials, there may be possible risk of casualties. In addition, tailing storage and slag discharge fields may be damaged if serious natural disaster happens such as heavy rain and debris flow.

EXPOSURE TO RISKS RELATED TO INTEREST RATES

The exposure to interest rates of the Company is mainly related to our short-term and long-term borrowings and deposits. The outstanding liabilities of the Company are calculated based on the benchmark interest rates of the People's Bank of China and the London inter-bank market as amended time to time. As of the date of this report, the Company has not entered into any type of interest agreement or derivatives to hedge against the contingent liabilities arising from fluctuations in interest rate.

EXPOSURE TO RISKS RELATED TO EXCHANGE RATE

The Company's principal domestic business operation is denominated in RMB and the reporting currency is RMB, the lawful currency of the PRC. As the production capacity of the Company increases along with its development in the markets and recovery in the overseas markets of molybdenum, tungsten and copper, there will be abundant products exported by the Company or through its subsidiaries to different countries. As at 31 December 2015, the balance of loans for the mergers and acquisitions of CMOC Limited and CMOC Mining Pty Limited (wholly-owned subsidiaries of the Company) were approximately EUR276 million and US\$379 million, respectively. All the assets of CMOC Mining Pty Limited are located in Australia, and the functional currency was U.S. Dollar. The exchange rate risks of the Company are primarily arising from assets and liabilities held in foreign currencies other than the function currency. Therefore, the risk, arising from the change in exchange rate, which the Company was exposed to was not substantial. Currently, the Company has no formal corresponding hedging policy in place and has no derivatives to hedge against the Company's currency risks.

EMPLOYEES

As at 31 December 2015, the Group had approximately 6,389 full-time employees, classified as follows by function and department:

Department	Employees	Proportion
Management & administration	600	9.4%
Quality control, research and development	1,033	16.2%
Production	4,108	64.3%
Finance, sales and other support	648	10.1%
Total	6,389	100%

The remuneration policy for the employees of the Company principally consists of a salary point and performance remuneration system, based on the employees' positions and responsibilities and their quantified assessment results. Remuneration assessment is conducted based on the linkage between employee's remunerations and the Company's results and employee's performances, which provides a consistent, fair and impartial remuneration system for all the employees. The domestic companies of Group have participated in the social insurance contribution plans introduced by the PRC local governments. In accordance with the laws and regulations regarding to the national and local labor and social welfare in the PRC, the Group is required to pay on behalf of its employees a monthly social insurance premium covering pension insurance, medical insurance, unemployment insurance and housing reserve fund. Pursuant to the current applicable PRC local regulations, the percentage of certain insurance policies are as follows: the pension insurance, medical insurance, unemployment insurance and the contribution to housing reserve fund of our PRC employees represent 20%, 6%, 1.5% and 5% to 12% of his or her total basic monthly salary respectively. Employees in Australia are enrolled under the requisite pension fund and healthcare scheme as required by Australian law.

PROSPECTS

Based on the future economic and market dynamics, we have confirmed the estimated targets: In 2016, the Company plans to produce 16,058 tons of molybdenum concentrates (containing 100% MO) with a planned cash cost of production of 56,298/ton (net of resource tax, depreciation and amortization, sales and general management), and 8,850 tons of tungsten concentrates (containing 100% WO₃) with a planned cash cost of production of 14,879/ton (net of resource tax, depreciation and amortization, sales and general management costs); the estimated output of NPM copper-gold mine in Australia in 2016 calculated based on 80% of equity interests: saleable copper metal of 39,368 tons with C1 cash cost of US\$0.77/pound, and saleable gold of 35,053 ounces C1 cash cost means: cash operating costs (including mining, processing, site administration expenses, logistics and smelting/refining costs) after deduction of the earnings generated from byproducts.

For the purpose of realizing the foregoing estimated targets, in 2016, the Company will actively respond to the opportunities and challenges brought by the fluctuation in the market price of molybdenum, tungsten, copper and gold and proactively optimize the product structure in order to balance the production and sales and maximize the revenue. Leveraging the advantages in scale, value chain, capital and market and financing platform in capital market, the Company will tap into both internal potentiality and seek merging and acquisition of international advanced resources with advantages in management, technology and capital as a support. The Company will further enhance the Company's comprehensive ability and

profitability and accelerate the pace of the Company's internationalization strategy with a cultivation of new driver for economic growth in order to generate a more adequate return for shareholders. The operation level will focus on the following tasks:

1. To consolidate the competitive advantages of cost of molybdenum and tungsten businesses, actively promote the technological advancement and structural adjustment to create a strong momentum for further development, achieve further optimization of the processing business and asset layout in Luanchuan area, and enhance the construction of automation, informatization, standardization;
2. To continue to advance the non-core assets stripping, simplify the corporate structure and optimize the balance sheet;
3. To vigorously promote the integrated industrial progress of polymetallic resources recycling and reusing so as to nurture and stabilize a new economic growth point;
4. To further promote the management work including benchmarking management, standardization management, improving and strengthening quality management, cost management, informatization management, investment management, risk management, human resources management, standardization construction and corporate cultural construction to promote the upgrading of the Company's management;
5. To strengthen the establishment of safety and management system, firmly promote the implementation of Ten Standards of Safety Management, vigorously foster all staff with safety culture to raise safety awareness;
6. To speed up the promotion and integration of the advanced management and technology in Australia, achieve synergistic effect at home and abroad and consolidate the internationalized management foundation of the company;
7. To use the cyclical opportunity brought by the bulk commodities and search for merger and acquisition of high-quality overseas resources items in a proactive and cautious manner; and
8. To establish a sound corporate market value management system in a bid to improve the management level and actively safeguard the interests of investors.

D. MANAGEMENT DISCUSSION AND ANALYSIS OF THE GROUP FOR THE NINE MONTHS ENDED 30 SEPTEMBER 2016**BUSINESS REVIEW**

In the first three quarters of 2016, the Company produced 12,087 tonnes of molybdenum concentrates (containing 100% MO) with a cash cost of production of RMB54,676 per tonne; and 7,806 tonnes of tungsten concentrates (containing 100% WO₃) with a cash cost of production of RMB11,627 per tonne (excluding resource tax, depreciation and amortisation, sales and general management costs). In the first three quarters, Northparkes copper gold mine recorded 27,507 tonnes of saleable copper (calculated based on 80% equity interest) with C1 cash cost of US\$0.75 per pound; the output of gold reached 21,674 ounces (calculated based on 80% equity interest) in the first three quarters.

ANALYSIS AND EXPLANATIONS OF THE PROGRESS OF SIGNIFICANT EVENTS AND THEIR IMPACTS AND SOLUTIONS**1. Material Asset Acquisition (Acquisition of Overseas Niobium and Phosphates Businesses)**

The Company has published the “Material Asset Acquisition Report (Acquisition of Overseas Niobium and Phosphates Businesses) (Draft) (Revised Version) of China Molybdenum Co., Ltd.*” (《洛陽樂川鋁業集團股份有限公司重大資產購買報告書(收購境外鈮磷業務)(草案)(修訂稿)》) on the websites of the Shanghai Stock Exchange and the Company, disclosing relevant matters in relation to the acquisition of 100% equity interests of Anglo American Fosfatos Brasil Limitada (“AAFB”), and 100% equity interests and niobium sales business of Anglo American Nióbio Brasil Limitada (“AANB”) (the “Acquisition Project of Niobium and Phosphates”), subsidiaries of Anglo American plc, by CMOC Limited, a wholly-owned subsidiary of the Company.

On 9 September 2016, the Company convened the 15th extraordinary meeting of the fourth session of the Board to consider and approve the “Resolution in relation to the “Material Asset Acquisition Report (Acquisition of Overseas Niobium and Phosphates Businesses) (Draft) (Revised Version) of China Molybdenum Co., Ltd.* and its Summary” (《關於〈洛陽樂川鋁業集團股份有限公司重大資產購買報告書(收購境外鈮磷業務)(草案)(修訂稿)〉及其摘要的議案》) and disclosed relevant revised reports.

On 23 September 2016, the Company convened the 2016 first extraordinary general meeting and the resolutions in relation to the Acquisition Project of Niobium and Phosphates were considered and approved.

On 1 October 2016, the transfer of 100% of shareholder's equity of each of AAFB and AANB has been completed. Niobium inventory and niobium sales contracts involved in niobium sales business of Anglo American Marketing Limited ("AAML") have both been transferred to CMOC Sales & Marketing Limited, and sales staff involved in niobium sales business of AAML has accepted employment from CMOC Sales & Marketing Limited. The debt of AANB held by Anglo American Capital PLC and the debt of AAFB held by Anglo American Capital Luxembourg SÁRL have both been transferred to CMOC Luxembourg S.A.R.L. All the conditions precedent set out in the Sale and Purchase Agreement had been fulfilled in accordance with the terms and provisions of the Sale and Purchase Agreement. Each of AAFB and AANB has become an indirectly wholly-owned subsidiary of the Company.

2. Material Asset Acquisition (Acquisition of Overseas Copper and Cobalt Businesses)

The Company has published the "Material Asset Acquisition Report (Acquisition of Overseas Copper and Cobalt Businesses) (Draft) (Revised Version) of China Molybdenum Co., Ltd.*" (《洛陽樂川鉬業集團股份有限公司重大資產購買報告書(收購境外銅鈷業務)(草案)(修訂稿)》) on the websites of the Shanghai Stock Exchange and the Company, disclosing relevant matters in relation to the acquisition of the Tenke Copper-cobalt mine (the "Acquisition Project of Copper and Cobalt") owned by Freeport-McMoRan Inc., by CMOC Limited, a wholly-owned subsidiary of the Company.

On 9 September 2016, the Company convened the 15th extraordinary meeting of the fourth session of the Board to consider and approve the "Resolution in relation to the Approval of the "Asset Valuation Report for Material Asset Acquisition (Acquisition of Overseas Copper and Cobalt Businesses) of China Molybdenum Co., Ltd.* (Revised Version)" (《關於批准公司重大資產購買(收購境外銅鈷業務)修訂稿〈資產評估報告〉的議案》) and the "Resolution in relation to the "Material Asset Acquisition Report (Acquisition of Overseas Copper and Cobalt Businesses) (Draft) (Revised Version) of China Molybdenum Co., Ltd.*" and its Summary" (《關於〈洛陽樂川鉬業集團股份有限公司重大資產購買報告書(收購境外銅鈷業務)(草案)(修訂稿)〉及其摘要的議案》) and disclosed relevant revised reports.

On 23 September 2016, the Company convened the 2016 second extraordinary general meeting and resolutions in relation to the Acquisition Project of Copper and Cobalt were considered and approved.

On 28 September 2016, the Company disclosed the "Announcement of Update on the Material Asset Acquisition (Acquisition of Overseas Copper and Cobalt Businesses) of China Molybdenum Co., Ltd.*" (《洛陽鉬業重大資產購買(收購境外銅鈷業務)進展公告》). After the negotiation and agreement among Freeport-McMoRan Inc., Tenke Holding Ltd. (Bermuda) and the Company, the period in which Tenke Holding Ltd. (Bermuda) had the right of first offer to acquire equity interest in TF Holdings Limited indirectly held by Freeport-McMoRan Inc. had been further extended to 20 October 2016 at 11:59 p.m. (Shanghai time).

On 20 October 2016, the Company disclosed the “Announcement of Update on the Material Asset Acquisition (Acquisition of Overseas Copper and Cobalt Businesses) of China Molybdenum Co., Ltd.*” (《洛陽鉬業重大資產購買(收購境外銅鈷業務)進展公告》). After the negotiation and agreement among Freeport-McMoRan Inc., Tenke Holding Ltd. (Bermuda) and the Company, the period in which Tenke Holding Ltd. (Bermuda) had the right of first offer to acquire equity interest in TF Holdings Limited indirectly held by Freeport-McMoRan Inc. had been further extended to 15 November 2016 at 11:59 p.m. (Shanghai time).

On 21 October 2016, the Company disclosed the “Announcement of Update on the Material Asset Acquisition (Acquisition of Overseas Copper and Cobalt Businesses) of China Molybdenum Co., Ltd.*” (《洛陽鉬業重大資產購買(收購境外銅鈷業務)進展公告》). After the negotiation and agreement between Freeport-McMoRan Inc. and the Company, both parties further entered into an amendment agreement regarding the amendment to part of the terms in the Exclusivity Agreement, of which the major amendment is to amend the time of achieving definitive agreement in the Exclusivity Agreement from “prior to 15 October 2016” to “prior to 15 November 2016”.

On 17 November 2016, the Company disclosed the “Announcement of the Completion of the Material Asset Acquisition (Acquisition of Overseas Copper and Cobalt Businesses) of China Molybdenum Co., Ltd.” (《洛陽樂川鉬業集團股份有限公司關於重大資產購買(收購境外銅鈷業務)交割完成的公告》). All conditions precedent set out in the Stock Purchase Agreement had been fulfilled in accordance with the terms and provisions of the Stock Purchase Agreement. The Acquisition has been completed.

3. Non-Public Issuance of A Shares

The Company has published “Proposal on the Non-public Issuance of A Shares of China Molybdenum Co., Ltd. (Revised Version)” (《洛陽樂川鉬業集團股份有限公司非公開發行A股股票預案(修訂稿)》) on the websites of Shanghai Stock Exchange and the Company, disclosing relevant matters of non-public issuance of shares of the Company.

On 9 September 2016, “Resolution in relation to the Proposal on the Non-public Issuance of A Shares (Revised Version)” (《關於〈非公開發行A股股票預案(修訂稿)〉的議案》) and “Resolution in relation to the Feasibility Report on the Use of Proceeds from the Fund Raising under Non-public Issuance of A Shares of China Molybdenum Co., Ltd.* (Revised Version)” (《關於〈洛陽樂川鉬業集團股份有限公司非公開發行A股股票募集資金使用可行性分析報告(修訂稿)〉的議案》) were considered and approved on the 15th extraordinary meeting of the fourth session of the Board of the Company, and relevant revised reports were disclosed.

On 23 September 2016, the Company convened the 2016 third extraordinary general meeting, the 2016 second class meeting of Holders of A Shares and the 2016 second class meeting of Holders of H Shares, considered and approved the resolutions in relation to relevant matters of non-public issuance of shares.

On 30 September 2016, the Company received the “China Securities Regulatory Commission’s Acceptance Notice of the Application for Administrative Permission” (No. 162774) (《中國證監會行政許可申請受理通知書》(編號162774)) issued by the China Securities Regulatory Commission (the “CSRC”). The CSRC had conducted an examination on the materials submitted by the Company regarding the application for administrative permission for the “Approval for Non-public Issuance of New Shares of Listed Companies by China Molybdenum Co., Ltd.*” in compliance with law and considered that the application materials are complete and comply with the statutory form, thus, it resolved to accept the application for administrative permission for further processing.

On 26 December 2016, “Resolution in relation to the Proposal on the Non-public Issuance of A Shares of China Molybdenum Co., Ltd. (Third Revised Version)” (《關於〈洛陽樂川鉬業集團股份有限公司非公開發行A股股票預案(三次修訂稿)〉的議案》) was considered and approved on the 17th extraordinary meeting of the fourth session of the Board of the Company, and relevant revised reports were disclosed.

On 19 January 2017, the Company disclosed the “Announcement of Approval from the Issuance Examination Committee of CSRC on the Non-public Issuance of A Shares of China Molybdenum Co., Ltd.” (《洛陽樂川鉬業集團股份有限公司關於非公開發行A股股票申請獲中國證監會發審會審核通過的公告》). On 18 January 2017, the Company was informed that the Issuance Examination Committee of the CSRC had reviewed and approved the Company’s application for the Non-public Issuance of A Shares. As at the date of this announcement, the Company has yet to receive the written approval from CSRC.

Please refer to the relevant announcements published by the Company on the website of Shanghai Stock Exchange (www.sse.com.cn), the website of Hong Kong Exchanges and Clearing Limited (www.hkexnews.hk) and the website of the Company (www.chinamol.com) for details.

FINANCIAL REVIEW

Overview

For the nine months ended 30 September 2016, net profit attributable to owners of the Company was RMB583.5 million, representing a decrease of RMB57.4 million or 8.96% from RMB640.9 million for the nine months ended 30 September 2015.

Operating results

For the nine months ended 30 September 2016, the Group recorded an operating revenue of RMB3,496.0 million, representing an increase of RMB321.4 million or 10.12% from RMB3,174.7 million for the nine months ended 30 September 2015. For the nine months ended 30 September 2016, the Group achieved an operating profit of RMB744.2 million, representing an increase of 196.6 million or 35.90% from RMB547.6 million in the same period last year.

Operating results, Operating cost, Gross Profit and Gross Profit Margin

The table below sets out the operating revenue, operating cost, gross profit and gross profit margin of the Group's products in the first three quarters of 2016 and in the first three quarter of 2015:

	The first three quarters of 2016 (RMB)	The first three quarters of 2015 (RMB)	Increase/decrease of the first three quarters of 2016 compared with the same period of last year (%)
Operating revenue	3,496.0 million	3,174.7 million	10.12%
Operating cost	2,079.0 million	1,953.4 million	6.43%
Gross profit	1,417.0 million	1,221.3 million	16.03%
Gross profit margin	40.53%	38.47%	2.06%*

* The gross profit margin of the first three quarters of 2016 increased by 2.06 percentage points compared with the same period of 2015.

The operating revenue increased by RMB321.4 million or 10.12% to RMB3,496.0 million in the same period of 2016 from RMB3,174.7 million in the first three quarters of 2015, mainly attributable to the increase in the sales volume of tungsten compared with the same period of 2015.

For the nine months ended 30 September 2016, the operating cost of the Group amounted to RMB2,079.0 million, representing an increase of RMB125.7 million or 6.43% from RMB1,953.4 million for the same period last year, falling behind the growth rate of operating revenue, mainly attributable to the decrease in the unit cash costs of molybdenum and tungsten compared with the same period of 2015.

For the nine months ended 30 September 2016, the average gross profit margin of the Group was 40.53%, representing an increase of 2.06 percentage points as compared with 38.47% for the same period last year.

Business Tax and Levies

For the nine months ended 30 September 2016, the business tax and surcharges of the Group amounted to RMB129.7 million, representing a decrease of RMB35.9 million or 21.70% from RMB165.6 million for the same period last year. Such decrease was mainly resulting from the reform of resource tax levied on the ad valorem basis instead of volume basis.

Selling Expenses

For the nine months ended 30 September 2016, the selling expenses of the Group amounted to RMB56.0 million, representing a decrease of RMB5.8 million or 9.41% from RMB61.8 million for the same period last year, which was mainly attributable to a decrease in the sales volume of relevant products.

Administrative Expenses

For the nine months ended 30 September 2016, the administrative expenses of the Group amounted to RMB276.6 million, representing an increase of RMB46.1 million or 20.00% from RMB230.5 million for the same period last year. The increase of the administrative expenses was mainly due to the intermediary expenses related to major asset restructuring during the period.

Finance Expenses

For the nine months ended 30 September 2016, the finance expenses of the Group amounted to RMB163.5 million, representing an increase of RMB25.0 million or 18.08% from RMB138.4 million for the same period last year. Such increase was mainly attributable to the increase in loans during the period as compared with the same period last year.

Investment Income

For the nine months ended 30 September 2016, the investment income of the Group was RMB155.5 million, representing an increase of RMB51.8 million or 50.00% from RMB103.7 million for the same period last year. Such increase was mainly attributable to the investment income generated from the disposal of available-for-sale financial assets for the period.

Non-operating Income

For the nine months ended 30 September 2016, the non-operating income of the Group amounted to RMB21.6 million, representing a decrease of RMB20.4 million or 48.54% from RMB42.0 million for the same period last year. Such decrease was mainly attributable to the decrease in the recognised government grants income for the period as compared with the same period last year.

Non-operating Expenses

For the nine months ended 30 September 2016, the non-operating expenses of the Group amounted to RMB23.3 million, representing a decrease of 38.1 million or 62.00% from 61.4 million for the same period last year. The decrease was mainly due to the decrease in losses from disposal of non-current assets as compared with the same period last year.

Income Tax Expenses

For the nine months ended 30 September 2016, the income tax expenses of the Group amounted to RMB174.3 million, representing an increase of RMB244.4 million from RMB -70.1 million for the same period last year. The increase in income tax expenses was mainly due to the increase in total profit before tax as compared with the same period last year.

Net Profit attributable to Owners of the Parent company

For the nine months ended 30 September 2016, the net profit of the Group attributable to owners of the parent company amounted to RMB583.5 million, representing a decrease of RMB57.4 million or 8.96% from RMB640.9 million for the nine months ended 30 September 2015. Such decrease was mainly attributable to the fact that the intermediary expenses related to major asset restructuring and provision for impairment losses of available-for-sale financial assets were included in profit or loss for the period; excluding the effect of non-recurring profit or loss items, net profit attributable to owners of the parent company for the period increased by 2.96% as compared with the same period last year.

Profit or Loss Attributable to Minority Interests

For the nine months ended 30 September 2016, the minority interests of the Group were amounted to RMB-15.3 million, representing an increase of RMB27.3 million or 64.08% from RMB-42.6 million for the same period last year. The increase in the profit or loss attributable to minority interests was mainly due to the decrease in the losses borne by minority shareholders for the period.

FINANCIAL POSITION

As at 30 September 2016, the total assets of the Group amounted to RMB44,789.5 million, comprising non-current assets of RMB27,564.3 million and current assets of RMB17,225.2 million. Equity attributable to shareholders of the parent company as at 30 September 2016 increased by RMB480.0 million or 2.77% to RMB17,833.5 million from RMB17,353.5 million as at 31 December 2015. Such increase was mainly due to the profit of the Group during the period.

Current assets

As at 30 September 2016, the current assets of the Group increased by RMB1,493.4 million or 9.49% to RMB17,225.2 million from RMB15,731.8 million as at 31 December 2015. Such increase was mainly due to the increase in bank balances and cash mainly attributable to the issuance of notes and financing from financial institution of the Group during the period.

Non-current assets

As at 30 September 2016, the non-current assets of the Group amounted to RMB27,564.3 million, representing an increase of RMB12,415.6 million or 81.96% from RMB15,148.8 million as at 31 December 2015. Such increase was mainly due to the prepayments of overseas acquisition during the period.

Current liabilities

As at 30 September 2016, the current liabilities of the Group amounted to RMB9,580.3 million, representing an increase of RMB811.4 million or 9.25% from RMB8,768.9 million as at 31 December 2015, mainly due to the increase in the short-term borrowings and financial liabilities at fair value through profit or loss resulting from the newly-added gold leasing business.

Non-current liabilities

As at 30 September 2016, the non-current liabilities of the Group amounted to RMB16,927.4 million, representing an increase of RMB12,632.5 million or 294.13% from RMB4,294.9 million as at 31 December 2015. Such increase was due to the increase in the long-term borrowings from financial institutions to fund overseas acquisitions.

Contingency

As at 30 September 2016, the Group had the following contingent liabilities:

On 30 January 2013, the Company received relevant files from the Intermediate People's Court of Luoyang City, Henan Province ("Luoyang Intermediate Court"), stating that West Lead Mine, Yangshuao, Luanchuan County (樂川縣楊樹凹西鉛礦) ("Yangshuao") filed a lawsuit accusing that the tailing storage built by the No. 3 Ore Processing Branch, a branch of the Company, was in its mining area. As the height of the dam of the tailing storage grew and the level of the groundwater rose, the mining facilities and equipment of Yangshuao were damaged and its mining needed to be written off. The plaintiff was unable to exploit the defined lead-zinc ore and an economic loss was thus incurred. Therefore, the plaintiff contended that No. 3 Ore Processing Branch shall cease the infringement and compensate the plaintiff for a direct economic loss of approximately RMB18.0 million and loss of obtainable profits. According to the results of judiciary appraisal, the assessed value of the mining rights of Yangshuao related to this litigation is RMB1.724 million.

Luoyang Intermediate Court ruled in its judgment that the Company and the No. 3 Ore Processing Branch stopped discharging tailings to the tailings storage specified in the plaintiff's exploitation license and compensated the plaintiff for the loss of RMB1.72 million. The Company is not satisfied with the decision and appealed to the higher court within the statutory period. Henan High People's Court made the Civil Ruling on 25 November 2016 and revoked the civil judgment made by Luoyang Intermediate Court and remanded the case to Luoyang Intermediate Court for a retrial. The Company currently believes that the litigation would not have any significant impact on the financial position of the Company and has not made any provision for an amount claimed in the aforesaid issue in its year-end financial statements.

The NPM business of the Group provided guarantees to government agencies of New South Wales, Australia through certain banks in relation to the operation of the business. The guarantees amounted to AUD 28.66 million (equivalent to RMB145.95 million) as of 30 September 2016. The owners of the joint venture agreed with the enforcement of the guarantees arising from any obligations in relation to the business. As of 30 September 2016, no significant obligations for the guarantees occurred.

Exposure to Price Fluctuations of Products

As the trading price of the Group's molybdenum, tungsten and precious metals products are calculated based on international and domestic prices, the Group has been exposed to the price fluctuation risk of molybdenum, tungsten and precious metals products. In the long run, the international and domestic prices of molybdenum, tungsten and precious metals products mainly depend on market demand and supply. These factors are beyond our control. Further, the prices of molybdenum, tungsten and precious metals products are also susceptible to the global and PRC economic cycles, taxation policies as well as fluctuations in the global currency market. The Group has not entered into any trading contracts and has not made any pricing arrangement to hedge against the risk arising from fluctuations in the price of nonferrous products.

Exposure to the Mineral Resources

As an enterprise engaged in mineral exploitation, the Company is highly dependent on resources. The retained reserves and grade of mineral resources directly affect the Company's operation and development. The exploitation of Mineral Reserves with relatively low grade may be economically infeasible if the cost of production rises due to fluctuations in the market price of metal products, the drop in the recovery rate, inflation or other factors, or restrictions caused by technical problems in the process of mining and natural conditions such as weather and natural disasters. Therefore, full utilization of the retained reserves of the Company cannot be guaranteed and the production capacity of the Company might be affected.

Exposure to Interest rates

The exposure to interest rates of the Group is mainly related to our short-term and long term borrowings and deposits. The outstanding liabilities of the Group are calculated based on the benchmark interest rate amended by The People's Bank of China and the London inter-bank market from time to time. As at 30 September 2016, the Group has not entered into any type of interest agreement or derivatives to hedge against fluctuations in interest rate or liabilities.

MATERIAL ACQUISITION AND DISPOSAL

For the nine months ended 30 September 2016 and save as disclosed in this circular, the Company have not completed any material acquisition and disposal.

SIGNIFICANT INVESTMENTS

Save as disclosed in this circular, there were no other significant investments held during the period under review.

HUMAN RESOURCES

As at 30 September 2016, the Group employed approximately 6,373 employees, as compared to 6,389 employees as at 31 December 2015. Based on the general operation of the Company and the contribution of employees, the Group provided employees with remuneration and benefits, including salary, pension insurance, medical insurance, unemployment insurance, maternity insurance, work injury insurance, housing reserve fund and state-administered retirement benefit scheme.

PROSPECTS

In 2017, the management of the Company will proactively respond to opportunities and challenges brought about by the fluctuations in market price with orientation on the market and grasp of the pace of sales, and endeavor to achieve a balance between production and sales as well as the maximization of profit; proactively promote smooth process of overseas acquisition projects; and proactively optimize the product structure with structural adjustments and changes in growth pattern which will serve as the main drivers for growth and support from construction of major projects in order to further enhance its comprehensive strengths and profitability to achieve better return to shareholders while enhancing the internal management.

The following is the text of a report received from the Company's reporting accountants, Deloitte Touche Tohmatsu, Certified Public Accountants, for the purpose of incorporation in this Circular.



**ACCOUNTANTS' REPORT ON HISTORICAL FINANCIAL INFORMATION OF BHR
NEWOOD INVESTMENT MANAGEMENT LIMITED TO THE DIRECTORS OF CHINA
MOLYBDENUM CO., LTD.**

We report on the historical financial information of BHR Newwood Investment Management Limited (the “**BHR**”) set out on pages IIA-4 to IIA-13, which comprises the statement of financial position as at 30 September 2016, the statement of profit or loss and other comprehensive income and statement of changes in equity from 15 April 2016 (date of incorporation) to 30 September 2016 (the “**Relevant Period**”) and a summary of significant accounting policies and other explanatory information (together, the “**BHR Historical Financial Information**”). The BHR Historical Financial Information set out on pages IIA-4 to IIA-13 forms an integral part of this report, which has been prepared for inclusion in the circular of China Molybdenum Co., Ltd. (the “**Company**”) dated 29 March, 2017 (the “**Circular**”) in connection with the connected and major transaction relating to the potential acquisition in relation to further acquisition of 24% indirect interest in Tenke Fungurume Mining Complex upon the exercise of the Call Option or the Put Option as contemplated under the Cooperation Arrangement (as defined in the Circular) by the Company.

Sole director's responsibility for the BHR Historical Financial Information

The sole director of the BHR is responsible for the preparation of the BHR Historical Financial Information that gives a true and fair view in accordance with the basis of preparation and presentation set out in Note 2 to the BHR Historical Financial Information, and for such internal control as the sole director determines is necessary to enable the preparation of the BHR Historical Financial Information that is free from material misstatement, whether due to fraud or error.

Reporting accountants' responsibility

Our responsibility is to express an opinion on the BHR Historical Financial Information and to report our opinion to you. We conducted our work in accordance with Hong Kong Standard on Investment Circular Reporting Engagements 200 "Accountants' Reports on Historical Financial Information in Investment Circulars" issued by the Hong Kong Institute of Certified Public Accountants ("HKICPA"). This standard requires that we comply with ethical standards and plan and perform our work to obtain reasonable assurance about whether the BHR Historical Financial Information is free from material misstatement.

Our work involved performing procedures to obtain evidence about the amounts and disclosures in the BHR Historical Financial Information. The procedures selected depend on the reporting accountants' judgement, including the assessment of risks of material misstatement of the BHR Historical Financial Information, whether due to fraud or error. In making those risk assessments, the reporting accountants consider internal control relevant to the entity's preparation of BHR Historical Financial Information that gives a true and fair view in accordance with the basis of preparation and presentation set out in Note 2 to the BHR Historical Financial Information in order to design procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Our work also included evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by the sole director, as well as evaluating the overall presentation of the BHR Historical Financial Information.

We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Opinion

In our opinion the BHR Historical Financial Information gives, for the purposes of the accountants' report, a true and fair view of the BHR's financial position as at 30 September 2016 and of the BHR's financial performance for the Relevant Period in accordance with the basis of preparation and presentation set out in Note 2 to the BHR Historical Financial Information.

Report on matters under the Rules Governing the Listing of Securities on the Stock Exchange and the Companies (Winding Up and Miscellaneous Provisions) Ordinance

Adjustments

In preparing the BHR Historical Financial Information no adjustments to the Underlying Financial Statements as defined on page IIA-4 have been made.

Dividends

We refer to Note 9 to the BHR Historical Financial Information which states that no dividends have been paid by BHR in respect of the Relevant Period.

Deloitte Touche Tohmatsu

Certified Public Accountants

Hong Kong

29 March 2017

HISTORICAL FINANCIAL INFORMATION OF BHR

Preparation of BHR Historical Financial Information

Set out below is the BHR Historical Financial Information which forms an integral part of this accountants' report.

The financial statements of BHR for the Relevant Period, on which the BHR Historical Financial Information is based, were audited by us in accordance with International Standards on Auditing issued by International Auditing and Assurance Standards Board ("Underlying Financial Statements").

The BHR Historical Financial Information is presented in United States dollars ("US\$"), which is the functional currency of BHR.

There was no bank account opened during the Relevant Period. There is no cash payment or receipt during the Relevant Period and all the expenses during the Relevant Period remained unpaid. As such, no statement of cash flows is presented.

(i) STATEMENT OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME

	<i>Note</i>	From 15 April 2016 (date of incorporation) to 30 September 2016 <i>US\$</i>
Administrative expenses		1,242
Loss before tax		1,242
Income tax	5	—
Loss and total comprehensive expense for the period		(1,242)

(ii) STATEMENT OF FINANCIAL POSITION

	<i>Notes</i>	30 September 2016 US\$
Current asset		
Amount due from a shareholder	7	<u>1</u>
Current liability		
Other payable	8	<u>1,242</u>
Net current liability		<u>(1,241)</u>
Capital and reserve		
Share capital	12	1
Accumulated losses		<u>(1,242)</u>
Total deficit of equity		<u>(1,241)</u>

(iii) STATEMENT OF CHANGES IN EQUITY

	Share capital	Accumulated losses	Total
	<i>US\$</i>	<i>US\$</i>	<i>US\$</i>
At 15 April 2016 (date of incorporation)	–	–	–
Issued during the period	1	–	1
Loss for the period	<u>–</u>	<u>(1,242)</u>	<u>(1,242)</u>
At 30 September 2016	<u>1</u>	<u>(1,242)</u>	<u>(1,241)</u>

NOTE TO THE BHR HISTORICAL FINANCIAL INFORMATION

1. GENERAL INFORMATION

BHR Newwood Investment Management Limited (“**BHR**”) is a private company incorporated in the British Virgin Islands. The address of its registered office and principal place of business is P.O. Box 957, Offshore Incorporations Centre, Road Town, Tortola, British Virgin Islands. In the opinion of the sole director of BHR, the immediate holding company and the ultimate holding company of BHR is Dingyuan (Shanghai) Investment Management Center L.P. (“**Dingyuan**”) (定元 (上海) 投資管理中心) throughout the Relevant Period.

The principal activity of BHR is investment management.

2. BASIS OF PREPARATION AND PRESENTATION OF BHR HISTORICAL FINANCIAL INFORMATION

The BHR Historical Financial Information has been prepared based on the accounting policies set out in Note 4 which confirm with International Financial Reporting Standards (“**IFRSs**”) issued by International Accounting Standard Board.

3. ADOPTION OF NEW AND AMENDMENTS TO IFRSs

For the purpose of preparing and presenting the BHR Historical Financial Information for the Relevant Period, BHR has consistently applied the IFRSs, which are effective for the accounting period beginning on the date of incorporation throughout the Relevant Period.

New and amendments to IFRSs in issue but not yet effective

At the date of this report, the following new and revised standards and amendments have been issued which are not yet effective:

IFRS 9	Financial Instruments ²
IFRS 15	Revenue from Contracts with Customers (and the related Clarifications) ²
IFRS 16	Leases ³
IFRIC 22	Foreign Currency Transactions and Advance Consideration ²
Amendments to IFRS 2	Classification and Measurement of Share-based Payment Transactions ²
Amendments to HKFRS 4	Applying HKFRS 9 Financial Instruments with HKFRS 4 Insurance Contracts ²
Amendments to IFRS 10 and IAS 28	Sale or Contribution of Assets between an Investor and its Associate or Joint Venture ⁴
Amendments to IAS 7	Disclosure Initiative ¹
Amendments to IAS 12	Recognition of Deferred Tax Assets for Unrealized Losses ¹
Amendments to IAS 40	Transfers of Investment Property ²
Amendments to IFRSs	Annual Improvements to IFRS Standards 2014-2015 Cycle ⁵

¹ Effective for annual periods beginning on or after 1 January 2017, with earlier application permitted.

² Effective for annual periods beginning on or after 1 January 2018, with earlier application permitted.

³ Effective for annual periods beginning on or after 1 January 2019, with earlier application permitted.

⁴ Effective for annual periods beginning on or after a date to be determined.

⁵ Effective for annual periods beginning on or after 1 January 2017 or 1 January 2018, as appropriate.

The sole director of BHR considers that the new and amendments to IFRSs that have been issued but are not yet effective have had no material impact on the BHR's financial performance and positions and/or on the disclosures for the financial statement of BHR to be issued in the future.

4. SIGNIFICANT ACCOUNTING POLICIES

The BHR Historical Financial Information has been prepared on the historical cost basis as explained in the accounting policies set out below.

Historical cost is generally based on the fair value of consideration given in exchange for goods and services.

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date, regardless of whether that price is directly observable or estimated using another valuation technique. In estimating the fair value of an asset or a liability, BHR takes into account the characteristics of the asset or liability if market participants would take those characteristics into account when pricing the asset or liability at the measurement date. Fair value for measurement and disclosure purposes in the Financial Information is determined on such a basis.

Financial instruments

Financial assets and financial liabilities are recognised in the statement of financial position when BHR becomes a party to the contractual provisions of the financial instrument.

Financial assets and financial liabilities are initially measured at fair value. Transaction costs that are directly related to the acquisition or issue of financial assets and financial liabilities are added to or deducted from the fair value of the financial assets or financial liabilities, as appropriate, on initial recognition.

Financial assets

BHR's financial asset is classified into loans and receivables. The classification depends on the nature and purpose of the financial assets and is determined at the time of initial recognition. All regular way purchases or sales of financial assets are recognised and derecognised on a trade date basis. Regular way purchases or sales are purchases or sales of financial assets that require delivery of assets within the time frame established by regulation or convention in the marketplace.

Effective interest method

The effective interest method is a method of calculating the amortized costs of a debt instrument and of allocating interest income over the relevant period. The effective interest rate is the rate that exactly discounts estimated future cash receipts (including all fees and points paid or received, transaction costs and other premium or discounts that form an integral part of the effective interest rate) through the expected life or the debt instrument, or, where appropriate, a short period, to the net carry amount on initial recognition.

Income is recognized on an effective interest basis for debt instruments.

Loans and receivables

Loans and receivables are non-derivative financial assets with fixed or determinable payments that are not quoted at an active market. Subsequent to initial recognition, loans and receivables (including amounts due from a shareholder) are carried at amortised cost using the effective interest method, less any identified impairment losses.

*Financial liabilities and equity instruments**Classification as debt or equity*

Debt and equity instruments issued by an entity are classified as either financial liabilities or as equity in accordance with the substance of the contractual arrangements and the definitions of a financial liability and an equity instrument.

Equity instruments

An equity instrument is any contract that evidences a residual interest in the assets of an entity after deducting all of its liabilities. Equity instruments issued by BHR are recognised at the proceeds received, net of direct issue costs.

Effective interest method

The effective interest method is a method of calculating the amortised cost of a financial liability and of allocating interest expense over the relevant period. The effective interest rate is the rate that exactly discounts estimated future cash payments (including all fees and points paid or received that form an integral part of the effective interest rate, transaction costs and other premiums or discounts) through the expected life of the financial liability, or, where appropriate, a shorter period, to the net carrying amount on initial recognition.

Interest expense is recognised on an effective interest basis.

Financial liability

Financial liability, including other payable, are subsequently measured at amortised cost using the effective interest method.

Derecognition

BHR derecognises a financial asset only when the contractual rights to the cash flows from the asset expire, or when it transfers the financial asset and substantially all the risks and rewards of ownership of the asset to another entity. If BHR neither transfers nor retains substantially all the risks and rewards of ownership and continues to control the transferred asset, BHR continues to recognise the asset to the extent of its continuing involvement and recognises an associated liability. If BHR retains substantially all the risks and rewards of ownership of a transferred financial asset, BHR continues to recognise the financial asset and also recognises a collateralised borrowing for the proceeds received.

On derecognition of a financial asset in its entirety, the difference between the asset's carrying amount and the sum of the consideration received or receivable and the cumulative gain or loss that had been recognised in other comprehensive income and accumulated in equity is recognised in profit or loss.

BHR derecognises financial liabilities when, and only when, BHR's obligations are discharged, cancelled or have expired. The difference between the carrying amount of the financial liability derecognised and the consideration paid and payable is recognised in profit or loss.

Taxation

Income tax expense represents the sum of the tax currently payable and deferred tax.

The tax currently payable is based on taxable profit for the year. Taxable profit differs from "loss before tax" as reported in the statement of profit or loss and other comprehensive income because of items of income or expenses that are taxable or deductible in other years and items are never taxable or deductible. BHR's current tax is calculated using tax rates that have been enacted or substantively enacted by the end of the reporting period.

Deferred tax is recognised on temporary differences between the carrying amounts of assets and liabilities in the financial statements and the corresponding tax bases used in the computation of taxable profit. Deferred tax liabilities are generally recognised for all taxable temporary difference. Deferred tax assets are generally recognised for all deductible temporary difference to the extent that it is probable that taxable profits will be available against which those deductible temporary differences can be utilised. Such deferred tax assets and liabilities are not recognised if the temporary differences arises from the initial recognition of assets and liabilities in a transaction that affects neither the taxable profit nor the accounting profit.

Deferred tax liabilities and assets are measured at the tax rates that are expected to apply in the period in which the liability is settled or the asset realised, based on tax rates (and tax laws) that have been enacted or substantively enacted by the end of the reporting period.

The measurement of deferred tax liabilities and assets reflects the tax consequences that would follow from the manner in which BHR expects, at the end of the reporting period, to recover or settle the carrying amount of its assets and liabilities.

Current and deferred tax are recognised in profit or loss, except when they relate to items that are recognised in other comprehensive income or directly in equity, in which case, the current and deferred tax are also recognised in other comprehensive income or directly in equity respectively.

5. INCOME TAX EXPENSE

BHR is established in British Virgin Islands, which is exempted from income tax in British Virgin Islands. Also, no provision for current taxation in Hong Kong has been made as BHR no assessable income and the related expenses incurred are not deductible.

6. DIRECTOR'S EMOLUMENT

The sole director of BHR, Mr. Li Xiangsheng has been appointed on 15 April 2016, there is no emolument paid to the sole director of BHR during the Relevant Period.

7. AMOUNT DUE FROM A SHAREHODLER

The amount is unsecured, non-interest bearing and repayable on demand.

8. OTHER PAYABLE

	30 September 2016
	<i>US\$</i>
Registration fee payable	1,242

9. DIVIDENDS

No dividend was paid or declared by the BHR since its incorporation.

10. CAPITAL MANAGEMENT

BHR manages its capital to ensure that it will be able to continue as a going concern while maximising the return to shareholders through the optimisation of the debt and equity balance.

The capital structure of BHR consists of issued share capital and accumulated losses. The sole director of BHR reviews the capital structure regularly. As a part of the review, the sole director considers the cost of capital and the risks associated with each class of capital. BHR will balance its overall capital structure through the payment of dividends and issue of new share.

11. FINANCIAL INSTRUMENTS

a. Categories of financial instruments

	30 September 2016
	<i>US\$</i>
Financial asset	
Amount due from a shareholder	<u><u>1</u></u>
Financial liability	
At amortised costs (including other payable)	<u><u>1,242</u></u>

b. Financial risk management objectives and policies

BHR's financial instruments include amount due from a shareholder and other payable. Details of these financial instruments are disclosed in respective notes. The sole director considers the risks associated with these financial instruments is minimum. However, the sole director manages and monitors this exposure to ensure appropriate measures are implemented on a timely and effective manner when such need arises.

c. Liquidity risk

As at 30 September 2016, the net current liabilities and net liabilities of BHR were US\$1,241. Pursuant to the Cooperative Arrangement (as defined in Circular), China Molybdenum Co. Ltd. has undertaken to provide adequate funds to BHR to enable BHR to meet in full its financial obligations as and when they fall due in the foreseeable future. Details of the Cooperative Arrangement is disclosed in the "Letter from the Board" in the Circular.

The financial liability of BHR is repayable on demand. Accordingly, no liquidity risk analysis is presented.

d. Fair value measurements

The sole director considers the carrying amount of financial asset and financial liability approximate their fair value.

12. SHARE CAPITAL

BHR is authorised to issue a maximum of 50,000 shares with a par value of US\$1. As at 30 September 2016, there was one issued and paid share which was issued on 15 April 2016.

13. SUBSEQUENT EVENTS

Saved as disclosed in the report, subsequent to the end of the Relevant Period, the following significant events took place:

- (i) On 15 November 2016, a stock purchase agreement (the “**Stock Purchase Agreement**”) was entered between BHR, Tenke Holding Limited and Lundin Mining Corporation, pursuant to which BHR agreed to purchase all the issued share capital of Lundin DRC Holdings Ltd. (“**Lundin DRC**”), a Bermuda exempted company from Tenke Holding Limited. Lundin DRC holds a 30% direct interest in TF Holdings Limited (“**TFHL**”) who in turns holds 80% interest in Tenke Fungurume Mining S.A. (“**TFM**”). Upon completion, BHR will hold a 24% indirect interest in TFM. Details please refer to section “Letter from the Board” of the Circular.
- (ii) On 20 January 2017 and 3 March 2017, BHR entered into a series of agreements (the “**Cooperation Arrangement**”), pursuant to which, the Company will assist BHR to effect the completion of the Stock Purchase Agreement set forth above. Details of the Cooperation Arrangement please refer to Section “Letter from the Board” of the Circular.

14. SUBSEQUENT FINANCIAL STATEMENTS

No audited financial statements of BHR have been prepared in respect of any period subsequent to the end of the Relevant Period.

ACCOUNTANTS' REPORT ON HISTORICAL FINANCIAL INFORMATION TO THE DIRECTORS OF CHINA MOLYBDENUM CO., LTD. AND LUNDIN DRC HOLDINGS LIMITED**Introduction**

We report on the historical financial information of Lundin DRC Holdings Limited (the “**Target**”) set out on pages IIB-4 to IIB-13, which comprises the balance sheet as at September 30, 2016 and the statement of income and comprehensive income, the statement of changes in equity and the statement of cash flows for the period from August 3, 2016 (date of incorporation) to September 30, 2016 (the “**Track Record Period**”) and a summary of significant accounting policies and other explanatory information (together, the “**Historical Financial Information**”). The Historical Financial Information set out on pages IIB-4 to IIB-13 forms an integral part of this report, which has been prepared for inclusion in the circular dated March 29, 2017 in connection with the connected and major transaction relating to the Co-operation Arrangement between China Molybdenum Co., Ltd. (the “**Company**”, “**CMOC**”) and BHR Newwood Investment Management Ltd. in connection with the acquisition of an indirect interest in the Tenke Fungurume Mine (the “**Circular**”).

Directors' responsibility for the Historical Financial Information

The directors of the Company are responsible for the preparation of the Historical Financial Information that gives a true and fair view in accordance with the basis of presentation and preparation set out in Note 2 to the Historical Financial Information, and for such internal control as the directors determine is necessary to enable the preparation of Historical Financial Information that is free from material misstatement, whether due to fraud or error.

The financial statements of the Target for the Track Record Period (the “**Underlying Financial Statements**”), on which the Historical Financial Information is based, were prepared by the management of the Target. The management of the Target are responsible for the preparation and fair presentation of the Underlying Financial Statements in accordance with International Financial Reporting Standards (“**IFRSs**”) issued by the International Accounting Standards Board, and for such internal control as the management of the Target determine is necessary to enable the preparation of the management account Underlying Financial Statements that are free from material misstatement, whether due to fraud or error.

Reporting accountant's responsibility

Our responsibility is to express an opinion on the Historical Financial Information and to report our opinion to you. We conducted our work in accordance with Hong Kong Standard on Investment Circular Reporting Engagements 200, Accountants' Reports on Historical Financial Information in Investment Circulars issued by the Hong Kong Institute of Certified Public Accountants ("HKICPA"). This standard requires that we comply with ethical standards and plan and perform our work to obtain reasonable assurance about whether the Historical Financial Information is free from material misstatement.

Our work involved performing procedures to obtain evidence about the amounts and disclosures in the Historical Financial Information. The procedures selected depend on the reporting accountant's judgement, including the assessment of risks of material misstatement of the Historical Financial Information, whether due to fraud or error. In making those risk assessments, the reporting accountant considers internal control relevant to the entity's preparation of Historical Financial Information that gives a true and fair view in accordance with the basis of presentation and preparation set out in Note 2 to the Historical Financial Information in order to design procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Our work also included evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by the directors, as well as evaluating the overall presentation of the Historical Financial Information.

We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Opinion

In our opinion the Historical Financial Information gives, for the purposes of the accountants' report, a true and fair view of the financial position of the Target as at September 30, 2016 and of its financial performance and its cash flows for period from August 3, 2016 (date of incorporation) to September 30, 2016 in accordance with the basis of presentation and preparation set out in Note 2 to the Historical Financial Information.

Report on matters under the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited*Adjustments*

In preparing the Historical Financial Information no adjustments to the Underlying Financial Statements have been made.

PricewaterhouseCoopers LLP*Chartered Professional Accountants, Licensed Public Accountants*

Toronto, Canada

March 29, 2017

Set out below is the Historical Financial Information which forms an integral part of this accountants' report.

The Underlying Financial Statements, on which the Historical Financial Information is based, were audited by PricewaterhouseCoopers LLP in accordance with International Standards on Auditing issued by the International Auditing and Assurance Standards Board (IAASB).

The Historical Financial Information is presented in US dollars and all values are rounded to the nearest dollar except when otherwise indicated.

The Historical Financial Information are as at September 30, 2016 and for the period from August 3, 2016 (date of incorporation) to September 30, 2016.

Assets

Investment in associate (*Note 7*) \$1,161,946,000

Total assets **\$1,161,946,000**

Liabilities

Total liabilities \$ –

Shareholder's equity

Share capital, \$1 par value, 150 shares authorized \$103

Share premium (*Note 6*) 1,157,681,897

Retained earnings 4,264,000

Total shareholder's equity 1,161,946,000

Total liabilities and shareholder's equity **\$1,161,946,000**

STATEMENT OF INCOME AND COMPREHENSIVE INCOME

For the period August 3, 2016 (date of incorporation) to September 30, 2016

(in US dollars)

Income

Income from equity investment in associate (<i>Note 7</i>)	<u>\$4,264,000</u>
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Net income and comprehensive income

<u><u>4,264,000</u></u>

STATEMENT OF CHANGES IN EQUITY

For the period August 3, 2016 (date of incorporation) to September 30, 2016

(in US dollars)

	Number of shares	Share Capital	Share premium	Retained earnings	Total
Balance, August 3, 2016	-	\$ -	\$ -	\$ -	\$ -
Share based payment	<u>103</u>	<u>103</u>	<u>1,173,281,897</u>	<u>-</u>	<u>1,173,282,000</u>
Distributions	-	-	(15,600,000)	-	(15,600,000)
Net Income	-	-	-	4,264,000	4,264,000
Balance, September 30, 2016	<u><u>103</u></u>	<u><u>\$103</u></u>	<u><u>\$1,157,681,897</u></u>	<u><u>\$4,264,000</u></u>	<u><u>\$1,161,946,000</u></u>

STATEMENT OF CASH FLOW

For the period August 3, 2016 (date of incorporation) to September 30, 2016

(in US dollars)

Operating Activities

Net income	\$4,264,000
Non-cash items:	
Income from equity investment in associate (<i>Note 7</i>)	(4,264,000)
Cash from operating activities	<u> —</u>
Change in cash during the period	<u> —</u>
Cash, beginning of period	<u> —</u>
Cash, end of period	<u><u> \$-</u></u>

1. Nature of Operation

Lundin DRC Holdings Ltd. (the “**Company**”) was incorporated under the laws of Bermuda on August 3, 2016. The Company’s registered address is 22 Victoria Street, Hamilton, Bermuda.

The Company is an investment holding company and is a wholly owned subsidiary of Tenke Holdings Ltd. (“**Tenke Holdings**”). The ultimate parent is Lundin Mining Corporation a publicly listed company on the Toronto Stock Exchange and its Swedish Depository Receipts are listed on the Nasdaq OMX (Stockholm) Exchange.

2. Basis of Presentation

The Company prepares its financial statements in accordance with International Financial Reporting Standards (“**IFRS**”) as issued by the International Accounting Standards Board (“**IASB**”).

The financial statements have been prepared on a historical cost basis.

The Company’s functional presentation currency is United States (“**US**”) dollars. Reference herein of \$ or USD is to US dollars.

These financial statements were approved by the Board of Directors of the Company for issue on March 29, 2017.

3. Significant Accounting Policies

The significant accounting policies applied in these historical financial statements are set out below.

(a) *Investments*

Investments over which the Company has the ability to exercise significant influence are accounted for by the equity method. Under this method, the investment is initially recorded at cost and adjusted thereafter to record the Company's share of post-acquisition earnings or losses of the investee as if the investee had been consolidated. The carrying value of the investment is also increased or decreased to reflect the Company's share of capital transactions and for accounting changes which relate to periods subsequent to the date of acquisition. When there is a loss in value of an equity accounted investment which is other than temporary, the investment is written down to recognize the loss by a charge included in net income during the period of loss.

(b) *Share based payment*

Share capital issued for non-monetary consideration is recorded at an amount equal to the fair market value of the asset received on the date of issue. Share capital issued in excess of par value is recorded as paid-in-capital.

4. New Accounting Pronouncements

IFRS 15, Revenue from Contracts with Customers, provides a single, principles based five-step model to be applied to all contracts with customers. Guidance is provided on topics such as the point at which revenue is recognized, accounting for variable consideration, cost of obtaining and fulfilling a contract and various related matters. New disclosures about revenue are also introduced. This standard is effective for annual periods beginning on or after January 1, 2018. The Company is assessing the impact of this standard.

The final version of IFRS 9, Financial Instruments, was issued by the IASB in July 2014 and will replace IAS 39, Financial Instruments: Recognition and Measurement. IFRS 9 introduces a model for classification and measurement, a single, forward-looking “expected loss” impairment model and a substantially reformed approach to hedge accounting. The new single, principles based approach for determining the classification of financial assets is driven by cash flow characteristics and the business model in which an asset is held. The new model also results in a single impairment model applied to all financial instruments, which will require more timely recognition of expected credit losses. It also includes changes in respect of own credit risk in measuring liabilities elected to be measured at fair value so that gains caused by the deterioration of an entity’s own credit risk on such liabilities are no longer recognized in profit and loss. IFRS 9 is effective for annual periods beginning on or after January 1, 2018, but is available for early adoption. In addition, changes in respect of own credit risk can be early adopted in isolation without otherwise changing the accounting for financial instruments. The Company is assessing the impact of this standard.

On January 13, 2016, the IASB published a new standard, IFRS 16, Leases. The new standard brings most leases on-balance sheet for lessees under a single model, eliminating the distinction between operating and finance leases. Lessor accounting however remains largely unchanged and the distinction between operating and finance leases is retained. IFRS 16 is effective for annual reporting periods beginning on or after January 1, 2019. Early adoption is permitted if IFRS 15, Revenue from Contracts with Customers, has also been adopted. The Company has not yet assessed the full impact of IFRS 16.

5. Critical Accounting Estimates – Valuation of Investments

Management exercises judgment in applying the Company’s accounting policies. These judgments are based on management’s best estimates.

The Company carries its investment in associates at cost and adjusts for its share of earnings and capital transactions of the investee. The Company reviews the carrying value of the investment whenever events or changes in circumstances indicate that impairment may be present. In undertaking this review, the Company makes reference to future operating results and cash flows. For the investment in Tenke Fungurume, this requires making significant estimates of, amongst other things, Mineral Resource and Reserve quantities, and future production and sale volumes, metal prices and future operating and capital costs to the end of the mine’s life.

6. Acquisition of equity investment

On August 22, 2016, as part of a related party transaction, the Company issued 103 common shares to Tenke Holdings for the purchase of its indirect investment in Tenke Fungurume. The transaction was recorded based on the fair market value of Tenke Fungurume at the time of the share issuance. The excess over the par value of the shares was recorded in paid-in-capital in the amount of \$1,173.3 million.

The Company used a fair value less cost to dispose model (“FVLCD” – a level 3 measurement) to calculate the fair market value. The Company used an operating scenario where no future investments are made for the debottlenecking or the processing of the mixed-sulphide resource for its cash flow projections. A separate valuation was performed for the in-situ value of the mixed-sulphide resource which was benchmarked using third-party market information.

The fair market value was determined using long term cash flow projections based on life-of-mine financial plans. The assumptions used in the long term cash flow projections consisted of forecasted commodity prices, reserve and resource quantities, operating costs, capital expenditures, reclamation and other closure costs and discount rates. Commodity prices used in the cash flow projections are within the range of current market consensus observed during 2016. Operating costs and capital expenditure included in the cash flow projections were based on approved operating plans. The fair market value based on FVLCD, was \$1,173.3 million.

Key assumptions for Tenke Fungurume

	2016
Copper price \$/lb	\$2.20–\$3.00
Cobalt price \$/lb	\$11.00–\$12.40
After-tax discount rate	10%
Life of mine	25 years

The Company did not identify any indicators of impairment from date of acquisition to September 30, 2016.

7. Investment in Associate

The Company holds a 30% interest in TF Holdings Limited (“TFHL”), a Bermuda company, which in turn holds an 80% interest in a Congolese subsidiary company, Tenke Fungurume Mining Corp S.A. (“TFM”). TFM holds a 100% interest in the Tenke Fungurume copper/cobalt mine. The Company exercises significant influence over TFHL and accordingly, the Company uses the equity method to account for this investment.

During 2016, the company received distributions from and recognized equity income from TFHL:

Acquisition of investment in TFHL	\$1,173,282
Distributions	(15,600)
Share of equity income	<u>4,264</u>
Balance, September 30, 2016	<u><u>\$1,161,946</u></u>

On acquisition, the Company recognized a fair value adjustment of \$375.1 million, calculated as the excess of fair value over the carrying value of the net assets recorded within TFHL. The fair value adjustment was allocated to the underlying mineral properties.

The following table is a summary of the consolidated financial information of TFHL on a 100% basis for fiscal years 2013, 2014, 2015 and for the period January 1–August 21, 2016. The financial information presented for the periods prior to the Company’s acquisition of TFHL are presented without any impact for the fair value adjustment.

Information for the period of August 22, 2016 to September 30, 2016 and as at September 30, 2016 include the impact for the fair value adjustment.

	September 2016	December 31, 2015	December 31, 2014	December 31, 2013	
Total current assets	\$756,709	\$718,318	\$838,382	\$659,118	
Total non-current assets	\$4,740,975	\$3,225,877	\$3,059,241	\$2,925,242	
Total current liabilities	\$89,044	\$115,280	\$198,322	\$99,334	
Total non-current liabilities	<u>\$557,752</u>	<u>\$533,014</u>	<u>\$539,434</u>	<u>\$578,474</u>	
Total net assets	<u><u>\$4,850,888</u></u>	<u><u>\$3,295,901</u></u>	<u><u>\$3,159,867</u></u>	<u><u>\$2,906,552</u></u>	
	August 22– September 30 2016	January 1– August 21 2016	2015	2014	2013
Total sales	\$145,473	\$798,898	\$1,384,575	\$1,558,068	\$1,636,515
Net earnings	<u>\$18,423</u>	<u>\$78,130</u>	<u>\$217,934</u>	<u>\$438,315</u>	<u>\$472,274</u>
					2016
Net assets attributable to TFHL, as at August 22, 2016					\$3,873,153
Distributions received					(52,000)
Net earnings ¹					<u>14,213</u>
Net assets attributable to TFHL, ending					3,873,153
Ownership interest					<u>30%</u>
Investment in TFHL					<u><u>1,161,946</u></u>

¹ Net earnings includes adjustment for NCI

The Company is subject to taxes in Bermuda at a statutory rate of 0%. As such, the Company has not recognized any deferred or current income tax assets or liabilities.

8. Related Party Transactions

The Company had the following related party transactions:

- The Company received distributions from its investment in Tenke of \$15.6 million.
- The Company distributed \$15.6 million to its parent as a return of capital.
- Lundin Mining Corporation pays certain administrative fees on behalf of the Company.

The distributions had no cash flow impact for the Company was cash is distributed by TFHL to Tenke Holdings directly.

9. Commitments and Contingencies

TFM is entitled to mine in the Democratic Republic of Congo (“**DRC**”) under an Amended and Restated Mining Convention (“**ARMC**”) between TFM and the Government of the DRC. The ARMC will remain in effect for as long as the TFM concessions are exploitable. The royalty rate payable by TFM is two percent of adjusted revenue.

TFM leases various types of properties, including land, equipment, vehicles and offices under non-cancelable leases. Future minimum rental payments under non-cancelable leases are \$6,783 million.

In late 2015, TFM entered negotiations with Société nationale s'électricité (“**SNEL**”) to resolve a commercial conflict regarding the availability, quality and volume of electricity currently being provided. Among other changes to the power supply agreement in the settlement proposal, TFM agreed to pay a higher tariff of US\$0.0569 per kWh (previously US\$0.0350) per kWh starting in January 2016 and make a US\$10.0 million settlement payment in return for receiving more and consistent power from SNEL. No formal agreement has been signed and negotiations are on-going. Negotiations are currently expected to be completed in late 2016. In anticipation of the settlement, TFM recorded a charge of US\$10.0 million in 2015 within cost of sales in the combined statement of profit or loss and other comprehensive income.

When requested, the Company may be required to provide funding to TFHL for certain capital expenditures. Lundin Mining Corporation, provides funding to TFHL on behalf of the Company as required.

10. Liquidity Risk

The Company has no financial liabilities and no significant liquidity risk.

11. Subsequent Event

On November 15, 2016, Tenke Holdings entered into a definitive agreement to sell its interest in TFHL to an affiliate of BHR Partners, for \$1.136 billion in cash and contingent consideration of up to \$51.4 million, consisting of \$25.7 million if the average copper price exceeds \$3.50 per pound and \$25.7 million if the average cobalt price exceeds \$20 per pound, both during a 24-month period beginning on January 1, 2018.

During November 2016, Freeport-McMoRan Inc. ("**Freeport**") completed its sale of its 70% interest in TFHL to China Molybdenum Co., Ltd ("**CMOC**"). As at November 18, 2016, the Company's and CMOC's effective interests in TFM were 24% and 56%, respectively. La Générale des Carrières et des Mines owns a free-carried 20% interest.

No audited financial statements have been prepared by the Company in respect of any period after September 30, 2016 and up to the date of this report. Subsequent to September 30, 2016, and prior to the date of issue of these financial statements, the Company received \$63.1 million in distributions from its investment in Tenke and declared \$63.1 million in distributions to its parent as a return of capital.

OVERVIEW AND PROSPECTS

Overview

BHR is a company incorporated in the British Virgin Islands on 15 April 2016. BHR was incorporated for the purposes of facilitating the Stock Purchase Agreement and the transactions contemplated thereunder.

From 15 April 2016 (date of incorporation) to 30 September 2016 (the “**Relevant Period**”), BHR had not conducted any business nor entered into any contracts. It had only incurred USD1,242 administrative expense during the Relevant Period.

PROSPECTS

The following significant events took place subsequent to the Relevant Period:

- (i) On 15 November 2016, BHR entered into the Stock Purchase Agreement, pursuant to which BHR agreed to purchase all the issued share capital of Lundin DRC from THL. Lundin DRC holds a 30% direct interest in TFHL who in turns holds 80% interest in TFM. Upon completion, BHR will hold a 24% indirect interest in TFM, which owns the Tenke Fungurume Mining Complex. Please refer to the section headed “Letter from the Board” of this circular for details.

- (ii) On 20 January 2017 and 3 March 2017, BHR entered into the Cooperation Arrangement, pursuant to which the Company will assist BHR to effect the completion of the Stock Purchase Agreement set forth above. The Company agreed to assist BHR in i) raising fund for the payment of the Lundin Consideration and ii) securing the Syndicated Loans (including the provision of guarantee). The Company agreed to grant the Put Option and accept the Call Option from BHR and/or the Investors. In the event that the Call Option or the Put Option is exercised (as the case may be), BHR or Lundin DRC will become a wholly owned subsidiary of the Company, and the Company will own a further 24% indirect interest in TFM, which owns the Tenke Fungurume Mining Complex. Please refer to the section headed “Letter from the Board” of this circular for details.

OVERVIEW

Lundin DRC is a company incorporated in Bermuda on 3 August 2016. Lundin DRC is an investment holding company, which was set up to hold a 30% equity interest in TFHL. TFHL holds an 80% interest in a Congolese entity, TFM, which owns and operates the Tenke Fungurume Mining Complex. Please refer to the section headed “Information on the Tenke Fungurume Mining Complex” in this circular for further details.

From 3 August 2016 (date of incorporation) to 30 September 2016, Lundin DRC did not conduct any business other than holding the 30% equity interest in TFHL, which Lundin DRC accounts for utilising the “equity method” as defined by International Financial Reporting Standards.

TFHL’s Financial Information

The TFHL consolidated group principally engages in the business of mining copper and cobalt and selling copper and cobalt products. Please refer to Appendix III of the circular of the Company dated 8 September 2016 in relation to the acquisition of Freeport McMoRan’s copper and cobalt business (which was essentially the other 70% share of TFHL) for the management discussion and analysis for the target group, for each of the years ended 31 December 2013, 2014 and 2015 and the three months ended 31 March 2016.

Statement of Financial Position

The following table is a summary of the consolidated financial position of TFHL on a 100% basis as at 31 December 2013, 2014, 2015 and 30 September 2016. The financial information presented for the periods prior to Lundin DRC’s acquisition of TFHL (on 22 August 2016) are presented without any fair value adjustment.

	30 September 2016	31 December 2015	31 December 2014	31 December 2013
Total current assets	\$ 756,709	\$ 718,318	\$ 838,382	\$ 659,118
Total non-current assets	\$ 4,070,196	\$ 3,225,877	\$ 3,059,241	\$ 2,925,242
Total current liabilities	\$ 89,044	\$ 115,280	\$ 198,322	\$ 99,334
Total non-current liabilities	\$ 557,552	\$ 533,014	\$ 539,434	\$ 578,474
Total net assets	<u>\$ 4,180,109</u>	<u>\$ 3,295,901</u>	<u>\$ 3,159,867</u>	<u>\$ 2,906,552</u>
Non-controlling interests	<u>\$ (306,379)</u>	<u>\$ (306,379)</u>	<u>\$ (288,089)</u>	<u>\$ (229,971)</u>
Total net assets attributable	<u><u>\$ 3,873,153</u></u>	<u><u>\$ 2,989,521</u></u>	<u><u>\$ 2,871,778</u></u>	<u><u>\$ 2,676,581</u></u>

APPENDIX III-B MANAGEMENT DISCUSSION AND ANALYSIS OF LUNDIN DRC

As of 31 December 2013, 2014 and 2015, and 30 September 2016, the TFHL had total current assets of USD659.1 million, USD838.4 million, USD718.3 million and USD756.7 million, respectively. The changes in total current assets for the years ended 31 December 2013, 2014 and 2015, and for the nine months ended 30 September 2016, were primarily due to normal changes in working capital.

Total Sales and Net Earnings

The following table provides consolidated Total sales and net earnings of TFHL on a 100% basis for the years ended 31 December 2013, 2014, 2015, for the period 1 January 2016 to 21 August 2016 and for the period 22 August 2016 to 30 September 2016. The financial information presented for the periods prior to Lundin DRC's acquisition of TFHL are presented without any fair value adjustment.

	22 August– 30 September 2016	1 January– 21 August 2016	2015	2014	2013
Total sales	\$ 145,473	\$ 798,898	\$ 1,384,575	\$ 1,558,068	\$ 1,636,515
Net earnings	\$ 18,423	\$ 78,130	\$ 217,934	\$ 438,315	\$ 472,274

For the years ended 31 December 2013, 2014 and 2015 and for the nine months ended 30 September 2016, TFHL's revenue was USD1,636.5 million, USD1,558.1 million, USD1,384.6 million and USD944.4 million, respectively. The decrease in revenue over these periods was primarily due to declining average realized copper prices, which decreased from an average of USD3.21/lb in 2013 to USD2.17/lb in the nine months ended 30 September 2016. The decline in copper revenues for 2014 compared with 2013 was also due to lower copper sales volumes. Cobalt revenues increased in 2014 compared with 2013 due to higher sales volumes and averaged realized cobalt prices.

For the years ended 31 December 2013, 2014 and 2015 and for the nine months ended 30 September 2016, TFHL's net earnings was USD472.3 million, USD438.3 million, USD217.9 million and USD96.6 million, respectively. The decrease in net earnings over these periods was primarily as a result of the declining revenue as noted above.

Prospect of TFHL

It is expected that copper price and cobalt price may increase steadily in the coming years, the value of investment in TFHL, being held by Lundin DRC, will also increase steadily. For the outlook of the copper and cobalt market, refer to the section headed "Industry Overview" of this circular.

**INDEPENDENT REPORTING ACCOUNTANTS' ASSURANCE REPORT ON THE
COMPILATION OF UNAUDITED PRO FORMA FINANCIAL INFORMATION****To the Directors of China Molybdenum Co., Ltd.**

We have completed our assurance engagement to report on the compilation of unaudited pro forma financial information of China Molybdenum Co., Ltd. (the “**Company**”) and its subsidiaries (hereinafter collectively referred to as the “**Group**”) by the directors of the Company (the “**Directors**”) for illustrative purposes only. The pro forma financial information consists of the pro forma statement of assets and liabilities as at 30 June 2016 and related notes as set out on pages IV-4 to IV-13 of the circular issued by the Company dated 29 March 2017 (the “**Circular**”). The applicable criteria on the basis of which the Directors have compiled the pro forma financial information are described on page IV-4 of the Circular.

The pro forma financial information has been compiled by the Directors to illustrate the impact of the potential acquisition in relation to the further acquisition of a 24% indirect interest in Tenke Fungurume Mining Complex upon the exercise of the Call Option or the Put Option as contemplated under the Cooperation Arrangement (as defined in the Circular) (the “**Potential Acquisition**”) on the Group’s financial position as at 30 June 2016 as if the transaction had taken place at 30 June 2016. As part of this process, information about the Group’s consolidated financial position has been extracted by the Directors from the pro forma financial information of the then Enlarged Group (as defined in the circular published by the Company on 8 September 2016 in connection with the Very Substantial Acquisition of A Controlling Indirect Interest In World-Class Copper And Cobalt Mine From Freeport-McMoRan Inc.) (the “**then Enlarged Group**”) for six months ended 30 June 2016, on which an independent reporting accountants’ assurance report has been published.

Directors’ Responsibilities for the Unaudited Pro Forma Financial Information

The Directors are responsible for compiling the unaudited pro forma financial information in accordance with paragraph 4.29 of the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited (the “**Listing Rules**”) and with reference to Accounting Guideline 7 “Preparation of Pro Forma Financial Information for Inclusion in Investment Circulars” (“**AG 7**”) issued by the Hong Kong Institute of Certified Public Accountants (the “**HKICPA**”).

Our Independence and Quality Control

We have complied with the independence and other ethical requirements of the “Code of Ethics for Professional Accountants” issued by the HKICPA, which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behavior.

Our firm applies Hong Kong Standard on Quality Control 1 “Quality Control for Firms that Perform Audits and Reviews of Financial Statements, and Other Assurance and Related Services Engagements” issued by the HKICPA and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

Reporting Accountants’ Responsibilities

Our responsibility is to express an opinion, as required by paragraph 4.29(7) of the Listing Rules, on the unaudited pro forma financial information and to report our opinion to you. We do not accept any responsibility for any reports previously given by us on any financial information used in the compilation of the unaudited pro forma financial information beyond that owed to those to whom those reports were addressed by us at the dates of their issue.

We conducted our engagement in accordance with Hong Kong Standard on Assurance Engagements 3420 “Assurance Engagements to Report on the Compilation of Pro Forma Financial Information Included in a Prospectus” issued by the HKICPA. This standard requires that the reporting accountants plan and perform procedures to obtain reasonable assurance about whether the Directors have compiled the unaudited pro forma financial information in accordance with paragraph 4.29 of the Listing Rules and with reference to AG 7 issued by the HKICPA.

For purposes of this engagement, we are not responsible for updating or reissuing any reports or opinions on any historical financial information used in compiling the pro forma financial information, nor have we, in the course of this engagement, performed an audit or review of the financial information used in compiling the unaudited pro forma financial information.

The purpose of unaudited pro forma financial information included in an investment circular is solely to illustrate the impact of a significant event or transaction on unadjusted financial information of the Group as if the event had occurred or the transaction had been undertaken at an earlier date selected for purposes of the illustration. Accordingly, we do not provide any assurance that the actual outcome of the event or transaction at 30 June 2016 would have been as presented.

A reasonable assurance engagement to report on whether the unaudited pro forma financial information has been properly compiled on the basis of the applicable criteria involves performing procedures to assess whether the applicable criteria used by the Directors in the compilation of the unaudited pro forma financial information provide a reasonable basis for presenting the significant effects directly attributable to the event or transaction, and to obtain sufficient appropriate evidence about whether:

- the related unaudited pro forma adjustments give appropriate effect to those criteria; and
- the unaudited pro forma financial information reflects the proper application of those adjustments to the unadjusted financial information.

The procedures selected depend on the reporting accountants' judgment, having regard to the reporting accountants' understanding of the nature of the Group, the event or transaction in respect of which the pro forma financial information has been compiled, and other relevant engagement circumstances.

The engagement also involves evaluating the overall presentation of the unaudited pro forma financial information.

We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Opinion

In our opinion:

- (a) the unaudited pro forma financial information has been properly compiled on the basis stated;
- (b) such basis is consistent with the accounting policies of the Group; and
- (c) the adjustments are appropriate for the purposes of the unaudited pro forma financial information as disclosed pursuant to paragraph 4.29(1) of the Listing Rules.

Deloitte Touche Tohmatsu

Certified Public Accountants LLP

Shanghai China

29 March 2017

A. BASIS OF PREPARATION OF THE PRO FORMA FINANCIAL INFORMATION OF THE ENLARGED GROUP

The pro forma financial information presented below is prepared to illustrate the consolidated financial position of the Enlarged Group as if the Potential Acquisition had been completed on 30 June 2016. This pro forma financial information has been prepared for illustrative purposes only and because of its hypothetical nature, it may not give a true picture of the consolidated financial position of the Enlarged Group as at 30 June 2016 or at any future date had the Potential Acquisition been completed on 30 June 2016.

The pro forma financial information is prepared based on the unaudited pro forma financial information of the then Enlarged Group (as defined in the circular published on 8 September 2016 by the Company in connection with Very Substantial Acquisition of A Controlling Indirect Interest In World-Class Copper And Cobalt Mine From Freeport-McMoRan Inc) (the “**then Enlarged Group**”) as at 30 June 2016, after giving effect to the pro forma adjustment described in the accompanying notes and was prepared in accordance with Rules 4.29 and 14.68(2)(a)(ii) of the Listing Rules.

B. PRO FORMA FINANCIAL INFORMATION OF THE ENLARGED GROUP

	Pro forma adjustment					
	Audited statement of		Audited statement of		Purchase of	Unaudited pro forma consolidated statement of financial position for the Enlarged Group as at 30 June 2016 RMB'000 (Note 1)
	financial position of BHR		financial position of Lundin DRC			
	as at 30 September 2016		as at 30 September 2016			
RMB'000	US\$'000	RMB'000	US\$'000	RMB'000	RMB'000	
		<i>equivalent</i>		<i>equivalent</i>		
		(Note 1)	(Note 1)	(Note 1)	(Note 1)	(Note 3)
Current assets:						
Bank and cash balances	528,162					528,162
Notes receivable	1,386,442					1,386,442
Accounts receivable	666,234					666,234
Prepayments	533,114					533,114
Interest receivable	91,498					91,498
Dividends receivable	44,100					44,100
Other receivables	652,747					652,747
Inventories	3,992,899					3,992,899
Other current assets	1,660,299					1,660,299
Total current assets	9,555,495					9,555,495

	Unaudited pro forma consolidated statement of financial position for the then Enlarged Group as at 30 June 2016	Pro forma adjustment				Unaudited pro forma consolidated statement of financial position for the Enlarged Group as at 30 June 2016	
		Audited statement of financial position of BHR as at 30 September 2016		Audited statement of financial position of Lundin DRC as at 30 September 2016			Purchase of 30% direct interest in TFHL
		US\$'000	RMB'000	US\$'000	RMB'000		RMB'000
		(Note 1)	(Note 1)	(Note 1)	(Note 1)		(Note 3)
Non-current assets:							
Available-for-sale financial assets	2,724,133					2,724,133	
Long-term equity investment	1,220,893		1,161,946	7,705,096	(7,705,096)	1,220,893	
Fixed assets	19,971,284					19,971,284	
Construction in progress	1,193,198					1,193,198	
Inventories	3,923,916					3,923,916	
Intangible assets	9,206,454					9,206,454	
Long-term deferred expenses	120,257					120,257	
Deferred tax assets	378,297					378,297	
Other non-current assets	3,882,636					3,882,636	
Total non-current assets	42,621,068					42,621,068	
Total assets	52,176,563					52,176,563	

	Unaudited pro forma consolidated statement of financial position for the then Enlarged Group as at 30 June 2016	Pro forma adjustment				Purchase of 30% direct interest in TFHL	Unaudited pro forma consolidated statement of financial position for the Enlarged Group as at 30 June 2016
		Audited statement of financial position of BHR as at 30 September 2016		Audited statement of financial position of Lundin DRC as at 30 September 2016			
		US\$'000	RMB'000	US\$'000	RMB'000		
		<i>equivalent</i>		<i>equivalent</i>			
	RMB'000	US\$'000	RMB'000	US\$'000	RMB'000	RMB'000	RMB'000
	(Note 1)	(Note 1)	(Note 1)	(Note 1)	(Note 1)	(Note 3)	
Current liabilities:							
Short-term borrowings	2,362,588						2,362,588
Financial liabilities measured at the fair value through profits and losses ("FVTPL")	1,740,084						1,740,084
Notes payable	830,000						830,000
Accounts payable	569,411						569,411
Receipts in advance	59,866						59,866
Employee benefits payable	195,914						195,914
Tax payable	(94,276)						(94,276)
Interest payable	150,876						150,876
Dividends payable	450,066						450,066
Put option liabilities	-					3,116,700	3,116,700
Provision for undertaking	-					4,517,900	4,517,900
Other payable	4,407,010	1	6				4,407,016
Non-current liabilities due within one year	2,389,009						2,389,009
Other current liabilities	1,042,637						1,042,637
Total current liabilities	14,103,185						21,737,791

	Unaudited pro forma consolidated statement of financial position for the then Enlarged Group as at 30 June 2016 <i>RMB'000</i> <i>(Note 1)</i>	Pro forma adjustment				Unaudited pro forma consolidated statement of financial position for the Enlarged Group as at 30 June 2016 <i>RMB'000</i>	
		Audited statement of financial position of BHR as at 30 September 2016 <i>US\$'000</i> <i>(Note 1)</i>		Audited statement of financial position of Lundin DRC as at 30 September 2016 <i>US\$'000</i> <i>(Note 1)</i>			Purchase of 30% direct interest in TFHL <i>RMB'000</i> <i>(Note 3)</i>
		<i>RMB'000</i> <i>(Note 1)</i>		<i>US\$'000</i> <i>(Note 1)</i>			<i>RMB'000</i> <i>(Note 3)</i>
		<i>equivalent</i>		<i>equivalent</i>			
Non-current liabilities:							
Long-term borrowings	2,823,580				2,823,580		
Bonds payable	4,000,000				4,000,000		
Provision	787,322				787,322		
Other non-current liabilities	280,885				280,885		
Deferred tax liabilities	4,500,211				4,500,211		
Total non-current liabilities	12,391,998				12,391,998		
Total liabilities	26,495,183				34,129,789		
Net assets	25,681,380				18,046,774		

	Unaudited pro forma consolidated statement of financial position for the then Enlarged Group as at 30 June 2016	Pro forma adjustment				Unaudited pro forma consolidated statement of financial position for the Enlarged Group as at 30 June 2016	
		Audited statement of financial position of BHR as at 30 September 2016		Audited statement of financial position of Lundin DRC as at 30 September 2016			Purchase of 30% direct interest in TFHL
		US\$'000	RMB'000	US\$'000	RMB'000		RMB'000
		<i>equivalent</i>	<i>equivalent</i>				
	RMB'000	US\$'000	RMB'000	US\$'000	RMB'000	RMB'000	
	(Note 1)	(Note 1)	(Note 1)	(Note 1)	(Note 1)	(Note 3)	
Shareholders' equity:							
Share capital	3,377,440					3,377,440	
Share premium	–			1,157,682	7,676,821	(7,676,821)	
Capital reserve	10,720,307					(1,664,484)	
Other comprehensive income	(687,955)						
Special reserve	47,196						
Surplus reserves	786,050						
Retained profit	2,987,006	(1)	(6)	4,264	28,275	(28,275)	
Total shareholders' equity attributable to the parent company	17,230,044						
Minority interests	8,451,336					(5,970,116)	
Total shareholders' equity	25,681,380					18,046,774	
Total liabilities and shareholders' equity	52,176,563					52,176,563	

C. NOTES TO THE PRO FORMA FINANCIAL INFORMATION OF THE ENLARGED GROUP

1. The financial information of the then Enlarged Group is extracted from the pro forma financial information included in the circular published by the Company dated 8 September 2016 in connection with the Very Substantial Acquisition of A Controlling Indirect Interest In World-Class Copper And Cobalt Mine From Freeport-McMoRan Inc.

The financial information of BHR Newwood Investment Management Limited (“**BHR**”) and Lundin DRC Holdings Limited (“**Lundin DRC**”) is presented in Appendix II-A and Appendix II-B, respectively, and is presented in United States dollar (“**US\$**”), being the functional currency of these two entities. The respective financial information of BHR and Lundin DRC is translated into Renminbi (“**RMB**”), being the presentation currency of the Group, at the exchange rate of US\$1 to RMB6.6312 on 30 June 2016 published by the People’s Bank of China.

2. On 15 November 2016, a stock purchase agreement (the “**Stock Purchase Agreement**”) was entered between BHR, Tenke Holding Limited and Lundin Mining Corporation, pursuant to which BHR agreed to purchase all the issued share capital of Lundin DRC from Tenke Holding Limited (the “**Lundin Acquisition**”). Lundin DRC holds a 30% direct interest in TF Holdings Limited (“**TFHL**”). TFHL holds 80% interest in Tenke Fungurume Mining S.A. (“**TFM**”).

On 20 January 2017 and 3 March 2017, the Company, BHR and its Investors (as defined in the Circular) entered into a series of agreements (the “**Cooperation Arrangement**”), pursuant to which, the Company will assist BHR to effect the completion of the Stock Purchase Agreement set forth above on the following, the details please refer to section “Letter from the Board” of the Circular:

- a. Fund raising: In the event that BHR fails to obtain all the funding required to settle the Lundin Consideration, the Company undertakes to assist and cooperate with BHR to raise the shortfall to allow BHR to obtain sufficient funding to effect the acquisition in accordance with the Stock Purchase Agreement;

- b. Assistance to BHR to effect the completion of the Stock Purchase Agreement: As part of the Cooperation Arrangement, the Company may make recommendations to potential investors on issues pertaining to the injection of capital into BHR and/or BHR's shareholders. The Company undertakes to negotiate with the Investors to the payment of Subscription Money (as defined in the Circular), which will be used to fund the Lundin Consideration. In addition, the Company undertakes to assist BHR in securing Syndicated Loans (as defined in the Circular), the maximum amount of which will not exceed US\$700 million (equivalent to RMB4,641.8 million). The Company would provide the relevant security in support of the Syndicated Loans, including a guarantee;
- c. Acceptance of the Call Option (as defined in the Circular) by the Company: BHR granted, and the Company accepted, the Call Option, pursuant to which the Company will have the right to acquire the 30% interest in TFHL. The Call Option becomes exercisable any time following the date falling on the first anniversary of receipt of all the Subscription Money (as defined in the Circular) by BHR. The exercise price of the Call Option would be the Subscription Money received from the Investors plus the return calculated based on the return rates in accordance with the Cooperative Arrangement; and
- d. Grant of the Put Option (as defined in the Circular) by the Company: the Company granted the Put Option to BHR or its Investors, pursuant to which the Company will have the obligation to acquire the 30% interest in TFHL. The Put Option becomes exercisable any time after 90 days immediately prior to the date falling on the third anniversary of the receipt of all the Subscription Money by BHR. The exercise price of the Put Option would be the Subscription Money received from the Investors plus the return calculated based on the return rates in accordance with the Cooperative Arrangement.

3. For the purposes of the pro forma financial information, it is assumed that:
- i) the Lundin Acquisition had been completed as of 30 June 2016. According to the Stock Purchase Agreement, the consideration to be paid for the Lundin Acquisition (“**Lundin Consideration**”) consists of i) cash consideration of US\$1,135.7 million (equivalent to RMB7,531.1 million) (the “**Cash Consideration**”); ii) contingent consideration of up to US\$51.4 million (equivalent to RMB340.8 million), consisting of US\$25.7 million (equivalent to RMB170.4 million) if the average copper price exceeds US\$3.5 per pound and US\$25.7 million (equivalent to RMB170.4 million) if the average cobalt price exceeds US\$20 per pound, both during a 24-month period beginning on 1 January 2018 (the “**Contingent Consideration**”); and iii) a cash adjustment (the “**Cash Adjustment**”) of 30% of the difference between the closing cash balance of TFHL as at closing date and cash target of US\$50.0 million (equivalent to RMB331.6 million). For the purpose of the pro forma financial information, the Lundin Consideration is estimated to be US\$1,151.3 million (equivalent to RMB7,634.6 million), consisting of i) the Cash Consideration; ii) the fair value of the Contingent Consideration of US\$6.7 million (equivalent to RMB44.5 million) as at 30 June 2016 with reference to a valuation report prepared by an independent third-party valuer; and iii) the Cash Adjustment of US\$8.9 million (equivalent to RMB59.0 million). The Cash Adjustment was calculated as 30% of the difference between the closing cash balance of TFHL as at 30 June 2016 amounting to US\$79.6 million (equivalent to RMB527.8 million) less the cash target of US\$50.0 million (equivalent to RMB331.6 million).

As at 21 March 2017, Syndicated Loans agreements with aggregate amount of US\$700 million have been entered into. The maximum amount of the Subscription Money would not exceed US\$470 million. Pursuant to Rule 14.74(1) of the Listing Rules of the Stock Exchange of Hong Kong, the grant of the Put Option will be classified as if the Put Option had been exercised. For simplicity, it is assumed that the maximum amount of the Subscription Money, being US\$470.0 million (equivalent to RMB3,116.7 million), is used to fund the Lundin Consideration and the rest US\$681.3 million (equivalent to RMB4,517.9 million) of the Lundin Consideration would be funded by the Syndicated Loans. The exercise price of the Put Options presented in the pro forma financial information represents the present fair value of the Investors’ Subscription Money plus return earned by the Investors on the Subscription Money.

- ii) When preparing the pro forma financial information of the then Enlarged Group, the Company has consolidated 70% equity interest in TFHL as if the acquisition of TFHL had been completed and become a non-wholly owned subsidiary of the Company as of 30 June 2016. Therefore, upon the exercise of the Put Option, the Company acquires the entire equity interest of Lundin DRC, which holds 30% interest in TFHL. The acquisition shall be accounted as equity transaction between the owners of the Company and non-controlling interest of the Group. Upon the exercise of the Put Option, the investment cost of the 30% interest in TFHL held by Lundin DRC would be eliminated against share premium and retained profit of Lundin DRC and RMB1,664,484,000 was debited into the capital reserve, being the difference between the fair value of total exercise price paid and liabilities assumed by the Company and carrying amount of the non-controlling interest in TFHL as of 30 June 2016.

Runge Pincock Minarco

Tenke Fungurume Project, Democratic Republic of Congo Competent Person Report

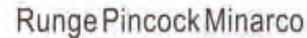
China Molybdenum Company Limited

ADV-HK- 00107

29 March 2017

Final Report





Executive Summary

China Molybdenum Company Limited.

North of Yihe, Huamei Shan Road,
Chengdong New District, Luanchuan County,
Luoyang City,
Henan Province,
the PRC, 471500

Runge Asia Limited trading as
RungePincockMinarco

13/F, 68 Yee Wo Street
Causeway Bay
Hong Kong

29 March, 2017

RE: Competent Person Report

Dear Sirs,

Runge Asia Limited trading as RungePincockMinarco ("RPM") has been engaged by China Molybdenum Company Limited (HK3993) referred to as ("CMOC" or "the Clients") to undertake an Independent Technical Review ("ITR") and compile a Competent Person Report ("CPR" or the "Report") (as defined by Chapter 18 of the Rules Governing the Listing Rules of the Stock Exchange of Hong Kong (the "Listing Rules") on the Tenke Fungurume Project (the "Project"). The Project is a world class operating copper-cobalt ("Cu-Co") deposit located in the Lualaba Province of the Democratic Republic of Congo ("DRC") which is currently owned (56%) by CMOC and operated by Freeport-McMoRan ("FMI" or the "Company").

The process and conclusions of the ITR are presented in the CPR which will be included in the Circular of the Client in relation to the transaction in accordance with Chapter 18 of the Listing Rules. The statements of Mineral Resources and Ore Reserves (as defined in **Appendix B**) have been reported to be in accordance with the recommended guidelines of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves JORC Code (2012 Edition)

RPM's technical team ("the Team") consisted of International Competent Person's, International Senior Consultants, Executive Mining Engineers and Senior Geologists. RPM's Hong Kong Competent Person was responsible for compiling or supervising the compilation of the report and the JORC Statements of Mineral Resources and Ore Reserves, stated within. The Team's qualifications and experience is detailed in **Annexure A** for reference.

The latest site visit was conducted by a member of the Team to the Project's mine site and surface operations from March 8th to 10th, 2017. Further to this a number of site visits were undertaken from April 4th to 6th, 2016 and also from June 6th to 8th, 2016 by various members of the Team. During the site visits the Team inspected the mine, the ore processing plant, the tailings storage facility, the communities and conducted general inspections of the Project area. The visits were also used to gain a better understanding of the Project status. During the site visits, the Team had open discussions with the Company's personnel on technical aspects relating to the relevant issues. The Company's personnel were cooperative and open in facilitating RPM's work.

In addition to work undertaken to generate independent JORC Mineral Resources and Ore Reserves estimates, the CPR relies largely on information provided by the Company and Clients, either directly from the sites and other offices, or from reports by other organizations whose work is the property of the Company, Clients or its subsidiaries. The data relied upon for the JORC Ore Resources and Ore Reserves estimates independently completed by RPM have been compiled primarily by the Clients and the Company and subsequently reviewed and verified as well as reasonably possible by RPM. The CPR is based on information made available to RPM as at 29 March, 2017. The Client or the Company has not advised RPM of any material change, or event likely to cause material change, to the underlying data, designs or forecasts since the date of asset inspections.

Project Summary

- The Project is a world class copper - cobalt (Cu-Co) operating project located in the Lualaba Province of the DRC approximately 175 km north of Lubumbashi and is readily accessible from Lubumbashi via a sealed highway and Zambia by the national level highway. The site also operates its own airstrip with 3 weekly return charter flights to Lubumbashi and onwards to Johannesburg.
- The Project is the world's 13th largest Cu and 2nd largest Co operating mine in the world by primary reserve size.
- The Project is contained within a number of mining and exploration concessions and consists of a series of sediment hosted Cu-Co deposits which form part of the well-known major Central African Copper belt. Containing fifteen defined well-endowed mineralised zones, the Project is the largest copper mine in the DRC and consists of one of the largest contained copper metal Mineral Resources globally. Regional scale structural overlays result in mineralisation in the belt being clustered semi-continuous but with large scale mineralised bodies both along strike and down dip with thickness ranging from 5 to 10 m across the resource.
- Since commissioning in 2008 the Project has been in constant operation with all mining being undertaken via the conventional open cut method focusing on the near surface oxide mineralisation. The agitated leach and solvent extraction and electrowinning ("SX-EW") processing plant has been incrementally upgraded to achieve the current treatment throughput rate of 5.6 million tonnes per annum ("Mtpa"). The Project produces a 99.9% Cu cathode product along with a wet and dry Co Hydroxide concentrate of approximately 38% Co. The majority of the Cu and Co products are transported by truck from site through Chingola Zambia and onto Durban Port in South Africa. The Cu product is subsequently sold to various customers globally, while the Co product is sold internally to Freeport's Co refinery in Finland and on sold as refined Co. A portion of the Cu product is also trucked from site and sold directly to customer facilities in Ndola Zambia.
- In addition to the open pit mining and the surface processing plant and offices infrastructure, significant regional and local infrastructure provide support to the operations and the forecast production requirements. A review by RPM of the regional and local infrastructure indicates that the area has suitable transport logistics connecting the operating asset to local and international markets for both supply of consumables and transport of product to market. The Project is located close to well established highways, water sources with all personnel accommodated onsite in two purpose built accommodation areas. Power to the Project is provided via a long-term agreement with Societe Nationale d'Electricite (SNEL), the state-owned electric utility company serving the region, however as is common in the DRC power supply shortages impact production (see below for further details).
- The Project directly employs close to 3,400 personnel of which 98% are DRC nationals who are all employed under a Collective Labour Agreement ("CLA") which was re-negotiated in late 2016 by the Company and unions and covers the next 4 years. CMOC during the past 6 months has made employment offers and received acceptance from the majority of the key international site management personnel, all of whom have in depth knowledge of the operation gained over many years. Upon completion of the Company's management contract these employees will transition to CMOC. RPM considers that the retention of most of the site management team during the transition period will support ongoing production as outlined in the CPR.

Mineral Resource and Ore Reserves Estimates

- Primary copper and cobalt mineralogy is predominately chalcocite, chalcopyrite, bornite, and carrollite. Oxidation has resulted in widespread alteration producing malachite, pseudomalachite, chrysocolla (hydrated copper silicate) and heterogenite. The oxidation base typically ranges between 75 to 125 m while a leached zone is well developed in some areas. Typically this zone is depleted between three and four times in copper grades in relation to the surrounding oxide, with back oxides and iron oxide staining accounting for low acid copper in this zone. The oxide zone transitions through a mixed (oxide and sulphide) zone before fresh rock is reached which is termed the sulphide zone.
- The review of the drilling and sampling procedures since 2006 indicates that international standard practices were utilised with no material issues being noted by RPM. The QA/QC samples from 2009 all showed suitable levels of precision and accuracy to ensure confidence in the sample preparation methods employed by the Company and primary laboratory. RPM also notes that over 90% of the samples used for the resource estimation are derived from drilling since 2006, with the pre-2006 drilling undertaken near surface and in areas which are mined out. As such, RPM considers the data which supports the resource estimation to have no material sample bias and is representative of the samples taken.

- A total of 18 block models have been created for the different resource areas within the Project. Results of the independent Mineral Resources estimates completed by RPM for the Project are tabulated in the Statement of Mineral Resources in **Table 1** below, which are reported in line with both the requirements of the 2012 JORC Code and the reporting standards of Chapter 18 of the HKEx Listing Rules. The Statement of Mineral Resources is therefore suitable for public reporting. The Statement of Mineral Resources shown in **Table 1** and **Table 2** and graphically in **Figure 1** includes the Ore Reserves reported in **Table 3**.

RPM notes the following:

- TCu/TCo – Refers to Total Cu-Co which is contained within the material. This Total is inclusive and not additional to ASCu/ASCc (see below).
- ASCu/ ASCo – Refer to grade of the Cu-Co which is acid soluble by the test method used, which is critical for the leach processing used for the Oxide material. The difference between the ASCu and TCu is not expected to be recovered through leaching.

Table 1 Statement of JORC Open Pit Mineral Resources by Mineral Type as of 31st December, 2016.

Type	Classification	Quantity (Mt)	TCu (%)	TCo (%)	ASCu (%)	ASCo (%)	Metal TCu (Mlbs.)	Metal TCo (Mlbs.)
Leach Cap	Measured	1.4	0.6	0.45	0.4	0.39	17.7	13.8
	Indicated	2.7	0.4	0.43	0.2	0.37	20.7	25.7
	Inferred	2.3	0.2	0.40	0.2	0.35	10.3	20.4
	Sub-Total	6.4	0.4	0.43	0.2	0.37	48.6	59.8
Oxide	Measured	117.7	2.8	0.30	2.5	0.24	7,224.6	789.2
	Indicated	119.3	2.4	0.26	2.1	0.21	6,247.4	694.6
	Inferred	34.5	2.0	0.19	1.8	0.16	1,533.5	144.4
	Sub-Total	271.4	2.5	0.27	2.2	0.22	15,005.2	1,628.5
Mixed	Measured	39.2	3.5	0.30	1.7	0.17	3,029.6	256.6
	Indicated	52.5	3.1	0.26	1.5	0.15	3,597.8	306.5
	Inferred	13.8	2.1	0.24	1.1	0.14	644.7	74.0
	Sub-Total	105.4	3.1	0.27	1.5	0.16	7,272.4	636.6
Sulphide	Measured	12.6	4.4	0.29	0.7	0.12	1,234.5	81.2
	Indicated	17.8	3.6	0.22	0.6	0.07	1,417.3	85.7
	Inferred	7.1	2.8	0.17	0.3	0.02	435.0	27.0
	Sub-Total	37.6	3.7	0.23	0.6	0.08	3,086.7	193.7

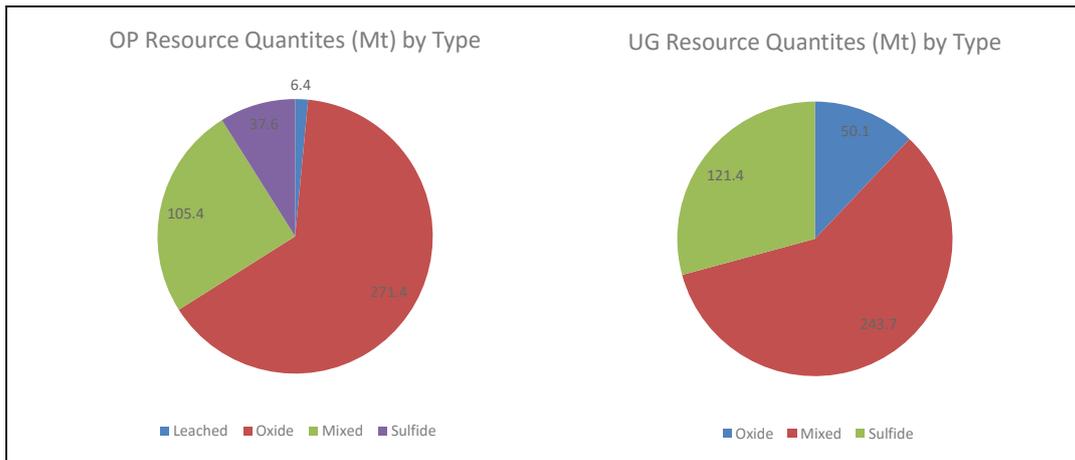
Table 2 Statement of JORC Underground Mineral Resources by Mineral Type as of 31st December, 2016.

Type	Classification	Quantity (Mt)	TCu (%)	TCo (%)	ASCu (%)	ASCo (%)	Metal TCu (Mlbs.)	Metal TCo (Mlbs.)
Oxide	Measured	4.7	2.8	0.32	2.5	0.24	293.8	33.0
	Indicated	30.7	2.9	0.30	2.5	0.23	1,932.6	203.0
	Inferred	14.7	3.0	0.28	2.6	0.20	956.2	91.2
	Sub-Total	50.1	2.9	0.30	2.5	0.22	3,182.6	327.4
Mixed	Measured	6.6	3.4	0.19	1.7	0.12	499.7	28.2
	Indicated	68.1	3.2	0.27	1.5	0.15	4,856.8	401.6
	Inferred	169.1	3.0	0.30	1.4	0.16	11,178.1	1,111.5
	Sub-Total	243.7	3.1	0.29	1.5	0.15	16,535.5	1,542.0
Sulphide	Measured	0.9	3.2	0.28	0.70	0.06	62.4	5.4
	Indicated	26.6	3.0	0.22	0.8	0.05	1,744.1	132.0
	Inferred	93.9	3.0	0.25	0.8	0.05	6,252.8	518.0
	Sub-Total	121.4	3.0	0.24	0.8	0.05	8,059.8	655.5

Note:

1. The Statement of JORC Mineral Resources in **Table 1 and Table 2** have been compiled under the supervision of Mr. Esteban Acuña who is a full-time employee of RPM and a Registered Member of the Chilean Mining Commission. Mr. Acuña has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity that he has undertaken to qualify as a Competent Person as defined in the JORC Code.
2. All Mineral Resources figures reported in the table above represent estimates at 31st December, 2016. Mineral Resource estimates are not precise calculations, being dependent on the interpretation of limited information on the location, shape and continuity of the occurrence and on the available sampling results. The totals contained in the above table have been rounded to reflect the relative uncertainty of the estimate. Rounding may cause some computational discrepancies.
3. Mineral Resources are reported in accordance with the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (The Joint Ore Reserves Committee Code – JORC 2012 Edition).

Figure 1 Graphical Representation of JORC Mineral Resources quantities as at 31st December, 2016 excluding Stockpiles



- In addition to the in situ Mineral Resource, a total of 48.2 Mt at 1.2 % ASCu and 0.26 % ASCo occurs in oxide stockpiles on or near the ROM pad and is classified as Measured. This material is estimated based on survey controls, truck counts and grade control polygon data and grouped into 3 types of material based on grade and NAC consumption as shown in **Table 3** below.

Table 3 Statement of Stockpile JORC Mineral Resources by Material Type as of 31st December, 2016.

Stockpile	JORC Classification	Tonnes (Mt)	ASCu%	ASCo%	TCu%	TCo%	NAC_kg/t	EqCu%
High Grade 1	Measured	2.0	2.8	0.3	3.0	0.3	108.6	3.4
High Grade 2		4.3	1.6	0.4	1.7	0.5	29.0	3.0
Low Grade		41.9	1.0	0.2	1.2	0.3	29.5	1.9
Total Stockpiles		48.2	1.2	0.3	1.3	0.3	32.6	2.1

- Due to the high variability of processing costs associated with acid consumption, the cut off grades for each resource model block were based on profit from each individual block. Profit was calculated based Cu and Co grades, acid consumption, metallurgical recoveries, mining and processing costs using largely the same parameters used in the Ore Reserves estimate with the exception of increased metal prices. All the blocks with profit greater than or equal to zero were reported as Mineral Resources and considered to have a reasonable prospect for eventual economic extraction.
- The Statement of Mineral Resources for the open cut areas has been constrained by the topography and a series of pits which were generated with Measured, Indicated and Inferred resources at a Cu price of 3.50 USD/lb and a Co price of 15.00 USD/lb. RPM has included all ore types in the Mineral Resources although the current metallurgical testwork indicates that lower recoveries are expected to be achieved for sulphide material through the current plant as outlined in the CPR. RPM highlights that a testwork program was undertaken on mixed and sulphide materials based on the development of a flotation and roasting processing plant, which results in recoveries and costs as outlined below. As such, RPM considers the mixed and sulphide material shows reasonable prospects for economic extraction in the future utilising lower recoveries. In reporting of the Underground Mineral Resources, RPM have utilised a similar revenue cashflow approach using an average underground mining cost of 52 USD/t. See the CPR for further details.
- One of the eighteen resource models (Dipeta Syncline (UG reported area)) did not have a calculated profit variable, so a copper equivalent formula was derived for oxide ore types: $CUEQ = ACU + (ACO \times 3.171)$, and for mixed/sulphide ore types: $CUEQ = TCU + (TCO \times 2.386)$. Assumed metal recoveries were 92.15% Cu and 89.3% Co for oxides and 85% Cu and 62% Co for mixed and sulfides. Copper equivalent cutoffs of 1.5% for oxides and 1.85% for mixed and sulfides were used to define the underground Mineral Resource. These cutoffs equate to about \$96/tonne for oxides (\$44 processing cost plus \$52 mining cost) and \$107 for mixed and sulfides (\$55 processing cost plus \$52 mining cost).
- The geologic interpretation models consist of a set of 3D solids, generated using implicit modelling, one for each interpreted rock type such that the metal content was estimated considering the whole volume of the blocks. As such this method does not incorporate ore loss or dilution into the block estimates.
- The Independent Statement of Ore Reserves for the Project is estimated as at the 31st December, 2016 by RPM and reported in accordance with the JORC Code. RPM has determined suitable technical parameters to apply in the Ore Reserve estimation process following review of site data and technical information contained with studies of at least a pre-feasibility level of confidence. Further information taken into consideration included the proposed life of mine plans, mining method, forecast processing plant recoveries and tailings storage facility capacities. The Ore Reserves were derived only from areas of the Project where Measured and Indicated Resources have been estimated.
- The Proved and Probable Ore Reserves estimate for the Project is summarized in **Table 4** and shown graphically in **Figure 2**. The Ore Reserves estimates reported below are included in the Measured and Indicated Mineral Resources quantities reported in **Table 1** and are not additional to. RPM has estimated the total Ore Reserves to be approximately **181.6 Mt** at an average grade of **2.2 % ASCu and 0.25 % ASCo**, comprising 125.1 Mt of Proved and 56.5 Mt of Probable Ore Reserves.

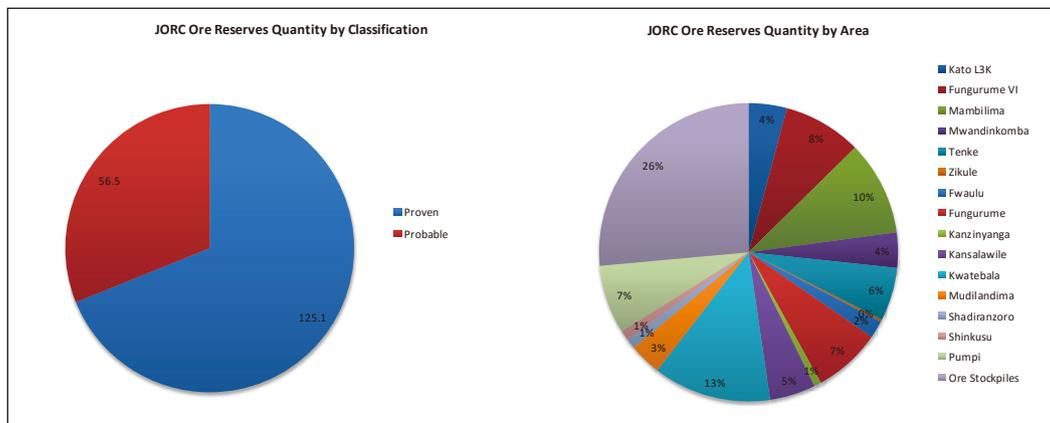
Table 4 Statement of JORC Ore Reserves Estimate as at 31st December, 2016

Area	Quantity (Mt)	TCu (%)	TCo (%)	ASCu (%)	ASCo (%)	TCu (Mlbs)	TCo (Mlbs)	ASCu (Mlbs)	ASCo (Mlbs)
Open Pits									
Proved	76.9	3.1	0.32	2.8	0.25	5,285.5	544.0	4,691.2	427.7
Probable	56.5	2.7	0.30	2.4	0.25	3,365.3	376.1	3,002.6	308.7
Sub Total	133.4	2.9	0.31	2.6	0.25	8,650.7	920.0	7,693.8	736.4
Ore Stockpiles									
Proved	48.2	1.3	0.31	1.2	0.26	1,389.6	326.6	1,236.4	281.4
Probable									
Sub Total	48.2	1.3	0.31	1.2	0.26	1,389.6	326.6	1,236.4	281.4
Combined									
Proved	125.1	2.4	0.32	2.2	0.26	6,675.1	870.5	5,927.6	709.1
Probable	56.5	2.7	0.30	2.4	0.25	3,365.3	376.1	3,002.6	308.7
Grand Total	181.6	2.5	0.31	2.2	0.25	10,040.4	1,246.6	8,930.2	1,017.7

Notes:

- The Statement of JORC Ore Reserves has been compiled under the supervision of Mr. Rondinelli Sousa who is a full time Senior Mining Engineer employed by RPM and is a Member of the American Society of Mining, Metallurgy & Exploration (SME). Mr. Sousa has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration to qualify as a Competent Person as defined in the JORC Code.
 - Tonnages are metric tonnes
 - Copper price: 2.88 USD/lb and Cobalt price: 12.40 USD/lb
 - Ore stockpiles include working-in-progress stockpiles balance as of 31st December 2016
 - Figures reported are rounded which may result in small tabulation errors. Ore Reserves have been estimated under the 2012 Edition of the JORC Code.
- RPM undertook the pit optimization using a cash flow method, since the block definition as either ore or waste varies according to its intrinsic revenue and costs values. In the cash flow method, the ore material is defined by comparing the cash flows that would be generated by processing a given block as ore or mining it as waste. If the cash flow generated by processing the block is higher than zero USD, then the block is reported as Ore; otherwise it is treated as waste. Haulage costs are included in this analysis.
 - In the simple cases where exists only one process method and processing costs are not based on mathematical expressions that affect the cutoff grade calculation, the ore selection by cash flow will produce the same result as that produced by the use of marginal cutoffs. This is not the case of the Tenke project.
 - The processing costs associated with the Tenke project are strongly related to the block acid consumption, which is estimated based on the concentrations of Cu, Co and calcium ("Ca") through mathematical expressions. In addition, although the magnesium ("Mg") concentration is not being used to estimate acid consumption, it does have an impact on quicklime consumption in the plant. Thus RPM considers that the cash flow method is the most suitable method to define the mineable quantities within the optimized pits.

Figure 2 Graphical Representation JORC Ore Reserves Estimate within the Final Pit Designs and Ore Stockpiles



Exploration Potential

- The Project has a long history of systematic exploration which has included geological mapping, geophysical and geochemical surveys as well as a large amount of surface diamond drilling. These have been undertaken over numerous generations within the last 100 years. The main focus has been on the outcropping low acid-consuming high grade oxide deposits for which Mineral Resources – Ore Reserves have been estimated. The sulphide extension at depth of these defined oxides resources has been explored and defined as resources in most of the zones, however there remains excellent potential for further exploration upside of both the oxide and sulphide mineralisation.
- RPM considers the large concession holding of the Company contains a number of targets which present opportunities to increase the resource base and add feed sources to the plant in turn increasing the mine life, these include:
 - **Inferred material:** Within the current final pit designs for the Project a total of approximately 10 Mt of “inferred” material has been reported. This is particularly prevalent in Mudilandima deposit with 3.4 Mt of Inferred materials inside the reserve pits. This material has been excluded in the Ore Reserves estimate.
 - **Oxide Regional Exploration Targets:** The Company has undertaken exploration in the areas surrounding the defined resource, however in addition further targets have been identified between the south side of the south limb and Zikule project, these are: Kamalondo South, Kansalawile South, Kafufya, Mukanzila, Kachimilambe, Kakapidi, Zakeo. Current drilling on these areas shows low copper grades, however exploration is limited and oxide mineralisation has been defined.
 - **Sulphide in Dipeta Syncline:** RPM notes that there is a significant sulphide potential in the extension of Dipeta Syncline where limited exploration has been undertaken to date. The current block model in the Dipeta Syncline covers approximately 1.2 km of the 14 km extension of the whole structure. Geophysical and limited exploration information indicates the mineralisation has the potential to continue at a similar magnitude along the structure. The Company is currently planning to complete additional drilling in this area along with 10 Magnetotelluric survey lines to help interpret the extent and geometry of the syncline to help quantify the likely resource quantity within the syncline.
 - **Other Sulphide Targets:** Additional sulphide targets remain below the Fungurume oxide deposit where thickening of the ore due to thrust faulting is expected to exist. Drilling has yet to be planned for this area due to current mining activity.
 - **Lateral and Vertical Extensions:** RPM notes that several zones of mineralisation may extend vertically and down dip outside of the currently defined resource and as such outside of the reported resources. As such RPM considers there to be excellent potential to define additional resources outside of the currently reported resources within the pit designs and the underground extension directly under the pits.

Mining and Production

Current Production

- Only oxide material is processed within the current plants (leach and SX-EW) which are continuously feed from five pits at any given time. Run of Mine (“ROM”) ore is transported via a series of on-site gravel haul roads from the pit to four ROM stockpiles which vary dependent on ore type and/or grade. Mining is undertaken via conventional truck and shovel open pit methods, and over the Life of Mine (“LOM”) ore is planned to be sourced from fifteen separate open pit areas with a total of 26 discrete pits designed. In many cases, mining can be considered hill-top removal with minimal stripping, however as the pits progress deeper stripping requirements will increase. Mining is performed with predominantly CAT 992 front end loaders, RH120 (CAT6030) diesel-hydraulic excavators, CAT 777 (90 tonne) haul trucks, with Haulmax 80 t capacity trucks used for overland ore transportation from outlying pits to the processing plant ROM stockpiles. Contractors are used sparingly on site to haul ore from outlying pits to the plant using 40t rigid body trucks when the Haulmax fleet is insufficient to keep up with ore movements. The Company aims to have five active mining pits in operation at any one time, which includes some relatively close to the processing plant and some quite distant. This approach aims to provide flexibility in the feed grade, ore types and cost structure of the operation. The plant has a current throughput rate of 5.6 Mtpa with the current equipment having a capacity (total rock) up to 52 Mtpa. This results in significant stockpiles being

created which will be processed at the cessation of mining in 2041 resulting in a total life of Project of 33 years through to 2049 based on the current Ore Reserves.

- RPM has estimated the total Ore Reserves to be approximately **181.6 Mt** at an average grade of 2.2 % ASCu and 0.25% ASCc. Over the 25 year of mining, the overall pit stripping ratio will average approximately 6.9:1, or 6.9 tonnes of waste mined for every 1.0 tonne of ore mined. RPM notes that drilling, blasting, loading, and transport activities at the Fungurume, Fwaulu, Mwandinkomba and Tenke mines are currently performed by an owner operator fleet. The selection of the pushbacks mining sequence is based on economic considerations which include ore grade, acid consumption estimates, ore haulage distance, as well as stripping as outlined in **Figure 3**.
- A single processing facility with a nominal throughput rate of 5.6 Mtpa of ROM ore has been constructed on site. Ore from the pits is stockpiled directly onto the ROM or onto two separate stockpiles (plus a scats pile) based on grade characteristic. Front end loaders are used to load ore through a hopper directly into the processing facilities comminution circuit based on grade and acid consumption requirements capped at a daily maximum of 2,250 t/day of acid supplied from two on site acid facilities. The ore processing facilities comprise an agitated leach circuit followed by a solvent extraction-electrowinning ("SX-EW") process to produce copper cathode and cobalt hydroxide intermediate products ("CHIP"). Combined the facilities have a throughput rate of 14.8 kilotonnes per day (ktpd) and have overall recoveries of approximately 97% and 94% acid soluble Cu and Co respectively (94% and 83% TCu and TCo) within the oxide ores. Ore is initially crushed, ground, tank leached with sulfuric acid and SO₂, and dewatered. Copper cathode is produced through SXEW from the resultant pregnant leach solution (PLS) and CHIP from a raffinate bleed stream through pH adjustment with magnesium oxide (MgO) following additional purification steps to first precipitate iron-aluminum-manganese (FAM) with air/SO₂ and limestone and then copper with lime.
- A total of 1.51 Billion USD of replacement and sustaining capital is required for the remainder of the current Ore Reserves mine life (oxide only) with the majority of the capital assigned for processing (148.9 Million USD) and mining (492.2 Million USD), with tails dam construction and maintenance (594.4 Million USD) being the largest item. RPM notes that the closure costs are included in the OPEX on a per tonne basis rather than CAPEX costs. Further breakdown are provided in **Section 12** for reference.
- Estimated LOM Production Costs for the Life of Project (Oxide only) are estimates to be 1.89 USD/lb Cu cathode however this costs excludes the SX-EW circuit, freight and sales of the Cu Cathode as well as costs of freight and sale of the Co product. The SX-EW, freight and sales costs for the Cu Cathode totals an additional 0.40 USD/lb Cu while an additional 0.87/lb Co metal is required for freight and sales cost to market. RPM notes that these costs have changed since the CPR, due primarily to increase prices and contractually arrangements as well as further definition of onsite LOM costs. Additionally G and A costs are now forecast to change in periods due to mining activity changes over the mine life etc... Further breakdown are provided in **Section 12** for reference.

Figure 3 Ore Reserve Life of Mine Pit Sequence

Pit Source	Unit	Years													LOM
		2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026-2030			
FGME	Ore Mt	3.0	4.2	2.2		0.7		0.3	1.2		0.5	1.5		13.5	
	Waste Mt	11.2	20.1	9.6		3.1		3.2	8.1		4.0	6.5		65.8	
FGVI	Ore Mt			0.4	0.6	0.8	2.7	1.4			6.4	3.9		15.7	
	Waste Mt			2.2	5.7	4.3	14.7	5.7			32.4	43.7		108.8	
FWAL	Ore Mt					0.3			<0.1	0.4	2.5			3.5	
	Waste Mt					2.3			2.4	3.3	12.8			20.8	
KANZ	Ore Mt								<0.1		0.9	0.4		1.4	
	Waste Mt										7.3	0.9		8.1	
KASA	Ore Mt					0.7	1.3	3.1	<0.1	1.2	<0.1	1.5		9.1	
	Waste Mt					9.6	11.9	10.6	3.1	2.7	5.1	20.0		63.1	
KATO	Ore Mt			1.0						0.2	6.0			7.1	
	Waste Mt			3.7						1.8	35.6			41.1	
KWAT	Ore Mt	1.2	1.6		3.2	2.6	1.6	2.1	2.6	0.1	4.3	3.0		22.5	
	Waste Mt	7.3	7.7		10.3	8.9	7.4	15.1	6.7	6.6	19.1	19.3		106.4	
MAMB	Ore Mt			0.3	1.0	1.8	1.5	0.2	1.7	2.4	5.8	4.2		18.8	
	Waste Mt			6.1	8.4	11.7	8.5	3.1	10.0	14.8	71.9	49.4		190.0	
MUDI	Ore Mt										6.1			6.1	
	Waste Mt										46.7			46.7	
MWAN	Ore Mt	1.6			0.3		0.4				<0.1	3.2		7.2	
	Waste Mt	11.0			0.6		3.4				34.7	22.1		71.7	
PUMP	Ore Mt		2.0	4.1	2.7	0.8					2.7	1.0		13.4	
	Waste Mt		12.0	17.3	5.4	0.7					35.6	3.5		74.5	
SHIK	Ore Mt									0.7	1.3			2.0	
	Waste Mt									9.1	8.0			18.1	
TENK	Ore Mt	2.2	0.9	0.9	2.2	1.5			0.2		2.7			10.5	
	Waste Mt	14.4	4.6	5.2	12.5	5.2			4.0		33.0			78.8	
ZIKU	Ore Mt										6.5			6.5	
	Waste Mt										7.3			7.3	
ZORO	Ore Mt							0.4	0.6	0.1	0.9	0.1		2.1	
	Waste Mt							6.3	4.3	0.9	9.5	2.5		23.4	

*Average of years

- Given the location of the Project, the transportation and power are critical logistical, infrastructure and operational items. The Project currently consumes around 83 MW per annum with power currently supplied from the national grid system. The Project is permitted to consume approximately 92 MW (capped at 95 MW) per annum from the Congolese power grid with approximately 14 MW (up to 18 MW) being self-generated from excess steam at the Tenke acid plants.
- RPM notes that power supply to Sub-Saharan Africa is unreliable with the entire Lualaba Province experiencing regular brownouts and blackouts. While the DRC power grid is connected into the southern-African power pool covering nations such as Zambia, Zimbabwe, Angola, Botswana, and South Africa, connectivity is limited and power which can be imported from Zambia is small and closely regulated. The majority of Tenke's power is transmitted via a direct-current power line from the Inga hydro-electric power station near the national capital of Kinshasa on the Congo River. This power station is however in poor repair and delivers only a portion of its design power capacity. Plans exist for two additional power stations on the Inga site which have potential to generate over 30 GW of power. RPM is of the opinion that it is likely that these plants will be delayed or not constructed for a number of years, nor will the existing non-functioning Inga turbines be repaired in the near future. RPM is aware the Company has invested significantly into ensuring a continuous supply of power, while this has resulted in additional costs it has resulted in a 98% availability rate for power. RPM is of the opinion that the current power supply is sufficient to continue to support operations based on the current Ore Reserves.

Sulphide Mining Potential

- RPM highlights that the current Ore Reserves and Production Schedule presented above are based on the oxide material only and specifically excludes any Inferred material and sulphide mineralisation which could potentially be mined through open pit and underground mining. Due to the mineralisation style, the mixed and sulphide mineralisation cannot be processed through the current agitated leach and SX-EW circuit and achieve the same recoveries as for the oxide. As such the Company has completed a number of testwork programs and studies on sulphide processing and possibility of extracting this material through both underground and open pit mining methods.
- RPM notes that this below study and qualities report are based on the 31st March, 2016 resource estimates and the associated reporting pit optimization. Due to no exploration as stated in as presented in **Section 7** the resource models have not changed since the completion of the below study. RPM however does not think that the pit optimization utilised to the report the 31st December, 2016 resource statement have changed. The below study has not been updated to include these new optimization, however no material change occurs with the conclusion or quantities presented for the underground study.
- Any sulphide processing would require the construction of a floatation and roasting circuit. A scoping study completed by the Company considered a 3.75 Mtpa processing rate through crushing, SAG milling, sulphide floatation, sulfidization of the sulphide float tail, oxide floatation, dewatering of these two concentrates, sulfation roasting followed by processing of these concentrates through a new agitated leach plant, SXEW, and cobalt precipitation plant. These process are estimated to recover 75% and 21% of TCu and TCo respectively to final products of Cu cathode and Co hydroxide, however RPM is aware test work suggests up to 85% and 40% can be achieved. The capital required to construct the full circuit and new plant is estimated to be **2.6 Billion USD** (in 2011), however a revised estimate by RPM of **2.2 Billion USD** (in 2016) includes the construction of only the communitation, floatation and roasting circuits and would utilise the current agitated leach and SX-EW plant.
- While RPM understands that no sulphide open pit mining studies or schedules have been undertaken by, or on behalf of the Company, RPM has completed preliminary pit optimizations to quantify this opportunity. These pit optimisations assumed the same parameters (slope angles etc) as the reserves pits with the exception of the pricing which utilised 3.25 USD/lb Cu and 11.93 USD/lb Co. Based on the deposit characteristics, it is envisaged similar mining methods, with the same equipment types would be required to exploit the mineralisation at a rate of 3.75Mtpa. This would result in similar unit costs for the removal of the haulage of ore and waste, however a slight increase in drill and blast (due to the rock hardness) would occur and the strip ratio of waste to ore would likely increase to the depth of the material (Sulphide is directly beneath the Oxide material). Minimal capital would be required other than new equipment over the life of the project or conversely the use of contractors.
- The Company previously engaged a third party to complete a high level study for the Sulphide Underground portion of the Dipeta Syncline area of the Project. RPM utilised this report, and completed further optimisations and designs and scheduling to better define the economic viability of an underground operation within the Project (the RPM Scoping Study). RPM highlights that that as reported above, a total of 365Mt at 3.1% TCu and 0.27% TCo has been reported for the Mixed and Sulphide ore types for all UG potential areas within the 18 resource areas. The RPM Scoping Study summarized below focused only on the Dipeta Syncline which accounts for a total 77.8Mt of the 365 Mt total resources.
- The term 'mineable quantity' has been defined and reported in the Report to be the potentially economically mineable portion of the Measured, Indicated and Inferred Mineral Resources following application of modifying factors considered suitable based on the data available. It accounts for mining dilution and material loss factors and economic considerations. The mineable quantities are not supported by a study to a Pre-Feasibility level of accuracy and as such the estimate of quantities are not Ore Reserves as per the JORC Code. Further work is required in certain areas including geotechnical, underground mine planning and detailed costing to improve the accuracy to a PFS level of detail. Any reference to the term "ore" or "ROM ore" **Section 13** refers to mineralised rock that is above the stated cut-off grade and is not **Ore** as designated by the JORC Code.
- RPM has estimated the total mineable quantities within the potential underground to be **38.0 Mt** at an average grade of 3.0% TCu and 0.05 % TCo comprising **0.1 Mt** of Measured Resources and **6.2 Mt** of Indicated Resources and **31.7 M** of inferred resources. **Table 5** shows the mineable quantities for the in situ Net Smelter Return ("NSR") scenario of 110 USD/t. The NSR estimation parameters and method is detailed in **Section 13.4**.

Table 5 Mineable Quantities for the Underground in situ NSR scenario of 110 USD/t by Mineral Resource estimate classification as at 31st December, 2016

	Quantities (Mt)	Cu metal (Mt)	Cu Grade (%)	Co Metal (Mt)	Co Grade (%)
Measured	0.1	<0.1	3.20	<0.1	0.10
Indicated	6.2	0.2	3.19	<0.1	0.17
Inferred	31.7	0.95	3.00	0.1	0.25
Total	38.0	1.15	3.04	0.1	0.24

Notes:

1. Tonnages are metric dry tonnes.
 2. Mineable cut-off Grade of NSR USD 110/t on an in situ grade basis.
 3. Figures reported are rounded which may result in small tabulation errors
 4. Mineable quantities are not Ore Reserves as defined by the JORC code.
- Underground mining is planned to be undertaken by the Long Hole Open Stopping method at a rate of 3.75 Mtpa resulting in a 12 year mine life based on the current Mineable Quantities. Utilising three declines with all mining is planned to be undertaken by contractors with a mining operating cost of 52 USD/t ore and a processing cost of 27.56 USD/t ore (excluding cobalt production, but including leaching of Cu and a TSF cost). Administration cost were estimated to be 19 USD/t ore while offsite costs (including SX-EW costs) are forecast to be 0.35 USD/lb Cu metal and 6.15 USD/lb Co metal to deliver product to market. No mining Capital is forecast, as all equipment is purchased by the contractors, however 85.3 Million USD is required for various underground and surface support infrastructure, as detailed in **Section 13.4.3**. RPM notes this CAPEX excludes the processing plant capital.
 - RPM understands that there is no set development option or sequence for either the open pit or underground sulphide projects, however RPM notes that there are various options which should be considered in future studies which are flexible in timing. The key limitations of the sulphide production is the requirement for a plant to be constructed, and timing of mining operations. As outlined above a floatation circuit followed by a roasting plant is required which would then feed a leaching and SX-EW circuit. There are various options for this sulphide plant, which includes construction of an entirely new plant or just a floatation and roasting plant and utilise the current plant, or a combination of both options. **Section 13.5** provides example options for the development timeframe.

Environmental, Health, Social and Safety

- A high level review indicates that Project continues to be viable from the environmental and social perspective even though many of the social management aspects of the project are complex and somewhat unstable. RPM considers that the potential social and environmental impacts resulting during all phases of the Project can be mitigated. The Company and their contractors appear to have the organizational capacity to address environmental and social issues, and health and safety management. The Company has established a number of management areas and procedures on-site and on a corporate level to enable processing of any claims and effective interactions on a community level. These include Environmental, social and security management area each have a number of initiative to support the significant social welfare programs implemented by the Company. These are detailed in **Section 14**, however a brief overview of the permitting and social management are provided below.
- The review of the available documents provides an indication that the Company has been compliant with applicable regulations. Site audits are conducted by project and company auditors on a daily basis for some components of the operation and more detailed reviews occur on a monthly and annual basis. Potential issues are addressed soon after discovery resulting in mitigation actions that appear to prevent violations from the regulatory auditors. Evidence of any significant environmental violations resulting in compliance issues was not discovered in the documentation provided or during the site visit. All major aspects of the environment are planned to be monitored including climatic conditions, air quality, noise, vibration, surface water and groundwater (quantity and quality), and flora and fauna including aquatic biota and biodiversity. The monitoring parameters and frequency vary depending on potential problems and regulatory requirements. Facilities located in the project area including the waste rock and ore storage areas, the tailings storage facility, and the waste management facilities are carefully monitored to provide early detection of problems. Water and air quality are also monitored to assure that effluent emissions from the various components of the project do not negatively impact people and the surrounding environment. RPM considers the monitoring programs are robust and meet existing regulatory requirements and international guidelines.

- The Company has social management staff that has the technical expertise and staffing levels required to achieve goals established as essential by Company commitments and regulatory requirements. The social management group is headed by a Social Programs Manager that has a good grasp of regulatory requirements, social issues and associated mitigations. Social Programs is subdivided into three (3) subgroups: Community development, Community Liaison and Resettlement. The Social Community Fund (SCF) is an organization that functions as a non-profit group outside of the Company organization. The SCF is funded through a government order that requires the Company to put aside a percentage of mining profits to support community ventures. The Social Programs division is supported by a Project Director from a third party that specializes in the implementation of Resettlement Action Plans (RAP). The community development team consists of specialists in important disciplines including community liaison/engagement, agriculture development, public health, education, economic development, and grievance mechanisms. The community liaison group is the primary engagement link between The Company and the communities. The voluntary Principles group works closely with the Social Development Programs group.
- The Company has implemented a grievance mechanism that meets the requirements of the Equator Principles and the IFC Performance Standards. Site-level SOP's have been developed for implementation to assure appropriate mechanisms are uniformly applied when dealing with grievance issues. The Company has a Community Liaison Group with offices in Tenke and Fungurume that supports the grievance function. The Liaison Group engages with the communities to make sure they are aware of the grievance mechanism and how it functions. Grievances are passed to an Independent Review Board, made up of 4 community stakeholders and 3 Company members, to seek resolution. A total of 357 grievances were received in 2015 and 472 grievances were closed out with 74 in process at the end of the year. RAP related grievances accounting for 79% primarily associated with asset identification and compensation while 21% were associated with physical and environmental damage. During 2016, 473 grievances were issued and 405 were closed with 149 still active. Human rights Grievances were also identified during 2015. A total of 29 grievances were received during the year with 28 closed and 1 active at the end of the year. No human rights grievances related to security operations were issued in 2016. RPM considers the grievances are well handled by the Company.

The Key Opportunities Identified during the ITR include.

While various opportunities exist to increase the value of the project, including the significant exploration potential of the project, inferred material within the current pits and short term blending, given the very long mine life RPM for reference presents below what are considered to be the opportunities which could material effect both the mine life and/or the value of the Project.

- **Sulphide Mineralisation:** The sulphide mineralisation is not included in the current Ore Reserves with a significant resource identified for both the open cut and underground mining methods. This material has the potential to significantly extend the mine life as well as the opportunity to increase Cu and Co production well above the current production rate based on oxide material only. RPM recommends that analysis of the development options for the sulphide operations be undertaken which should include various options to optimise the oxide production in conjunction with the sulphide. This is particularly relevant at the current planned cessation of oxide mining in 2041, when the low grade material is planned to be processed, thereby decreasing Cu cathode production.
- **Oxide Mine Optimisation:** Mining is forecast to occur in 15 areas within the Project with five pits at any given time in operation. In addition, five different ore type based on grade and acid consumption are required to be scheduled over the mine life and stockpiles to ensure correct blending at the ROM pad. While this results in complications to achieve a practical schedule, the number of pits, required pushbacks and ore types presents significant flexibility in the production to achieve both the required throughput, head grade and acid consumption. RPM notes that the schedule presented in this Letter is limited by the equipment capacity as well as the maximum acid consumption however still results in significantly more ore per year than the current throughput. While RPM considers the schedule both practical and achievable, various options should be analysed, which includes decreasing the mining rate to match the ore throughput, increasing the mining rate to allow more high grade material early in the mine life, as well as various options to develop sulphide mining. All options have advantages and disadvantages over the current plan, however have different cost profiles which could materially impact the value of the project and the social risks (i.e. mining faster reduce the illegal mining problem).
- **Heap Leach Operation:** The current LOM plan sees production continuing for 8 years beyond cessation of mining in 2041 due to the processing of low grade oxide stockpiles. The Company is currently finalising studies to introduce heap leach operations at Tenke, Kwatebala and Fungurume to bring forward copper

and cobalt production from the low grade stockpile material. The plan is to start heap leaching in 2019 with a target of 70 Ktpa of Cu and 10 Ktpa of Co being recovered from the heap leach. This approach would reduce the LOM (excluding sulphide) and significantly improve cashflow. CAPEX requirements for this is estimated at USD 428M which will include the creation of the 3 leach pads, establishment of 3 agglomeration plants, establishment of pregnant leach solution collection and transmission lines back to the existing SX plant and construction of 2 additional SX extractors at the Kwatebala plant to manage the additional solution volumes. The current Cu EW facility is considered sufficient to the needs of both the current agitated leach plant and the proposed heap leach requirements. RPM notes that introducing a heap leach could potentially free up capacity in the agitated leach circuit earlier allowing for production from the underground sulphide to be brought forward. Heap leaching will also reduce TSF capacity requirements which will either negate or defer the need for construction of some of the planned phases of the new northwest TSF.

The Key Risks Identified during the ITR include.

While various risks have been identified, given the very long mine life, RPM presents below what are considered to be the risks that could potentially affect the Company's ability to achieve the mine life and/or the value of the Project's current Ore Reserve schedule and does not include any risks associated with the upside sulphide mining potential.

- **Power Supply:** Power supply is often interrupted through brownout and blackouts not just within the Project but within the wider Lualaba Province. While RPM notes the recent improvement in supply this change has resulted in higher cost per usage and further changes may occur as operations which had been on care and maintenance due to low commodity prices are bought back online. RPM considers that the approach by the Company of continued support and discussions with the government, SNEL and local communities is suitable however recommends continued review of power supply alternatives, particularly in the context of the upside sulphide mining potential.
- **Social-Economic Community Relations:** Social management plans including development of resettlement action plans and grievance procedures are required to ensure continued good relationships with community. Some grievance issues have occurred primarily related to dust, sedimentation, and concerns about low quality crop lands in resettlement areas which are required to be managed by the Company. In addition previously some vandalism has occurred, and RPM notes that the company has set up a number of procedures and management system to mitigate this risk as outlined in **Section 14**.
- **Illegal Mining:** Illegal Mining is undertaken by numerous groups in various mining areas including the temporarily stopped pits and non-mined known mineralised area. While the quantities removed are not material to the operation, the social and production impact may affect production and security particularly as the various mining areas become more developed. The Company continues to implement a number of non-confrontational management plans around this issue to increasingly make the removal of ore from the site harder. This method whilst effective has only had limited impact as ongoing economic downturn in the region associated with improving commodity prices has seen increasing numbers of illegal miners come to site in 2016.

Limitations and Exclusions

RPM's review was based on various reports, plans and tabulations provided by CMOC or the Company either directly from the mine site and other offices, or from reports by other organizations whose work is the property of the CMOC or the Company. Neither CMOC nor the Company has not advised RPM of any material change, or event likely to cause material change, to the operations or forecasts since the date of asset inspections.

The work undertaken for this Report is that required for a technical review of the information, coupled with such inspections as the Team considered appropriate to prepare this Report.

It specifically excludes all aspects of legal issues, commercial and financing matters, land titles and agreements, except such aspects as may directly influence technical, operational or cost issues and where applicable to the JORC Code guidelines.

RPM has specifically excluded making any comments on the competitive position of the Relevant Asset compared with other similar and competing producers around the world. RPM strongly advises that any potential investors make their own comprehensive assessment of both the competitive position of the Relevant Asset in the market, and the fundamentals of the copper, molybdenum, and gold markets at large.

Limited Liability

This Report has been prepared by RPM for the purposes of CMOC for inclusion in its Circular in respect of the proposed acquisition of the Project in accordance with the Listing Rules and is not to be used or relied upon for any other purpose. RPM will not be liable for any loss or damage suffered by a third party relying on this report or any references or extracts therefrom contrary to the purpose (regardless of the cause of action, whether breach of contract, tort (including negligence) or otherwise) unless and to the extent that RPM has consented to such reliance or use.

Responsibility and Context of this Report

The contents of this Report have been based upon and created using data and information provided by or on behalf of CMOC or the Company. RPM accepts no liability for the accuracy or completeness of data and information provided to it by, or obtained by it from CMOC, the Company or any third parties, even if that data and information has been incorporated into or relied upon in creating this report. The report has been produced by RPM in good faith using information that was available to RPM as at the date stated on the cover page and is to be read in conjunction with the circular which has been prepared and forms part of the referenced transaction.

This report contains forecasts, estimates and findings that may materially change in the event that any of the information supplied to RPM is inaccurate or is materially changed. RPM is under no obligation to update the information contained in the report.

Notwithstanding the above, in RPM's opinion, the data and information provided by or on behalf of CMOC or the Company was reasonable and nothing discovered during the preparation of this Report suggests that there was a significant error or misrepresentation of such data or information.

Indemnification

CMOC has indemnified and held harmless RPM and its subcontractors, consultants, agents, officers, directors, and employees from and against any and all claims, liabilities, damages, losses, and expenses (including lawyers' fees and other costs of litigation, arbitration or mediation) arising out of or in any way related to:

- RPM's reliance on any information provided by CMOC and the Company; or
- RPM's services or materials; or
- Any use of or reliance on these services or material,

save and except in cases of death or personnel injury, property damage, claims by third parties for breach of intellectual property rights, gross negligence, willful misconduct, fraud, fraudulent misrepresentation or the tort of deceit, or any other matter which be so limited or excluded as a matter of applicable law (including as a Competent Person under the Listing Rules), and regardless of any breach of contract or strict liability by RPM.

Mining Unknown Factors

The findings and opinions presented herein are not warranted in any manner, expressed or implied. The ability of the operator, or any other related business unit, to achieve forward looking production and economic targets is dependent upon numerous factors that are beyond RPM's control and which cannot be fully anticipated by RPM. These factors include site specific mining and geological conditions, the capabilities of management and employees, availability of funding to properly operate and capitalise the operation, variations in cost elements and market conditions, developing and operating the mine in an efficient manner, etc. Unforeseen changes in legislation and new industry developments could substantially alter the performance of any mining operation.

Capability and Independence

RPM provides advisory services to the mining and finance sectors. Within its core expertise it provides independent technical reviews, resource evaluation, mining engineering and mine valuation services to the resources and financial services industries.

RPM has independently assessed the Relevant Assets of the Project by reviewing pertinent data, including resources, reserves, manpower requirements and the life of mine plans relating to productivity, production, operating costs and capital expenditures. All opinions, findings and conclusions expressed in this Report are those of RPM and its specialist advisors.

Drafts of this Report were provided to CMOC, but only for the purpose of confirming the accuracy of factual material and the reasonableness of assumptions relied upon in this Report.

RPM has been paid, and has agreed to be paid, professional fees based on a fixed fee estimate for its preparation of this Report. Its remuneration is not dependent upon the findings of this Report or on the outcome of the transaction.

None of RPM or its directors, staff or specialists who contributed to this Report have any economic or beneficial interest (present or contingent), in:

- the Project, securities of the companies associated with the Project or that of CMOC; or
- the right or options in the Relevant Assets; or
- the outcome of the proposed transaction.

This CPR was compiled on behalf of RPM by the signatories to this CPR, details of whose qualifications and experience are set out in Annexure A of this CPR. The specialists who contributed to the findings within this CPR have each consented to the matters based on their information in the form and context in which it appears.

RPM Qualifications and Experience

RPM's advisory division operates as independent technical consultants providing services across the entire mining life cycle including exploration and project feasibility, resource and reserve evaluation, mining engineering and mine valuation services to both the mining and financial services industries.

RPM is the market leader in the innovation of advisory and technology solutions that optimise the economic value of mining assets and operations. RPM has serviced the industry with a full suite of advisory services for over 45 years and is the largest publicly traded independent group of mining technical experts in the world having completed over 11,000 studies across all major commodities and mining methods, and worked in over 118 countries globally. This report was prepared on behalf of RPM by technical specialists, details of whose qualifications and experience are set out in **Appendix A**.

RPM has been paid, and has agreed to be paid, professional fees for its preparation of this report; however, none of RPM or its directors, staff or sub-consultants who contributed to this report has any interest or entitlement, direct or indirect in:

- the Company, securities of the Company or companies associated with the Company; or
- the right or options in the relevant Mine.
- The work undertaken is an ITR of the information provided by or on behalf of the Company, as well as information collected during site inspections completed by RPM as part of the ITR process. It specifically excludes all aspects of legal issues, marketing, commercial and financing matters, insurance, land titles and usage agreements, and any other agreements/contracts that Company may have entered into.

RPM does not warrant the completeness or accuracy of information provided by the Company which has been used in the preparation of this report.

The title of this report does not pass to the Client until all consideration has been paid in full.

Drafts of this report were provided to the Client, but only for the purpose of confirming the accuracy of factual material and the reasonableness of assumptions relied upon in the report.

Generally, the data available was sufficient for RPM to complete the scope of work. The quality and quantity of data available, and the cooperative assistance, in RPM's view, clearly demonstrated the Company's assistance in the ITR process. All opinions, findings and conclusions expressed in the report are those of RPM and its specialist advisors.

Yours faithfully,

Jeremy Clark



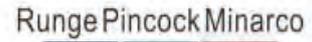
Manager – Hong Kong (Competent Person – Chapter 18).

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1. Introduction

Runge Asia Limited trading as RungePincockMinarco ("RPM") has been engaged by China Molybdenum Company Limited (HK3993) referred to as ("CMOC" or "the Clients") to undertake an Independent Technical Review ("ITR") and compile a Competent Person Report ("CPR" or the "Report") (as defined by Chapter 18 of the Rules Governing the Listing Rules of the Stock Exchange of Hong Kong (the "Listing Rules") on the Tenke Fungurume Project (the "Project"). The Project is a world class operating copper-cobalt ("Cu-Co") deposit located in the Lualaba Province of the Democratic Republic of Congo ("DRC") Africa which is currently owned (56%) by CMOC and operated by Freeport-McMoRan ("FMI" or the "Company"). See (**Figure 1-1**).

1.1 RPM Scope of Work

RPM's scope of work included:

- Gathering of relevant information on the Project including resources and reserves information, LOM production schedules, and operating and capital cost information;
- Reviewing of the Company's resources and reserves, including quantity and quality of drilling, reliability of data, and adequacy of resource and reserve estimation methods;
- Estimation of independent Mineral Resources and Ore Reserves (as defined in **Appendix B**) reported in compliance with the recommended guidelines of the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the "JORC Code"), prepared by the Joint Ore Reserves Committee ("JORC");
- Reviewing and commenting on the exploration prospect of the Project;
- Reviewing and commenting on forecast operating and capital expenditures in the relevant technical studies;
- Reviewing the Project short term and long term development plans;
- High level review of the environmental, health and safety risks and management plans for the Project; and
- Compilation of a CPR as defined under Chapter 18 of the Listing Rules.

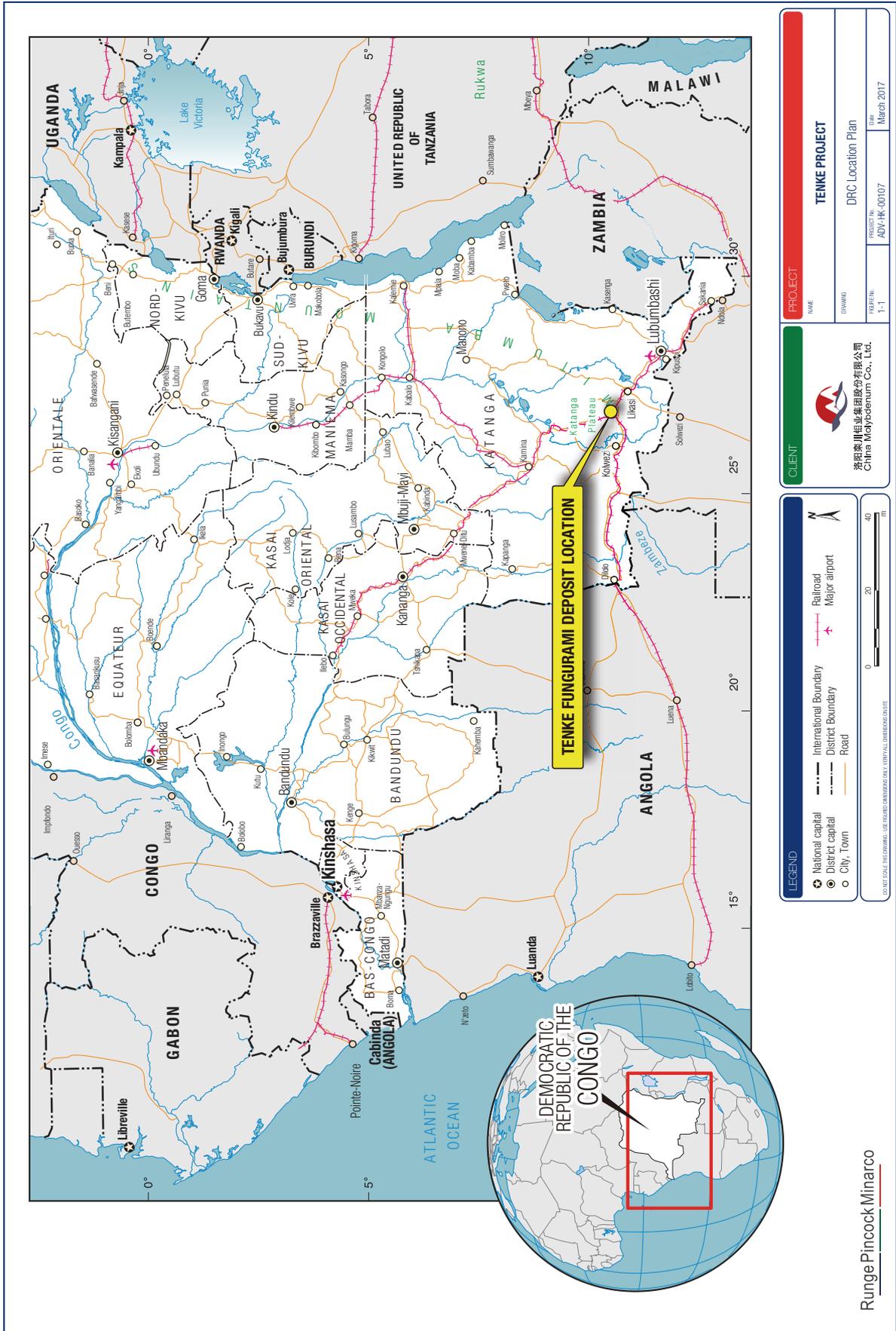
1.2 Relevant Assets

The relevant assets for the proposed study includes the operating Tenke Fungurume Mine which is an existing, major producer of copper and cobalt located in the Lualaba Province of the Democratic Republic of Congo, Africa. The Project consists of a 15 deposits which are under or planned to be under production through conventional open pit mining. Ore from these mines is processed through a single onsite agitated leach and SX-EW plant.

1.3 Review Methodology

RPM's ITR methodology was as follows:

- Review existing reports and data,
- Conduct a Competent Person's site visit,
- Discussions with Project personnel of the Company prior to and following the site visit,
- Independent Estimation and Reporting of Mineral Resources and Ore Reserves in accordance with the guidelines of the JORC Code, and
- Preparation of a CPR and provision of drafts of the CPR to Project personnel to ensure factual accuracy and reasonableness of assumptions.



1.4 Site Visits and Inspections

RPM completed a site visit from the 8th to 10th March, 2017 by Mr Philippe Baudry. In addition, RPM completed two site visits to the mines and processing facilities between the dates of April 4th and 6th, 2016 and between the dates of June 6th and 8th, 2016 to review the mining, processing and EHSS aspects of the project.

1.5 Information Sources

Several geology studies, feasibility studies, and design reports were provided for the Project.

1.6 Competent Person and Responsibilities

The Statements of Mineral Resources and Ore Reserves have been reported in accordance with the recommended guidelines of the JORC Code and are suitable for inclusion in a CPR as defined by Chapter 18 of the Listing Rules.

1.6.1 Team Responsibility

As part of the Team, members who have worked to compile this report include the following:

- Mr Esteban Acuna – Esteban was responsible for review the drill hole database and estimation of the Mineral Resources stated within this Report.
- Mr John Uhrie – John was responsibility for infrastructure and processing and metallurgical flowsheet and parameter review.
- Dr Terry Brown – Terry was responsibility for the review of the environmental and social aspects of the Project.
- Mr Rondinelli Sousa – Rondinelli was responsible for review the mining parameters, mine scheduling and estimation of the Ore Reserves stated within this Report.
- Mr Brendan Douglas – Brendan was responsible for undertaking mine scheduling.
- Mr Pedro Repetto – Pedro was responsible for the review of the pit slope design, TSF designs and costing's.
- Mr Jeremy Clark – Jeremy was responsible for the supervision of all Team members, their work and the compilation of the Report. Jeremy assumes responsibility of the Report as Competent Person.
- Mr Philippe Baudry – Philippe was responsible for the internal peer review of the Report and 2017 update site visit.

1.6.2 Mineral Resources

The information in this report that relates to Mineral Resources is based on information compiled by Mr. Esteban Acuña who is a full-time employee of RPM and a Registered Member of the Chilean Mining Commission. Mr. Acuña has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity that he has undertaken to qualify as a Competent Person as defined in the JORC Code.

Reporting of the Mineral Resources estimate complies with the recommended guidelines of the JORC Code and is therefore suitable for public reporting.



Esteban Acuña (Competent Person – Mineral Resources)

1.6.3 Ore Reserves

The information in this report that relates to Ore Reserves is based on information compiled by the Project and reviewed by Mr. Rondinelli Sousa who is a full time Senior Mining Engineer employed by RPM and is a Member of the American Society of Mining, Metallurgy & Exploration (SME). Mr. Sousa has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration to qualify as a Competent Person as defined in the JORC Code.



Rondinelli Sousa (Competent Person – Ore Reserves)

1.6.4 HKEx Competent Person

Mr. Jeremy Clark meets the requirements of a Competent Person, as defined by Chapter 18 of the Listing Rules. These requirements include:

- Greater than five years' experience relevant to the type of deposit;
- Member of the Australian Institute of Mines and Metallurgy ("AUSIMM"), Member of the Australian Institute of Geoscientists ("AIG"), which are Recognized Professional Organizations as per the HKEx and JORC Code.
- Does not have economic or beneficial interest (present or contingent) in any of the reported Relevant Assets;
- Has not received a fee dependent on the findings outlined in the Competent Person's Report;
- Is not an officer, employee or proposed officer for the Client or any group, holding or associated company of the issuer, and
- Assumes overall responsibility for the Competent Person's Report.



Jeremy Clark (Hong Kong Competent Person) (MAUSIMM)

Jeremy is a mining professional with over 15 years of experience in the mining industry and has gained extensive experience working in all facets of the mining chain and has a broad understanding of mineralisation styles, mining methods and technical studies required for mining operations of all scales. Jeremy is a member of good standing both with the AUSIMM and AIG and has taken a lead role in several mining studies and independent reviews including CPR's for numerous HKEx transactions over the past 7 years. Having worked with all major financial exchange rules and regulations throughout the world, including the Hong Kong, London, Australian, Singapore and Toronto Stock Exchanges, Jeremy has a detailed understanding of the requirements of investors and financial institutions as well as compliance reporting to international standards including JORC and NI 43-101. In addition to compliance reporting his experience includes practical working experience on exploration projects, open cut and underground mines in South America (in particular spending time in-country in Brazil and Peru), Australia and Africa as well as reviewing and estimating a vast number of metalliferous deposits in all major mining provinces throughout the world. As such in addition to understanding the technical facets of mining operation, Jeremy had developed a detailed understanding of the commercial and social interaction of mining operations in various jurisdictions throughout the world including Brazil and Africa and the subsequent requirements for public compliance reporting and investor confidence and transparency.

For the past 10 years Jeremy has worked as an International consultant with RungePincockMinarco in Australia, North and South America, Africa and Asia where he held the role of Principal Geologist and Project Manager and recently Manager – Hong Kong. During his work with RPM, Jeremy has been based in several of RPM's global offices including Perth, Brisbane, Denver, Beijing and Hong Kong and as such has worked on a vast variety of mineral deposit types, mining styles and operations throughout the world including the major mining centres within Brazil, Africa, China, Central Asia, Europe, and North and South America. Recently Jeremy has been the project manager, principal project reviewer and/or acted as Competent Person for a number IPO's, major exchange transaction or major mining studies completed under the JORC Code (or equivalent international standards). This work has included project managing mining studies ranging from scoping and pre-feasibility studies to independent technical reviews of large scale operating assets in South America, Africa and the DRC, China and Australia, which have a variety of mining methods and product types. Recently, as

part of Jeremy compliance reporting Jeremy has been Competent Person or Lead Project manager and reviewer for a number of HKEx reports RPM have a strong history of successfully preparing JORC and HKEx compliant Competent Persons' Reports (**See Annexure A**).

1.7 Limitations and Exclusions

RPM's review was based on various reports, plans and tabulations provided by CMOC or the Company either directly from the mine site and other offices, or from reports by other organizations whose work is the property of the CMOC or the Company. Neither CMOC nor the Company have advised RPM of any material change, or event likely to cause material change, to the operations or forecasts since the date of asset inspections.

The work undertaken for this Report is that required for a technical review of the information, coupled with such inspections as the Team considered appropriate to prepare this Report.

It specifically excludes all aspects of legal issues, commercial and financing matters, land titles and agreements, except such aspects as may directly influence technical, operational or cost issues and where applicable to the JORC Code guidelines.

RPM has specifically excluded making any comments on the competitive position of the Relevant Asset compared with other similar and competing producers around the world. RPM strongly advises that any potential investors make their own comprehensive assessment of both the competitive position of the Relevant Asset in the market, and the fundamentals of the copper and cobalt markets at large.

1.7.1 Limited Liability

This Report has been prepared by RPM for the purposes of CMOC for inclusion in its Circular in respect of the proposed acquisition of the Project in accordance with the Listing Rules and is not to be used or relied upon for any other purpose. RPM will not be liable for any loss or damage suffered by a third party relying on this report or any references or extracts therefrom contrary to the purpose (regardless of the cause of action, whether breach of contract, tort (including negligence) or otherwise) unless and to the extent that RPM has consented to such reliance or use.

1.7.2 Responsibility and Context of this Report

The contents of this Report have been based upon and created using data and information provided by or on behalf of CMOC or the Company. RPM accepts no liability for the accuracy or completeness of data and information provided to it by, or obtained by it from CMOC, the Company or any third parties, even if that data and information has been incorporated into or relied upon in creating this report. The report has been produced by RPM in good faith using information that was available to RPM as at the date stated on the cover page and is to be read in conjunction with the circular which has been prepared and forms part of the referenced transaction.

This report contains forecasts, estimates and findings that may materially change in the event that any of the information supplied to RPM is inaccurate or is materially changed. RPM is under no obligation to update the information contained in the report.

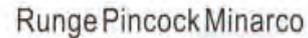
Notwithstanding the above, in RPM's opinion, the data and information provided by or on behalf of CMOC or the Company was reasonable and nothing discovered during the preparation of this Report suggests that there was significant error or misrepresentation of such data or information.

1.7.3 Indemnification

CMOC has indemnified and held harmless RPM and its subcontractors, consultants, agents, officers, directors, and employees from and against any and all claims, liabilities, damages, losses, and expenses (including lawyers' fees and other costs of litigation, arbitration or mediation) arising out of or in any way related to:

- RPM's reliance on any information provided by CMOC and the Company; or
- RPM's services or materials; or
- Any use of or reliance on these services or material,

save and except in cases of death or personnel injury, property damage, claims by third parties for breach of intellectual property rights, gross negligence, willful misconduct, fraud, fraudulent misrepresentation or the tort



of deceit, or any other matter which be so limited or excluded as a matter of applicable law (including as a Competent Person under the Listing Rules), and regardless of any breach of contract or strict liability by RPM.

1.7.4 Mining Unknown Factors

The findings and opinions presented herein are not warranted in any manner, expressed or implied. The ability of the operator, or any other related business unit, to achieve forward looking production and economic targets is dependent upon numerous factors that are beyond RPM's control and which cannot be fully anticipated by RPM. These factors include site specific mining and geological conditions, the capabilities of management and employees, availability of funding to properly operate and capitalise the operation, variations in cost elements and market conditions, developing and operating the mine in an efficient manner, etc. Unforeseen changes in legislation and new industry developments could substantially alter the performance of any mining operation.

1.7.5 Capability and Independence

RPM provides advisory services to the mining and finance sectors. Within its core expertise it provides independent technical reviews, resource evaluation, mining engineering and mine valuation services to the resources and financial services industries.

RPM has independently assessed the Relevant Assets of the Project by reviewing pertinent data, including resources, reserves, manpower requirements and the life of mine plans relating to productivity, production, operating costs and capital expenditures. All opinions, findings and conclusions expressed in this Report are those of RPM and its specialist advisors.

Drafts of this Report were provided to CMOC, but only for the purpose of confirming the accuracy of factual material and the reasonableness of assumptions relied upon in this Report.

RPM has been paid, and has agreed to be paid, professional fees based on a fixed fee estimate for its preparation of this Report. Its remuneration is not dependent upon the findings of this Report or on the outcome of the transaction.

None of RPM or its directors, staff or specialists who contributed to this Report have any economic or beneficial interest (present or contingent), in:

- the Project, securities of the companies associated with the Project or that of CMOC; or
- the right or options in the Relevant Assets; or
- the outcome of the proposed transaction.

This CPR was compiled on behalf of RPM by the signatories to this CPR, details of whose qualifications and experience are set out in **Annexure A** of this CPR. The specialists who contributed to the findings within this CPR have each consented to the matters based on their information in the form and context in which it appears.

2. Project Overview

The Project is contained within a number of concessions (**Figure 2-2**) and consists of a series of sediment hosted Copper -Cobalt deposits which form part of the well-known major Central African Copper belt (**Figure 5-1**). This belt transgresses multiple countries including the DRC and Zambia and hosts some of the highest grade copper deposits in the world. Containing fifteen defined mineralised zones the Project is the largest copper mine in the DRC and consists of one of the largest contained copper metal Mineral Resources globally. Mineralisation in the belt is typically extensive both along strike and down dip with thicknesses ranging from 5 to 10 m across the known mineralisation. Regional scale structural overlays result in clustered semi-continuous but large scale mineralised bodies both along strike and down dip.

Since commissioning in 2008, the Project has been in constant operation with all mining being undertaken via the conventional open cut method focusing on the near surface oxide mineralisation. The agitated leach and solvent extraction and electrowinning ("SX-EW") processing plant has been incrementally upgraded to achieve the current throughput rate of 5.6 million tonnes per annum ("Mtpa"). The Project produces a 99.9% Cu cathode product along with a wet and dry Co Hydroxide concentrate of approximately 38% Co. The majority of the Cu and Co products are transported by truck from site through Chingola Zambia and onto Durban Port in South Africa. The Cu product is subsequently sold to various customers globally, while the Co product is sold internally to Freeport's Co refinery in Finland and on sold as refined Co. A portion of the Cu product is also trucked from site and sold directly to customer facilities in Ndola Zambia.

2.1 Project Location and Access

Located in the Lualaba Province of the DRC (**Figures 1-1**), the Project is 175 km to the north-west of the provincial capital of Lubumbashi and is accessed via a recently refurbished good quality paved national highway. Lubumbashi operates an international airport with regular flights to Johannesburg, Republic of South Africa and the Middle East. The national railroad also passes through the concession, however is not of a condition to be of used for transport of industrial goods and supplies. The Company maintains an airstrip which is used principally for transportation of mine staff to and from Lubumbashi and onto Johannesburg.

2.2 Current Operations

The current Life of Mine ("LOM") schedule (Ore Reserve Schedule) is planned to be sourced from fifteen separate oxide only open pit areas with a total of 26 discrete pits planned. All mining is undertaken using owner operated conventional open cut equipment of type which is common in the region and is maintained by third party staff. The Company aims to have five active mining pits (with multiple mining fleets) at any one time which includes pits relatively close to the processing plant and others quite distant which provides flexibility in both the feed grade, ore types and cost structure of the operation.

Ore production is forecast to be in excess of the current throughput rate (5.6Mtpa) of the processing plant resulting in significant ore stockpiles adjacent to the plant which will be processed at the cessation of oxide mining in 2038. As of 31st December, 2016 the stockpile totals **86.2 Mt**, however at the completion of oxide mining (2041) **40.6 Mt** will be stockpiled for processing, peaking at **71.5 Mt** in 2027. RPM considers this approach to be suitable considering the main driver to processing rate and schedule is the acid consumption, however recommends the schedule be optimized to ensure the best value for the project. As with similar Cu oxide projects globally which utilize leaching and SX-EW techniques, differing ore types (mineralisation styles) results in different acid consumption per tonne of ore. The Company operates two sulphuric acid plants which produce a combined 2,250 tonnes of acid per day which is the major limitation of production.

Historically ore was placed into one of five stockpiles depending on the ore type, however this approach was simplified in 2016 to only include 3 stockpiles with the destination of the material determined by the short term planning engineers on site. Ore routing is based on a profit (PRFT) calculation based on information contained within the grade control model. **See Section 9.2** for more information.

From the ROM pad, ore is fed into a single crusher with priority given to the higher grade material and low acid consuming material. As the mining rate is significantly higher than the throughput rate, material is stockpiled to be processed upon completion of open pit mining.

Based on RPM's Ore Reserve estimates, the Life of Mine ("LOM") is forecast to be approximately 35 years through to year 2050, processing approximately **181.6 million tonnes ("Mt")** for **10.04 billion pounds of TCu metal and 1.25 Billion pounds of TCo metal**. The current production schedule is entirely sourced from the

oxide mineralisation however significant sulphide mineralisation has been defined which will form part of longer term project development options which will be analyzed in the near future.

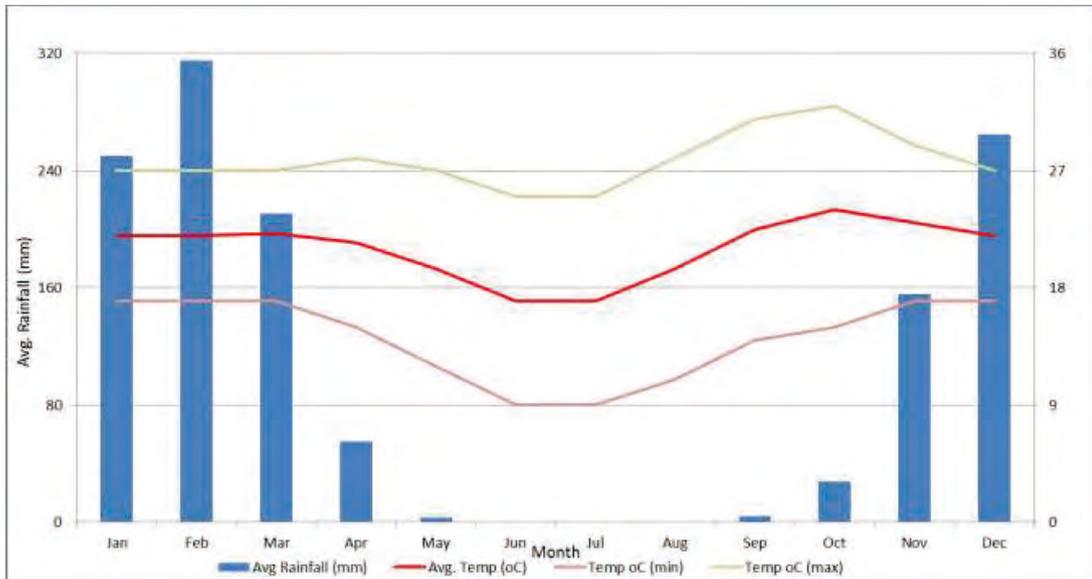
2.3 Regional Environment

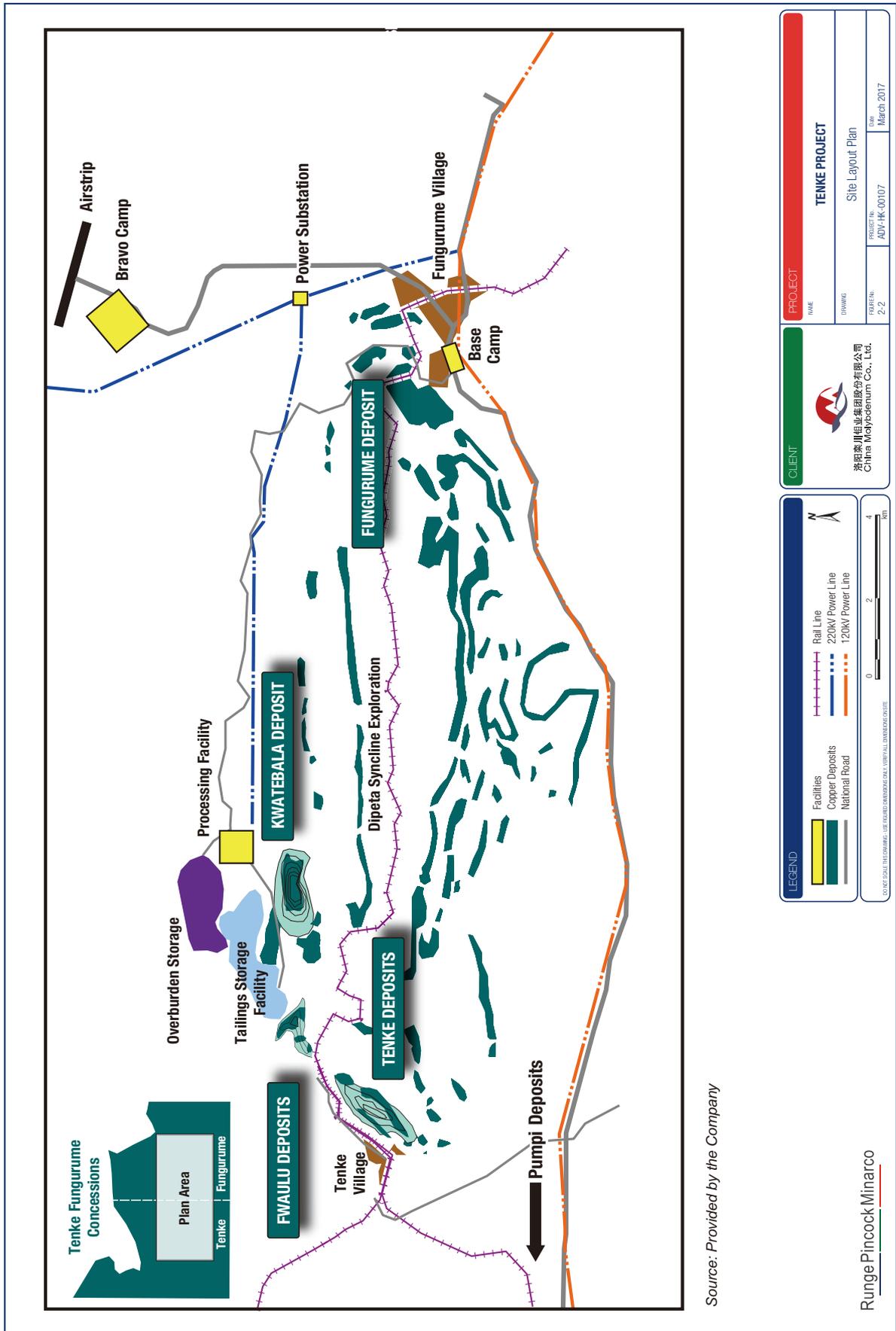
2.4 Geography and Climate

The terrain in the region and vicinity of the Project is of low rolling hills and has elevations ranging between 1,518 masl to 1,110 masl. The area is generally covered in tall grasses, shrubs and small trees.

The region has a humid subtropical hot summer climate that is mild with dry winters, hot humid summers and is moderately seasonality. The mean temperature is 21°C as shown in the **Figure 2-2**. Annual Precipitation averages 1,290 mm which predominately occurs in the summer months between December and March (**Figure 2-2**).

Figure 2-1 Average Rainfall and Temperatures





2.5 Industry

While little industry apart from local husbandary and mining occurs in the region of the project, Lubumbashi serves as an important commercial and national industrial center. Manufacturers include textiles, food products and beverages, printing, bricks, and copper smelting. The city hosts the headquarters of one of the country's largest banks, Trust Merchant Bank. The airline Korongo Airlines, a joint-venture between Brussels Airlines and the Belgian multinational Groupe George Forrest International, also maintains its head office in Lubumbashi.

Lubumbashi also serves as the mining capital of the DRC and is a base for many of the country's biggest mining companies which combined produce a bit over 3 percent of the world's copper and half its cobalt, most of which comes from the Lualaba region.

2.6 Regional and Local Infrastructure

In addition to the open pit mining and the surface processing plant and offices infrastructure, significant regional and local infrastructure provide support to the operations and the forecast production requirements. A review by RPM of the regional and local infrastructure indicates that the area has suitable transport logistics connecting the operating asset to local and international markets for both supply of consumables and transport of product to market. The Project is located close to well established quality highways (**Figure 2-2**), water sources with all personnel accommodated onsite in two purpose built accommodation areas. Power to the Project is provided via a long-term agreement with Societe Nationale d'Electricite (SNEL), the state-owned electric utility company serving the region, however as is common in the DRC power supply shortages impact production. Further details of the supporting infrastructure and power issues are provided in **Section 12**.

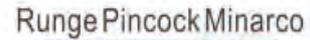
2.7 Future Operations

Due to the mineralisation style, the mixed and sulphide mineralisation cannot be processed through the current agitated leach and SX-EW circuit and achieve the same recoveries as for the oxide. As such the Company has completed a number of studies and testwork in regards to sulphide processing, underground mining and potential open pit mining. This has resulted in estimates of cost for construction of a second plant, to support both open cut and underground sulphide mining (see **Section 13** for further details).

RPM highlights that the current Ore Reserves and Production Schedule presented in **Section 8** and **Section 9** are based on the oxide material only and specifically excludes any Inferred material and the sulphide mineralisation. RPM notes that there is significant potential for both open pit and underground mining to be undertaken on the mixed and sulphide mineralisation. While further details are provided in **Section 13**, below is a brief summary:

- **Open Cut:** While RPM understands that no sulphide open pit mining studies or schedules have been undertaken by, or on behalf of the Company, as part of this Report and review RPM has completed preliminary pit optimizations to quantify this opportunity. The results pit shells were subsequently utilised to report the Mixed and Sulphide Mineral Resource for a total of **143 Mt at 3.3% TCu and 0.26% TCo**. Based on the deposit characteristics, it is envisaged similar mining methods, with the same equipment types would be required to exploit the mineralisation at a rate of 3.75Mtpa to feed the Flotation and Roasting plants which are required to be constructed. This would result in similar unit costs for the removal of the haulage of Ore and Waste.
- **Underground:** The Company previously engaged a third party to complete a scoping study for the Sulphide Underground portion of the Dipeta Syncline area of the Project, however as part of this Report, RPM has completed further optimisations and designs. These were completed to increase the accuracy of the mining portions of the study to better define the economic viability of an underground operation within the Project (the RPM Scoping Study). This study highlighted the economic viability of this material that as outlined in **Section 7** a total of **365Mt at 3.1% TCu and 0.26% TCo** has been reported for the Mixed and Sulphide ore types within all UG potential areas. The RPM Scoping Study summarized in **Section 13** focused only on the Dipeta Syncline which accounts for a total **77.8Mt** of the **365 Mt** total. It would be envisaged that similar studies would result in further definition of potentially economic Underground mineralisation of a resource to mineable quantity conversion.

RPM understands that there is no set development option or sequence for the either the open pit or underground sulphide projects, however RPM notes that there are various options which should be considered in future studies which are flexible in timing and can somewhat mitigate the critical risk of power supply and processing



plant capital requirements. The development timeframe for the Sulphide Open cuts is limited by the timing of the oxide pit, and in general the oxide pits need to be completed prior to commencement of sulphide mining (unless additional personnel and capital would be required). However there is scope for some overlap towards the end of the oxide mine life. However it is logical that sulphide mining commence at the cessation of oxide mining to minimize equipment. Underground mining has a flexible development timeframe dependent on the construction of the sulphide plant. It is clear there are various options for development which need to be studied and analyzed as part of the ongoing work which will be completed in the future. RPM highlights that while a preliminary open cut optimization has been completed, no mine schedule or economic modelling has been completed to confirm the viability of the sulphide operations and potential mine life at the 3.75Mtpa production rate.

3. Licenses and Permits

The Company holds numerous current mining tenements including mining and exploration licenses (permits), business, environmental and safety permits as outlined in **Appendix D**. These enable the continued operations including mining operations, major surface facilities and ore handling, management operations, electrical infrastructure, waste and TSF emplacement, and exploration activity. Below is a summary of the key permits,

RPM provides the below information for reference only and recommends that land titles and ownership rights be reviewed by legal experts.

3.1 Project Ownership

The Project is a joint venture agreement between three companies, namely CMOC (56%), Lundin Mining Corporation (24%) and the parastatal mining company, Gécamines (20%). The mine is currently operated by Freeport-McMoRan and is the largest copper mine in the DRC. The Project has a long history with various owners since discovery in 1917 as outlined in **Table 3-1**.

Table 3-1 Chronological Project History

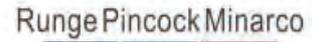
Year	Activity
1917	Union Miniere first explores the area
1969	Mobutu Government nationalizes the project
1971-1976	Societe Miniere de Tenke Fungurume (private consortium) invest \$280M
1996	TF Holdings Limited (TFHL), subsidiary of the Lundin Group, acquires a majority interest through public tender process
1998	BHP acquires option to purchase majority interest in TFHL
2000	FCX acquires option to purchase 50% of BHP's interest in TFHL
2002	FCX acquires remaining part of BHP option
2005	TFHL and Gecamines execute (i) amended and Restated Shareholders Agreement, FCX exercises option to acquire 70% interest in TFHL
2007	Construction starts on initial development project
2009	First metal production as project enters start-up phase
2010	DRC government confirms Tenke mining contracts are in good standing; Tenke agrees to additional commitments
2011	Construction starts on Phase II expansion
2012	Tenke ownership interest of 56% for FCX, 24% for Lundin and 20% for Gecamines agreed to in 2010 become effective March 26, 2012
2016	CMOC acquired 56% from FCX, with 24% for Lundin and 20% for Gecamines.

3.2 Mineral Concessions and Surface Rights

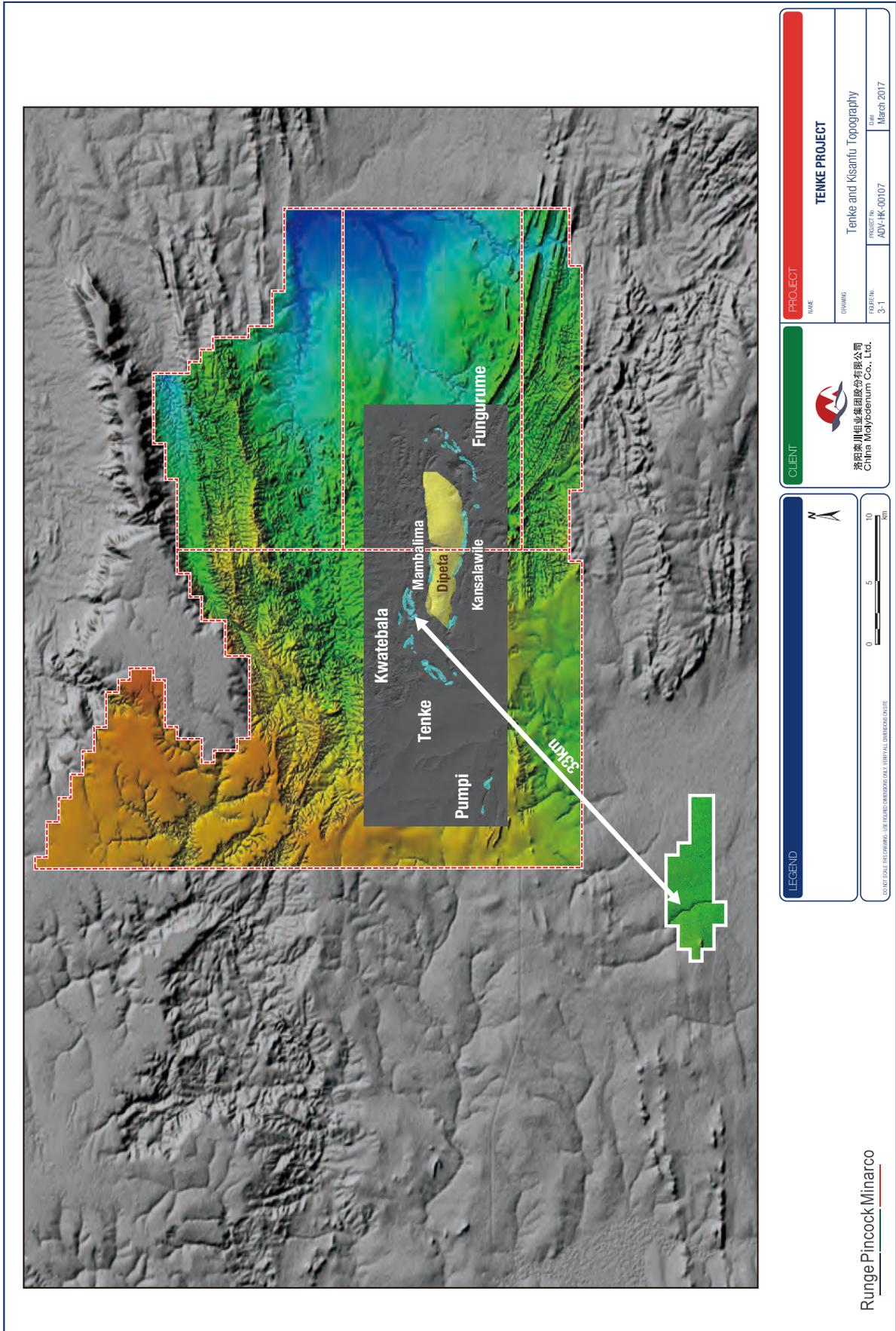
All key mining tenements are currently valid for the continued operation of the assets to support the planned production rates (**Figure 3-1**) and possesses all of the mineral rights (concessions) and surface rights necessary to exploit the Project at the forecast presented in this report, and is not aware of any legal claims or proceedings against the Company. In addition the Company currently holds numerous environmental, construction, and operating permits. The permits include the waste and tails storage construction and operating permits, water well drilling and extraction permits and various operating and environmental permits. RPM has completed an overview of these permits, and considers them in good standing to support the continued operation of the asset for the foreseeable future in line with the planned production rates for the mine life. RPM notes all major concessions are applicable for the life of mine subject to compliance to local regulation. A list of the key tenement, names and expiry dates are provided in **Appendix D**.

3.3 Community and EHSS Permitting and Interactions

As further detailed in **Section 14.1.4**, RPM understands that it has been and still is in compliance with the country law and regulations and all permitting and tenement expenditures have been met. A major issue identified during RPM's review includes the illegal miners which target the near surface high grade Cu and Co mineralisation. These groups generally target the non-activity mining areas, while in the past community tensions have included vandalism etc. of Company facilities. As such, the Company has developed a significant social and community interaction program as well as a social community fund. Since this program was initiated,



RPM is aware that significant improvements have been made with the both the local communities and national government, which has resulted in minimal production disruptions however illegal mining still continues. RPM notes that these types of risk are not isolated to either the Project in the DRC nor globally for similar scale projects, significant details are provided in **Section 14** for reference.



4. Project History

4.1 Exploration History

Exploration within the region dates back to 1917 when Union Miniere du Haut Lualaba ("UMHK") sampled the Project area with trenches and drilling. Between the first exploration and commercial production, which commenced in 2009, numerous companies conducted exploration campaign using various methods. These included Gecamines which carried out a drilling campaign in 1969-1970 and Societe Miniere de Tenke Fungurume ("SMTF") whom carried out various studies, including drilling, between 1971 and 1976.

Limited exploration was carried between 1976 (following cessation of all work by SFTM) and 1994, Lundin Holding Limited ("LHL") started discussion with Gecamines and completed a technical review, following which LHL acquired the project in July, 1996.

In December, 1998, BHP entered into exclusive option to purchase LHL Shares. In February of 1999, LHL ceased Feasibility Study ("FS") work and declared force majeure. Between 2000 and 2002 Phelps Dodge entered into option agreement to acquire one-half of BHP's interest and the remaining exclusive option to purchase LHL Shares.

Phelps Dodge completed a Scoping Study and obtained the Amended Shareholders Agreement between 2002 and 2005 and the FS and ESIA where completed between 2005 and 2006. Phelps Dodge conditionally approved to start the construction at December 2006. During each phase of ownership by the various companies exploration quantities varied with a large proportion of the work being completed sign Freeport acquired the mining in 2008 as outlined in **Table 4-1**.

Table 4-1 Exploration Campaign Summary

Year	Company	Core		RC		Total	
		m	# holes	m	# holes	m	# holes
1919 - 1970	UMHK	92,393	346	10,925	56	103,318	402
1971 - 1976	SMTF	64,630	545			64,630	545
1990 - 1991	GCM	8,635	83			8,635	83
1997	TMC	9,820	85			9,820	85
2006	PD	16,797	131			16,797	131
2007	PD/FCX	52,280	436	2,413	34	54,693	470
2008	FCX	113,956	626	5,943	58	119,899	684
2009	FCX	52,293	292	82	4	52,375	296
2010	FCX	43,131	312			43,131	312
2011	FCX	78,956	444			78,956	444
2012	FCX	106,024	628			106,024	628
2013	FCX	106,013	549	1,042	22	107,055	571
2014	FCX	87,034	611	2,822	45	89,856	656
2015	FCX	59,326	373			59,326	373
2016	FCX	20,710	145	2,348	44	23,058	189
		911,998	5,606	25,575	263	937,573	5,869

4.2 Mining History

First copper cathode was produced in March 2009 and the plant was working at planned capacity by September 2009. The plant was expanded in 2013 to its current capacity of approximately 600 million pounds per year of copper in cathode and 37 million pounds of cobalt in a cobalt hydroxide precipitate.

Up to September 30, 2016, 4.23 Mt of ore was processed, for a total of 161.7 kt of copper cathode and 12.7 kt of cobalt hydroxide concentrate.

5. Geology

RPM has reviewed the geology within the Project area, on both a regional and deposit scale and considers the geology is well understood and developed through the generation of geological maps, stratigraphic definitions (sedimentary sequence, dating and intrusive history), geological cross sectional interpretations, and three-dimensional models. **Table 5-1** outlines the various rocks types identified in the region and their associated abbreviations used in all technical documentation pertaining to the project and this report.

Table 5-1 Rock Type Abbreviations

Abbreviation	Name	Description
RAT Lilas	Roches Argilo-Talqueses	dolomitic and talcose argillite and dolomitic argillaceous sandstone
RAT Grises	Roches Argilo-Talqueses	grey sandy dolomitic argillite and argillaceous sandstone
DStrat	Dolomies Stratifies	bedded to laminated dolomite and dolomitic shale
RSF	Roches Siliceuses Feulletees	siliceous dolomitic shale
RSC	Roches Siliceuses Cellulaires	silicified dolomite
SD	Shales Dolomitiques	dolomitic shales
BOMZ	Black Ore Mineralized Zone	Black Ore Mineralized Zone
CMN	Calcaire a Mineral Noire	Dolostone
Dipeta	Dipeta Formation	Dipeta Formation

5.1 Geologic Environment and Mineralisation Style

The Project is located at approximately latitude 10°S and longitude 26°E, some 175 km northwest of Lubumbashi, the administrative center and capital of Lualaba Province, within southeast Democratic Republic of Congo ("DRC"). Deposits within the Project are interpreted to be a series of sediment hosted Cu-Co deposits which form part of the Central African Copperbelt (CACB). The CACB transgressed multiple countries including the DRC and Zambia and is located within a major structural feature called the Lufilian Arc. A 500 km long fold belt that stretches from Kolwezi in the southern DRC to Luanshya in Zambia this arc hosts some of the largest and highest grade Cu-Co deposits in the world.

One of several major Pan-African structures bordering the Congo and Kalahari cratons the Arc exhibits early Neo-Proterozoic intra-cratonic rift development, coincident with the break-up of a Meso-Proterozoic supercontinent (approximately 800 to 600 Ma). Late Neo-Proterozoic collisional deformation and metamorphism is also documented regionally, linked to the formation of central Gondwana (approximately 600 to 500 Ma).

The Lufilian Orogeny focused various thrust events, resulting in curvilinear north-northwest lineaments in Zambia and east-west lineaments at Kolwezi (**Figure 5-1**). These structures are best recorded in Neo-Proterozoic Roan Supergroup sediments, which outcrop in a series of faulted and brecciated anticlines or so-called "écaillés" which can measure up to 10 km in length. This Supergroup comprises an approximately 7,000 m thick succession of predominantly shallow-marine and terrestrial meta-sediments., which accumulated within intra-cratonic rift basins.

The basal Lualaba sequence, 800 to 2,000 m thick and assigned to the Roan Super-group, comprises continental siliclastic sedimentary rocks passing upward to a shallow platformal carbonates and evaporates-dissolution breccias. The Roan Super-group is overlain by the Nugba Super-group, a marine siliclastic and carbonate package deposit at the passive margin along the southern side of the Congo craton after breakup of the Rodinian supercontinent, and the Kundelengu and Fungurume Groups, synorogenic and foreland basin successions. The upper Roan and basal Nugba Super-groups are intruded by voluminous, tholeiitic metagabbro sills and dykes (Tempo et al., 1999). A series of cratonic events of Pan African age (650 to 500 Ma) resulted in extensive deformation of these rocks. The principal tectonic event referred to as the Lufilian Orogeny led to the formation of the Lufilian Arc during the collision of Congo – Kalahari cratons (Master et al., 2005).

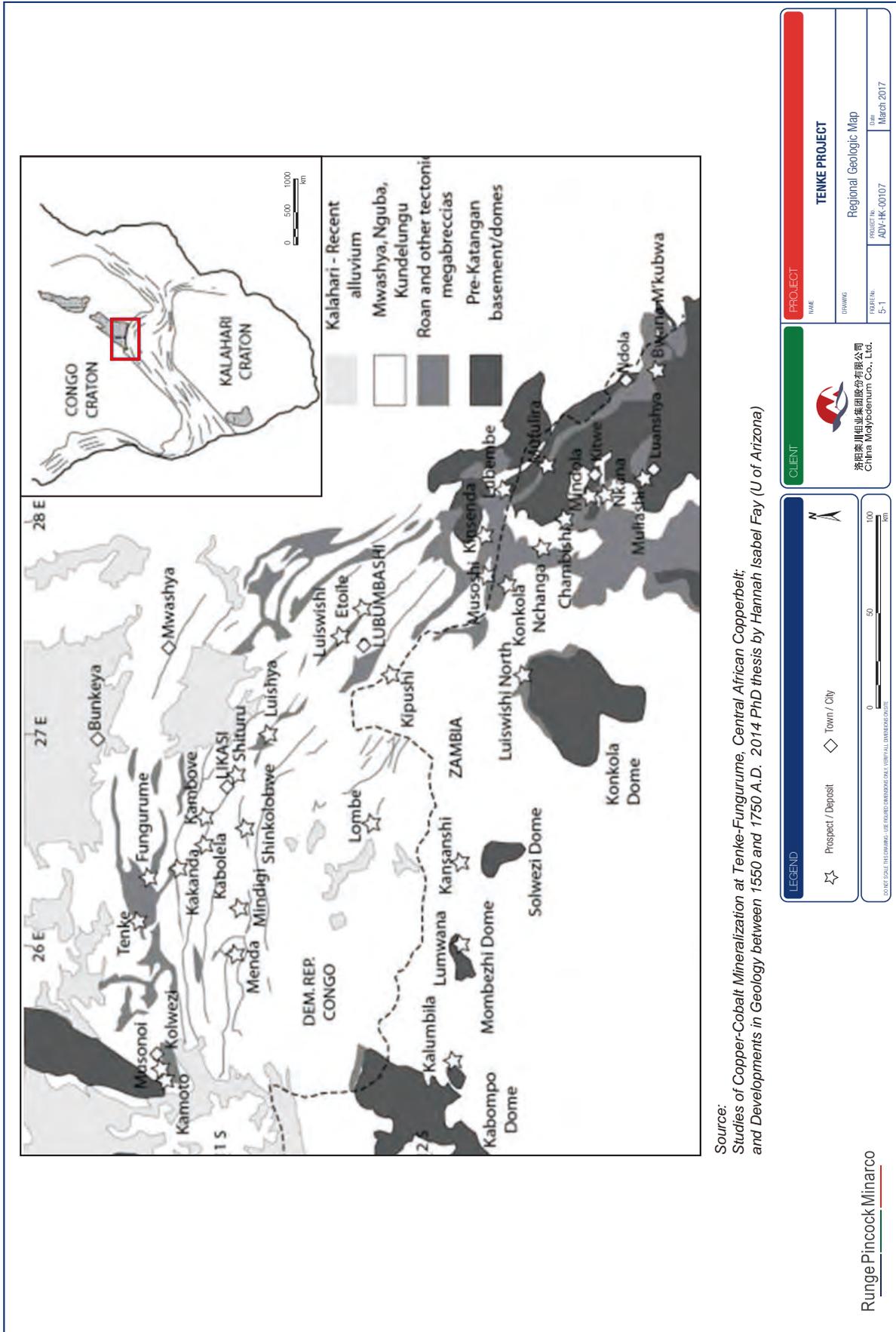
The majority of mineralisation in the Central African Copperbelt is hosted by a variety of siliclastic, argillaceous, and dolomitic lithologies inside the lower parts of the Roan Super-group, although mineralisation also extends into pre-Lualaban basement as well as to much higher stratigraphic levels in the Nugba Super-group. The

mineralisation is largely stratiform and confined to specific horizons and commonly extended along strike for several kilometres.

5.1.1 Stratigraphic column

The Lualaba Series is divided in two super-groups in the Lualaba Province, the older Roan Super-group and the younger Kundelungu Super-group. The Roan Super-group is outlined below from oldest to youngest and shown graphically in *Figure 5-2*:

- **RAT Lilas** Formation is a dolomitic and talcose argillite and dolomitic argillaceous sandstone that contains abundant specularite. These rocks are highly incompetent, often brecciated and altered. The base of the formation is not observed as it rests on a thrust plane. The RAT Lilas Formation can be correlated with the basal conglomerate that lays unconformable upon the granitoids (gneisses) of the basement complex.
- **RAT Grises** Formation is a 2 – 5 m thick fine to medium grey grain massive sandy dolomitic argillite and argillaceous sandstone. Likewise the RAT Lilas, this formation is frequently incompetent, brecciated and altered. In several locations it is well mineralised.
- **DSTRAT** Formation is commonly a fine-grained well bedded to laminated dolomite and dolomitic shale. This formation in some areas hosts the lowest part of the mineralised zone.
- **RSF** Formation contains the majority of the lower mineralisation. It is alternating thinly banded siliceous dolomitic shale and bands of micaceous shale and microgranular quartz. Copper – cobalt mineralisation occurs as dissemination and along the bedding planes and joints.
- **RSC** Formation is composed by a fine- to coarse-grained, massive, silicified dolomite, consistently 20m thick. This formation has been leached of carbonate near the surface and has a cavernous and cellular cherty appearance. Because it is resistant to erosion, it forms conspicuous ridges and hill features. RSC is often mineralized close to the contacts with the underlying RSF and the overlying SDB.
- **SD** Formation is finely laminated dolomitic shale with subordinate dolomite and sparse discontinuous graphitic shale bands. Based on drill intersects it is about 90m thick in Kwatebala (one of the major despoits in the region), although it varies from 30 to 130 m in the region. The basal 10m, known as SDB, consists of pale to dark bluish grey sericitic and dolomitic shale which hosts copper and cobalt mineralisation along bedding, joints and other fracture planes. This lower unit comprises the upper economic mineralized layer. Within the SD, a dolomitic black ore mineralized zone (**BOMZ**) is characterized by the presence of abundant black oxide minerals consisting primarily of manganese oxide and often containing cobalt oxides however these are not always present.
- **CMN** Formation is a dolostone that can be broken into two units, a dark, organic dolostone at the base and clean dolostone interbedded with chloritic and dolomitic siltstones at the top. Drilling at Kwatebala does not distinguish these units consistently. Drill intercepts through the CMN at Kwatebala suggest a true thickness of about 90 to 110 m. The unit is unmineralized at Tenke.
- **Dipeta** Formation is the youngest unit in the Kwatebala deposit. RGS is used to designate the lower part of the Dipeta by some authors. It consists of dolostone and argillaceous and dolomitic siltstones in the lower portions and dolostone, limestone, shale, sandstone, and arkose at the top. The Dipeta Formation forms the center of Kwatebala Hill where it is penetrated by many drill holes beneath a nappe of productive Mines Series rocks. Strong Cu-Co mineralisation is locally noted at this brecciated fault contact. This is best explained as clasts of the mineralized section caught up in the breccia but could also be from strong supergene mineralisation.



5.1.2 Structural Geology

Regionally, north-northeast directed compressional deformation during the Lufilian orogeny is interpreted to have transformed nominal flat lying sediments into km-scale subvertical and overturned folds which now define the Lufilian Arc. Continued deformation is considered to have led to the dismemberment of fold segments along north-northeast directed steeply dipping faults (lateral ramps) and bedding-parallel thrusts. The deformation process was probably assisted by evaporite extrusion from the Lower Roan Group sediments along thrusts, shear zones and along the cores of fold structures. Such deformation can explain how the *écailles* of Lower Roan Group sediments became surrounded by breccias of the underlying RAT.

Locally the Lufilian Arc's rocks are intensely folded with three distinct but related structural units recognized. This Report describes the outer unit where the Tenke Fungurume group of deposits is located which is the most northerly unit. Consisting of tightly folded and thrust blocks of Roan age rocks this unit has been tectonically transported northward over a younger Kundelungu foreland.

Various dimensions and orientations of thrust slices separate the various deposits within the Project. The northern portion is relatively undisturbed with a gentle northerly dip, while the southern portion hosts the Dipeta syncline. At its eastern extremity the syncline is closed by a series of thrust blocks which form the Fungurume section of the deposits. At the western end, the northern limb of the syncline is terminated by a major dislocation which offsets the Tenke deposits to the northeast.

Within the east-west trending Dipeta syncline both the northern and southern limbs can be traced in somewhat continuous ridges of Lower Roan rocks, with more resistant silicious rocks forming the spines of the ridge crests. These ridges run approximately parallel for a distance of 14 km, with no significant offsets observed. The deeper structure of the syncline is unknown, as limited exploration has been undertaken to date. The presence of small-intermediate scale folds and faults parallel to bedding and the complexity evident in the Tenke - Fungurume deposits suggests that the structure is unlikely to be simple.

As in the case with the Kolwezi Nappe, it is possible that the mineralized mega-fragments represent transported blocks of large dimension riding as nappes, or related structures, on a series of decollement planes.

Both to the north and south sides, the Dipeta syncline is flanked by numerous blocks of Lower Roan rocks. They attain a maximum development south of the syncline where they form, in general, randomly oriented blocks. By contrast the thrust blocks to the north of the northern flank of the syncline are smaller and fewer in number, generally aligned sub-parallel to the strike of the Dipeta syncline axis, and are seen to rest upon the lower member of the Dipeta Formation (RGS) of Upper Roan age.

5.1.3 Alteration and Mineralization

Primary copper and cobalt mineralogy is predominately chalcocite, chalcopyrite, bornite, and carrollite. Oxidation has resulted in widespread alteration producing malachite, pseudomalachite, chrysocolla (hydrated copper silicate) and heterogenite. The oxidation base ranges between 75 to 125 m at Tenke and Fungurume. The primary mineral associations are homogeneous in both mineralized levels and the variations have been produced by the effect of supergene processes.

A leached zone is well developed in some areas, typically this zone is depleted between three and four times in copper grades in relation to the surrounded oxide. Black oxides and iron oxide staining may account for low copper acid copper in this zone.

Dolomite or dolomitic rocks make up the bulk of the host strata with dolomite and quartz as the main gangue minerals present. Weathering of the host rocks is normally depth related, intensity decrease at depth, producing hydrated iron oxides and silica at the expense of dolomite, which is leached and removed resulting in some residual enrichment zones.

5.2 Mineralization Style

The generally interpreted timing of the sediment-hosted, stratiform copper-cobalt mineralisation in the Central African Copperbelt has radically changed over the last 50 years, from syngenetic, during host-rock sedimentation, through early diagenetic, prior to final sediment cementation and compaction, to the currently popular view of multiple stage of diagenetic to epigenetic emplacements which produced the economic mineralisation (Sillitoe et al., 2010). The same author, based on the ubiquitously presence of sulfide-bearing veinlets, stated that the pre-lithification origin is unlikely. Other authors suggest genetic models such as

enrichment by evaporation in shallow waters, and remobilization under pressure, produced by folding and thrusting.

Whatever the mechanism that resulted in the formation of these deposits, the stratiform nature of the mineralisation, both on the micro and regional scales, argues for syn-sedimentary processes playing a major role in the ultimate mineralisation process. This results in extensive lateral continuity of the mineral bodies, often over thousands of meters, as exemplified by such major deposits as Nchanga in Zambia and Kolwezi in the Congo.

The presence of organic material, presumably derived from algae and stromatolites, might be a significant factor in concentrating the economic mineralisation in the RSF and SDB units. The presence of evaporates could also have played a role in the mineralisation process. Cobalt mineralisation generally occurs on the contact of RSF-RSC and SDB-RSC however does occur in other areas, but generally lower grade.

Despite the high degree of deformation these rocks have undergone, they remain essentially un-metamorphosed.

5.3 Deposit Geology

The Project geology is similar to the above description of the regional geology; however, local variations of thickness, grades and also the local structural features of faults and folds, define several areas. The Company divides the Project in 18 separate deposits, as shown in **Figure 5-3** and outlined below.

Tenke Complex, includes several deposits which are cut by complex structures. The north-eastern most deposit is Shimbidi, which consists of one limb of a syncline that dips approximately 30-45 degrees to the northwest. Adjacent to Shimbidi is another deposit that sits below the surface. Relatively few drill holes have penetrated this deposit and as such no resource is stated, so not much is known about its origin or structure. It is possible, however, that there is the presence of a shallow syncline. With a lack of drilling below Shimbidi it is difficult to understand how far the newly discovered deposit extends.

Separating Shimbidi from the main Tenke deposit is a large northwest striking bounding fault. It is possible that this fault extends to the southeast as far as Zikule (**Figure 5-3**). The vertical offset across this fault is unknown, however it is possible that Shimbidi and its adjacent deposit are extensions of the Kabwe and Goma limbs (see below). On the southwest side of this fault are the deposits Kabwe and Goma. Goma is strongly faulted and is offset by two relatively flat thrust faults. The direction of thrusting is north-northwest and the offset along these faults ranges from 50 to 100 m. The Kabwe limb to the northwest of Goma does not show any evidence of thrust related faulting; however there is a fold near the surface which indicates the offset experienced at Goma transitions into a blind thrust at Kabwe. Here the fracture density is high, which allowed salt within the RAT to penetrate the surrounding Mine Series similar to a dike.

At the surface Kabwe dips steeply, but gradually shallows into a syncline that is exposed for only 100 m at the surface of Goma. Here there are three limbs present indicated by drilling and by old French surface mapping with the north-eastern-most exposure of Mine Series representing the south-eastern most limb of the Kabwe syncline. The syncline plunges to the southwest with a large vertical bounding fault that separates the Kabwe single limb from the Goma double limb. This fault has been offset by thrusting.

At the south-western end of Goma the north-western limb begins to disappear as the Mine Series now dips to the southeast. It is likely that during folding and thrusting the north-western limb of Goma was sheared off as the rocks moved to the north and vertically. The deeper of the two thrust faults truncates against the upper one, which disappears to the west. The remaining thrust fault dips to the southwest until it disappears under the limits of the model.

The Mine Series at Goma begins to shallow at depth and dips about 35° to the southeast towards the south-western end of the deposit. Approximately 1 km across the valley to the southeast sits L3K where the Mine Series also dips to southeast, but at approximately 50°. Both Goma and L3K are in conformable contact with the Dipeta in the valley, so it is possible that these two deposits form a syncline at depth. However, the depth to any potential syncline in the valley is unknown.

The southwestern most area is separated from Kabwe and Goma by a large thrust related northwest-striking fault. This area is known as Kakavilondo and is made up of three deposits in which two are likely related. The southwestern most deposit is small and resembles a gently folded syncline. The origin of this deposit is unknown and it is unclear how it relates to the two other deposits of Kakavilondo to the northeast. The other two deposits

comprising Kakavilondo appear to be related: they are both of equal size, dip in the same direction, and strike in the same direction taking the outcrop strike direction of the RAT-Mine Series contact as the putative plane of reference. However, the northernmost deposit is overturned. Structural considerations and 3D modelling solutions indicate that it is likely that the two northeastern most deposits of Kakavilondo once formed a single RAT-cored anticline.

The Tenke deposit is structurally bound by a younger, thicker sequence of rocks that appears more stable no more than half a kilometre to the west and north. With thrusting occurring in the northerly direction the northeast-southwest corridor between Tenke and Fwaulu appears to define a tectonic ramp set against the younger rocks to the west, which appear to have served as a structural buttress for which faulting may not have penetrated deeply. As a result the folded, relatively soft Mine Series directly to the east of this boundary must necessarily rotate to the NW, causing folds to tighten and overturn, as well as inducing strike-slip tear faulting in order to accommodate progressive thrusting. Along the boundary between the Tenke complex and the younger rocks, where rotation must be greatest, the Kakavilondo deposits were rotated more than 90 degrees counter clockwise. Once the Mine Series rotated sufficiently for its fold axial plane to line up with the local direction of thrusting, a large left-lateral tear fault split the two Kakavilondo deposits along the weak RAT-cored hinge of the anticline. The lateral offset along this tear fault is approximately 300 m.

Kakavilondo, Iko, Kabwe, Goma, Shimbidi, KM-485, Fwaulu, and L3K all reside within the area of influence of the structural buttress defined by the younger, relatively non-deformed rocks. Hence, their proximity to the more resistant rocks resulted in several north-northwest striking tear faults in conjunction with rotation in the northerly direction as thrusting endured. East of KM-485 the other deposits strike roughly east-west and show no obvious signs of thrust related rotation. It is possible that the thrust related structures in close proximity to the younger rocks have acted as feeder structures, enhancing the copper and cobalt grades in the nearby Mine Series.

Copper grades at Tenke are slightly lower in the RSF and lower in the SDB when compared to Kwatebala (which is one of the major deposits in the concession). Total copper contained within the blocks in the RSF average 3.39%, while the average is 2.20% for SDB. In comparison at Kwatebala total copper averages 3.84% for the RSF and 3.26% for SDB.

When compared to Kwatebala the cobalt grades at Tenke average lower in the RSF (0.16% compared with 0.25%) and identical in the SDB (0.42% compared to 0.42%). Mineralization in the RSC is optimal along the upper and lower contacts with SDB and RSF and within the intercalated shale unit, with grades up to 2.87%.

Fungurume, includes eleven sub-deposits or "blocks" (I, II, III, IV, VII, VIII, IX, X, XI, XII and XIII) that contain a significant number of faults and complex structural geometries.

Blocks III and IV are at the heart of the Fungurume group of deposits and consist of a RAT-cored anticline that separates IV from XI. At depth tight folding gives way to minor subparallel thrust faulting. Blocks XI and IV represent the southern and northern ends of an outcropping syncline. A major tear fault separates IV and XI from VII. To the east of VII sits XIII, which is devoid of any mineralisation. Blocks I and II are small and dip shallowly in roughly opposite directions. Blocks IX and X are a part of the same ore body with X representing the footwall portion of the main ore body. Block VIII is a plunging syncline that is separated from IV and VII by an east-west bounding fault. Finally, block XII resides in the extreme NW corner of the model area. It is a relatively small deposit with the edges poorly defined. It is likely that XII is fault bounded by at least three separate, but related, bounding faults as shown in the cross section **Figure 5-4**.

With the exception of III and IV the mine series at Fungurume dips, on average, more shallowly than most deposits in the Tenke-Fungurume district. The average dip of the mine series, excluding III and IV is approximately 30 degrees. However, II dips roughly 0 degrees in places and historically was divided into IIh (horizontal) and IIv (vertical). III and IV, on the other hand, dip approximately 70-90 degrees. The only other steeply dipping part of Fungurume is the NE end of VIII. The average dip gradually increases from roughly 0 to 90 degrees from the SW to the SE. Stratigraphic thicknesses in the Fungurume project area are comparable to some other deposits in the district such as Kwatebala.

Overall copper grades at Fungurume are lower in the RSF, but higher in the SDB when compared to Kwatebala averages.

Fungurume Extension, includes a significant number of faults and complex structural geometries forming a series of blocks. The southeastern limbs of blocks VI, VI extension and V mine series are in fault contact with the Kundulungu Group. There has been limited drilling into the Kundulungu, however it is interpreted that the fault dips steeply to the north-northwest. This fault zone is represented by brecciated Dipeta on the hanging wall

side and Kundulungu on the footwall side, similar to the typical RAT-Dipeta fault zone. The brecciated Dipeta varies in thickness from only a few meters where the Kundulungu nearly cuts the lower mine series to almost 100.

On the southwest side of the area VI extension is separated from VI by a northwest striking strike slip fault and is comprised of multiple stacked sections of mine series. The offset along the separating fault is approximately 45 m and is likely the youngest structure in the project area. The southern limb of VI contains three closely stacked pieces of mine series separated by various amounts of fault gouge. These severed limbs have been folded and truncate against the Kundulungu. It is possible that the folding formed in response to compressional forces in the immediate vicinity.

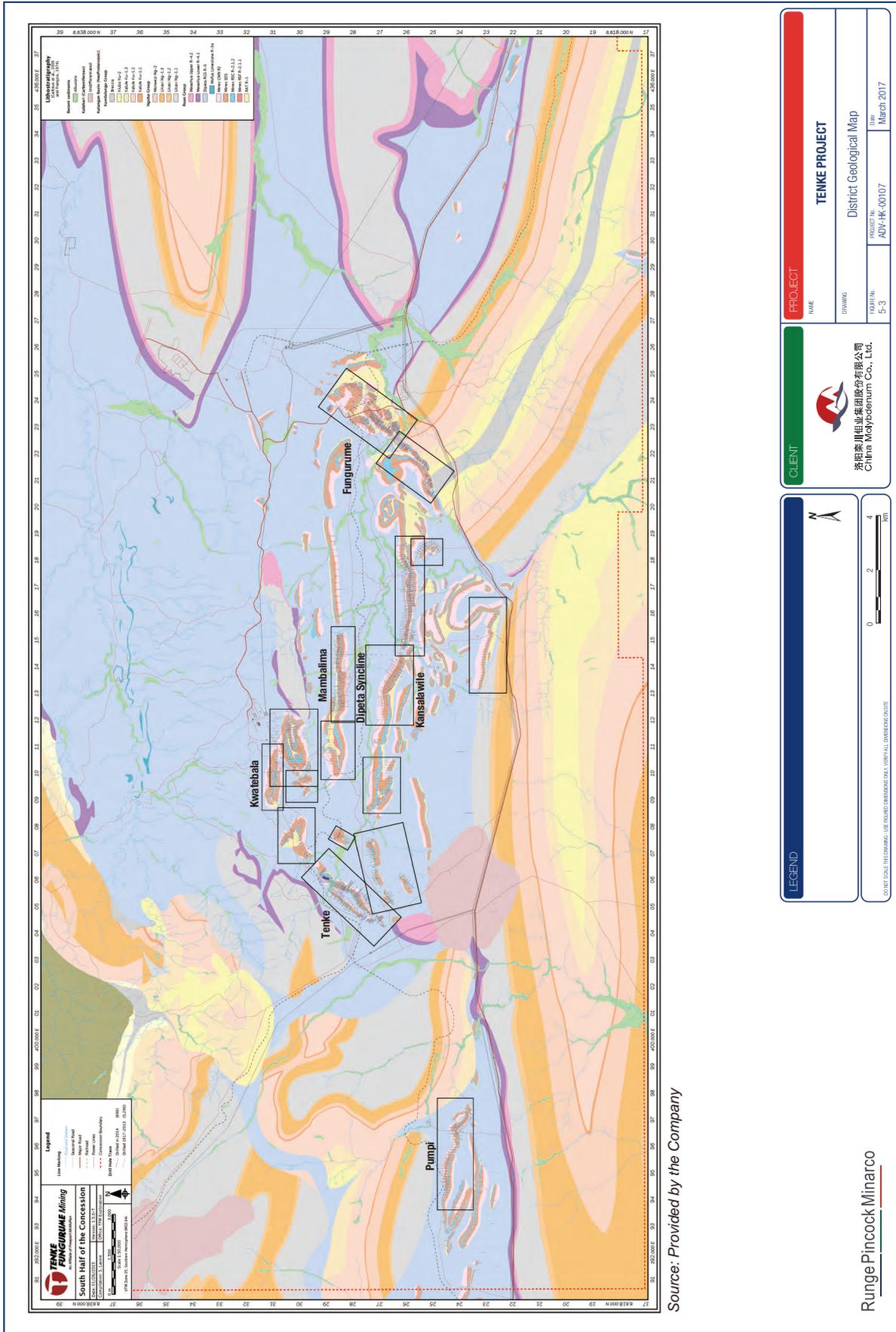
The north-western limbs of VI and VI extension are separated from the southern limbs by a large thrust fault. This thrust fault has removed most of the relatively soft RAT in contact with the silicified CMN in the footwall of the north-western limb. A fault zone is generally present in this area and varies in thickness from 0 to 10 meters. It is also a possibility, however small, that the major fault separating the north-western and south-eastern limb is a reactivated normal fault. Evidence for this can be found in the degree of weathering of the two limbs. The south-eastern limbs have undergone relatively minor amounts of weathering. In fact no leaching of copper has taken place and high grades can be found at the surface in the RSF. The north-western limb, on the other hand, is thoroughly leached and this leaching can reach depths in excess of 100 m. Unfortunately, on the west and eastern ends of VI extension, the majority of the drilling did not extend deep enough to reach below the leach zone. Here the leached zone could extend to depths of greater than 100 meters and overlie a well-developed supergene zone. If the major fault separating the north-western and south-eastern limbs was a thrust fault, then it should be relatively old and both limbs should have had roughly the same amount of time to undergo weathering. However, the drastic difference in degree of weathering between the limbs could suggest that the north-western limb has been exposed at the surface for a much greater period of time, indicating the major separating fault is a young normal fault.

Block V is much smaller than VI and VI extension with the south-western part of V a tightly folded RAT-cored anticline. At the surface the RAT-cored anticline has been eroded away, a typical feature of the Project's deposits.

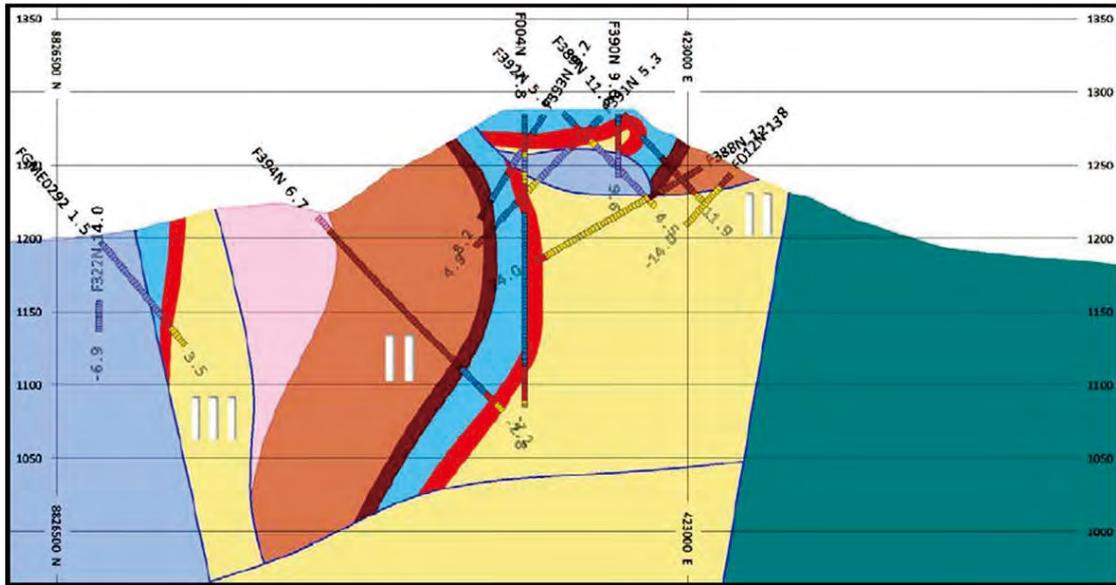
However, towards the northeast, the tight folding begins to ease and the RAT-cored anticline falls below the surface. At the north-eastern end of the deposit tight folding gives way to a gradual fold and is truncated against a series of northwest striking strike slip faults.

At the surface V and IV are separated by a 200 m wide breccia zone that contains remnant pieces of the RAT cored anticline of V. It is unknown how much offset has occurred along the major structure separating V from VI. However, there are various northwest striking fault slivers that cut through this area and average about 35 m of offset. Previous drilling that exited V at depth hit mostly Dipeta. This Dipeta, however, did not mark the true end of VI and instead represented a hiatus in the extension of VI underneath V. A hiatus in mine series can be found all over the district in places like L3K, Tenke, and Mambilima. This seems to result from either one or both parts of the RAT-cored anticline failing to fold upwards in response to salt tectonics. In fact, this hiatus in mine series can be as little as 50 m wide (Tenke limb), indicating even relatively small blocks of mine series can fail to fold in response to the fluidized movements of salt-bearing material.

In the case of block VI, it appears that there is a 450 m wide hiatus of the mine series. The eastern extension of VI picks up again towards the eastern extent of the project area. Here VI is quickly truncated against the series of northwest striking faults. However, if reconstruction is performed VI lines up perfectly with III. It is highly likely that VI is simply the western extent of III that, together, form one limb in excess of 3.5 km in strike length.



Fungurume (Top)



Copper grades are similar, but lower than the Kwatebala averages. Total copper contained within the blocks in the RSF average 2.89%, while the average is 1.39% for SDB.

When compared to Kwatebala the cobalt grades average higher in the RSF (0.33% compared with 0.25%) and lower in the SDB (0.19% compared to 0.42%). Cobalt mineralisation can also be found in the RSC and is optimal along the upper and lower contacts with SDB and RSF reaching up to 0.97%.

Kavifwafwaulu, contains a large number of faults and relatively complex structural geometries. The western end of the deposit consists of a tightly folded RGS cored anticline that is truncated by a large northeast trending oblique slip fault. The south-eastern part of the anticline has been faulted down by approximately 80 m to the southeast by a relatively young normal fault. A small low angle thrust fault has also been offset by the normal fault. The offset along this thrust fault is relatively small on the western end of the deposit and ranges from approximately 0 to 10 m. Mine series is also present in two drill holes (GCON0006 and FWAL0231) to the southwest of Fwaulu, but it is not clear how it relates to Fwaulu. Shimbidi sits a few hundred meters to the southwest of Fwaulu and it is possible that the mine series found in these peripheral holes may instead be the extension of Shimbidi.

Copper grades at Fwaulu are lower in the RSF and in the SDB when compared to Kwatebala averages. Total copper contained within the blocks in the RSF average 3.00%, while the average is 1.01% for SDB. Cobalt grades at Fwaulu average lower in the RSF (0.18% compared with 0.25% in Kwatebala) and in the SDB (0.14% compared to 0.42% in Kwatebala)

Kazinyanga, deposit consists of a broken overturned syncline cored by the CMN and Dipeta Formations. The deposit is unusual in that it is an overturned syncline apparently "floating" in RGS-Dipeta Formation. The fold is cut by high-angle faults into 5 major pieces. The contact between RAT and Dipeta, interpreted as a thrust fault and is well mineralized in places. Because of this, the mineralized fault was separated into two structural zones and interpolated with composites from the zone. Stratigraphic thicknesses in the Kazinyanga project area are comparable to those for other deposits in the district. Overall copper grades at Kazinyanga are low.

Kasanlawite-Kamalondo, deposits contain relatively few faults and simple structural geometries. These two deposits form the south side of the central part of Dipeta valley syncline. The easternmost deposit, Kansalawile, consists of a single limb of mine series striking NW-SE. The RAT portion of the mine series is truncated by the RAT-RGS thrust fault. Salt tectonics is apparent as relatively thin intrusions of RAT cut across the adjacent mine series at or close to the crest of folds. Where the direction of folding is towards the RAT the fracture density is highest, providing a path for salt within the RAT to intrude the adjacent mine series. However, RAT has also intruded adjacent rocks where it makes up the core of the fold. It is possible that larger scale salt movement within the adjacent Dipeta has caused the mine series to bend in these areas.

Kansalawile and Kamalondo are separated by a large oblique slip normal fault that strikes roughly N-S. It is not clear how much offset has occurred or which deposits has moved relative to which. However, the copper grade across this fault in all rock types is similar, indicating that Kansalawile and Kamalondo were once connected as one deposit. To the west of Kansalawile is Kamalondo. At the surface Kamalondo dips approximately 25 degree to the north before becoming near vertical. The geology is relatively simple and there have not been any structures identified.

The east side of Kamalondo and the west side of Kansalawile contain highly variable thicknesses for the RSC. RSC thicknesses can range from 0 to 25 meters from two adjacent drill holes. However, there is no indication the observed thinning is structurally related. Instead, drill core and road cut evidence suggests a natural stratigraphic thinning within the RSC. Considering the RSC is a stromatolitic rock it is possible that areas with little or no RSC are related to local absence of algal mats.

Overall copper grades at Kansalawile-Kamalondo are lower in the RSF and much lower in the SDB when compared to Kwatebala averages. Total copper contained within the blocks in the RSF average 2.60%, while the average is 0.53% for SDB. In comparison at Kwatebala total copper averages 3.84% for the RSF and 3.26% for SDB.

Compared to Kwatebala, cobalt grades at Kansalawile-Kamalondo average lower in the RSF (0.11% compared with 0.25%) and in the SDB (0.08% compared to 0.42%).

L3K, includes four deposits that contain a significant number of faults and complex structural geometries. The easternmost deposit, Katuto, consists of a RAT-cored anticline that strikes almost due east. The north side of

the anticline is thoroughly leached and cut off by a south-dipping bounding fault. The south side of the anticline is very weakly leached and continues somewhat irregularly to the base of the model. Dipeta salt wedges intrude the mine series and nearly cut Katuto in half towards the west side of the deposit.

To the west of Katuto sits east-west striking Kamakonka. Komakonka consists of only one steeply dipping limb that is truncated against the Dipeta by a bounding fault. Towards the surface several drill holes intercepted a flat fault with roughly 20 to 80 meters of offset. This fault has been interpreted as a thrust fault with the hanging wall shifted to the north towards the Tenke deposit. It is likely that this thrust fault is related to the multiple sets of thrust faults discovered cutting the Goma limb of the Tenke deposit.

To the west of Kamakonka is Kakalalwe. Kakalalwe consists of a RAT-cored anticline that strikes to the southwest. Towards the bottom of the deposit a bounding fault separates a thin section Dipeta from the mine series. Exposed at the surface is a large Dipeta salt wedge that is likely connected to the thin section of the lower Dipeta Formation.

To the south of Kakalalwe is Leta. Leta strikes in the same direction as Kakalalwe, but only has one limb. The mine series dips steeply at almost 90 degrees and is truncated by a bounding fault. Several northwest striking oblique-slip faults cut Leta including one that offsets the mine series by almost 100 meters.

All the deposits of L3K are truncated by northwest-striking faults. The trend of northwest striking faults is consistent within the Tenke deposit to the north and can be found throughout the Tenke-Fungurume mining district. It is not clear how much vertical offset there is across these faults as the mine series has not been encountered in shallow holes drilled into the Dipeta.

Copper grades at L3K are lower in the RSF and much lower in the SDB when compared to Kwatebala averages. Total copper contained within the blocks in the RSF average 2.60%, while the average is 0.96% for SDB. Similar to Kwatebala average L3K grades compared to Tenke are also lower. Tenke copper grades average 4.14% in the RSF and 2.67% in the SDB.

When compared to Kwatebala the cobalt grades at L3K average higher in the RSF, but lower in the SDB (0.35% compared with 0.25% and 0.38% compared to 0.42% respectively).

Kwatebala, deposit comprises a complex assemblage of large independent stratigraphic blocks. The north limb of the Kwatebala anticline strikes east-west and dips anywhere from 45 degrees north to approximately 80 degrees south. The south limb of this tightly folded anticline also strikes east-west, steeply overturned near the surface but dipping generally south. The anticline has relatively small faults that displace the stratigraphy up to 15 meters, but small scale folds and gentle bends are more common. The east flank is an overturned sequence of conformable stratigraphy that strikes almost due north. This block contains relatively low copper and cobalt grades when compared to the rest of the deposit.

The southern and western sections of Kwatebala are situated within a much more complex structural framework. The high grade, overturned anticlinal fold nose is cut by numerous faults, resulting in numerous small fault blocks, some of which are less than 100 m in diameter. Individual blocks have varied orientations, and can be either right side up or overturned. It is possible that copper and cobalt have been remobilized following the folding and faulting in this area.

The centre of the deposit consists of a fault boundary between RAT and Dipeta. The contact is concave and forms an irregular dome in appearance. Although the logs from the drilling suggest a Dipeta core, some pit observations suggest this unit may in fact be an older portion of the RAT sequence.

Stratigraphic thicknesses in the Kwatebala project area are comparable to those for other deposits in the district.

Copper grades at Kwatebala are below the Tenke-deposit averages. TCu contained within the blocks in the RSF average 3.95%, while the average is 1.69% for SDB. In comparison at Tenke TCu averages 4.30% for the RSF and 2.56% for SDB.

When compared to Tenke, TCo grades at Kwatebala average higher in RSF but lower in SDB. The highest grades occur within the SDB, but significant mineralisation can be found within the RSC and RSF. Mineralization is optimal along the contacts between SDB-RSC and RSC-RSF. Cobalt grades average 0.21%, 0.23% and 0.32% for RSF, RSC and SDB respectively. At Tenke the same units carry 0.16%, 0.22% and 0.53% TCo.

Mambilime, contains a small number of faults and relatively simple structural geometries. The eastern half of the deposit consists of a RAT-cored anticline that dips approximately 60 degrees to the north. However, around

cross section 416,350 the southern limb is truncated by a high angle, north striking fault. Only the northern limb carries through to the western end of the model where it too is truncated by a high angle, north striking fault.

To the south of the continuous northern limb two small deposits appear towards the west end of the model. Unlike the RAT-cored anticline to the east, which was driven by salt tectonics, the northern limb is separated from the two smaller deposits by a high angle fault. It is not clear how the two small deposits are related to the northern limb, if at all. Therefore offset and sense of motion along the high angle structure separating these deposits is unknown. A cross section is shown in **Figure 5-5**.

Overall copper grades at Mambilima are lower in the RSF and in the SDB when compared to Kwatebala averages. Total copper contained within the blocks in the RSF average 2.87%, while the average is 0.79% for SDB.

When compared to Kwatebala the cobalt grades at Mambilima average lower in the RSF (0.14% compared with 0.25%) and in the SDB (0.13% compared to 0.42%). Cobalt mineralisation can also be found in the RSC and is optimal along the upper and lower contacts with SDB and RSF reaching up to 1.07%.

Mwadinkomba, deposit is largely an east-west striking single limb thrust over a smaller, overturned limb on the west end. Dips of the beds are variable from steeply overturned to gently dipping to the south.

Variable stratigraphic thicknesses in the Mwadinkomba project area led to a number of complications in the interpretation of the deposit, especially in the interpretation of the RSC. The RSC is of variable thickness and is modelled as pinching out in some places. SDB also is somewhat thicker than normal compared to other deposits in the Tenke-Fungurume area.

RSC thickness ranges from less than 1 m to as much as 20 m, but typically no thicker than 15 m. RSF is more consistently around 7.5 to 10 m in both the upper and lower limbs of the anticline. The variations in thickness are thought to be sedimentary rather than tectonic but the evidence is equivocal.

Overall copper grades at Mwadinkomba are high in RSF but lower for other units. Total copper within the RSF blocks average 3.03%, while the average is 0.25% for SDB. In comparison at nearby Kwatebala total copper averages 3.36% for the RSF and 1.77% for SDB.

Mwadinkomba anticline, contains a small number of faults and relatively simple structural geometries. The mine series towards the western half of the model is split by a RAT-cored anticline. The mine series dips approximately 30 degrees to the north and strikes roughly E-W. However, the northern limb takes an abrupt turn to the north around 410800 east before being truncated by a bounding fault. The southern limb, on the other hand, continues to strike E-W throughout the entire modelled area. A small deposit resides in the northeast corner of the model area and is bounded to the north and south by E-W striking bounding faults.

Copper grades at Mwadinkomba Anticline are much lower in the RSF and in the SDB when compared to Kwatebala averages. Total copper within the RSF blocks average 0.90%, while the average is 0.08% for SDB.

When compared to Kwatebala the cobalt grades at Mwadinkomba Anticline average much lower in the RSF (0.07% compared with 0.25%) and in the SDB (0.02% compared to 0.42%). Cobalt mineralisation in the RSC is optimal along the upper and lower contacts with SDB and RSF, with grades up to 0.84% Co.

Mudilandima, is located on the south side of the Dipeta Syncline near the east end of the structure. Generally the beds strike east-west but strike northwest-southeast in the western and south-eastern parts of the deposit.

The Mudilandima deposit is dominated by a central syncline with an east-west, easterly dipping axial plane and tight anticlines on both flanks of the syncline, including a recumbent anticline on the southwest side of the deposit. Drill holes through these folded rocks pass from Lower Mine Series rocks into rocks logged as younger RGS-Dipeta indicating the entire package is a thin thrust sheet contorted by generally north-south compression. This package has been subsequently dissected by high-angle faults including a series of early northwest-southeast faults and later north-south and northeast-southwest faults.

Copper mineralisation is strongly influenced by supergene processes including both leaching and oxidation of primary copper-sulphide mineralisation. Leaching can be very deep and appears to be strongly influenced by the RSC in the broad syncline located in the middle to western portion of the deposit. Cobalt mineralisation is also impacted, but rather than being leached it is oxidized to deep levels of the syncline with less well-oxidized

material in the SDB and SDS overlying the RSC. Little sulphide remains in the deposit to the limits drilled to date.

Sefu, deposit is dominated by an east-west striking tight recumbent anticline dipping northward, complicated by faulting. This fold is cut by high-angle north-south faults that divide the anticline into four fault blocks with the lower limb faulted out in the eastern-most block.

Variable stratigraphic thicknesses in the Sefu project area led to a number of complications in the interpretation of the deposit, especially in the interpretation of the RSC. The RSC in the upper limb of the Sefu anticline is generally thicker than in the lower limb while the RSF often remains about the same in both limbs. RSC thickness ranges from less than 5 m to as much as 20 m, but typically no thicker than 15 m. RSF is more consistently around 7.5 to 10 m in both the upper and lower limbs of the anticline. The variation in thickness is thought to result from intra-formational shearing and subsequent thinning of the unit. An effort to explain the differences with high-angle faulting was made but provides a less desirable product with high-angle faults between most holes on north-south sections. The final interpretation results in some pinching and swelling of units, especially the RSC.

Copper grades at Sefu are considerably lower than the Kwatebala averages. Total copper contained within the blocks in the RSF average 1.20%, while the average is 0.22% for SDB. The highest copper grades in the RSF occur within the lower eastern limb.

Shinkusu, deposit comprises a complex assemblage of small independent stratigraphic blocks. The majority of the mine series strikes north to northwest and east-west. Shinkusu is comprised of multiple fault slivers of the mine series. Major faults at Shinkusu separate the mine series from the Dipeta all way around. Stratigraphic thicknesses in the Shinkusu project area are comparable to those for other deposits in the district.

Zikule, deposit is a northwest-southeast trending ridge of Mine Series rocks in fault contact on the west and east with Dipeta Sub-Group rocks. This approximately three-kilometre long block is broken into sub-blocks by several northeast-southwest faults delineated by recent detailed mapping. A smaller group of fault blocks of Mine Series about 200 m south of the main body is also included in the model but these are sparsely drilled and all blocks are in the inferred confidence category.

Stratigraphic thicknesses in the Zikule project area are comparable to those for other deposits on the south of the Dipeta Syncline such as Mambilima, Kansalawile and Kazinyanga. RSF is typically about 7 to 10 m thick, RSC 20 m, and SDB 5 to 7 m.

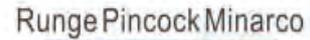
Copper grades at Zikule are lower than the mineralisation at nearby Mambilima and Kansalawile but higher than Kazinyanga. Cobalt grades are typically low. Total copper contained within the blocks in the RSF averages 1.38%, while the average is 1.46% for SDB. RSC is, in places, well mineralized and averages 0.90% TCu.

Shadirandzoro, deposit is largely an east-west striking, south-dipping single limb of Mine Series rocks and overlying Dipeta thrust over the presumed younger RGS-Dipeta rocks.

Stratigraphic thicknesses in the Shadirandzoro project area are fairly consistent. RSF ranges from about 5 to 11 m but is typically between 7.5 and 9m, averaging about 8m. RSC gently pinches and swells from about 11 to as much as 25m, but typically is between 15 and 20m. SDB thickness ranges from 7.5 to 15m but is typically between 9 and 10m.

Copper grades at Shadirandzoro are high in RSF, especially in the western half of the deposit, but lower for other units. Total copper contained within the blocks in the RSF average 2.25%, while the average is 0.14% for SDB. The highest copper grades in the RSF occur in the western half of the deposit (west of 417,625 East). Cobalt grades are low, reaching their highest in mixed oxide-sulfide material in RSF in the western half of the deposit. Here the grade averages 0.119% TCo. Cobalt is highest in RSF, but averages only 0.062 for RSF in the entire deposit.

Dipeta Syncline, is bounded by major faults on the east and west with a small fault splay on the northeast. This result is a very large, continuous block of Mine Series stretching nearly 3 Km beneath the Dipeta Valley and a smaller fault wedge on the northeast. These account for the two important structural zones and together form interpolation zone, the only area where grades were estimated in the model.



Variable stratigraphic thicknesses in the Dipeta Syncline area led to a number of minor complications in the interpretation of the deposit, especially in the interpretation of the RSC. The RSC is of variable thickness and is modeled as pinching out in some places. SDB also is somewhat thicker than normal compared to other deposits in the Tenke-Fungurume area. RSC thickness ranges from less than 1 m to as much as 25m, but typically no thicker than 20m. RSF is more consistently around 7.5 to about 12m. The variation in thickness is thought to be mostly sedimentary rather than tectonic but the evidence is equivocal. **Figure 5-6** shows a cross section through the area.

Copper grades at Dipeta Syncline are high in RSF but lower for other units. Total copper contained within all of the blocks in the RSF average 3.27%, while the average is 0.32% for both RSC and SDB. Oxide blocks in RSF average 3.75% TCu while sulphide blocks average 3.21% TCu. RSC blocks average 0.46% TCu in oxide ore and 0.42% TCu in sulfide while SDB averages 0.66% TCu in oxide and 0.29% TCu in sulphide. Cobalt grades are also highest in the RSF blocks. All blocks of RSF average 0.23% TCo.

Pumpi, includes a significant number of faults and complex structural geometries. The west side of Pumpi North is the least complex of Pumpi deposit. A RAT-cored anticline separates the two limbs of the east striking mine series. An east striking, north dipping fault is the only major structure in the area. It separates the mine series from the surrounding Dipeta and is marked by brecciation along the fault zone.

The east side of Pumpi North is the most structurally complex. Mine series is repeated up to three times as a series of small thrust faults (?) has stacked the rocks on top of nearby mine series. Mixed and monolithic breccia zones are associated with the small thrust faults and can be found along the contact between two adjacent mine series blocks. This zone contains the highest copper grades in the form of supergene malachite and chrysocolla. The many structures of this area likely served as a pathway for enriched supergene fluids to travel.

A major fault zone separates Pumpi North from Pumpi East (Figure 1). Mine series repeats up to four times in this area, but only sparse drilling exists to tie the geology together. Therefore, no coherent interpretation of this area could be attempted. Instead all rocks falling within this area were considered mixed breccias. The width of this zone exceeds 100 m.

Pumpi East contains mine series rocks striking SE that are separated by a RAT cored anticline. Nearby to the major strike slip fault sits a wedge of Dipeta breccias. It is possible that this wedge of material behaved like a small salt dome and intruded the surrounding rocks. To the far east of Pumpi East the geology becomes much more complex. With limited drilling it is difficult to determine what has occurred. One possibility is that a neighbouring block has collided with Pumpi East.

The mine series at Pumpi dips, on average, more steeply than most deposits in the Tenke-Fungurume district. The average dip of the mine series at Pumpi North is approximately 70-80 degrees. Pumpi East dips more gently at about 45 degrees. Stratigraphic thicknesses in the Pumpi project area are comparable to some other deposits in the district such as Kwatebala..

Copper grades at Pumpi are high in RSF but lower for other units. Total copper contained within all of the blocks in the RSF average 1.74%, while the average is 1.35% for SDB. Cobalt grades are also low in the all the units. All blocks of RSF average 0.09% TCo.

6. Data Verification

RPM conducted a review of the geological digital data supplied by the Client to ensure that no material issues could be identified and that there was no cause to consider the data inaccurate and not representative of the underlying samples. RPM visited the Project in April 2016 and concluded that the data was adequately acquired and validated following industry best practices.

6.1 Drilling Types and Core Recoveries

RPM notes that predominantly diamond drill-holes ("DDH") with drill core diameters of PQ (8.5 cm diameter), HQ (6.4 cm diameter) or NQ (4.8 cm diameter) have been used to define mineralisation and the information from this drilling has been used to underpin resources estimation, geotechnical and hydrogeological studies. Metallurgical test work samples were also taken from adits and trench locations.

Holes were generally started with PQ core size and then were reduced to HQ and NQ, as needed. The drill-holes for geotechnical and hydrogeological studies utilised HQ diameter holes.

Typically core recoveries ranged between 90% and 100% for all DDH which RPM considers suitable; however, some low recoveries were noted. A further review by RPM indicates that the zones with low recovery are associated with intensely fractured or faulted intervals and the more intensely weathered upper zone. These low recoveries are not considered material to the total Mineral Resource currently estimated.

6.2 Topography and Collar Locations

In 2006, the Company created a digital topographic model (DTM) based on aerial photography. The DTM was created by triangulating the 1 m contours lines. This topography surface and the end-of-year surfaces from mine planning were used within the resource estimates. RPM considers the topography suitable for inclusion in a Mineral Resource estimate.

Recently, the Company surveyed a new topography of the Project based on light, imaging, detection and ranging (LIDAR) which has been utilised in RPM estimates. All the surface maps are drafted in UTM coordinates using the projections WGS 84 zone 35L. In addition, the primary and secondary geodesic local networks and azimuth points were geo-referenced, all in the WGS 84 system.

Since 2006, the Company undertook a survey of the drill-hole collar locations with the high resolution differential GPS equipment using the method of taking static differential data, which is considered suitable. RPM notes that for drilling completed prior to 2006, collar information is available however the methods used to locate these collar points are unknown. As such, the collar coordinates cannot be confirmed, however they were validated with the LIDAR digital topographic model and cross referenced by the Company when possible. These holes only constitute a small proportion of the total holes, and the results indicate were suitable for inclusion in the resource estimation and any variation would not be material to the resultant resource.

While RPM is aware that the Company undertook an internal re-survey of 1 in every 10 collars by separate operators, during the site visit RPM independently checked the collar locations of the Fungurume's drill-holes FGME-0379 and FGME-0380 with a handheld GPS and notes only small differences (7 m) well within the error limit of the manual GPS.

6.3 Down the Hole Survey

Since 2009, the Company used the Reflex EZ-shot instrument to measure deviations in azimuth and inclination angles for non-vertical drill-holes; however, vertical holes were not surveyed. The first measurement is taken at 6 m depth, and then at 50, 100, 150, and at the end of the hole. The Company performed acid bottle, Eastman single-shot, Reflex Maxibor, Sperry Sun and Tropari methods in the campaigns prior to 2009.

RPM reviewed the consistency between consecutive azimuth and dip measurements, detecting a low proportion (<0.5%) of differences greater than ten degrees for inclined drill holes. RPM considers the drilling and the drilling information to be of high standard when compared to mining industry practices. RPM agrees with the surveys procedures, their controls and as a result all drilling from 2006 onwards can be used as a base for the Mineral Resource estimate. Also, RPM opines that any small measurement's inaccuracies are irrelevant given that, in general, the drill hole's depths are shorter than 200 m.

RPM notes that while limited information was supplied for drilling prior to 2006, this data is only a small proportion of the resource, as such any variation would not material to the global estimates.

6.4 Geological, Geotechnical, and Geomechanical Logging

The Company has developed logging and sampling procedures that have been continuously improved and have been subjected to external auditing that confirmed the processes and protocols implemented giving the results a high level of confidence. The Company geologists log the core samples according to the existing stratigraphic nomenclature of the deposit. Photography and recovery measurements were carried out by assistants under a geologist's supervision.

RPM considers that the recorded information is sufficient to define a geological model that includes the Cu and Co mineralisation controls.

During the site visit, RPM checked the geological logging process by reviewing the logs for 5 drill-holes, DSYN-0017, DSYN-0024, FGME-0145, FGME-0129, KWAT-0185. The geological staff demonstrated the logging process which matches with the model descriptions. RPM considers that Cu-Co mineralisation intensity match with the database assays and that the logs of these drill-holes are of a high quality.

Logging records were mostly registered in physical format and were input into a digital format (Acquire). However, RPM would recommend capturing the geological logs in digital format, to avoid any potential for input errors. The core photographs, collar coordinates and down the hole surveys were received in digital format.

6.5 Bulk Density Determination

RPM reviewed the bulk density determination procedures concluding that they are correctly performed. Since 2006, the Company has been completing bulk density determinations on 10 to 20 cm uncut PQ, HQ and NQ drill core using plastic-cover determinations which is an industry standard practice. Although density is measured periodically on drill core, there are insufficient measurements to allow interpolating this item in the block models.

A reasonable good correlation was observed with the elevation and the weathering profile (as contented Ca), as such density was estimated as a function of the elevation or on the Ca content. Further information is provided in **Section 7**.

6.6 Sampling, Sample Preparation and Assaying

The Company considers the drilling prior to 2006 as historical with just the drill hole information for UMHK's drilling (1919 – 1970) having limited information available on the sample preparation protocols and few or no samples remain. As such these holes were not included in the resource estimate. For SMTF's drilling campaign (1971-1972), sampling protocols are better known although some different assaying techniques were applied to determine acid soluble or oxide assays. SMTF's samples were assayed in Rhokana laboratory at Kitwe in Zambia. Phelps Dodge campaign samples (2006) and Freeport-McMoRan (2007-2008) were sent to ALS Chemex laboratories in Johannesburg, South Africa. Since 2009, cutting of core and placing of half core into sample bags along with all sample preparation and assay determinations works being conducted by the in-house Fungurume laboratory, although Skyline Laboratory in Tucson, US has been used for assaying as well. As part of the QA/QC procedures (See **Section 6.7**) of the Company, ALS was used as the secondary laboratory.

RPM reviewed the on-site sampling and sampling preparation protocols and procedures and considers that they were properly executed to minimize the standard error in typical sampling methods. Half core was dried for 6-8 hrs at 105°C and successively crushed, split and pulped to obtain 200 g of #200 grain size pulp.

The assaying protocols are as follow: ALS and the Company laboratories take 0.5g sample and assay total copper (TCu) and cobalt (TCo) using 3-acid digestion (hydrochloric, perchloric and nitric acids) with atomic absorption spectrometry (AAS) finish. Also, based on 3-acid digestion, the Company lab and Skyline assayed TCu and TCo by ICP-OES finish.

Assaying for acid soluble Cu and Co is undertaken by all the laboratories following the Company Acid Soluble Co and Cu Method, which required the addition of sulphuric acid, sodium sulphite and ferrous sulphate, six hours agitation digestion finishing with AAS (the Company and ALS) or ICP (Skyline). The same samples were subsequently assayed by ICP for Ca, Mg, Mn, and other elements.

RPM considers that 90% of the data used to estimate resources was from the 2006 campaigns onwards, followed standard industry sampling procedures and quality control protocols. A new, improved, QA/QC protocol was implemented as a consequence of an extensive 2009 laboratory audit, however some questions remain for the works prior.

6.7 Quality Assurance Quality Control

Since 2009, the Company has conducted a detailed QA/QC program to provide verification of the sample procedures, the sample preparation and the analytical precision and accuracy. The total control sample insertion rates vary from 12% to 19% of the total samples. The insertion rate of every control has been variable, however have included a significant number of samples (**Table 6-1**) which included the following:

- *Field duplicates*: correspond to ½ or ¼ of core inserted 1 in every 22-56 samples.
- *Coarse duplicates samples or preparation duplicates*: correspond to the half sub-sample after the first crusher. Were inserted 1 in every 45-90 samples.
- *Pulp duplicates samples*: correspond to the second envelope after the pulverization were inserted 1 in every 45-90 samples.
- *Coarse blank samples*: Were inserted 1 in every 16-42 samples after the high grade reference sample material.
- *Standard Reference Material (SRM) samples*: a set of at least three SRM (low, medium and high grade) for TCu and TCo have been used in each campaign. The last campaign includes the SRMs AMISO159, AMISO300, AMISO357, STD10, STD11, STD14, STD19, STDFR1X and STDFR5X were inserted 1 in every 22-.50 samples.
- *External Check samples*: ALS-Chemex Johannesburg was the laboratory used to check the main laboratories. In 2011 campaign, just 0.1% of pulps were sent for checks, since 2012, between 1.1% and 6%.

Table 6-1 QAQC samples since 2011.

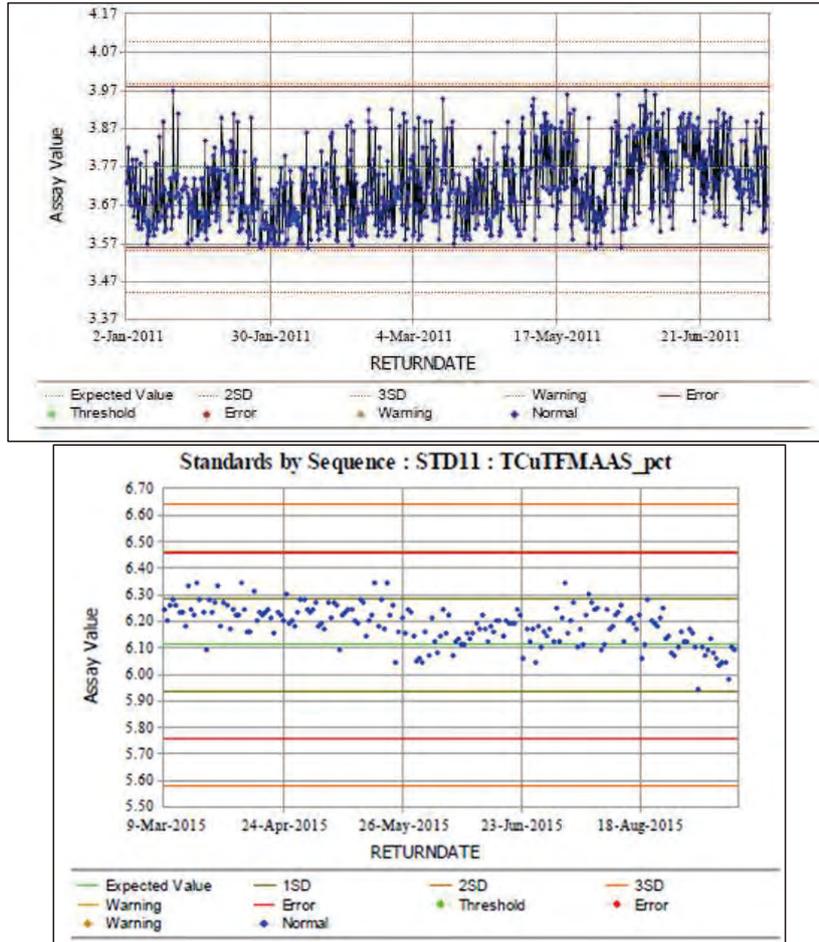
Campaign	#samples	Laboratory		RSM	Blanks	Duplicates			Total
		Skyline	the Company			Field	Coarse	Fine	
2011	73,900	27%	73%	5.80%	6.40%	2.40%	2.00%	2.00%	19%
2012	53,800	15%	85%	4.10%	2.40%	1.80%	1.80%	1.80%	12%
2013	50,200	21%	79%	5.80%	3.20%	4.50%	1.10%	1.10%	16%
2014	72,900	60%	40%	4.00%	2.40%	2.00%	2.00%	2.00%	12%
2015	40,000	15%	85%	4.50%	2.80%	2.20%	2.20%	2.20%	14%
2016	24,513	4%	96%	6.30%	2.60%	2.16%	2.15%	2.16%	15%
Total	315,313	24%	76%	5%	3%	3%	2%	2%	15%

RPM has reviewed all the QA/QC data supplied since 2006 and concluded the following:

- **Blanks**: a minimum level of sample contamination by Cu and Co was detected during the sample preparation and assay. Blanks results are below five times the detection limit for the element.
- **Internal Duplicates**: the analytical precision is within acceptable ranges when compared to the original sample. Fine duplicates have more than 95% of the pairs of samples are within the absolute relative difference (ARD) of 10% (R>0.90). Coarse duplicates have more than 95% of the pairs of samples are within the ARD of 15% (R>0.85). However, field duplicates (1/4 core) have less than 95% of the pairs of samples within the ARD of 20% (R>0.80). RPM notes that the common industry acceptance criteria for this type of duplicates and style of mineralisation is an ARD of 30% for 90% confidence as such these values are considered acceptable.
- These results were also repeated in the external ALS check samples. Duplicates results show less than 20% of absolute relative difference at 95% confidence.

- Standard Reference Material:** a variety of SRM's were utilised, with two examples sown in **Figure 6-1**. The analytical accuracy was considered to be within acceptable ranges for the elements Cu and Co because 95% of the results were inside the $\pm 2SD$ limits. However, RPM observed some periodic bias in some campaigns as shown in Figure 6-1, however these are not considered material to the estimates.

Figure 6-1 Cu Reference Sample Material (STD09, Top and STD11, Bottom)



- Laboratory checks:** the reproducibility between laboratories is good with bias ranges between -0.03 to -0.006 and very low ARD.

In 2016 Total Calcium was included in the QAQC protocol due to its importance in segregating various ore types for the plant. Results from the initial QAQC program have been poor with +/- 10% precision achieved from the internal and external repeats. The Company is continuing to review these results and associated protocol in 2017 and whilst this poor precision will impact short term planning it is not deemed material by RPM.

For all data in the campaigns post 2009, RPM considers the insertion rate of average 15% is better than the industry standards for control sample preparation and laboratory assay accuracy and precision. Furthermore, RPM considers the results of the controls samples are within the acceptability limits in coarse-pulp duplicate, reference samples, and cross laboratory checks.

6.8 Data Quality Review

The review of the drilling and sampling procedures since 2006 indicates that international standard practices were utilised with no material issues being noted by RPM. The QA/QC samples from 209 all showed suitable levels of precision and accuracy to ensure confidence in the sample preparation methods employed by the Company and primary laboratory. RPM also notes that over 90% of the samples used for the resource estimation are derived from drilling since 2006 and therefore RPM considers the data which supports the resource estimation to have no material sample bias and is representative of the samples taken. In addition the majority of the pre-2206 was completed near surface in areas which have been mined out, and as such do not have a material impact on the future production.

The selective original data review and site visit observations carried out by RPM did not identify any material issues with the data entry or digital data. In addition RPM considers that the onsite data management system is above industry standard which minimizes potential 'human' data-entry errors and no systematic fundamental data entry errors or data transfer errors; accordingly, RPM considers the integrity of the digital database to be sound.

In addition, RPM considers that there is sufficient geological logging and bulk density determinations to enable estimation of the geological and grade continuity of the deposit to an accuracy suitable for the classification applied (see **Section 7-4**).

6.9 Sample Security

All drilling activities have been undertaken by contractors independent of the Client. Due to the style of drilling undertaken within the Project the Client's personnel have only done core sample handling.

Samples for the Mineral Resource estimates have been derived from predominantly surface diamond drilling post 2005. Subsequent to the independent drilling crews delivering the core to the core shed, the Company's personnel are responsible for cutting the core and placing the cut core in bags for delivery to the laboratory. The preparation laboratory was managed by the Company in Kwatebala. After preparation, the Company personnel inserted the control samples and renumbered all the samples within the batch. DHL transportation company was utilised to send the pulps to Skyline Tucson. Together with the batches, the Company provided to Fungurume (on-site) and Skyline laboratories, a report with the amount and the numbers of samples and sample tickets to each pulp were provided and detailing the analysis method required for each element. Chain of custody is kept all the time for laboratory personnel or Company's staff, excepting the time between the site and Tucson.

RPM notes that, although the Company's personnel are responsible for handling the core during the sampling process, all personnel are supervised by senior site geologists and geo-technicians. In addition, photos are taken of all core trays prior to sampling. Core is clearly labelled for sampling, a suitable paper trail of sampling can be produced and duplicate samples are taken to ensure no sample handling issues arise. RPM considers these procedures to be industry standard and regards that the sample security and the custody chain during this period adequate.

RPM considers that the sample security during the drilling, sampling, sample preparation and assaying to be acceptable.

6.10 Data Verification Statement

The review undertaken by RPM of the drilling and sampling procedures indicates that international standard practices were utilised with no material issues noted by RPM in the checks completed. The QA/QC samples all showed suitable levels of precision and accuracy to enable confidence in the primary laboratories. RPM also notes the majority of the samples used for the resource estimation are derived from drilling from post 2006 which can be confirmed. RPM considers that the data which supports the resource estimation has no material sample bias and is representative of the samples taken.

7. JORC Mineral Resources

Mineral Resources have been independently reported by RPM in compliance with the recommended guidelines of the JORC Code (2012).

7.1 Mineral Resource Classification System under the JORC Code

A "Mineral Resource" is defined in the JORC Code as 'a concentration or occurrence of solid material of economic interest in or on the Earth's crust in such form, grade (or quality) that there are reasonable prospects for eventual economic extraction. The location, quantity, grade (or quality), continuity and other geological characteristics of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge, including sampling. Mineral Resources are sub-divided, in order of increasing geological confidence, into Inferred, Indicated and Measured categories.' Mineral Resource estimates are not precise calculations, being dependent on the interpretation of limited information on the location, shape and continuity of the occurrence and on the available sampling results.

For a Mineral Resource to be reported, it must be considered by the Competent Person to meet the following criteria under the recommended guidelines of the JORC Code:

- There are reasonable prospects for eventual economic extraction.
- Data collection methodology and record keeping for geology, assay, bulk density and other sampling information is relevant to the style of mineralisation and quality checks have been carried out to ensure confidence in the data.
- Geological interpretation of the resource and its continuity has been well defined.
- Estimation methodology that is appropriate to the deposit and reflects internal grade variability, sample spacing and selective mining units.
- Classification of the Mineral Resource has taken into account varying confidence levels and assessment and whether appropriate account has been taken for all relevant factors i.e. relative confidence in tonnage/grade, computations, confidence in continuity of geology and grade, quantity and distribution of the data and the results reflect the view of the Competent Person.

7.2 Area of the Resource Estimation

A total of 18 block models have been created with various drilling and sampling for each, as outlined in **Table 7-1** and shown graphically in **Figure 2-2**. RPM is not aware of any new drill-holes being completed by the Company since 31st December, 2016, with the drill plan for each shown in **Figure 7-4**, through **Figure 7-6**.

In addition to the open pit and underground resource areas, a significant oxide stockpile is located adjacent to the existing plant which form part of the reported Mineral Resources.

Table 7-1 Resource Estimation Summary

Area	Abbreviation	Year	m	# Used holes
Dipeta Syncline	DSYN	2015	72,910.4	344
Fungurume	FGME	2015	183,547.6	1,032
Fungurume Extension	FGVI	2015	62,964.4	321
Kavifwafwaulu	FWAL	2015	22,849.0	338
Kazinyanga	KANZ	2010	9,325.0	53
Kasanlawite - Kamalondo	KASA	2014	33,147.2	240
L3K	KATO	2014	32,117.0	216
Kwatebala	KWAT	2010	89,443.0	750
Mambilima	MAMB	2014	102,987.3	518
Mwadinkomba Anticline	MATI	2014	10,062.4	62
Mudilandima	MUDI	2012	14,319.5	91
Mwadinkomba	MWAN	2015	72,329.1	417
Pumpi	PUMP	2013	51,133.0	265
Sefu	SEFU	2013	10,642.5	105
Shinkusu	SHIK	2011	5,098.0	50
Tenke	TENK	2014	110,191.1	658
Zikule	ZIKU	2012	9,125.0	67
Shadirandzoro	ZORO	2015	10,005.9	60
Total			902,197	5,587

Source: Provided by the Company

7.3 JORC Statement of Mineral Resources

Results of the independent Mineral Resources estimate for the Project are tabulated in the Statement of Mineral Resources in **Table 7-2** through **Table 4** below, which are reported in line with both the requirements of the 2012 JORC Code and the reporting standards of Chapter 18 of the HKEx Listing Rules. The Statement of Mineral Resources is therefore suitable for public reporting. The Statement of Mineral Resources shown in **Table 7-2** and graphically in **Figure 7-2** and **Figure 7-3** includes the Ore Reserves reported in **Section 8**. RPM notes that quantities and grade **Table 7-2** through **Table 7-4** are inclusive of those in **Table 8-2** and are not in addition.

RPM notes the following:

- TCu/TCo – Refers to Total Cu/Co which is contain within the material. This include and is not additional to the ASCu/ASCc (see below).
- ASCu/ ASCc– Refer to grade of the Cu/Co which is acid soluble. This is critical for the leach processing used for the Oxide material. The difference between the ASCu and TCu is not recovered through leaching.

In addition to the in situ Mineral Resource, a total of **48.2 Mt** at 1.2 % ASCu and 0.26 % ASCc occurs in stockpiles on the ROM pad and classified as Measured. This material is estimated based on survey controls, truck counts and grade control data.

Table 7-2 Statement of JORC Open Pit Mineral Resources by Mineral Type as of 31st December, 2016.

Type	Classification	Quantity (Mt)	TCu (%)	TCo (%)	ASCu (%)	ASCo (%)	Metal TCu (Mlbs.)	Metal TCo (Mlbs.)
Leach Cap	Measured	1.4	0.6	0.45	0.4	0.39	17.7	13.8
	Indicated	2.7	0.4	0.43	0.2	0.37	20.7	25.7
	Inferred	2.3	0.2	0.40	0.2	0.35	10.3	20.4
	Sub-Total	6.4	0.4	0.43	0.2	0.37	48.6	59.8
Oxide	Measured	117.7	2.8	0.30	2.5	0.24	7,224.6	789.2
	Indicated	119.3	2.4	0.26	2.1	0.21	6,247.4	694.6
	Inferred	34.5	2.0	0.19	1.8	0.16	1,533.5	144.4
	Sub-Total	271.4	2.5	0.27	2.2	0.22	15,005.2	1,628.5
Mixed	Measured	39.2	3.5	0.30	1.7	0.17	3,029.6	256.6
	Indicated	52.5	3.1	0.26	1.5	0.15	3,597.8	306.5
	Inferred	13.8	2.1	0.24	1.1	0.14	644.7	74.0
	Sub-Total	105.4	3.1	0.27	1.5	0.16	7,272.4	636.6
Sulphide	Measured	12.6	4.4	0.29	0.7	0.12	1,234.5	81.2
	Indicated	17.8	3.6	0.22	0.6	0.07	1,417.3	85.7
	Inferred	7.1	2.8	0.17	0.3	0.02	435.0	27.0
	Sub-Total	37.6	3.7	0.23	0.6	0.08	3,086.7	193.7

Table 7-3 Statement of JORC Underground Mineral Resources by Mineral Type as of 31st December, 2016.

Type	Classification	Quantity (Mt)	TCu (%)	TCo (%)	ASCu (%)	ASCo (%)	Metal TCu (Mlbs.)	Metal TCo (Mlbs.)
Oxide	Measured	4.7	2.8	0.32	2.5	0.24	293.8	33.0
	Indicated	30.7	2.9	0.30	2.5	0.23	1,932.6	203.0
	Inferred	14.7	3.0	0.28	2.6	0.20	956.2	91.2
	Sub-Total	50.1	2.9	0.30	2.5	0.22	3,182.6	327.4
Mixed	Measured	6.6	3.4	0.19	1.7	0.12	499.7	28.2
	Indicated	68.1	3.2	0.27	1.5	0.15	4,856.8	401.6
	Inferred	169.1	3.0	0.30	1.4	0.16	11,178.1	1,111.5
	Sub-Total	243.7	3.1	0.29	1.5	0.15	16,535.5	1,542.0
Sulphide	Measured	0.9	3.2	0.28	0.70	0.06	62.4	5.4
	Indicated	26.6	3.0	0.22	0.8	0.05	1,744.1	132.0
	Inferred	93.9	3.0	0.25	0.8	0.05	6,252.8	518.0
	Sub-Total	121.4	3.0	0.24	0.8	0.05	8,059.8	655.5

Note:

- The Statement of JORC Mineral Resources in **Table 7-2 and Table 7-3** have been compiled under the supervision of Mr. Esteban Acuña who is a full-time employee of RPM and a Registered Member of the Chilean Mining Commission. Mr. Acuña has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity that he has undertaken to qualify as a Competent Person as defined in the JORC Code.
- All Mineral Resources figures reported in the table above represent estimates at 31st December, 2016. Mineral Resource estimates are not precise calculations, being dependent on the interpretation of limited information on the location, shape and continuity of the occurrence and on the available sampling results. The totals contained in the above table have been rounded to reflect the relative uncertainty of the estimate. Rounding may cause some computational discrepancies.
- Mineral Resources are reported in accordance with the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (The Joint Ore Reserves Committee Code – JORC 2012 Edition).

In addition to the in situ Mineral Resource, a total of 48.2 Mt at 1.2 % ASCu and 0.26 % ASCo occurs in oxide stockpiles on or near the ROM pad and is classified as Measured. This material is estimated based on survey controls, truck counts and grade control polygon data and grouped into 3 types of material based on grade and NAC consumption as shown in **Table 7-4** below.

Table 7-4 Statement of Stockpile JORC Mineral Resources by Material Type as of 31st December, 2016.

Stockpile	JORC Classification	Tonnes (Mt)	ASCu%	ASCo%	TCu%	TCo%	NAC_kg/t	EqCu%
High Grade 1	Measured	2.0	2.8	0.3	3.0	0.3	108.6	3.4
High Grade 2		4.3	1.6	0.4	1.7	0.5	29.0	3.0
Low Grade		41.9	1.0	0.2	1.2	0.3	29.5	1.9
Total Stockpiles		48.2	1.2	0.3	1.3	0.3	32.6	2.1

Due to the high variability of processing costs associated with acid consumption, the cut off grades for each resource model block were based on profit from each individual block. Profit was calculated based Cu and Co grades, acid consumption, metallurgical recoveries, mining and processing costs using largely the same parameters used in the Ore Reserves estimate with the exception of increased metal prices and a small reduction in G&A and management fees of \$3.93/ tonne. All the blocks with profit greater than or equal to zero were reported as Mineral Resources and considered to have a reasonable prospect for eventual economic extraction.

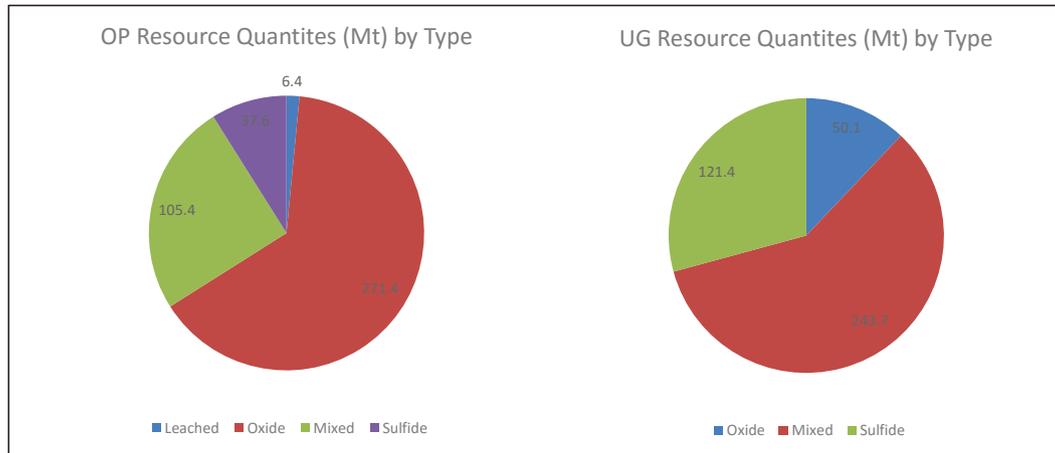
The Statement of Mineral Resources for the open cut areas has been constrained by the topography and a series of pits which were generated with Measured, Indicated and Inferred resources at a Cu price of 3.50 USD/lb and a Co price of 15.00 USD/lb. RPM has included all ore types in the Mineral Resources although the current metallurgical testwork indicates that lower recoveries are expected to be achieved for sulphide material through the current plant as outlined in the CPR. RPM highlights that a testwork program was undertaken on mixed and sulphide materials based on the development of a flotation and roasting processing plant, which results in recoveries and costs as outlined below. As such, RPM considers the mixed and sulphide material shows reasonable prospects for economic extraction in the future utilising lower recoveries. In reporting of the Underground Mineral Resources, RPM have utilised a similar revenue cashflow approach using an average underground mining cost of 52 USD/t. See the CPR for further details.

One of the eighteen resource models (Dipeta Syncline(UG reported area)) did not have a calculated profit variable, so a copper equivalent formula was derived for oxide ore types: $CUEQ = ACU + (ACO \times 3.171)$, and for mixed/sulfide ore types: $CUEQ = TCU + (TCO \times 2.386)$. Assumed metal recoveries were 92.15% Cu and 89.3% Co for oxides and 85% Cu and 62% Co for mixed and sulfides. Copper equivalent cutoffs of 1.5% for oxides and 1.85% for mixed and sulfides were used to define the underground Mineral Resource. These cutoffs equate to about \$96/tonne for oxides (\$44 processing cost plus \$52 mining cost) and \$107 for mixed and sulfides (\$55 processing cost plus \$52 mining cost).

In reporting of the Underground Mineral Resources, RPM have utilised a similar revenue cashflow approach using an average mining cost of \$52/t. The processing, transport and downstream costs are the same as those utilised for the open cut analysis. RPM notes that an underground scoping study has been completed on the dipeta syncline, as outlined in **Section 10**.

RPM notes that the assumed costs are opex only and this analysis does not include the CAPEX required to construct the additional plant to process the sulphide material which is outlined in **Section 10**. While this CAPEX is significant, as outlined in **Section 10**, a scoping study completed on a small portion of the reported underground resource demonstrates the economic viability of underground mining. Based on this study, the large open pit and underground mineralisation and high level analysis the currently defined mixed and sulphide resource demonstrate reasonable prospects for economic extraction. RPM does however highlight that additional further mining studies, drilling and testwork and trade off studies are required to confirm this potential.

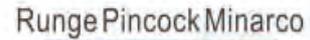
The geologic interpretation models consist of a set of 3D solids, generated using implicit modelling, one for each interpreted rock type such that the metal content was estimated considering the whole volume of the blocks. As such this method does not incorporate ore loss or dilution into the block estimates.

Figure 7-1 Graphical Representation of the Mineral resource Quantities as at 31st December 2016 excluding Stockpiles

7.4 Estimation Parameters and Methodology

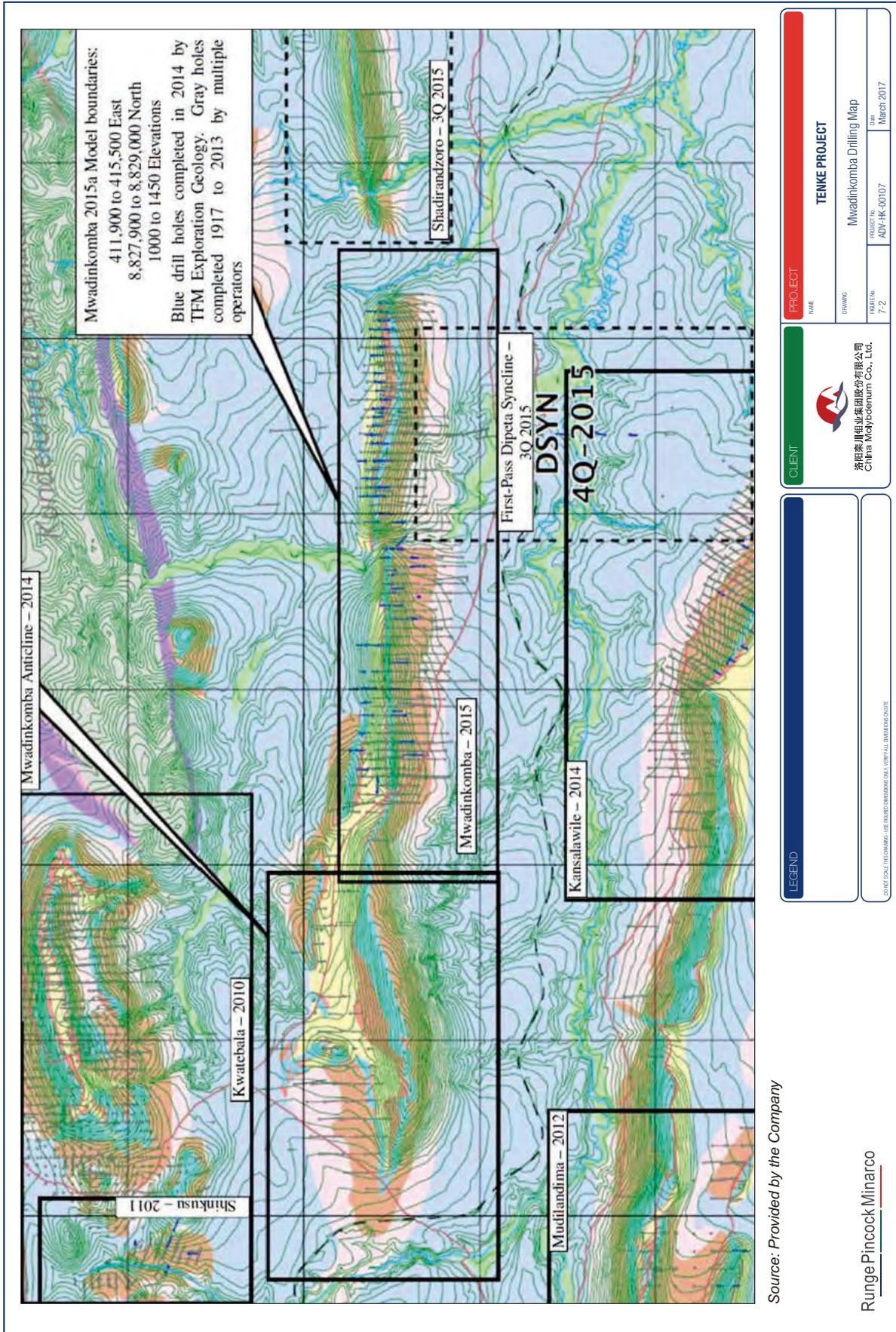
While **Table 1** as required by the JORC Code 2012 edition is presented in **Appendix B** for reference a summary of the resource estimate parameters is provided below:

- Due to uncertainties in the sample procedures and limited QA/QC data only the post 1971 drilling was included in the estimates, however 90% of the data is from the Company's drilling post 2006 which is of excellent quality. Drilling which was included in the estimates has been conducted on a variety of spacing's via mainly surface diamond core. Surface drilling was generally conducted on larger spacing down to 50m by 50m with close spaced drilling being used to define the resource with higher confidences, especially inside the structurally more complex sectors, drilling was increased until the interpretation reached an adequate level of certainty. Implicit modelling using MineSight was utilized to build the solids used to code the resource block models of the Project. **Figure 7-2** graphically shows the drilling for the Mwadinkomba deposit while **Figure 7-3** and **Figure 7-4** show the drill hole locations for Tenke and Fungurume Extension, respectively.
- Bulk Density was estimated based on the interpreted correlation for some rock types over ranges of elevation and weathering profile (Ca estimates). In cases where no correlation could be established, an average value by rock type was used. **Table 7-4** summaries the density function used for all the 19 areas, while **Table 7-5** are examples of density estimates of Fungurume and Mambilime.
- As the base of weathering and the oxidation profiles do not coincide in all deposits within the Project they were modelled separately. The oxidation profile was modelled with the base of oxidation defined using the ratio of acid soluble Cu/total Cu (RATCu) of 0.8, while the mixed zone corresponds to a RATCu between 0.2 and 0.8. The sulphide mineralisation is beneath the mixed zone with very low RATCu ratios. Weathering bases were interpreted utilising geological logging and, because there is a distinct break between a zone of low Ca and high Ca content, the Ca grades were also utilized to define the acid consumption base of weathering.
- A set of correlograms were modelled for the 18 defined estimated resources as outlined for the Dipeta Syncline and Mudilandima in **Table 7-6**. Correlograms were interpreted for TCu, TCo, RATCu, acid soluble/total cobalt (RATCo) and Ca. Down-hole correlograms for each estimation domain were used to infer the nugget effect. RPM interpreted the grade continuity to be approximately the same along strike as down dip. Two spherical model functions were used to fit the experimental correlogram results with an average correlogram range of 120 m at the stratigraphic plane (strike and down dip directions). Importantly the first structure of the correlogram (~60% sill) had a range of approximately 65 m. RPM notes that similar analysis were completed for all deposits and to those outlined in **Table 7-6**.
- Due to the folded nature of the mineralisation TCu, TCo, RATCu, RATCo and Ca grades were estimated using dynamic unfolding in MineSight (MSDU) and some zones with Local Anisotropy Ordinary Kriging (LAK). Acid soluble Cu (ASCu) and Co (ASCc) were obtained indirectly by multiplying the estimated RATCu



and RATCo by the estimated TCu and TCo, respectively. A total of 3 passes were utilised to interpolate the blocks. **Table 7-7** summaries the sample configuration used for the kriging passes.

- Inside the stratigraphic layers, the Company coded the sub-layers or the block position with respect to the footwall-hanging wall plane in order to keep any zonation of the Cu and Co grades in this direction into the beds. MSDU and LAK oriented the search ellipsoids according the local structure (folding) orientation. In the first pass, a minimum and maximum of four and 12 composites were used to estimate the blocks. All the contacts were defined as hard and no capping was applied to the samples nor composites due to no outliers being interpreted within the deposits.

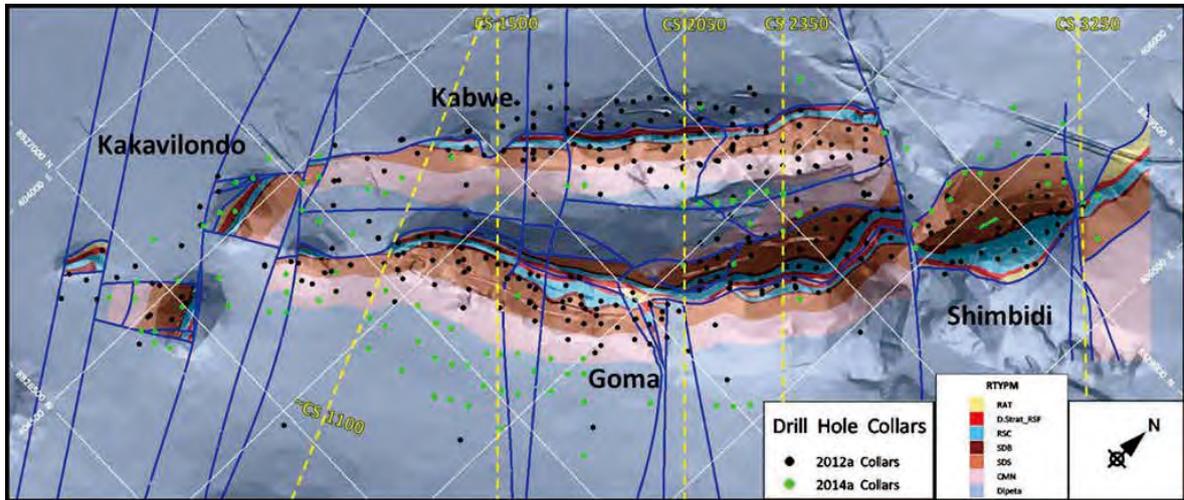


Source: Provided by the Company

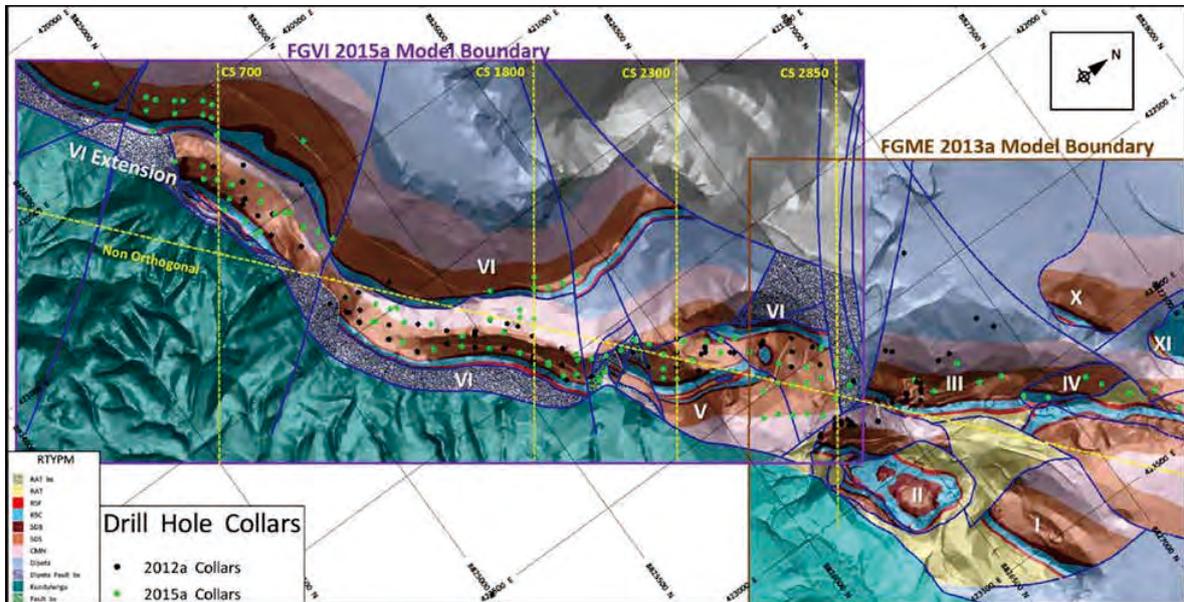
Runge Pincock Minarco

PROJECT	NAME	TENKE PROJECT	
	DRAWING	Mwadinkomba Drilling Map	
CLIENT	PROJECT NO.	ADV-HK-00107	DATE
	FIGURE NO.	7-2	March 2017
LEGEND			
	洛阳森川有色金属集团有限公司 China Maysidunum Co., Ltd.		
<small>NO OFFICIAL ENDORSEMENT OR ENDORSEMENT ONLY. ORIGINAL UNDERSIGNED ONLY.</small>			

Tenke Extension Drill Map



Fungurume Extension Drill Map



Source: Provided by the Company

Runge Pincock Minarco

LEGEND

CLIENT
 洛阳栾川钼业集团股份有限公司 China Molybdenum Co., Ltd.

PROJECT
NAME TENKE PROJECT
DRAWING Tenke and Fungurume Extension Drill Map
FIGURE No. 7-3
PROJECT No. ADV-HK-00107
Date March 2017

Table 7-5 Density Calculation Methods

Area	BD function
Dipeta	Elevation
Fungurume	Elevation
Fungurume Extension	Elevation
Kavifwafwaulu	Elevation
Kazinyanga	Elevation
Kasanlawite - Kamalondo	Ca
L3K	Elevation
Kwatebala	Elevation
Mambilima	Ca
Mwadinkomba Anticline	Elevation
Mudilandima	Elevation
Mwadinkomba	Elevation
Pumpi	Elevation
Sefu	Elevation
Shinkusu	Elevation
Tenke	Ca
Zikule	Elevation
Shadirandzoro	Elevation

Table 7-6 Fungurume and Mambilima Density Estimation Summaries

Fungurume				Mambilima			
Unit	SG cap	Wea	Bulk Density	Unit	Elevation	Wea	SG
RAT	-	1	2.23	RAT	-	-	-0.0003*ELEV + 2.7802
RAT	-	2	0.0199*Ca + 2.3347	RSF	>1000	1	-0.002*ELEV + 4.5548
RAT	>2.65	2	2.65	RSF	<=1000	1	2.6
RSF	-	1	2.25	RSF	>1125	2	-0.0011*ELEV + 3.9184
RSF	-	2	0.0111*Ca + 2.47	RSF	<=1125	2	2.65
RSF	>2.65	2	2.65	RSC	-	1	-0.0018*ELEV + 4.2758
RSC	-	1	2.22	RSC	-	2	-0.0001*ELEV + 2.6535
RSC	-	2	0.0277*Ca + 2.2185	SDB	>1000	1	-0.0013*ELEV + 4.0322
RSC	>2.65	2	2.65	SDB	<=1000	2	2.58
SDB	-	1	2.33	SDB	-	2	-0.0002*ELEV + 2.8081
SDB	-	2	0.0137*Ca + 2.5105	SDS	>1000	1	-0.0018*ELEV + 4.3902
SDB	>2.65	2	2.65	SDS	<=1000	1	2.6
SDS	-	1	2.2	SDS	-	2	-0.00009*ELEV + 2.7334
SDS	-	2	0.0034*Ca + 2.5573	CMN	-	all	-0.0003*ELEV + 2.6975
SDS	>2.65	2	2.65	Dipeta	-	all	-0.000008*ELEV + 2.6761
CMN	-	all	2.6	Unknown Rock	-	all	2.5
Dipeta	-	all	2.6				

- As part of the cut off grade revenue based profit analysis both total acid consumption (TAC) and net acid consumption (NAC) were required. Ca allow indirect assessment of TAC and NAC according the following functions for oxide mineralisation:

$$\text{TAC} = 15.13 \cdot \text{ACu} + 16.6 \cdot \text{ACo} + 51.21 \cdot \text{Ca} + 20.28.$$

$$\text{NAC} = 7.22 \cdot \text{ACu} + 13.44 \cdot \text{ACo} + 39.9 \cdot \text{Ca}.$$

RPM notes that TAC and NAC do not apply for the mixed and sulphide zone, which utilised different processing parameters as outlined in **Section 10**.

Table 7-7 Correlogram Models of Dypeta Syncline and Mudilandima

Area	Element	Unit	Nugget	First Structure			Second Structure					
				Sill	Range			Sill	Range			
					Z	X	Y		Z	X	Y	
DSYN	TCU	RAT	0.23	0.69	11	11	11	0.08	12	245	245	
		RSF	0.11	0.76	7	9	9	0.13	20	322	322	
		RSC	0.26	0.65	11	15	15	0.10	77	201	201	
		SDB	0.40	0.55	15	17	17	0.06	72	359	359	
	TCO	RAT	0.24	0.66	7	7	7	0.10	74	277	278	
		RSF	0.16	0.68	4	15	15	0.16	26	126	126	
		RSC	0.26	0.60	4	24	24	0.14	26	65	65	
		SDB	0.11	0.78	6	18	18	0.11	12	109	109	
	Ca	UnWeath	0.10	0.64	7	9	9	0.26	36	466	466	
	MUDI	TCU	RAT	0.12	0.58	27	5.2	5.2	0.30	6	374	374
			RSF	0.51	0.45	20	229	229	0.04	28	494	494
			RSC	0.11	0.77	16.4	17	17	0.12	39	429	429
SDB			0.01	0.37	17	16	16	0.62	19	336	336	
SDS			0.17	0.71	15.6	60	60	0.13	506	156	156	
TCO		RAT	0.06	0.53	9.6	13	13	0.42	53	168	168	
		RSF	0.09	0.88	11.3	20	20	0.03	27	194	194	
		RSC	0.67	0.21	14.8	303	303	0.13	61	305	305	
		SDB	0.02	0.23	6.8	8	8	0.74	12	398	398	
		SDS	0.26	0.51	8	39	39	0.23	135	298	298	
Ca		WEATH	0.03	0.86	8.1	67	67	0.13	100	73	73	

Table 7-8 Sample Configuration.

	Kriging Pass			Classification		
	1st	2nd	3rd		Min. DH	Max, avg. distance (m)
Search Distance (m)	75	150	300	Measured	4	50
Min Composites	4	3	1	Indicated	3	100
Max Composites	12	12	12	Inferred	1	500

7.4.1 Validation

To validate the block model, RPM visually compared estimated and composite grades observing a high coincidence between them. RPM also undertook swath plots (examples shown in **Figure 7-4**) and concluded that the comparison between the block estimates and composites were within the acceptable range and the estimations have an appropriate level of error-smoothing for the style of mineralisation. RPM considers that the sample configuration estimations suitable for the style of mineralisation and the results unbiased with respect to the composites (nearest neighbour estimates) and keep the variability across the stratigraphic sequence. RPM recommends during future estimations, smoothing must be validated with discrete Gaussian charts and reporting of at least another sampling configuration to assess the impact of using more or less composites.

7.4.2 Classification

To report the Mineral Resources and be consistent with the JORC requirement of 'Reasonable Prospects for Eventual Economic Extraction' RPM constrained the block estimates by the topography and an economic pit which was estimated with Measured, Indicated and Inferred resources and at a copper price of \$3.50 per pound. Metallurgical recoveries and costs were set as per the Ore Reserve statements as outlined in **Section 8** for the oxide layer, and **Section 10** for the open pit and underground resources.

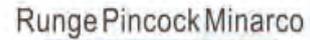
A detailed statistical analysis suggested that a composite spacing of 50 m with a minimum of four composite from four drill holes was appropriate for classification of Measured Mineral Resources and 100 m with a minimum of three composites from three drill holes was appropriate for classification of Indicated Mineral Resource and one composite from 1 drill hole a maximum distance of 500 m for classification of Inferred Mineral Resource which would be compliant with the recommended guidelines of the JORC Code. These distances were based on the variogram ranges for the strike and down dip directions of continuity and an interpretation of the geological and grade continuity through visual inspection within the mineralisation. These distances represent the average distance between the composites and the estimated block. Based on this detailed statistical analysis, RPM's search method utilised for the estimation was appropriate for classification of Measured, Indicated, although RPM would recommend that Inferred Mineral Resources would be based on more than one drill hole in future estimates, as outlined in **Table 7-8**.

7.5 Exploration Potential

The Project has a long history of systematic exploration which has included geological mapping, geophysical and geochemical surveys as well as a large amount of surface diamond drilling. These have been undertaken over numerous generations within the last 100 years. The main focus has been on the vast bulk of outcropping low acid-consuming high grade oxide deposits for which Mineral Resources – Ore Reserves have been estimated. The sulphide extension at depth of these defined oxides resources has been explored and defined as resources in most of the zones, however the exploration potential of this area is considered excellent.

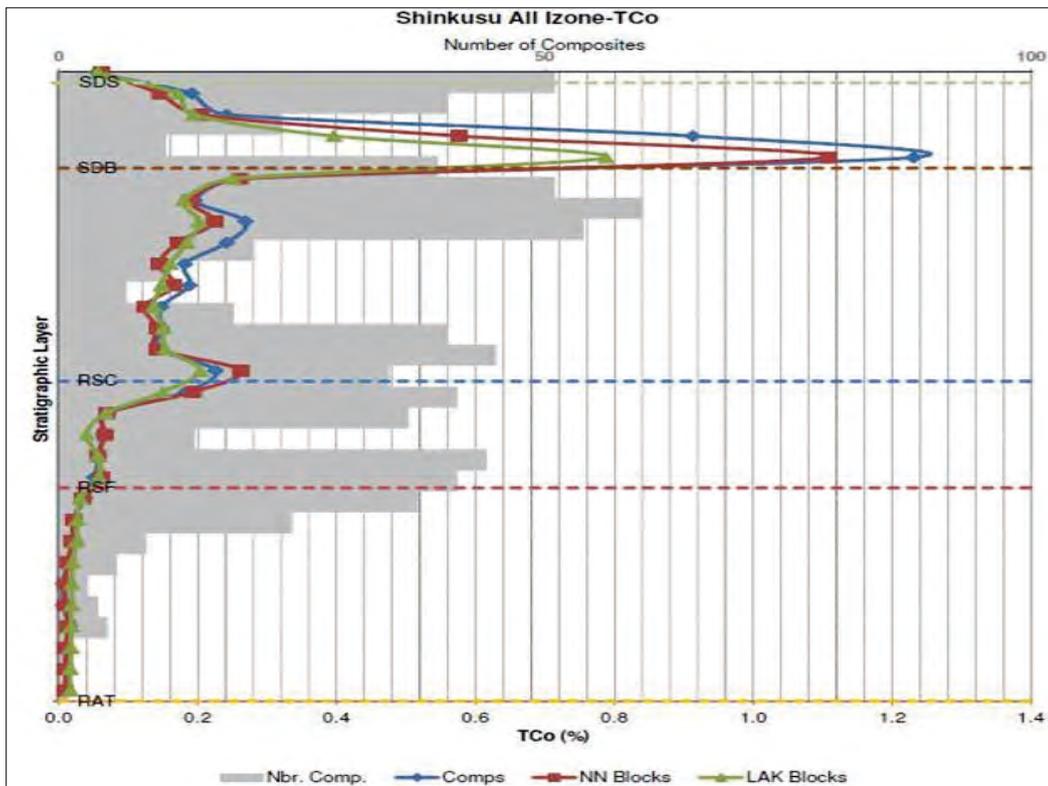
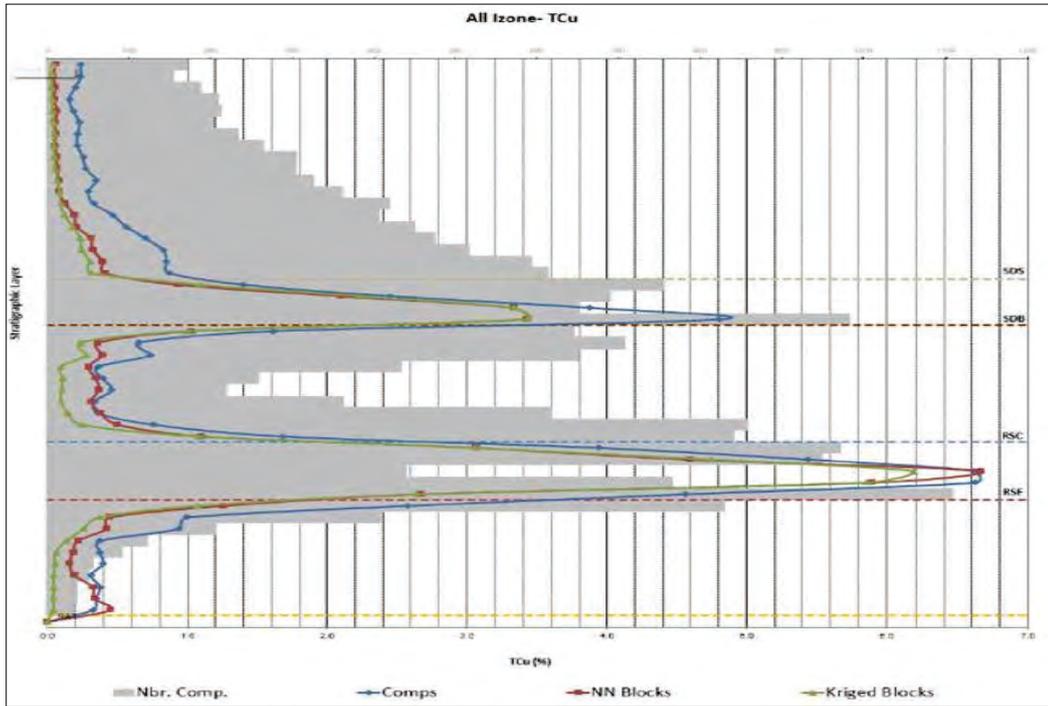
Following a review of the data RPM considers there to be potential for the identification of further bodies of economic interest within the concession area. RPM considers the large concession holding of the Company contains a number of targets which present opportunities to increase the resource base and add feed sources to the plant and add to the mine life, these include:

- **Inferred material:** Within the current final pit designs for the Project a total of approximately 10 Mt of "inferred" material has been reported. This is particularly prevalent in Mudilandima deposit with 3.4 Mt of Inferred materials inside the reserve pits. This material has been excluded in the Ore Reserves estimate, and as per the requirement of the JORC Code the current Ore Reserve schedule, as presented in this Report, attributes a waste mining cost to this material with no revenue from the contained metal. RPM considers there is high likelihood that with additional exploration drilling to increase geological confidence, large portions of this material can be upgraded and included as part of the Ore Reserve estimate. RPM highlights that using the cost profiles and modifying factors as those applied in the mine design and production schedule these Mineral Resources show 'Reasonable Prospects for Eventual Economic Extraction'.
- **Oxide Regional Exploration Targets:** The Company has developed exploration around the known mineralized areas. **Figure 10** shows the several targets that have been defined between the south side of the south limb and Zikule project, these are: Kamalondo South, Kansalawile South, Kafufya, Mukanzila, Kachimilambe, Kakapidi, Zakeo. Although the current drilling on these areas shows low copper grades,
- **Sulphide in Dipeta Syncline:** RPM notes that there is a significant sulphide potential in the extension of Dipeta Syncline where limited exploration has been undertaken to date. The current block model in the



Dipeta Syncline covers approximately 1.2 km of the 14 km extension of the whole structure. Geophysical and limited exploration information indicates the mineralisation has the potential to continue at a similar magnitude along the structure. The Company is currently planning to complete additional drilling in this area along with 10 Magnetotelluric survey lines to help interpret the extent and geometry of the syncline to help quantify the likely resource quantity within the syncline.

- **Other Sulphide Targets:** Additional sulphide targets remain below the Fungurume oxide deposit where thickening of the ore due to thrust faulting is expected to exist. Drilling has yet to be planned for this area due to current mining activity.
- **Lateral and Vertical Extensions:** The geological continuity limit of the mineralized beds is unknown; therefore, the extension of the resources is given for the block model limits. RPM notes that several zones of mineralisation might be extended vertically and at the dip direction outside of the block model extents. In addition to the currently reported resource within the pit designs and the underground extension under the pits, large potential of resources exist which is going to be limited for the reasonable prospects for eventual economic extraction rather than geologic limits.



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CLIENT

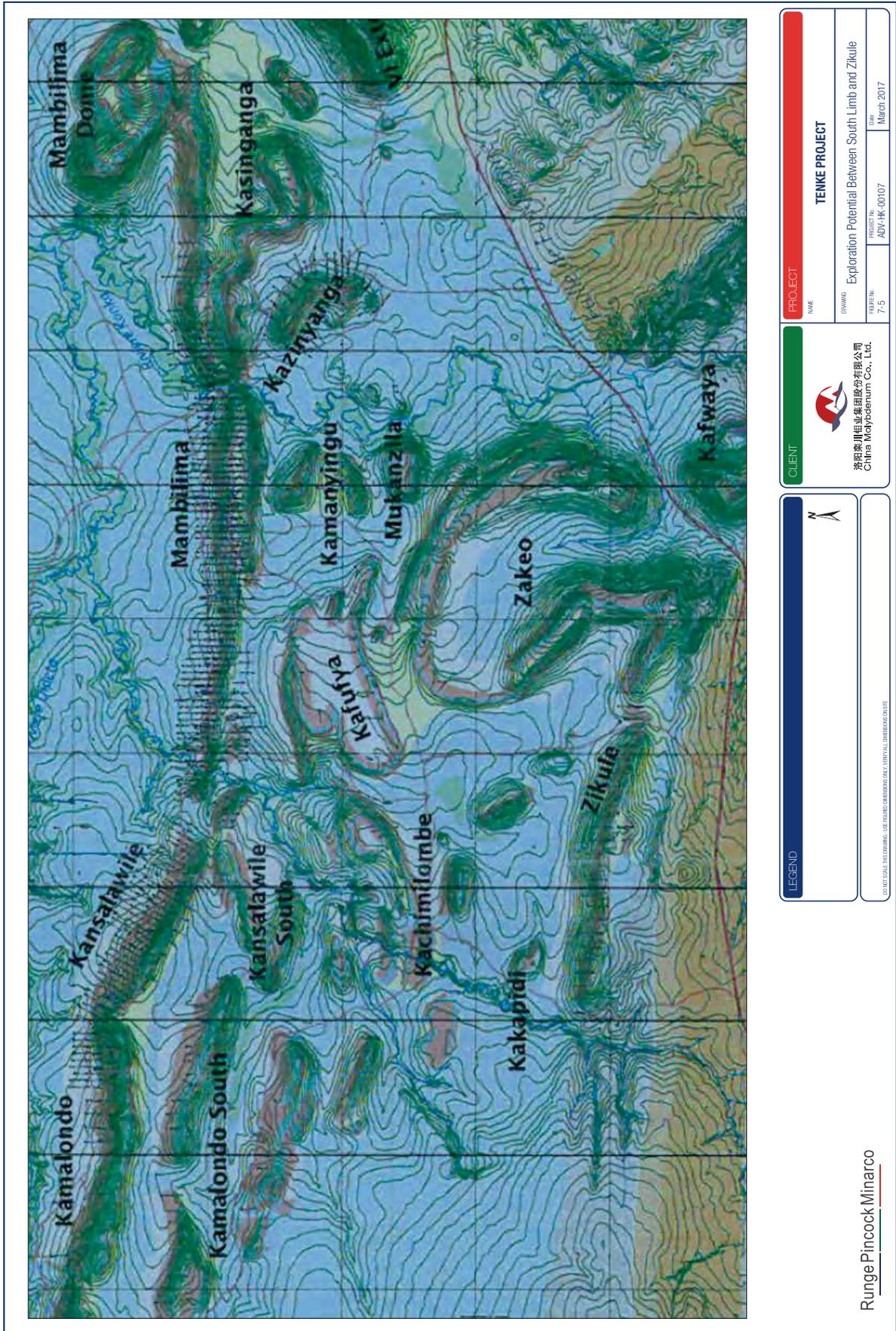


洛阳栾川钼业集团股份有限公司
China Molybdenum Co., Ltd.

PROJECT

NAME	TENKE PROJECT	
DRAWING	Swath Plot Profile of Fungurume	
FIGURE No.	PROJECT No.	DATE
7-4	ADV-HK-00107	March 2017

Runge Pincock Minarco



PROJECT NAME	TENKE PROJECT	
	DRAWING NUMBER	Exploration Potential Between South Limb and Zikule
CLIENT	PROJECT NO.	ADV-HK-00107
	DATE	March 2017
LEGEND	 中国钼业集团有限公司 China Molybdenum Co., Ltd.	
	中国地质调查局 地质研究所 地质研究所 地质研究所 Geological Institute of China Geological Survey	

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8. JORC Ore Reserves

The JORC Code defines an 'Ore Reserve' as the economically mineable part of a Measured and/or Indicated Mineral Resource. It includes diluting materials and allowances for losses, which may occur when the material is mined. Appropriate assessments and studies have been carried out, and include consideration of and modification by realistically assumed mining, metallurgical, economic, marketing, legal, environmental, social and governmental factors. These assessments demonstrate at the time of reporting that extraction could reasonably be justified. Ore Reserves are sub-divided in order of increasing confidence into Probable Ore Reserves and Proved Ore Reserves. (JORC Code - Clause 28).

8.1 Areas of Ore Reserves

The estimation of Ore Reserves is based on the number of areas which are planned to be exploited through large scale open cut mining methods, plus the ore work-in-progress stockpiles:

Table 8-1 Ore Reserve Areas

Area	Method	Quantity (Mt)
Katol	Open Pit	7.1
Fungurume V	Open Pit	15.7
Mambilima	Open Pit	18.8
Mwandinkomba	Open Pit	7.2
Tenke	Open Pit	10.5
Zikule	Open Pit	0.5
Fwaulu	Open Pit	3.5
Fungurume	Open Pit	13.5
Kanzinyang	Open Pit	1.4
Kansalawile	Open Pit	9.1
Kwatebala	Open Pit	22.5
Mudilandima	Open Pit	6.1
Shadiranzoro	Open Pit	2.0
Shinkusu	Open Pit	2.0
Pumpi	Open Pit	13.4
Stockpile	Open Pit	48.2

8.2 JORC Statement of Ore Reserves

The Proved and Probable JORC Ore Reserves estimate for the Project is summarized in **Table 8-1** and shown graphically in **Figure 8-1**, however further details are provided in **Appendix D** showing the breakdown by pit area. The JORC Ore Reserves estimates reported below are included in the Measured and Indicated Mineral Resources quantities reported in **Section 7**. RPM has estimated the total Ore Reserves to be approximately **181.6 Mt** at an average grade of 2.2 % ASCu and 0.25% ASCo, comprising **125.1 Mt** of Proved and **56.5 Mt** of Probable Ore Reserves.

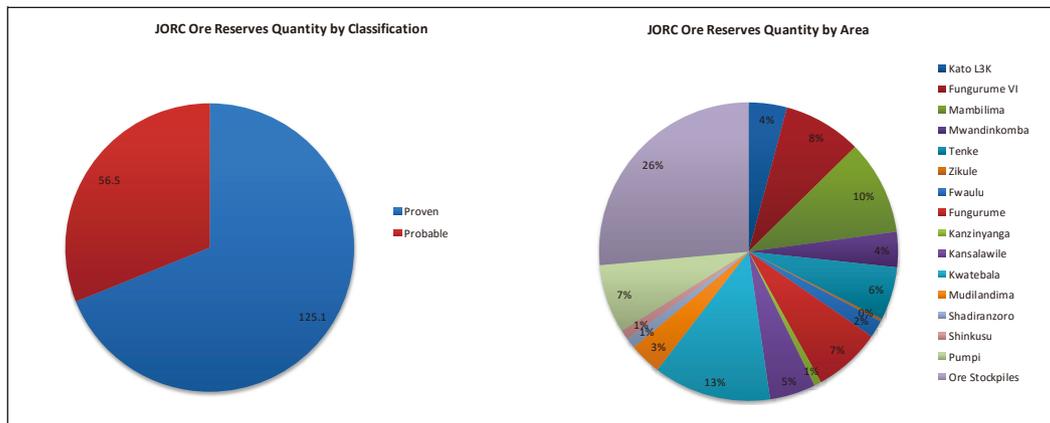
Table 8-2 Statement of JORC Ore Reserves Estimate as of 31st December, 2016

Area	Quantity (Mt)	TCu (%)	TCo (%)	ASCu (%)	ASCo (%)	TCu (Mlbs)	TCo (Mlbs)	ASCu (Mlbs)	ASCo (Mlbs)
Open Pits									
Proved	76.9	3.1	0.32	2.8	0.25	5,285.5	544.0	4,691.2	427.7
Probable	56.5	2.7	0.30	2.4	0.25	3,365.3	376.1	3,002.6	308.7
Sub Total	133.4	2.9	0.31	2.6	0.25	8,650.7	920.0	7,693.8	736.4
Ore Stockpiles									
Proved	48.2	1.3	0.31	1.2	0.26	1,389.6	326.6	1,236.4	281.4
Probable		0.0	0.0						
Sub Total	48.2	1.3	0.31	1.2	0.27	1,389.6	326.6	1,236.4	281.4
Combined									
Proved	125.1	2.4	0.32	2.2	0.26	6,675.1	870.5	5,927.6	709.1
Probable	56.5	2.7	0.30	2.4	0.25	3,365.3	376.1	3,002.6	308.7
Grand Total	181.6	2.5	0.31	2.2	0.25	10,040.4	1,246.6	8,930.2	1,017.7

Notes:

1. The Statement of JORC Ore Reserves has been compiled under the supervision of Mr. Rondinelli Sousa who is a full time Senior Mining Engineer employed by RPM and is a Member of the American Society of Mining, Metallurgy & Exploration (SME). Mr. Sousa has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration to qualify as a Competent Person as defined in the JORC Code.
2. Tonnages are metric tonnes
3. Copper price: 2.88 USD/lb and Cobalt price: 12.40 USD/lb
4. Ore stockpiles include working-in-progress stockpiles balance as in the end of 31st December 2016
5. Figures reported are rounded which may result in small tabulation errors. Ore Reserves have been estimated under the 2012 Edition of the JORC Code.

Figure 8-1 Graphical Representation JORC Ore Reserves within the Final Pit Designs and Ore Stockpiles



8.3 JORC Ore Reserves Estimation Procedure

Ore Reserves were estimated using a suit of specialized open pit mine planning software packages, which includes the pit optimization program 'Whittle', the haul analyze program 'HaulNet', and the production schedule program XPAC Open Pit Metals Solution 'OPMS'. The input parameters selected by RPM are based on the review of the mining studies completed by the Company, discussions with site personnel and site visit observations. To enable the estimation of JORC Ore Reserves, RPM has:

- Reviewed approach, assumptions and outcomes from the Company mine planning studies, including the operating and capital cost forecasts;
- Reviewed information on current mine performance including operating costs and processing recoveries;
- Verified the results of the Whittle optimisation and selection of appropriate pit shells;
- Reviewed the mining method and current life of mine designs;
- Reviewed methodology used to estimate ore recovery parameters in the model;
- Performed independent simulation of production schedules using the specialized production schedule program 'OPMS'. The simulation for each deposit is outlined in Section 9.5 and was undertaken to ensure the life of Project schedule had appropriate blending for the revised Ore Reserves and pit designs.
- Verified the variable gross value pit calculation applied as suitable for use in an Ore Reserve estimate;
- Generated an economic model for the LOM schedule incorporating operating and capital costs and revenue as detailed in **Section 13** and outlined below. RPM reviewed the operating and capital cost estimates prior to applying them in the economic model.

8.4 JORC Ore Reserves Estimation Parameters

RPM has determined suitable technical parameters to apply in the Ore Reserve estimation process following; discussions with site personnel, review of feasibility level documents, proposed life of mine plans, mining method, tailing dam capacity and the forecast processing plant recoveries for the areas of the Project where Measured and Indicated Resources have been estimated. Inferred Mineral Resources cannot be used for Ore Reserves estimation and were not included as part of the Ore Reserve estimate.

The following parameters have been used for the Ore Reserve estimate:

- An average Copper and Cobalt metallurgical recovery of 92.15% and 89.30%, respectively, applied to all ore types
- Operating and capital costs based on feasibility level documents. Refer to **Section 13** for the estimation of operating costs. RPM notes that the cost incremental with depth varies per pit. Additionally both the haulage and acid consumption varies per pit and in particular acid consumption varies per block. The unit costs applied are averaged based current information and expected rates over the mine life;
- Long Term Consensus Forecast metal prices of USD2.88 per pound Copper and USD12.40 per pound Cobalt were utilised for the pit optimisations and economic modelling. RPM is note a price forecasting expert, as such has based these prices on long term bank consensus forecast provided form a third party expert company.
- Pit optimization input parameters as shown in **Table 8-2**.

RPM highlights that while the unit costs presented in **Table 8-2** have been applied to the pit optimisations, a revenue cash flow analysis has been undertaken to justify the economic viability of the Ore Reserves presented. The forecast schedule shown in **Section 9**, for the basis for this analysis while **Section 13** details the unit costs, including mining, haulage by pit, processing, downstream and transport costs got each product produced. The resultant annualised costs from this model are presented in **Section 13** along with the LOM CAPEX require to extract the Ore Reserves.

Table 8-2 Pit Optimization Parameters Used in the Ore Reserves by RPM

Description	Units	Value
Price		
Copper (includes adjustment)	\$/lb	2.88
Cobalt (includes premium)	\$/lb	12.40
Mining Costs		
Sustaining Capital	\$/tonne	0.30
Ore Mining	\$/tonne	3.43
Waste Mining	\$/tonne	3.38
Processing Cost	\$/tonne	47.68
Haulage Cost	\$/tonne	2.86
Acid Consumption Cost	\$/kg	0.26
Cu Downstream	\$/lb	0.39
Co Downstream	\$/lb	6.61
Dilution and Recovery		
Mining Recovery	%	100.00
Mining Dilution	%	5.00
Average Metallurgical Recovery		
Average Copper Recovery	%	92.15
Average Cobalt Recovery	%	89.30
Expected Internal Cut off Grade		
Copper	%	1.05
Pit Slopes		
Overall Slope Angles	Degrees	Varies
Cost by Depth		
Incremental Cost per Bench	\$/tonne	Varies
Discount Rate		
Bench Discount Rate (5m)	%	0.67

Source: Provided by the Company and reviewed by RPM.

Notes:

1. All costs in US Dollars
2. Tonnage in metric tonnes
3. Average Cu cutoff grade

9. Oxide Open Pit Mining

The current operations and Ore Reserve estimate are based on Oxide material mined via open pit methods. No sulphide material is included in the current Life of project schedule; however there is significant potential for a sulphide operation, as outlined in **Section 13**.

9.1 Summary

Mining is undertaken via conventional truck and shovel open pit methods, and over the Life of Mine ("LOM") ore is planned to be sourced from fifteen separate open pits areas with a total of 26 discrete pits been designed. In many cases, this mining can be considered hill-top removal with minimal stripping, however as the pits progress deeper stripping requirements increase. Mining is performed with 12-yd front end loaders, RH120 and RH90 diesel-hydraulic excavators, CAT 777 (90 t) haul trucks, with Hualmax 80 t capacity trucks used for overland ore transportation from outlying pits to the processing plant run-of-mine (ROM) stockpiles. The Company aims to have five active mining pits, which includes some relatively close to the processing plant and some quite distant which provides flexibility in both the feed grade and ore types and cost structure of the operation. The plant has a throughput rate of 5.6 Mtpa with the current equipment having a capacity (total rock) up to 52Mtpa. This results in significant stockpiles being created which will be processed at the cessation of mining in 2038.

RPM has estimated the total Ore Reserves to be approximately **181.6 Mt** at an average grade of 2.2 % ASCu and 0.25% ASCc resulting in a total project of 45 years from 31st December, 2016. Over the 24 year of mining, the overall pit stripping ratio will average approximately 6.9:1, or 6.9 tonnes of waste mined for every 1.0 tonne of ore mined. RPM notes that drilling, blasting, loading, and transport activities at the Fungurume, Fwaulu, Mwandinkomba and Tenke mines are currently performed by an owner operator fleet.

Mine operating personnel consist of local equipment operators, local supervisors and several expatriate employees. Maintenance is performed by the local Caterpillar dealer, using employees from throughout Africa. Illegal mining of cobalt is very prevalent in all active mining areas. These miners use hand tools to fill sacks with cobalt ore which they remove from the pit and reportedly sell to third parties in the surrounding communities.

9.2 Mining Method

The ore is located in relatively thin bodies and in some locations the seams are significantly faulted, folded and overturned. The ore is broken via conventional drilling and blasting methods. Front-end loaders are used to load the haul trucks and the high-grade ore is delivered to stockpiles near the primary crusher, and lower grade ore is sent to stockpiles to be processed later in the mine life. Loaders are used to produce ore blend from these stockpiles, such that the material fed to the plant does not see significant short term variation of acid consumption and ore grade. Open cut mining is the preferred mining method as:

- mineralisation occurs near surface;
- minimal initial mining capital investment for open cut mining as mining contractors will be engaged;
- the presence of supporting infrastructure for open cut mining;
- open cut operational costs are lower than underground.

The typical open cut mining method includes:

- drilling of a blast pattern;
- blasting to fragment rock;
- marking out ore zones based on grade control results; and
- loading and hauling of ore and waste rock to its final destination.

9.3 Mine Design and Concept

All mining operations are conducted by the Company using conventional truck and loader open pit mining methods. Waste material from the pits is delivered through a series of haul roads to onsite waste dumps for storage at each of the pits. Ore from the pits is hauled via trucks to the top of the pit prior to haulage to the run of mine ("ROM") stockpiles at the processing facility. Historically ore was placed into one of five stockpiles

depending on the ore type, however this approach was simplified in 2016 to only include 3 stockpiles with the destination of the material determined by the short term planning engineers on site. Ore routing is based on a profit (PRFT) calculation based on information contained within the grade control model. The formula employed is:

$$PRFT=(ACU/100*NPCU)+(KTCO/100*NPCO)-(MUC+HUC+FPC+(UAC*FMNAC))$$

Where:

ACu: Acid Soluable Copper grade

NPCu: \$/lb Cu

KTCO: Total Cobalt grade

NPCo: \$/lb Co

MUC: Mining Unit Cost

HUC: Haulage Unit Cost

FPC: Fixed Processing Cost

UAC: Unit Acid Cost

FMNAC: NAC

The ore at a blast mark-up scale is then assigned a stockpile location based on the following bins:

- ≤\$0 per tonne is Waste
- >\$0 per tonne is Low Grade
- >\$30 per tonne is High Grade 2 (near ROM stockpile used to maintain consistent plant feed grade)
- >\$60 per tonne is High Grade 1 (dumped directly on the ROM for feeding into the plant)

From the ROM pad, ore is fed into a single crusher with priority given to the higher grade material and low acid consuming material. As the mining rate is significantly higher than the throughput rate, material is stockpiled to be processed upon completion of open pit mining.

9.3.1 Geotechnical—Pit Slopes

No significant slope issues have been reported to date, and none should be expected given the to-date mining activities taking place at the tops of the ore zones, which in many cases amounts to hill-top removal. Long range slope angles are reported to be a conservative 35°. Water tables have not been reached and are not expected prior to achieving final limit pit bottoms. The Company did report some relatively minor slope stability issues caused by talc and asbestos mineral zones, plus some complications associated with thrust faulting zones.

Pit slope monitoring using radar technology has been implemented at site and is used as a preventative measure to ensure safe operations. All the information is relayed to the dispatch hut and managed centrally 24/7.

9.3.2 Pit Optimisation

RPM has evaluated the block models used in the estimates of the Mineral Resource to confirm the validity of the pit limits employed in the LOM studies prepared by the Company. RPM used only Measured and Indicated material during the pit optimization.

This work of the pit optimisations indicates that RPM could replicate the Company's life of mine pit shells at a revenue factor of 100% (at USD 2.88 /lb Cu) with minimal variation.

9.3.3 Cutoff Grade Analysis

RPM undertook the pit optimization using a cash flow method, since the block definition as either ore or waste varies according to its intrinsic revenue and costs values. In the cash flow method, the ore material is defined by comparing the cash flows that would be generated by processing a given block as ore or mining it as waste.

If the cash flow generated by processing the block is higher than \$0, then the block is reported as Ore; otherwise it is treated as waste. Haulage costs are included in this analysis.

In the simple cases where exists only one process method and processing costs are not based on mathematical expressions that affect the cutoff grade calculation, the ore selection by cash flow will produce the same result as that produced by the use of marginal cutoffs. This is not the case of the Tenke project.

The processing costs associated with the Tenke project are strongly related to the block acid consumption, which is estimated based on the concentrations of Cu, Co and Ca through mathematical expressions. In addition, although the Mg concentration is not being used to estimate acid consumption, it does have an impact on quicklime consumption in the plant. Thus result, RPM considers that the cash flow method is the most suitable method to define the mineable quantities within the optimized pits.

9.3.4 Mine Design Parameters

The mine design parameters for the phase and interim pit designs are listed in **Table 9-1**.

Table 9-1 Mine Design Parameters

Item	Value
Haul Road Width	26 m
Ramp Grade	10%
Bench Height	7 to 15 m
Bench Operating Width	30 m
Interramp Slope Angle	38°
Overall Slope Angle	16° to 42°

Source: Provided by the Company and reviewed by RPM.

RPM has review the current mine plans for the pits which will mined over 24 years (combined Tenke) and considers that the pit limits and phases were designed with suitable level of detail taking into account the recommended geotechnical and mining operation parameters.

9.3.5 Waste Dumps

RPM have not been provided with detailed waste dump designs for each of the pits, as well as dumping strategies for the remainder of the mine life; however, understands that the waste is planned to be stored in separate dumps located adjacent to the each pit. RPM is aware there is adequate storage capacity for low level dumps which require minimal designs to support both the Ore Reserve and Upside Production Schedules.

9.3.6 Equipment Plan

Mining at the site utilizes small equipment, typically CAT 992 loaders and CAT 6030 hydraulic excavators (which are being phased out in preference to loaders), placing ore or waste into CAT 777 trucks, and into Cat Haulmax (80t) trucks for long distance transportation to the processing plant. Drilling and blasting is performed on 100% of material mined.

Local contractors are sparingly used to assist in hauling ore from the mine to the process plant when quantities of ore exceed the ability of the Haulmax fleet to keep up with mine advancement in the outlying pits.

All maintenance is performed by the local Caterpillar dealer, Congo Equipment. The majority of component rebuilds are completed at the Caterpillar rebuild facility located on-site. Maintenance planning is completed through SAP and completed by the Company as opposed to Caterpillar.

The Company maintenance facilities include a modern mine repair facility (capable of servicing larger trucks than currently employed), an arc-welding facility, an equipment washing facility and a component rebuild facility. Modern maintenance planning, including VIMMS monitoring, vibration monitoring, oil analysis, etc. is all performed. Future plans include establishing oil analysis equipment located at site.

Equipment inspections revealed Cat 777 and Haulmax haul trucks in generally good condition, which was expected due to their age, although several dozers had very worn track sprockets which will require expensive replacement in the very near future. Used oil is collected and currently stored outside of the maintenance shop. Bridgestone tires were in use, consistent with world-wide vendor facilities and their global supply agreement.

9.4 Life of Mine Plan and Pit Sequence

The Project has 26 discrete pits within the 15 different ore zones (15 block models) with five pushbacks operating at any one time (Table 9-2). The selection of the pushbacks mining sequence is based on economic considerations which include ore grade, acid consumption estimates, ore haulage distance, as well as stripping. All planning on site, both long term and short term is performed using the long term block models, however the Company plans to develop shorter-range planning models that incorporate blast hole sampling. Long term sequencing is performed with Minemax while short term sequencing is done using MineSight SSO.

Significant low grade stockpiles have been and will continue to be developed due to the excess capacity of the mining fleet. These will serve as plant ore feed after in-situ reserves are mined out in approximately 24 years, with some stockpiled material being reclaimed to support the capacity plant throughput from Year 15 onwards (2030).

Table 9-2 Ore Reserve Life of Mine Pit Sequence

Pit Source	Unit	Years											LOM
		2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026-2030	
FGME	Ore Mt	3.0	4.2	2.2		0.7		0.3	1.2		0.5	1.5	13.5
	Waste Mt	11.2	20.1	9.6		3.1		3.2	8.1		4.0	6.5	65.8
FGVI	Ore Mt			0.4	0.6	0.8	2.7	1.4				6.4	15.7
	Waste Mt			2.2	5.7	4.3	14.7	5.7				32.4	108.8
FWAL	Ore Mt					0.3			<0.1	0.4	2.5		3.5
	Waste Mt					2.9			2.4	3.9	12.8		20.8
KANZ	Ore Mt								<0.1		0.9	0.4	1.4
	Waste Mt										7.3	0.9	8.1
KASA	Ore Mt					0.7	1.3	3.1	<0.1	1.2	<0.1	1.5	9.1
	Waste Mt					9.6	11.9	10.6	3.1	2.7	5.1	20.0	63.1
KATO	Ore Mt			1.0						0.2	6.0		7.1
	Waste Mt			3.7						1.8	35.6		41.1
KWAT	Ore Mt	1.2	1.6		3.2	2.6	1.6	2.1	2.6	0.1	4.3	3.0	22.5
	Waste Mt	7.3	7.7		10.3	6.9	7.4	15.1	6.7	6.6	19.1	19.3	106.4
MAMB	Ore Mt			0.3	1.0	1.8	1.5	0.2	1.7	2.4	5.8	4.2	18.8
	Waste Mt			6.1	8.4	11.7	8.5	3.1	16.0	14.8	71.9	49.4	190.0
MUDI	Ore Mt										6.1		6.1
	Waste Mt										46.7		46.7
MWAN	Ore Mt	1.6			0.3		0.4				<0.1	3.2	7.2
	Waste Mt	11.0			0.6		3.4				34.7	22.1	71.7
PUMP	Ore Mt		2.0	4.1	2.7	0.8					2.7	1.0	13.4
	Waste Mt		12.0	17.3	5.4	0.7					35.6	3.5	74.5
SHIK	Ore Mt									0.7	1.3		2.0
	Waste Mt									9.1	8.0		18.1
TENK	Ore Mt	2.2	0.9	0.9	2.2	1.5			0.2		2.7		10.5
	Waste Mt	14.4	4.6	5.2	12.5	5.2			4.0		39.0		78.8
ZIKU	Ore Mt										0.5		0.5
	Waste Mt										7.3		7.3
ZORO	Ore Mt							0.4	0.6	0.1	0.9	0.1	2.1
	Waste Mt							6.3	4.3	0.9	9.5	2.5	23.4

*Average of years

9.4.1 Monitoring System

The Company uses a Modular Mining Dispatch system to track the haul trucks and loading equipment. Thirty six 777 and six Haulmax haul trucks are currently in use, at five different areas, as mentioned above. A sophisticated control room is used for equipment monitoring. The Company also reports using a fatigue monitoring system in all haul trucks which detects operator issues and reports them to the dispatch control room operator for their attention. These devices typically provide warnings to the operator when eye closure lasts for a brief period of time.

9.4.2 Ore Reserve Schedule

The Project production plan prepared by RPM is based on measured and indicated resources only and is shown in **Table 9-2 and Table 9-3** and graphically in **Figure 9-1**. Specifically, the design pits used were based on measured and indicated material, and the inferred resource that fell within the design pit was included in the waste category.

The initial 5 years of the RPM schedule duplicated the first 5 years of the Company's schedule. This was achieved by using the provided end-of-year face positions as a guide. The remaining years of the mine plan have been developed considering several objectives. The primary aim was to enable the maximum grade of copper ore to be fed to the plant early in the mine life and stockpile the lower grade for later processing. This was accomplished through a staggered introduction of mining from the various deposits and phases in order to maximise cash flow early. The phases developed by RPM, which were based on a higher copper price assumption, were given a lower priority and generally mined towards the end of the schedule.

The mining production capacity was limited to a maximum of 52 million tonnes total movement (ore plus waste material) per year, which was a continuation of the maximum annual capacity of the first 5 years of the Companies schedule.

The ore feed schedule was developed to feed at an average rate of 15,432 tonnes per day (approximately 5.6 Mtpa), with the primary aim of prioritizing the feed of material with the greatest grade of copper, while not exceeding the monthly acid consumption limitation of 2,250 tonnes per day.

Based on the Ore Reserve estimate, the Pit Development Sequence and the Pit Designs, the forecast project mine life is approximately 24 years from 31st December, 2016 in an overall project life of 33 years. RPM considers that the proposed Life of Mine Development Sequence and Production Forecast to be reasonable and achievable based on the current mining equipment and designs. RPM does however recommend that further optimisation and short term planning to avoid any short comings in the ore delivery to the plants. This optimisation should focus of the sequence of development in conjunction with capital expenditure and short term grade variability to maximize the profitability of the Project.

RPM notes that that while the pits are forecast to be completely mined by the end of 2041, ore processing will continue 18 years after mining completion, to 2049. During this period the low grade material stockpiled during mining will be reclaimed and represent the entirety of the mill feed.

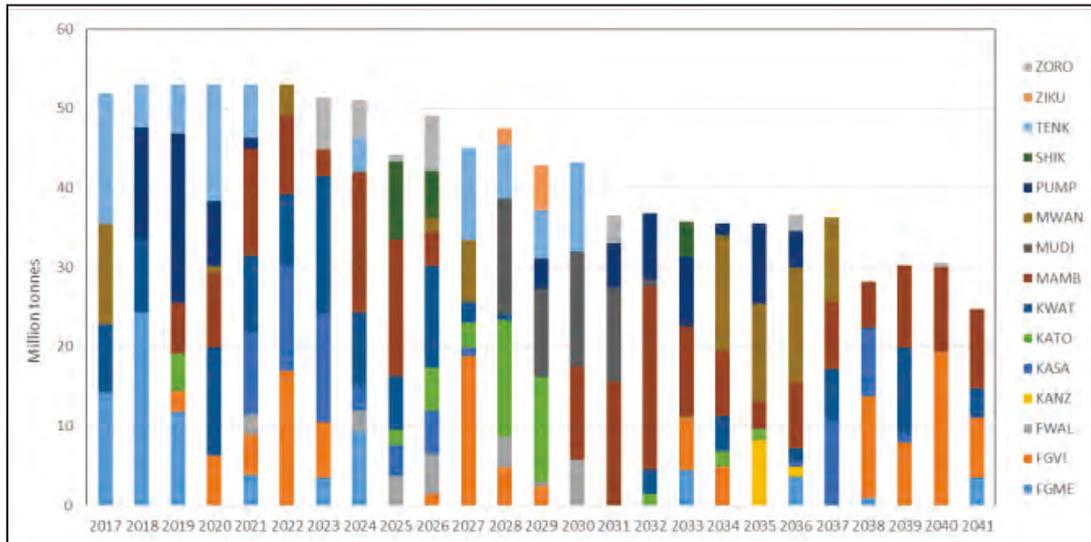
9.5 Comments and Recommendations

RPM considers that the current open cut mining method is best suited for the project and is the most effective means by which to exploit the mineralisation of the project, however notes there is significant upside potential for underground methods.

RPM identified the upside opportunity related to the Inferred resource materials located within the existing Reserves pits limits. Considering these materials can be further upgraded to the Indicated resources category with further drilling and studies, the potential quantities of approximately 10.5 Mt above the average 0.95% Cu internal cutoff grade could be added to the existing Ore Reserves.

RPM considers these points as opportunities within the current production plan, not only to increase revenue and reserve base but also decrease the risk of ore availability in the shorter term production plans.

Figure 9-1 Graphical Representation of Total Material Movement





9.6 Forecast Production

Table 9-3 Ore Reserve Life of Mine Production Forecast

Area	Unit	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	LOM				
Mining	In situ Ore	Mtpa	8.0	8.7	8.9	10.0	9.3	7.1	7.4	6.5	5.0	5.1	5.5	4.6	3.6	3.5	3.7	3.2	2.3	2.0	3.5	3.7	1.5	3.0	3.1	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.4			
	WFO Ore	Mtpa	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	dMCu	%	0.3	0.3	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.25
	WFO Ore	Mtpa	1.0	0.0	0.0	0.0	0.0	1.6	1.1	2.0	0.0	1.1	2.0	0.0	2.1	2.4	3.5	3.2	4.2	4.5	4.5	3.4	3.7	1.8	4.1	0.1	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	48.0
dMCu	WFO Ore	%	3.1	0.0	0.0	0.0	0.0	2.5	1.6	1.6	0.0	4.3	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.0	1.0	1.1	1.1	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4
	Waste	%	0.2	0.0	0.0	0.0	0.0	0.3	0.4	0.4	0.0	0.5	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.28	
	WFO Ore	Mtpa	4.39	4.43	4.41	4.30	4.37	4.59	4.41	4.46	39.2	41.0	37.9	42.0	38.2	39.6	33.1	31.1	32.6	33.0	33.5	33.2	32.6	27.2	27.5	20.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	94.7
	Strip Ratio	t/t	4.8	5.1	5.0	4.3	4.7	6.5	4.9	5.8	5.6	5.0	5.3	7.7	5.6	6.6	4.8	4.4	4.7	5.2	4.9	4.4	4.7	7.9	3.8	4.5	5.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.1
Stockpile Material	HQ	Mtpa	0.4	0.2	0.0	0.1	0.2	0.0	0.2	0.2	0.1	0.1	0.3	0.4	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	LG	Mtpa	2.0	5.3	8.8	13.1	16.7	18.4	21.6	23.5	25.1	27.7	29.0	28.8	29.9	30.3	31.6	32.9	34.7	36.0	36.9	38.2	40.0	38.3	39.9	37.5	35.9	31.6	26.0	20.4	14.8	9.3	3.7	1.5	0.0	0.0	0.0	0.0	
	WIP	Mtpa	46.9	46.9	46.9	46.9	46.9	46.9	46.4	44.2	42.2	42.2	42.2	42.2	40.1	37.7	34.2	31.0	26.8	22.3	17.8	14.4	10.8	8.9	4.8	4.7	4.7	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	0.0
	Total	Mtpa	69.3	52.4	55.7	60.2	63.9	65.3	67.1	68.0	67.4	70.0	71.5	71.4	70.4	68.4	66.3	64.4	62.0	58.9	55.3	53.2	51.3	47.3	44.7	40.2	40.6	35.0	28.4	23.9	18.3	12.7	7.1	1.5	0.0	0.0	0.0		
Processing Plant	dMCu Grade	%	1.1	1.1	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.3	1.3	1.3	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	
	dMCu Grade	%	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
	One Processed	Mtpa	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	
	Acid Consumption	ktpa	600.0	581.1	547.5	411.5	450.0	289.6	313.3	325.3	265.9	291.6	360.0	299.1	264.5	280.3	218.4	226.1	227.8	181.6	188.7	284.3	511.7	654.9	400.0	400.0	400.0	400.0	400.0	400.0	400.0	400.0	400.0	400.0	400.0	400.0	400.0	400.0	
Feed Grade	dTcu	%	4.6	4.8	4.5	4.1	4.1	3.3	3.7	3.2	2.9	3.2	3.0	2.3	2.0	2.1	1.8	1.9	1.8	1.6	1.4	1.8	2.1	2.0	1.9	2.0	2.3	1.9	1.9	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	
	dTCo	%	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
	dCu	%	4.2	4.4	4.1	3.7	3.7	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	
	dCu	%	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Metal Recovery	As/Copper Recovery	%	97.0%	97.0%	97.0%	97.0%	97.0%	97.0%	97.0%	97.0%	97.0%	97.0%	97.0%	97.0%	97.0%	97.0%	97.0%	97.0%	97.0%	97.0%	97.0%	97.0%	97.0%	97.0%	97.0%	97.0%	97.0%	97.0%	97.0%	97.0%	97.0%	97.0%	97.0%	97.0%	97.0%	97.0%	97.0%		
	As/Cobalt Recovery	%	94.0%	94.0%	94.0%	94.0%	94.0%	94.0%	94.0%	94.0%	94.0%	94.0%	94.0%	94.0%	94.0%	94.0%	94.0%	94.0%	94.0%	94.0%	94.0%	94.0%	94.0%	94.0%	94.0%	94.0%	94.0%	94.0%	94.0%	94.0%	94.0%	94.0%	94.0%	94.0%	94.0%	94.0%	94.0%	94.0%	
	Copper Cathode	000 Lbs	462,874	503,761	478,533	446,463	440,925	374,354	394,626	357,426	319,533	343,036	371,283	349,129	218,867	230,466	193,866	204,701	193,292	179,993	158,651	163,517	222,747	274,866	202,119	209,739	233,827	166,392	194,490	183,286	160,551	181,460	173,588	113,987	82,106	61,822	49,329		
	Copper Grade	%	49.2	49.2	49.2	49.2	49.2	49.2	49.2	49.2	49.2	49.2	49.2	49.2	49.2	49.2	49.2	49.2	49.2	49.2	49.2	49.2	49.2	49.2	49.2	49.2	49.2	49.2	49.2	49.2	49.2	49.2	49.2	49.2	49.2	49.2	49.2		
Cobalt Product	Dry Quantity	000 Lbs	89,422	97,198	88,276	87,421	80,516	87,411	97,382	96,801	88,659	95,735	85,570	92,451	95,834	72,491	80,769	70,135	70,611	69,748	69,625	69,545	69,717	50,236	47,603	67,307	55,585	67,497	48,882	45,378	42,079	104,985	23,850	23,850	23,850	23,850			
	Contained Cobalt	%	38.0%	38.0%	38.0%	38.0%	38.0%	38.0%	38.0%	38.0%	38.0%	38.0%	38.0%	38.0%	38.0%	38.0%	38.0%	38.0%	38.0%	38.0%	38.0%	38.0%	38.0%	38.0%	38.0%	38.0%	38.0%	38.0%	38.0%	38.0%	38.0%	38.0%	38.0%	38.0%	38.0%	38.0%	38.0%		
	Moisture Content	%	41.2%	41.2%	41.2%	39.6%	35.3%	35.3%	35.3%	35.3%	35.3%	35.3%	35.3%	35.3%	35.3%	35.3%	35.3%	35.3%	35.3%	35.3%	35.3%	35.3%	35.3%	35.3%	35.3%	35.3%	35.3%	35.3%	35.3%	35.3%	35.3%	35.3%	35.3%	35.3%	35.3%	35.3%	35.3%		
	Net Product	000 Lbs	126,231	137,214	124,620	122,037	97,325	93,999	104,686	104,981	94,663	102,913	97,488	99,384	103,129	74,928	84,618	76,011	75,393	76,038	74,979	74,792	74,387	74,361	74,948	51,004	50,928	72,335	59,754	72,351	74,135	70,281	77,485	112,638	25,334	25,334			

10. Oxide Open Pit Metallurgy and Ore Processing

Below is a description of the current operations, which supports the Ore Reserves stated in this Report. RPM notes that as part of future operations, the Company has completed reviews and testwork of the sulphide material which has resulted in the development of a design study for the construction of an ore flotation and a concentrate roasting plant. This information is presented in the Sulphide Mining Potential in **Section 13**.

A single processing facility with a nominal capacity of 5.6 Mtpa of ROM ore has been constructed on site. Ore from the pits is stockpiled into 5 ROM fingers based on their grade characteristic. Front end loaders are then used to draw from the fingers and create a blended feed for the processing facilities comminution circuit based on grade and acid consumption requirements. The ore processing facilities comprise an agitated leach circuit followed by a solvent extraction-electrowinning ("SXEW") process to produce copper cathode and cobalt hydroxide intermediate products ("CHIP"). Combined the facilities have a throughput rate of 14.8 kilotonnes per day (ktpd) and have overall recoveries of 97% and 94% acid soluble copper and cobalt respectively (94% and 83% total copper) within the oxide ores. Ore is initially crushed, ground, tank leached with sulfuric acid and SO₂, and dewatered. Copper cathode is produced through SXEW from the resultant pregnant leach solution (PLS) and CHIP from a raffinate bleed stream through pH adjustment with magnesium oxide (MgO) following additional purification steps to first precipitate iron-aluminum-manganese (FAM) with air/SO₂ and limestone and then copper with lime.

Due to the mineralisation style acid consumption is substantial (100 kg per tonne or greater) which is expected to increase as mining reaches greater depth and acid solubility decreases. A maximum of 2,225 tonnes per day of sulfuric acid is supplied leaching from two on-site acid plants via burning imported sulfur.

10.1 Preliminary Test Work in support of Tenke Plant Design

A metallurgical ore testing program was undertaken in 2007-2008 on samples representing the early years of mining activity at Tenke and encompassed materials from the Upper, Intermediate and Lower Ore Zones. This work began with bench scale development and confirmation testing and concluded with three pilot campaigns. Bench scale and confirmatory tests were conducted with both individual and blended ore zone samples. Campaign One of the integrated pilot plant operated with a composite ore containing 60% Lower Ore Zone material and 40% Upper Ore Zone material and demonstrated the process from comminution through copper solvent extraction (SX), electrowinning (EW) and cobalt hydroxide precipitation. The subsequent Tenke flowsheet and process design criteria were based on this pilot testing program.

Approximately 1,100 kg of the composite ore was treated in Campaign One. A single LME Grade A copper cathode, weighing 38.2 kg, was produced. Cobalt hydroxide, or an intermediate basic cobalt sulfate product containing from 40% to 45% cobalt, was produced. The magnesium and copper content of this product ranged from 3% to 5% and 0.5% to 1%, respectively. The first pilot plant campaign operation yielded copper and cobalt leaching extractions exceeding 98% and 90% respectively.

Comminution testing indicated that the ore zones tested are very soft to soft, although the Intermediate Ore Zone contained some harder silica bearing material.

Copper solvent extraction (SX) and electrowinning (EW) were examined in pilot scale. High and low-grade pregnant leach solutions (PLS) were fed to an optimized series-parallel SX circuit, using approximately 30% (vol/vol) Cognis LIX984N extractant and Chevron/Phillips SX-80 diluent. Copper extractions realized in the high and low grade PLS circuits were 91% and 95%, respectively.

Low-grade raffinate from the solvent extraction circuit reported for further processing in the metal impurity removal and cobalt hydroxide precipitation stages. A two-stage impurity removal circuit was employed to first remove iron, aluminum and manganese, followed by residual copper in the second stage. Cobalt hydroxide precipitation was carried out in a two-stage circuit, with magnesium oxide added as the precipitating agent. The resulting cobalt product contained from 40% to 45% cobalt, with magnesium and copper contents ranging from 3% to 5% and 0.5% to 1%, respectively.

Integrated pilot plant products and residues were supplied to various metallurgical and environmental consulting firms and equipment suppliers to conduct ancillary work in support of process stream filtration, thickening, tailings deposition and confirmation of process water recycle. These results were captured within the process

test work and environmental summaries in the Feasibility Study document. Mass balance data and product chemistry were provided for comparison with the MetSim® model and to potential clients interested in acquiring the crude intermediate hydroxide.

The extractions for copper and cobalt for all three pilot plant campaigns are summarized in **Table 10-1** along with the original design values used. The feasibility mine plan, project economic model and process plant design were based upon overall plant recoveries of 95% Cu and 83.3% Co (for acid soluble content). The current parameters used for mine planning assume recoveries of 97.0% for copper and 94.0% for cobalt (for acid soluble content) and more closely match actual plant performance. Further variability testing of near-surface oxides ores from throughout the district have shown little variation in copper and cobalt recovery through agitated leaching.

Table 10-1 Pilot Plant Extraction Results

Item	Campaign 1			Campaign 2			Campaign 3			Pilot Plant Average	Design Criteria
	Min	Max	Average	Min	Max	Average	Min	Max	Average		
Cobalt extraction	80.3%	96.3%	89.8%	95.0%	96.3%	95.5%	82.8%	93.7%	90.2%	90.7%	88.5%
Copper extraction	98.4%	99.4%	98.8%	98.6%	99.1%	98.8%	97.8%	98.8%	98.5%	98.7%	95.6%

10.2 Process Design Criteria

The Tenke process plant was originally designed to process 2.9 M tpa (8 ktpd) of oxide copper-cobalt ore and produce 253 M lbs per of cathode copper and 20 M lbs per year of cobalt in CHIP based on average feed grades. The plant was expanded in 2009 and 2010 to process 14,800 tpd (5.4 mtpa) of ore and produce of up to 600 M lbs per year of cathode copper with 37.5 M lbs per year of cobalt in CHIP. During 2016 a debottlenecking project was undertaken which successfully upgraded the capacity to 5.6mtpa.

Life-of-Mine average metal recoveries from oxide ores are projected as follows to be 97% of acid soluble copper and 94% of acid soluble cobalt. The plant required 85Kwatts of power which is supplied from the national grid as outlined in **Section 11**.

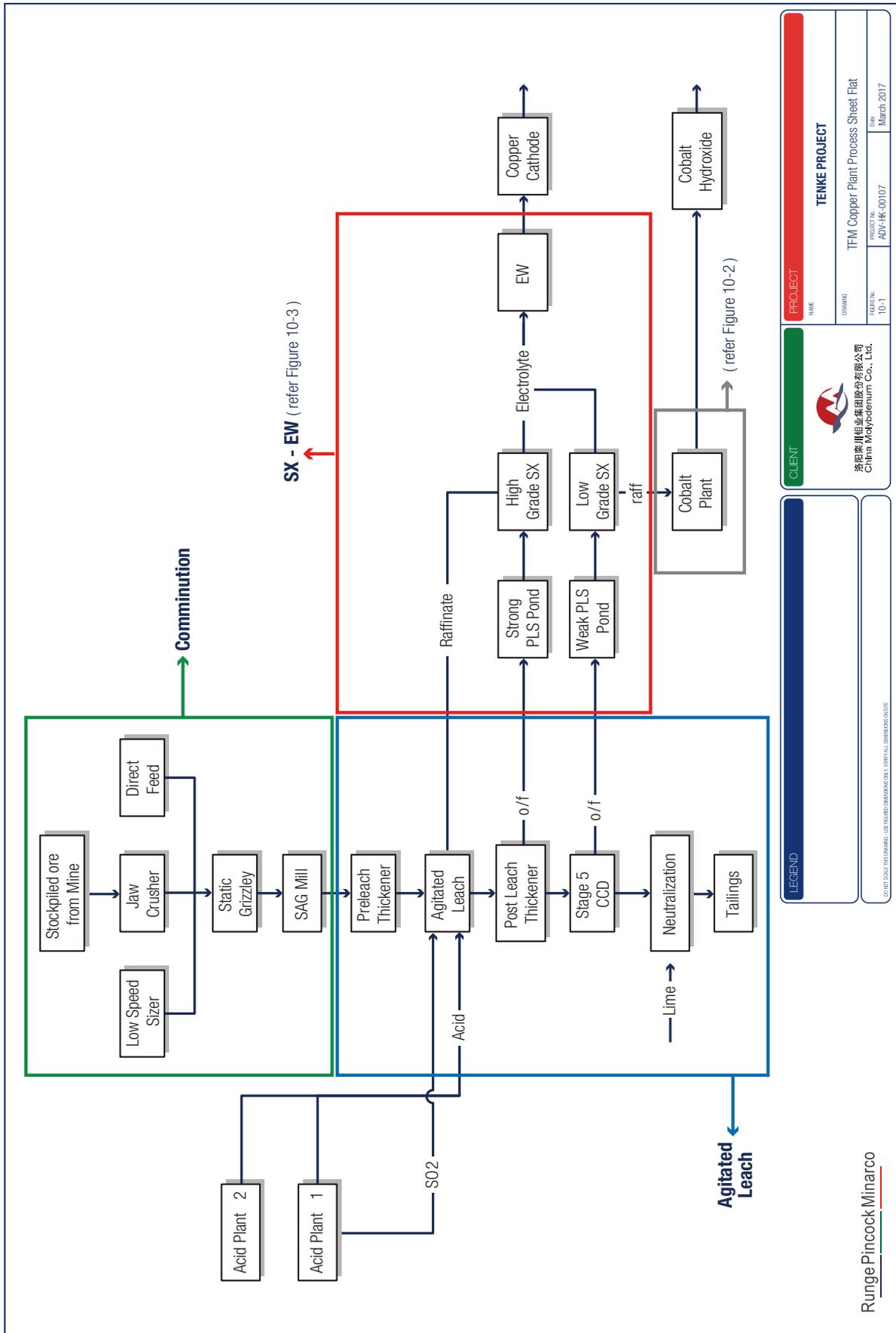
Only oxide material is processed within current plants (leach and SX-EW) which are continuously feed from five pits at any given time. ROM ore is transport via a series of on-site gravel haul roads from the pit to five ROM stockpiles which vary depend on ore type and/or grade. Ore are fed into a single jaw crusher prior to the SAG mill and entering into the leaching circuit. Simplified operating flow sheets are shown in **Figure 10-1** through **Figure 10-3** while the relevant design criteria and major equipment list are shown in **Table 10-2** and **Table 10-3** respectively.

Table 10-2 Tenke Principal Process Design Criteria

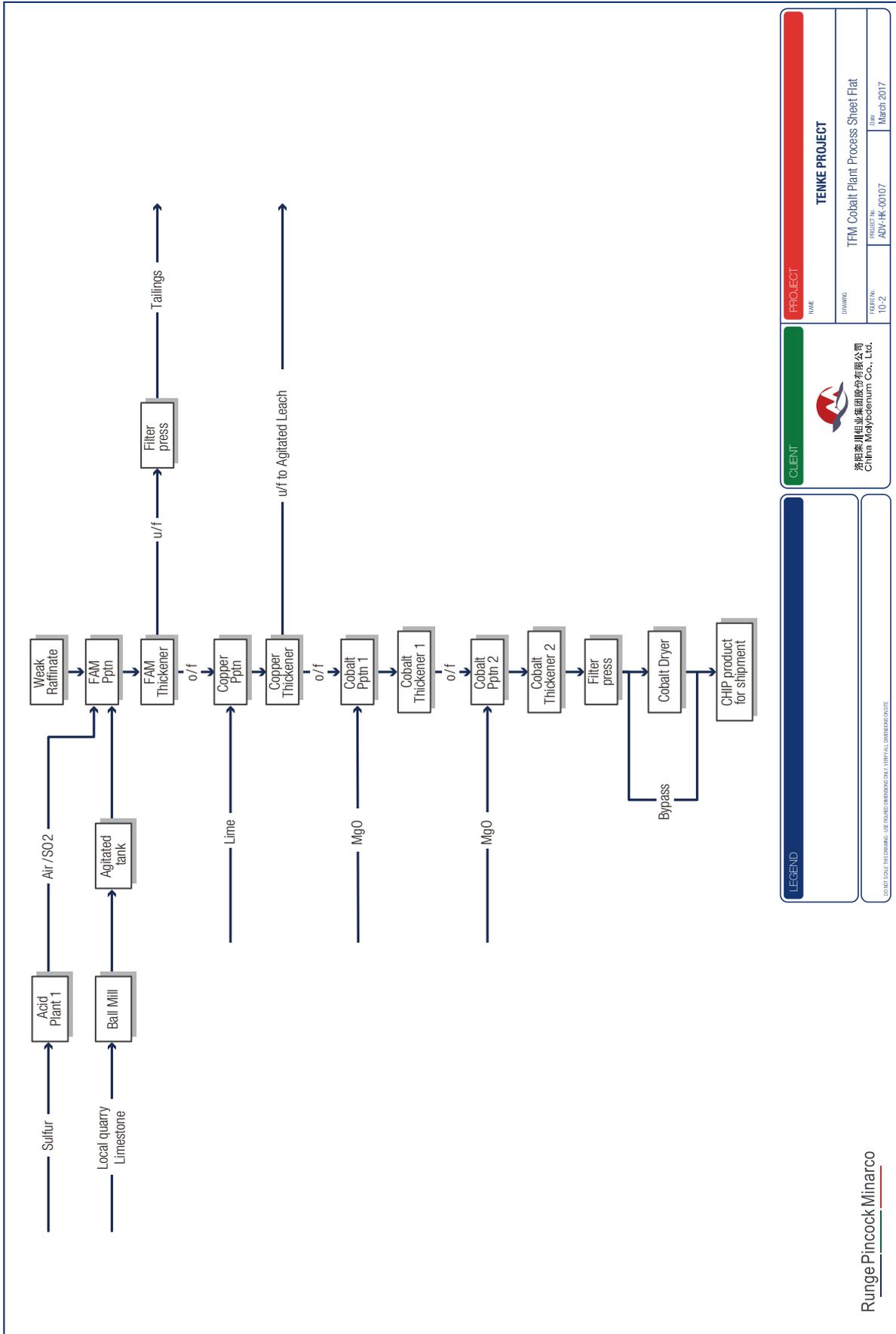
Principal Process Design Criteria	
Plant Design Capacity	5.6 Mtpa 15,432 tpd
Availability	92%
Recovery	87% TCu, 97 %ASCu 78% TCo, 94% ASCc
Ore Bond Work Index*	10.4 kWh/t
JKSimMet Parameters (Axb)	157
Ai	0.13 g
SAG P80	200 micron
Leach feed thickener rise rate	4.62 m3/m2/hr
Leach Residence time	7.5 hours
Acid consumption	81 kg/t
SO2 addition	12 kg/t
Leach redox potential	350 mV
Leach discharge thickener rise rate	3.47 m3/m2/hr
CCD rise rate	3.68 m3/m2/hr
Copper Production*	430 M lbs/yr
Cobalt Production*	18,500 t/yr

Table 10-3 Tenke Major Equipment

Item	Size	Power (kW)	Quantity
Lokotrack 200E Jaw Crusher	2m x 1.5m	1600	1
Low-speed sizer	2.35m x 6.3m x 1.1m	275	1
SAG Mill	24m (Diameter)	5500	1
Leach Feed Thickener	31m		1
Leach Tanks	15.8m x 18.5m		6
Post Leach Thickener	31m		1
CCD	31m		5
Strong PLS Pond	55m x 65m		1
Weak PLS Pond	115m x 75m		1
Strong Raff Pond (1)	100m x 75m		1
Strong Raff Pond (2)	85m x 55m		1
Weak PLS Pond	100m x 100m		1
Solvent Extraction			
2E x 2S			1
2E x 2E x 2S			1
EW			
Cells (polycrrete)			560
Rectifiers (old)	32KA		2
Rectifiers (new)	34KA		2
FAM Precipitation Tanks	9.7m X 13m		5
FAM Thickener	25M		1
FAM Filter Press (plate and frame)	76 plates @ 2m x 2m		2
Copper Precipitation Tanks	9.7m x 13m		4
Copper Thickener	30m		1
Primary Cobalt Precipitation Tanks	10.1m 14.5m		5
Primary Cobalt Thickener	25m		
Secondary Cobalt Precipitation Tanks	10.3m x 12.0m		3
Secondary Cobalt Thickener	20m		2
Cobalt Filter Press (plate and frame)	84 plates @ 1.5m x 1.5m		2
Cobalt Dryer	18,000 tpa		2
Acid Plant 1	825 tpd		1
Acid Plant 2	1400 tpd		1



CLIENT		PROJECT	
 中国钼业集团有限公司 China Molybdenum Co., Ltd.		TENKE PROJECT TFM Copper Plant Process Sheet Flat	
LEGEND		DRAWING 10-1	PROJECT No. ADV-HK-00107
		DATE March 2017	



PROJECT		TENKE PROJECT	
NAME			
DRAWING	TFM Cobalt Plant Process Sheet Flat		
FIGURE NO.	10-2	PROJECT NO.	ADV-HK-00107
		DATE	March 2017
 中国钼业集团有限公司 China Molybdenum Co., Ltd.			
LEGEND			
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10.3 Process Description

The following process plant description is based on observations during RPM's site visit as well as the various reports provided by the Company and Client. RPM finds the process flowsheet and forecast recoveries to be reasonable over the planned mine life and suitable to support the production schedules outlined in **Section 9** for near-surface oxide ores.

10.3.1 Comminution

Run-of-Mine (ROM) oxide ore is transported from the various pits by haul truck to the ore process stockpile. Ore is placed in one of five stockpiles including (1) high copper (greater than 3.5% TCu), (2) high cobalt (greater than 0.7%), (3) intermediate copper (between 3.5% copper and 2.2% copper), (4) high dolomite/high acid consuming material, and (5) mill scats. RPM notes that ore is fed to the process to maximize copper production while not exceeding acid availability.

Ore is fed through one of three methods; (1) a low-speed MMD sizer, (2) a LokoTrack 200 jaw crusher, or (3) direct fed at ROM scale over a static grizzly. Ore is withdrawn from the stockpiles by front-end loaders to feed the required ore blend (based on the acid consumptions and Cu grades) to the primary crushing system. A low-speed sizer was originally selected as the primary crusher to directly feed the SAG mill due to perceived high clay content of the ore; however, high clay has not been encountered in Tenke ores leading to preferred primary crushing method to be jaw crushing.

A long-dimensioned SAG mill circuit was chosen for the grinding system and produces a ground ore with a product size of 80% passing (P_{80}) 200 microns. The grinding circuit product from the cyclone overflow is thickened in the pre-leach thickener with the underflow slurry feeding the agitated leach process.

10.3.2 Agitated Leaching

Thickened slurry is pumped from the leach feed thickener to the agitated leach circuit (**Figure 10-2**). RPM notes that the agitated leach circuit can bypass any one tank (of which there are six) to allow maintenance without taking the entire plant offline. Concentrated sulphuric acid is added to the leach tanks to maintain a PLS free acid concentration of 10 gpl (pH of approximately 1.8). Cobalt is leached through reductive leaching promoted through addition of sulfur dioxide (SO_2) generated in the sulfur burning plant. The slurry flows by gravity through the leach circuit. The system is agitated via high solidity impellers promoting three phase mixing of acidic leach solutions, SO_2 , and solids; however, agitation is not designed for solids suspension of the coarsest size fraction which is facilitated by continuous operation of desanding pumps. Total design leach residence time is 6 hours; copper leaching is essentially complete in 2 hours with the remaining residence time required for cobalt recovery.

Leached slurry discharges to the post-leach thickener. Overflow from this thickener is "Strong PLS" and discharges to the "Strong Pond." The underflow from the post-leach thickener passes to the five-stage Counter Current Decantation (CCD) thickener system where copper is washed from the slurry. This step is required to limit copper loss to tailings and to recover soluble copper into the Weak PLS.

Each of the five CCD thickeners are equipped with a mix tank to combine slurry and wash liquor prior to feeding the respective thickener. Fresh water is added to the final CCD 5 and water travels counter-current to the solids with it exiting the system from CCD 1 as the "Weak PLS". Underflow slurry from the final CCD stage is neutralized to pH 8.5 and pumped to tailings. Tailings were originally designed to be neutralized to pH 10.5 to fix manganese; however, the Company reports that lower pH has not yet altered return water chemistry.

10.3.3 Copper Solvent Extraction and Electrowinning

Pregnant solution passes to two solvent extraction circuits (SX). The first is a "split high-low" SX circuit processing both Strong and Weak PLS's while the second circuit only processes Strong PLS (**Figure 10-3**). Each system has its own separate organic loop. The high-low circuit is designed to contain high-acid solutions from lower acid solutions and allow them to be used for leaching of metal values. The originally constructed SX circuit has an organic loop passing from fresh Strong-PLS which then is counter currently contacted systematically with intermediate strong PLS, fresh Weak PLS, and finally intermediate Weak PLS. The loaded organic is then subjected to a two stage strip using lean electrolyte ($2E_{HS} \times 2E_{LS} \times 2S_s$).

Tenke also has a second SX circuit designed to treat exclusively Strong PLS. This circuit consists of a two-stage series extraction and a two-stage series strip (2E x 2S). Raffinate from the Strong PLS is returned to the agitated leach circuit and a bleed from the Weak raffinate is sent to the cobalt recovery circuit. Copper is recovered in a standard electrowinning tankhouse with stainless steel mother blanks and lead-calcium-tin anodes. Tenke uses Acorga extractant and ShellSol diluent.

10.3.4 Cobalt Recovery

Cobalt is recovered from a bleed stream from the Weak raffinate (**Figure 10-2**). Solution is first brought into the "FAM" precipitation circuit where iron, aluminum and manganese are precipitated. The circuit consists of two tanks where solution is brought to pH 3.5 and contacted with air-SO₂ (1%). In this, manganese is oxidized to insoluble MnO₂, and iron and aluminum are precipitated as hydroxide minerals. This slurry is thickened, then solids are filtered, re-pulped, and pumped to tailings. Limestone is quarried locally, ground in a ball mill and stored in agitated slurry tanks prior to being added to the process.

Solution from the FAM circuit is then brought to the copper precipitation circuit. The circuit consists of agitated tanks where pH is raised to approximately 5.5 through addition of lime. Copper precipitate is thickened and underflow slurry is returned to the agitated leach circuit for copper recovery.

Cobalt is precipitated from the copper precipitation step overflow solution with magnesium oxide (MgO). Precipitation is carried out in two stages of agitated tanks at pH 7.5 and then 8.2. CHIP is thickened, filtered and either directly bagged for shipment in super-sacks (55% moisture) or dried and then bagged for shipment in super sacks (7.5% moisture). RPM notes that the current drying capacity 5,000 tpa, however this will be increased to 20,000 tpa in 2019 which will allow all CHIP to be transported as dry product.

10.3.5 Other Services

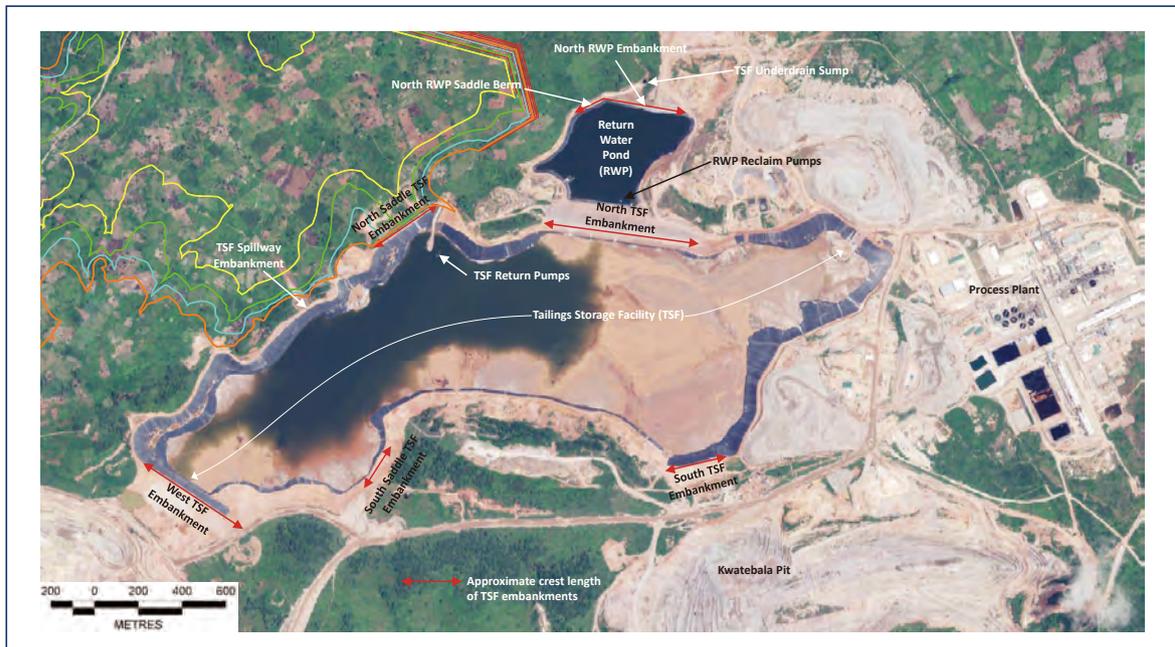
Reagent storage and mixing systems are provided for the process reagents. Covered reagent warehousing is provided for reagents such as sulfur, MgO, lime, diluent, extractant, etc.

Utility systems including compressed air, steam generators, and water distribution systems are provided to service the process systems.

10.3.6 Tailings Storage

Only one Tail Storage Facility is currently constructed and in operation at the Project, the Kwatebala TSF. The LOM extends through 2050 and includes two proposed TSFs, designated as Northwest and Shamika (**Figure 10-4**).

Tailings generated at the plant are the waste of a process that includes milling, leaching and counter current decantation (CCD). The current mill throughput is 14,904 tpd with the amount of tailings approximately the same as the mill throughput.



Runge Pincock Minarco

LEGEND	
	Stage I Tailings Footprint at 1383.5m
	Stage II Tailings Footprint at 1393.5m
	Stage III Tailings Footprint at 1401.5m
	Stage IV Tailings Footprint at 1408.5m
	Stage Embankment Crest

CLIENT

洛阳栾川钼业集团股份有限公司
China Molybdenum Co., Ltd.

PROJECT	
NAME	
TENKE PROJECT	
DRAWING	
Storm Water Dams Locations and TSF Embankments	
FIGURE No. 10-4	PROJECT No. ADV-HK-00107
Date March 2017	

Kwatebala TSF

Initial Construction and Previous Raises

The Kwatebala TSF is fully lined with a 1.5-mm thick high-density polyethylene (HDPE) geomembrane and has been constructed in four stages:

- The original design for the TSF was prepared by MWH and Golder Associates Africa in 2007 and included Stages 1 and 2. The design for Stages 1 and 2 had a capacity of 15 cu.Mm and considered six years of operation with a throughput of 8,832 tpd, slurry concentration of 46 percent solids and in-place tailings density of 1.25 t/cu.m. The Stage 2 design was subsequently modified as discussed below. The construction of Stage 1 TSF containment embankments was completed to crest elevation (EL.) 1380 m in 2009 and included an adjacent return water pond (RWP) (**Figure 10-4**).
- The Stages 1 and 2 design report included an inspection and monitoring program, an emergency response plan and a conceptual closure plan. The inspection plan comprised daily inspection by the operations staff, monthly inspection by the TSF superintendent and semi-annual inspections by the TSF designer.
- In 2009 Golder prepared the revised Stage 2 design for the TSF. At that time it was found that the tailings slurry concentration being achieved was only 35 percent, which reduced the in-place dry density and hence the life of the TSF. Construction of Stage 2 was completed in August 2010 to crest EL. 1390 m, which provided three years of storage capacity through the end of 2012.
- AMEC provided the design for the Stage 3 raise in July 2012, which was completed to EL. 1399 m in November 2013. Stage 3 considered a plant throughput ramp up to 14,000 tpd and increased the total TSF capacity to 30 cu.Mm and extended the TSF capacity by 34 months through October 2015. The design for Stage 3 added vibrating-wire piezometers to monitor water pressures in the North Embankment. Stage 3 included a new Return Water Pond (RWP) to the northeast of the TSF, replacing the previous RWP that subsequently became the eastern extension of the TSF. Stage 3 also included a new tailings booster pumping station, which was commissioned in January 2015.
- In 2014 Golder provided the design for the Stage 4 raise to crest EL. 1410 m. Construction of the Stage 4 raise commenced in July 2014, and was completed and signed off by the Engineer of Records in 2016. One section of the storm water overflow control is currently being constructed and will be finalised in Q2 2017. The Stage 4 TSF has a total perimeter length of about 9 km, covering an area of about 250 ha. The Stage 4 configuration will provide for a total storage capacity (tailings + water) of about 54 cu.Mm to EL. 1,408.5 m, allowing for the design 1.5 m freeboard below crest EL. 1,410 m. Stage 4 will provide tailings storage capacity through 2021 and represents the final planned raise of the Kwatebala TSF.

Containment Embankments

Containment for the majority of the TSF perimeter is in natural high ground. Embankments were constructed to complete the containment, as indicated on **Figure 10-4** (which indicates the embankment crest extents), in six locations:

- The North TSF Embankment separates the TSF from the RWP area. This is the highest of the embankments enclosing the TSF, with a maximum design height of about 52 m and a crest length of the existing embankment of approximately 700 m. It has an upstream slope slightly flatter than 2.5H:1V, with 5-m horizontal benches for each stage raise, and a downstream slope of 2.5H:1V.
- The North Saddle TSF Embankment is located about 600 m to the west of the left abutment of the North TSF embankment. It has a maximum height of 17 m, and upstream and downstream slopes of 2.5H:1V. The crest length is about 500 m.
- The TSF Spillway Embankment fills the open channel spillway that was constructed for Stage 1 of the TSF. This embankment has a maximum height of about 30 m, with an upstream slope of about 2.7H:1V and a downstream slope of 2.5H:1V. The crest length is about 80 m.
- The West TSF Embankment is at the far west end of the TSF, having a maximum height of about 20 m and a crest length of about 510 m. The upstream slope between stages is 2.5H:1V, with a 5-m bench at successive stage elevations resulting in a slightly flatter overall upstream slope. The downstream slope was constructed at about 6% to infill a low area between the embankment and the open pit to the west. Most of the downstream shell consists of random fill, apart from the more controlled and well compacted portion of the downstream shell, constructed at 3H:1V.

- The South TSF Embankment has a maximum height of 15 m, an upstream slope of 2.5H:1V, and a downstream slope constructed at about 6% to infill a low area between the embankment and the open pit to the south, similar to the approach for the downstream shell of the West TSF Embankment. Most of the downstream shell consists of random fill, with controlled, well-compacted fill constructed at a 3H:1V slope, buttressed by the random fill. The crest length is about 380 m.
- The South Saddle TSF Embankment is between Sefu Hill and the West TSF Embankment and has a maximum height of about 10 m with upstream and downstream slopes at about 2.5H:1V. The crest length is about 200 m.

All the embankments were raised utilizing downstream construction with compacted fills comprising fine mine waste for the bulk of the embankment and fine-grained native (saprolitic) soils for the geomembrane liner bedding. **Figure 10-5** shows a typical cross-section of the containment embankments.

The RWP, immediately downstream of the North TSF Embankment, forms an integral part of the TSF. The pond is contained by the North TSF Embankment to the south, high ground to the west and east, and the North RWP Embankment to the north, with a smaller saddle berm extension, designated the North RWP Saddle Berm, immediately to the west. The RWP is fully lined with 1.5-mm HDPE geomembrane up to the embankment crest EL. 1369 m. The North RWP Embankment has a maximum height of 27 m, an upstream slope of 3H:1V, and a downstream slope of 2.5H:1V. The embankment was constructed of compacted mine waste and fine-grained native (saprolitic) soils. A blanket drain was constructed along the base of the embankment. The North RWP Saddle Berm has a maximum height of 6 m, and the same upstream and downstream slopes as the North RWP Embankment. The combined crest length of the two embankments is about 400 m.

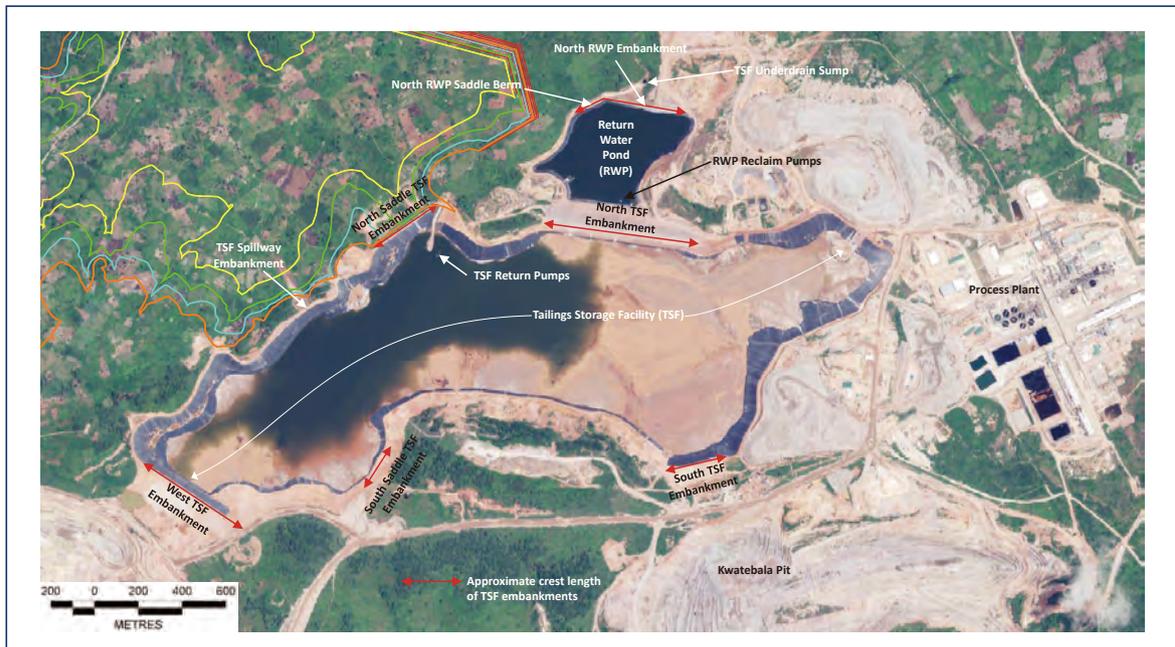
An underdrain was constructed in the valley bottom, starting below the TSF upstream of the North TSF Embankment and extending under the RWP, discharging into a sump constructed downstream (north) of the North RWP Embankment. Seepage collected in the sump is pumped to the RWP.

TSF Inspections

The TSF structures are regularly inspected as follows:

- Daily and Monthly monitoring by site staff;
- Quarterly external visit by Engineer of Records; and
- Yearly Review using external consultants at the end of the wet season (worst case scenario).

During quarterly and yearly visits all other dam structures on site are inspected including the four storm water dams discussed in **Section 11.4**.



Runge Pincock Minarco

LEGEND	
	Stage I Tailings Footprint at 1383.5m
	Stage II Tailings Footprint at 1393.5m
	Stage III Tailings Footprint at 1401.5m
	Stage IV Tailings Footprint at 1408.5m
	Stage Embankment Crest

CLIENT

洛阳栾川钼业集团股份有限公司
China Molybdenum Co., Ltd.

PROJECT		
NAME		
TENKE PROJECT		
DRAWING		
Storm Water Dams Locations and TSF Embankments		
FIGURE No. 10-4	PROJECT No. ADV-HK-00107	DATE March 2017

LOM TSF Planning

As mentioned above, Stage 4 of the Kwatebala TSF is the final raise of this TSF and will provide tailings storage until approximately 2019. A new TSF, designated Northwest, is planned immediately northwest of the Kwatebala TSF (**Figure 10-5**). The Kwatebala and the Northwest TSFs will merge over time. The Northwest TSF has been planned in four stages, designated as Stages I through IV in the LOM plan. From the construction periods indicated in the LOM financial model discussed below, it is inferred that the Northwest TSF will provide storage capacity until approximately 2035. The throughput considered is not indicated. Assuming the current throughput of 14,904 tpd, this represents a capacity to store 85.8 Mt of tailings. Permits have already been secured by the Company for the 4 stages of the Northwest TSF.

After 2031 the LOM plan considers tailings storage at the Shamika TSF. Site selection is still being evaluated for optimization at this time. Assuming the current throughput of 14,904 tpd and LOM through 2041, this represents a capacity to store 53.6 Mt of tailings.

Comments

The following comments are provided about the Project TSFs:

- The studies and designs for the four stages of the Kwatebala TSF are considered adequate. The stability analyses indicate an adequate factor of safety.
- No indications of stability issues were reported. A detailed inspection report of the tailings stewardship program maintained by Freeport-McMoRan, dated May 2016, was reviewed. This report identified some operational and maintenance issues that need to be addressed, however no major issues that could trigger immediate stability concerns. Other periodic monitoring and inspection reports were not available for review. It is recommended verifying that the periodic monitoring and inspection programs are fully implemented.
- The sustaining capital for the LOM included in the financial model appears adequate for the currently estimated Ore Reserves of 138 Mt.
- If the plant throughput is increased to 18,000 tpd as suggested in one of the documents reviewed, the schedule for sustaining capital would require to be accelerated.
- RPM notes that significant mineral resource has been identified, consisting of about 440 Mt from surface pits and 400 Mt from underground mining. If any of this resource is converted to reserves, the currently planned TSF capacity would be insufficient. Additional location(s) would need to be identified and additional capital allocated.
- A shift to a partial heap leach operation will result in a significant drop in tails dam capacity requirements over the LOM meaning that the Kwatebala and Northwest TSF may be sufficient if heap leaching is implemented.

10.4 Process Expansion Opportunities

10.4.1 Debottlenecking Program

Since completion of the 2013 Tenke mill expansion, the Tenke SAG Mill has a reported nominal capacity of 14.8 ktpd of ore, with throughput varying in a narrow range of 14.7 to 14.9 ktpd. At this feed rate, approximately 10% of all mill feed is rejected as a mill scat which is collected with a front end loader and transferred to a stockpile to dewater. This ore until late 2016 was subsequently refeed again and jaw-crushed by a contractor prior to reintroducing it as feed to the SAG mill. While a 17 ktpd daily rate has been achieved on a daily basis, it has not been sustained, and debottlenecking had been planned to meet this rate on a continuous basis. A significant portion of the debottlenecking plan in the comminution area was cancelled in 2016 in favor of the development of three heap leach pads discussed in **Section 10.4.2**. Some of the items completed or planned against the debottlenecking program are as follows:

Completed in 2016:

- Descending Pumps – These were installed in late 2016 and should allow for a reduction in solids making it through to the solvent extraction.

Planned:

- Pebble crusher installation – replacing the contractor through construction of an owner operated cone crusher with an option to feed crushed product to cyclone feed or SAG feed, dewatering screen, upstream surge bin, metal detection and magnet (estimate, USD26M)
- Cobalt Circuit Upgrade – increasing capacity of underflow pumps and construction of a new filter press and dryer to increase dry product quantity (estimate, USD3-4M)

10.4.2 Heap Leach Projects

The current LOM plan sees production continuing for 8 years beyond cessation of mining in 2041 due to the processing of low grade oxide stockpiles. The Company is currently finalising studies to introduce heap leach operations at Tenke, Kwatebala and Fungurume to bring forward copper and cobalt production from the low grade stockpile material. The plan is to start heap leaching in 2019 with a target of 70 Ktpa of Cu and 10 Ktpa of Co being recovered from the heap leach. This approach would reduce the LOM (excluding sulphide) and significantly improve cashflow. CAPEX requirements for this is estimated at USD 428M which will include the creation of the 3 leach pads, establishment of 3 agglomeration plants, establishment of pregnant leach solution collection and transmission lines back to the existing SX plant and construction of 2 additional SX extractors at the Kwatebala plant to manage the additional pregnant leach solution volumes. The current Cu EW facility is considered sufficient to the needs of both the current agitated leach plant and the proposed heap leach requirements. RPM notes that introducing a heap leach could potentially free up capacity in the agitated leach circuit earlier allowing for production from the underground sulphide to be brought forward. Heap leaching will also reduce TSF capacity requirements which will either negate or defer the need for construction of some of the planned phases of the new northwest TSF.

CMOC will evaluate the trade-off between permanent and on-off leach pads in upcoming studies. Initial leach cycle times are estimated from a trial conducted in 2013 to be 90-100 days with recovery from preliminary test work indicating 82% and 30% TCu and TCo respectively.

Permitting for the establishment of the Tenke and Kwatebala heap leach are already in place with an extension required for Kwatebala, whilst the Fungurume heap leach has yet to be permitted. The Company estimates that this would take 12-18 months from completion of the designs.

The current schedule aims to complete the study and design stage in 2018 with construction on the Tenke and Kwatebala heap leach aimed to commence in 2019.

RPM believes that development of the proposed heap leach operation has significant merit and whilst the current recoveries quoted by the Company appear slightly high against the results from some of the original test work, and permeability is likely to be an issue due to the clay content of the material type being leached, the Company's plan to continue to study this option are warranted.

11. Infrastructure and Logistics

Essentially all of the infrastructure, administration facilities, and requirements for the Project are in place with commissioning occurring in 2008. Many aspects of infrastructure are acceptable such as the town site, water supply, sewage treatment, and buildings, but power supply and roads present issues which require mitigation as outlined below. **Table 11-1** outlines the key Infrastructure and Logistics required to support production which are summarised below.

Table 11-1 Infrastructure Facilities

Facility	Description
Roads	
Internal	None required, reasonable dirt access roads are in place throughout the concession
National	Asphalt paved road in existence connecting the Project to Zambia via Lubumbashi
Water Supply	Water is pumped from a well-field and treated to potable standards
Power Supply	Power supply is obtained from the DRC grid, but is unreliable. Tenke has invested heavily to modernize the national power grid. Power is generated principally from hydroelectric projects in the DRC. Power may prove to be a bottleneck to milling expansions.
Communications	Phone, cell phone, and internet are available.
Sewage Treatment	Sewage treatment is in-place.
Explosive Magazine	Existing facility internal to the property

11.1 Transportation Facilities

The Project is directly connected to the DRC national highway which allows transportation of supply goods along with the product to and from site. The Company has contributed to major repairs on this highway between the towns of Fungurume and Likasi in Lualaba Province (**Figure 3-1**). As a result the national highway is in good condition near the Project area, however is in increasingly poor condition nearing Lubumbashi. The DRC National Highway connects to Zambia near Lubumbashi and then to the remainder of the African highway network including routes to major ports such as Durban, Dar es Salaam, etc. The transportation distances to ports are substantial and shipping costs are a substantial percentage of the operating costs.

RPM notes that the Company's copper and cobalt products are tracked via Lubumbashi primarily to Durban Port through Zambia and either Botswana or Zimbabwe for shipment to international markets and refineries, with some of the copper product sold to end users in Ndola, Zambia.

Limited paved roads occur within the concession, with access between operating areas being from well-maintained two-lane all weather dirt roads. These roads service both site personnel as well as ore haulage to the processing plants. RPM notes the limited need for additional roads within the concession area with ongoing activities focus on maintenance work in the area of the concession, including dust control on major roads.

The national railway also travels through the project area. This rail system was installed by Belgium during the 1950's and is of non-standard narrow-gauge and is in poor repair. To be of use for transporting goods to and from the concession, this railway would need significant upgrades and is not currently in the Life of Mine plan.

The Company also maintains an airstrip suitable for commercial planes which allow regular scheduled flights (private charter) to Lubumbashi and further to Johannesburg.

11.2 Buildings and Accommodation

A full complement of infrastructure buildings are located onsite to support the current operation including offices, control rooms, warehouses, laboratories, etc. The laboratory is operated for sample preparation, ore digestion, and AA analysis of copper, cobalt, and other metals. For grade control activities a metallurgical test work laboratory is also included in the laboratory building.

As the Project is located in a relatively remote location, the on-site employee accommodation is expansive and includes two sites; the historic Fungurume camp and the Mikuba camp. These facilities have soccer pitches,

gym facilities, tennis courts, and a social club. Staff may also be employed from the local community and live in Tenke or Fungurume town.

11.3 Water Supply

Water supply for the current operations is obtained from a well-field which is located within the concession area. The wells pump to a head tank which is subsequently used to supply the town-site and plant. Contact water from the plant site and mine as well as decant water from the TSF are used as process water to supplement the water from the wells however water delivered to the town site is filtered and chlorinated and considered potable. Following a high level review of the studies, water supply requirement, RPM considers the current water supply to be suitable to meet the current Life of Mine plan, however additional sources may be required if sulphide production is implemented.

11.4 Storm Water Dams

Given the climate in which if the Project is located, which include monsoonal rains, a series of Storm Water Dam's ("SWD's) have been constructed to contain mine-affected waters (see locations on **Figure 11-4**). These are homogeneous earthfill dams that were sized such that the spillway would only activate one out of every ten years, on average, based on probabilistic water balance modeling. The spillways were sized to route the peak discharge from the 50-year, 24-hour storm with 0.3 m of freeboard and the peak discharge from the 100-year, 24-hour storm with no freeboard. The design seismic load for the dams was the 975-year peak ground acceleration of 0.12g. Erosion protection on the slopes consists of naturally occurring grasses. There are four SWDs located within the Project:

- Northeast SWD – constructed in 2010
- South SWD – retrofit of initial construction completed in 2010
- Southwest SWD – constructed in 2013
- Tenke Fwaulu SWD – constructed in 2013

The Northeast SWD is located approximately 1 km northeast of the RWP. It has a maximum height of 20 m, a crest elevation of 1,345 m, a crest width and length of 5 m and 350 m, respectively, and upstream and downstream slopes of 2.5H:1V and 3H:1V respectively. The embankment includes a geocomposite chimney and blanket drain in the downstream half of the downstream shell. The dam is oriented approximately east-west with the dam on the north side of the basin. It impounds 471,300 m³ to the spillway crest elevation of 1343.8 m (1.2 m below the dam crest). The spillway is a 10-m wide channel through the right abutment controlled by a concrete sill with concrete aprons and training walls. Instrumentation at the dam consists of two standpipe piezometers—one at the crest and one on the downstream slope.

The South SWD is located approximately 0.6 km SSW of the processing facility. It has a maximum height of 11 m, a crest elevation of 1,375 m, a crest width and length of 5 m and 180 m, respectively, and upstream and downstream slopes of 2.88H:1V. The embankment was originally constructed with steeper slopes but in 2010 was retrofit with upstream and downstream buttresses and a geocomposite chimney and blanket drain under the downstream buttress. The dam is oriented approximately northeast-southwest with the dam on the southeast side of the basin. It impounds 335,500 m³ to the spillway crest elevation of 1373.7 m (1.3 m below the dam crest). The spillway is a 20-m wide channel through the left abutment controlled by a concrete sill with concrete aprons and training walls. Instrumentation at the dam consists of a single standpipe piezometer near the crest.

The Southwest SWD is located approximately 1 km southwest of the Kwatebala open pit. It has a maximum height of 13 m, a crest elevation of 1,350 m, a crest width and length of 5.5 m and 180 m, respectively, and upstream and downstream slopes of 2.6H:1V and 3.2H:1V respectively. The embankment includes a geotextile-wrapped gravel chimney and blanket drain in the downstream slope, and a foundation underdrain consisting of two 360-mm perforated HDPE pipes in a geotextile-wrapped gravel drain. The dam is oriented approximately southeast-northwest with the dam on the southwest side of the basin. It impounds 262,000 m³ to the spillway crest elevation of 1,348.5 m (1.5 m below the dam crest). The spillway is a 12-m wide channel through the right abutment controlled by a broad-crested concrete weir at the inlet. Instrumentation at the dam consists of two standpipe piezometers on the downstream slope.

The Tenke Fwaulu SWD is located approximately 2 km south of the Tenke and Fwaulu open pits. It has a maximum height of 12 m, a crest elevation of 1,362 m, a crest width and length of 5.4 m and 120 m, respectively, and upstream and downstream slopes of 3.3H:1V and 3.4H:1V respectively. The embankment includes a geotextile-wrapped gravel chimney and blanket drain in the downstream slope, and a foundation underdrain consisting of a 360-mm perforated HDPE pipe in a geotextile-wrapped gravel drain. The dam is oriented approximately northeast-southwest with the dam on the southeast side of the basin. It impounds 1,019,100 m³ to the spillway crest elevation of 1360 m (2 m below the dam crest). The spillway is a 13-m wide channel through the right abutment controlled by a broad-crested concrete weir at the inlet. Instrumentation at the dam consists of two standpipe piezometers on the downstream slope.

11.4.1 Comments

In RPM's opinion, based on the information available to review, the designs of the SWD's appear adequate. However, detailed design documentation and stability analyses were not supplied for review.

11.5 Power Supply

One of the DRC government's most pressing imperatives is to increase the supply and distribution of electricity. As of 2015, only about ten percent of the country's population had access to reliable electricity, despite the DRC's enormous hydropower potential. The Congo River represents potential electricity generation of more than 100,000 megawatts (MW) of power. Not only could new power generation projects resolve the DRC's chronic electricity shortages and provide critical energy for the mining industry, they could also supply countries as far afield as South Africa with much-needed electricity.

The Congo River supplies the bulk of the DRC's electricity through two dams built along the Inga rapids, located about 225 km southwest of Kinshasa. The Inga 1 dam, commissioned in 1972, and the Inga 2 dam, commissioned in 1982, represent nearly 80 percent of the DRC's installed capacity. When these hydropower stations were first constructed, their combined capacity totaled more than 1,700 MW; however, due to aging equipment and prolonged mismanagement by the state-owned Société Nationale d'Electricité (SNEL), their total capacity has diminished to less than half that. In October 2015, the total available capacity at both Inga 1 and Inga 2 was estimated to be only about 765 MW.

In addition to supply constraints, access to electricity in the DRC is limited by recurring failures in the power delivery network. The transmission and distribution systems have also suffered due to limited funding for repairs and poor oversight. Moreover, the electricity grid is oversubscribed and overloaded with transmission installations, resulting in frequent drops in voltage and failures of transformers.

The reduced output at the Inga power stations compounds the country's existing electricity deficit, already under pressure from energy-intensive mineral processing facilities located in the southeast provinces of the DRC's copper belt. Growth in the mining industry has fueled demand for electricity, with many mining operations now relying on their own generators to fill supply gaps. The energy deficit in the mining hub of Lualaba is estimated to be more than 700 MW.

11.5.1 Current Power Supply

The Project currently consumes around 83 MW per annum with power currently supplied from the national grid system. The Project is permitted to consume approximately 92 MW (capped at 95 MW) per annum from the Congolese power grid with approximately 14 MW (up to 18 MW) being self-generated from excess steam at the Tenke acid plants. This combination of grid and self-generated power provides a buffer against brown outs.

Power supply to Sub-Saharan Africa is unreliable with the entire Lualaba Province experiencing regular brownouts and blackouts. While the DRC power grid is connected into the southern-African power pool covering nations such as Zambia, Zimbabwe, Angola, Botswana, and South Africa, connectivity is limited and power which can be imported from Zambia is small and closely regulated. The majority of Tenke power is transmitted via a direct-current power line from the Inga hydro-electric power station near the national capital of Kinshasa on the Congo River, but this plant is in poor repair and delivers only a portion of the existing plant's potential. Plans exist for two additional power plants on the Inga site which have potential to generate over 30 GW of power. RPM is of the opinion that it is unlikely that these plants will be built, nor will the existing non-functioning Inga turbines be repaired in the near future.

Due to the power supply unreliability the Company has invested USD215 M to renovate the regional N'Seke hydro-electric power station, including installation of two transformers and the replacement and upgrade of high tension transmission lines and substations. The Company has recently agreed to a power rate increase from USD0.038/kWh to USD0.057/kWh and in doing so has received assurance that they will be receiving more regular power. While power availability is reported by site to have availability of more than 98%, even instantaneous power interruptions result in the plant losing run-time of approximately 30-60 minutes.

11.6 Communication Systems

The usual complement of communication systems is provided for the existing operation, including telephone, Internet and cell phone service; however, throughout the nation, communications infrastructure is inadequate, with a poor fixed-line service. The privatization of the mobile (cellular) telephone sector has improved communications coverage.

11.7 Sewage Treatment

The project operates the only two sewage-treatment systems in the DRC.

11.8 Explosives Magazine

The existing operation includes an explosives magazine located central to the concession. This magazine appear suitable to support the open pit operations, blasting requirement and has all required permits and safety emplacements.

11.9 Administration

Overall control of the Project operation is by the Company and the Executive Management team. The operation includes a high number of administrative, geology, mining, and ore-processing employees and contractors; full time staffing is reported to be 3,319 DRC nationals and 65 expatriate employees as summarised in **Table 11-2**. Including contract labor, total staffing is approximately 7,158 in the DRC and an additional 23 in South Africa. Additionally, a further 60 staff are employed full-time on the Project, but based at Freeport-McMoRan headquarters in Phoenix.

Table 11-2 Project Staffing as at 31st December 2016

Area	DRC Nationals	Inpatriates	Nat.
TFM Employees	Actual	Actual	%
Mine Ops, Dev, Eng & Geo	932	12	99%
Mine Maintenance	249	3	99%
Plant	827	10	99%
Central Services	166	5	97%
Security	319	0	100%
Operation Support & Administration	616	29	96%
TFM Operations TOTAL	3,109	59	98%
Exploration	158	3	98%
Resettlement Action Plan (RAP)	20	0	100%
Energy & Infrastructure -Nseke	11	1	92%
Kinshasa Office	21	2	91%
TFM Non Operations TOTAL	210	6	97%
TFM Employees TOTAL	3,319	65	98%
Community Social Fund	7	0	100%
TFM Contractors			
Labor Hire	246	74	77%
Service Provider	3,345	102	97%
Total TFM Contractors and Labor Hire	3,591	176	95%
TOTAL TFM DRC	6,917	241	97%
South Africa (PSAMS)	20	3	87%

DRC nationals are all employed under a Collective Labour Agreement ("CLA") which was re-negotiated in late 2016 by the Company and unions and covers the next 4 years. CMOC during the past 6 months has made employment offers and received acceptance from the majority of the key international site management personnel, all of whom have in depth knowledge of the operation gained over many years. Upon completion of the FMI's management contract these employees will transition to CMOC. RPM considers that the retention of most of the site management team during the transition period will support ongoing production as outlined in the CPR.

RPM notes that post the acquisition by CMOC job offers were made to the Phoenix based team to transition to CMOC at the completion of FMI's management contract. Whilst most of the team accepted some of the long term planning technical experts chose to remain with FMI and CMOC is in the process of filling these gaps with new employees to ensure continued support of the site team in the areas of long term strategic planning for the Project.

11.10 Supply Logistics

A significant percentage of spare parts required for normal operations of the Project are supplied from other African countries such as Caterpillar parts from South Africa and Weir pumps from Zambia. The majority of the South African supplies are sourced from Johannesburg which has large warehouses to handle imports from throughout the world.

Typically, local purchasing agents purchase items sourced in Africa or Europe, and Phoenix purchasing agents purchase items sourced in the USA or elsewhere in the world. Key supplies include:

- A 30-day fuel supply is stored in six tanks located at site with normal consumption requirements of approximately 35 million litres per month. Deliveries are mostly from Lubumbashi, DRC trucking firms.
- A fleet of supply trucks, owned by the Company and operated by local staff, shuttles products from the site to Chingola in Zambia and bulk supplies (sulfur, lime and magnesium oxide) back from Zambia to the site. Per day, approximately 330 tonnes of sulfur, 150 tonnes of lime and 40t of magnesium oxide are delivered.
- The Cat dealer delivers parts from Johannesburg, and one truck arrives approximately each day after a multi-day trip from Johannesburg to the site.

To mitigate any supplied issues the Company has a warehouse containing substantial inventory of spare parts, supplies and product ready for shipment (\$260 M, currently).

12. Oxide Open Pit Capital and Operating Costs

The Capital and Operating costs outlined below reflect the Ore Reserve Consolidated Production Schedule which only includes the Oxide Open Pit material which is summarized in **Section 9**. As such the forecast costs assume all Inferred Resources are waste and costed accordingly and no sulphide CAPEX or OPEX.

12.1 Capital Costs

A total of 1.51 Billion USD capital is required of the remainder of the current Ore Reserves mine life as outlined in **Table 12-8**. The majority of the capital is for processing and mining, with tails dam construction and maintenance being the largest item bit a significant margin, as outlined in the breakdown by cost centers in **Table 12-1** through **Table 12-4**. RPM consider the forecast reasonable to support the Ore Reserve mine life.

12.1.1 Mining Capital Expenditure

Key costs for mine operations consist of replacement equipment and purchasing equipment to complete the desired mix of equipment during the mine life. **Table 12-1** outlines the key sustaining capital required during the LOM. Truck replacement is planned at every 80 k hours. The Company is currently assessing whether it may be possible to remanufacture ("reman") the trucks to extend their life through swapping out cabs, trays, engines, hoses and harnesses. Whilst there are concerns with the lack of facilities and difficulties of import/export logistics in sending components out of the DRC for rebuilding the cost savings warrant an assessment of this option.

Table 12-1 Mine Sustaining Costs (USD M)

Cost Centre	Year				Total
	2017 to 2020	2021 to 2031	2032 to 2041	2041+	
Haul Trucks (777 CAT)	0	51	4.4		55.4
Dozers (D10CAT)	3	32.7	5.9		41.6
HaulMax (3900 CAT)	6.6	17.6	8.8		33
Front End Loaders (992 CAT)	16.1	23	4.6		43.7
Drills	7.2	14.4	0		21.6
Mine Development	41.4	78.4	3		122.8
Other Equipment	40.9	57.3	67	2	167.2
Advisory Fee	7.4	14.8	10.7		32.9
Total	122.6	289.2	104.4	2	518.2

Source: Unit Costs Provided by the Company and utilised by RPM in the Ore Reserve Schedule.

12.1.2 Processing Plant Capital Expenditure

Total life of mine (LOM) plant capex, covering the areas of the mill, the SXEW, acid plant, cobalt processing is USD148.9M as outlined in **Table 12-2** with the majority of costs associated with the construction of the second cobalt dryer which is aimed at increasing output of dry Co hydroxide product.

Table 12-2 Life of Project Processing Plant Capex (USD M)

Area	2017-2020	2021-2031	2032-2041	2041+	Total
Process plant	76.4	25.5	25	22	148.9
Second Cobalt Dryer	34.8				
Pebble Crusher	20.3				
Scrubbers	10.3				
Other	11				
Totals	76.4	25.5	25	22	148.9

Source: Unit Costs Provided by the Company and utilised by RPM in the Ore Reserve Schedule.

Tailings

Tailings capital is broken into different projects consisting of the NW Stages 5 through 7 as well as construction of the new, conceptual Shanika tailings facility to be constructed in years 2030-2031. Capital for these tailings projects is found below in **Table 12-3**.

RPM notes that should the establishment of heap leach operations at Tenke, Kwatebala and Fungurume proceed then it is unlikely that some of the NW TSF and Shanika TSF will be required.

Table 12-3 Tenke Life of Project Tailings Capex (USDM)

Area	2017-2020	2021-2031	2032+	Total
NW Stage 4 construction	-	1.8	-	1.8
NW Tailings design	-	1.4	-	1.4
NW Tailings construction				
Stage I	119	-	-	119
Stage II	-	63	-	63
Stage III	-	59	-	59
Stage IV	-	-	61	61
Shanika tailings construction/design	-	101.2	188	289.2
Totals	119	226.4	249	594.4

Source: Costs Provided by the Company and utilised by RPM in the Ore Reserve Schedule.

12.1.3 Infrastructure, General and Administrative

Significant capital spending occurs over the life for General and Administrative; however, as shown below in **Table 12-4**, approximately USD145 M of this capex is 'undefined' in Infrastructure (Power, water and Facilities) and is simply a placeholder for future projects. Of the remaining, approximately USD59 M is dedicated to infrastructure projects, USD 8 M to development and maintenance of the Mikuba camp which is planned to become the only camp facility for the project, and USD 18.1 M to vehicle purchases which includes replacement for trucks used to ship supplies and product between site and Zambia.

Table 12-4 Infrastructure, General and Administrative Capex (USDM)

Area	2017-2020	2021-2031	2032-2041	2041+	Total
Undefined	-	50	50	45.4	145.4
Mikuba Camp	8				8
Central Services Projects	9.4				9.4
Core Shed	1.5				1.5
IT Infrastructure	5				5
Other infrastructure	59				59
Vehicles (Hwy trucks, buses. Light vehicles)	18.1				18.1
Totals	101	50	50	40.4	246.4

Source: Costs Provided by the Company and utilised by RPM in the Ore Reserve Schedule.

12.2 Operating Costs

Estimated LOM operating costs for the Project are summarized in **Table 12-5** and are described below. The cost of production excluding the SX-EW circuit and freight of the Cu Cathode product to market is expected to be USD1.89 per pound of saleable copper produced over the life of the mine with SX-EW and freight costs totaling an additional USD 0.40 per pound. RPM notes that the Total Production Costs include the production of Co product (Hydroxide) with an additional 0.87 per pound Co metal required to freight and sale cost to market.

Up to September 30, 2016, 4.23 Mt of ore was processed, for a total of 161.7 kt of copper cathode and 12.7 kt of cobalt hydroxide concentrate.

Table 12-5 LOM Operating Cost Estimate

Cost Centre	LOM Average Cost
Production Costs	
Mining	USD 3.03/rock tonne
Haulage Cost	USD 1.36/rock tonne
Stockpile Rehandle	USD 0.38/rock tonne
Processing*	USD 28.05/ore tonne
Acid Costs	
2017	USD 221.90/acid tonne
2018-2020	USD 238.22/acid tonne
2021-LOM	USD 240.02/acid tonne
G&A	
2016-2022	USD 29.50/ore tonne
2023-2028	USD 19.61/ore tonne
2029 - LOM	USD 12.73/ore tonne
Total	USD 1.89/lb Cathode
Downstream Operating Cost	
Copper	
SX-EW	USD 0.14/lb
Freight	USD 0.10/lb
Sales	USD 0.16/lb
Total Copper	USD 0.40/lb Cathode
Cobalt	
Fees	USD 0.46/lb
Freight Co Hydroxide	USD 0.41/lb
Total Cobalt	USD 0.87/lb Co

*Includes Leach and Cobalt processing excludes SX-EW

Source: Unit Costs Provided by the Company and utilised by RPM in the Ore Reserve Schedule.

12.2.1 LOM Mining Costs

Projected operating costs are shown in **Table 12-6**. These costs are high by benchmark comparison with North or South American operations but reflective of the high cost of doing business in the DRC.

Table 12-6 Average Operating Cost

Area	Unit costs (USD/t mined)
Drill & Blast	1.01
Loading	0.52
Hauling	1.02
Support	0.38
Maintenance & other	1.48
Total	4.40

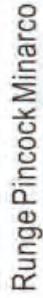
Source: Unit Costs Provided by the Company and utilised by RPM in the Ore Reserve Schedule.

12.2.2 Processing Costs

Forecast total process operating costs for the Project are estimated to be USD0.66/lbs Cu and USD 0.92/ Lbs/ cobalt hydroxide as outlined in **Table 12-7**.

Table 12-7 LOM Processing Opex by Process Area

Item	USD/t milled	USD/lb Cu metal	USD/lb Co hydroxide
Crush-mill	7.52	0.10	
Leach-CCD	3.95	0.05	
SXEW	10.86	0.14	
Acid	28.66	0.37	
Cobalt	6.10		0.92
Totals	57.08	0.66	0.92



12.2.3 Annual Costs

Table 12-8 Annual Costs

Area	Unit	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	LOM					
Operating Costs																																									
Mining	M USD	157.6	160.8	160.8	160.8	160.8	160.8	156.0	154.9	134.1	149.1	136.5	144.1	130.1	131.0	110.8	111.8	108.5	107.7	107.8	111.1	110.2	85.5	91.6	92.9	75.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3,210.4			
Haulage	M USD	65.5	58.8	69.5	50.6	65.9	67.1	41.2	57.7	58.4	47.0	46.2	64.7	54.2	61.2	45.1	54.2	59.6	47.7	49.6	54.4	46.4	47.6	28.4	35.4	39.1	10.3	13.0	7.6	7.6	6.5	15.3	6.4	1.3	0.0	0.0	0.0	0.0	1,383.4		
Processing	M USD	158.7	158.8	158.8	159.1	158.9	158.8	158.8	159.1	158.9	158.8	159.1	158.9	158.8	159.1	158.9	158.8	159.1	158.9	158.8	159.1	158.9	158.8	159.1	158.9	158.8	159.1	158.9	158.8	159.1	158.9	158.8	159.1	158.9	158.8	159.1	158.9	158.8	159.1	158.9	5,157.7
Acid	M USD	133.1	138.4	130.4	98.0	108.0	69.5	75.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	3,220.9		
Closure	M USD	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	363.5			
G & A	M USD	164.7	164.8	164.7	165.1	164.8	164.7	109.5	109.5	109.5	109.5	109.5	109.8	11.1	11.1	11.1	11.1	11.1	11.1	11.1	11.1	11.1	11.1	11.1	11.1	11.1	11.1	11.1	11.1	11.1	11.1	11.1	11.1	11.1	11.1	11.1	11.1	3,102.2			
Total	M USD	690.9	692.8	695.5	644.8	669.6	632.1	551.9	570.8	536.9	545.6	548.6	560.7	489.0	500.6	449.4	461.8	464.1	451.2	442.0	452.4	461.2	497.7	470.2	465.8	451.3	399.6	422.0	417.2	416.8	415.6	424.3	336.9	208.8	0.0	16,438.2					
Downstream Operating Cost																																									
Copper																																									
S&E/W	M USD	68.9	70.4	66.9	62.2	61.6	52.3	55.0	49.1	44.6	48.1	44.9	34.8	30.6	30.8	27.6	26.6	25.1	22.2	26.6	31.1	30.0	28.2	29.3	33.2	27.4	27.6	25.6	25.2	25.4	24.8	15.9	11.5	0.0	0.0	0.0	1,213.1				
Freight	M USD	48.6	49.7	47.2	43.9	43.5	36.9	38.8	34.7	31.5	33.9	31.7	24.6	21.6	21.6	19.5	20.2	19.5	17.7	15.6	18.8	22.0	21.2	19.9	20.7	23.5	19.4	19.5	18.1	17.8	17.9	17.5	11.2	8.1	0.0	0.0	856.3				
Sales	M USD	80.2	82.0	77.9	72.5	71.7	60.9	64.0	57.2	52.0	56.0	52.3	40.5	35.6	35.9	32.2	33.3	32.1	29.2	25.8	31.0	36.2	35.0	32.9	34.1	38.7	32.0	32.1	29.8	29.4	29.6	28.9	18.5	13.4	0.0	0.0	1,412.9				
Total Copper	M USD	197.6	202.0	191.9	176.8	176.8	150.1	157.8	140.3	128.1	138.0	128.8	99.9	87.8	88.4	79.3	82.1	79.1	72.1	63.6	76.4	89.3	86.2	81.1	84.1	95.4	78.8	79.2	73.5	72.4	73.0	71.2	45.7	32.9	0.0	3,482.3					
Cobalt																																									
Fees	M USD	15.6	17.0	15.4	15.3	15.8	15.3	17.0	16.9	15.4	16.7	15.0	16.2	16.8	12.7	13.8	12.4	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	441.5				
Front	M USD	14.1	15.3	13.9	13.8	14.3	13.8	15.3	15.3	13.9	15.1	13.5	14.6	15.1	11.4	12.4	11.1	11.1	11.1	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	389.1				
Total Cobalt	M USD	29.7	32.3	29.3	29.0	30.1	29.1	32.4	32.2	29.3	31.8	28.4	30.7	31.9	24.1	26.2	23.5	23.3	23.5	23.2	23.1	23.1	23.1	23.2	16.7	15.8	22.4	18.5	22.4	22.9	21.7	24.0	34.9	7.9	0.0	839.6					
Capital Costs																																									
Mining	M USD	28.4	59.8	23.0	20.0	15.0	19.3	32.5	38.8	23.9	18.3	26.3	13.3	18.9	27.6	20.9	33.3	17.4	10.6	7.9	7.4	3.8	2.9	6.3	5.0	9.6	1.5	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	492.2				
Processing	M USD	16.8	37.5	22.1	-	-	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	148.9				
Tailing Dams	M USD	2.3	56.0	35.0	25.8	-	33.2	33.2	-	-	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	594.4			
Infrastructure (Power/Water/Facilities)	M USD	10.9	6.1	1.9	-	-	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	163.9				
Capital Construction Projects	M USD	14.9	22.9	3.0	32.7	35.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	108.5				
Capitalization CF from Prior Year Expend.	M USD	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0					
Total	M USD	73.2	182.3	85.1	78.5	50.0	60.0	73.2	46.3	31.4	25.9	33.8	60.8	66.4	75.1	68.4	40.8	74.7	67.9	65.2	64.7	61.1	10.4	13.8	12.5	17.1	9.0	7.7	7.6	7.5	7.6	7.5	7.5	7.5	7.5	1,586.0					

Source: Unit Costs Provided by the Company and utilised by RPM in the Ore Reserve Schedule.

13. Sulphide Mining Potential

RPM highlights that the current Ore Reserves and Production Schedule presented in **Section 8** and **Section 9** are based on the oxide material only and specifically excludes the any Inferred material, and the sulphide mineralisation. RPM notes that there is significant potential for both open pit and underground mining to be undertaken on the mixed and sulphide mineralisation.

RPM notes that this below study and qualities report are based on the 31st March, 2016 resource estimates and the associated reporting pit optimization. Due to no exploration as stated in as presented in **Section 7** the resource models have not changed since the completion of the below study. RPM however does note that the pit optimizations utilised to the report the 31st December, 2016 resource statement have changed. The below study has not been updated to include these new optimization, however no material change occurs with the conclusion or quantities presented for the underground study.

Due to the mineralisation style, the mixed and sulphide mineralisation cannot be processed through the current agitated leach and SX-EW circuit and achieve the same recoveries as for the oxide. As such the Company has completed a number of studies and testworks in regards to sulphide processing, underground mining and potential open pit mining. Below is a summary of the works completed or on behalf of the Company, as well as independent reviews and studies undertaken by RPM.

13.1 Sulphide Processing Review

In 2011, Tenke with the assistance of AMEC, produced a high-level scoping study evaluating the processing of mixed oxide-sulfide ores within the various areas of the Project. This plan considers processing of ores through crushing, SAG milling, sulfide flotation, sulfidization of the sulfide float tail, oxide flotation, dewatering of these two concentrates, sulfation roasting, and processing of these concentrates through a new agitated leach plant, SXEW, and cobalt precipitation plant. RPM considers the flotation-roasting-leaching flowsheet to be best practice for the high grade mixed oxide-sulfide, sulfide, and highly acid consuming copper-cobalt ores of the Tenke mining district. Design criteria are shown below in **Table 10-1**. It is important to not this supplement the current processing plant

Tenke produced a factored cost estimate for this expansion of **USD 2.6 Billion**. This estimate was considering a full expansion resulting in additional throughput and metal recovery. Items such as a full oxide leach circuit, SX-EW expansion, etc., were considered and included in the costing. The cost estimate was based on the 2008 final, as-built costs for the Tenke oxide plant, factored for throughput variation, and then escalated to the year 2011. Following the same logic, RPM has generated a new order-of-magnitude cost estimate for flotation-roasting option assuming the current oxide leach plant is available for leaching of roasted product and that no additional EW or CHIP capacity is required (i.e. processing commences post oxide (or in conjunction with) low grade stockpiles whereas the AMEC estimate assumes a new plant is constructed. The RPM order of magnitude estimate has varied areas required in the expansion, factored these areas for throughput using a 0.6 coefficient, and then escalated costs from 2008 to 2016. The cost based on this method of estimation is **USD 1.6billion** and detailed as follows in **Table 13-2**.

RPM is aware that the testwork completed to date indicates that recovery of up to 85% and 40% of TCu and TCo may be achievable. As part of this study RPM has assumed the lower recoveries as outlined **Table 13-1**.

Table 13-1 Tenke Sulfides Process Design Criteria

Item	Value	
Plant Design Capacity	3.65	million tonnes per year
Utilization	75%	
Ore Grade		
Copper	3.50%	
Cobalt	0.28%	
Ore Bond Work Index	14.2	kWh/tonne
Abrasion Index	0.3	g
Flotation Feed Size	100	microns
Recovery to rougher bulk conc		
Copper	85%	
Cobalt	54%	
Rougher Grade		
Copper	28.25%	
Cobalt	1.50%	
Recovery to final product		
Copper	75%	
Cobalt	21%	
Production		
Copper	106,000	tonnes per year
Cobalt	3,550	tonnes per year

Source: Unit Costs Provided by the Company and reviewed by RPM.

Table 13-2 Tenke Sulfides Process Design Criteria

Area	the Company As-built Costs 2008 (USDM)	AMEC Mill Estimate 2011 (USDM)	RPM Estimate (USDM)
Directs			
General	222	274	131
Comminution	33	70	38
Flotation		48	48
Roaster		70	70
Leaching	47	44	
CCD	44	7	
Tailings	84	84	92
Copper SXEW	127	190	
Cobalt Precipitation	79	46	
Acid Plant	118	13	
Services	76	76	39
Power	77	76	
Buildings	87	36	11
Other	59	58	12
Subtotal Directs	1,053	1,093	441
Indirects			
EPCM (19% of directs)	193	208	84
Taxes (10% of directs)	107	109	44
Subtotal Indirects	300	317	128
Subtotal D+I	1,354	1,410	569
Owners Costs (39% of D+I)	516	550	222
Total proj costs	1,869	1,960	790
Escalation		98	166
Updated project costs		2,058	956
Contingency (25%)		516	239

Source: Unit Costs Provided by the Company and reviewed by RPM.

Power Supply Options

Milling of sulfide ores in the Tenke mining district is potentially viable; however, a fatal flaw includes power supply. The currently envisioned concentrator is very roughly estimated to require an additional 50 MW of power. This power can be supplied through any of a number of options including (1) directly tying into the Southern Africa Power Pool (cost of ~USD400M), (2) refurbishment of the Inga hydroelectric power project on the Congo River near Kinshasa, (3) refurbishment of a turbine on the N'zilo hydroelectric project in the DRC, or (4) green field power generation on the N'seke River. All of these options have a risk of not completing on-budget, however RPM notes that no definitive decisions have been made, nor a timeframe for implementation of the sulphide processing option been set.

13.2 Open Pit Mining

While RPM understands that no sulphide open pit mining studies or schedules have been undertaken by, or on behalf of the Company, RPM has completed preliminary pit optimizations to quantify this opportunity. As outlined in **Section 7**, these pit optimisations were based on the same parameters as the reserves pits with the exception of the pricing which utilised USD 3.50 / lb Cu and USD 15.00 / lb Co. The results pit shells were subsequently utilised to report the Mixed and Sulphide Mineral Resource for a total of **143 Mt at 3.3% TCu and 0.27% TCo**.

Based on the deposit characteristics, it is envisaged similar mining methods, with the same equipment types would be required to exploit the mineralisation at a rate of 3.75Mtpa to feed the Flotation and Roasting plants which are required to be constructed. This would result in similar unit costs for the removal of the haulage of Ore and Waste, however a slight increase in drill and blast (due to the rock hardness) would occur and the strip ratio of waste to ore would likely increase to the depth of the material (Sulphide is directly beneath the Oxide material).

13.3 Underground Mining Study

The Company previously engaged a third party to complete a scoping study for the Sulphide Underground portion of the Dipeta Syncline area of the Project. RPM has completed a review of the associated reports which outlines the proposed production profile, operations and costs. RPM utilised this report, and completed further optimisations and designs to better define the economic viability of an underground operation within the Project (the RPM Scoping Study). RPM highlights that that as reported in **Section 7** a total of **365Mt at 3.1% TCu and 0.27% TCo** has been reported for the Mixed and Sulphide ore types for all UG potential areas within the 18 resource areas. The RPM Scoping Study summarized below focused only on the Dipeta Syncline which accounts for a total 77.8Mt of the 365 Mt total.

The RPM Scoping Study has been conducted to optimise the underground mining potential and while based on the parameters based on previous studies for this Project, has changes various items and significantly the approach to determine the economic viability of mining blocks. The main changes in the approach from previous studies include:

- A detailed Net Smelter Return ("NSR") for both the Cu and Co has been determined for each Mineral Resource block;
- A Cu Equivalent has not been used as the NSR was determined to reflect the economic more accurately;
- Stope Optimisations are based on a range of NSR scenarios rather the CuEq values;
- Instead of using an average grade and density for the entire mine area, as previous studies, this study utilised the Mineral Resource block model to ensure the respective tonnes and grade spatially reflects the practical mining area and ability to report the tonnes and grade on a block by block basis;
- The previous study used 3 declines to access a single limb within the "Modelled Area" This study uses a twin decline for the northern limb and a single decline for the southern limb. The southern limb has a maximum strike of 800m therefore only one decline; and
- Previous studies only used the top of one limb in the Syncline and extrapolated that both limbs and keel of the syncline would produce the same physical and economical outcomes. This study uses the entire Resource supplied and highlights that the aforementioned approach does not account for a significant change in the geology structure and faulting.

13.3.1 Geotechnical

A preliminary geotechnical assessment of potential underground mining in the Dipeta Syncline was undertaken in February 2015 (Sandy, 2015) which is outlined in **Table 13-3**. RPM understand this analysis was based on a limited review of drill core and photographs from selected drill holes on Section 414450 mE subsequent. All Dipeta Syncline drill holes have been logged for detailed geotechnical parameters to allow formal rock mass characterisation. Logging has been undertaken that allow both Bieniawski's Rock Mass Rating (RMR) and the NGI Q system values to be calculated. The detailed results were not supplied other than the summary in **Table 13-3**.

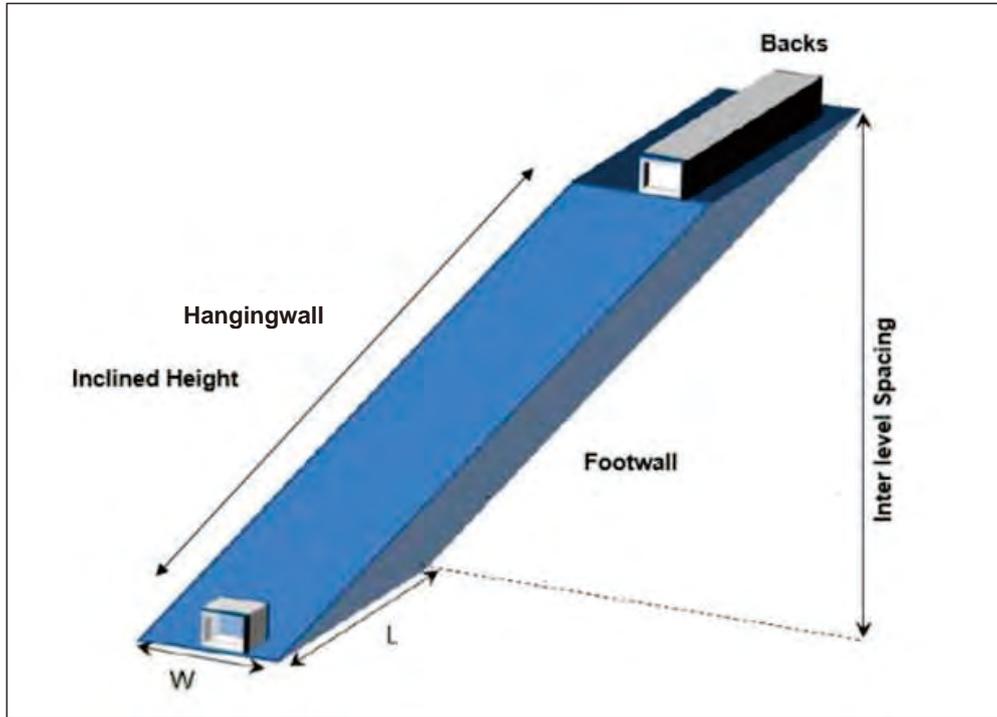
Table 13-3 Geotechnical Sample Results

Lithology	Uniaxial Compressive Strength (MPa)			Brazilian Tensile Strength (MPa)			Young's Modulus (Tan50, GPa)			Poisson's Ratio Mean Std. Dev.		
	n	Mean	Std. Dev.	n	Mean	Std. Dev.	n	Mean	Std. Dev.	n	Mean	Std. Dev.
CMN	5	193	82.4	5	8.5	2.2	5	69.7	33.8	5	0.41	0.04
SDS	5	153	41.7	5	10.6	1.9	5	51.5	19.8	5	0.37	0.05
SDB	4	180	36.3	5	12.3	3.6	4	43.4	10.7	4	0.37	0.06
RSC	5	170	75.8	5	10	5	5	73.3	10.3	5	0.32	0.06
RSF	2	223	39.8	2	8.3	3.7	2	70.8	10	2	0.29	0.03
RAT	5	65	26.5	5	5.1	2.2	5	20.2	7.5	5	0.36	0.09
RGS	4	50	16.5	3	60.8	0.2	4	35.6	21	4	0.37	0.09

Source: Provided by the Company.

Preliminary geotechnical reviews indicate a hydraulic radius (HR) of 6.5m. The HR is a geotechnical parameter for the quotient of the stope wall area and the stope wall perimeter. As the orebody is primarily dipping at 30 degrees, a 7.5m level interval would maintain an ideal stope length of 50m and production holes less than 30m in length. For reference RPM shows the terminology of the Stope in **Figure 13-1**. When further geotechnical studies are completed, in further studies, the level interval can be varied to reflect the dip of the mineralisation.

Figure 13-1 Stope Terminology



13.3.2 Hydrological

No hydrological modelling has been completed however it has been assumed that similar water inflow rates may occur at Dipeta as those in the region. The underground dewatering comprises development to the areas to be dewatered followed by the drilling of drainage boreholes (approximately every 100 m along strike and every 90 vertical). Once the boreholes intersect the aquifers, the dewatering rate can be controlled using collar standpipes fitted with valves. Extensive pumping facilities are also established to capture and pump the water to surface. Dewatering development and drilling activities are generally undertaken two years ahead of production commencing on that level, to allow time for the water levels to drop below that level.

Considering the faults in the area, hydrology is a risk for the Project and additional studies are required to understand the impact of groundwater on development and costs.

13.3.3 Mining Methods

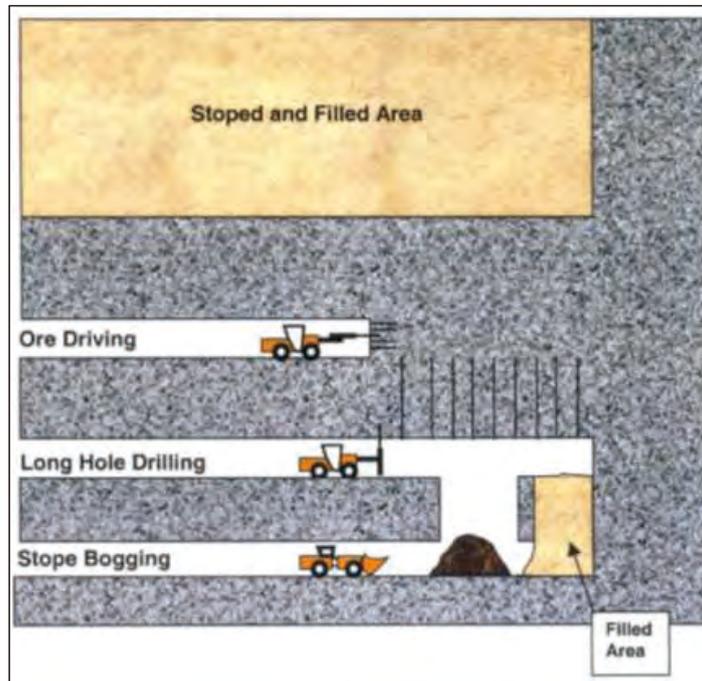
Previous studies concluded that Overhand Long Hole Open Stopping (“LHOS”) with engineered fill is the optimum mining method, which RPM considers is reason. This scoping study has utilised this as the base case option however would recommend that further studies are undertaken that examines an alternative mining method for the mineralisation that has a dip less than 20° towards the keel of the syncline. A method such as Room and Pillar mining could be more practical in these areas however will result in lower mining recoveries and production rates.

LHOS is a conventional underground mining method which is both flexible and relatively selective. It is suited to deposits of variable dimension and shape, and for rock of varying strength characteristics. The bulk mining nature of this method leads to reduced unit mining costs as the mechanised extraction methodology generates significant broken rock quantities for relatively low input costs. This method is also suitable for mineralised bodies with variable geometry and/or weak wall rocks, as increased recovery and reduced dilutions may be achieved.

Stopes are accessed by two main development levels at the top and bottom of the stope (Figure 13-2), serviced generally by crosscuts from the decline. The stopes are mined in panels from the end of the development drive to the start of the crosscut. As each panel is mined a void is created which is then either backfilled, generally with a rock or paste or serves as the void into which the lifts above can be fired.

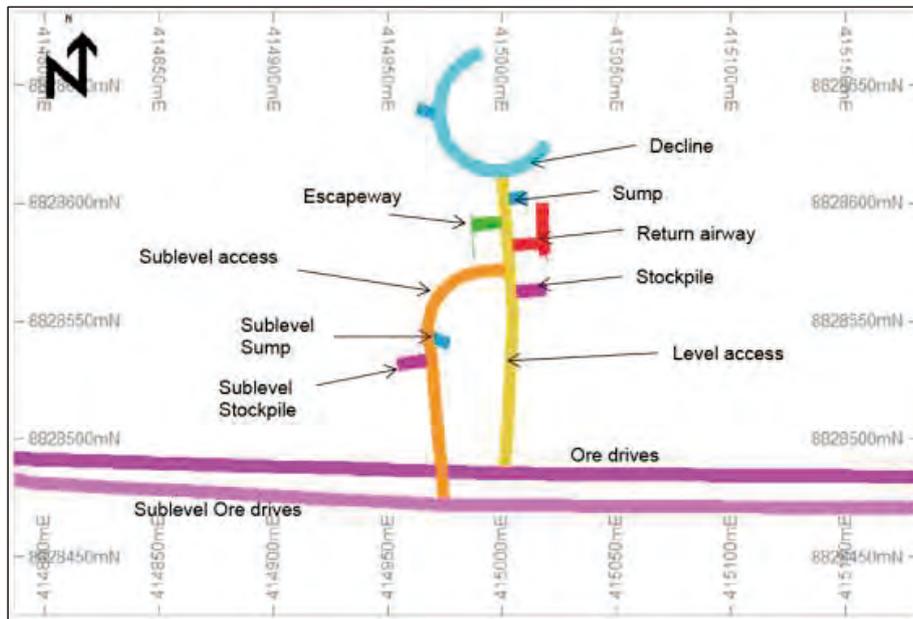
LHOS accesses and extracts the mineralisation parallel to the strike of the mineralisation. This method is suited to narrower mineralised veins where the entire width can be mined without producing an unstable stope crown. Successful implementation is therefore dependent on understanding the geotechnical conditions of both the mineralised material and wall rocks, and monitoring and mitigating geotechnical hazards as they develop. This is generally done by controlling the size of the stope exposed and use of conventional ground support methodology.

Figure 13-2 Generic view of a LHOS mining method



The two twin declines, at a 1:7 gradient, advance from the surface to 50 m below the pit through the crown pillar. The crown pillar separates the underground workings from the open cut void. The decline then continues at a 150m offset to the mineralisation in 15 m level intervals on the hanging wall side of the orebody. From each level an access drive splits to access ore drives at 7.5m sublevels. The ore drives are developed through the stope on the hanging wall side, as shown in **Figure 13-3**.

Figure 13-3 Typical level layout showing a plan view of the 7.5m access to the sublevel



13.3.4 Cut off Grade Analysis

Previous studies have used a Cu equivalent of the Cu grade plus 4 x the Co grade however this study has been optimised based on determining a net smelter return (NSR) which can be considered a mine gate price for the contained metal. The NSR incorporates the various processing recoveries, smelting, transport and selling costs for Cu and Co. **Table 13-4** outlines the NSR assumptions which have included into each mining block within the Resource block model has a mine gate price.

Table 13-4 NSR Assumptions

NSR Factors	Cu	Co
U/G Recovery with paste	80 %	80 %
U/G Dilution without paste	11 %	11 %
U/G Dilution grade	0.00 % Cu	0.00 % Co
Processing Recovery	90 %	78 %
Metal Price	2.88USD/lb	10 USD/lb
Total selling cost	0.35 USD/lb	6.15 USD/lb
Annuity	0.01 USD/lb	0.02 USD/lb
SX—EW operating costs	0.11 USD/lb	0.07 USD/lb
Remunerative fee	0.02 USD/lb	0.09 USD/lb
Marketing fee	0.03 USD/lb	0.09 USD/lb
Export fees and duties	0.03 USD/lb	0.03 USD/lb
Local fund and exchange controls	0.01 USD/lb	0.03 USD/lb
Royalties	0.04 USD/lb	0.12 USD/lb
Freight cost	0.10 USD/lb	0.40 USD/lb
Cobalt hydroxide cost	0.00 USD/lb	0.88 USD/lb
Cobalt hydroxide kokkola conversion & customer freight	0.00 USD/lb	4.41 USD/lb
Advisory fee	0.00 USD/lb	0.01 USD/lb

13.3.5 Basis of Mine Design

RPM undertook a stope optimisations using Vulcan software which was conducted with the following parameters:

- Sublevel interval of 7.5 m;
- Stope Length of 50m;
- Range of NSR Cut-Off Grades (COG)s from 90 USD/t to 130 USD/t in USD 10 increments;
- Minimum stope width of 5m;
- 3 declines – twin access on the Northern Limb and 1 decline on the southern limb of the Syncline;
- 150m decline off set from the orebody;
- The ROM and waste dump is located 1km from the portal;
- Underground mining dilution of 11%;
- Underground mining recovery of 80%; and
- Engineering fill to be used in all areas as specified in previous studies.

Once detailed engineering studies identify the paste unit costs, additional stopes at a lower NSR could be identified. This could improve the potential mineable quantities in future studies taking into account the decrease in mining recovery due to leaving some pillars behind.

Figure 13-4 through **Figure 13-6** show the results of the stope optimisations using the above assumptions at different NSR COG's. Each stope has been colour coded to reflect the NSR value (the redder the colour, the higher the value). RPM notes the red line the block model limits, and the blocks do not go to the edge of the models. RPM highlights the green line on the southern limb which is an interpreted fault structure which displaces mineralisation and the black dashed line which is the interpreted syncline axis.

Figure 13-4 Stope Optimisation Results for In situ USD 90/t COG (Left), USD 100/t (Right)

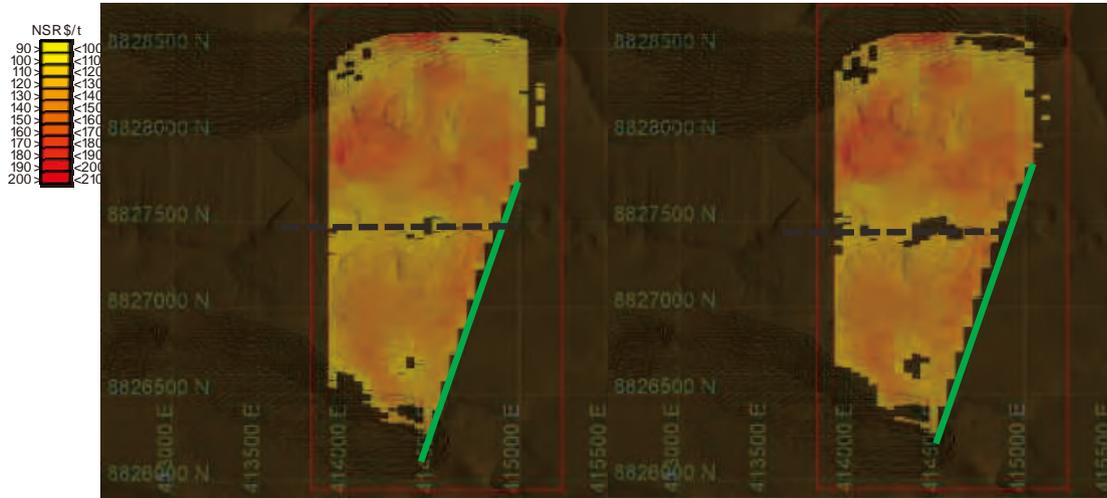


Figure 13-5 Stope Optimisation Results for In situ \$110/t (Left), USD 120/t (Right)

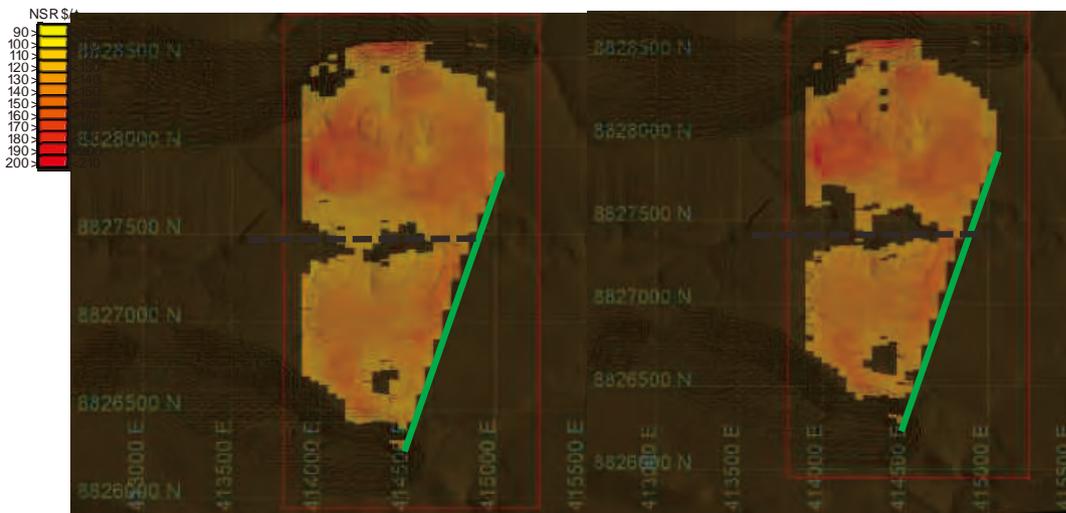
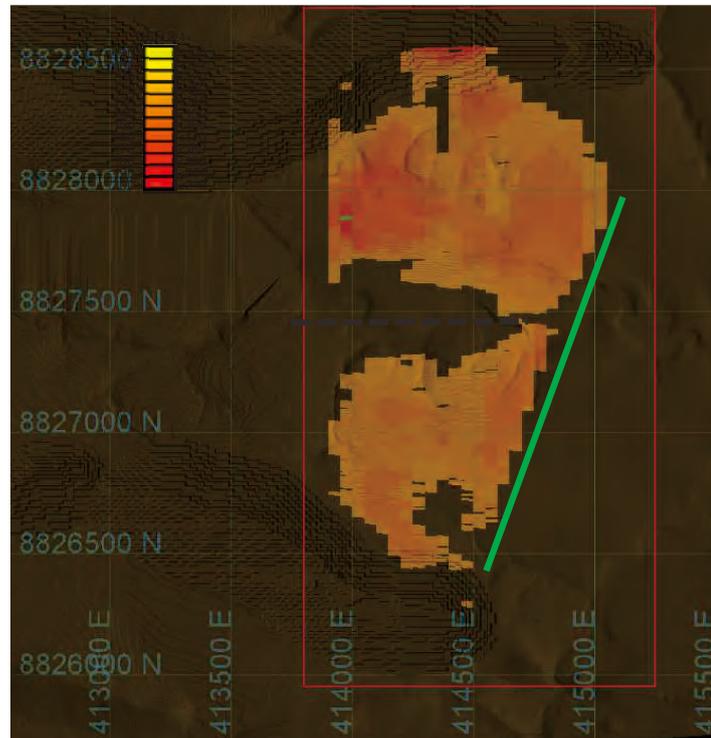


Figure 13-6 Stope Optimisation Results for In situ \$130/t



The northern limb of the syncline has more potentially economic mineralisation than the southern limb. The keel of the syncline is not as economic as the limbs. This limited defined potential economic mineralisation in the keel is likely due to the lateral extent (and distance) a minimum of twin declines are required to access the stopes, however is likely also attributed to the orientation of the mineralisation (much near horizontal) this have less Cu per vertical meter. As noted above, RPM recommends reviewing the mining method in this area to increase recovery.

13.3.6 Mining Cycle

The development (horizontal) mining cycle includes the following items:

- Development drilling;
- Charging;
- Blasting;
- Washing down
- Mucking/bogging;
- Mechanical/manual scaling;
- Fiber Crete to support walls and roof;
- Bolting and meshing to support walls and roof (cross-cuts and elsewhere when required);
- Survey and face mapping; and
- Cable bolting crosscuts later.

The production and stoping mining cycle includes the following items:

- Sludge sampling as required immediately after development;

- Cable bolting as required – Action takes place as soon as stope design is ready (requires sludge sampling results);
- Extra bolting and meshing when needed;
- Production Drilling/Blasting;
- Mucking/Bogging of material onto trucks and stockpiles or remote controlled mucking to a loading point;
- Building of the paste bund and reticulation of paste line;
- Paste filling and inspections – conducted in stages; and
- Curing of the paste.

13.3.7 Ground Support

No ground support regime has been identified however the assumed development consist of 2.1m Split Sets or 2.4m Swellex bolts, 125mm x 125mm mesh, 3.0m yielding cement bolts in various patterns as determined locally. The cross cuts and stope drives have splayed 6 to 15m cable bolts at regular intervals of 2m. As part of future geotechnical studies various ground support regimes will need to be identified.

13.3.8 Mining Materials Handling

Trucking is expected to be the most cost effective means of transporting waste and ore with advantages of:

- High level of flexibility which is suited to Dipeta geometry; and
- Low upfront capital cost.

Should the mine deepen, shaft hoisting may become suitable. Shaft hoisting in comparison to trucking will entail:

- Higher initial capital costs; and
- Lower operating costs.

One of the main considerations for shaft haulage will be underground lateral transfer of rock from development and stoping areas to a central shaft location. With the large lateral extent of ore and low tonnage per unit area an extensive underground transport network will be required. To reduce haul distances it is anticipated that a shaft would be centrally located within the syncline. The disadvantage of this is that a large amount of development would then be required in the HW units, including development through potential aquifers.

RPM recommends as part of future mining studies the option of using shaft haulage should be evaluated.

13.3.9 Mining Infrastructure and Support

The underground operations have been considered after the open pit mining has paid for the non-mining surface facilities inclusive of the Mine Closure, Process plant, Leach-SXEW, Acid Plant, Cobalt Plant, and Tailings etc. As such these costs are assumed already sunk. However as part of the development of the underground various support infrastructure construction is required. A detailed costing and list of the infrastructure underground mining include:

- Workshop/Change Rooms
- Various Underground related surface infrastructure such as fuel and service bays etc
- Electrical cabling and supply to underground operations
- Backfill Plant
- Dewatering
- Ventilation

13.3.10 Mine design

Figures 13-6 through Figure 13-12 shows the concept mine design based on the NSR of \$110/t.

Figure 13-7 Concept Mine Design looking East

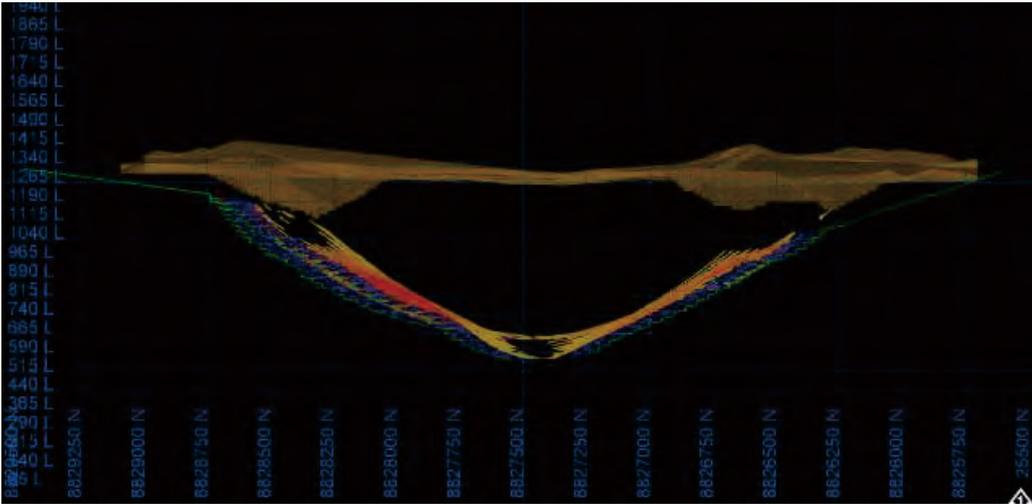


Figure 13-8 Concept Mine Design looking West

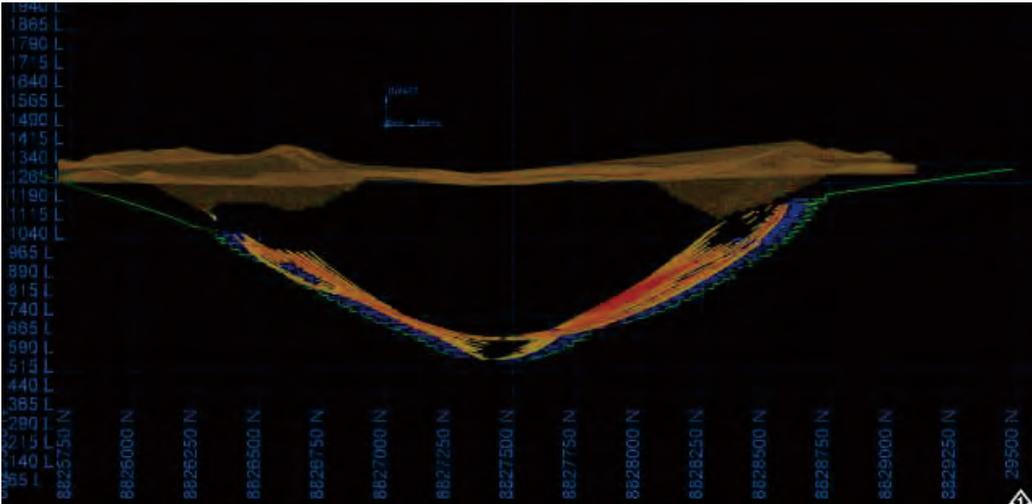


Figure 13-9 Concept Mine Design plan view

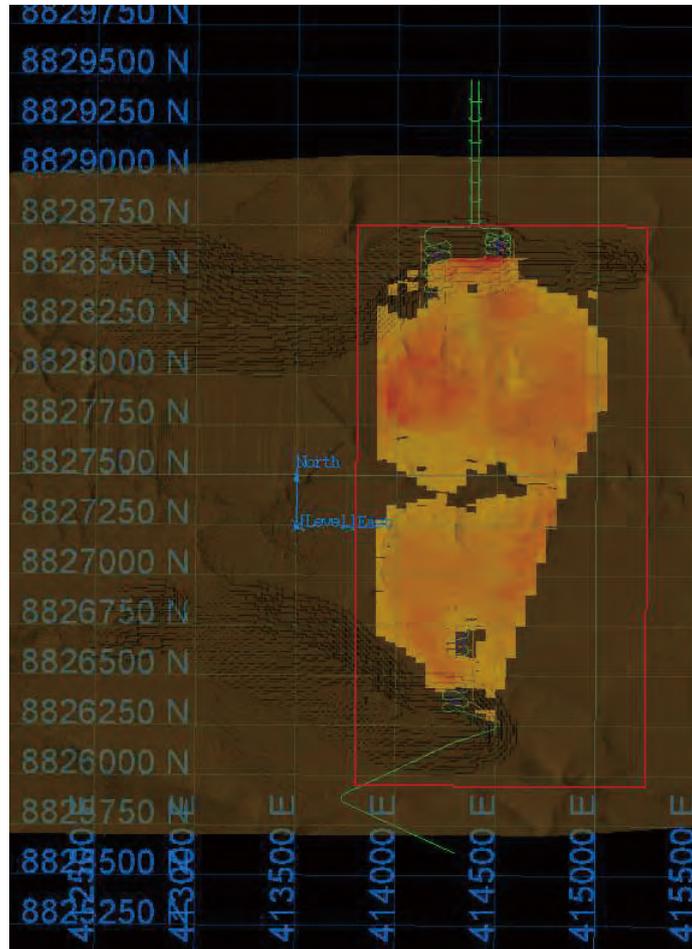


Figure 13-10 Concept Mine Design looking North

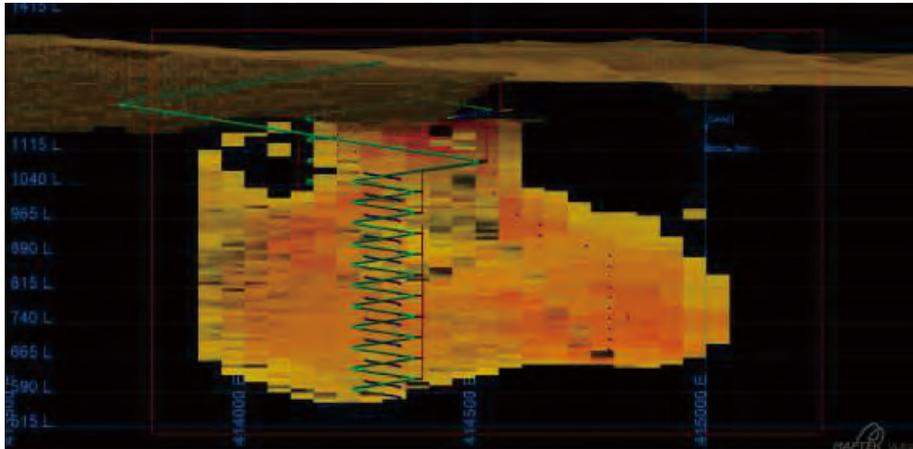


Figure 13-11 Concept Mine Design looking South

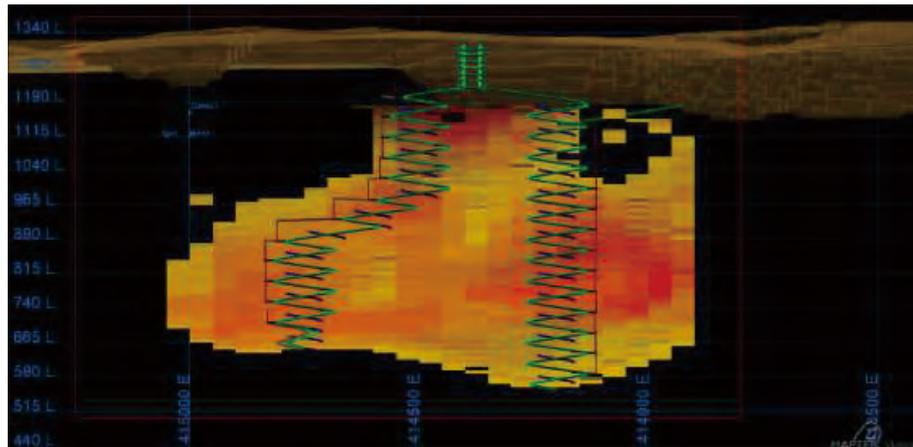


Figure 13-12 Concept Mine Design looking South West

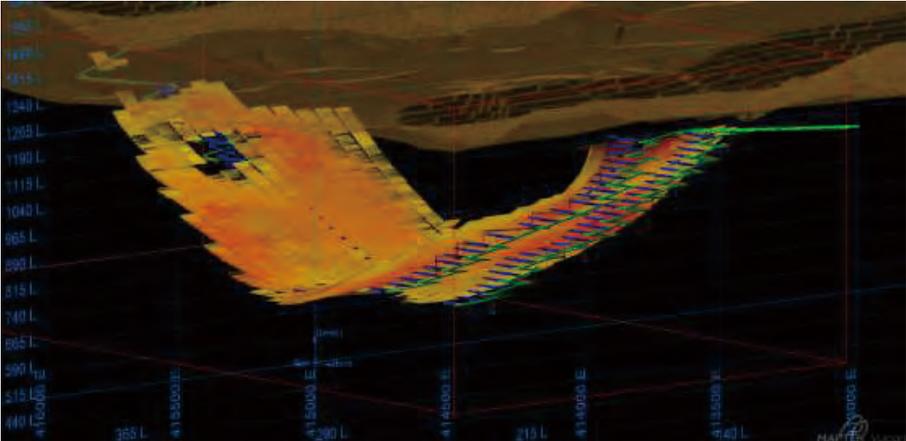
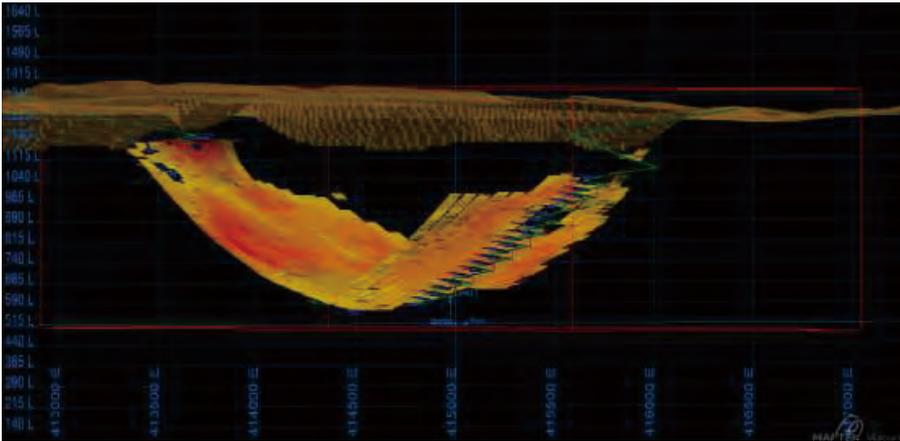


Figure 13-13 Concept Mine Design looking North East



13.4 Underground Capital and Operating Costs

13.4.1 Mining Contractor Costs

The estimated mining costs have been based on the contractor costs provided by the Company separated into capital and operating costs as set out in the **Table 13-5**.

Table 13-5 Mining Contractor Costs

Area	Unit cost (USD /t ore)	Unit Cost Split	Capex split	Opex split	Capex (USD /t ore)	Opex USD/ t ore)
Contractor mob/demob	0.1	0%	100%	0%	0.1	0.0
Equipment	na	na	na	na	na	na
Purchase	na	na	na	na	na	na
Lease — owners LV's	0.1	0%	100%	0%	0.1	0.0
Equipment operating	0.0	0%	0%	100%	0.0	0.0
Development	14.0	21%	33%	67%	4.6	9.4
Stope loading	5.4	8%	0%	100%	0.0	5.4
Haulage	11.7	18%	25%	75%	3.0	8.7
Personnel — owners	1.4	2%	25%	75%	0.4	1.0
Personnel — contractor expat accom	0.4	1%	25%	75%	0.1	0.3
Diesel — included in contractor rates	0.0	0%	25%	75%	0.0	0.0
Electrical power	1.9	3%	25%	75%	0.5	1.4
Development consumables — c/b and fibrecrete	0.7	1%	33%	67%	0.2	0.5
Production	0.5	1%	0%	100%	0.0	0.5
Production	10.8	16%	0%	100%	0.0	10.8
Fill	12.1	18%	0%	100%	0.0	12.1
Vertical development (capital)	0.9	1%	100%	0%	0.9	0.0
Grade control	0.7	1%	0%	100%	0.0	0.7
Mine services	0.7	1%	25%	75%	0.2	0.5
Mine management	0.6	1%	25%	75%	0.2	0.5
Infrastructure	3.8	6%	100%	0%	3.8	0.0
TOTAL	66.0	100%			14.0	52.0

Source: Unit Costs Provided by the Company and reviewed by RPM.

13.4.2 Capital Costs

The estimated mining capital costs are as follows based on previous studies and are set out in **Table 13-6** below. The estimated mining costs assume a mining contractor therefore the mobile plant is contained in the variable mining rate. The variable mining cost of \$6,980/m includes the distribution of costs as indicated in **Table 13.5**.

Table 13-6 Underground Capital costs

CAPEX			No CAPEX		
Cost Centres	Units	Cost	Cost Centres	Units	Cost
Workshop/change-rooms	USD	11.06 M	Mobile Plant	USD	Mining contractor
Communications	USD	2.0 M	Shaft	USD	N/A
Utility lines	USD	0.38 M	Conveyor	USD	N/A
Surface roads	USD	0.31 M	Capitalised Opex to First Stope Ore	USD	N/A
Raw water	USD	2.96 M	Decline/Access Development	USD	Unit rate applied
Compressor	USD	1.50 M	Mine Closure	USD	Paid for by the OP
Miscellaneous tools	USD	0.50 M	Surface Infra	USD	Paid for by the OP
Cap lamps and PPE	USD	0.79 M	Process plant	USD	Paid for by the OP
Mines rescue equipment	USD	0.50 M	Leach-SXEW	USD	Paid for by the OP
Portal	USD	4.0 M	Acid Plant	USD	Paid for by the OP
Underground service bays	USD	1.0 M	Cobalt Plant	USD	Paid for by the OP
Underground fuel bay	USD	1.0 M	Tailings	USD	Paid for by the OP
Underground explosives magazine	USD	1.0 M	Other	USD	Paid for by the OP
Underground lunchroom	USD	0.30 M	Contingency	%	0%
Refuge chambers	USD	1.80 M	Sustaining Capital	%	5%
Tele-remote cabins	USD	1.20 M	Technical services	USD	0.0 M
Fill	USD	21.50 M	EPCM	USD	0.0 M
Electrical	USD	4.64 M			
Dewatering	USD	17.48 M			
Ventilation	USD	11.34 M			

Source: Unit Costs Provided by the Company and reviewed by RPM.

13.4.3 Operating Costs

The estimated mining operating costs are based on information provided by the Company and reviewed by RPM are shown in **Table 13-7**:

Table 13-7 Mining Operating Costs

Cost Centre	Opex (USD / t ore)
Development	9.39
Stope loading	5.40
Haulage	8.73
Personnel — owners	1.04
Personnel — contractor expat accom	0.30
Diesel — included in contractor rates	0.00
Electrical power	1.42
Development consumables — c/b and fibre Crete	0.47
Production	0.50
Production	10.80
Fill	12.10
Grade control	0.70
Mine services	0.52
Mine management	0.45
Contingency	0%
TOTAL	52.00

Source: Unit Costs Provided by the Company and reviewed by RPM.

The estimated Processing and Administration Operating costs are outlined in **Table 13-8**. RPM notes that these costs include the floatation and roasting circuit as well as the leaching but exclude the SX-EW plant to produce the products (as per the current operations) and freight costs to market.

Table 13-8 Processing and Administration Operating costs

Area	Units	Cost
Processing costs	USD/ore tonne	18.09
TSF cost	USD/ore tonne	4.33
Other costs	USD/lb	0.34
Site administration costs	USD/ore tonne	19.00
Surface haulage	USD/ore tonne	1.13
Processing Operating Contingency	%	0

The Operating costs beyond the mine gate are shown in **Table 13-9** and include the SX-EW, the cobalt production to product costs, as well as freight and selling costs.

Table 13-9 Operating costs beyond the mine gate

Area	USD /lb metal
Total Cu off site cost	0.35
Annuity	0.01
SX—EW operating costs	0.11
Remunerative fee	0.02
Marketing fee	0.03
Export fees and duties	0.03
Local fund and exchange controls	0.01
Royalties	0.04
Freight cost	0.10
Cobalt hydroxide cost	0.00
Cobalt hydroxide kokkola conversion & customer freight	0.00
Advisory fee	0.00
Total Co off site cost	6.15
Annuity	0.02
SX—EW operating costs	0.07
Remunerative fee	0.09
Marketing fee	0.09
Export fees and duties	0.03
Local fund and exchange controls	0.03
Royalties	0.12
Freight cost	0.40
Cobalt hydroxide cost	0.88
Cobalt hydroxide kokkola conversion & customer freight	4.41
Advisory fee	0.01

13.4.4 Level by Level Analysis

The stope optimisation was conducted at a NSR cut off of \$90, \$100, \$110, \$120 and \$130, each level was reviewed to assess if it is economically viable (undiscounted) after capital development and an extraction sequence was determined.

Key assumptions in this analysis include

- RPM assumes that the declines have portals commencing from the surface rather than in pit. RPM have assumed this to ensure continuity of production should the development be started before the completion of the pits.
- USD currency;
- No corporate taxation;
- No depreciation;
- No Exploration Cost

13.4.5 Economic Scenario Ranking

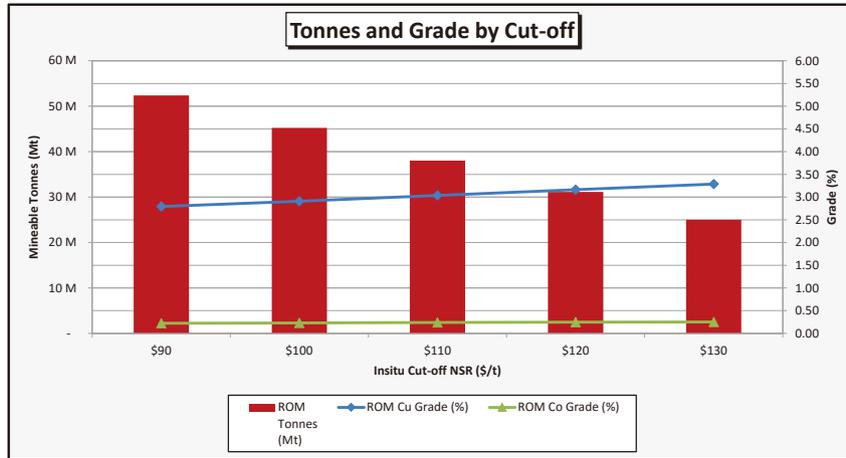
An Economic Scenario Ranking model was created by RPM for the purpose of selecting the optimal scenario to pursue in future studies at a particular NSR. **Table 13-10** outlines the assumptions used for each of the mining scenarios which assumed a discount rate of 12%.

Table 13-10 Base case economic modelling parameters

Base case economic modelling parameters	Cu	Co
U/G Recovery with paste	0.80	0.80
U/G Dilution without paste	0.11	0.11
U/G Dilution grade	0.00	0.00
Processing Recovery	0.90	0.78
Metal Price	2.88 \$/lb	10 \$/lb
Total selling cost	0.35 \$/lb	6.15 \$/lb
Annuity	0.01 \$/lb	0.02 \$/lb
SX—EW operating costs	0.11 \$/lb	0.07 \$/lb
Remunerative fee	0.02 \$/lb	0.09 \$/lb
Marketing fee	0.03 \$/lb	0.09 \$/lb
Export fees and duties	0.03 \$/lb	0.03 \$/lb
Local fund and exchange controls	0.01 \$/lb	0.03 \$/lb
Royalties	0.04 \$/lb	0.12 \$/lb
Freight cost	0.10 \$/lb	0.40 \$/lb
Cobalt hydroxide cost	0.00 \$/lb	0.88 \$/lb
Cobalt hydroxide kokkola conversion & customer freight	0.00 \$/lb	4.41 \$/lb
Advisory fee	0.00 \$/lb	0.01 \$/lb

Figures 13-15 outlines the tonnes and grade for each of the optimized scenarios. A review of this graph indicates that the mineable quantities and Cu grade decrease proportionally with the increase in the NSR, as would be expected. The Co grade is relatively linear and does not vary with the change in the NSR, this reflects the relative consistent grade of Co compared to the viability of the Cu in the resource estimate. Based on the review of the quantities, grade variation and economic of each of the scenarios, RPM has selected the optimal scenario is at a NSR of \$110 which results in a payback of mining capital in 4 years of a 12 year mine life.

Figure 13-14 Tonnes and grade for each NSR Scenario



13.4.6 Mining Schedule and Estimate of Mineable Quantities

The mineable quantity has been defined and reported in the Report to be the potentially economically mineable portion of the Measured, Indicated and Inferred Mineral Resource following application of modifying factors considered suitable based on the data available. It accounts for mining dilution and material loss factors and economic considerations.

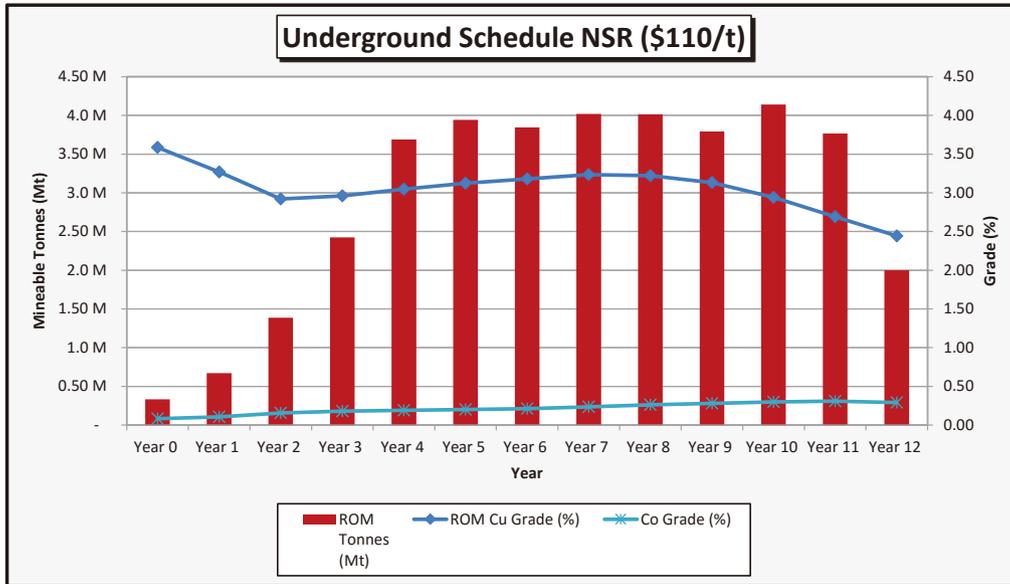
The mineable quantities are not supported by a study to a Pre-Feasibility accuracy and as such the estimate of quantities are not Ore Reserves as per the JORC Code. Further work is required in certain areas including geotechnical, underground mine planning and more detailed costing is required to improve the accuracy to a PFS level of detail. Any reference to the term “ore” or “ROM ore” in this document refers to mineralised rock that is above the stated cut-off grade and is not **Ore** as designated by the JORC Code.

Using the results of the level by level analysis for each scenario, an annual RL based mining schedule was produced based on the USD 110/t NSR. This schedule was optimised to achieve the following:

- Ore target of 3.75 Mtpa;
- Ramp up for the first 4 years; and
- No lag between mining and processing.

Figure 13-16 shows the outcomes for the NSR USD 110/t ore schedule. This is provided as an example with mining schedules completed for each NSR option.

Figure 13-15 Mining Schedule



RPM has estimated the total mineable quantities to be **38.0 Mt** at an average grade of 3.0% TCu and 0.05 % TCo comprising **0.1 Mt** of Measured Resources and **6.2 Mt** of Indicated Resources and **31.7 M**. **Table 13-11** shows the Mineable Quantities for the in situ NSR of \$110/t scenario by Mineral Resource estimate classification.

Table 13-11 Mineable Quantities for the in situ NSR of \$110/t scenario by Mineral Resource estimate classification as at 31st December, 2016

	Quantity (Mt)	Cu metal (Mt)	Cu Grade (%)	Co Metal (t)	Co Grade (%)
Measured	0.1	<0.1	3.20	<0.1	0.10
Indicated	6.2	0.2	3.19	<0.1	0.17
Inferred	31.7	0.95	3.00	0.1	0.25
Total	38.0	1.15	3.04	0.1	0.24

Notes:
 Tonnages are metric dry tonnes.
 Mineable cut-off Grade of NSR USD 110/t on an in situ grade basis.
 Figures reported are rounded which may result in small tabulation errors
 Mineable quantities are not Ore Reserves as defined by the JORC code.

13.5 Sulphide Development Options

RPM understands that there is no set development option or sequence for the either the open pit or underground sulphide projects, however RPM notes that there are various options which should be considered in future studies which are flexible in timing and can mitigate the critical risk of power supply and processing plant capital requirements.

The key limitations of the sulphide production is the requirement for a plant to be constructed, and timing of mining operation. As outlined in **Section 13.1** a flotation circuit followed by a roasting plant is required which would then feed a leaching and SX-EW circuit. RPM notes there is two options for this plant:

- Construction of only a Flotation and Roasting plant and utilising the current leaching and SX-EW plant. While this approach minimises the capital requirements, however no sulphide processing can commence until there is spare capacity in the current plant. This would likely not occur until the high grade material is processed in 2038, and the LG stockpile is being processed (but would require a blend of the Sulphide

concentrate and the LG stockpile material. This option would have the added advantage of decreasing the overall power requirements of a new plant as the current plant is utilised.

- Construction of both the floatation, roast plant and a new leaching and SX-EW plant. While this method results in additional capital, personnel and power requirements it allows much great flexibility in the timing for production and would result in a higher production of copper cathode which would result in cost savings per pound produced and unlock the value of the sulphide material earlier.

Either of the two options above are consistent with the options for mine development. The development timeframe for the Sulphide Open cuts is limited by the timing of the oxide pit, and in general the oxide pits need to be completed prior to commencement of sulphide mining, however there is scope for some overlap towards the end of the oxide mine life. However it is logical that sulphide mining commence at the cessation of oxide mining to minimize equipment Capital and personnel requirements along with administration costs etc. As such sulphide mining would likely be planned to commence in 2038.

Underground mining is by far the most flexible of the development timeframe for the sulphide operations. As noted in **Section 5.3** RPM's scoping study assumes that the UG portals are located at surface, as such the development is not restricted by the current operations. However it is noted that significant savings can be achieved by utilizing the open pits to allow decrease development costs.

Having noted the above, it is clear there various option for development which need to be studied and analyzed as part of the ongoing work which will be completed in the future. To allow clarity two options are presented for reference and provides commentary about the advantages and disadvantages of each. RPM highlights that while a preliminary open cut optimization has been completed, no mine schedule or economic modelling has been completed to confirm the viability of the sulphide operations and potential mine life at the 3.75Mtpa production rate. Additionally the underground operations (and scoping study), assumes that the sulphide plant has been constructed as part of the open pit development (or at least included as Capital).

Option 1

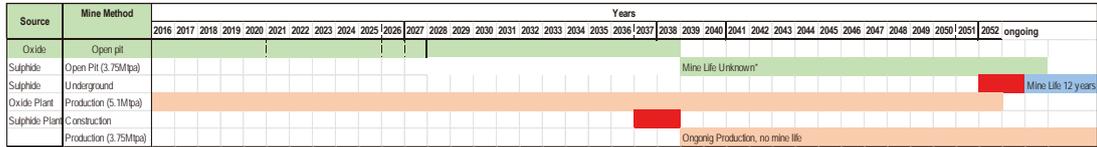
Option 1, as presented in the **Figure 13-17**, includes the construction of the plant in 2037 and 2038 to coincide with oxide mining ceasing allow all equipment and personnel to commence sulphide open pit mining and underground mining commencing towards the end of the sulphide pit mine life (unknown at this stage). This option would include the use of the current plant and the construction of only the floatation and roasting plants. As such the primary feed would be the sulphide material with the remainder of the feed for the leach plant from the LG oxide stockpile. This option has the following advantages:

- Increase cathode and cobalt production (compared to the current ore Reserve schedule) from 2038 due to the increased feed grade from the sulphide material.
- Decreases capital for both mining and plant using the same equipment.
- Decreased the complexity of the operation by using the same mining methods, versus bringing in the underground development earlier.
- Decreases the power consumption
- Effectively keep the same mining cost and logistic profile as is current until underground mining commences which will be much later in the mine life.

The disadvantage of this option include:

- Increase the technical complexities of the processing via blending of sulphide and oxide material in the leach plant.
- Effectively keeps the same Cu and Co production profile (from year 2016 to 2038).
- Defers the value until later in the current mine life

Figure 13-16 Option 1 Sulphide Development Schedule



Option 2.

Option 2, as shown in **Figure 13-18**, includes the construction of both the floatation and roasting plant as well as a new leach and SX-EW plant. In this option, the scheduled construction is planned to coincide the 12 year mine life of the Dipeta UG mine with the cessation of the oxide mining. It would be envisaged, following cessation of oxide mining, the sulphide open pit mining would commence and a combined UG and OC feed to a maximum of 3.75 Mtpa would occur and the oxide plant would continue as planned with the LG stockpile feed. This option has the following advantages:

- Increase production through underground earlier than in 2038. This includes increasing production from the current schedule.
- A dedicated sulphide plant and SX-EW circuit decreases the technical risk of blending of oxide and sulphide material.
- Decreased the complexity of the operation by using the same mining methods, versus bringing in the underground development earlier.
- Unlocks the value of the Project earlier in the mine life.
- Allows significant flexibility in the operation and decrease the mining risk through having multiple sources of feed, Open Cut, Stockpiles and underground, and
- With multiple mining sources, and ability to increase production readily allow multiple options to ramp up Cu production if processing plant capacity can be increased easily or the current plant utilised for sulphide processing rather than LG Stockpiles.

The disadvantage of this option include:

- Increases the capital required develop the project, in both the UG capital required (earlier in the mine life) and the processing plant.
- Increases the complexity of the operation by using the underground mining methods, versus the current similar open pit mining.
- Increases the power consumption when compared to utilising the current leach and SX-EW plant.
- Increases the cost of the operation through the higher cost underground mining, however this is offset by increased production of Cu.

Figure 13-17 Option 2 Sulphide Development Schedule



13.6 Comments

- LHOS stoping methods are considered the most appropriate for the syncline limbs based on the ore geometry, and potential production rates and costs of LHOS methods relative to other potential methods. However it is recommended during future studies additional review and alternative mining methods for the keel of the syncline be undertaken. Room-and-pillar methods are considered to be the most appropriate method for the syncline keel. However at these depths (>600 mbs) ore recovery is expected to be low in order to maintain stable ground conditions;
- RPM underground scoping study assumes the portals will be at surface. Alternatively the declines could be commence from within the pits thereby decreasing the initial development capital. It would be recommended to have the portals not at the very bottom of the pits but at least a few benches from the bottom to allow for dewatering. The portals would ideally located with the pit development plan. The current portals are located at the 1,370RL. Should the decline be located within the pit it would be located approximately 1,205RL saving \$30M in capital development.
- RPM notes that as approximately 30% of the ore is derived from ore development, the ore profile could be improved with more detailed planning. The mine production profile is constrained primarily due to development and the impact of poor ground or the ingress of water will impact on the development rates and could have a material effect on the production profile. Future Geotechnical and Hydrological studies will be critical to identify possible disruptions to the production profile.

14. Environment and Social

This section of the report provides a detailed review of the environmental and social management aspects of the Project. The review is based on a detailed evaluation of the important components of the environmental and social facets of the Project identified from the site visit, interviews, presentations, and document review. The Project continues to be viable from the environmental and social perspective even though many of the social management aspects of the project are complex and somewhat unstable. It appears that the potential social and environmental impacts resulting during all phases of the Project can be mitigated. The Company and their contractors appear to have the organizational capacity to address environmental and social issues, and health and safety management.

14.1 Environmental Management Program

The Environmental Management Plan (EMP) for the project has been developed based upon the conceptual EMP provided within the ESIA. The EMP's will include the four general elements of a management plan: (1) Planning: a statement of principles, definitions of responsibilities for the performance of plans and planning of activities; (2) Execution: a number of guidelines for the protection of the various environmental components and/or management of environmental risks; (3) Verification: a process for the control of activities by means of monitoring and inspections; and (4) Mitigation: corrective action in different areas under the environmental guidelines and implementation of remediation measures for the environment.

The Company understands that the EMS is a dynamic program and that modifications are required to meet ever changing conditions throughout the Project period.

The Project has received and has maintained ISO 14001 certification. This certification provides an indication of good management and a positive attitude toward environmental control.

14.1.1 Environmental Management Team Capacity

The Environmental Management Team is organized with a Manager position that leads environmental activities at the Project site. The Manager has a good understanding of the program and appears to be well organized making sure all obligations associated with compliance monitoring and reporting are fulfilled. It appears that the environmental group is well managed and the overall work effort is well organized. The management team consists of expertise in biodiversity, mine waste management, water resources, waste management including hazardous waste management and site closure. Waste management activities are primarily contracted with oversight by the management team.

14.1.2 Environmental Management System

Management plans have been developed addressing the environmental and social management activities in the project area. Fifteen separate management plans have been developed for the environmental aspects of the project. A series of action plans including the Biodiversity Action Plan (BAP) were completed during the initial phase of the project that contained mitigation actions required to manage projected impacts. Although the action plans are modified as the project progresses, the initial action plans provided a good starting point for environmental and social management.

14.1.3 Status of Permitting Activities

The 2005 Amended and Restated Mining Convention to which TFM is subject is based on the 1981 Mining Law, which has no provisions for environmental permitting. However, The Company prepared an ESIA due to their commitment to comply with the policies and guidelines of the World Bank and Equator Principles, which require the preparation of an ESIA. Completion of the ESIA appeared to provide the information required by the regulatory agencies as noted in the 2002 (current) Mining Law. Based on the monthly status reports provided, it appears that permitting activities follow appropriate time lines as required by the regulatory authorities without major issues.

14.1.4 Important Components of the Environmental Management System

Environmental Compliance Performance

The review of the available documents provides an indication that the Company has been compliant with applicable regulations. Site audits are conducted by project and company auditors on a daily basis for some components of the operation and more detailed reviews occur on a monthly and annual basis. Potential issues are addressed soon after discovery resulting in mitigation actions that appear to prevent violations from the regulatory auditors. Evidence of any significant environmental violations resulting in compliance issues were not discovered in the documentation provided.

Some issues have occurred with regard to sedimentation of a local stream due to instability of the South Waste Rock Storage area and the impact of dust generated from roads and waste rock stockpiles on adjacent crop lands. The waste rock issue will be mitigated during the next dry season while the dust issue will be ongoing although more emphasis on efforts to control dust in the vicinity of the communities should be pursued.

Baseline Studies

Study areas for baseline evaluations were selected based on the expected areas of influence for each of the important environmental disciplines. The primary areas of influence evaluated included potential impacts associated with air quality, noise and vibration, pit dewatering, erosion and sedimentation, waste rock and tailings storage areas, water storage, and water management including water treatment and discharge. The baseline determination occurred during 2005 and 2006 with continued monitoring of surface water flow and climatic conditions likely to the present. It appears that the data collected provide information associated with the dry and wet climatic seasons. The information collected appears to have some deficiencies that will be discussed in the following sections, where applicable.

Air Quality Management and Greenhouse Gas Emissions

The potential impact on air quality is primarily associated with dust generated from traffic, land disturbance, wind erosion and exhaust emissions from vehicles. Emissions from the processing plant, acid generation and other facilities such as SO₂ and NO_x will also impact air quality. Greenhouse gas emissions will contribute to the global warming issue.

An air quality action plan was developed to manage mitigation measures to reduce air emissions caused by the Company project. An air quality monitoring program has been developed with the primary objectives: (1) demonstrate compliance with air quality standards; (2) provide information for updating the air dispersion model; (3) detect short and long term trends with respect to mitigation performance; and (4) provide data for analysis of environmental changes and the design of appropriate mitigation actions.

The mitigation measures used for air quality management include design of roads, traffic and velocity control, dust suppression using water and other substances, road and vehicle maintenance, progressive revegetation measures to reduce areas susceptible to dust generation and the use of baghouses and electrostatic precipitators in the processing facilities. Road surfaces are designed to reduce travel distances and will be covered with materials such as asphalt and treated with magnesium chloride or similar substances to control dust generation.

Greenhouse emissions will be reduced by using hydroelectric power to support the project, minimizing haul routes and access road lengths, limiting vehicle idling times, and using railroads versus road transport.

Noise and Vibration Management

Noise and vibration levels will increase in the Project area resulting from vehicle traffic, blasting, processing of ore and haulage of waste rock and limestone. Noise and vibration modeling indicated that the nearest communities (post-resettlement) will not experience noise and vibration above applicable guidelines. This appears to be the case as grievances associated with noise and vibration issues were not noticed in the documentation reviewed.

Soils Management

Soils found in the project area are highly weathered, Oxisols and Ultisols soils. Soils are typically low in nutrients due to low elemental adsorption capacity and leaching of nutrients through the profile. Warm soil temperatures and high soil water conditions promote high biological activity causing mineralisation of organic matter resulting in a very low organic matter component in the soil.

Soils in the Project area including re-settlement sites were mapped and areas containing salvageable soil for reclamation were determined. Soils are salvaged and stock piled for use in reclamation and closure activities. Where available, composted materials will likely be used as an amendment to enhance soil productivity during reclamation.

Biodiversity Management and Ongoing Biodiversity Studies

TFM is committed to complying with International Standards with regard to biodiversity management through the commitment to minimize impacts of their operation on the environment using risk management strategies based on credible data and good science. As noted in the Biodiversity Action Plan (BAP), TFM's Environmental Policy directs the company to:

- Comply in all material respects with all applicable environmental laws and regulations;
- Review and take into account the environmental effects of mining activities during all phases of the operation;
- Acknowledge that certain areas may have particular ecological, biodiversity or cultural values and consider these values along with economic, social and other benefits resulting from development;
- Support research to expand scientific knowledge and develop improved technologies to protect the environment; and
- Support biodiversity programs and sustainable development in all operational areas

TFM has developed biodiversity management plans and a land management plan to promote biodiversity and ensure that significant biodiversity resources are considered during project planning. Such planning was accomplished using applicable criteria including IFC Performance Standard 6 and ICMM Sustainable Development Framework Principle 7, TFM conducted a detailed evaluation of biodiversity considerations in the Project area using several highly qualified consultants. The resulting ESIA and BAP provide detailed considerations of important habitats potentially impacted. The primary considerations included the copper flora communities (Copper Clearings), gallery forest and Miombo woodland habitats, and wetlands and other aquatic habitats. A significant amount of work was conducted to establish baseline conditions for the various habitats and a number of "potentially critical habitats" were evaluated. After careful consideration of baseline information with regard to applicable criteria including IFC Performance Standard 6 and ICMM Sustainable Development Framework Principle 7, the Copper Flora communities were determined to be critical habitat while the gallery forest and Miombo woodland habitats were determined to be important natural habitats at TFM.

The BAP addressed actions with respect to the copper flora vegetation providing a relatively good approach to maintaining and re-establishing this critical habitat post-project. The gallery forest habitat, which is not considered a critical habitat, was included in the BAP as restoration and protection are considered important to the biodiversity of the area. The BAP also discussed protection and reestablishment of the existing habitats such as the Miombo Woodlands, which is considered vulnerable in the concession area due to its use by the communities for fire wood and charcoal. The following discussion provides some insight into the important biodiversity considerations at TFM.

Copper Flora Habitat

The Copper Flora habitat was determined to be critical habitat vulnerable to destruction by legal and illegal mining operations. This flora community flourishes on high copper zones reflecting mineralization to depths. As a result, TFM and/or illegal miners mine the area to recover the ore. It is conceivable that mining companies such as TFM could leave such areas to conserve the critical biodiversity resource. However, the DCR Mining Code and Mining Convention require development of mineral properties to their fullest extent with no allowance to set-a-side areas of known mineral reserves. The DRC and NGO's concerned about the environment have shown no interest in conserving the Copper Flora habitats. However, if it was legal for the mining company to leave such areas for biodiversity conservation, illegal miners would mine the copper flora habitats destroying

their contribution to biodiversity. TFM has established Copper Flora habitats at appropriate locations associated with previous disturbance and intends to continue such operations. At present, this work appears to be successful as long as illegal miners are not able to impact the reestablished areas.

Gallery Forest Habitat

The gallery forest habitats located in the project area have been impacted by the communities as trees are cut for fire wood and charcoal, which is an important product supporting many households. A biodiversity evaluation conducted by TFM experts determined that the gallery forests are not considered critical habitat at the Tenke Operation. However, TFM has committed to establish gallery forests on the site as part of the reclamation/closure phase of the project in an effort to promote biodiversity conservation. TFM has promoted the use of mitigation measures to support gallery forest. If spring flow in the gallery forests is disrupted due to aquifer draw down, the company will discharge water from the pit dewatering systems to the appropriate drainages. Efforts will be made to protect the gallery forests from community use during the mining and post-mining phases of the project.

Miombo Woodland Habitat

The Miombo Woodland habitat occupies much of the area mined at the Tenke Project. As part of its commitment to strive towards no net loss of natural habitats to the extent possible, TFM will restore Miombo woodland habitat at appropriate locations in the project area as the mining areas are reclaimed. This work has been initiated on previously disturbed areas as about 550 ha of woodlands have been established as of 2015. Appropriate measures will be taken to protect these reclaimed areas from community use.

Aquatic Habitat including Fisheries

TFM will continue to implement existing aquatic ecosystem program components including monitoring of stream flows, channel geomorphology, benthic macroinvertebrate communities and conducting annual wetland and riparian habitat assessments. In addition, minimum base flow guidelines are being developed for local rivers, which will serve as a basis for maintenance of minimum flow requirements. Minimum base flow levels will be maintained using pit dewatering releases, where feasible.

Water Resources Management

Surface Water Management

Surface water flows in the project area will be disrupted by diversion of non-contact water around the project area or will be captured for use. Runoff from disturbed areas will increase until revegetation is established during the post-closure period and the lowering of groundwater levels due to dewatering will decrease groundwater discharge to the headwaters of streams in the affected areas.

A surface water flow-model was conducted by Golder to predict potential impacts that the project would have on the water resources in the project area. The impact was expected to be minimal during the wet season but would become substantial during the dry season in the immediate vicinity of the Project. Water quality issues were expected from erosion and resulting sedimentation, disposal of waste rock and ore, accidental releases and spills, and discharging of mine dewatering wells to local surface water resources. Best Management Practices (BMP's) will be used to minimize these potential issues. Water management actions that include construction of diversions and the use of sedimentation impoundments, weeping berms and silt fences have been employed.

It should be noted that the Project was designed as a no discharge facility, where discharged water is minimized and will meet water quality standards. Mitigation measures employed include lining of the tailings storage facility and return water dams and recycling of contact water for use in the processing plant.

Groundwater Management

Groundwater is pumped from supply wells for the processing plant, operations camp and other mine facilities. Other sources of water include rainwater captured at various locations in the project area and water accumulating at locations including the tailings facility, waste rock facility, the ore stockpiling area, and from the pit dewatering activities. Many of these actions have the potential to lower the water table in the vicinity of the operations and could impact discharge of water to springs and other surface water resources. It appears that the surface water resources have not been impacted at this time. However, it must be realized that reduced or the elimination of water flow in the critical habitat associated with wetlands and gallery forest areas could become a significant issue requiring mitigation actions.

Potential groundwater contamination caused by seepage from the tailings, waste rock and ore storage facilities must be closely monitored. The tailings facility is lined but solutions from the waste rock and ore storage facilities will likely seep into the groundwater in time. Other potential groundwater impacts could be associated with spills and discharges of toxic solutions such as petroleum products and chemicals used in the processing facility. Appropriate management plans have been developed to handle potential issues and it appears that employees are aware of the issues and are using appropriate techniques during operations to reduce such accidents.

During the site visit, several of the underground storage units experienced leakage into the groundwater system. It appears that mitigation measures were implemented to prevent environmental contamination outside of the immediate area.

Waste Rock Management

Waste Rock Characterization and Use

Waste rock will be broken up and transported by truck to waste rock storage areas. Geochemistry studies conducted show the materials to be composed predominantly of oxide minerals grading to sulfide mineralisation with depth. The oxide minerals are not acid forming but potentially will contribute some soluble metals such as copper, cobalt and manganese. The information provided indicates that the leaching potential for arsenic is low. However, since redox conditions influence the solubility of arsenic, it could become an issue and early detection through water monitoring will be important as the project moves through the operational and post-closure phases.

Based on preliminary testing, reduced waste rock generated during the future expansion into the sulfide resources are not expected to cause water quality issues. There is some discussion about using a blending approach to control acid formation, which could limit water quality issues for solutions potentially seeping into the groundwater. Additional testing will be necessary to provide information needed to support mitigation actions required to prevent environmental impact.

Water collected in the waste rock storage facility is used for various needs in the project area and will not be directly discharge to the environment.

Waste rock will be used for various applications in the project area including fill for construction applications, cover for the tailings storage material during closure and to provide geotechnical support for dam construction. The use of waste rock for construction and closure activities must be monitored to prevent environmental impact. The use of acid forming materials or waste rock that contains soluble elements such as As could cause contamination of storm water discharge.

Tailings Management

The tailings storage facility is used to store process tailings and other waste materials including sludge generated in the waste water treatment plants and iron-aluminum-manganese residue generating in the processing plant. The tailings facility is lined with an impermeable liner to prevent seepage into the groundwater system. Water collected in the facility is recycled to the processing plant and enhanced evaporation is used to reduce excess water not used. A number of groundwater monitoring wells was constructed around the facility to allow quick response to leakage issues. No issues are apparent at the time of this review.

The enlargement of the tailings storage facility to accommodate project expansion should not be an issue from the environmental and social standpoint. TFM does not anticipate any issues acquiring authorizations from the regulatory authorities with the expansion and the anticipated timing of the expansion.

Waste Management

Waste Management Program

The primary components of the waste management program include: (1) waste reduction, recycling, composting and treatment; and (2) safe storage of wastes produced minimizing effects to air, water resources and soil. Monitoring is conducted and mitigation measures will be implemented if issues are found. Hazardous waste is currently stored in a lined facility in the facilities area.

Solid wastes are classified and sorted according to their characteristics recyclable, suitable for clean landfill, compostable and hazardous. Non-hazardous and hazardous waste management landfills have been constructed. Both landfills are lined consisting of a double lining systems with leachate collection system above the primary liner and leakage collection system between the primary and secondary liners. Leachate will be collected in a detention pond and transported to the sewage treatment system or recycled to the processing plant.

Sewage generated in the facilities and camp area is treated using a treatment plant with the sludge either transported to the tailings storage facility or composted for use in vegetation establishment. Treated water is recycled for project use or discharged to the environment. Sewage at Base Camp is treated using septic systems.

The waste management program appears to be well managed. Waste management specialists are routinely sent to TMF to review management activities to assure appropriate techniques are used and that monitoring activities are ongoing.

Used Oil Processing System and Mitigation of Previous Contaminated Sites

The oil recycling system appears to be successful as the used oil stockpiled on site has been processed and transported off site.

The used oil storage sites were found contaminated with hydrocarbons. It was noted during the site visit, the contaminated soil will be removed and transported to a hazardous waste facility or incinerated on site. = The status of this mitigation effort is not known at this time.

Environmental Monitoring Program

The purpose of the environmental monitoring program is to provide early detection of undesirable impacts resulting from operations activities of the project. If review of monitoring data indicates an impact, the action plan can be amended to implement mitigation measures to eliminate the problem. This ensures that environmental protection is maintained and that regulatory compliance is demonstrated.

All major aspects of the environment will be monitored including climatic conditions, air quality, noise, vibration, surface water and groundwater (quantity and quality), and flora and fauna including aquatic biota and biodiversity. The monitoring parameters and frequency vary depending on potential problems and regulatory requirements.

Facilities located in the project area including the waste rock and ore storage areas, the tailings storage facility, and the waste management facilities are carefully monitored to provide early detection of problems. Water and air quality are also monitored to assure that effluent emissions from the various components of the project do not negatively impact people and the surrounding environment.

At this time, the monitoring programs appear to be robust and meet existing regulatory requirements and international guidelines.

14.2 Social Management

14.2.1 Community Development Team Capacity

The Company appears to have a social management staff that has the technical expertise and staffing levels required to achieve goals established as essential by company commitments and regulatory requirements. The social management group is headed by a Social Programs Manager that has a good grasp of regulatory requirements, social issues and associated mitigations. Social Programs is subdivided into three (3) subgroups: Community development, Community Liaison and Resettlement. The Social Community Fund (SCF) is an organization that functions as a non-profit group outside of the organization. The SCF is funded through a government order that requires The Company to put aside a percentage of mining profits to support community ventures.

The Social Programs division is supported by a Project Director from a third party that specializes in the implementation of Resettlement Action Plans (RAP). The community development team consists of specialists in important disciplines including community liaison/engagement, agriculture development, public health, education, economic development, and grievance mechanisms. The community liaison group is the primary engagement link between The Company and the communities.

The voluntary Principles group works closely with the Social Development Programs group.

14.2.2 Social/Community Management System

Management plans have been developed addressing social management activities in the project area. Action plans have been created to address the primary social management issues related to project development including the Resettlement Action Plan (RAP), management of Voluntary Principles on Security and Human Rights considerations including women and vulnerable persons rights, establishment of a Grievance Mechanism to deal with stakeholder concerns, Community Liaison (engagement) to ensure stakeholder understanding of project activities, and plans to address community development concerns including Agriculture improvement, improvement of Public Health in the project area primarily associated with water and sanitation, Improving Education opportunity, Economic Development (small business development) to support development of a sustainable economy in the region.

14.2.3 Important Components of the Social Management Program

Community Liaison

The liaison group is responsible to create positive connection between TFM and the various communities within the mining concession or impacted by the project. The liaison group consists of twelve people that visit villages and interact with each community on a regular basis at least once a month. Their primary goal is to keep The Company in good standing with the communities by providing an open door attitude for discussion of concerns, providing potential solutions to perceived issues, notification of project activities, and providing a notion that The Company is a good neighbour. The group continually takes the "temperature" and attempts to properly address issues before they become issues. Information collected during the community engagement activities is recorded and stored in the cooperate data base, which is housed in Phoenix.

It appears that Communities are moving toward taking ownership of the Project. Tensions are significantly lower compared to the initial stages of the project and many potential issues such as vandalism of schools and the Company facilities are controlled by the communities preventing such actions. With continued engagement, relations between The Company and impacted communities are expected to improve reducing significant security risks.

Resettlement Actions

The primary objective of the resettlement process for The Company is to provide continued land access for mine construction and operations. The Company conducts resettlement actions following international best practices as outlined in IFC Performance Standard 5. An integrated resettlement process is in-place where all impacted households (physically and economically displaced) are fully informed about the resettlement and participate in the consultation processes. Since the beginning of the Project, eight (8) resettlement processes have been initiated including: 3 closed out; 4 ongoing and 1 in the initial phases. The resettlement actions have

affected 4,979 households with 805 physically displaced. Houses and affected lands are normally replaced in-kind with other assets compensated for in cash using the 150% replacement value required by DRC law.

Several resettlement actions are anticipated in the next few years. Construction of the tailings facility expansion to the Northwest is expected to be done during 2018, which means the associated resettlement should be accomplished in 2017. In addition, about 300 households isolated by the expected sulfide expansion due to construction of haulroads, waste rock dumps and mine pits must be completed by 2019. It should be noted that this resettlement is not driven by the mine plan but rather by considerations of impacts to the isolated community. TFM would like to complete the resettlement during 2018 in order to use the baseline completed in 2016. If the resettlement is not completed in 2018, the baseline must be redone at an additional cost as alignment with best practice requires an update of baseline information older than 3 years..

A number of challenges exist for The Company to administer a fair and impartial resettlement process. The Project has attracted thousands of in-migrants that perceive the area to provide opportunities for employment, fertile land for agriculture and other business opportunities. The situation appears to be highly transient with people moving into the area on a temporary basis before moving on making it difficult to define the appropriate compensation. A number of approaches are used such as gradual land acquisition that requires restricted access and activities in areas planned to be acquired to avoid opportunistic behaviour. Often times, in-migrants will move into mine impacted areas where initial habitants have been resettled looking for resettlement compensation. This causes significant safety and health issues. These people are not physically removed but are told that they are in a restricted zone and need to move. These encounters are documented to support The Company's position against grievances and other liability issues.

One of the problems experienced by the resettlement team is that the engagement process for economically displaced needs to improve and livelihood restoration of impacted households is often challenging. An integrated resettlement process has been put into place where all households, including economically impacted ones, are fully informed about the resettlement and are greatly involved. The livelihood restoration program has been improved. The agricultural support has been diversified and technical assistance strengthened. For agriculture restoration assistance, The Company is careful to acquire relocation lands in the dry season to allow farmers to harvest before giving up lands. This also allows the farmers to initiate timely farming activities on the new lands allowing farming activities to move forward without losing a year of production. In addition, the Company is introducing non-agricultural livelihood restoration support including technical and basic skills training. It is very apparent that some people would rather pursue other forms of employment including developing a small business rather than return to agriculture.

The Company with the support of 3rd party service provider rePlan has developed a resettlement process that best meets the needs and desires of impacted people in the concession. An assisted self-resettlement scheme has been initiated where physically displaced households can purchase and repair their own houses. The company works with the individuals to make sure that the homes meet certain the Company standards and can be repaired using reasonable approaches. For example, a certain number of windows and access points must exist. A positive aspect of this approach is that members of the physically displaced households can be paid to make the construction modifications to the homes. The initial application of this resettlement approach has been successful and the resettled households are very satisfied.

Grievance Mechanism

The Company has implemented a grievance mechanism that meets the requirements of the Equator Principles and the IFC Performance Standards, and the International Council on Mining and Metals Sustainable Development Framework (ICMM). Site-level SOP's have been developed for implementation to assure appropriate mechanisms are uniformly applied when dealing with grievance issues. The Company has a Community Liaison Group with offices in Tenke and Fungurume that supports the grievance function. The Liaison Group engages with the communities to make sure they are aware of the grievance mechanism and how it functions. Grievances are passed to an Independent Review Board, made up of 4 community stakeholders and 3 Company members, to seek resolution. The Review Board is trained to handle grievance issues by FCX. A snapshot of the grievances received in 2015 provides an indication of how the process is working. A total of 357 grievances were received in 2015 and 472 grievances were closed out (some from previous years) with 74 in process at the end of the year. RAP related grievances accounting for 79% primarily associated with asset identification and compensation while 21% were associated with physical and environmental damage. During 2016, 473 grievances were issued and 405 were closed with 149 still active.

Human rights grievances were also identified during 2015. A total of 29 grievances were received during the year with 28 closed and 1 active at the end of the year. No human rights grievances related to security operations were issued in 2016.

Grievances appear to be well handled by the Company. The use of an Independent Review Board made up of trained Company personnel and Community stakeholders is a good approach for dealing with the issues. In fact, the people submitting grievances appear to be satisfied with the resolutions granted by the Independent Review Board.

Agriculture Program

An agricultural development program has been initiated by The Company to promote sustainable agriculture and increase incomes of farmers within the concession. The initial emphasis of the program was related to the improvement of farmer skills to increased growth of maize, which is the primary crop grown in the area. The program has now expanded to include beans and goats. The Agriculture Program includes testing varieties of plants to determine the most successful producers on the concession area. Crop rotations using beans and maize to improve production are also an important part of the program. An important aspect of this program is that The Company purchases much of the production beyond family needs to support the Project. The program provides an important project concern related to food security. As the program expands and crop production increases, the development of COOP groups is promoted.

The goat husbandry project has become a success story. Each of the program farmers was given 3 goats to initiate the project with the understanding that each would pay back the program with 3 goats once their herd expanded. The goats received would be provided to another farmer and the program would expand. The program now contains 1500 goats. The goats are primarily used for meat although other uses are possible. New livestock has recently been introduced from other areas in an attempt to diversify the genetic pool.

The program initially included 600 families/farms that will be supported until they become self-sufficient. Once self-sufficient, a farm is carefully evaluated to make sure it can continue to be successful without support from the program before being released from the program. Additional farms are included into the program in-place of those released. Additional families are expected to join the program in the near future.

An interesting aspect of the agricultural development program is that the plan is expected to include in-migrants. The thought is that many in-migrants will become involved in farming activities to support their families rather than engaging in criminal activities. This action is expected to reduce risks to the project.

Health - Water and Sanitation

Water and sanitation issues are a problem for the communities potentially impacted by the Company. This is currently the largest and most costly program supported by the project. Prior to implementation of the project, no potable water was available in the area. The Company initially constructed 124 wells to support the communities with the expectation that the communities would manage the wells. Additional wells are currently being constructed in many areas as the program expands. Households pay for the water, which covers the cost of maintenance. Tenke and Fungurume have management committees and have developed cooperatives that make the potable water available to households. Some issues do exist where smaller communities cannot generate the funds required to manage and maintain wells. The current idea is to develop an agency or business that can manage and maintain a large number of wells needed in the small communities to make the business venture profitable. The approach is to make the business sustainable.

Another problem with the potable water supply is testing water to make sure that the biological and elemental levels meet the health requirements. Wells are periodically monitored to make sure these water sources remain potable. The lack of a certified laboratory in the vicinity of the project makes water testing an issue. It is hopeful that arrangements can be made to handle this work in a local laboratory.

Malaria and cholera cause significant public health issues in the project area. Projects relating to cleaning garbage and vegetation from the river have reduced cholera in the area. In addition, the Social Community Fund is financing an upgrade to the Tenke water network that will increase the capacity and coverage of the Tenke water system. Waste management and public health promotions to improve hygiene including washing hands is also impacting health issues. Quick response kits have been developed to deal with cholera. It is important to isolate infected people quickly to prevent wide spread occurrences. Programs relating to reduce

the malaria issue by eliminating mosquito habitat have substantially decreased the occurrence rate from about 80% to 30%. The company also supports an HIV control program providing people with the knowledge and tools to reduce infection.

The Company in cooperation with the Social Community Fund have constructed and/or renovated and equipped five (5) health centers in the area. In addition, the Fund is building bathroom facilities for the health center maternity wards, and is installing solar panels to power essential medical equipment.

Educational Program

The primary objective of the educational program supported by The Company is to increase access to education through the construction of schools, providing educational materials such as books and increasing the capacity of teachers through the attendance of mandatory workshops designed to improve capability. Libraries are being piloted for future development at each school. A program has been created to provide scholarships to worthy students to attend a boarding school located in at the start of the 6th grade. The school is hard to qualify for but out of the 107 students granted emissions 87 are still attending. An internship program has also been instituted that provides university students from the three local universities an opportunity to acquire an understanding of the technical aspects of the Project.

The educational group is currently working to develop a technical training school that would include diesel mechanics and other courses to provide vocational training preparing people for mining positions and other business opportunities. Adults and children would fit well into this program. In addition, adult programs have also been developed such as literacy and basic skills to make the population better equipped to support work activities in the growing community.

The educational program appears to be moving in a positive direction. People involved in the educational program have a very positive outlook on education believing it is becoming more important to the families. However, such changes take time and will only happen with time.

Economic Development

The objective of the Economic Development Program is primarily to strengthen existing businesses to become well managed and to expand and create employment. This is an attempt to develop businesses that can promote sustainability of the area beyond closure of the Project. The primary focus is to train people to build a business using good money management, while promoting good human rights policies. Small businesses are invited to workshops (usually 3 days) to interact sharing ideas and promoting cooperation. Areas of potential business opportunities include agriculture (supplies), mining support (materials, supplies, etc.), and community support areas. The development of the New Town resettlement community includes construction of an industrial center. This is a good idea, but has not generated interest from potential businesses and the required capital that would make it a reality. This type of facility can only become a reality if businesses cooperate and buy into the idea and make it work. The Company cannot successfully initiate the project on its own.

Illegal Mining Issues

The social management conditions on the concession are complex. The area has experienced an influx population of over 100,000 people many looking for employment opportunities. Many find limited employment opportunities and therefore turn to criminal activities to support themselves and their families. As a result, illegal mining on the concession has become a lucrative business employing hundreds, if not thousands of otherwise unemployed people. The Company has estimated that at least a thousand workers engage in the activity on the concession on a daily basis.

The Illegal mining sector including production mechanisms and trading patterns appear to be well structured. At the source of the mineral supply chain, thousands of miners (creuseurs) extract the ores with rudimentary tools and manpower under very difficult working conditions. Local middlemen (négociants) buy the minerals at the mines after negotiating the price. It should be noted that such negotiations are not founded on equal bargaining power, as middlemen sometimes pre-finance new artisanal mining projects controlling mining costs and prices. The négociants transport the ore to the main trading hubs near Kolwezi, Lubumbashi and Likasi. Once at the trading houses, ore is processed and exported to the world market

As noted previously, transport of ore from the concession to processing facilities is well organized. The processed material is known to be sold to local smelters and traders. It is interesting to note that although it is illegal to mine the ore on the concession, it is not illegal to sell the ore once it is mined. The operation appears to be an established business that provides a significant amount of money to the impacted communities and is likely supported by government leaders at many levels. Illegal mining was noted by the Company to be the number one security and human rights issue impacting the project.

Illegal workers are composed of two groups of people. About 50% of the workers are ordinary people looking to make a living, while the other half can be considered as criminals. The illegal miners make regular incursions into the open pits, ore stockpiles and the waste rock areas to collect ore. In recent months, the criminal behavior has become more aggressive towards the security personnel who are responsible for the safety of the mine and its employees, with large groups of 200 to 300 moving into mining areas to work at various locations in groups of 15 to 20 individuals.

The Company is committed to upholding the Voluntary Principles on Security and Human Rights during its interaction with the illegal mining operation. As a result, defensive force is used only as a last resort. A more detailed discussion of security measures used to control the illegal mining activity is provided in the Security Operations Section of the report.

14.3 Social Community Fund

In 2010, The Company established a Social Community Fund (SCF) to support the sustainable development of communities impacted by the concession by investing in infrastructure, education, health and agriculture. The formation of the SCF was accomplished in response to a contractual obligation under Article 21 of the Mining Convention established between The Company and the Government of the DRC.

As noted in the previous paragraph the SCF is mandated by Article 21 of the Amended and Restated Mining Convention among GoDRC, Gecamines, Lundin Holdings Ltd., and Tenke Fungurume Mining S.A.R.L. The following statement is provided in Article 21: Agriculture and Social Investments and describes The Company's obligation. " In full satisfaction of any laws applicable to agriculture and social investments associated with the Project, T.F.M. will undertake to create a fund jointly managed by T.F.M. and concerned local authorities to assist the local communities affected by the Project with development of local infrastructure and related services (such as those pertaining to health, education, and agriculture). This fund will be financed by payments from T.F.M. at a rate of 0.3% of the net sales revenues (ex-works from the mine) of production."

The SCF is a registered Congolese non-profit organization managed by Caitlin Hamill (Manager/Technical Advisor). The organization is currently operating with a headcount of 7 people that includes a management team (2 people), stakeholder engagement group (3 people), an administration/financial support group (2 people), and two individuals that head the Agriculture and Infrastructure activities. A program manager for Education component will soon be employed. The Fund is governed by a Board of Directors with representatives from the Provincial Government, the communities (Tenke and Fungurume), The Company and an observer representative from Gecamines. SCF activities are driven by consultation with a Stakeholder Forum comprised of key representatives that suggest needs and priorities of their communities to the Fund. This engagement guides project selection and approval by the Board of Directors. The SCF currently appears to be well managed and has made significant progress toward establishing respectability and independence while responding to the needs of the communities.

The primary areas of support are health, education, infrastructure and agriculture. The total budget allocation for the March 2009 through December 2015 period was \$23.6 million of which \$13 million has been allocated to various projects. The following projects are supported by the Fund:

- Health – funding health facilities with appropriate equipment; programs on child birth and mother health; preventative and emergency care; and maintenance of established programs.
- Education – fund school development including upgrading teacher qualifications; launched scholarship program awarding the first 15 scholarships; and maintaining schools.
- Infrastructure – road construction projects including maintenance; construction of health care facilities; construction of water management facilities in Fungurume; drilling of potable water wells/supplies in the villages; facilitate business development through capacity building programs; and providing maintenance budgets for roads and other infrastructure projects. Recent projects completed include the construction of

a community center used to support demonstration and training programs such as sewing, construction of a bridge near Nkando to allow easy access to the training facility, upgrading roads to allow better connection between communities, and the construction of a sports complex including football fields and basketball courts.

- Agriculture – development of a training farm demonstrating production increases, crop diversification and other techniques for improving production; promoting improved agriculture to reach 8 new villages; provided technical and organizational support to 3 fish farming and agricultural cooperatives in various villages in the concession; and providing maintenance budgets for the farm. Recent education programs have been implemented to improve farming techniques in the area. TFM has joined Caterpillar to make tractors available to support farming activities in the area.

A primary objective of the SCF is to make significant progress to become a respected and independent development institution responding to the needs of Concession communities in an effective, just, and transparent way. Improvements in stakeholder engagement activities are an important consideration. Breakdowns between the various entities are being addressed to assure appropriate consideration and approval of projects that best meet the objectives of the SCF. A major attempt is being made to encourage the communities and the government to take ownership in the various projects supported by the SCF. Projects can only be successful if long-term maintenance is achieved through community and government support.

The SCF is an organization that will support sustainable development of the communities in and around the concession. This program provides a good basis supporting the social closure management plan for the Project.

14.4 Security Operations

14.4.1 Security Management Team Capacity

The Project appears to have a security management staff that has the technical expertise and staffing levels required to achieve goals established as essential by The Company to provide security for the project. The Company considers the Voluntary Principles on Security and Human Rights (Voluntary Principles) as an important cornerstone of the human rights and security program providing guidance for the operation and a mechanism to promote engagement, awareness and respect for human rights within the work force and with government and community partners. The Security Operations group is headed by a Manager that has a good grasp of security requirements, human rights issues and associated mitigations.

The voluntary Principles group works closely with the Social Programs group but is primarily managed by the Security Operations group.

14.4.2 Security Management and Human Rights

The Company has committed to upholding the Voluntary Principles. Freeport-McMoRan has been a member of the Voluntary Principles since it was established in 2000. Human rights and security are included in a risk evaluation where any risks classified as actionable require the development and implementation of Action Plans. Results of the action plans are closely monitored through the life of the project or until risk is substantially reduced. The Company has included the following action plans into the process: (1) the responsible prevention of illegal on-site mining and the mitigation of its impacts; (2) the conduct of public security providers on the concession; and (3) the security of The Company's employees and contractor employees.

The security group used by the Company consists of 328 employees, 835 private security contractors and 118 mines police people (PMH), which is a government police force. The Company and private security contractors do not carry weapons but use passive tactics to remove illegal miners from the concession. If actions become uncontrollable, the mines police are called in to control the problem. Most of the security people have received human rights training.

It should be noted that a detachment of PMH (Government Police Force) under the control of an officer directed by the Minister of Mines and Congolese law are housed in the concession. The Mine Police carry firearms and control their own deployment with the Company providing administrative assistance only.

The almost continuous occupation of illegal miners on the mining concession is the primary security/human rights issue that plagues the operation at the Project. The security department has adopted a passive management scenario where direct engagement/confrontation with illegal miners is avoided and access control

is gradually established using fences (razor wire), securing equipment in safe locations, and collocating unused machinery to safe storage.

The illegal miners are coerced/encouraged to move out of active pits and stockpiles and out of the concession through active patrol sweeps and confiscation of materials and detention by the PMH offices. Once mine areas are vacated, patrols are increased to monitor and deter influx. The purpose of this strategy is to make illegal mining in the concession untenable/frustrating and encourage mining outside the concession.

Additional measures are being taken to control and frustrate those that are involved in the movement of illegal ore and stolen items of equipment off the concession. This is achieved by legally authorized searches and sweeps throughout the concession and local villages by members of the PMH, who act under their provision of jurisdiction, locating stockpile warehouses, private property, national railway transportation and arrest perpetrators. PMH also regulate traffic movement through manned barriers on the national highways at Nguba and Pumpi. These operations have caused frustration and resentment within the illegal mining organizations, which is likely a direct cause in the increased criminal activity primarily related to damage and theft of equipment. This persistent effort is slowly suppressing existing issues and will likely reduce illegal mining problems in the future.

It is apparent that the exploitation of minerals is an important source of income for many communities in and around the concession. It also plays a significant role in the continuation of insecurity in and around the concession. Revenues from illegal mineral trade have provided budget to control state security forces and influential businessmen and political stakeholders. During the past year, the Company security department has made some changes in operating procedures to help control these issues. Numerous personnel dismissals for collusion have disrupted locally procured supply chains and trafficking activities. Changes in how the Company security people are placed at various locations in the concession have reduced response times resulting in more timely interventions with illegal miners. These changes have provided a deterrent resulting in diminished earning potential for the illegal mining trade.

The Company security personal are often harassed by illegal miners during interactions within the concession. Security people are often welcomed with a barrage of rocks and sometimes individuals are attacked often resulting in injury. Serious injuries have not been common place but appear to be increasing as the security measures implemented in recent time have cause illegal miners to become more frustrated due to increased security.

During 2015, the Company experienced a number of incidents related to illegal mining in the concession. There were 8 incidents observed by or reported to the Company personnel in 2015 that resulted in 11 deaths of illegal miners including 10 deaths due to tunnel collapses and one due to the actions of a member of the Mines Police. Non-life threatening injuries to 3 illegal miners due to encounters with the Mines Police were also noted. Half of the incidents took place on the mining concession. One of the incidents that occurred in an active mine area spilled over into Tenke. It involved a large group of miners who were seen carrying the body out of Tenke stockpiles and vandalizing stationary mining equipment in the area. The crowd proceeded toward the center of Tenke vandalizing the Company Community Liaison office. As a result of the incident, the Company Community Liaison team launched an awareness campaign targeting more than 400 community leaders, aimed at mobilizing their support for efforts to protect the company's investments for the benefit of the local community. This action has resulted in positive reactions from the communities as similar vandalizing episodes initiated by illegal miners since have been prevented by the actions of community members.

Accidents continued to take lives of illegal miners during 2016. Ten incidents were reported during 2016 resulting in 21 deaths due to mining accidents. Local government authorities reported that during one heavy rainfall event, 14 illegal miners were killed in an inactive pit area as flood water poured into a tunnel they excavated. TFM and local governmental authorities continue to discourage unsafe illegal mining that occurs within their mining concession; however, no matter what is done, illegal mining will likely continue, along with the risk of serious injury or death, due to economic circumstances.

As noted previously, the Company employees and contractors have suffered injuries from attacks by trespassers seeking to steal equipment and fuel or accessing the concession for illegal mining activities. In 2015, a total of 96 injuries resulted from physical assaults ranging in severity from those requiring minor first aid to injuries resulting in hospitalization. The majority of the injuries (66) were incurred against unarmed security employees and contractors while guarding the Project personnel and assets. The other 30 injuries were suffered to people while on the job. In addition, the Mines Police reportedly suffered 10 injuries during their

confrontations with the illegal miners. The growing number of attacks is of significant concern to the Company and the corporate management teams.

Illegal mining in the concession remains a significant security risk for the mine. In addition to The Company's established security measures, the issue is being addressed through the combination of ongoing training on the Voluntary Principles, engagement with the local community security council and investment in economic development programs to promote long-term growth and alternative livelihoods in the communities. The Company continued to partnership with non-profit organization Search for Common Ground in 2015 to address conflict drivers in the local communities, including illegal mining, through a communications and engagement program. Through this partnership, participatory theater was used to promote dialogue on issues related to illegal mining and targeted over 5,000 people with 20 performances in villages throughout the concession. These performances helped build an understanding of the negative impacts of illegal mining on the community, such as increased violence, and encouraged community members to develop solutions to underlying issues such as limited opportunities for youths.

14.4.3 Human Rights Management

The Company has implemented programs to uphold the Voluntary Principles on Security and Human Rights on the mining concession. It appears that the Project has developed a program that closely monitors activities within the organization to make sure items noted in the Voluntary Principles are upheld. Issues have developed on occasion, but appear to be resolved using appropriate methods. Human rights training is an important component of the program as almost all the security personnel including members of the PMH receive the training.

Human rights content is incorporated into the training materials for the induction of new employees. In 2015, 2,869 Company and contractor employees received this training. As a private company in the DRC, The Company is not permitted to conduct formal training of state employees or government representatives, which includes government security personnel. However, as an outcome of discussions at the Security and Human Rights Discussion Group, the United Nations Organization Stabilization Mission in the DRC (MONUSCO) offered to conduct human rights training for public security personnel assigned to the concession. MONUSCO was able to conduct one "train the trainer" course in 2015, which was attended by 24 participants. These participants trained the Mines Police in 2015. MONUSCO will continue to be asked to be involved in the program in the future.

A Human Rights Compliance Officer position has been established at the Project to receive, document and follow-up on any formally or informally reported human rights allegations including those relating to the conduct of public and private security providers. The Compliance Officer oversees: (1) compliance with the Voluntary Principles and Company policy; (2) training activities; (3) grievance mechanism related to human rights; and (4) promotion of awareness within the Company, contractors and the potentially impacted communities. Human rights issues have been incorporated into the corporate Community Grievance Management System Procedure. As noted previously, a total of 29 grievances were received during the year with 28 closed and 1 active at the end of the year. All aspects of human rights at the Project are carefully monitored and reported on an annual basis.

14.5 Occupational Health and Safety Program

The occupational health and safety plan describes the actions that are taken to protect the health and safety of the employees involved in the project. The program appears to be well designed and implemented. The data provided demonstrates the existence of a good program for this part of the world, which deals with many unexperienced workers.

14.6 Archaeological and Cultural Resources

Protecting the archaeological and cultural resources of the area relies on implementing best practices for appropriate identification, protection and mitigation and also on consultation with local communities to understand the meaning and importance of particular locations and resources.

Avoidance of cultural and historical sites of significance is the preferred mitigation option for project development. All sites recorded in the project area can be safely avoided. Archaeological sites located in the buffer zone at the western boundary of the project will be avoided. In addition, all recorded cemeteries have

been excluded from projected disturbance. A primary management action implemented at the Project is to conduct detailed site evaluations prior to disturbance. The program used by the Company appears to be working well.

14.7 Closure and Reclamation Plans

The closure plan for the Project intends to ensure that the project complies with national and international guidelines and operates within a sustainable development framework. The facilities will be reclaimed with the goal of establishing a productive use during the post-closure phase of the project, where practical and feasible. Project infrastructure including roads, construction and operations camps, and industrial facilities will be integrated to the extent practical into the post-closure land use plan.

14.7.1 Environmental Closure Plans

The closure measures identified in the initial closure plan provide a general concept of how the project will be closed to achieve pre-mining conditions. It was noted that the pits will be left open and therefore will likely develop into pit lakes. Safeguards will be used to minimize safety and health hazards to people and livestock. The mine wastes (waste rock and tailings) will be closed with the goal of achieving pre-mining land uses. The facilities will be covered with available material and revegetation will be established to prevent wind and water erosion. BMP's will be used to achieve stable conditions at all locations. TFM has developed a closure cost estimate based on detailed accounting of each aspect of the project to be closed. The estimate cost for closure during 2013 was determined to be \$366.9 m (USD).

It should be noted that the preliminary closure plan is a general description of how closure will be accomplished for the major components of the operation. It is necessary to develop a detail closure plan that identifies and provides detailed mitigation procedures for each component of the project.

No mechanism has been developed to finance closure costs as required by International Principles, Performance Standards and Guidelines. However, TFM proposes to enter into a Memorandum of Understanding with the DRC Government setting forth the means by which the company will financially ensure that any mined areas are successfully reclaimed at the end of the mine life.

14.7.2 Social Closure Plans

The social closure plan is not specifically addressed as a closure plan but is well covered under the social management discussions including the Sustainability Assessment. The impact analysis methodology for closure impacts is based on a process to minimize negative impacts and to optimize benefits. The process focuses on direct and indirect effects that arise during the phases of the project life cycle. Two additional areas were considered: (1) development of project-supported actions over and above impact related mitigation measures that would benefit people and the environment (social and environmental investment) beyond the closure of the mine; and (2) prediction of the ecological or social consequences of predicted positive effects.

Actions that the Company could take to encourage positive, long-term effects were identified through stakeholder consultations and a series of workshops and discussions. Once the actions were identified and the impact criteria were rated, the overall effect of the actions on people, the environment and on sustainability could be assessed. There appears to be three major elements of the social development program that addresses social closure actions: (1) investments intended to mitigate potentially negative social and environmental impacts of the project and to convert these to positive impacts; (2) investments intended to promote social development among the population of the project area and contribute to regional economic growth throughout the life of mine and beyond; and (3) establishment of the Social Community Fund and creation of a foundation for management that will promote social development within the communities in the mining concession and contribute to regional growth throughout the life of the project and far into the future. The social management program implemented by the Company is expected to successfully promote long-term economic development through the post-closure period and beyond. This program is expected to reduce significant social impact as the mining operation is closed.

14.8 Summary of Potential Environmental and Social Issues

Potential issues related to the operations, closure and post-closure phases of the Company are summarized below. As with any mining project, the primary issues are related to potential effects on water quantity and quality, biodiversity concerns and social impacts and mitigations primarily associated with involuntary resettlement and illegal mining. It appears that most of the potential issues are addressed with the implementation of appropriate mitigation actions.

- Biodiversity issues exist primarily related to the potential to impact critical habitat associated with copper flora vegetation communities. Copper flora vegetation communities will be removed during mining, which will require re-establishment and possibly the implementation of other set-aside or protection programs. The risk associated with impacting gallery forest habitat (not critical habitat at this mine) will require implementation of mitigation actions primarily to prevent depletion of source water or to establish water sources required to support establishment of these habitats in the post-mining phase of the project.
- Potential impact of water quality due to seepage from mine waste facilities, spills of hazardous solutions associated with mineral processing, petroleum products, solvents and hazardous wastes.
- Erosion and sedimentation control will be an issue in the climatic conditions experienced at the Project. Implementation of BMP's will be a primary consideration for preventing future issues. Construction of stream crossings and disturbance along streams associated with critical habitats must be carefully planned and managed.
- Waste management primarily related to hazardous waste disposal should be carefully monitored. Seepage from the hazardous waste storage facility into the environment could result in significant long-term mitigation efforts.
- Involuntary resettlement activities appear to be well planned and implemented. It is important to continue engagement actions that promote the success of the program.
- Security issues primarily associated with illegal mining will be problematic for the life of the project. The problem is expected to improve as the communities become more involved to protect their interests.
- Updated closure plans should be developed that includes detailed long-term management of the reclaimed area. It will be important to develop a detailed pit lake plan that will ensure a safe and environmentally stable post-closure environment.
- A mechanism must be developed to finance closure costs at any time during the project life as required by International Principles, Performance Standards and Guidelines.

15. Mine Risks and Opportunity Assessment

15.1 Opportunity

- **Sulphide Mineralisation:** The sulphide mineralisation is not included in the current Ore Reserves with a significant resource identified for both the open cut and underground mining methods. This material has the potential to significantly extend the mine life as well as the opportunity to increase Cu and Co production well above the current production rate based on oxide material only. RPM recommends that analysis of the development options for the sulphide operations be undertaken which should include various options to optimise the oxide production in conjunction with the sulphide. This is particularly relevant at the current planned cessation of oxide mining in 2037, when the low grade material is planned to be processed, thereby decreasing Cu cathode production.
- **Oxide Mine Optimisation:** Mining is forecast to occur in 15 areas within the Project with five pits at any given time in operation. In addition, five different ore type based on grade and acid consumption are required to be scheduled over the mine life and stockpiles to ensure correct blending at the ROM pad. While this results in complications to achieve a practical schedule, the number of pits, required pushbacks and ore types presents significant flexibility in the production to achieve both the required throughput, head grade and acid consumption. RPM notes that the schedule presented in this Report is limited by the equipment capacity as well as the maximum acid consumption however still results in significantly more ore per year than the current throughput. While RPM considers the schedule both practical and achievable, various options should be analysed, which includes decreasing the mining rate to match the ore throughput, increasing the mining rate to allow more high grade material early in the mine life, as well as various options to develop sulphide mining. All options have advantages and disadvantages over the current plan, however have different cost profiles which could materially impact the value of the project and the social risks (i.e. mining faster reduce the illegal mining problem).
- **Heap Leach Operation:** The current LOM plan sees production continuing for 8 years beyond cessation of mining in 2041 due to the processing of low grade oxide stockpiles. The Company is currently finalising studies to introduce heap leach operations at Tenke, Kwatebala and Fungurume to bring forward copper and cobalt production from the low grade stockpile material. The plan is to start heap leaching in 2019 with a target of 70 Ktpa of Cu and 10 Ktpa of Co being recovered from the heap leach. This approach would reduce the LOM (excluding sulphide) and significantly improve cashflow. CAPEX requirements for this is estimated at USD 428M which will include the creation of the 3 leach pads, establishment of 3 agglomeration plants, establishment of pregnant leach solution collection and transmission lines back to the existing SX plant and construction of 2 additional SX extractors at the Kwatebala plant to manage the additional solution volumes. The current Cu EW facility is considered sufficient to the needs of both the current agitated leach plant and the proposed heap leach requirements. RPM notes that introducing a heap leach could potentially free up capacity in the agitated leach circuit earlier allowing for production from the underground sulphide to be brought forward. Heap leaching will also reduce TSF capacity requirements which will either negate or defer the need for construction of some of the planned phases of the new northwest TSF.

15.2 RPM considers that there are several opportunities within the Project. These include: Risk

Mining is a relatively high risk business when compared to other industrial and commercial operations. Each mine has unique characteristics and responses during mining and processing, which can never be wholly predicted. RPM's review of the Mines indicates mine risk profiles typical of large scale mines at similar levels of resource, mine planning and development in the DRC. Until further studies provide greater certainty, RPM notes that it has identified risks and opportunities with the Project as outlined in **Table 15-2**.

RPM has attempted to classify risks associated with the Mine based on Guidance Note 7 issued by The Stock Exchange of Hong Kong Limited. Risks are ranked as **High**, **Medium** or **Low**, and are determined by assessing the perceived consequence of a risk and its likelihood of occurring using the following definitions:

Consequence of risk:

- **Major:** the factor poses an immediate danger of a failure, which if uncorrected, will have a material effect (>15% to 20%) on the Mine cash flow and performance and could potentially lead to Mine failure;
- **Moderate:** the factor, if uncorrected, could have a significant effect (10% to 15% or 20%) on the Mine cash flow and performance unless mitigated by some corrective action, and
- **Minor:** the factor, if uncorrected, will have little or no effect (<10%) on Mine cash flow and performance.

Likelihood of risk occurring within a 7 year timeframe:

- **Likely:** will probably occur;
- **Possible:** may occur, and
- **Unlikely:** unlikely to occur.

The consequence of a risk and its likelihood of occurring are then combined into an overall risk assessment as shown in **Table 15-1** to determine the overall risk rank.

Table 15-1 Risk Assessment Ranking

Likelihood	Consequence		
	Minor	Moderate	Major
Likely	Medium	High	High
Possible	Low	Medium	High
Unlikely	Low	Low	Medium

RPM notes that in most instances it is likely that through enacting controls identified through detailed review of the Mine's operation, existing documentation and additional technical studies, many of the normally encountered Mine risks may be mitigated.

Risk Ranking	Risk Description and Suggested Further Review	Potential Mitigant	Area of Impact
Ore Reserve Risk Analysis			
M	Power Supply Power supply is often interrupted through brownout and blackouts. While RPM notes the recent improvement in supply, these have been in part due to the shut-down of nearby operations which released power back to the grid improving stability. With improving commodity prices these operations are slated to recommence production in Q2 2017 which combined with predicted lower hydropower supply due to a dryer than average wet season may result in worsening power supply stability.	Continued support with the government and local communities to ensure supply at required amounts	Production
M	Social-Economic Community Relations Social management plans including development of resettlement action plans and grievance procedures were completed. Some grievance issues have occurred primarily related to dust, sedimentation, and concerns about low quality crop lands in resettlement areas. In addition previously some vandalism has occurred.	Continue further development of the social management system	Production
M	Illegal Mining Illegal Mining is undertaken by numerous groups in various mining areas. While the quantities of ore removed are not material to the operation the social and production impact may increase in the future as the various mining areas become more developed	Increase the already well developed social and community interactions	Production schedule
L	Transport Logistics While the Company maintains portions of the National highway, other parts are falling in disrepairs, as is common in the sub-sahara area.	Continue discussions with the government	Transport OPEX
L	Mine Planning Short term mine planning is currently undertaken using long term block model, rather than the short term grade control models utilizing the grade control data.	Develop a system for using the grade control data and models in short and medium term planning. RPM notes this is underway	Production schedule
L	Low Grade Stockpile		

Risk Ranking	Risk Description and Suggested Further Review	Potential Mitigant	Area of Impact
	The low grade stockpile grades are based on grade control information. Reconciliation of this information back to the long range resource model indicates that a significant amount of additional material is mined during the grade control process and placed on the low grade stockpile than is identified through the resource drilling. There is a chance that due to the lower selectivity of the blast hole samples which underpin the grade control models that the grade from higher grade mineralization zones is being applied to lower grade zones hence applying a positive bias to the estimated grade of the stockpile.	Review and introduction of tighter grade control reconciliation procedures along with recording of actual dig plans should help in gaining confidence in the low grade stockpile quantities and in turn its grade.	Production
L	Pre-2006 Drilling Data Limited sampling procedures and QAQC has been provided for pre-2006 drilling. As such the data cannot be 100% verified.	Re-sample remaining data and completed spatial analysis	Resource estimate
L	Tails Dam Design Tails Dams have been design through to 2019, and preliminary designs for significant increases in preceding year to support production. This requires further design and studies particular the LOM TSF from year 2031. RPM notes this risk is associate with costs not timing	Complete required design	CAPEX
Upside Sulphide Production Risk Analysis			
M	Mining Study Accuracy Only High level pit optimisations and an underground and sulphide plant scoping study have been completed for development of the sulphide operation. No joint studies have been completed including development of both the open cuts and underground operation	Complete additional studies to confirm viability and development options	Development options, CAPEX and timing.
M	Power Supply The current Oxide project has suitable power supply, however any sulphide operation will require at a minimum 50MW additional to current power supply.	Analyzed and cost various options available	Development options and timing
M	Underground Geotech and Hydro Testwork Limited Geotechnical and Hydro Studies have been completed on the underground areas, as such the parameters utilised in the scoping study are a high level and may impact the mining recoveries and proposed mining method	Complete testwork	UG production schedule
L	Sulphide Processing Design and Testwork While testwork and designs have been undertaken to a scoping level of accuracy for the sulphide plant, further testwork is required to confirm the recoveries, flowsheet and CAPEX to support production. RPM notes this does not impact the Ore Reserves schedule in any form, and a risk for the upside potential of the project	Complete testwork and designs	CAPEX and processing criteria for sulphide plant only (not Ore Reserve CAPEX)
L	Tails Dam Design Pre-conceptual level design and costings have been completed for the sulphide plant and operations.	Complete detailed studies (upon completion of mining studies)	CAPEX

Runge Pincock Minarco

A. Experience and Qualifications



Jeremy Clark – Manager, Hong Kong, Bsc. with Honours in Applied Geology, Grad Cert Geostatistics, MAIG, MAusimm

Jeremy has over 15 years of experience working in the mining industry. During this time he has been responsible for the planning, implementation and supervision of various exploration programs, open pit and underground production duties, detailed structural and geological mapping and logging and has a wide range of experience in resource estimation techniques. Jeremy's wide range of experience within various mining operations in Australia and recent experience working in South and North America gives him an excellent practical and theoretical basis for resource estimation of various metalliferous deposits including Iron Ore and extensive experience in reporting resource under the recommendations of the JORC and NI-43-101 reporting codes.

With relevant experience in a wide range of commodity and deposit types, Jeremy meets the requirements for Qualified Person for 43-101 reporting, and Competent Person ("CP") for JORC reporting for most metalliferous Mineral Resources. Jeremy is a member of the Australian Institute of Geoscientists

Philippe Baudry – General Manager – China and Mongolia, Bsc. Mineral Exploration and Mining Geology, Assoc Dip Geo science, Grad Cert Geostatistics, MAIG

Philippe is a geologist with over 15 years of experience. He has worked as a consultant geologist for over 6 years first with Resource Evaluations and subsequently with Runge after they acquired the ResEval group in 2008. During this time Philippe has worked extensively in Russia assisting with the development of two large scale copper porphyry Mines from exploration to feasibility level, as well as carrying out due diligence studies on metalliferous Mines throughout Russia. His work in Australia has included resource estimates for BHPB, St Barbara Mines and many other clients both in Australia and overseas on most styles of mineralisation and metals. Philippe furthered his modelling and geostatistic skills in 2008 by completing a Post Graduate Certificate in Geostatistics at Edith Cowan University. Philippe relocated to China in 2008 and has since managed numerous Due Diligences and Independent Technical Reviews for private acquisitions and IPO listings purpose mostly in China and Mongolia.

Prior to working as a consultant Philippe spent 7 years working in the Western Australian Goldfields in various positions from mine geologist in a large scale open cut gold mine through to Senior Underground Geologist. Before this time Philippe worked as a contractor on early stage gold and metal exploration mines in central and northern Australia.

With relevant experience in a wide range of commodity and deposit types, Philippe meets the requirements for Qualified Person for 43-101 reporting, and Competent Person ("CP") for JORC reporting for most metalliferous Mineral Resources. Philippe is a member of the Australian Institute of Geoscientists

John L. Uhrie, P.E., Ph.D, Chief Process & Environmental Engineer, B.S. Geological Engineering, Michigan Tech, 1991, M.S. Geology, University of Wyoming, 1993, Ph.D. Metallurgical Engineering, Michigan Tech, 1996. Member, SME, Qualified Professional, MMSA

Dr. Uhrie has 20 years of experience with major mining companies including Phelps Dodge, Freeport McMoRan and Newmont, has operated mines on three continents and is highly experienced in operations, operations management, project development, engineering, and startups of copper and gold projects. He is highly experienced in all aspects of owner's side project engineering as both the process manager and project manager for prefeasibility through detailed engineering activities and is a recognized technical expert in sulfide processing of copper, heap bio-leaching, pressure oxidation, and SXEW. Dr. Uhrie has authored 18 technical publications and one book, holds 2 US Patents, is a Registered PE (Mining and Minerals Processing), and is a Qualified Professional through the MMSA. Dr. Uhrie is fluent in English and Spanish.

Terry H. Brown, Ph.D., Principal Environmental Specialist. Ph.D. Soil and Environmental Chemistry, University of Idaho, 1986, M.S. Soil Chemistry/Morphology, Washington State University, 1977, B.S. Forest Management, Washington State University, 1974. Member of American Chemical Society, RCPAC Certified Professional Soil Scientist # 1742 American Society for Surface Mining and Reclamation, Soil Science Society of America (American Society of Agronomy)

Over 35 years of U.S. and International experience serving in environmental management positions with two coal mining companies, a U.S. federal coal mining/environmental regulatory agency, an international research institute and with an International environmental consulting company. Specializing in soil and water management activities including: Water Management - potential for development of acid rock drainage in mineral and coal mines, metals dissolution, tailings storage, waste rock management, water treatment, erosion and sedimentation control, and water and soil chemistry; Soil Management - soil chemistry, soil morphology/mapping, soil fertility and soil microbiology/bioremediation;. Significant experience in environmental impact analysis, development of impact mitigation measures, permitting of mine construction and operations, reclamation/mine closure planning, pit lake development, environmental monitoring, soil mapping, evaluation of compliance with environmental standards, liability determinations, and environmental cost accounting.

Esteban Acuña, Senior Geologist. Geology, Universidad De Concepcion - Concepcion, Chile. Registered Member of the Chilean Mining Commission.

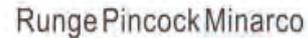
Mr. Acuña has 17 years experience in geostatistics, geological modeling and 3D modeling. His experience includes sampling control, QAQC, design and control of exploration drilling activities, drilling and surface mappings, ore control, ore feeding control to plant, and mine-plant grade reconciliations. Prior to joining PAH, Mr. Acuña worked as Resource Geologist with Antofagasta Minerals S.A. and Minera el Tesoro Company. He is proficient in the use of Vulcan, Medsystem, Minesight, Pcxplor, Geomodel, Dips, Surface, and Gslib.

Pedro Repetto, P.E., Principal Civil Engineer, M. S.Civil Engineering, Purdue University, 1970, B. S. Civil Engineering, Catholic University of Peru, 1965. Engineering Registration (P.E. is in Colorado and several other states plus in Peru)

Mr. Repetto has over 40 years of experience in civil, geotechnical, earthquake engineering, mining, solid waste, and environmental remediation projects. Experience comprises over 500 projects which include all phases of project development, implementation, and closure. Qualifications in the mining industry include over one hundred projects for the mining industry and over one hundred civil and geotechnical projects. He has managed projects at several Freeport McMoRan properties, including Safford, Morenci, Chino, Cobre, Tyrone, Henderson, Cerro Verde, El Abra, Candelaria, and Ojos del Salado and was recently project manager for the design and construction monitoring of the Coermotibo (Suriname) tailings ponds for BHP Billiton. Experience as an independent consultant include tailing dams, leach pads, shallow and deep foundations, slope stability, retaining walls, solid waste management, closure and reclamation of mining facilities, and environmental remediation projects.

Rondinelli Sousa, Senior Mining Engineer. M.Sc., Mineral Engineering, University of Sao Paulo, Brazil –2006., B.Sc., Mineral Engineering, Federal University of Campina Grande, Brazil – 2002. Registered Member of Mining, Metallurgy and Exploration (SME)

Mr. Sousa has a strong background in technology customization. His experience includes mine planning technology implementation projects, orebody modeling, grade estimation, and applied geostatistics. Prior to joining RPM, Mr. Sousa was a Mining Consultant with The Datamine Group where he provided technical consulting and support services for mining companies in the USA and Latin and South America. He is fluent in English, Portuguese and Spanish.



Company's Relevant Experience

RungePincockMinarco (RPM) is the market leader in the innovation of advisory and technology solutions that optimise the economic value of mining assets and operations. RPM has serviced the industry with a full suite of advisory services for over 45 years and is the largest publicly traded independent group of mining technical experts in the world.

RPM has completed over 11,000 studies across all major commodities and mining methods, having worked in over 118 countries globally.

RPM has operations in all of the world's key mining locations enabling them to provide experts who understand the local language, culture and terrain. RPM's global team of technical specialists are located in 18 offices around the world. Through their global network, RPM can provide you access to the right specialist technical skills for your project.

RPM's advisory division operates as independent technical consultants providing services across the entire mining life cycle including exploration and project feasibility, resource and reserve evaluation, mining engineering and mine valuation services to both the mining and financial services industries.

RPM's trusted advisors typically complete assignments across all commodities in the disciplines of:

- Geology;
- Mining Engineering;
- Minerals Processing;
- Coal Handling and Preparation;
- Infrastructure and Transportation;
- Environmental Management;
- Contracts Management;
- Mine Management;
- Finance and Project Funding;
- Commercial Negotiations.

RPM was founded in Australia and as a result, has a solid understanding of and is committed to compliance with the codes which regulate Australian corporations and consultants.

Over the past 45 years, RPM has grown into an international business which has continued to provide clients and those that rely on its work the confidence that can be associated by the use of the relevant global industry codes some of which include:

- The Australasian Institute of Mining and Metallurgy Code of Ethics;
- The Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves;
- The Australian Institute of Geoscientists Code of Ethics and Practices;
- Society for Mining, Metallurgy and Exploration Code of Ethics; and
- The National Instrument 43-101 Standards of Disclosure for Mineral Projects.

RPM has conducted numerous independent mining technical due diligence studies and reporting for IPO's and capital raisings under the requirements of all key mining equity markets over the past six years, with involvement in capital raisings worth more than USD44 billion. Some of this and other work is summarised in **Table A1**.

RPM leverages the power of its specialist knowledge to also provide cutting edge mining software that is sought after globally for mine scheduling, equipment simulation and financial analysis. RPM software is relied on by mining professionals to understand how to structure their long and short term operations efficiently using auditable best practice methodologies and solutions.

Table A1 - Mining Related IPO and Capital Raising Due Diligence Experience

<p>2015 CGN Mining Company Limited; Competent Persons Report of Mineral Resources and Ore Reserves under JORC and Independent Technical Review for inclusion in a HKEx Circular to support the a Major Transaction for the acquisition of a 19.9% equity stake in Fission Uranium Corps Pattersons Lake Uranium Project, Canada.</p> <p>2015 BHP Limited Demerger into South 32; independent technical review and compilation of a Competent Persons Report as defined by the European Securities and Markets Authority's Recommendations on consistent implementation of Commission Regulations ("EC") No 809/2004 implementing the Prospective Directive (the "ESMA Recommendations"). The ITR was completed on the assets of Illawara Coal Holdings located in the New South Wales state of Australia.</p> <p>2014 MMG Limited; Competent Persons Report of Mineral Resources and Ore Reserves under JORC and Independent Technical Review for inclusion in a HKEx Circular to support the acquisition of the Las Bambas Copper and Gold Mine, Peru.</p> <p>2014 Hidili International Development Company., Ltd; Competent Persons Report of Coal Resources and Coal Reserves under JORC and Independent Technical Review for inclusion in a HKSE Circular to support the divestment of Multiple Coal Mines, Yunnan Province, China.</p> <p>2013 China Molybdenum Company., Ltd; Competent Persons Report of Mineral Resources and Ore Reserves under JORC and Independent Technical Review for inclusion in a HKSE Circular to support the acquisition of the Northparkes Copper and Gold Mine, Central West NSW, Australia.</p> <p>2012 China Gold Resources International., Ltd; Tibet Jiama Copper-Polymetallic Phase II NI 43-101 HKEx Pre-Feasibility Study. China</p> <p>2012 China Precious Metal Resources Holdings Co., Ltd Competent Persons Report of Mineral Resources and Ore Reserves under JORC and Independent Technical Review for inclusion in a HKSE Circular to support the acquisition of an Gold Operation Yunnan Province, China.</p> <p>2012 Kinetic Mines and Energy., Ltd; Competent Persons Report of Mineral Resources and Ore Reserves under JORC and Independent Technical Review for inclusion in a HKSE Circular to support the IPO of an underground coal asset in Inner Mongolia Province, China.</p> <p>2012 China Daye Non-Ferrous Metals Mining., Ltd; Competent Persons Report of Mineral Resources and Ore Reserves under JORC and Independent Technical Review for inclusion in a HKSE Circular to support the acquisition of 4 operating underground copper, lead, zinc assets in Hubei Province, China.</p> <p>2012 Huili Resources Group ., Ltd; Competent Persons Report of Mineral Resources and Ore Reserves under JORC and Independent Technical Review for inclusion in a HKSE Circular to support the IPO of multiple underground nickel, lead, zinc, copper and gold mining assets in Xinjiang and Hami Province, China.</p> <p>2011 China Polymetallic Limited Mining., Ltd; Competent Persons Report of Mineral Resources and Ore Reserves under JORC and Independent Technical Review for inclusion in a HKSE Circular to support the IPO of a lead zinc silver polymetallic underground mining assets in Yunnan Province, China.</p> <p>2011 China Precious Metal Resources Holdings Co., Ltd; Competent Persons Report of Mineral Resources and Ore Reserves under JORC and Independent Technical Review for inclusion in a HKSE Circular to support the acquisition of multiple underground gold mining assets in Henan Province, China.</p> <p>2011 HaoTian Resources Group Limited; Competent Persons Report of Mineral Resources and Reserves under JORC and Independent Technical Review for inclusion in a HKEx Circular to support acquisition of and underground coal mines in Xinjiang Autonomous Region, China.</p> <p>2011 King Stone Energy Group., Ltd; Competent Persons Report of Mineral Resources and Reserves under JORC and Independent Technical Review for inclusion in a HKEx Circular to support acquisition of 2 underground coal mines in Shanxi Province, China.</p> <p>2010 China Precious Metals Holdings Co., Ltd; Competent Persons Report of Mineral Resources and Ore Reserves under JORC and Independent Technical Review for inclusion in a HKEx Circular to support the acquisition of multiple underground gold mining assets in Henan Province, China.</p> <p>2010 Century Sunshine Group Holdings Limited; Competent Persons Report of Mineral Resources and Ore Reserves under JORC and Independent Technical Review for inclusion in a HKEx Circular to support the acquisition of a serpentinite mining asset in Jiangsu Province, China.</p>

2010 Doxen Energy Group Limited; Independent Technical Review and estimation of Mineral Resources under JORC for inclusion in a HKEx Circular to support the acquisition of a coal mining asset in Xinjiang Autonomous Region, China.

2010 KwongHing International Holdings (Bermuda) Limited; Independent Technical Review for inclusion in a HKEx Circular to support a Very Substantial Acquisition.

2009 Metallurgical Corporation Of China Ltd (“MCC”); Independent Technical Review for inclusion in a Prospectus to support a stock exchange listing on the Hong Kong Stock Exchange.

2009 Nubrand Group Holdings Limited, Guyi Coal Mine; Independent Technical Review for inclusion in a Stock Exchange Circular to support a mining asset purchase by a listed Hong Kong Company.

2008 China Blue Chemical Limited, Wangji and Dayukou Phosphate Mines; Independent Technical Review for inclusion in a Stock Exchange Circular to support a mining asset purchase by a listed Hong Kong Company.

2008 Kenfair International (Holdings) Limited, Shengping Coal Mine; Independent Technical Review for inclusion in a Stock Exchange Circular to support a mining asset purchase by a listed Hong Kong Company.

2007 China Railway Company Limited, African Copper/Cobalt Assets; Capital raising for mining assets on the Hong Kong Stock Exchange. Preparation of Competent Persons Report for planned IPO on the HKEx.

2007 Gloucester Coal Limited – Independent Technical Review for Australian Stock Exchange Scheme of Arrangement.

B. Glossary of Terms



- AA atomic adsorption (analytical procedure)
- Ai abrasion index
- ANFO ammonium-nitrate fuel-oil (explosive)
- ASCc Acid soluble cobalt
- ASCu Acid soluble copper
- BWi Bond Work index
- C Centigrade degrees
- CCD counter-current decantation (ore-processing method)
- cm centimeter
- Co Cobalt
- CO₂ carbon dioxide
- COG Cut-Off Grade
- CRM Certified Reference Material
- Cu copper
- Cv Coefficient of variation
- dBA decibels (sound intensity)
- DD diamond-drill hole
- DDH diamond-drill hole
- DH diamond-drill hole
- DIA Declaration of Environmental Impact
- dia diameter
- EDA exploratory data analysis
- EHS Environment, Health, and Safety
- EIA Environmental Impact Assessment
- EP Equator Principles
- EPC Engineering, Procurement, and Construction
- EPA Environmental Protection Agency
- ESIA Environmental and Social Impact Assessment
- ESMS Environment and Social Management System
- Fe iron
- FPIC Free, Prior, Informed Consultation
- FS Feasibility Study
- G&A General & Administrative (costs)
- HDPE high-density polyethylene
- hr hour
- ID₂ inverse distance squared (reserve estimation method)
- IDC inverse distance cubic (reserve estimation method)
- IDW Inverse Distance Weighted (interpolation method)
- IFC International Finance Corporation
- IK Indicator Kriging (reserve estimation method)

- KE Kriging Efficiency
- kg kilogram
- km kilometer
- KSR Kriging Slope of Regression
- kV kilovolt
- kW kilowatt
- kWh kilowatt hour
- kWh/t kilowatt hour per tonne
- l and L liters
- lb pound (avoirdupois)
- M million
- m meter
- m³ cubic meters
- Ma million years
- masl meters above sea level
- MC master composite (of testwork samples)
- mil thousands of an inch
- mm millimeters
- m/sec meters per second
- MT million tonnes
- Mtpa million tonnes per annum
- MW megawatts
- O₂ oxygen gas
- OK Ordinary Kriging (reserve estimation method)
- PACK Probability Assigned Constrained Kriging (reserve estimation method)
- PAF Potentially Acid Forming
- PAG Potentially Acid Generating
- PGE Peak Ground Acceleration
- pH negative log of hydrogen ion concentration (measure of acidity/alkalinity)
- PMP Probable Maximum Precipitation
- PVC polyvinyl chloride
- PS Performance Standard (of IFC)
- QA/QC Quality Assurance/Quality Control
- QKNA Quantitative Kriging Neighborhood Analysis
- QQ Quantile-quantile (of statistical data plots)
- RC reverse circulation (drill hole)
- RPM RungePincockMinarco
- RPP reinforced polypropylene (type of membrane)
- RQD rock quality designation
- S sulfur

- S2- sulfide sulfur
- SAG semi-autogenous
- SE search ellipsoid
- s.g. specific gravity
- SLS solid-liquid separation
- SMC SAG Mill Comminution (ore-processing test procedure)
- SPI SAG-mill Power Index (ore-processing test procedure)
- ss stainless steel
- StdDev Standard Deviation
- TCo Total Cobalt
- TCu Total Copper
- TDH total dynamic head (of pump discharge)
- TIN triangulated irregular network
- tpa tonnes per annum
- tpd tonnes per day
- TSF tailings-storage facility
- USD United States dollar
- V volt
- VCS Vulcan Chronos Scheduler
- WHO World Health Organization
- WRSA waste rock storage area
- XRD X-Ray Diffraction (mineralogical analysis)
- XRF X-Ray Fluorescence (chemical analysis)

Runge Pincock Minarco

C.
JORC Table 1



Section 1 Sampling Techniques and Data

Criteria	JORC 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 XR 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"> Historical drilling data were not preserved well prior to 2006 however. SMTF's samples were assayed in Rhokana laboratory at Kitwe in Zambia. Phelps Dodge campaign samples (2006) and Freeport-McMoRan (2007-2008) were sent to ALS Chemex laboratories in Johannesburg, South Africa. Since 2009, cutting of core and placing of half core into sample bags along with all sample preparation and assay determinations works being conducted by the in-house Fungurume laboratory, although Skyline Laboratory in Tucson, US has been used for assaying as well. As part of the QA/QC procedures of the Company, ALS was used as the secondary laboratory. The total drill holes which were used for resource estimation were 5,587 drill holes for 902,197 m. Half core was dried for 6-8 hrs at 105°C and successively crushed, split and pulped to obtain 200 g of #200 grain size pulp. The assaying protocols are as follow: ALS and the Company laboratories take 0.5g sample and assay total copper (TCu) and cobalt (TCo) using 3-acid digestion (hydrochloric, perchloric and nitric acids) with atomic absorption spectrometry (AAS) finish. Also, based on 3-acid digestion, the Company lab and Skyline assayed TCu and TCo by ICP-OES finish. Assaying for acid soluble Cu and Co is undertaken by all the laboratories following the Company Acid Soluble Co and Cu Method, which required the addition of sulphuric acid, sodium sulphite and ferrous sulphate, six hours agitation digestion finishing with AAS (the Company and ALS) or ICP (Skyline). The same samples were subsequently assayed by ICP for Ca, Mg, Mn, and other elements.
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"> RPM notes that predominantly diamond drill-holes ("DDH") with drill core diameters of PQ (8.5 cm diameter), HQ (6.4 cm diameter) or NQ (4.8 cm diameter) have been used to define mineralisation and the information from this drilling has been used to underpin resources estimation, geotechnical and hydrogeological studies. Metallurgical test work samples were also taken from adits and trench locations. Holes were generally started with PQ core size and then were reduced to HQ and NQ, as needed. The drill-holes for geotechnical and hydrogeological studies utilised HQ diameter holes.
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 	<ul style="list-style-type: none"> Typically core recoveries ranged between 90% and 100% for all DDH which RPM considers suitable; however, some low recoveries were noted. A further review by RPM indicates that the zones with low

Criteria	JORC Explanation	Commentary
	<p><i>representative nature of the samples.</i></p> <ul style="list-style-type: none"> <i>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</i> 	<p>recovery are associated with intensely fractured or faulted intervals and the more intensely weathered upper zone. These low recoveries are not considered material to the total Mineral Resource currently estimated.</p>
Logging	<ul style="list-style-type: none"> <i>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</i> <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"> The Company for post 2006 drilling has developed logging and sampling procedures that have been continuously improved and have been subjected to external auditing that confirmed the processes and protocols implemented giving the results a high level of confidence. The Company geologists log the core samples according to the existing stratigraphic nomenclature of the deposit. Photography and recovery measurements were carried out by assistants under a geologist's supervision. During the site visit, RPM checked the geological logging process by reviewing the logs for 5 drill-holes, DSYN-0017, DSYN-0024, FGME-0145, FGME-0129, KWAT-0185. The geological staff demonstrated the logging process which matches with the model descriptions. RPM considers that Cu-Co mineralisation intensity match with the database assays and that the logs of these drill-holes are of a high quality. Logging records were mostly registered in physical format and were input into a digital format (Acquire). However, RPM would recommend capturing the geological logs in digital format, to avoid any potential for input errors. The core photographs, collar coordinates and down the hole surveys were received in digital format.
Sub-sampling techniques and sample preparation	<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</i> 	<ul style="list-style-type: none"> All cores were cut in half using diamond core saws. Half core was dried for 6-8 hrs at 105°C and successively crushed, split and pulped to obtain 200 g of #200 grain size pulp. The sample preparation methods are appropriate for the type of mineralisation. Sample size is considered appropriate for the grain size of the material

Criteria	JORC Explanation	Commentary
	<p><i>appropriate to the grain size of the material being sampled.</i></p>	
Quality of assay data and laboratory tests	<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"> • RPM considers that 90% of the data used to estimate resources was from the 2006 campaigns onwards, followed standard industry sampling procedures and quality control protocols. A new, improved, QA/QC protocol was implemented as a consequence of an extensive 2009 laboratory audit, however some questions remain for the works prior. • Since 2009, the Company has conducted a detailed QA/QC program to provide verification of the sample procedures, the sample preparation and the analytical precision and accuracy. The total control sample insertion rates vary from 12% to 19% of the total samples. The insertion rate of every control has been variable, however have included a significant number of samples which is detailed in Section 6 •
Verification of sampling and assaying	<ul style="list-style-type: none"> • <i>The verification of significant intersections by either independent or alternative Client 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 review undertaken by RPM of the drilling and sampling procedures indicates that international standard practices were utilised with no material issues noted by RPM in the checks completed. The QA/QC samples all showed suitable levels of precision and accuracy to enable confidence in the primary laboratories. RPM also notes the majority of the samples used for the resource estimation are derived from drilling from post 2006 which can be confirmed. RPM considers that the data which supports the resource estimation has no material sample bias and is representative of the samples taken. • No adjustments have been made to assay data.
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"> • Since 2006, the Company undertook a survey of the drill-hole collar locations with the high resolution differential GPS equipment using the method of taking static differential data, which is considered suitable. RPM notes that for drilling completed prior to 2006, collar information is available however the methods used to locate these collar points are unknown. As such, the collar coordinates cannot be confirmed, however they were validated with the LIDAR digital topographic model and cross referenced by the Company when possible. These holes only constitute a small proportion of the total holes, and the results indicate were suitable for inclusion in the resource estimation and any variation would not be material to the resultant resource. • The coordinate system was UTM

Criteria	JORC Explanation	Commentary
		<p>coordinates using the projections WGS 84 zone 35L. In addition, the primary and secondary geodesic local networks and azimuth points were geo-referenced, all in the WGS 84 system.</p> <ul style="list-style-type: none"> While RPM is aware that the Company undertook an internal re-survey of 1 in every 10 collars by separate operators, during the site visit RPM independently checked the collar locations of the Fungurume's drill-holes FGME-0379 and FGME-0380 with a handheld GPS and notes only small differences (7 m) well within the error limit of the manual GPS. The topographic surface is defined by 1m contours which are sufficient for a Mineral Resource.
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 hole spacing is approximately 50 m by 50 m. A detailed statistical analysis suggested that a composite spacing of 50 m with a minimum of four composite from four drill holes was appropriate for classification of Measured Mineral Resources and 100 m with a minimum of three composites from three drill holes was appropriate for classification of Indicated No sample compositing has been utilised in the raw datasets
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"> Drill holes were designed to intersect mineralisation perpendicular to strike. No material sampling bias has been introduced as a result of the relationship between the drilling orientation and the orientation of mineralised structures.
Sample security	<ul style="list-style-type: none"> <i>The measures taken to ensure sample security.</i> 	<ul style="list-style-type: none"> Subsequent to the independent drilling crews delivering the core to the core shed, the Company's personnel are responsible for cutting the core and placing the cut core in bags for delivery to the laboratory. The preparation laboratory was managed by the Company in Kwatebala. After preparation, the Company personnel inserted the control samples and renumbered all the samples within the batch. DHL transportation company was utilised to send the pulps to Skyline Tucson. Together with the batches, the Company provided to Fungurume (on-site) and Skyline laboratories, a report with the amount and the numbers of samples and sample tickets to each pulp were provided and detailing the analysis method required for each element. Chain of custody is kept all the

Criteria	JORC Explanation	Commentary
		time for laboratory personnel or Company's staff, excepting the time between the site and Tucson.
Audits or reviews	<ul style="list-style-type: none"><i>The results of any audits or reviews of sampling techniques and data.</i>	<ul style="list-style-type: none">Internal reviews and audits of sampling methods and data by RPM for Mineral Resource estimation. All audits indicate sampling techniques and data are acceptable.

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> • <i>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</i> • <i>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</i> 	<ul style="list-style-type: none"> • The Project is a joint venture agreement between three companies, namely Freeport-McMoRan (56%), Lundin Mining Corporation (24%) and the parastatal mining company, Gécamines (20%). All operations are control by Freeport-McMoRan and is the largest copper mine in the DRC. • In addition the Company currently holds numerous environmental, construction, and operating permits. The permits include the waste and tails storage construction and operating permits, water well drilling and extraction permits and various operating and environmental permits. RPM has completed an overview of these permits, and considers them in good standing to support the continued operation of the asset for the foreseeable future.
Exploration done by other parties	<ul style="list-style-type: none"> • <i>Acknowledgment and appraisal of exploration by other parties.</i> 	<ul style="list-style-type: none"> • Exploration by other parties is summarized in Table 4-1 of Section 4.1 of this Report.
Geology	<ul style="list-style-type: none"> • <i>Deposit type, geological setting and style of mineralisation.</i> 	<ul style="list-style-type: none"> • Deposits within the Project are interpreted to be a series of sediment hosted Cu-Co deposits which form part of the Central African Copper belt (CACB). The CACB transgressed multiple countries including the DRC and Zambia and is located within a major structural feature called the Lufilian Arc. A 500 km long fold belt that stretches from Kolwezi in the southern DRC to Luanshya in Zambia this arc hosts some of the largest and highest grade Cu-Co deposits in the world. • The majority of mineralisation in the Central African Copperbelt is hosted by a variety of siliclastic, argillaceous, and dolomitic lithologies inside the lower parts of the Roan Super-group, although mineralisation also extends into pre-Lualaban basement as well as too much higher stratigraphic levels in the Nugba Super-group. The mineralisation is largely stratiform and confined to specific horizons and commonly extended along strike for several kilometres.
Drill hole Information	<ul style="list-style-type: none"> • <i>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:</i> <ul style="list-style-type: none"> ○ <i>easting and northing of the drill hole collar</i> ○ <i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i> ○ <i>dip and azimuth of the hole</i> ○ <i>down hole length and</i> 	<ul style="list-style-type: none"> • The Company undertook a survey of the drill-hole collar locations with the high resolution differential GPS equipment using the method of taking static differential data, which is considered suitable. • The Company used the Reflex EZ-shot instrument to measure deviations in azimuth and inclination angles for non-vertical drill-holes; however, vertical holes were not surveyed. • RPM notes that while limited information was supplied for drilling prior to 2006, this data is only a small proportion of the resource which have been excluded, as

Criteria	JORC Code explanation	Commentary
	<p><i>interception depth</i></p> <ul style="list-style-type: none"> ○ <i>hole length.</i> <ul style="list-style-type: none"> • <i>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</i> 	<p>such any variation would not material to the global estimates.</p>
Data aggregation methods	<ul style="list-style-type: none"> • <i>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</i> • <i>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</i> • <i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i> 	<ul style="list-style-type: none"> • Not Applicable as not exploration results included in the report.
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> • <i>These relationships are particularly important in the reporting of Exploration Results.</i> • <i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i> • <i>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</i> 	<ul style="list-style-type: none"> • Not Applicable as not exploration results included in the report.
Diagrams	<ul style="list-style-type: none"> • <i>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</i> 	<ul style="list-style-type: none"> • Not Applicable as not exploration results included in the report.
Balanced reporting	<ul style="list-style-type: none"> • <i>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</i> 	<ul style="list-style-type: none"> • Not Applicable as not exploration results included in the report.
Other substantive exploration data	<ul style="list-style-type: none"> • <i>Other exploration data, if meaningful and material, should be reported including (but not limited to):</i> 	<ul style="list-style-type: none"> • Not Applicable as not exploration results included in the report.

Criteria	JORC Code explanation	Commentary
	<p><i>geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</i></p>	
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"> • RPM is not aware of future exploration plans, other than typical grade control drilling. • RPM notes that several exploration targets exists in the project area as outlined in Section7.

Section 3 Estimation and Reporting of Mineral Resources

Criteria	JORC Explanation	Commentary
Database integrity	<ul style="list-style-type: none"> 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. Data validation procedures used. 	<ul style="list-style-type: none"> The drilling data has been systematically audited by RPM. Original drilling records were compared to the equivalent records in the data base. No errors were found. RPM completed systematic data validation steps after compiling the database. A visual check of the drill holes and assays was also completed using MineSight mining software.
Site visits	<ul style="list-style-type: none"> Comment on any site visits undertaken by the Competent Person and the outcome of those visits. If no site visits have been undertaken indicate why this is the case. 	<ul style="list-style-type: none"> RPM completed two site visits to the mines and processing facilities between the dates of April 4th and 6th, 2016 and between the dates of June 6th and 8th, 2016 to review the mining, processing and EHSS aspects of the project.
Geological interpretation	<ul style="list-style-type: none"> Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit. Nature of the data used and of any assumptions made. The effect, if any, of alternative interpretations on Mineral Resource estimation. The use of geology in guiding and controlling Mineral Resource estimation. The factors affecting continuity both of grade and geology. 	<ul style="list-style-type: none"> The confidence in the geological interpretation is considered to be good and is based on visual confirmation in outcrop, intersections of mineralisation in drill holes and other exploration works and variography of grade continuity. Geological logging has been used to assist identification of lithology and mineralisation. Extensive assaying using appropriate methods define all forms of Cu and Co in the data. Alternative interpretations may be possible but are considered unlikely. The effect of any alternative interpretations would be immaterial to the Mineral Resource estimate. Outcrops of mineralisation and host rocks confirm the geometry of the mineralisation. The grade and continuity is affected by the presence of local faults or folds, the depth of oxidized, sulfide and mixture areas
Dimensions	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> A total of 19 models have been estimates, with similar mineralisation styles in each deposit. All deposit show stratabound cu-co mineralisation with strike then of up to 14 km and depths up to 400 m defined to date. Thicknesses vary between 5 and 10 m in all deposit.
Estimation and modelling techniques	<ul style="list-style-type: none"> 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. The availability of check estimates, previous estimates and/or mine production records and whether the Mineral 	<ul style="list-style-type: none"> Implicit modelling using MineSight was utilized to build the solids used to code the resource block models of the Project. Three passes were used with minimum samples of 4, 3 and 1, maximum samples of 12. Search radius for passes 1, 2 and 3 were 75 m, 150 m and 300 m respectively. A robust semi-variogram was interpreted with parameters then applied to all objects for interpolation. A two-structured, nested spherical model was found to model the experimental semi-variogram reasonably well, with a nugget of 0.03 to 0.67 and maximum range of around 500 m. Due to the folded nature of the mineralisation TCu, TCo, RATCu, RATCo and Ca grades were estimated using dynamic unfolding in

Criteria	JORC Explanation	Commentary
	<p>Resource estimate takes appropriate account of such data.</p> <ul style="list-style-type: none"> The assumptions made regarding recovery of by-products. Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation). In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed. Any assumptions behind modelling of selective mining units. Any assumptions about correlation between variables. Description of how the geological interpretation was used to control the resource estimates. Discussion of basis for using or not using grade cutting or capping. The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available. 	<p>MineSight (MSDU) and some zones with Local Anisotropy Ordinary Kriging (LAK). Acid soluble Cu (ASCu) and Co (ASCo) were obtained indirectly by multiplying the estimated RATCu and RATCo by the estimated TCu and TCo, respectively.</p> <ul style="list-style-type: none"> Reconciliation was completed which indicated an accuracy of 10% was achieved which is considered suitable, No assumption of income from recovery of by-products has been made as there are no by-products outside of the Cu and CO products. TCu, TCo, RATCu, RATCo and Ca were interpolated into the block model. No assumptions were made on selective mining units. A reasonable good correlation was observed with the elevation and the weathering profile (as contented Ca), as such density was estimated as a function of the elevation or on the Ca content. Validation of the model included detailed comparison of composite grades and block grades by object, by northing and easting and a section by section visual assessment of block grades and interpolation vs composite grades and interpretation of mineralisation. Validation plots showed good local correlation between the composite grades and the block model grades. No reconciliation data was available.
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"> Tonnages and grades were estimated on a dry in situ basis.
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"> The Mineral Resource has been reported using a cashflow based on processing costs and revenue per block, as outlined in Section 7. This cashflow approach was utilised due to the variable processing cost based on acid consumption.
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, 	<ul style="list-style-type: none"> Open pit mining method is suitable for current mining for oxidation ore with an average ASCu and ASCo metallurgical recovery of 97% and 93%. Pit optimisations were utilised using a Cu and Co price of 3.50/ Lb and 15.00 per lb respectively. Open Pit resource were reported within these areas while the mineralisation below was reported using UG costs as outlined in Section 7.

Criteria	JORC Explanation	Commentary
	<i>this should be reported with an explanation of the basis of the mining assumptions made.</i>	
Metallurgical factors or assumptions	<ul style="list-style-type: none"> <i>The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. When this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.</i> 	<ul style="list-style-type: none"> Variable processing costs and acid consumptions were utilised in the cashflow analysis of to report the profitable blocks. These costs varied on a block by block basis based on the ASCu component of the TCu.
Environmental factors or assumptions	<ul style="list-style-type: none"> <i>Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. When these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.</i> 	<ul style="list-style-type: none"> The Project is currently in operation, with all permits and licences in place for continued operation. In addition RPM has completed an Environmental Review as part of this Report and is not aware of any limitation to mining.
Bulk density	<ul style="list-style-type: none"> <i>Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.</i> <i>The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.</i> <i>Discuss assumptions for bulk density estimates used in the</i> 	<ul style="list-style-type: none"> Bulk Density was estimated based on the interpreted correlation for some rock types over ranges of elevation and weathering profile (Ca estimates). In cases where no correlation could be established, an average value by rock type was used.

Criteria	JORC Explanation	Commentary
Classification	<p><i>evaluation process of the different materials.</i></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"> A detailed statistical analysis suggested that a composite spacing of 50 m with a minimum of four composite from four drill holes was appropriate for classification of Measured Mineral Resources and 100 m with a minimum of three composites from three drill holes was appropriate for classification of Indicated Mineral Resource which would be compliant with the recommended guidelines of the JORC Code.
Audits or reviews	<ul style="list-style-type: none"> <i>The results of any audits or review of Mineral Resource estimates.</i> 	<ul style="list-style-type: none"> Internal audits of the Mineral Resource model only. No material issues identified.
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 relative accuracy and confidence level in the Mineral Resource estimates were determined by the use of a geospatial analysis to for all 18 resource areas in addition to RPM's validation procedures. The global and local grade validation procedures to check the resource model, comparisons of block model grades with input grades for different types and generations of sampling, comparison with previous estimates, comparison with global production data and checks of all depletion volumes and tonnages were used to aid in determining relative accuracy and confidence levels in the Mineral Resource estimates. The statement as above relates to the global estimates.

Section 4 Estimation and Reporting of Ore Reserves

(Criteria listed in section 1, and where relevant in sections 2 and 3, also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral Resource estimate for conversion to Ore Reserves	<ul style="list-style-type: none"> Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve. Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves. 	<ul style="list-style-type: none"> The independent Mineral Resources (Section 7) completed by RPM have been utilised for the Ore Reserve estimate. The JORC Measured and Indicated Mineral Resources quantities are inclusive and not additional to the Ore Reserves reported
Site visits	<ul style="list-style-type: none"> Comment on any site visits undertaken by the Competent Person and the outcome of those visits. If no site visits have been undertaken indicate why this is the case. 	<ul style="list-style-type: none"> Two site visits were undertaken by RPM's team. While the CP's did not undertake the site visit, the team consisted of principal consultant who complete the visit on behalf and as defacto for the CP's.
Study status	<ul style="list-style-type: none"> The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves. The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered. 	<ul style="list-style-type: none"> Ore Reserves were estimated using a suite of specialized open pit mine planning software packages, which includes the pit optimization program, the haul analyze program, and the production schedule program (OPMS). The input parameters selected by RPM are based on the review of the Feasibility level geotechnical, hydrological and mining studies completed by the Company, discussions with site personnel and site visit observations. The estimation of JORC Ore Reserves were prepared based on studies of Feasibility level confidence.
Cut-off parameters	<ul style="list-style-type: none"> The basis of the cut-off grade(s) or quality parameters applied. 	<ul style="list-style-type: none"> RPM undertook the pit optimization using the cash flow method, since the block definition as either ore or waste varies according to its intrinsic revenue and costs values. In the cash flow method, the ore material is defined by comparing the cash flows that would be generated by processing a given block as ore or mining it as waste.
Mining factors or assumptions	<ul style="list-style-type: none"> The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design). The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc. The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling. 	<ul style="list-style-type: none"> Fifteen separate open pits areas are planned to be mined at Project in the current LOM plan. RPM has evaluated the block models used the estimate the Mineral Resource, using a pit optimization software package, which resulted in the identification of approximately 133 million tonnes of insitu material in addition to the 47.9 million tonnes of existing stockpile ore that could economically be mined using reasonable assumptions for costs and metals prices estimate based on Feasibility level studies. Feasibility level geotechnical studies have been completed by the Company and have been utilised to derive the mine designs slope angles (Previous CPR). The pit limits and phases were designed with suitable level of detail taking into account the recommended geotechnical and mining operation parameters.

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> • <i>The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).</i> • <i>The mining dilution factors used.</i> • <i>The mining recovery factors used.</i> • <i>Any minimum mining widths used.</i> • <i>The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.</i> • <i>The infrastructure requirements of the selected mining methods.</i> 	<ul style="list-style-type: none"> • During the development of the pits a number of phases or push back are planned. These phases are planned to ensure consistent ROM ore is produced and minimise long period of waste mining • Mining recovery and dilution were revised and were used with suitable level of detail taking into account the mining method applied. • RPM reviewed the planned production rates and haulage profiles of the Company within the open pit and the resultant truck and shovel requirements to ensure the rate can be meet planned rates. • All design parameters and assumptions are outlined in Section 9 of this report. • Inferred resources were assumed to be waste in the pit optimisation and mine scheduling of the projects. • The mining method will require varying quantities of mining equipment throughout the mine life. Current mining equipment is outlined in Section 9.
Metallurgical factors or assumptions	<ul style="list-style-type: none"> • <i>The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.</i> • <i>Whether the metallurgical process is well-tested technology or novel in nature.</i> • <i>The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.</i> • <i>Any assumptions or allowances made for deleterious elements.</i> • <i>The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole.</i> • <i>For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?</i> 	<ul style="list-style-type: none"> • A single processing facility with a nominal capacity of 5.6 Mtpa of ROM ore has been constructed on site. Ore from the pits is stockpiled into 4 ROM fingers based on their grade characteristic and acid consumption. • Due to the mineralisation style acid consumption is substantial (100 kg per tonne or greater) which is expected to increase as mining reaches greater depth and acid solubility decreases. A maximum of 2,225 tonnes per day of sulfuric acid is supplied leaching from two on-site acid plants via burning imported sulfur. • RPM considers the testwork supports the continued operation and recoveries forecast.
Environmental	<ul style="list-style-type: none"> • <i>The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should</i> 	<ul style="list-style-type: none"> • The project is an operating asset with all permits and licences granted for the continued operation based on the Ore Reserve schedule. RPM is aware all studies have been completed, and suitable waste dumps, Tails storage facilities have been designed, or being designed to support the forecast production rates.

Criteria	JORC Code explanation	Commentary
	<i>be reported.</i>	
Infrastructure	<ul style="list-style-type: none"> The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed. 	<ul style="list-style-type: none"> All of the infrastructure, administration facilities, and requirements for the Project are in place with commissioning occurring in 2008. Many aspects of infrastructure are acceptable such as the town site, water supply, sewage treatment, and buildings, but power supply and roads present issues which require mitigation
Costs	<ul style="list-style-type: none"> The derivation of, or assumptions made, regarding projected capital costs in the study. The methodology used to estimate operating costs. Allowances made for the content of deleterious elements. The derivation of assumptions made of metal or commodity price(s), for the principal minerals and co-products. The source of exchange rates used in the study. Derivation of transportation charges. The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc. The allowances made for royalties payable, both Government and private. 	<ul style="list-style-type: none"> A total of 1.51 Billion USD capital is required of the remainder of the current Ore Reserves mine life. Capital cost were based on information provided by the Company, and included open pit mine equipment, process plant sustaining capital and tailings dam construction and successive lift construction. All operating costs was derived from actuals and contracts in place that went into mining and processing a tonne of ROM Ore. This primarily comprised three major components, i.e. Mining Cost, Ore Processing Cost, Administration & Marketing and others with acid consumption. These actuals included the off site refining, transport costs and fees. These are provided in the Letter for Reference No allowances were made for deleterious elements other than acid consumption, since they are reported to have negligible effect on processing recoveries. Moreover, penalty elements were found to be virtually absent from the concentrate based on actuals Due to the product type no penalties generally occur outside of product specifications. RPM took into account fees payable to local government and private sector in our economic analysis which have been capitalised
Revenue factors	<ul style="list-style-type: none"> The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc. the derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products. 	<ul style="list-style-type: none"> All mining input parameters are based on the Ore Reserve estimate LOM production schedule. RPM has based its metal prices on long term bank consensus forecast of US \$2.88/lb Copper and US \$12.4/lb Cobalt.
Market assessment	<ul style="list-style-type: none"> The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future. A customer and competitor analysis along with the identification of likely 	<ul style="list-style-type: none"> It is proposed that the majority of the product will be sold to Chinese customers, however RPM notes the Co product is sold to Freeports Co Refinery for further processing. RPM has based its metal prices on long term bank consensus forecast. Although no contracts are in place RPM does not

Criteria	JORC Code explanation	Commentary
	<p><i>market windows for the product.</i></p> <ul style="list-style-type: none"> • <i>Price and volume forecasts and the basis for these forecasts.</i> • <i>For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.</i> 	<p>envisages any issues with sales given the product type and the likely target customer in China and market conditions.</p> <p>RPM also note the market research completed by the Client as presented in the Circular.</p>
Economic	<ul style="list-style-type: none"> • <i>The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.</i> • <i>NPV ranges and sensitivity to variations in the significant assumptions and inputs.</i> 	<ul style="list-style-type: none"> • RPM derived the inputs for an economic analysis by review of project documentation, by evaluation of project during site visit, by interviews with employees and by own experience • RPM supplied technical input to a licensed Hong Kong Stock Exchange Competent Evaluator for the NPV calculation of discounted cash flows
Social	<ul style="list-style-type: none"> • <i>The status of agreements with key stakeholders and matters leading to social licence to operate.</i> 	<ul style="list-style-type: none"> • Involuntary resettlement activities appear to be well planned and implemented. It is important to continue engagement actions that promote the success of the program. • Security issues primarily associated with illegal mining will be problematic for the life of the project. The problem is expected to improve as the communities become more involved to protect their interests.
Other	<ul style="list-style-type: none"> • <i>To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:</i> • <i>Any identified material naturally occurring risks.</i> • <i>The status of material legal agreements and marketing arrangements.</i> • <i>The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.</i> 	<p>All required permits and licences are in place for the continued operation at the forecast production rate.</p> <ul style="list-style-type: none"> • RPM notes that the power supply has could production down time in the past and the Company has taken steps to ensure regular power supply.
Classification	<ul style="list-style-type: none"> • <i>The basis for the classification of the Ore Reserves into varying confidence categories.</i> • <i>Whether the result appropriately reflects the Competent Person's view of the deposit.</i> • <i>The proportion of Probable Ore</i> 	<ul style="list-style-type: none"> • RPM has Classified all the Indicated resource as Probable and Measured resources as Proved. • The classification is consistent with the Competent Person view of the deposits.

Criteria	JORC Code explanation	Commentary
	<i>Reserves that have been derived from Measured Mineral Resources (if any).</i>	
Audits or reviews	<ul style="list-style-type: none"> <i>The results of any audits or reviews of Ore Reserve estimates.</i> 	<ul style="list-style-type: none"> Internal reviews of the Ore Reserves estimate followed RPM's standard internal peer review procedures.
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 Ore Reserve 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 reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which 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>Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.</i> <i>It is recognised that this may not be possible or appropriate in all circumstances. 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"> All related confidence level work was undertaken based on the results of global estimates. Confidence level for the reserves was tested performing sensitivity check based on economic model generated by RPM, after economically mineable portion of the mineral resource was defined through pit optimization, subsequent mine design and scheduling. Key elements found to be sensitive to the project economics are product price and transportation costs (Mine site to processing plant), and acid consumption.

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D. Pit Optimisations



Pit Shell and Designed Pit Summary

Pit Optimization Results												
Description	Ore (kt)	TCu (%)	TCo (%)	AsCu (%)	AsCo (%)	TCu (klbs)	TCo (klbs)	AsCu (klbs)	AsCo (klbs)	Strip Ratio	Waste (kt)	Total (kt)
Kato L3K												
RPM Pitshell	7,936	1.62	0.58	1.45	0.51	282,565	101,225	253,976	89,423	5.14	40,805	48,741
Fungurume VI												
RPM Pitshell	15,162	2.76	0.40	2.49	0.31	923,117	133,688	832,933	103,204	5.93	89,894	105,056
Mambiima												
RPM Pitshell	16,479	3.21	0.16	2.87	0.11	1,164,835	56,947	1,043,002	40,726	7.75	127,651	144,130
Mwandinkomba												
RPM Pitshell	5,993	3.54	0.13	3.16	0.10	468,160	16,819	417,704	13,304	7.28	43,637	49,630
Tenke												
RPM Pitshell	11,439	3.15	0.49	2.82	0.39	795,142	123,140	711,771	99,183	6.02	68,843	80,282
Zikule												
RPM Pitshell	468	2.96	0.13	2.58	0.11	30,541	1,343	26,580	1,088	13.21	6,186	6,654
Fwaulu												
RPM Pitshell	3,965	3.04	0.24	2.67	0.19	266,096	20,597	233,623	16,693	5.50	21,805	25,770
Fungurume												
RPM Pitshell	13,898	3.96	0.44	3.41	0.30	1,214,092	136,225	1,044,393	93,145	4.30	59,725	73,623
Kanzinyanga												
RPM Pitshell	1,860	1.47	0.35	1.28	0.27	60,443	14,371	52,654	11,255	5.79	10,758	12,618
Kansalawile												
RPM Pitshell	8,742	3.08	0.17	2.77	0.14	593,567	32,589	534,796	26,364	6.21	54,306	63,047
Kwatebala												
RPM Pitshell	23,867	2.35	0.36	2.11	0.30	1,234,190	187,953	1,110,221	159,460	4.22	100,637	124,504
Mudilandima												
RPM Pitshell	6,582	1.92	0.39	1.76	0.34	279,269	56,102	255,560	49,210	7.23	47,613	54,194
Shadiranzoro												
RPM Pitshell	1,881	3.49	0.10	3.25	0.08	144,606	3,979	134,601	3,506	9.20	17,302	19,183
Shinkusu												
RPM Pitshell	1,847	2.85	0.51	2.58	0.44	116,198	20,849	105,096	17,755	8.57	15,836	17,683
Pumpi												
RPM Pitshell	13,545	2.94	0.18	2.58	0.15	876,890	53,050	769,938	45,674	5.05	68,414	81,959
Total Deposits												
RPM Pitshell	133,663	2.87	0.33	2.55	0.26	8,449,711	958,878	7,526,848	769,992	5.79	773,411	907,074

Notes:
 1) Tonnage in metric tonnes
 2) Copper price: \$2.88/lb and Cobalt price: \$12.40/lb
 3) Figures reported are rounded which may result in small tabulation errors.

Runge Pincock Minarco

E.
Data Verification Checks by RPM
(Licences and Permits)



List of main permits, licenses, approvals to be obtained from local authorities in connection with Company's business

Please find attached a list of the main permits/authorizations required to carry out our business on a daily basis.

Note that these authorizations are either obtained only one time (without renewal) or renewable on a yearly basis and are not formalized by a "physical" permit.

The renewal/obtaining of the permits/authorizations is supported by the payment of the corresponding parafiscal tax.

- Exploitation permit for dangerous, unhealthy and awkward establishments

Not required. Covered by the Mining Convention.

N/A.	N/A.
------	------

- Earthworks

- Earthworks (obtained by the Company)

Authorization from the Governor of the Province to begin mining activities within the mining concession (Article 45 of Ordinance-Law n°81-013 dated 2 April 1981).

10/0112/CAB/GP/KAT/2006 dated 28 January 2006 ¹ .	Valid for the duration of mining activities.
--	--

- Roads (obtained by the Company)

Authorization from the Governor of the Province to begin mining activities within the mining concession, including roads (Article 45 of Ordinance-Law n°81-013 dated 2 April 1981).

10/0112/CAB/GP/KAT/2006 dated 28 January 2006 ¹ .	Valid for the duration of mining activities.
--	--

- Deforestation

Not required. Covered by the Mining Convention and by Article 45 of Ordinance-Law n°81-013 dated 2 April 1981.

N/A.	N/A.
------	------

- Construction/Urbanism (building permits) (obtained by the Company)

- Authorization from the Governor of the Province to begin mining activities within the mining concession, including erection of mining installations, buildings, houses linked to the project (Article 45 of Ordinance-Law n°81-013 dated 2 April 1981).

¹ This is not a permit number but the reference number of the letter/authorization of the Governor.

10/0112/CAB/GP/KAT/2006 dated 28 January 2006 ² .	Valid for the duration of mining activities.
--	--

- Building permits from the Ministry of Urbanism.

N/A.	N/A.
------	------

- Publicity/advertising

Not required. the Company does not realize any commercial publicity/advertising (as it does not carry out an activity of sale of its products locally)..

N/A.	N/A.
------	------

- Water (obtained by the Company)

Authorization from the Governor of the Province to begin mining activities within the mining concession, including erection of mining installations, buildings, houses linked to the project (Article 45 of Ordinance-Law n°81-013 dated 2 April 1981).

10/0112/CAB/GP/KAT/2006 dated 28 January 2006 ³ .	Valid for the duration of mining activities.
--	--

- Transport

- Authorization of transport (vehicles) (obtained by the Company)
All vehicles using the national roads are subject to the obligation to obtain an authorization. The authorization is delivered on a yearly basis. Its granting is formalized by the payment of a parafiscal tax.

No permit number.	1 year (renewable). Expires in March 2017.
-------------------	---

- Certification of the airport runway (renewable every year) (obtained by the Company)

AAC/DG/DSA/SEC/031/2014 ⁴	1 year (renewable). Expires on 30 November 2016.
--------------------------------------	---

- Certification of the helicopter runway (renewable every year) (obtained by the Company)

Obtaining of the certificate for 2016 under progress.	1 year (renewable).
---	---------------------

² This is not a permit number but the reference number of the letter/authorization of the Governor.

³ This is not a permit number but the reference number of the letter/authorization of the Governor.

⁴ Last renewal certificate available (valid until 30 November 2015). the Company is still waiting for the certificate covering 2016.

- Import/export operations (obtained by the Company)

An import/export number/authorization is required to be able to perform import/export operations. The renewal of the number/authorization is made every year by the payment of a parafiscal tax.

MC/DIP/KAT/154/110/2011	Valid for 1 year, renewable. Expires in March 2017.
-------------------------	--

- Tax & corporate registration

- Tax ID (obtained by the Company): required within 15 days from the beginning of the activity.

A0810758D	Valid for the duration of the carrying out of taxable activities.
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- VAT registration (obtained by the Company): required to be considered as liable for VAT.

0998/DGI/DGE/DIG/MB/TVA/2011 dated 24 November 2011.	Valid for the duration of the carrying out of taxable activities.
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- INSS (social security) ID (obtained by the Company)

0706000895C01	Valid for the duration of the carrying out of taxable activities.
---------------	---

- INPP (training fund) ID (obtained by the Company)

2927.80	Valid for the duration of the carrying out of taxable activities.
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- National identification number (NIN) (obtained by the Company): required from the Ministry of Economy at the moment of the setting up of the company

6-118-K30745D	Valid for the duration of the carrying out of commercial/industrial activities.
---------------	---

- RCCM (Trade registrar) registration number (obtained by the Company)

CD/L'SHI/RCCM/14-B-1428 (NRC 7325)	Valid for the duration of the legal entity (99 years, renewable).
------------------------------------	---

- Mines

- Mining licenses (exploitation permits) (obtained by the Company):

Tenke Mining Concession formerly n°198 / newly n°123 / Now divided into exploitation permits 123, 9707 and 9708 (83,850,58 Ha)	20 th September ,2020.
--	-----------------------------------

Fungurume Mining Concession formerly n°199 / newly n°159 / Now divided into exploitation permits 159, 4728 and 4729 (75,799.86Ha)	12 th August, 2026
---	-------------------------------

- Surface area fees

Payment of the surface area fees is a condition of validity of the mining exploitation permits. Fees are paid on a yearly basis.

N/A.	N/A.
------	------

- License for exportation of samples of mining ores (granted for a certain quantity of ore and limited in time – i.e. renewable) (obtained by the Company)

014/2016 ⁵	Valid for 6,540kgs of samples and for exportations made during March-June 2016.
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- Fuel

- Storage of petroleum products (obtained by the Company): an authorization for the storage of petroleum products is required and is renewed on a yearly basis. The granting and renewal of the authorization are made by the payment of a parafiscal tax.

No permit number.	1 year (renewable). Expires in March 2017.
-------------------	---

⁵ Last license requested and obtained for samples.

**END
OF
REPORT**

Letter of Transmittal

Our reference: C00069-12-r1



Censere (Far East) Limited
3/F, Tower Two, Tern Centre,
251 Queen's Road Central,
Hong Kong

Tel: +852 2511 2011
Fax: +852 2511 2005
Email: hk@censere.com
www.censere.com

29 March 2017

The Directors

China Molybdenum Co., Limited

Huamei Shan Road, Chengdong New District
Luanchuan County, Luoyang City
Henan Province, China

Dear Sirs/Madams,

In accordance with your instructions, we have undertaken an analysis to determine the Market Value of the Tenke Fungurume copper-cobalt mine ("Tenke" or the "Mine" or the "Project"), which is located in the Democratic Republic of the Congo ("DRC"). China Molybdenum Co., Limited ("CMOC" or the "Company") has entered into a definitive agreement with Freeport-McMoRan Copper & Gold Inc. ("Freeport" or "Vendor") to acquire 100% of its interest in Freeport-McMoRan DRC Holdings Ltd., which holds Freeport's indirect 56% interest in Tenke. On 16 November 2016, CMOC announced that the acquisition had been completed. On 22 January 2017, CMOC announced that they had signed an agreement with a Chinese private equity firm, BHR Partners ("BHR") to support BHR's acquisition of a 24% stake in Tenke from Lundin Mining Corporation (the "Acquisition").

CMOC is dually listed on the Main Board of the Stock Exchange of Hong Kong Limited (the "HKEx") and the Shanghai Stock Exchange (the "SSE"). The Company is headquartered in Luoyang, China. CMOC specialises in mining, dressing, smelting and processing of molybdenum and tungsten, integrating scientific research, production and trading. Currently its market value ranks in the top 30 mining companies globally, and it is the world's fourth-largest molybdenum and second-largest tungsten concentrate producer. Also, it is the fourth largest producer of copper in Australia.

As requested by HKEx (as defined herein), CMOC is required to prepare a valuation report which is part of the Competent Person's Report ("CPR") for any major mineral asset acquisition that must form part of the relevant circular to shareholders. The purpose of our analysis is to determine the value of the Mine in accordance with Chapter 18 of Hong Kong Listing Rules ("Chapter 18"). In that regard, we have been engaged as Competent Evaluator and have adopted VALMIN Code (as defined herein) in arriving at our valuation assessment.

Our date of valuation is 31 December 2016 ("Valuation Date") and our report which follows is dated 29 March 2017 ("Report Date"). The Effective Date of our report is the same as the Valuation Date.

This valuation has been undertaken on a Market Value basis. For the purposes of this exercise, Market Value is defined as the estimated amount (or the cash equivalent of some other consideration) for which the Mineral Asset (as defined herein) should exchange on the date of valuation between a willing buyer and a willing seller in an arm's length transaction after appropriate marketing where the parties had each acted knowledgeably, prudently and without compulsion.

Based on the analysis outlined in the report which follows, we are of the opinion that the Market Value of the Mine as at the Valuation Date is as follows:

<i>US\$</i>	Low	Most likely outcome	High
Value of the Mine	4.44 billion	4.96 billion	5.57 billion
24% Value of the Mine	1.07 billion	1.19 billion	1.34 billion

The following pages outline the factors considered, methodologies and assumptions employed in formulating our opinions and conclusions. Any opinions are subject to the assumptions and limiting conditions contained therein.

Yours faithfully

For and on behalf of

Censere (Far East) Limited

Brett Shadbolt

Chief Executive Officer

1. VALUER'S BIOGRAPHY

Censere Group, comprising both Censere and Stratiqa, is a specialist valuation, forensic and advisory group head-quartered in Singapore with twenty-one offices throughout Asia Pacific and the United States. Censere offices are located at Auckland, Bangkok, Beijing, Ho Chi Minh, Hong Kong, Houston, Jakarta, Kuala Lumpur, Maldives, Seoul, Shanghai, Shenzhen, Singapore, Sydney, Taipei, Tokyo and Washington DC while Stratiqa has offices in Hong Kong, New York, San Francisco and Singapore. Censere Group was established in 2002 and offers comprehensive technical asset, intellectual property and business valuation and advisory services to major corporates and leading SME's in the Asia Pacific region. This engagement has been principally undertaken by Brett Shadbolt, Chief Executive Officer of Censere Group.

Brett Shadbolt is the Chief Executive Officer and Founder of Censere Group. He has over 30 years of dedicated valuation and advisory experience and has a MSc in Global Finance jointly conferred by NYU Stern and HKUST. Brett is a Professional Member of Royal Institute of Chartered Surveyors, Registered Business Valuer (HK), Member of the Hong Kong Securities Institute, Energy Risk Professional of GARP and Professional Member of the Australasian Institute of Mining and Metallurgy (AusIMM). Brett has conducted numerous mining rights and mineral assets valuations for companies such as Albidon Limited, Anhui Conch Cement Company Limited, Terratech Group Ltd, Sino Vanadium Inc., Ultro Technologies Ltd, China Molybdenum Co., Limited, Adventus Holdings and King Stone Energy Group Limited. He has also conducted various valuations for companies such as Advanced Micro Devices (AMD), Cafe de Coral, China.com Corporation, ExxonMobil, Keppel Corporation, Quam, Shanghai Tonva, Singapore Airline, and Tencent. He has written numerous articles about valuation and financial due diligence in emerging market, and is a regular speaker at conferences on the same topics.

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3. DEFINITIONS AND GLOSSARY

For the purpose of this report, the following terms have, where appropriate, the following meanings:

“%”	Percent
“CAPM”	Capital asset pricing model
“CHIP”	Cobalt hydroxide intermediate products
“CMOC” or “Company”	China Molybdenum Co., Limited
“Co”	Cobalt
“Comparables”	Comparable listed companies
“Competent Person”	Runge Pincock Minarco
“Competent Person Report” or “CPR”	Competent person report dated 29 March 2017 prepared by Runge Pincock Minarco in relation to the Project (as defined herein)
“CRU”	CRU International Ltd.
“Cu”	Copper
“DCF”	Discounted cash flow
“DRC”	Democratic Republic of the Congo
“Effective Date”	Also referred to as “Valuation Date”
“FCFF”	Free cash flow to firm
“Freeport” or “Vendor”	Freeport-McMoRan Inc.
“FY”	Financial year ended/ending 31 December

“HKEx”	Stock Exchange of Hong Kong Limited
“Indicated Mineral Resource”	Part of a mineral Resource (as defined herein) for which quantity, grade, (or quality), densities, shape and physical characteristics are estimated with sufficient confidence to allow the application of modifying factors in sufficient detail to support mine planning and evaluation of economic viability of the deposit
“IMF”	International Monetary Fund
“JORC Code”	Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (2012 edition), as published by the Australasian Joint Ore Reserves Committee, as amended from time to time
“Listing Rules”	Rules governing the Listing of Securities on the Hong Kong Stock Exchange
“Management”	Management of CMOG
“Market Value”	Estimated amount (or the cash equivalent of some other consideration) for which the Mineral Asset should exchange on the date of Valuation between a willing buyer and a willing seller in an arm’s length transaction after appropriate marketing where the parties had each acted knowledgeably, prudently and without compulsion
“Measured Mineral Resources”	Part of a mineral Resource (as defined herein) for which quantity, grade (or quality), densities, shape, and physical characteristics are estimated with confidence sufficient to allow the application of modifying factors to support detailed mine planning and final evaluation of the economic viability of the deposit
“Mineral Assets”	Mineral assets or the equivalent as defined in the VALMIN Code
“Mining Code”	the Mining Code of the DRC
“Mining Regulation”	the Mining Regulations of the DRC
“Mt”	Million tonnes
“Oxide Operation”	Operation on the near surface oxide mineralization

“p.a.”	Per annum
“PLS”	Pregnant leach solution
“Probable Reserve”	Economically mineable part of an Indicated, and in some circumstances, a Measured Mineral Resource. The confidence in the modifying factors applying to a Probable Reserve is lower than that applying to a Proved Reserve
“Proved Reserve”	Economically mineable part of a Measured Mineral Resource. A Proved Reserve implies a high degree of confidence in the modifying factors
“Reserves”	Economically mineable part of a Measured and/or Indicated Mineral Resource. It includes diluting materials and allowances for losses, which may occur when the material is mined or extracted and is defined by studies at pre-feasibility or feasibility level as appropriate that include application of modifying factors
“Resources”	Concentration or occurrence of solid material of economic interest in or on the Earth’s crust in such form, grade (or quality), and quantity that there are reasonable prospects for eventual economic extraction
“Report Date”	29 March 2017
“ROM”	Run-of-mine
“SSE”	Shanghai Stock Exchange
“Sulphide Operation”	Mining and process operation on the mixed and sulphide mineralisation
“SX-EW”	Solvent extraction and electro-winning
“Technical Value”	Technical Value is an assessment of a mineral asset’s future net economic benefit at the Valuation Date under a set of assumptions deemed most appropriate by a practitioner, excluding any premium or discount to account for market considerations
“Tenke”, “Mine” or “Project”	Tenke Fungurume copper-cobalt mine

“US\$”	US dollar, the lawful currency of United States of America
“VALMIN Code”	Code for the technical assessment and valuation of mineral and petroleum assets and securities for independent expert reports (2015 edition), as prepared by the VALMIN Committee, a joint committee of The Australasian Institute of Mining and Metallurgy, the Australian Institute of Geoscientists and the Mineral Industry Consultants Association as amended from time to time
“Valuation Date”	31 December 2016
“WACC”	Weighted Average Cost of Capital

4. PREAMBLE

4.1 Brief Description of Project

The Mine is operational and is a major producer of copper and cobalt located in the Lualaba Province of the DRC. CMOC is holding 56% interest in the Mine and Freeport-McMoRan Copper & Gold Inc. is the operating partner on behalf of CMOC and Lundin Mining Corporate is holding 24% interest. The construction started in late 2006, and the second phase expansion was completed in early 2013. According to annual report of TF Holdings Limited, production of copper cathode and cobalt metal contained in the form of cobalt hydroxide has been approximately 449,663 and 35,306 thousand pounds in 2015 and approximately 476,066 and 35,392 thousand pounds in 2016.

The Mine is operated under mining concession No. 198 and mining concession No. 199, which were granted under the former mining legislation – the Mining Law and the 1967 Mining Regulations. The latter mining legal regime was applicable prior to the entry into force of the Mining Code and the Mining Regulations, which constitute the current mining regime.

The mining licenses are noted below:

Mine	Exploitation Permits Number	Number of squares (carrés)	Approximate area (in hectares)	Expiry Date
Tenke mine area	No. 123	448	38,060	16 September 2020
	No. 9707	405	34,407	16 September 2020
	No. 9708	134	11,384	16 September 2020
	Total	987	83,851	
Fungurume mine area	No. 159	435	36,955	12 August 2026
	No. 4728	135	11,469	12 August 2026
	No. 4729	322	27,356	12 August 2026
	Total	892	75,780	

More detailed information about the Project is contained in the section titled “The Project”.

4.2 Purpose of VALMIN Valuation

The purpose of our assessment is to determine the Market Value of Tenke for acquisition purposes in accordance with Chapter 18 of the Hong Kong Listing Rules (“Chapter 18”). In that regard, we have been engaged as Competent Evaluator and have adopted VALMIN Code in arriving at our assessment.

This report outlines the information and assumptions upon which the valuation of the Project is based, the valuation model applied and the conclusions reached.

Our report should not be used or relied upon for any other purpose other than noted herein.

4.3 Basis of Valuation

We have conducted the valuation on a Market Value basis. The VALMIN Code states that Market Value is “the estimated amount (or the cash equivalent of some other consideration) for which the Mineral Asset should exchange on the date of valuation between a willing buyer and a willing seller in an arm’s length transaction after appropriate marketing where the parties had each acted knowledgeably, prudently and without compulsion”.

The Market Value comprises a technical value plus or minus, in some cases, a premium or discount to account for such factors as market, strategic considerations or special circumstances. However, it should be recognised that some assets, such as exploration areas may not have a technical value.

The VALMIN Code contains 5 fundamental Principles:

- Competence;
- Materiality;
- Transparency;
- Reasonableness; and
- Independence.

Competence or being *Competent* requires that the public report is based on work that is the responsibility of a suitably qualified and experienced person who is subject to an enforceable professional Code of Ethics.

Materiality or being *Material* requires that a public report contains all the relevant information that investors and their professional advisors would reasonably require, and reasonably expect to find in the report, for the purpose of making a reasoned and balanced judgement regarding the technical assessment or mineral asset valuation being reported.

Transparency or being *Transparent* requires that the reader of a public report is provided with sufficient information, the presentation of which is clear and unambiguous, to understand the report and not be misled by this information or by omission of material information.

Reasonableness requires that an assessment that is impartial, rational, realistic and logical in its treatment of the inputs to a valuation or technical assessment has been used, to the extent that another practitioner with the same information would make a similar technical assessment or valuation.

Independence or being *Independent* requires that there is no present or contingent interest in the mineral asset(s), nor is there any association with the commissioning entity or related parties that is likely to lead to bias.

Where the legal definition of Independence or Independent differs from the above, the legal definition takes precedence.

For this assignment, we have not carried out any work in the nature of a feasibility study nor are we required to express a viability opinion on any proposed transaction. We have relied on information provided by the Company, Runge Pincock Minarco and Etude Kabinda Advocats DRC in arriving at our valuation estimates.

We have conducted the necessary checks, enquiries, analyses and verification procedures to establish reasonable grounds for establishing the soundness of the contents and conclusions of this valuation report.

Our valuation is only an indicative quantum at which interests in the Project might be reasonably be expected to be sold at the Valuation Date and may be different from the actual transacted price.

4.4 Statement of Independence

We confirm that we have no present or contemplated interest in the assets which are the subject of the valuation and are acting independent of all parties. Further, our fees are agreed on a lump sum basis and are not contingent on the outcome.

4.5 Limitation of Circulation

This valuation report has been prepared solely for inclusion in the circular of the Company and is not intended for any legal or court proceedings without our prior written consent. We will assume no responsibility or liability for any losses incurred by you or any third party as a result of unauthorised circulation, publication or reproduction of this report in any form and/or if used contrary to the purpose stated therein. Censere understands that the valuation will be incorporated into the Company's circular for public disclosure purposes and have provided a letter of consent for the inclusion of the valuation report into the circular.

5. SOURCES OF INFORMATION

In preparing our report, we have received and reviewed information from Management and held discussions with them. We have relied, in some instances, to a large extent, on such information in arriving at our valuation; including, but not limited to, the following:

- announcement made by the Company in relation to the acquisition dated 9 May 2016;
- announcement made by the Company in relation to the Acquisition dated 22 January 2017;
- CPR prepared by Runge Pincock Minarco dated 29 March 2017;
- historical financial information of TF Holdings Limited from FY2010 to 31 March 2016;
- draft financial statements of Freeport-McMoRan DRC Holdings Ltd. from FY2013 to 31 December 2016;

- financial forecast of Tenke provided in the CPR;
- discussion with the following personnel:
 - Mr. Chen Ching-Yung, CFO of CMOC Mining USA Ltd;
 - Mr. Fred Li, Business Development Director of CMOC;
 - Mr. Jeremy Clark, Manager of Runge Pincock Minarco; and
- all other information and representations provided by Management.

In addition, we have made reference to, and relied upon, other information such as:

- market risk premium from Damodaran’s website;
- Chapter 18 of the Hong Kong Listing Rules;
- Code for the Technical Assessment and Valuation of Mineral and Petroleum Assets and Securities for Independent Expert Reports (2015 edition), as prepared by the VALMIN Committee in Australia (“VALMIN Code”);
- The Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (2012 edition), as published by the Joint Ore Reserves Committee, as amended from time to time (“JORC Code”);
- research report titled “Cobalt Market Outlook 2015” and “Cobalt Outlook Update November 2016” prepared by CRU International Limited dated in 2015 and 2016, respectively;
- United States inflation rate from International Monetary Fund (“IMF”);
- copper price forecast projected by Wood Mackenzie; and
- historical financial information of the Comparable Companies from Bloomberg.

6. VALUATION CONSIDERATIONS

We have inspected the sites and processing facilities where the Project operates and note that the facilities, in general, are in good operating condition.

Dimensions, measurements and areas included in the valuation report are based on information contained in the documents provided to us by the Company.

We have also considered the information in the CPR and the specialist(s) (where applicable) who contributed to the findings in the CPR have each consented to matters based on their information in the form and context in which it appears in the CPR.

We have no reason to doubt the truth and accuracy of the information provided to us by the Company.

7. KEY CAVEATS AND ASSUMPTIONS

In preparing our assessment, we have made the following key limitations and assumptions as of the Valuation Date in our valuation model and these apply throughout unless otherwise stated:

- the production schedules reflect the operational status of the Project;
- the time period between production/processing and sales is reasonably short;
- forecasts for capital cost throughout the forecast period have been provided. The Company is responsible for the contents, estimations, and assumptions used in the forecast;
- the Project shall have sufficient financial liquidity and working capital to achieve the financial forecasts and projections;
- there are no other liabilities including any contingent liabilities or unusual contractual obligations or substantial commitments which would have a material effect on the value of the Project;
- there will be no material change in the existing political, legal or regulatory (including changes in legislation, laws or regulations, government policies or rules), fiscal, market, logistic and shipping or economic conditions in DRC and elsewhere;
- there will be no material changes to inflation, interest rates or exchange rates from those prevailing as at the Valuation Date;

- there will be no material change in the bases or rates of taxation or duties in DRC and elsewhere;
- operation of the Project will not be severely interrupted by any force majeure event or unforeseeable factors or any unforeseeable reasons that are beyond the control of Management, including but not limited to, the occurrence of natural disasters or catastrophes, epidemics or serious accidents; and
- other assumptions specific to a particular valuation approach or certain observations and conclusions are outlined in the ensuing sections of the report.

Any deviation from the above key limitations and assumptions may significantly vary the valuation of the Project. Our valuation is largely based on information provided by the Company and the Company is responsible for their contents and accuracy. Notwithstanding this, we have conducted the necessary checks, enquiries, analyses and verification procedures to establish reasonable grounds for establishing the soundness of the contents and conclusions of this valuation report. We have also considered the information in the CPR and information provided by the specialist(s) who contributed to the findings in the CPR. The specialist(s) has/have consented to matters based on their information, in the form and context in which it appears in the CPR.

For this exercise, we have obtained, and considered, published market data and other publicly available information relating to Comparables from sources which we regard to be reputable and reliable. We make no representations as to the accuracy of the content in such published market data and other publicly available information in deriving parameters used for the financial forecasts and valuations models, and have accepted such information without detailed verification.

8. STANDARD LIMITING CONDITIONS

Our assessment is subject to the following standard limiting conditions and these apply throughout unless otherwise stated:

- we shall not be required to give testimony or attendance in court or to any government agency by reason of this valuation, with reference to the property described herein, unless prior arrangements have been made; and
- our report is for the use of the party to whom it is addressed and no responsibility is accepted from any third party for the whole or any part of the contents of our report.

9. THE PROJECT

9.1 Background

Censere has been instructed by CMOC to undertake an independent valuation of Freeport's interests in the Mine located in the DRC. Lundin Mining Corporation holds a 24% interest, as at the Valuation Date.

9.2 Tenke Fungurume copper-cobalt mine

The Tenke Fungurume copper-cobalt mine is located in Lualaba Province of the DRC, about 175km north of Lubumbashi. The Mine is accessible via highway from Lubumbashi or by national highway from Zambia. Product supply to overseas is done through the international port in South Africa.

Mine	Exploitation Permits Number	Number of squares (carrés)	Approximate area (in hectares)	Expiry Date
Tenke mine area	No. 123	448	38,060	16 September 2020
	No. 9707	405	34,407	16 September 2020
	No. 9708	134	11,384	16 September 2020
	Total	987	83,851	
Fungurume mine area	No. 159	435	36,955	12 August 2026
	No. 4728	135	11,469	12 August 2026
	No. 4729	322	27,356	12 August 2026
	Total	892	75,780	

As discussed with the Management, nothing has come to our attention that the tenements cannot be renewed.

According to the CPR, the Mine is the largest copper mine of DRC and is situated in the Central African Copper belt. Since it commenced in 2008, the Mine has been under constant operation on the near surface oxide mineralisation ("Oxide Operation"). The main mining method is the conventional open cut method. The leach and solvent extraction and electro-winning ("SX-EW") processing plant currently has a throughput rate of 5.6 million tonnes per annum ("Mtpa").

Currently, the plants (leach and SX-EW) only process oxide material and are continuously fed from 5 pits at any given time. Run of Mine ("ROM") ore is transported from the pit through on-site gravel haul roads to four ROM stockpiles. It depends on ore type and/or grade as to which ROM stockpiles the ROM ore will be sent. Mining follows conventional truck and shovel open pit methods. The Life of Mine ("LOM") ore is scheduled to be sourced from fifteen separate open pit zones, within which there are a total of 26 discrete pits which have been designed.

According to CPR, products are a Cu cathode product and Co Hydroxide concentrate. Cu cathode product contains 99.9% Cu while Co hydroxide product contains 38% Co. Both products are transported from site to the seaport in South Africa via Zambia. Customers of the Cu product are from all over the world, while the Co product is sold internally to Freeport's Co refinery in Finland.

Besides the Oxide Operations, based on the CPR, there is potential for mixed and sulphide mineralisation by open pit and underground mining ("Sulphide Operation"). The Sulphide Operation would require the construction of a floatation and roasting circuit and the Company has completed a number of studies and tests in regards to sulphide processing, underground mining and potential open pit mining. However, no detailed feasibility study has been completed to date.

According to the annual report of TF Holdings Limited, the copper and cobalt production volumes between 2010 and 2015 were as follows:

Year	2010	2011	2012	2013	2014	2015	2016
Copper (thousands of recoverable pounds)	265,151	280,796	347,606	462,742	446,761	449,663	476,066
Cobalt (thousands of contained pounds)	20,337	24,652	25,726	28,111	29,396	35,306	35,392

Source: Management

According to the CPR, the quality and the amount of Reserves and Resources at the Mine are estimated as follows:

Item	Unit	Proved	Probable	Total
Quantity	Mt	125.1	56.5	181.6
TCu	%	2.4	2.7	2.5
AsCu	%	2.2	2.4	2.2
TCo	%	0.32	0.3	0.31
AsCo	%	0.26	0.25	0.25
TCu	Mlbs	6,675.1	3,365.3	10,040.4
TCo	Mlbs	870.5	376.1	1,246.6

Source: CPR

Notes: TCu/TCo – Refers to Total Cu/Co which is contained in the material.

AsCu/AsCo – Refers to grade of the Cu/Co which is acid soluble.

Mining Type	Ore Type	Resource		Quantity (Mt)	TCu	TCo	AsCu	AsCo	
		Classification							
Open Pit	Leached	Measured		1.4	0.6	0.45	0.4	0.39	
		Indicated		2.7	0.4	0.43	0.2	0.37	
		Inferred		<u>2.3</u>	<u>0.2</u>	<u>0.40</u>	<u>0.2</u>	<u>0.35</u>	
			Sub-Total		<u>6.4</u>	<u>0.4</u>	<u>0.43</u>	<u>0.2</u>	<u>0.37</u>
	Oxide	Measured		117.7	2.8	0.30	2.5	0.24	
		Indicated		119.3	2.4	0.26	2.1	0.21	
		Inferred		<u>34.5</u>	<u>2.0</u>	<u>0.19</u>	<u>1.8</u>	<u>0.16</u>	
			Sub-Total		<u>271.4</u>	<u>2.5</u>	<u>0.27</u>	<u>2.2</u>	<u>0.22</u>
	Mixed	Measured		39.2	3.5	0.30	1.7	0.17	
		Indicated		52.5	3.1	0.26	1.5	0.15	
		Inferred		<u>13.8</u>	<u>2.1</u>	<u>0.24</u>	<u>1.1</u>	<u>0.14</u>	
			Sub-Total		<u>105.4</u>	<u>3.1</u>	<u>0.27</u>	<u>1.5</u>	<u>0.16</u>
	Sulphide	Measured		12.6	4.4	0.29	0.7	0.12	
		Indicated		17.8	3.6	0.22	0.6	0.07	
		Inferred		<u>7.1</u>	<u>2.8</u>	<u>0.17</u>	<u>0.3</u>	<u>0.02</u>	
		Sub-Total		<u>37.6</u>	<u>3.7</u>	<u>0.23</u>	<u>0.6</u>	<u>0.08</u>	

Mining Type	Ore Type	Resource		TCu	TCo	AsCu	AsCo	
		Classification	Quantity (Mt)					
Underground	Oxide	Measured	4.7	2.8	0.32	2.5	0.24	
		Indicated	30.7	2.9	0.30	2.5	0.23	
		Inferred	14.7	3.0	0.28	2.6	0.20	
		Sub-Total	50.1	2.9	0.30	2.5	0.22	
		Mixed	Measured	6.6	3.4	0.19	1.7	0.12
			Indicated	68.1	3.2	0.27	1.5	0.15
	Inferred		169.1	3.0	0.30	1.4	0.16	
	Sub-Total		243.7	3.1	0.29	1.5	0.15	
	Sulphide		Measured	0.9	3.2	0.28	0.70	0.06
			Indicated	26.6	3.0	0.22	0.8	0.05
		Inferred	93.9	3.0	0.25	0.8	0.05	
		Sub-Total	121.4	3.0	0.24	0.8	0.05	

Source: CPR

Note: Numbers in the table may not add due to rounding

For the purpose of the valuation, we have not considered the amount of Inferred Resources in accordance with Chapter 18 of the Listing Rules. However, we have illustrated a value that includes the inferred resources in section 11.10 as one of the scenarios which may not necessarily represent an achievable Market Value.

9.3 Site Visits

Mr. Brett Shadbolt conducted a site visit from 11 July 2016 to 13 July 2016 at the Mine. Please refer to the map and photographs of the site in Appendices 1 and 2 respectively.

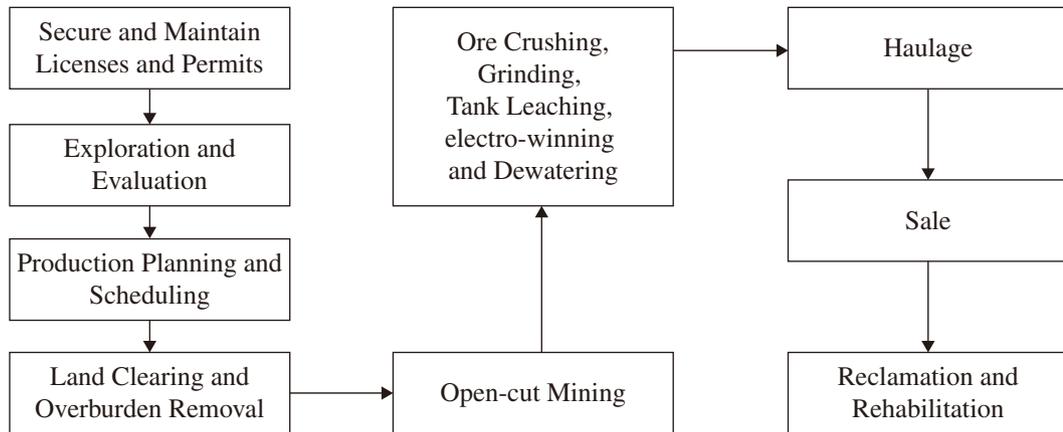
We note that the Company has appointed Etude Kabinda Advocats DRC to conduct a report on the valid licenses, permits and approvals which CMOC is required to carry on its operations. As stated in the report from Etude Kabinda Advocats DRC, the Company has obtained all material licenses, permits and approvals for its operations and has complied with the conditions imposed thereunder.

9.4 The Mining Methods

The current mining method is primary open cut mining method, which is also to be used in the future. There are also future plans to conduct underground mining. The processing includes crushing, grinding, tank leaching with sulfuric acid and SO₂, electro-winning, and dewatering. Ore is broken by conducting conventional drilling and blasting methods. Front-end loaders load the haul trucks and the high-grade ore is delivered to stockpiles near the primary crusher, while the lower grade ore is sent to stockpiles and is processed later in the mine life. Loaders produce ore blend from these stockpiles.

The ore processing facilities consist of an agitated leach circuit and a solvent extraction – electrowinning process to produce copper cathode and cobalt hydroxide intermediate products (“CHIP”). Copper cathode is produced through SXEW from the resultant pregnant leach solution (“PLS”) and CHIP is produced from a raffinate bleed stream through pH adjustment with magnesium oxide following additional purification steps, which firstly precipitate iron-aluminum-manganese with air/SO₂ and limestone and then copper with lime.

Below are flow-charts illustrating the main process.



Source: Censere

10. VALUATION METHODOLOGY

Oxide Operation

The valuation method we adopted to arrive at our assessment is the Discounted Cash Flow (“DCF”) method. The reason for using this method is to capture the cash flows of future periods throughout the Project; it is also a fundamental approach that is widely used within the extractive minerals industry for valuing operational, or soon to be operational, mine(s).

Other valuation methodologies such as the Market Multiples and Cost Methods were considered but deemed less desirable when compared to the DCF method. The Market Multiple method is an appropriate approach where the future cash flows of a project or company are expected to be stable for the foreseeable future but is highly dependent on the comparables selected. Further, the use of Market Multiples is also dependent on the number of data points available.

Given the lack of suitable comparables, any valuation based on market multiples will be very unlikely to provide any economically meaningful interpretation for cross-checking purpose. Further, for the Market Multiples for the valuation of the Oxide Operation, there are insufficient data points to provide any meaningful analysis. Similarly, the cost method does not take into account the production yield of future periods and will result in valuation estimates that are not representative of the Oxide Operation's potential.

Sulphide Operation

Currently, the Sulphide Operation is not operational and there is no mining or processing undertaken. Due to the lack of reliable information and uncertainty about the future development of the Sulphide Operation, neither the DCF method nor the Cost Method are appropriate for determining the Market Value of the Sulphide Operations. Thus, we have adopted the Transaction Multiples method to derive the economic value of the Sulphide Operation as at the Valuation Date.

10.1 Discounted Cash Flow Method

The DCF method involves projecting a series of periodic cash flows to an operating property. A discount rate is then applied to the cash flow series to arrive at a present value of the income-producing property.

$$DCF = \frac{CF_1}{(1+r)^1} + \frac{CF_2}{(1+r)^2} + \dots + \frac{CF_n}{(1+r)^n}$$

where:

CF = cash flow

r = discount rate

n = time period (year)

To use discounted cash flow to value the Project, it is necessary to:

- Consider the riskiness of the Project and estimate an appropriate discount rate reflecting the riskiness of the asset and time value of money; and
- Estimate expected cash flows of the Project for the life of the operations.

Net Cash Flow

Cash flow refers to flow or movement of cash into or out of the asset. The DCF method is based on periodic net cash flows discounted by the discount rate. Net cash flow is defined as cash inflows minus cash outflows.

$$\text{Net Cash Flow} = \text{EBIT} - \text{Tax} + \text{Depreciation and Amortisation} - \text{Working Capital Additions} \\ - \text{Capital Cost}$$

where:

$$\text{EBIT} = \text{Sales revenue} - \text{Cost of Goods Sold} - \text{total operating cost}$$

Revenue

Sales revenue is generated from the sale of copper cathode and CHIP.

Operating Cost

Cash outflows include mining operating costs and processing operating costs.

Discount Rate

To discount the future cash flows to their present value, we have used the weighted average cost of capital (“WACC”) as the discount rate. The discount rate reflects the expected rate of return for the investment, given its risk profile.

Net Present Value

Net present value can be calculated by summing up periodic net cash flows multiplied by the respective present value factor.

To ascertain the valuation range of the Oxide based on DCF, we have performed the following:

- Reviewed the operating, environmental and social practices including but not limited to mining and process method, quantity and quality of final products, equipment availability and performance, marketability of products, pricing forecast etc;
- Conducted comparison of historical versus proposed production plan, product quality and quantity, operating expenses and capex; and

- Reviewed the proposed operating expenses and capex and of the view that the proposed services and infrastructure is adequate, realistic and achievable.

Based on the above, we are of the view that the financial projection, production forecast, operating, environmental and social practices by the Oxide Operation is reasonable to achieve the Market Value as indicated in section 11.9.

10.2 Transaction Multiples

The Transaction Multiples method is based on transactions observed in an active market that are similar to the transaction under consideration. An active market fulfils all of the following conditions:

- (1) the items traded within the market are homogenous;
- (2) willing buyers and sellers can normally be found at any time; and
- (3) prices are available to the public.

11. VALUATION OF OXIDE OPERATION

Based on our findings and conclusions presented in previous sections, we have adopted the following key parameters and assumptions for the valuation of Oxide Operation.

11.1 Assumptions

The valuation is subject to the following assumptions:

- The time period between production and sales is reasonably short;
- Working capital forecast for the Oxide Operation is based on the historical trends of Tenke from FY2013– FY2016 which are as follows:

Tenke	Average number of days turnover
Accounts receivables	11 days
Accounts payables	36 days
Inventory	227 days

- income tax rate of 30% is based on DRC corporate tax rate;

- copper price is projected based on price forecast by Wood MacKenzie. For the period commencing 1 January 2017, copper price is determined by escalating the price projected by Wood MacKenzie by using IMF's published forecast inflation rate of the United States;
- cobalt price is projected based on growth rates indicated by the cobalt price forecast by CRU International Limited and historical sale price on the Valuation Date. For the period commencing from 1 January 2021, cobalt price is determined by escalating the Valuation Date price by using IMF's published forecast inflation rate of the United States;
- production projection is based on CPR; and
- capital cost and operating cost is escalated based on IMF's published forecast inflation rate of the United States.

11.2 Cash inflows

Prices of copper and cobalt

According to the Management, revenue will be generated from the sale of copper and cobalt to various customers.

The forecast copper prices from FY2017 to FY2035 are based on forecast copper price (real price, basis year as at FY2016) prepared by Wood Mackenzie, for similar metal characteristics as that produced by Oxide Operation, and escalated with the IMF's published forecast inflation rates for the United States which, as at the Valuation Date, are as follows:

Year	(Real US\$/tonnes) (2016 Basis)	IMF US Inflation rate	(Nominal US\$/tonnes)
FY2017	5,284	2.34%	5,407
FY2018	5,612	2.65%	5,895
FY2019	6,063	2.52%	6,529
FY2020	6,504	2.39%	7,171
FY2021	7,826	2.34%	8,831
FY2022	8,267	3.00%	9,608
FY2023	8,708	3.00%	10,424
FY2024	8,267	3.00%	10,193
FY2025	7,826	3.00%	9,939
FY2026	7,275	3.00%	9,516

Year	(Real US\$/tonnes) (2016 Basis)	IMF US Inflation rate	(Nominal US\$/tonnes)
FY2027	7,275	3.00%	9,802
FY2028	7,275	3.00%	10,096
FY2029	7,275	3.00%	10,399
FY2030	7,275	3.00%	10,711
FY2031	7,275	3.00%	11,032
FY2032	7,275	3.00%	11,363
FY2033	7,275	3.00%	11,704
FY2034	7,275	3.00%	12,055
FY2035	7,275	3.00%	12,417

Source: Wood Mackenzie and IMF

Forecast copper prices after FY2035 are based on the forecast price for FY2035 and escalated with the IMF's long-term forecast inflation rates for the United States, which is 3% per year.

Forecast cobalt prices are based on the growth rates indicated by the nominal cobalt price forecast by CRU International Limited till FY2021. The forecast cobalt price is escalated with IMF's published forecast inflation rate for the United States after FY2021. The cobalt forecast price for the period FY2016 to FY2021 is indicated in the following table:

Year	Historical Sale price (US\$/lb)	Projected Nominal Price (US\$/lb)	Nominal Price growth rate (CRU)
FY2016	7.99	7.99	
FY2017		10.40	30.0%
FY2018		11.34	9.1%
FY2019		11.80	4.1%
FY2020		12.16	3.0%
FY2021		12.64	3.9%

Sources: CRU

Further information about the price forecast can be found in Appendix 5.

Quantity of copper and cobalt

From FY2017 to FY2049, the estimated production quantity of copper cathode is forecast to grow to 504 million pounds per annum in FY2018, and then gradually decrease to 82 million pounds per annum in FY2049 based on CPR. As such, during the projected production period, 8.7 billion pounds (which equals to 3.94 million tonnes) of copper cathode is expected to be extracted from 181.6 million tonnes of oxide Reserves of and 237 million tonnes of open-pit oxide Measured and Indicated Resources.

From FY2017 to FY2049, the estimated production quantity of contained cobalt is forecast to range from 9.6 million pounds per annum to 41.5 million pounds per annum based on CPR. In FY2049, the estimated production of contained cobalt is projected to be 9.6 million pounds. As such, during the projected production period, 1,014 million pounds (which equals to 0.5 million tonnes) of contained cobalt is expected to be extracted from 181.6 million tonnes of oxide Reserves and 237 million tonnes of open-pit oxide Resources.

11.3 Cash outflows*Operating Costs*

Operating costs mainly comprise the following:

- production costs, including costs generated from mining, haulage cost ore, haulage cost waste, stockpile re-handling cost, processing, acid costs, inc. closure cost, general and administration; and
- downstream operating costs, such as costs for SX-EW, freight, and sales.

From FY2017 to FY2050, the forecast is based on the expected planned production as shown in the CPR, escalated by the IMF's published forecast inflation rates for the United States. The expected operating costs (excluding depreciation and amortisation) for the projected period are as follows:

(USD, in thousands)

Operating Costs	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025
	939,688	973,888	987,198	939,999	988,980	942,856	888,414	917,268	881,735
	FY2026	FY2027	FY2028	FY2029	FY2030	FY2031	FY2032	FY2033	FY2034
	935,749	951,093	959,421	869,975	902,612	841,487	886,259	911,374	905,983
	FY2035	FY2036	FY2037	FY2038	FY2039	FY2040	FY2041	FY2042	FY2043
	902,452	970,214	1,038,690	1,132,000	1,103,495	937,394	993,318	1,051,085	1,123,638
	FY2044	FY2045	FY2046	FY2047	FY2048	FY2049	FY2050		
	1,142,771	1,174,775	1,205,503	1,264,181	1,046,386	644,505	-		

Source: CPR and IMF

Capital Cost

The projected capital cost for Oxide Operation as per the CPR is mainly for mining and processing. These costs are then escalated using IMF's published forecast inflation rates for the United States against each financial year. The total capital costs expected to be incurred during the forecast financial period are shown in the table below:

(USD, in thousands)

Capital Cost	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025
	74,957	191,520	91,600	86,514	56,418	69,715	87,600	57,074	39,885
	FY2026	FY2027	FY2028	FY2029	FY2030	FY2031	FY2032	FY2033	FY2034
	33,720	45,538	84,308	94,892	110,550	103,795	63,688	120,178	112,565
	FY2035	FY2036	FY2037	FY2038	FY2039	FY2040	FY2041	FY2042	FY2043
	111,281	113,732	110,702	19,483	26,520	24,784	34,923	18,986	16,573
	FY2044	FY2045	FY2046	FY2047	FY2048	FY2049	FY2050		
	17,001	17,203	17,865	18,251	18,798	19,362	19,943		

Source: CPR and IMF

11.4 Discount rate

To discount the future cash flows to their present value, we have used an annual discount rate of 15.0% for Tenke. The discount rate reflects the required rate of return on the investment and is based on its WACC. Please refer to Appendix 3 for details of computation of the discount rate.

11.5 Annuity value

To estimate value of the potential open-pit oxide resources that may be extractable after FY2049, we have estimated an annuity value at the end of FY2049. As mentioned in the CPR, there are approximately 56 Mt of Measured Resources and Indicated Resources that may be potentially processable after FY2049. This indicates that the life of mine may be extended by another 10 years based on the 5.6 Mtpa treatment throughput rate and recovery rate of 97% of AsCu and of 94% of AsCo. The annuity value measures the current value of a set of cash flows in the future, given a specified rate of return or discount rate and the formula is as follows:

$$\text{Value} = \text{CF}_{n+1} \frac{1 - (1+r)^{-N}}{r}$$

where: CF_{n+1} = normalised cash flow 1 year after n
 r = required rate of return. i.e. discount rate
 N = number of periods

11.6 Net Present Value of Net Cash Flow (NPV)

With cash flows multiplied by the present value factor for each period, we can derive the net present value of the cash flow for each year as at the Valuation Date. The NPV is determined by summation of all present values during the projection period plus the present value of the annuity to represent cash flow from the final projection year through to the end of mine life.

11.7 Marketability Discount

According to the International Glossary of Business Valuation Terms, marketability means the relative ease and promptness with which a security or commodity may be sold when desired, at a representative current price, without material concession in price merely because of the necessity of the sale. Investors will price in a discount for the additional costs and risks of liquidation when valuing equity in privately held companies. For this exercise, we are of the opinion that no marketability discount is applicable for the purpose of this valuation. This is an operating mine that has been in operation for many years and has been profitable. We believe that this asset could be listed with relative ease by itself in most markets in the world and hence we concluded that no marketability discount needs to be allowed.

11.8 Valuation Range

We have set the upper and lower limits of the valuation range at 1.5% higher, and 1.5% lower against the WACC. The valuation range for Oxide Operation is set out below:

<i>US\$</i>	Low	Most Likely Outcome	High
Value of Oxide Operation	4.38 billion	4.80 billion	5.31 billion

11.9 Most Likely Outcome

For purposes stated herein and subject to the limitations and assumptions set out in this report, we are of the opinion that the NPV of Oxide Operation as at 31 December 2016 is in range of US\$4.38 billion to US\$5.31 billion. The most likely outcome for the Oxide Operation is US\$4.80 billion and 24% of the value of the Oxide Operation is US\$1.15 billion.

Further details of the valuation of Oxide Operation can be found in the Appendix 5.

11.10 Scenario/Sensitivity Analyses

Sensitivity analyses have been performed to illustrate the NPV of Oxide Operation under various scenarios. The sensitivity analyses are meant for illustration purposes only and do not necessarily imply that the NPV of Oxide Operation could be as stated below. The parameters that are being considered for the sensitivity analyses are:

- changes to the discount rate(s);
- changes in copper and cobalt prices;
- changes in production volumes;
- changes in operating costs; and
- changes in capital costs.

Discount rate

Shown below is the sensitivity analysis for a 5% increase or decrease in discount rates with other parameters and assumptions remaining unchanged. The valuation for each scenario is computed and presented in the following table:

	Value of Oxide Operation (100%) (in US\$)	Value of Oxide Operation (24%) (in US\$)
+5%	3.63 billion	0.87 billion
Most likely outcome	4.80 billion	1.15 billion
-5%	7.04 billion	1.69 billion

Copper and cobalt prices

Shown below is the sensitivity analysis for a 15% increase or decrease in copper and cobalt prices with the remaining parameters and assumptions remaining unchanged. The valuation under each scenario is computed and presented in the following table:

	Value of Oxide Operation (100%) (in US\$)	Value of Oxide Operation (24%) (in US\$)
-15%	3.39 billion	0.81 billion
Most likely outcome	4.80 billion	1.15 billion
+15%	6.21 billion	1.49 billion

Production volumes

Shown below is the sensitivity analysis for a 15% increase or decrease in the targeted production volumes with other parameters and assumptions remaining unchanged. The valuation under each scenario is computed and presented in the following table:

	Value of Oxide Operation (100%) (in US\$)	Value of Oxide Operation (24%) (in US\$)
-15%	4.01 billion	0.96 billion
Most likely outcome	4.80 billion	1.15 billion
+15%	5.59 billion	1.34 billion

Operating costs

Shown below is the sensitivity analysis for a 15% increase or decrease in the operating costs (excluding depreciation and amortisation) with the other parameters and assumptions remaining unchanged. The valuation under each scenario is computed and presented in the following table:

	Value of Oxide Operation (100%) (in US\$)	Value of Oxide Operation (24%) (in US\$)
+15%	4.18 billion	1.00 billion
Most likely outcome	4.80 billion	1.15 billion
-15%	5.42 billion	1.30 billion

Capital cost

Shown below is the sensitivity analysis for a 15% increase or decrease in the capital costs with the other parameters and assumptions remaining unchanged. The valuation for each scenario is computed and presented in the following table:

	Value of Oxide Operation (100%) (in US\$)	Value of Oxide Operation (24%) (in US\$)
+15%	4.70 billion	1.13 billion
Most likely outcome	4.80 billion	1.15 billion
-15%	4.89 billion	1.17 billion

Concurrent effect of the parameters

Shown below is the sensitivity analysis for the total effects of all the parameters moving together towards the directions which result in highest and lowest values, respectively.

Sensitivity Analysis	Highest value	Lowest value
Discount rate (-/+5%)	10.0%	20.0%
Price (+/-15%)	115%	85%
Production (+/-15%)	115%	85%
Operating cost (-/+15%)	85%	115%
Capital cost (-/+15%)	85%	115%
Value		
Value of Oxide Operation (100%)	11.69 billion	1.63 billion
Value of Oxide Operation (24%)	2.80 billion	0.39 billion

Scenario Analysis

We have also considered the valuation of the Oxide Operation to include the extraction of the Inferred Resources. We note that the inclusion of the Inferred Resources in the valuation is not permitted under Chapter 18. Such scenario analysis is considered as a best case scenario which the Project is able to achieve and it is a form of illustration which does not necessarily imply that the Technical Value of Oxide Operation are as stated below:

Best-Case Scenario value (US\$ in billions)		
Min	Mid-point	Max
4.38	4.81	5.33

Best-Case Scenario value for 24% of the Oxide Operation (US\$ in billions)		
Min	Mid-point	Max
1.05	1.15	1.28

Further, shown below is the sensitivity analysis for the total effects of all the parameters moving together towards the directions which result in highest and lowest values, respectively.

Sensitivity Analysis	Highest value	Lowest value
Discount rate (-/+5%)	10.0%	20.0%
Price (+/-15%)	115%	85%
Production (+/-15%)	115%	85%
Operating cost (-/+15%)	85%	115%
Capital cost (-/+15%)	85%	115%
Value		
Value of Oxide Operation (100%)	11.84 billion	1.63 billion
Value of Oxide Operation (24%)	2.84 billion	0.39 billion

12. VALUATION OF SULPHIDE OPERATION

12.1 Comparable Transactions

We have considered similar market transactions of copper mines in recent years to derive transaction multiples of copper resources. The results are shown in following table.

Completion Date	Acquiror	Transaction Location	Transaction value (\$bn)	Cu Resources (MT)			
				Measured	Indicated	Inferred	
31-07-14	MMG Limited	Las Bambas copper project (Glencore)	5.85	Peru	3.14	4.90	2.50
08-12-15	Zijin Mining Group Co., Ltd.	Kamoa Project (IVN) (50%)	0.41	DRC		9.95	1.94
25-08-14	PanAust Limited	Frieda River Project	0.08	PNG	3.18	2.19	3.06
23-01-15	Alsons Prime Investments Corporation	Indophil Resources NL	0.36	Philippines	2.55	2.18	1.01
09-04-13	First Quantum Minerals Ltd	Inmet Mining Corp	5.09	Panama	8.46	14.70	8.46

Based on our analysis, we have used the lower 25 percentile of the multiples indicated by the comparable transactions (after excluding outliers), which is 0.010 US\$/lb. The multiple is then multiplied by the amount of Measured and Indicated Resources of the Sulphide Operations which indicates a value of the US\$166 million for a 100% interest.

Further information can be found in Appendix 6.

12.2 Valuation Range

We have set the upper and lower limits of the valuation range at 0 percentile and 50 percentile of the multiples indicated by the comparable transactions (after excluding the outliers). The valuation range for Sulphide Operation is set out below:

US\$	Low	Most Likely Outcome	High
Value of Sulphide Operation	67.5 million	165.6 million	263.8 million

12.3 Most Likely Outcome

For purposes stated herein and subject to the limitations and assumptions set out in this report, we are of the opinion that the value of Sulphide Operation as at 31 December 2016 is in range of US\$67.5 million to US\$263.8 million. The most likely outcome for the Sulphide Operation is US\$165.6 million and 24% of the value of the Sulphide Operation is US\$39.7 million.

Further details of the valuation of Sulphide Operation can be found in the Appendix 6.

12.4 Scenario/Sensitivity Analyses

Sensitivity Analysis

Sensitivity analyses have been performed to illustrate the value of Sulphide Operation under various scenarios. The sensitivity analysis is meant for illustration purposes only and do not necessarily imply that the value of Sulphide Operation could be as stated below. The parameter that is being considered for the sensitivity analysis is the percentile of the multiples and due to the limited number of parameters that are available to analyse, the sensitivity range being illustrated is the valuation range for the Sulphide Operation.

Percentile	Transaction Multiples	NPV of Sulphide Operations
	(\$/lb)	('000 US\$)
0%	0.004	67,483
25%	0.010	165,622
50%	0.016	263,761

Scenario Analysis

We have also considered the valuation of the Sulphide Operation to include the extraction of the Inferred Resources. We note that the inclusion of the Inferred Resources in the valuation is not permitted under Chapter 18. Such scenario analysis is considered as a best case scenario which the Sulphide Operation is able to achieve and it is a form of illustration which does not necessarily imply that the value range of Sulphide Operation are as stated below:

Best-Case Scenario value (US\$ in million)		
Min	Mid-point	Max
140.7	345.4	550.1
Best-Case Scenario value for 24% of the Sulphide Operation (US\$ in million)		
Min	Mid-point	Max
33.8	82.9	132.0

13. STATEMENT OF VALUE

13.1 Technical Value

For purposes stated herein and subject to the limitations and assumptions set out in this report, the Technical Value of a 100% interest of Tenke as at the Valuation Date is in the approximate range of US\$4.44 billion to US\$5.57 billion and the most likely outcome is approximately US\$4.96 billion.

The Technical Value of a 24% interest is in the approximate range of US\$1.07 billion to US\$1.34 billion and the most likely outcome is approximately US\$1.19 billion. The respective values are found in the table below:

<i>US\$</i>	Low	Most likely outcome	High
Value of the Mine	4.44 billion	4.96 billion	5.57 billion
24% Value of the Mine	1.07 billion	1.19 billion	1.34 billion

13.2 Technical Value versus Market Value

The Market Value comprises a technical value plus or minus, in some cases, a premium or discount to account for such factors as market, strategic considerations or special circumstances. A marketability discount is usually required to convert Technical Value to Market Value. According to the International Glossary of Business Valuation Terms, marketability means the relative ease and promptness with which a security or commodity may be sold when desired, at a representative current price, without material concession in price merely because of the necessity of the sale.

Investors will price in a discount for the additional costs and risks of liquidation when valuing equity in privately held companies. For this exercise, we are of the opinion that no marketability discount is applicable for the purpose of this valuation. This is an operating mine that has been in operation for many years and has been profitable. We believe that this asset could be listed with relative ease by itself in most markets in the world and hence we concluded that no marketability discount needs to be allowed.

Based on the above mentioned, we are of the view that there is no need to apply any market adjustment to the Technical Value of this Project. Hence, the Market Value of the Project is the same as its Technical Value.

14. KEY RISK FACTORS

The Mine is subject to both specific risks to its business activities and risks of a general nature. Individually, or in combination, these might adversely affect the future operating and financial performance of the Mine. This section describes some, but not all, of the risks which may be associated with the Mine's operation.

14.1 Specific Risk Factors

14.1.1 Exploration, development and production

Potential investors should understand that mineral exploration, development and mining are high-risk enterprises, only occasionally providing high rewards. There is no assurance that exploration of the mineral interests of the Mine will result in the discovery of an economically viable mineral deposit. Even if an apparently viable mineral deposit is identified, there is no guarantee that it can be profitably mined.

The discovery of mineral deposits is dependent upon a number of factors, not the least of which is the technical skill of the exploration personnel involved. The commercial viability of a mineral deposit, once discovered, is also dependent upon a number of factors, some of which are the particular attributes of the deposit, such as size, grade and proximity to infrastructure, metal prices and government regulations, including regulations relating to royalties, allowable production, importing & exporting of minerals, and environmental protection. In addition, assuming discovery of a commercial ore body, depending on the type of mining operation involved, several years can elapse from the initial phase of drilling until commercial operations are commenced.

The cost of the capital & operating expenditure, resources & reserves estimates of the Mine described in the above section are based on certain estimates and assumptions with respect to the method and timing of exploration and/or production. By their nature, these estimates and assumptions are subject to significant uncertainties and accordingly, the actual costs may materially differ from these estimates and assumptions.

Accordingly, no assurance can be given that the cost estimates, resources and reserves estimates and the underlying assumptions will be realised in practice, which may materially and adversely affect viability of the Mine or its operation. Whilst the exploration, development and production program outlines the current intentions with regard to the project, the actual expenditure and exploration and production work undertaken will depend on the results generated. The priority of the prospects and accordingly expenditure, may be redirected as results are obtained and therefore actual expenditure may differ materially from budgeted expenditure.

In addition there are always geotechnical risks associated with mining operations. Rock behaviour can be unpredictable as highlighted in Runge's technical report. Underground mining is especially vulnerable to these risks as ground movement can render production areas inaccessible. Larger openings that have collapsed are very difficult to return to service with no guarantee that the impacted area would not collapse again. In addition, the success of the underground mining is dependent on a product produced to be sufficiently fine for easy extraction from underground once the undercutting is completed. Since ground conditions are different from one area to the next, there is a risk that performance and extraction rates of the mine may be negatively impacted.

14.1.2 Fluctuation in copper and cobalt prices

The profitability and the value of the copper and cobalt reserves depend upon the prices of the minerals. The contract prices it may receive in the future for copper and cobalt depend upon factors beyond our control, including the following:

- The domestic and foreign supply and demand for copper and cobalt;
- The quantity and quality of copper and cobalt available from competitors;
- Adverse weather, climatic or other natural conditions, including natural disasters;
- Domestic and foreign economic conditions, including economic slowdowns;
- Legislative, regulatory and judicial developments or environmental regulatory changes that would adversely affect the industry; and
- The proximity to, capacity of and cost of transportation and port facilities.

A substantial or extended decline in the prices it receives for its future copper and cobalt sales contracts could materially and adversely affect the Mine by decreasing its profitability and the value of its copper and gold reserves.

14.1.3 Funding

While the Project seems to have sufficient funds to meet its capital requirements for its proposed exploration program and other expenses, it may need additional funds, or may seek to develop opportunities of a kind that will require it to raise additional capital from equity or debt sources. It is difficult to predict the level of funding required with accuracy. Any additional equity financing may be dilutive and debt financing, if available, may involve restrictions on financing and operating activities. There can be no assurance that the Project will be able to raise such financing on acceptable terms or at all. If the Project is unable to obtain such additional financing, it may be required to reduce the scope of its anticipated activities, which could adversely affect its business, financial condition and operating results.

14.1.4 Performance of Equipment, Technical Personnel and Contractors

There is also a risk that hired contractors (including technical personnel) may under-perform or that equipment may malfunction, either of which may affect the progress of the Project exploration and mining activities. There may also be high demand for contractors providing other services to the mining industry. Consequently, there is a risk that Project may not be able to source all the personnel and equipment required to fulfil its proposed exploration and mining activities included in its planned budgets.

14.1.5 Disruption to Business Operations

The Project is also subject to a range of operational risks. Such operational risks include equipment failures, IT system failures, external services failure (including energy or water supply), industrial action or disputes and natural disasters. While CMOC will endeavour to take appropriate action to mitigate these operational risks or to insure against them, one or more of these risks may have a material adverse impact on the performance of the Project.

14.1.6 Occupational Health and Safety

Given Project exploration activities (and especially if it achieves exploration success leading to mining activities), it will face the risk of workplace injuries which may result in workers' compensation claims, related common law claims and potential occupational health and safety prosecutions. Further, the production processes used in conducting any future mining activities of the Mine can be dangerous. CMOC has, and intends to maintain, a range of workplace practices, procedures and policies which will seek to provide a safe and healthy working environment for its employees, visitors and the community.

While CMOC intends to maintain appropriate safeguards in its exploration activities, serious injury to an employee or another person could occur and give rise to liability under occupational health and safety laws and regulations and also under the general law.

14.2 Environmental, Other Regulations and Legal Risk

14.2.1 Extensive environmental regulations

The copper and cobalt mining industry is subjected to increasingly strict regulation by federal, state and local authorities with respect to environmental matters such as:

- Limitations on land use;
- Mine permitting and licensing requirements;
- Reclamation and restoration of mining properties after mining is completed;
- Management of materials generated by mining operations;
- The storage, treatment and disposal of waste materials (solids and liquids);
- Remediation of contaminated soil and groundwater;
- Air quality standards;
- Water pollution;
- Protection of human health, plant-life and wildlife, including endangered or threatened species;
- Protection of wetlands;
- The discharge of materials into the environment; and
- The effects of mining on surface water and groundwater quality and availability.

The costs, liabilities and requirements associated with the laws and regulations related to these and other environmental matters may be costly and time-consuming and may delay commencement or continuation of exploration or production operations. Failure to comply with these laws and regulations may result in the assessment of administrative, civil and criminal penalties, the imposition of clean-up and site restoration costs and liens, the issuance of injunctions to limit or cease operations, the suspension or revocation of permits and other enforcement measures that could have the effect of limiting production from the operations. The Project may incur material costs and liabilities resulting from claims for damages to property or injury to persons arising from our operations.

14.2.2 Mining permits

The failure to obtain and renew permits necessary for the mining operations could negatively affect the Project. Mining companies must obtain numerous permits that impose strict regulations on various environmental and operational matters in connection with copper and cobalt mining. These include permits issued by various federal, state and local agencies and regulatory bodies.

The permitting rules, and the interpretations of these rules, are complex, change frequently, and are often subject to discretionary interpretations by the regulators, all of which may make compliance more difficult or impractical, and may possibly preclude the continuance of ongoing operations or the development of future mining operations. The public, including non-governmental organisations, anti-mining groups and individuals, have certain statutory rights to comment upon and submit objections to requested permits and environmental impact statements prepared in connection with applicable regulatory processes, and otherwise engage in the permitting process, including bringing citizens' lawsuits to challenge the issuance of permits, the validity of environmental impact statements or performance of mining activities.

Accordingly, required permits may not be issued or renewed in a timely fashion or at all, or permits issued or renewed may be conditioned in a manner that may restrict the ability to efficiently and economically conduct its mining activities, any of which would materially reduce its production, cash flow and profitability.

14.2.3 Changes in the legal and regulatory environment

The conduct of the mining business is subject to various DRC laws and regulations. These laws and regulations may change, sometimes dramatically, as a result of political, economic or social events or in response to significant events. Certain recent developments may cause changes in the legal and regulatory environment in which the Project operates and may impact the results or increase its costs or liabilities.

Such legal and regulatory environment changes may include changes in; the processes for obtaining or renewing permits; costs associated with providing healthcare benefits to employees; health and safety standards; accounting standards; taxation requirements and competition laws.

14.3 General Risk Factors

14.3.1 Economic Conditions

The performance of the Project may be influenced by the general economic conditions within DRC and the global economy. Changes in interest rates, employment rates, exchange rates, inflation, consumer spending, access to debt and capital markets and government fiscal, monetary and regulatory policies may affect customer's sentiment and may result in the reduction of demand for copper and cobalt which will have an adverse effect on Project's financial performance and growth.

Thus, the Project is and will continue to be, dependent on the economic growth, foreign exchange movement, political stability, social conditions of DRC and any other countries in which it intend to operate in the future. Its growth and expansion plans may also be undermined by any labour disputes, political unrest, economic or financial crisis or disturbances occurring in DRC and any of such countries that the Project is exposed to.

15. EXCLUSIONS AND LIMITATION OF LIABILITY

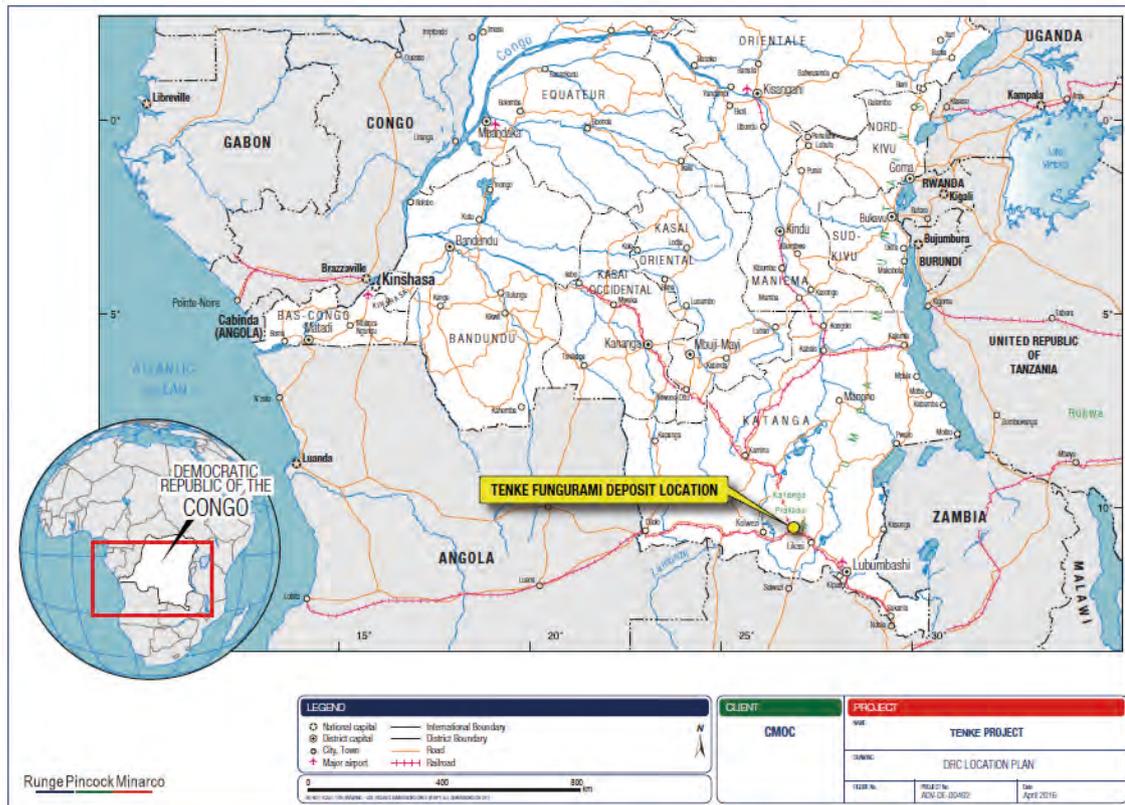
Our work has been performed in accordance with and subject to our Standard Conditions of Engagement, a copy of which has been previously provided. For your reference, we highlight some of the more pertinent points:

- We have used due skill and care in the provision of the services set out in this report;
- We shall not under any circumstances be liable for damages, or for losses, that are not a direct result of breach of contract, or negligence, on our part in respect of services provided in connection with, or arising out of, the engagement set out in this letter (or any variation or addition thereto), or for any consequential losses or loss of profits of whatsoever nature. In any event, the liability of Censere, its related companies, partners, directors and staff (whether in contract, negligence or otherwise) shall in no circumstances exceed the fees paid specifically for the work in question which allegedly entailed a breach of contract or negligence on our part;
- In no event shall Censere, its related companies, partners, directors and staff be liable for any loss, damage, cost or expense arising in any form or in connection with the fraudulent acts or omissions, or any misrepresentations or any default on the part of the directors, employees or agents of the management of the Company and its subsidiaries;
- Without derogating from the aforesaid provisions, we shall not under any circumstances whatsoever, be liable to any third party, whether or not they are shown a copy of any work that we have done pursuant to the terms of our engagement, and whether or not we have consented to such work being shown to them, save and except where we specifically agreed in writing to accept such liability; and
- Except as a result of our own negligence or wilful default, in the event that we find ourselves subject to a claim or incur legal costs from another party as a result of false or misrepresented information provided by Management in connection with this engagement, any claim established against us and the cost we necessarily incur in defending it would form part of the expenses we would look to recover from the Management of the Company.

16. APPENDICES

Appendix 1 – Map

Tenke



Source: CPR

Appendix 2 – Photographs

Tenke

The crushing Line



Source: Censere

The mining pit



Source: Censere

The conveyor to primary crusher



Source: Censere

The concentrators and SAG mill



Source: Censere

Acid Plant 1 and Acid Plant 2

Source: Censere

Appendix 3 – Derivation of Discount Rate

The income approach requires the application of an appropriate discount rate that reflects the inherent risks relating to the cash flows. The discount rate for the future Free Cash Flows of Oxide Operation is the return on investments required by investors.

Weighted Average Cost of Capital (WACC)

WACC is the minimum acceptable return on investments required by lenders and shareholders. It is the weighted cost of debt and equity funded capital and is the appropriate rate to discount the free cash flows of Oxide Operation. The formula for calculating WACC is:

$$\text{WACC} = K_e * W_e + K_d * (1 - t) * W_d$$

where:

K_e = Cost of equity

K_d = Cost of debt

W_e = Equity weight (value of equity divided by invested capital)

W_d = Debt weight (value of debt divided by invested capital)

t = Effective tax rate

After taking into consideration the exposure of Oxide Operation to both local and global risk, we have assigned a 33/67 weight on DRC WACC and US WACC to determine the WACC used in valuing the Oxide Operation. Detailed information on WACC computation is as below:

Cost of Equity

The return on equity is the minimum acceptable return on investment required by shareholders. The Capital Asset Pricing Model (“CAPM”) is a model which indicates what should be the expected or required rate of return on risky assets. CAPM characterises the relationship between a common stock’s expected return and risk as:

$$K_e = R_f + \beta (R_m - R_f) + \varepsilon$$

where:

K_e = Cost of equity

R_f = Risk-free rate of return

β = Beta on firm that measures the co-movement of that firm’s returns with those of the overall market

R_m = Expected return of the overall market

ε = Epsilon, a measure of project or company specific risk which cannot be quantified directly

Derived cost of equity is as below:

Cost of Equity	Ref	Congo	US.
Risk Free Rate	a	8.9%	2.4%
Market Risk Premium	b	16.1%	6.0%
Average Unlevered Beta	c	1.00	1.00
Relevered Beta	d	2.05	2.05
Estimated Return of Equity	e = a+d*b	41.8%	14.7%
Add: Epsilon	f	7%	7%
Cost of Equity		48.8%	21.7%
	Weightage	33.3%	66.7%
		16.3%	14.5%
Cost of Equity		30.8%	

- a: Based on the US and South Africa risk free rate: 10-year reference yield as at Valuation Date (Source: Bloomberg)
- b: The US and South Africa market premium was collected from Bloomberg
- c: Average of unlevered betas of the Comparable Companies
- d: Management expects the mines will be operated on a debt to equity ratio aligned with the industry
- f: Epsilon is a measure of company/ project/ asset specific risk, i.e., operation premium, quality of earnings and the risk of financial projections unable to be met which cannot be quantified directly.

Due to the lack of information and the difficulty in getting the necessary information about DRC, the DRC risk free rate is derived from Bloomberg by using information on South Africa as a proxy.

Beta

Beta is derived by taking the unlevered betas of the Comparables and then re-levering by the optimal debt-equity ratio and the tax rate of Oxide Operation. Please refer to Appendix 4 for a description of the Comparables. The Comparables beta's are as follows:

Comparable Listed Companies	Equity Ratio	Loan Ratio	Cost of Debt		Cost of Debt
			before Tax	1-Tax Rate	After Tax
	%	%	%	%	%
1 First Quantum Minerals Ltd	33.74%	66.3%	3.1%	73.5%	2.27%
2 Freeport-McMoRan Inc	29.23%	70.8%	5.5%	60.0%	3.29%
3 Ivanhoe Mines Ltd	92.96%	7.0%	2.6%	73.5%	1.93%
4 Katanga Mining Ltd	5.94%	94.1%	-0.1%	73.5%	-0.09%
5 Tiger Resources Ltd	25.80%	74.2%	3.8%	70.0%	2.64%
Average	37.5%	62.5%	3.0%	70.1%	2.0%

Expected Capital Structure	40%	60%
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Comparable Listed Companies	12/31/2016	Market	Tax Rate	12/31/2016
	Beta	D (%) / E (%)		Beta
	Levered	Ratio		Unlevered
1 First Quantum Minerals Ltd	3.351	196.4%	26.50%	1.37
2 Freeport-McMoRan Inc	2.399	242.2%	40.00%	0.98
3 Ivanhoe Mines Ltd	1.145	7.6%	26.50%	1.08
4 Katanga Mining Ltd	1.356	1583.4%	26.50%	0.11
5 Tiger Resources Ltd	1.971	287.6%	30.00%	0.65
Average	2.044	463.4%	29.9%	0.84

Expected D/E ratio & Tax Rate	1.50	30.0%	1.00
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Cost of Debt

Derived cost of debt is as below:

Weighted Average Cost of Capital		Congo	US
Cost of Debt (Pre-tax)	n	10.50%	3.75%
	Weightage	33.3%	66.7%
		3.50%	2.50%
	Cost of Debt (pre-tax)	6.00%	

Note:

n. Based on the US and South Africa prime lending rate respectively

Due to the lack of information and the difficulty in getting the necessary information about DRC, the cost of debt of 10.5% based on South Africa's prime lending rate as a proxy. (Source: Bloomberg)

*Derived WACC**Capital Structure*

We have made reference to the Comparables for estimates of the long term capital structure, which consists of 40% of equity and 60% of debt.

Based on the above inputs for cost of equity and cost of debt, WACC is derived as follows:

$$\begin{aligned}
 \text{WACC} &= K_e * W_e + K_d * (1 - t) * W_d \\
 &= 30.8\% * 40\% + 6.0\% * (1 - 30\%) * 60\% \\
 &= 15.0\% \text{ (rounded)}
 \end{aligned}$$

Appendix 4 – Comparable Companies

No.	Company	Ticker	Country	Description
1	First Quantum Minerals Ltd	FM CN	Canada	First Quantum Minerals Ltd. is an international mining company. It is engaged in mineral exploration, mine engineering and construction, development and mining. It produces copper in concentrate, copper cathode, nickel in concentrate, gold, zinc, platinum-group elements (PGE) and pyrite. Its operations and development projects are located in Zambia, Mauritania, Spain, Turkey, Finland, Australia, Panama, Peru and Argentina. Its operations include the 80% owned Kansanshi copper-gold mine in Zambia and the 100% owned Bwana/Lonshi cross-border copper operation in Zambia and the Democratic Republic of Congo. First Quantum also holds a strategic investment (16.9%) in Mopani Copper Mines Plc which operates the Nkana underground copper mine and cobalt refinery and the Mufulira underground copper mine, smelter and copper refinery in Zambia.
2	Freeport-McMoRan Inc	FCX US	United States	Freeport-McMoRan Inc. (FCX) is a natural resource company with a portfolio of mineral assets, and oil and natural gas resources. The Company's segments include the Morenci, Cerro Verde, Grasberg and Tenke Fungurume copper mines, the Rod & Refining operations and the U.S. Oil & Gas Operations.
3	Ivanhoe Mines Ltd	IVN CN	Canada	Ivanhoe Mines Ltd. is a mineral exploration and development company. It focuses on exploration within the Central African Copperbelt and the Bushveld Complex. It has four segments: the Platreef property, the Kamao property and joint venture, the Kipushi property and treasury. The segments are engaged in the exploration and development of mineral properties in South Africa, the Democratic Republic of Congo (DRC) and the restoration of a mine in the DRC, respectively. Its projects include Kamao Copper Project, Platreef Project and Kipushi Project. The Kamao Copper Project is a copper deposit with adjacent prospective exploration areas within the Central African Copperbelt. The Platreef Project hosts an underground deposit of thick, platinum-group metals, nickel, copper and gold mineralization in the Northern Limb of the Bushveld Igneous Complex. The Kipushi Mine is located on the Central African Copperbelt in the Democratic Republic of Congo's southern Haut-Katanga province.
4	Katanga Mining Ltd	KAT CN	Switzerland	Katanga Mining Limited is a Switzerland-based holding company. Through its subsidiaries, it produces copper and cobalt metal and that have copper and cobalt assets in the Democratic Republic of Congo (DRC). Through its subsidiaries, it operates mining and processing facilities for the production of copper and cobalt; conducts exploration and development of properties with the potential to yield copper and cobalt mineral resources, and holds a number of other mines.
5	Tiger Resources Ltd	TGS AU	Australia	Tiger Resources Limited is engaged in mineral exploration, development, mining and sale of copper cathode and concentrate. It operates in minerals exploration, development and production in the Democratic Republic of Congo (DRC) segment. It owns interests in Kipoi Copper Project, Lupoto Copper Project and La Patience Permit project.

Appendix 5 – Valuation of Oxide Operation

(USD, in thousands)

	Forecast														
	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030
Revenue	1,312,842	1,583,121	1,792,488	1,838,431	1,878,767	2,228,462	2,091,519	2,388,644	2,164,893	1,946,332	2,051,930	1,950,246	1,721,644	1,648,355	1,548,142
Operating cost excl.															
Depreciation	915,544	832,337	851,679	868,631	822,596	867,644	830,474	762,198	795,476	768,830	811,464	834,720	847,154	756,065	799,219
EBITDA	397,298	750,784	940,809	969,801	1,056,171	1,360,817	1,261,046	1,626,446	1,369,417	1,177,502	1,240,466	1,115,526	874,490	892,291	748,924
Depreciation	207,560	107,351	122,209	118,567	117,403	121,335	112,383	126,216	121,792	112,905	124,285	116,374	112,267	113,910	103,393
EBIT	189,738	643,433	818,600	851,234	938,767	1,239,482	1,148,663	1,500,230	1,247,625	1,064,597	1,116,181	999,153	762,223	778,380	645,531
EBITDA Margin	30.3%	47.4%	52.5%	52.8%	56.2%	61.1%	60.3%	68.1%	63.3%	60.5%	60.5%	57.2%	50.8%	54.1%	48.4%
EBIT Margin	14.5%	40.6%	45.7%	46.3%	50.0%	55.6%	54.9%	62.8%	57.6%	54.7%	54.4%	51.2%	44.3%	47.2%	41.7%
Revenue growth	(5.2%)	20.6%	13.2%	2.6%	2.2%	18.6%	(6.1%)	14.2%	(9.4%)	(10.1%)	5.4%	(5.0%)	(11.7%)	(4.3%)	(6.1%)
EBITDA growth	(17.6%)	89.0%	25.3%	3.1%	8.9%	28.8%	(7.3%)	29.0%	(15.8%)	(14.0%)	5.3%	(10.1%)	(21.6%)	2.0%	(16.1%)
EBIT growth	(31.8%)	239.1%	27.2%	4.0%	10.3%	32.0%	(7.3%)	30.6%	(16.8%)	(14.7%)	4.8%	(10.5%)	(23.7%)	2.1%	(17.1%)

(USD, in thousands)

	Forecast										Forecast									
	FY2031	FY2032	FY2033	FY2034	FY2035	FY2036	FY2037	FY2038	FY2039	FY2040	FY2041	FY2042	FY2043	FY2044	FY2045	FY2046	FY2047	FY2048	FY2049	
Revenue	1,521,836	1,546,520	1,546,643	1,500,544	1,419,350	1,648,742	1,890,777	1,904,192	1,874,138	1,818,905	2,036,999	1,991,879	1,953,028	2,027,329	2,082,857	2,117,790	2,220,030	2,107,604	978,195	
Operating cost excl.																				
Depreciation	732,555	778,400	798,761	790,398	786,602	836,447	883,450	978,903	952,984	803,332	848,981	895,493	979,121	985,367	1,012,951	1,043,484	1,088,334	842,094	563,150	
EBITDA	789,281	768,120	747,882	710,145	632,748	812,296	1,005,327	925,289	921,154	1,015,573	1,188,018	1,096,386	973,907	1,041,963	1,069,906	1,074,306	1,131,696	1,265,510	415,044	
Depreciation	108,932	107,860	112,613	115,585	115,850	133,767	153,240	153,097	150,512	134,062	144,337	155,592	144,517	157,405	161,825	162,019	175,847	204,292	81,355	
EBIT	680,349	660,261	635,269	594,560	516,898	678,529	852,087	772,192	770,642	881,511	1,043,681	940,794	829,390	884,558	908,081	912,287	955,849	1,061,218	333,689	
EBITDA Margin	51.9%	49.7%	48.4%	47.3%	44.6%	49.3%	53.2%	48.6%	49.2%	55.8%	58.3%	55.0%	49.9%	51.4%	51.4%	50.7%	51.0%	60.0%	42.4%	
EBIT Margin	44.7%	42.7%	41.1%	39.6%	36.4%	41.2%	45.1%	40.6%	41.1%	48.5%	51.2%	47.2%	42.5%	43.6%	43.6%	43.1%	43.1%	50.4%	34.1%	
Revenue growth	(1.7%)	1.6%	0.0%	(3.0%)	(5.4%)	16.2%	14.7%	0.7%	(1.6%)	(2.9%)	12.0%	(2.2%)	(2.0%)	3.8%	2.7%	1.7%	4.8%	(5.1%)	(53.6%)	
EBITDA growth	5.4%	(2.7%)	(2.6%)	(5.0%)	(10.9%)	28.4%	23.8%	(8.0%)	(0.4%)	10.3%	17.0%	(7.7%)	(11.2%)	7.0%	2.7%	0.4%	5.3%	11.8%	(67.2%)	
EBIT growth	5.4%	(3.0%)	(3.8%)	(6.4%)	(13.1%)	31.3%	25.6%	(9.4%)	(0.2%)	14.4%	18.4%	(9.9%)	(11.8%)	6.7%	2.7%	0.5%	4.8%	11.0%	(68.6%)	
(US\$ '000)																				
Expected FCFF																				
EBIT				643,433	818,600	851,234	938,767	1,239,482	1,148,663	1,500,230	1,247,625	1,064,597	1,116,181							
Less: Tax Expenses 30%				193,030	245,580	255,370	281,630	371,844	344,599	450,069	374,287	319,379	334,854							
Add: Depreciation and amortisation				107,351	122,209	118,567	117,403	121,335	112,383	126,216	121,792	112,905	124,285							
Less: Capital Expenditure				74,957	191,520	91,600	86,514	56,418	69,715	87,600	57,074	39,885	33,720							
Less: Working capital additions				85,089	23,985	8,307	(23,577)	35,792	(28,141)	(19,947)	8,655	(24,950)	31,371							
Expected FCFF				397,708	479,724	614,525	711,604	896,762	874,873	1,108,725	929,401	843,188	840,521							

		A		B		C = A + B	
		DCF at		PV of the annuity Value of		Market Value before	
		31 December		the normalised year		Marketability Discount	
		2016		as at December 2016			
Discount Rate	Variance Analysis	Adjusted Discount Rate	DCF at 31 December 2016	PV of the annuity Value of the normalised year as at December 2016	Market Value before Marketability Discount	Market Value before Marketability Discount	Market Value before Marketability Discount
15.0%	-1.5%	13.5%	5,226,830	82,683.68	5,309,514.13	5,309,514.13	
	0%	15.0%	4,748,303	50,777.71	4,799,081.10	4,799,081.10	
	1.5%	16.5%	4,345,071	31,421.93	4,376,493.12	4,376,493.12	
D E = C * (1 - D)							
				Market Value Adjusted		Market Value	
				for Marketability Discount		Min Mid-point Max	
				as at 31 December 2016			
Discount Rate	Variance Analysis	Adjusted Discount Rate	Marketability Discount Rate	Market Value Adjusted for Marketability Discount as at 31 December 2016	Market Value Min	Market Value Mid-point	Market Value Max
15.0%	-1.5%	13.5%	-	5,309,514.13	4,376,493	4,799,081	5,309,514
	0%	15.0%	-	4,799,081.10		24%	
	1.5%	16.5%	-	4,376,493.12	1,050,358	1,151,779	1,274,283

Appendix 7 – Valuer’s Declaration

1. The information in the attached report that relates to the Valuation of Mineral Assets reflects information compiled and conclusions derived by Mr. Brett Shadbolt, who is a Member of The Australasian Institute of Mining and Metallurgy.
2. Mr. Brett Shadbolt is not a permanent employee of China Molybdenum Co., Limited.
3. Mr. Brett Shadbolt has sufficient experience relevant to the Valuation of the Mineral Assets under consideration and to the activity which he is undertaking to qualify as a Practitioner as defined in the 2015 edition of the ‘Australasian Code for the Public Reporting of Technical Assessments and Valuations of Mineral Assets’. Mr. Brett Shadbolt consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Yours faithfully,

Brett Shadbolt

Chief Executive Officer

1. INTRODUCTION

The legal system of the DRC is civil law-based and the mining industry is regulated through national legislation issued by the DRC parliament and regulations issued by the DRC executive branch. Mining and associated activities in the DRC are primarily governed by the Mining Code, adopted in 2002 and the Mining Regulations, adopted in 2003 (the Mining Code and Mining Regulations, together, being the “Mining Law”).

The Mining Law was introduced following a period of civil war in the DRC, which resulted in the fall of the Mobutu government and the introduction of a new transitional government. This transitional government took steps to stimulate development in the mining sector, which included implementing the Mining Law. The aim of the Mining Law was to attract investment by promising fair and transparent treatment to private sector investors. According to World Bank report 43402-ZR, this action, together with higher commodity prices, has resulted in a renewal of investment in exploration and exploitation activities in the DRC.

TFM is the holder of Mining Concession No. 198 called Tenke, now designated as Exploitation Permits No. 123, No. 9707 and 9708 and Mining Concession No. 199 called Fungurume, now designated as Exploitation Permits No. 159, No. 4728 and No. 4729 that were granted under the previous mining legislation: ordinance-law No. 81-013 of 2 April 1981 enacting the general legislation on mines and hydrocarbons and ordinance No. 67-416 of 23 September 1967 enacting mining regulations (the “Concessions’ Mining Regime”). The Concessions’ Mining Regime was applicable prior to the entry into force of the Mining Law which constitutes the current mining regime. TFM did not opt for the application of the provisions of the Mining Law in accordance with article 340 paragraphs 1 and 2 of the Mining Code, nor did it opt to transform Mining Concessions No. 198 and No. 199 into new mining rights provided for in the Mining Code. Therefore, pursuant to articles 336 paragraph 1, 340 paragraph 1 and 343 (a) of the Mining Code, the Mining Concessions No 198 and No. 199 held by TFM are still governed by the Concessions’ Mining Regime and the Mining Convention.

A summary of the main provisions of the Concessions’ Mining Regime is set out below. Further information on the Mining Convention is also set out below in the summary table headed “Table 1 – Summary of Some Main Provisions of the Mining Convention”.

2. MINING RIGHTS PROVIDED UNDER THE CONCESSIONS' MINING REGIME

Under the Concessions' Mining Regime, all underground resources are the property of the DRC. The DRC may grant various mining rights through concessions to eligible individuals and entities, but these rights are separate and distinct from the DRC's ownership right. These mining rights include:

- exploration permits
- exclusive exploration areas
- small-scale production permits
- exploitation permits
- concessions

TFM is the holder of Mining Concessions No. 198 called Tenke, now designated as Exploitation Permits No. 123, No. 9707 and No. 9708 and 199 called Fungurume, now designated as Exploitation Permits No. 159, No. 4728, and No. 4729. Mining Concession No. 198 and Mining Concession No. 199 were respectively renumbered into Exploitation Permits No. 123 (later divided into three Exploitation Permits numbered No. 123, No. 9707 and No. 9708) and No. 159 (later divided into three Exploitation Permits numbered No. 159, No. 4728 and No. 4729).

As TFM only holds exploitation rights, this circular will not include a summary applicable to the exploration phase or to any right other than those held by TFM.

3. ELIGIBILITY

Under the Concessions' Mining Regime, the following individuals and entities are eligible to be granted mining rights:

- any individual who is a resident of the DRC and who provides all guarantees of good character
- any legal entity incorporated in DRC, with its headquarters located in DRC and a corporate purpose limited to minerals prospection, exploration, exploitation and ancillary activities.

4. RIGHTS UNDER MINING CONCESSIONS AND EXPLOITATION PERMITS

Exploitation permits and concessions provide their holder with the exclusive right to carry out, within a delimited area, all prospection, exploration and exploitation work in connection with the mineral substances for which they were granted. Both permits and concessions provide their holder the right to process, treat and transform minerals extracted. The holder of such rights also has the right to exploit mineral substances coupled to those for which an exploitation permits or a concession was granted, but may be required by the mining administration to apply for an extension of its title to cover exploitation of these additional substances within a determined time frame, if the holder had not done so at its own initiative. Exploitation permits and concessions may only be granted following a previous exploration permits. Furthermore, proof of existence of a commercially exploitable deposit must be provided, as well as a program of production and investment proportioned to the size of the deposit, a program of ancillary activities in line with the governmental authorities' development goals and proof of existence of financial and technical resources necessary to carry out the project.

5. RENEWAL AND EXPIRY

Exploitation permits are granted for a 5-year term and are renewable three times for the same duration. Concessions on the other hand are granted for a 20-year term and can be renewed once or twice for 10-year terms. At the end of this 40-year duration of the concession, the concession holder can apply for new exploitation permits or a new concession over the same surface area. These renewals are automatic on presentation of sufficient activity levels and after verified compliance with applicable laws and regulations. Exploitation permits and concessions are granted and renewed by the ministry in charge of mines following approval of the mining administration. If renewal is not granted in time before expiry of the mining right, the validity of the exploitation permit or the concession is automatically extended until such renewal is granted or refused.

6. TRANSFER

Exploitation permits and concessions can be transferred to any person meeting the eligibility criteria and conditions for grant (as detailed in previous section on Rights under Mining Concessions and Exploitation Permits), and require authorisation from the ministry in charge of mines following approval of the mining administration. Partial transfers of mining rights are not possible.

7. LEASES (AMODIATION)

An exploitation permit or concession holder may lease its mining rights under to a third party, although such lease may not include the right for the third party to sublease mining rights. The lessee must meet the eligibility criteria mentioned above for the lease to be valid.

Notwithstanding any clause to the contrary contained in the lease, the lessee is liable for the payment of taxes, duties and royalties due by virtue of the leased mining right. However, if the lessee defaults, the lessor will be liable to the DRC, subject to its right of recourse against the defaulting lessee.

In order to be valid the lease must include;

- a termination clause in the event of the lessee:
 - o fails to pay taxes, duties and royalties due to the DRC
 - o does not comply with applicable laws and regulations which have financial or administrative consequences that are detrimental to the lessor
- clauses setting out the conditions for the maintenance and the reinvestment necessary for the appropriate exploitation and development of the deposit.

8. TAX AND CUSTOMS REGIME

Although, and as stated above TFM is not subject to the Mining Law but is governed by the Concessions' Mining Regime and the Mining Convention, the conventional tax regime applicable to TFM is largely similar to that set out under the Mining Law. Indeed, Article 8 of the Mining Convention sets out the same tax regime as that applicable under the Mining Law, subject to the differences outlined in the section headed "Table 2 – Summary of Taxes and Duties Provided by Article 8 of the Mining Convention", except that Article 8 of the Mining Convention does not include any reference to the Mining Law.

Table 1 – Summary of Some Main Provisions of the Mining Convention

This table constitutes a non-exhaustive summary provided for information purposes only.

Unless defined elsewhere in this circular, terms used with capital letters in this Appendix shall have the meanings given to them in the Mining Convention.

Mining Convention

Parties	<ul style="list-style-type: none"> • The DRC; • Gécamines; • TFHL; and • TFM.
Article 2 – Purpose	<ul style="list-style-type: none"> • The Mining Convention defines in particular the obligations of the Parties and the legal, economic, financial, fiscal and social conditions for the realisation of the Project (all Operations undertaken on the Property).
Article 3 – Property	<ul style="list-style-type: none"> • Definition of the Property – Pursuant to Article 1, the Property means: <ul style="list-style-type: none"> o the Mining Concession No. 198 called Tenke, renumbered No. 123 by the Cadastre Minier, in accordance with the <i>Certificat d’Exploitation</i> No. CAMI/CE/940/2004 dated 3 November 2004; and o the Mining Concession No. 199 called Fungurume, renumbered No. 159 by the Cadastre Minier, in accordance with the <i>Certificat d’Exploitation</i> No. CAMI/CE/941/2004 dated 3 November 2004, <p style="margin-left: 40px;">both located in the Katanga Province, DRC, described in Appendix A of the Mining Convention, including all stock of already extracted ore, Buildings and Fixtures.</p>

- **Rights and Titles held by TFM** – Article 3.1 (h) – As of the date of the transfer of the Property, TFM has received the quiet enjoyment of the Property and will hold all Rights and Titles on the Property. The DRC acknowledges that TFM has fulfilled all requirements with respect to validation and conformation of all existing Rights and Titles on the Property, and all Rights and Titles on the Property are, and are warranted by the DRC to be, valid and existing and in good standing and do not contain, and are warranted by the DRC not to contain, any unusual burdensome provision, condition or limitation. To the extent it may be determined at any time in the future that TFM has not obtained validation and conformation of all existing Rights and Titles on the Property, the DRC shall take any remedial measures and otherwise assist TFM in obtaining any waivers to ensure compliance with such requirements and uninterrupted continuation of TFM’s entitlement to all Rights and Titles on the Property.

As long as the Property is exploitable and this Mining Convention remains in force, and except in case of withdrawal or forfeiture pursuant to Article 48 of this Mining Convention, the DRC undertakes to renew as of right, upon filing of the documents required by law, all Rights and Titles on the Property, so that the Operations can be normally conducted until their end.

- **Validity of other agreements** – The DRC represents and warrants to the Class A Shareholders, Class B Shareholders, and TFM that TFM has been duly constituted in accordance with the Agreement for the Formation of TFM and that the Agreement with the *Banque Centrale du Congo* is valid, binding and in full force and effect.

**Article 4 – Transfer of the
Property**

- **Transfer Bonus** – TFHL has undertaken to pay, for the transfer of the Property from Gécamines to TFM, the Transfer Bonus to Gécamines as follows:
 - o US\$50,000,000 in May 1997; and
 - o US\$50,000,000 divided into 5 payments to be paid by due dates listed in Article 4. The last payment of US\$10,000,000 is due on the second anniversary of the Date of Commencement of Commercial Production.

- **Additional amounts to be paid by TFM** – TFM will pay to Gécamines the following additional amounts:
 - o US\$30,000,000 upon reaching the 6 benchmarks based on the cumulative copper production as provided by Article 4; and
 - o US\$1,200,000 for each 100,000 t of additional recoverable Proved and probable reserves of copper at the time the new recoverable Proved and probable reserves amount is greater than 2,500,000 t of copper.

Article 5 – Definition of Project

- **Phases of the Project** – The activities required to develop the Revised Project, which will be designed to produce at least 40,000 t of copper with associated cobalt per year, and subsequent Development of the Property shall be conducted in 6 phases:
 - o Phase 1 – Finalization of Primary Documentation;
 - o Phase 2 – Final Feasibility Study;
 - o Phase 3 – Revised Project Plant Construction;
 - o Phase 4 – Expansion Study;
 - o Phase 5 – First Major Expansion; and
 - o Phase 6 – Subsequent Expansions.

Article 6 – Ownership of Shares

- **TFM’s share capital** – ARMC-A1 provides for an increase of TFM’s share capital to US\$65,000,000, by a US\$50,000,000 contribution in kind of TFHL, and an increase of the Gécamines’ 17.5% interest in the share capital of TFM to a 20% non dilutable interest.

Regarding the current breakdown of TFM’s share capital, please refer to the ARSA as amended by ARSA-A1 and TFM’s articles of association dated 12 June 2014.

- Article 8 – Tax and Custom Provisions**
- **Tax and custom regime** – The tax and customs regimes applicable to the Project as from the entry into force of the ARMC are exclusively governed by the provisions of this Article 8.

Law No. 007/2002 of 11 July 2002 enacting the Mining Code as well as Decree No. 038/2003 dated 26 March 2003 enacting the mining regulations, shall not apply to this Mining Convention or to the Rights and Titles on the Property.
 - **Tax and custom regime applicable to affiliated companies and subcontractors** – The following also benefit from the entire tax and customs regime provided for by Article 8:
 - o the affiliated companies of TFM carrying out mining activities; and
 - o the subcontractors of TFM carrying out mining activities and which result exclusively from contracts entered into with TFM.
 - **Tax on the surface area (surface fee)** – TFM is liable for the tax on the surface area of the mining concessions at the rates in Congolese Francs equivalent to:
 - o US\$0.04 per hectare for the first year;
 - o US\$0.06 per hectare for the second year;
 - o US\$0.07 per hectare for the third year; and
 - o US\$0.08 per hectare for the subsequent years.
- Article 12 – Marketing and Export**
- **Right to freely export production** – TFM will be entitled to freely export all of its production.

- Article 13 – Mining Convention of the *Banque Centrale du Congo***
- **TFM’s financial and exchange system** – The provisions relating to the financial and exchange system have been agreed upon in the Mining Convention with the *Banque Centrale du Congo* (See Appendix D of the Mining Convention).
- The DRC guarantees to TFM, its Shareholders and contractors the free conversion and free transfer of funds and profits, and the complete convertibility of any sum necessary to the Project, upon conditions provided by Article 13.
- Article 14 – Sales**
- **Sales proceeds** – The production of TFM will be sold in foreign currency and TFM will be entitled to freely dispose of the proceeds of such sales.
- Article 15 – Accounts Abroad**
- **Right to open foreign accounts** – TFM is entitled to open, hold and operate foreign accounts abroad in foreign currency with one or more reputable international banks selected by TFM and approved by the *Banque Centrale du Congo*.
- Article 16 – Personnel**
- **Employment of Congolese personnel (local content requirement)** – TFM, its Shareholders, Affiliates and contractors will give priority, subject to equal qualifications, competence and professional experience, to the employment of Congolese personnel.
 - **Restrictions regarding the employment of expatriate personnel** – TFM, its Shareholders, Affiliates and contractors may employ expatriate personnel for positions requiring a high level of qualification or specific professional experience.

**Article 18 – Training
and Anticipatory
Management**

- **Knowledge transfer** – TFM undertakes to implement a policy of technology transfer, subject to normal confidentiality provisions, as well as a transfer of operational techniques in the extraction and processing sectors, and management techniques.
- **Training of TFM’s Personnel** – TFM undertakes to supply its Personnel with the necessary trainings.
- **Secondment of Gécamines’ employees within TFM** – TFM may request that employees of Gécamines participate as seconded employees working full time within TFM.

**Article 19 – Health,
Security and Means of
Communication**

- **Protection of the health and security of TFM’s employees, family members and assets** – The DRC authorizes, in accordance to the law, TFM and its contractors to take all necessary steps and do everything necessary to protect the health and security of their employees and family members and their assets of the members of TFM and its contractors.

State undertakes to deliver the authorizations necessary, according to the law, to TFM and to its contractors, to freely:

- o import any needed medical equipment or drugs;
- o import any security equipment, hire security personnel and for the possession of firearms by such security personnel; and
- o import and use in DRC any communication means they will need, including, without limitation, satellite telephones.

- Article 21 – Agriculture and Social Investments**
- **Local development fund** – TFM will undertake to create a fund jointly managed by TFM and concerned local authorities to assist the local communities affected by the Project with development of local infrastructure and related services, and consult with the Ministry of Mines in furtherance of execution of infrastructure and other social actions.
- This fund will be financed by payments from TFM at a rate of 0.3% of the net sales revenues (ex-works from the mine) of production.
- Article 22 – Environmental Protection**
- **Guarantee of absence of contamination of the Property** – The DRC warrants that as of the date of the transfer of the Property from Gécamines to TFM and, to the best of its knowledge thereafter, no contaminant has been released, spilled, leaked, discharged, disposed of, or pumped on the Property contrary to any applicable environmental law.
 - **General environmental compliance** – The activities of TFM will be carried on in compliance with environmental standards internationally accepted as good mining practice. There are also references to compliance with the legislation in force on the date of the Original Convention concerning specific environmental aspects.
- Article 23 – Force Majeure**
- **Force Majeure definition** – *Force majeure* shall mean any sudden or unforeseen or insurmountable event, outside the control of the Affected Party, excluding lack of funds, but including without limitation: strikes, lockouts or other industrial disputes; acts of a public enemy, riots, acts of public violence, pillage, rebellion, revolt, revolution, civil war, coup d'état or any event of a political character which materially affects or could materially affect the success of the Project; fire, storm, flood, explosion, government restriction, failure to obtain any approval required from public authorities including environmental protection agencies.
 - **Notification of the other Party** – In the event of *force majeure*, the Affected Party shall notify the other Party without delay.

- **Suspension of obligations by reason of a *force majeure* event** – The obligations of the Affected Party shall be suspended during the *force majeure* event, and for an additional period, sufficient to allow the Affected Party, acting with all required diligence, to place itself in the same situation as before the occurrence of such event of *force majeure*.

All time periods and dates shall be adjusted to take into account the extension and delay arising out of the *force majeure* Event.

We note that there is no explicit limitation of time for the *force majeure* event and details on what would happen should the duration of this event be very long.

- **Duty to mitigate the effects of *force majeure*** – Affected Parties shall use all diligence reasonably possible to eliminate such event of *force majeure* as quickly as possible, but such requirement shall not entail the settlement of strikes or other industrial disputes against the judgment of the Affected Party.
- **Consultation between the Parties** – In case of *force majeure*, the Parties will consult with each other in order to limit the damage caused by the *force majeure*.

Note: There is a contradiction between the French and English version of the Mining Convention in respect of the consultation between the Parties in case of *force majeure*.

While the English version provides that “*Parties will consult with each other at least twice yearly as to how to limit the damage caused by the force majeure and to pursue the realisation of the objectives of the Project*”, the French version only provides for a general obligation for the Parties to consult with each other in order to limit the damage caused by the *force majeure*.

- Article 24 – Confidentiality** • **Confidentiality and disclosure conditions** – All data information provided or received by the Party with respect to this Mining Convention, the other Parties and/or the Property shall be confidential and shall not be disclosed to any third party without the prior express consent of the other Parties (which consent will not be unreasonably withheld).
- Exception to this confidentiality obligation is provided for Affiliates, or if such disclosure is required to effect a third party sale, to procure financing or by law or any governmental authorities with jurisdiction.
- In accordance with applicable law, the Mining Convention is now publicly available on Government’s website.
- Article 25 – International Center for the Settlement of Investment Disputes (“ICSID”)** • **ICSID arbitration** – Any disputes arising out of or relating to the Mining Convention shall be submit to the ICSID and settled by arbitration under the arbitration rules of the Convention on the Settlement of Investment Disputes between States and Nationals of Other States of 18 March 1965 (“ICSID Convention”).
- Arbitration shall be held in English in Washington DC (United States) or such other place as may be determined by the arbitration tribunal pursuant to the ICSID Convention and its regulations.
- Article 26 – Substitute Arbitration Procedure** • **Substitute to ICSID arbitration: ICC arbitration** – In the event the ICSID would declare itself incompetent, disputes shall be settled by arbitration under the arbitration rules of the ICC. Arbitration shall be held in English and French in Geneva (Switzerland).
- Article 29 – Applicable Law** • **Applicable law** – The Contract is governed by the law of the DRC, and if necessary supplemented by the principles of international commercial law.

**Article 30 – Stabilized
Legislation**

- The Mining Convention provides for a stabilisation clause as follows.
 - a) The DRC guarantees, for the whole duration of this Mining Convention, to TFM, its Shareholders, its consultant(s), its officers, its salaried expatriate agents and its lenders, stability of legislation and regulations which are in force on 28 September 2005, and in particular with respect to judicial, land, fiscal and customs, commercial, monetary, social, employment, health and Mining legislation matters, and in matters of residence and work conditions for foreigners.
 - b) References to provisions of “generally applicable law” in this Mining Convention shall mean the rules, whether legal, regulatory, or administrative, pertaining to, where appropriate, customs matters, consumption and excise matters and tax and non-tax fees in force on 28 September 2005.
 - c) No legal or regulatory provision effective after 28 September 2005 may entail a restriction or reduction of the special advantages of this Mining Convention or hinder the exercise of the rights resulting therefrom.

**Article 31 – More
Favourable Provisions**

- **Option for TFM regarding the application of more favourable provisions to the Mining Convention** – More favourable provisions under any law or regulation adopted in DRC after the date of the Original Convention shall be immediately applicable at the option of TFM, as of right, in place of the corresponding system or provisions in this Mining Convention.

- Article 32 – Compliance with Laws and Regulations**
- Subject to the provisions of Articles 30 and 31, TFM undertakes to comply with applicable laws and regulations in force in DRC. TFM will make every effort to obtain from the members of its expatriate staff and their families their compliance with regulations on the entrance and residence of foreigners and their fulfilment of their normal obligations with that respect.
- Article 33 – Conditions of Commercial Activities**
- **Preference to Congolese businesses (local content requirement)**
– TFM shall grant preference to Congolese businesses and enterprises, insofar as these offer guarantees of quality, safety and delivery terms equivalent to those offered by foreign companies.
 - **Right to freely import and move goods for TFM’s activities**
– TFM may, without restriction, import all materials, machines, equipment, spare parts, consumables and goods of any kind, of whatever origin, necessary for the implementation and operation of the Project and may move them freely within DRC, as well as the products of its operations.
- Article 36 – Extension of the Mining Convention**
- **Extension of the Mining Convention to thirds parties participating in the Project under the supervision of TFM**
– Benefits, undertakings and obligations resulting from the Mining Convention shall be extended, *mutatis mutandis*, to any individual or entity participating in the realization of the Project, but exclusively to the extent of his/its activities concerning the Project. TFM will make every effort to ensure that such individual or entity fulfils such undertakings and satisfies such obligations as it would have done itself.

**Article 37 – Assignment and
Substitution**

• The Mining Convention provides for an assignment and substitution clause as follows:

- (a) TFM may not assign any part or the whole of the rights and obligations resulting from this Mining Convention without the prior consent of the DRC, which may not be unreasonably withheld.

However:

- o any Shareholder may assign or transfer its interest in TFM pursuant to the provisions of the By-Laws and the TFM ARSA;
- o any Shareholder may freely assign or transfer its interest in TFM to any Affiliate; and
- o without prejudice to the provisions of this Mining Convention, any assignment will be notified to the DRC by the assigning Shareholder and will be made free of any taxes or duties, of whatever kind, direct or indirect, and the proceeds of the assignment may be transferred outside DRC without any levy.

In case of assignment or transfer, the assignee or transferee will have to adhere to this Mining Convention, and it will benefit from all rights related thereto and will be bound by all undertakings stipulated herein.

- (b) Subject to the approval by the DRC, any subsidiary of TFM may be subrogated in the rights and obligations deriving from this Mining Convention in favor of TFM and for which TFM is responsible. Provisions similar to those herein will be stipulated by an additional agreement. For purposes of this provision, a “subsidiary of TFM” means any company under the law of DRC in which TFM holds permanently at least fifty percent.

- Article 38 – Modifications**
- **Conditions to amend the Mining Convention** – The Mining Convention may be amended or modified only by a written agreement which shall entry into force upon prior approval by presidential decree or ordinance.
- Article 40 – Duration and Entering into Force**
- **Entry into force** – This Mining Convention will enter into force after its signature by all Parties and upon the date of its approval by presidential decree.
 - **Term** – The Mining Convention will remain in effect for so long as the Property is exploitable.
- Article 41 – Language of the Mining Convention and Measure System**
- **Validity of English and French languages** – The Mining Convention is made in the English and in the French languages, both languages being equally valid. In the event of a contradiction in meaning with respect to the interpretation of any provision herein, the actual intention of the parties will prevail as determined by the arbitration tribunal or in any other court of competent jurisdiction.
- Article 43 – Enurement**
- The Mining Convention provides for the following enurement clause.

This Mining Convention will ensure to the benefit of and be binding upon the Parties and their respective successors and permitted assigns; nothing in this Mining Convention, express or implied, is intended to confer upon any third party any rights or remedies hereunder.
- Article 44 – Waiver**
- **Validity of waivers** – Any waiver by any Party to a provision of this Mining Convention will be valid only if expressly made in writing.

- Article 46 – Cooperation in Financing**
- **Guarantee of the DRC to cooperate in financing** – The DRC is informed that TFHL or TFM is intending to secure partial financing for the Project from international agencies and banks and TFHL confirms its ability to do so. The DRC agree to cooperate fully with TFHL and TFM in facilitating the obtaining of such financing, including signing any such documents and giving any such assurances as may reasonably be required to conclude such financings; provided, however, this is without financial commitment on the part of the DRC.
- Article 47 – Securities**
- **Right to mortgage** – TFM may mortgage, upon approval of the Minister of Mines:
 - o its exploitation permits, in whole or in part;
 - o its immovables by incorporation (*immeubles par incorporation*) located within the mining exploitation perimeter; and
 - o the fixtures (*immeubles par destination*) used in mining exploitation.
 - **Right to pledge** – Marketable products originating from the deposit or artificial deposits may be pledged.
- Article 48 – Withdrawal – Forfeiture**
- The Mining Convention provides for a withdrawal and forfeiture clause as follows:

The DRC cannot terminate this Mining Convention, as long as TFM and the other beneficiaries of this Mining Convention have not committed a serious breach of the provisions of this Mining Convention, or of applicable laws, that materially and adversely affects the Property or the Project, and as long as they are not in a position to use the arbitration procedure described in Articles 25 and 26.

The DRC may pronounce the forfeiture of all or part of the rights granted to TFM, where the latter, having received a valid notice of remedy, has not, within six months, remedied the non-performance of its obligations resulting from the rights in question, except where there is a dispute between TFM and the DRC concerning the existence of a violation and/or the possibility of remedying to it, and except where TFM begins the arbitration procedure described in Articles 25 or Article 26 within six months of the notice of remedy, and notifies the Minister of Mines within the same time limit.

In the event of a material breach of any provision of this Mining Convention by the DRC (including all covenants, representations and warranties), TFM and/or TFHL may suspend the performance of their respective obligations pursuant to this Mining Convention. In such case, any time limits agreed upon for the performance of these obligations will be extended by a period equal to that of the breach. Furthermore, if Gécamines or the DRC will have failed to remedy any such breach within thirty days after receipt of notice of such breach from TFM, TFM and/or TFHL may, pursuant to Article 25 or Article 26 ask for the rescission of this Mining Convention and/or claim compensation for damages against the Party or Parties at fault, including without limitation return of any portion of the Transfer Bonus paid and immediate repayment of any other payments made by TFHL and/or TFM.

**Article 49 – Breach of
ARSA**

- **Right for TFHL to suspend its performance** – In the event a material breach or termination the ARSA by Gécamines, TFHL shall have the right to suspend its performance under the Mining Convention until such time as Gécamines has cured such breach.

**Article 50 – Invalid
Provision**

- **Negotiation between the Parties in the event of an invalid provision** – In the event that the unlawfulness or invalidity of a provision of this Mining Convention materially and adversely alters the rights of a Party:
 - o the Parties shall negotiate in good faith to substitute such lawful and valid provisions; or
 - o the adversely affected Party may terminate the Mining Convention.

**Article 52 – Intent of
Mining Convention**

- This Mining Convention supplements, amends and restates the Original Convention, and shall enter into force on the date of its approval by Presidential Decree.

Pursuant to Articles 340 and 343 (a) of the Mining Code, this Mining Convention remains governed by *Ordonnance-Loi* No. 81–013 of 2 April 1981 with respect to the general legislation in force regarding mines and hydrocarbons.

Table 2 – Summary of Taxes and Duties Provided For by Article 8 of the Mining Convention

This table constitutes a non-exhaustive summary of taxes and duties under Article 8 of the Mining Convention, provided for information purposes only. Unless defined in this circular, all capitalised terms herein have the same meaning as in the Mining Convention.

Taxes**Content****Surface area fees**

- The rate of the annual surface area fees per square (*droits superficiaires*) is **US\$424.78 per square**, equivalent to US\$5.00 per hectare.
- Article 8.2 (c) also provides that “commencing with the fiscal year 2011, TFM will pay such fee at the rate of US\$424.78 per square. In addition, TFM will pay an amount of US\$5,080,632.83 covering the surface area fees for all prior periods had such fees been applicable”.

- Duties and remunatory taxes** (*redevances et taxes rémunératoires*)
- TFM, its Affiliated Companies and its sub-contractors are not subject to the duties and remunatory taxes (*redevances et taxes rémunératoires*) with respect to activities related to the Project, in accordance with article 509 para. 5 of the Mining Decree.
 - Pursuant to this provision, TFM is totally exonerated, for imports, from the duties and costs in remuneration for services rendered by public service entities such as the *Office Congolais de Contrôle*, OGEFREM, other entities dealing with import services be they public, para-public, customs, paracustoms, fiscal, para-fiscal or parastatal (the “**public service entities**”).
 - These duties and remunatory taxes referred to in this Article 8.2 (d) of the Mining Convention are subject to Article 8.16.
- Import duties: Assets benefiting from the preferential regime**
- All goods appearing on the list referred to in Article 8.7 which are strictly for mining use and imported by TFM, its affiliates and sub-contractors are subject to an import duty at the rate of:
 - o 2%, (i) before the effective commencement of exploitation work at the mine, or (ii) after the Commencement of Commercial Production, only for extension works for the purpose of increasing the production capacity of the mine by at least 30%; and
 - o 5%, as from the effective commencement of exploitation work.
 - Fuel, lubricants, reagents and consumer goods destined for mining activities are subject to a single import duty of 3% throughout the duration of the Project.
 - In the event the assets that have benefited from the preferential regime are made available for consumption without the authorization of the Customs Authority, they will be subject to the payment of duties and taxes which remain due, at the rate in force on the date of transfer.

- In the event the Project is halted on or before completion, all assets that have benefited from the preferential regime shall be re-exported or be made available for consumption within the National Territory after complying with the customs regime by paying the duties and taxes which remain due.
- In the event the extension work is not completed in the manner or within the deadline indicated at the time of the application provided for in Article 8.15, and/or if the production capacity does not effectively increase by 30%, TFM is retroactively liable for the import duties on the imports made at the rate applicable during the Exploitation phase.
- **Import duties: Assets not benefiting from the preferential regime and subject to general applicable rates**
 - The import of goods which do not appear on the list referred in Article 8.7, or which are excluded from such list (including consumer goods, reagents and maintenance products needed for everyday use, but not directly related to mining activities; or in the event of fraud in the declaration in relation to extension works) does not benefit from the preferential regime and are subject to the following rates under general law (Law No. 04/014 of 16 July 2004 modifying and supplementing Law No. 002/03 of 13 March 2003 establishing new import duties and tax rates):
 - o Oils, petroleum oils, and fuel oils: 5%;
 - o Paints and varnishes: 10%;
 - o Glues: 10%;
 - o Matches: 20%;
 - o Rosin and resin acids, ester gum: 5%;
 - o Industrial fatty acids, industrial fatty alcohols: 5%;
 - o Polymers: 5%;

- o Silicones: 5%;
 - o Plastic packaging: 5%;
 - o Bricks: 10%;
 - o Electrical equipment: 10%; and
 - o Iron or steel materials: 5%.
- In accordance with Article 8.15 of the Mining Convention, in the event of fraud in the declaration at the time of imports in relation to extension works, TFM shall also be subject to the turnover tax on the imports at the rate specified under general law (art. 6 of Law No. 04/013 of 15 July 2004 amending and supplementing certain provisions of Ordinance-Law No. 69–058 of 5 December 1969 on the turnover tax):
 - o 3% for equipment, and agricultural, breeding and veterinary inputs, and products specifically designated in the rates of import duties and taxes; and
 - o 15% for the others.
- **Exports of samples for industrial analysis and assaying**
 - The export by TFM of samples in connection with the Project for industrial analysis and assaying is exempt from any customs duty or other taxes, regardless of their nature, when leaving the National Territory.
- **Export of samples sold to third parties or of a commercial nature**
 - Samples sold to third parties for the benefit of or by TFM, before or after analysis, are taxable at the rate set forth under generally applicable law: 5% for copper and cobalt ores and their concentrates.
 - Any export of samples which is of a commercial nature is also taxable. This is the case, in particular, for samples exported in exorbitant quantities in comparison with the reasonable requirements of an analysis.

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|---|---|
| Imports of personal items belonging to expatriates | <ul style="list-style-type: none">• The personal items belonging to expatriate employees employed by TFM in connection with the Project are exempt from import taxes and duties in accordance with customs legislation. |
| Transfer of goods, equipment and/or tools | <ul style="list-style-type: none">• In the event of a transfer of equipment used in connection with a given mining title, to a project relating to another mining title belonging to a different holder than TFM, this holder-transferee must:<ul style="list-style-type: none">o benefit from a customs regime similar to the one from which TFM benefited; ando obtain prior written authorization from the Customs administration. |
| Temporary imports free of duty | <ul style="list-style-type: none">• All assets imported by TFM that are intended to be exported (within six months) are admitted into the National Territory temporarily free of customs duty with the authorization of the Customs Authority for a period of six months.• This term may be extended twice for six months in the event TFM cannot export the concerned goods, tools or equipment for reasons which are beyond its control. |
| Export duties (<i>droit de sortie</i>) | <ul style="list-style-type: none">• TFM is exempt upon export from all customs duties and other taxes for its exports in relation to the Project, however, in addition to the imposition of taxes pursuant to the generally applicable law (5% for copper and cobalt ores and their concentrates), fraudulent and irregular exports made by TFM are subject to fines and penalties provided for in customs legislation (Chapter VIII “Sanctions” of Decree of 29 January 1949 concerning the Customs Regime).• The duties and remuneration costs for services rendered in connection with the export (<i>redevances et frais en rémunération des services rendus à l’exportation</i>) of commercial products or goods for temporary export for processing, as defined in Article 8.16, may not exceed 1% of their value. |

- The total of these duties and remuneration costs imposed by the relevant public service entities on each export of said products cannot exceed 1% of the Mercuriale value of the product exported.
 - Without affecting the validity of the application of the provisions of Article 8 8 paragraphs 2 to 4, TFM is completely exempt upon export from all customs duties and other taxes (*droits de douane et autres impôts à la sortie*), regardless of their nature, for its exports in relation to the Project.
- Consumption and excise duties**
- TFM is liable for the consumption and excise duties, except for mineral oils, in accordance with generally applicable law (art. 4–11 of Ordinance-Law No. 68/010 of 6 January 1968), and intended for and exclusively linked to mining activities.
 - The applicable rates for the consumption and excise duties of the following non-exempt items are as follows:
 - o Alcohol (rates were established by Decree No. 0010 of 22 January 1997):
 - Beer measuring less than 6°: 15%; measuring 6° and more: 20%;
 - Wines (fresh grapes) measuring less than 15°: 15%; measuring 15° and more: 25%;
 - Vermouth and other wines prepared additives measuring less than 15°: 20%; measuring 15° and more: 20%;
 - Cider, mead, other fermented beverages: 15%;
 - Non-denatured ethyl alcohol, eaux-de-vie, etc.: 30%;

- Denatured ethyl alcohol:
 - a) for medical uses: 3%,
 - b) for the manufacture of perfumed waters: 10%,
 - c) for all other industrial uses: 3%;
- Other industrial alcohols: 3%;
- o Table Waters and Soft Drinks (rates were established by Ordinance-Law No. 89–013 of 3 January 1989):
 - Mineral water, bottled drinking water: 10%;
 - Lemonades or other sugared beverages, fruit based juice beverages: 3%;
- o Tobacco Products: 40% (rate were established by Decree No. 0010 of 22 January 1997);
- o Sugars, Cement and Matches: 0% (duties on such items were abrogated by Law No. 04/011 of 5 July 2004); and
- o Perfumes: 10% (rates were established by Ordinance-Law No. 89–013 of 3 January 1989).
- (A) TFM is not liable for the consumption and excise duties regarding mineral oils (airline fuel, other gasoline; lamp oil or kerosene, jet A1, diesel oil, fuel-oil and petroleum gas).

Property tax

- TFM is liable for property taxes in accordance with the provisions of generally applicable law, only on the properties for which the tax on the surface area of mining and hydrocarbons concessions is not due.

- The property tax rates as defined in the Ministerial Order No. 62 of 19 October 1999 are variable depending upon the type of property, and the Rank of Locality (in accordance with the Ministerial Order No. 19 of 8 October 1997) in which the property is located (art. 2–38 of Ordinance-Law No. 69–006 of 10 February 1969). Applicable rates for non-exempt properties are the following:
 - o Detached Houses (art. 13 of Ordinance-Law No. 69–006 and Ministerial Order No. 081 of 26 February 2002):
 - 1.50 Ff/m² in First Rank;
 - 1.00 Ff/m² in Second Rank;
 - 0.50 Ff/m² in Third Rank;
 - 0.30 Ff/m² in Fourth Rank.
 - o Buildings:
 - 75.00 Ff per storey in First Rank;
 - 37.50 Ff per storey in Second Rank;
 - 30.00 Ff per storey in Third Rank;
 - 22.50 Ff per storey in Fourth Rank;
 - o Lands without Buildings (lump sum annual tax) (art. 18 of Ordinance-Law No. 69–006 and Ministerial Order No. 20/97 of 8 October 1997):
 - 30.00 Ff in First Rank;
 - 7.50 Ff in Second Rank located in Kinshasa;
 - 4.50 Ff in Second Rank within the country;
 - 3.00 Ff for Third Rank located in Kinshasa;

- 2.00 Ff for Third Rank located within the country;
and
- 1.50 Ff in Fourth Rank.

Tax on vehicles

- TFM is liable for taxes on vehicles in accordance with the provisions of generally applicable law, except for the vehicles used exclusively within the perimeter of the Project compound.
- The rates of the tax applicable to non-exempt vehicles are the following (art. 41 of Ordinance-Law No. 69-006 of 10 February 1969 and Ministerial Order No. 081 of 26 February 2002):
 - o Motorcycles: 5 Ff;
 - o Utility motor vehicles of less than 2,500 kg: 9 Ff; from 2,500 to 10,000 kg: 14 Ff; over 10,000 kg: 17 Ff; and
 - o Passenger cars from 01 to 10 horse power (HP): 23 Ff; from 11 to 15 HP: 29 Ff; over 15 HP: 44 Ff.
- The tax on vehicles is not payable on vehicles used for transporting people or materials, vehicles used for handling or traction, which are used exclusively within the perimeter of the Project compound.

**Tax on the surface area of
mining concessions**

- TFM is liable for the tax on the surface area of mining concessions at the rates, as provided by article 238 of the Mining Code, in Congolese Francs equivalent to:
 - o US\$0.04 per hectare for the first year;
 - o US\$0.06 per hectare for the second year;
 - o US\$0.07 per hectare for the third year; and
 - o US\$0.08 per hectare for the subsequent years.

- Special tax on road traffic**
- TFM is liable for the special tax on road traffic in accordance with the provisions of generally applicable law. The tax rates are the following (Ordinance-Law No. 88-029 of 15 July 1988 and Decree No. 038 of 10 April 2002):
 - o Motorcycles: 6 Ff;
 - o Utility motor vehicles weighing 2,500 kg: 20 Ff; from 2,500 to 10,000 kg: 25 Ff; over 10,000 kg, such as buses, trailers and cranes: 45 Ff; and
 - o Passenger vehicles from 01 to 10 horse power (HP): 12 Ff; from 11 to 15 HP: 25 Ff; over 15 HP: 37 Ff. (B)
- Mining royalty**
- TFM is subject to a mining royalty which is calculated on the basis of the amount of sales minus the costs of transport and costs of analysis concerning the quality control of the commercial product for sale, insurance and marketing costs. The selling price must be higher than or equal to the price which could be obtained for any sale of products to a non-affiliated entity.
 - TFM is liable for this royalty on all commercial products as of the effective date of commencement of the exploitation. The mining royalty is due upon sale of the product.
 - The rate of the mining royalty is 0.5% for iron or ferrous metals, 2% for non-ferrous metals, 2.5% for precious metals, 4% for precious stones, 1% for industrial minerals, solid hydrocarbons and other substances not specifically mentioned, and 0% for standard construction materials, in accordance with article 241 of the Mining Code.
 - TFM benefits from a tax credit equal to a third of the mining royalties paid on products sold to a transformation entity located on the National Territory.

Professional tax on remunerations

- TFM is legally liable for the professional tax on remunerations payable by the employees at the rate set forth in the generally applicable law.
- The following progressively increasing rates are applicable to TFM, provided, however that in no case may the total tax exceed 30% of the taxable income (art. 84(2) of Ordinance-Law No. 69/009 of 10 February 1969, modified by Decree Law No. 015 of 30 March 2002). The rates applicable to TFM are:

Tax Rates	Income Bracket (the average exchange rate between US Dollars and Congolese Franc is \$1 = 900 F C. Thus, the highest marginal tax rate of 50% is applicable to salaries exceeding US\$2,590)
3%	0.00 FC to 72,000.00 FC
5%	72,001.00 FC to 126,000.00 FC
10%	126,001.00 FC to 208,800.00 FC
15%	208,801.00 FC to 330,000.00 FC
20%	330,001.00 FC to 498,000.00 FC
25%	498,001.00 FC to 788,400.00 FC
30%	788,401.00 FC to 1,200,000.00 FC
35%	1,200,001.00 FC to 1,686,000.00 FC
40%	1,686,001.00 FC to 2,091,600.00 FC
45%	2,091,601.00 FC to 2,331,600.00 FC
50%	Excess

- TFM is to pay a 10% tax on indemnities paid as the result of the termination of employment or the breach of the employment contract or contract for the hiring of services (art. 86 of Ordinance-Law No. 69/009 of 10 February 1969).

- Tax on rental income**
- TFM is liable for the tax on rental income in accordance with the provisions of generally applicable law.
 - The rate of the tax on rental income is 22% (art. 11 of Ordinance-Law No. 69/009 of 10 February 1969, modified by Decree Law No. 109/2000 of 19 July 2000) of the gross income of buildings and lands rented out, and gross profit of sublets, and is also due if the premises are made available free-of-cost to the tenant (art. 3–4 of Law No. 83/004 of 23 February 1983, as amended).
- Tax on income from movable assets**
- TFM is liable for the tax on income from movable assets, in accordance with the provisions of generally applicable law, at a rate of 20% (art. 26 of Ordinance-Law No. 69/009 of 10 February 1969).
 - Dividends and other distributions paid by TFM to its shareholders will be subject to tax on investment income at the rate of 10%, as provided by article 246 of the Mining Code.
 - TFM is not liable for the tax on income from movable assets on interest paid by TFM by virtue of loans contracted in foreign currency abroad.
 - TFM is not liable for the tax on income from movable assets for interest paid by TFM by virtue of loans contracted in foreign currency abroad, provided, however, that interest paid by TFM to its affiliates by virtue of loans contracted abroad are only exempted from the tax on investment income if the interest rates and the other loan conditions are as favourable or better than the rates and the conditions which TFM, as applicable, could obtain from money lenders who are not affiliates.
- Professional tax on profits**
- TFM is liable for the professional tax on profits at the rate of 30%, as provided by article 247 of the Mining Code.
 - The tax regime for the advance payment of the professional tax on Industrial and Commercial Profit (ICP) is not applicable to TFM, but TFM has the obligation to collect the ICP at source.

- Provisions in respect of the determination of the taxable profits, net profits from exploitation which are subject to the professional tax on profits, in accordance with law and fiscal legislation in force, are provided for by Articles 8.30 to 8.40. It should be noted that:
 - o **Foreign currency accounts** – TFM may keep its accounts in foreign currencies quoted by the Central Bank of Congo, as provided by article 248 para. 2 of the Mining Code (Article 8.30 of the Mining Convention – Article 248 of the Mining Code);
 - o **Depreciation** – The amount of the first year’s exceptional depreciation is equal to 60% of the cost of the asset at issue, in accordance with Article 8.31 of the Mining Convention, as provided by article 249 of the Mining Code. Declining balance depreciation applies for each of the subsequent taxable years pursuant to general law (art. 43 ter of Ordinance-Law No. 69/009 of 10 February 1969), with the exceptions provided by Article 8.31 (Article 8.31 of the Mining Convention – Article 249 of the Mining Code);
 - o **Deferred depreciation** – Depreciation accrued in loss periods is deemed to be deferred, in accordance with Article 8.32 of the Mining Convention, as provided by article 250 of the Mining Code (Article 8.32 of the Mining Convention – Article 250 of the Mining Code);
 - o **Tax loss carried forward** – Professional losses in a tax year may, at the express request of TFM addressed to the tax administration, be deducted from the profits made during the subsequent tax years until the fifth year which follows the loss tax year, in accordance with the tax legislation (art. 43ter of Ordinance-Law No. 69/009 of 10 February 1969) and Article 8.33 of the Mining Convention, as provided by article 251 of the Mining Code and article 530 of the Mining Decree (Article 8.33 of the Mining Convention – Article 251 of the Mining Code);

- o **Research and development expenditures** – The amount of research and development expenditures is converted to current value as of the day of the granting of the Exploitation Permit and depreciated during the following two tax years at the rate of 50% per year. The loss in a given tax year resulting from it is deferred without limitation in terms of time, over the subsequent tax years, in accordance with Article 8.34, as provided by article 252 of the Mining Code (Article 8.34 of the Mining Convention – Article 252 of the Mining Code);

- o **Capital gain and capital loss on mining title transfers** – TFM will include the capital gain or the capital loss made upon the transfer of a mining title, on the basis for the calculation of the professional tax on profits, in accordance with Article 8.35, as provided by article 253 of the Mining Code (Article 8.35 of the Mining Convention – Article 253 of the Mining Code);

- o **Deduction of interest paid abroad** – The interest paid by TFM to affiliates by virtue of external loans is deductible from the taxable basis of the professional tax on profits, upon conditions provided by Article 254, as stated by article 254 of the Mining Code (Article 8.36 of the Mining Convention – Article 254 of the Mining Code);

- o **Deduction of mining royalties** – The mining royalties paid by TFM are deductible from the taxable basis of the professional tax on profits, in accordance with Article 8.37, as provided by article 255 of the Mining Code (Article 8.37 of the Mining Convention – Article 255 of the Mining Code);

- o **Deductible professional expenses** – Deemed professional expenses, including the amounts paid by TFM to a foreign individual or to one of its affiliated companies upon a triple condition, as provided by Article 8.38, can be deducted from taxable revenue. A substantial difference between Article 8.38 of the Mining Convention and article 256 of the Mining Code has been identified (please see comments below) (Article 8.38 of the Mining Convention – Article 256 of the Mining Code);
 - o **Provision for restoration of the deposit** – TFM is authorized to set aside, free of the professional tax on profits, an amount for restoring the mineral deposit, up to a maximum equivalent to 5% of the taxable profits for the tax year during the course of which it is set aside, in accordance with Article 8.39, as provided by article 257 of the Mining Code (Article 8.39 of the Mining Convention – Article 257 of the Mining Code); and
 - o **Provision for site rehabilitation** – TFM must make, free of tax on profits, a provision for rehabilitation of the site on which the mining activities take place, up to a maximum equivalent to 0.5% of the turnover for the tax year during which it is made, in accordance with Article 8.40, as provided by article 258 of the Mining Code (Article 8.40 of the Mining Convention – Article 258 of the Mining Code).
- Domestic turnover tax**
- TFM is liable for the domestic turnover tax on the sales made and the services rendered on the National Territory, at the rates provided by article 259 of the Mining Code:
 - o 10%, for the sales of products, other than sales of products to a transformation entity located in the National Territory which are exempt, constituting the tax base for the calculation of the taxable amount;
 - o Set forth under generally applicable law, for the services rendered by TFM; and

- o 5%, if TFM benefits from the supply of services relating to its company's corporate purpose. Such rate shall be applied to the Operations as specified in Article 8.1 of the Mining Convention, provided the services relate to TFM's corporate purpose, as specified in Article 3 of the Mining Convention, including, but not limited to:
 - catering for supply of food and meals for T F M's and its subcontractors' personnel;
 - banking and financial services rendered by financial institutions, including banks;
 - insurance services;
 - real estate works, including construction works; and
 - legal, tax, audit and accounting services;
 - o 3%, for the acquisition by TFM of goods produced locally related to the mining activities. Such rate applies to goods used in the Project including, sales of capital equipment and agricultural inputs (art. 13(4)(a) of Ordinance-Law No. 69-058 of 5 December 1969).
 - The sales of products to a transformation entity located in the National Territory are expressly exempt from the domestic turnover tax.
 - TFM is liable for the exceptional tax on the remunerations of expatriates at the rate of **10%**. It is set in terms of the salaries generated by the work carried out or the position held in the DRC, and is deductible from the taxable base of the professional tax on profits.
- Exceptional tax on remunerations of expatriates**

1. RESPONSIBILITY STATEMENT

This circular, for which the Directors collectively and individually accept full responsibility, includes particulars given in compliance with the Listing Rules for the purpose of giving information with regard to the Company. The Directors, having made all reasonable enquiries, confirm that to the best of their knowledge and belief the information contained in this circular is accurate and complete in all material respects and not misleading or deceptive, and there are no other matters the omission of which would make any statement in this circular misleading.

2. INFORMATION ON SHARE CAPITAL OF THE COMPANY

As at the Latest Practicable Date, the registered share capital of the Company is RMB3,377,439,739.80 divided into 3,933,468,000 H Shares of RMB0.20 each and 12,953,730,699 A Shares of RMB0.20 each. As at the Latest Practicable Date, all share capital of the Company has been issued and fully paid up.

3. DISCLOSURE OF INTERESTS**(a) Directors' interests and short positions in the securities of the company and its associated corporations**

As at the Latest Practicable Date, none of the Directors, supervisors nor chief executive of the Company had or was deemed to have any interests and short positions in the Shares, underlying shares and debentures of the Company and its associated corporations (within the meaning of Part XV of the SFO) which were required (i) to be notified to the Company and the Hong Kong Stock Exchange pursuant to Divisions 7 and 8 of Part XV of the SFO (including interests or short positions which they were taken or deemed to have under such provisions of the SFO); or (ii) pursuant to section 352 of the SFO, to be entered in the register referred to therein; or (iii) pursuant to the Model Code for Securities Transactions by Directors of Listed Issuers contained in the Listing Rules, to be notified to the Company and the Hong Kong Stock Exchange.

(b) Persons who have an interest or short position which is discloseable under Divisions 2 and 3 of Part XV of the SFO and substantial Shareholders

As at the Latest Practicable Date, as far as is known to the Directors, supervisors and the chief executive of the Company, the following persons had an interest or short position in the Shares or underlying shares of the Company which would fall to be disclosed to the Company under the provisions of Divisions 2 and 3 of Part XV of the SFO or who are directly or indirectly interested in 5% or more of the nominal value of any class of share capital carrying rights to vote in all circumstances at general meetings:

Name	Number of shares held	Capacity	Class of Share	Approximate percentage of shareholding in relevant class of shares
Li Chaochun	529,564	Director	A shares	0.012%
Li Faben	354,800	Director	A shares	0.008%
Yuan Honglin	350,200	Director	A shares	0.008%
Zhang Zhenhao	354,500	Supervisor	A shares	0.008%

Save as disclosed above, so far as is known to the Directors, supervisors or chief executives of the Company, no other person (not being a Director, supervisors or chief executive of the Company) who had any interests or short positions in the shares or underlying shares of the Company (as the case may be) which would fall to be disclosed to the Company and the Hong Kong Stock Exchange, under the provisions of Divisions 2 and 3 of Part XV of the SFO, or who was, directly or indirectly, interested in 10% or more of the nominal value of any class of share capital carrying rights to vote in all circumstances at general meetings of any other member of the Group or held any option in respect of such capital.

None of the Directors or supervisors of the Company had any direct or indirect interest in any assets which had since 31 December 2015, being the date to which the latest published audited financial statements of the Company were made up, been acquired or disposed of by or leased to any member of the Enlarged Group, or are proposed to be acquired or disposed of by or leased to any member of the Enlarged Group.

None of the Directors or supervisors of the Company was materially interested in any contract or arrangement entered into by any member of the Enlarged Group since 31 December 2015, being the date to which the latest published audited financial statements of the Company were made up, and which was significant in relation to the business of the Group.

4. DIRECTORS' AND SUPERVISORS' SERVICE CONTRACTS AND LETTERS OF APPOINTMENT

As at the Latest Practicable Date, none of the Directors or supervisors of the Company had any existing or is proposed to have a service contract with the Company or any of its associated corporations which will not expire or is not determinable by the Company within one year without payment of compensation other than statutory compensation.

5. MATERIAL CHANGES

The Directors confirm that there was no material adverse change in the financial or trading position of the Group since 31 December 2015, being the date to which the latest published audited financial statements of the Company were made up.

6. COMPETING INTEREST

As at the Latest Practicable Date, none of the Directors or their respective associates had any competing interest (as would be required to be disclosed under Rule 8.10 of the Listing Rules if each of them was a controlling shareholder of the Company for the purpose of the Listing Rules).

7. LITIGATION

As at the Latest Practicable Date, neither the Company nor any of its subsidiaries was engaged in any litigation or arbitration of material importance and, as far as the Directors were aware, no litigation or claim of material importance was pending or threatened against the Enlarged Group.

8. MATERIAL CONTRACTS

The following material contracts (not being contracts entered into in the ordinary course of business) were entered or to be entered into by any member of the Enlarged Group within the two years immediately preceding the Latest Practicable Date:

- (a) the stock purchase agreement dated 9 May 2016 entered into between Phelps Dodge Katanga Corporation, Freeport-McMoRan Inc., the CMO Limited and the Company in relation to the proposed acquisition of all of the issued and outstanding ordinary shares of FMDRC and any amendments thereto;

- (b) the sale and purchase agreement effective date 27 April 2016, entered into between Ambras Holdings SÁRL, Anglo American Luxembourg SÁRL, Anglo American Marketing Limited, Anglo American Capital plc and Anglo American Capital Luxembourg SÁRL, Anglo American Services (UK) Limited, the Buyer, the Company in relation to, among others, the proposed acquisition of the whole issued share capitals of Anglo American Fosfatos Brasil Limitada and Anglo American Nióbio Brasil Limitada and any amendments thereto;
- (c) the Framework Cooperation Agreement;
- (d) the BHR Shareholders Cooperation Agreement;
- (e) the Shareholders of BHR Shareholders Cooperation Agreement;
- (f) the Hantang Cooperation Agreement;
- (g) the Design Time Cooperation Agreement;
- (h) the CNBC Cooperation Agreement;
- (i) the Syndicated Loans Agreement; and
- (j) the Guarantee.

9. EXPERTS

- (a) The following sets out the qualifications of the expert which has given its opinion or advice as contained in this circular:

Name	Qualifications
Censere (Far East) Limited	Independent valuer
PwC (Canada)	Chartered Professional Accountants, Canada
RungePincockMinarco	Independent technical adviser
Deloitte Touche Tohmatsu Certified Public Accountants LLP (Shanghai China)	Certified Public Accountants, PRC
Deloitte Touche Tohmatsu (Hong Kong)	Certified Public Accountants, Hong Kong

- (b) As at the Latest Practicable Date, PwC (Canada), RungePincockMinarco, Censere, Deloitte Touche Tohmatsu Certified Public Accountants LLP (Shanghai China) and Deloitte Touche Tohmatsu (Hong Kong) did not have any shareholding, direct or indirect, in any member of the Group or any right (whether legally enforceable or not) to subscribe for or to nominate persons to subscribe for securities in any member of the Group.

- (c) As at the Latest Practicable Date, PwC (Canada), RungePincockMinarco, Censere, Deloitte Touche Tohmatsu Certified Public Accountants LLP (Shanghai China) and Deloitte Touche Tohmatsu (Hong Kong) did not have any interest, direct or indirect, in any assets which had been acquired or disposed of by or leased to any member of the Enlarged Group, or which were proposed to be acquired or disposed of by or leased to any member of the Enlarged Group since 31 December 2015, the date to which the latest published audited financial statements of the Company were made up.
- (d) As at the Latest Practicable Date, PwC (Canada), RungePincockMinarco, Censere, Deloitte Touche Tohmatsu Certified Public Accountants LLP (Shanghai China) and Deloitte Touche Tohmatsu (Hong Kong) had given and had not withdrawn their written consents to the issue of this circular with the inclusion of their letters and references to its name in the form and context in which they were included.
- (e) The letters and opinions given by PwC (Canada), RungePincockMinarco, Censere, Deloitte Touche Tohmatsu Certified Public Accountants LLP (Shanghai China) and Deloitte Touche Tohmatsu (Hong Kong) are given as of the date of this circular for incorporation herein.

10. MISCELLANEOUS

- (a) The Company's registered office is at North of Yihe, Huamei Shan Road, Chengdong New District, Luanchuan County, Luoyang City, Henan Province, the PRC.
- (b) The company secretary of the Company is Ms. Ho Siu Pik (FCS, FCIS). Ms. Ho Siu Pik is a fellow member of both The Institute of Chartered Secretaries and Administrators and The Hong Kong Institute of Chartered Secretaries.
- (c) Save as otherwise indicated, the English text of this circular shall prevail over the Chinese text in the case of any inconsistency.

11. DOCUMENTS AVAILABLE FOR INSPECTION

Copies of the following documents are available for inspection at the principal place of business in Hong Kong of the Company at Level 54, Hopewell Centre, 183 Queen's Road East, Hong Kong during normal business hours (from 8:30 a.m. to 5:30 p.m., Monday to Friday, excluding public holidays) from the date of this circular for a period of 14 days and at the EGM:

- (a) the Articles of Association;
- (b) the written consents referred to in the paragraph headed "Experts" to this Appendix;
- (c) the material contracts referred to in the paragraph headed "Material Contracts" to this Appendix;
- (d) the consolidated audited accounts of the Group for the years ended 31 December 2014 and 31 December 2015;
- (e) the accountants' report of BHR and Lundin DRC, the text of which is set out in Appendix IIA and Appendix IIB respectively to this circular;
- (f) the pro-forma financial information of the Enlarged Group as set out in Appendix IV to this circular;
- (g) the Competent Person's Report, the text of which is set out in Appendix V to this circular;
- (h) the Valuation Report, the text of which is set out in Appendix VI to this circular;
- (i) this circular;
- (j) the circular of the Company dated 8 September 2016 in relation to the acquisition of Freeport-McMoRan Inc.'s copper and cobalt businesses; and
- (k) the circular of the Company dated 8 September 2016 in relation to the acquisition of Anglo American plc's niobium and phosphates Businesses.



洛陽欒川鉬業集團股份有限公司
China Molybdenum Co., Ltd.*

(a joint stock company incorporated in the People's Republic of China with limited liability)

(Stock Code: 03993)

AMENDED NOTICE OF
THE 2017 FIRST EXTRAORDINARY GENERAL MEETING

NOTICE IS HEREBY GIVEN that the 2017 first extraordinary general meeting (the “**EGM**”) of China Molybdenum Co., Ltd.* (the “**Company**”) will be held at 1:00 p.m. on Friday, 14 April 2017 at the International Conference Room of Mudu-Lee Royal International Hotel at No. 239, Kaiyuan Street, Luolong District, Luoyang City, Henan Province, PRC for the purposes of considering and, if thought fit, passing (with or without modifications) the following resolutions of the Company. Unless otherwise indicated, capitalised items used herein have the same meanings as those defined in the circular of the Company dated 29 March 2017 (the “**Circular**”).

SPECIAL RESOLUTIONS

1. “To consider and approve the “Resolution in relation to the investment cooperation[#] with BHR and its shareholders or the shareholders of its shareholders at the Tenke Fungurume mining area”.”
2. “To consider and approve the “Resolution in relation to seeking a mandate from the Shareholders to authorise the Board with full discretion to deal with the investment cooperation[#] between the Company, BHR and its shareholders or the shareholders of its shareholders at the Tenke Fungurume mining area”.”

ORDINARY RESOLUTION

3. “To consider and approve the “Resolution in relation to the purchase of liability insurance for Directors, supervisors and senior management”.”

(investment cooperation means the Cooperation Arrangement, the acceptance and exercise of the Call Option together with the provision of assistance in securing the Syndicated Loans (including a guarantee), the grant of the Put Option together with the provision of assistance in securing the Syndicated Loans (including a guarantee) together with the transactions contemplated thereunder as stipulated and defined in the Circular. Shareholders are advised to refer to the section headed “Letter from the Board” of the Circular for further information.)

For details of the above resolutions, please refer to the Circular.

By Order of the Board
China Molybdenum Co., Ltd.*
Li Chaochun
Chairman

Luoyang City, Henan Province, PRC, 29 March 2017

As at the date of this notice, the Company’s executive directors are Messrs. Li Chaochun and Li Faben; the Company’s non-executive directors are Messrs. Ma Hui, Yuan Honglin and Cheng Yunlei; and the Company’s independent non-executive directors are Messrs. Bai Yanchun, Xu Shan and Cheng Gordon.

* *For identification purposes only*

Notes:

- (1) This amended notice should be read in conjunction with the announcement of dated 24 February 2017 of the Company and the Circular.
- (2) H Shareholders who intend to attend the EGM in person or by proxy should return the reply slip despatched on 25 January 2017 (the “**Reply Slip**”) to the office of the Board at the Company’s principal place of business in PRC 20 days before the meeting, i.e. before Saturday, 25 March 2017 by hand, by post or by fax. The contact details of the Company’s office of the Board are set out in note (9) below. For the avoidance of doubt, the Reply Slip will be a valid reply slip for the EGM.

(3) PROXY FORM

Since the proxy form despatched on 25 January 2017 (the “**First Proxy Form**”) for use at the EGM does not contain certain information as set out in this amended notice, an amended proxy form (the “**Amended Proxy Form**”) has been prepared and is enclosed with this amended notice.

- (a) Each Shareholder entitled to attend and vote at the EGM may appoint one or more proxies to attend and vote on his/her behalf. A proxy need not be a shareholder of the Company.
 - (b) Shareholders can appoint a proxy by an instrument in writing (i.e., by using the Amended Proxy Form enclosed). The Amended Proxy Form shall be signed by the appointor or his/her attorney duly authorised in writing, or if the appointor is a body corporate, either under the common seal or signed by a director or a duly authorised attorney of the body corporate. If the Amended Proxy Form is signed by an attorney of the appointor, the power of attorney authorising that attorney to sign or other document of authorisation must be notarized.
 - (c) To be valid, for H Shareholders, the Amended Proxy Form and notarised power of attorney or other documents of authorisation (if applicable), must be delivered to the Company’s H Share registrar at the address stated in note (8) below by post or facsimile (for H Shareholders only), not less than 24 hours before the time for holding the EGM or any adjournment thereof (as the case may be).
 - (d) Shareholders who have lodged the First Proxy Form with the Company should note that:
 - (i) If the Amended Proxy Form is lodged with the Company’s H Share registrar 24 hours prior to the time designated for convening the EGM (the “**Closing Time**”), the Amended Proxy Form will revoke and supersede the First Proxy Form previously lodged by him/her. The Amended Proxy Form will be treated as a valid form of proxy lodged by the Shareholder if correctly completed and signed and returned in accordance with the instructions printed thereon.
 - (ii) If no Amended Proxy Form is lodged with the Company’s H Share registrar as at the Closing Time, the First Proxy Form will be treated as a valid form of proxy lodged by him/her if correctly completed. The proxy so appointed by the Shareholder will be entitled to vote at his/her discretion or to abstain from voting on any resolution properly put to the EGM as set out in this amended notice.
 - (e) Completion and return of the First Proxy Form or the Amended Proxy Form will not preclude you from attending and voting in person at the EGM or any adjournment thereof should you so wish.
- (4) All resolutions at the meeting will be taken by poll except where the chairman, in good faith, decides to allow a resolution which relates purely to a procedural or administrative matter to be voted on by a show of hands pursuant to the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited (the “**Listing Rules**”). The results of the poll will be published on the websites of The Stock Exchange of Hong Kong Limited and the Company in accordance with the Listing Rules.
- (5) H Shareholders or their proxies must present proof of their identities upon attending the EGM. Should a proxy be appointed, the proxy must also present his/her proxy form, or appointing instrument and power of attorney, if applicable.

- (6) In order to determine the list of H Shareholders who will be entitled to attend and vote at the EGM, the Company's register of members of H Shares would be closed from Saturday, 11 February 2017 to Friday, 14 April 2017 (both days inclusive) during which period no transfer of shares will be effected. H Shareholders whose names appear on the register of members of H Shares of the Company at 4:30 p.m. on Friday, 10 February 2017 shall be entitled to attend and vote at the EGM. In order for the H Shareholders to qualify for attending and voting at the EGM, Shareholders whose H Shares are not registered in their names should complete and lodge their respective instruments of transfer with the relevant H Share certificates with Computershare Hong Kong Investor Services Limited, the Company's H Share registrar in Hong Kong, at Shops 1712–1716, 17th Floor, Hopewell Centre, 183 Queen's Road East, Wanchai, Hong Kong, and in any case no later than 4:30 p.m. on Friday, 10 February 2017.
- (7) A vote given in accordance with the terms of an instrument of proxy shall be valid notwithstanding the death or loss of capacity of the appointor, or the revocation of the proxy or of the authority under which the proxy was executed, or the transfer of shares in respect of which the proxy is given, provided that no notice in writing of these matters shall have been received by the Company prior to the commencement of the EGM.
- (8) The address and contact details of the H Share registrar of the Company, Computershare Hong Kong Investor Services Limited, are as follows:
- 17M Floor
Hopewell Centre
183 Queen's Road East
Wanchai
Hong Kong
Telephone No.: (+852)2862 8555
Facsimile No.: (+852)2865 0990/(+852) 2529 6087
- (9) The address and contact details of the Company's office of the Board at its principal place of business in PRC are as follows:
- North of Yihe
Huamei Shan Road
Chengdong New District
Luanchuan County
Luoyang City
Henan Province
PRC
Postal code: 471500
Telephone No.: (+86)379 6865 8017
Facsimile No.: (+86)379 6865 8030
- (10) The EGM is expected to last not more than one day. Shareholders or proxies attending the EGM are responsible for their own transportation and accommodation expenses.



洛陽欒川鉬業集團股份有限公司

China Molybdenum Co., Ltd.*

(a joint stock company incorporated in the People's Republic of China with limited liability)

(Stock Code: 03993)

**AMENDED PROXY FORM OF H SHAREHOLDERS FOR
THE 2017 FIRST EXTRAORDINARY GENERAL MEETING
TO BE HELD ON FRIDAY, 14 APRIL 2017 ^(Note 1)**

I/We ^(Note 2) _____ of _____

_____ (as shown in the register of members of H shares)

being the registered holder(s) of ^(Note 3) _____

_____ H shares of RMB0.20 each
in the share capital of China Molybdenum Co., Ltd.* (the “**Company**”), **HEREBY APPOINT THE
CHAIRMAN OF THE MEETING** ^(Note 4) or _____ of

as my/our proxy(ies) to attend and act for me/us at the 2017 First Extraordinary General Meeting (the “**EGM**”) (or at any adjournment thereof) to be held at 1:00 p.m. on Friday, 14 April 2017 at the International Conference Room of Mudu-Lee Royal International Hotel at No. 239, Kaiyuan Street, Luolong District, Luoyang City, Henan Province, the PRC for the purposes of considering and, if thought fit, passing the resolutions as set out in the notice convening the EGM (including any amended notice of EGM) and to vote for me/us and in my/our name(s) in respect of the resolutions as indicated below at the EGM (or at any adjournment thereof) and, if no such indication is given, as my/our proxy(ies) thinks fit. Unless otherwise defined, capitalized terms used herein have the same meanings as those defined in the circular of the Company dated 29 March 2017 (the “**Circular**”).

Please make a mark in the appropriate box to indicate how you wish your vote to be cast on a poll *(Note 5)*.

SPECIAL RESOLUTIONS		FOR <i>(Note 5)</i>	AGAINST <i>(Note 5)</i>	ABSTAIN <i>(Note 5)</i>
1.	“To consider and approve the “Resolution in relation to the investment cooperation [#] with BHR and its shareholders or the shareholders of its shareholders at the Tenke Fungurume mining area”.”			
2.	“To consider and approve the “Resolution in relation to seeking a mandate from the Shareholders to authorise the Board with full discretion to deal with the investment cooperation [#] between the Company, BHR and its shareholders or the shareholders of its shareholders at the Tenke Fungurume mining area”.”			
ORDINARY RESOLUTION				
3.	“To consider and approve the “Resolution in relation to the purchase of liability insurance for Directors, supervisors and senior management”.”			

[#] (investment cooperation means the Cooperation Arrangement, the acceptance and exercise of the Call Option together with the provision of assistance in securing the Syndicated Loans (including a guarantee), the grant of the Put Option together with the provision of assistance in securing the Syndicated Loans (including a guarantee) together with the transactions contemplated thereunder as stipulated and defined in the Circular. Shareholders are advised to refer to the section headed “Letter from the Board” of the Circular for further information.)

Date: _____ 2017

Signature(s) *(Note 6)*: _____

Notes:

- IMPORTANT: YOU SHOULD FIRST REVIEW THE CIRCULAR TO WHICH THE EGM RELATES AND CONTAINS FURTHER INFORMATION OF ABOVE RESOLUTIONS, WHICH WERE DESPATCHED TO SHAREHOLDERS ON 29 MARCH 2017, BEFORE APPOINTING THE PROXY.**
- Please insert full name(s) (in Chinese or English) and address(es) (as shown in the register of members of H Shares) in **BLOCK CAPITALS**.
- Please insert the number of H shares registered in your name(s) to which this amended proxy form (the “**Amended Proxy Form**”) relates. If no number is inserted or the number inserted is more than the number of H shares registered in your name(s), the Amended Proxy Form will be deemed to relate to all the H shares registered in your name(s).

4. If any proxy other than the Chairman of the Meeting is preferred, please strike out the words “**THE CHAIRMAN OF THE MEETING**” and insert the name and address of the proxy desired in the space provided. An H Shareholder entitled to attend and vote at the EGM may appoint one or more proxies to attend and vote on his/her behalf. A proxy need not be an H Shareholder of the Company but must attend the EGM in person to represent you. **ANY ALTERATION MADE TO THE AMENDED PROXY FORM MUST BE INITIALED BY THE PERSON WHO SIGNS IT.**

5. **IMPORTANT: IF YOU WISH TO VOTE FOR A RESOLUTION, PLEASE TICK (“✓”) IN THE BOX MARKED “FOR”. IF YOU WISH TO VOTE AGAINST A RESOLUTION, PLEASE TICK (“✓”) IN THE BOX MARKED “AGAINST”. IF YOU WISH TO ABSTAIN FROM VOTING OR WAIVE THE RIGHT TO VOTE ON A RESOLUTION, PLEASE TICK (“✓”) IN THE BOX MARKED “ABSTAIN”.** If you have more than one voting intention on certain resolution, the sum of the votes cast shall be equal to the number of H shares registered in your name(s) to which the Amended Proxy Form relates. If the sum of the votes cast is less than the number of H shares registered in your name(s) to which the Amended Proxy Form relates, the difference shall be regarded as abstention votes. If the sum of the votes cast is more than the number of H shares registered in your name(s) to which the Amended Proxy Form relates, all the votes cast on such resolution shall be regarded as abstention votes. Any abstention vote shall be counted in the total number of votes cast for the purposes of calculating the result of that resolution. If no direction is given, your proxy will vote at his/her discretion. Your proxy will also be entitled to vote at his/her discretion on any resolution properly put to the EGM other than those referred to in the notice and the supplemental notice convening the EGM.

6. The Amended Proxy Form must be signed by you or your attorney duly authorised in writing. In the case of a corporation, the same must be either under its common seal or under the hand of its director(s) or duly authorised attorney(s). If the Amended Proxy Form is signed by an attorney of an H Shareholder, the power of attorney authorising that attorney to sign or other authorisation document must be notarized.

7. In order to be valid, the Amended Proxy Form together with the power of attorney or other authorisation document (if any) must be deposited at the H share registrar of the Company, Computershare Hong Kong Investor Services Limited, the address of which is set out in note 8 below, not less than 24 hours before the time fixed for holding the EGM or any adjournment thereof (as the case may be).

8. The address and contact details of the H share registrar of the Company, Computershare Hong Kong Investor Services Limited, are as follows:
17M Floor,
Hopewell Centre
183 Queen’s Road East,
Wanchai
Hong Kong
Telephone No.: (+852) 2862 8555
Facsimile No.: (+852) 2865 0990/(+852) 2529 6087

9. **IMPORTANT: AN H SHAREHOLDER WHO HAS ALREADY LODGED THE PROXY FORM SENT ON 25 JANUARY 2017 (THE “FRIST PROXY FORM”), SHOULD NOTE THAT:**
- (i) If the Amended Proxy Form is lodged with the Company’s H share registrar 24 hours prior to the time designated for convening the EGM (the “**Closing Time**”), the Amended Proxy Form will revoke and supersede the First Proxy Form previously lodged by him/her. The Amended Proxy Form will be treated as a valid form of proxy lodged by the H Shareholder if correctly completed and signed and returned in accordance with the instructions printed thereon.
 - (ii) If no Amended Proxy Form is lodged with the Company’s H share registrar as at the Closing Time, the First Proxy Form will be treated as a valid form of proxy lodged by him/her if correctly completed. The proxy so appointed by the H Shareholder will be entitled to vote at his/her discretion or to abstain from voting on any resolution properly put to the EGM as set out in the notice of EGM dated on 25 January 2017 and the amended notice of EGM dated on 29 March 2017.
10. An H Shareholder or his/her/its proxy should produce proof of identity when attending the EGM. If a corporate shareholder appoints its legal representative to attend the EGM, such legal representative shall produce proof of identity and a copy of the resolution of the board of directors or other governing body of such H Shareholder appointing such legal representative to attend the EGM.
11. Completion and delivery of the First Proxy Form and the Amended Proxy Form will not preclude you from attending and voting at the EGM if you so wish.

PERSONAL INFORMATION COLLECTION STATEMENT

Your supply of your and your proxy’s (or proxies’) name(s) and address(es) is on a voluntary basis for the purposes of processing your request for the appointment of a proxy (or proxies) and your voting instructions for the EGM (the “**Purposes**”). We may transfer your and your proxy’s (or proxies’) name(s) and address(es) to our agent, contractor, or third party service provider who provides administrative, computer and other services to the Company and to such parties who are authorised by law to request the information or are otherwise relevant for the Purposes and need to receive the information. Your and your proxy’s (or proxies’) name(s) and address(es) will be retained for such period as may be necessary to fulfil the Purposes. You/your proxy (or proxies) has/have the right to request access to and/or correction of the relevant personal data in accordance with the provisions of the Personal Data (Privacy) Ordinance and any such request should be in writing by either of the following means:

By mail to: Personal Data Privacy Officer
Computershare Hong Kong Investor Services Limited
17M Floor, Hopewell Centre, 183 Queen’s Road East, Wanchai, Hong Kong

By email to: hkinfo@computershare.com.hk

* *For identification purposes only*