

# **Chinalco Yunnan Copper Resources Limited**

**ACN 070 859 522**

## Notice of Extraordinary General Meeting and Explanatory Memorandum

---

Date of Meeting: Friday 21 October 2011

Time of Meeting: 10:00am (Brisbane time)

Place of Meeting: HopgoodGanim Lawyers  
Presentation Room  
Level 7, Waterfront Place, 1 Eagle Street,  
Brisbane QLD 4000 Australia

This Notice of Extraordinary General Meeting should be read in its entirety. If Shareholders are in doubt as to how they should vote, they should seek advice from their accountant, solicitor or other professional adviser prior to voting.

# Notice of Extraordinary General Meeting and Explanatory Memorandum

Notice is given that an Extraordinary General Meeting of shareholders of **Chinalco Yunnan Copper Resources Limited ACN 070 859 522 (Chinalco Yunnan or Company)** will be held at the offices of HopgoodGanim Lawyers on Friday 21 October 2011 (Brisbane time).

## Agenda

### Ordinary business

#### **Resolution 1 - Approval of Acquisition of 51% Equity Interest in Yunnan Copper San Mu Mining Industry Co Ltd**

To consider and, if thought fit, pass the following Ordinary Resolution, without amendment:

*“That in accordance with ASX Listing Rule 10.1 and for all other purposes, the Company be authorised to acquire a 51% equity interest in Yunnan Copper San Mu Mining Industry Co Ltd and otherwise on the terms and conditions described in the Explanatory Memorandum.”*

#### **Voting exclusion statement**

The Company will disregard any votes cast on this Resolution by:

- Yunnan Copper San Mu Mining Industry Co Ltd; and
- Yunnan Copper Industry (Group) Co Ltd; and
- Yunnan Copper Mineral Resources Exploration and Development Co Ltd; and
- any associate of the above parties.

However, the Company need not disregard a vote if:

- it is cast by a person as proxy for a person who is entitled to vote, in accordance with the directions on the proxy form; or
- it is cast by the person chairing the Meeting as proxy for a person who is entitled to vote, in accordance with the direction on the proxy form to vote as the proxy decides.

#### **Resolution 2 - Approval of Disposal of 55% Interest in Cloncurry North and Waterford Projects**

To consider and, if thought fit, pass the following Ordinary Resolution, without amendment:

*“That in accordance with ASX Listing Rule 10.1 and for all other purposes, the Company be authorised to dispose of a 55% interest in the Cloncurry North and Waterford Projects and otherwise on the terms and conditions described in the Explanatory Memorandum.”*

#### **Voting exclusion statement**

The Company will disregard any votes cast on this Resolution by:

- Yunnan Copper Mineral Resources Exploration and Development Co. Ltd; and
- any associate of Yunnan Copper Mineral Resources Exploration and Development Co. Ltd.

However, the Company need not disregard a vote if:

- it is cast by a person as proxy for a person who is entitled to vote, in accordance with the directions on the proxy form; or
- it is cast by the person chairing the Meeting as proxy for a person who is entitled to vote, in accordance with the direction on the proxy form to vote as the proxy decides.

# Notice of Extraordinary General Meeting and Explanatory Memorandum

## **General business**

To consider any other business as may be lawfully put forward in accordance with the Constitution of the Company.

## **BY ORDER OF THE BOARD**

Paul Marshall  
Company Secretary  
21 September 2011

# Notice of Extraordinary General Meeting and Explanatory Memorandum

## 1. Introduction

---

This Explanatory Memorandum is provided to shareholders of **Chinalco Yunnan Copper Resources Limited ACN 070 859 522 (Company)** to explain the resolutions to be put to Shareholders at the Extraordinary General Meeting to be held at the offices of HopgoodGanim Lawyers on Friday 21 October 2011 (Brisbane time).

The Directors recommend Shareholders read the accompanying Notice of Meeting and this Explanatory Memorandum in full before making any decision in relation to the resolutions.

Terms used in this Explanatory Memorandum are defined in Section 2.

### ORDINARY RESOLUTIONS

#### **Resolution 1 - Approval of Acquisition of 51% Equity Interest in Yunnan Copper San Mu Mining Industry Co Ltd**

##### **Introduction**

Resolution 1 seeks Shareholder approval for the proposed acquisition by the Company of a 51% equity interest in Yunnan Copper San Mu Mining Industry Co Ltd.

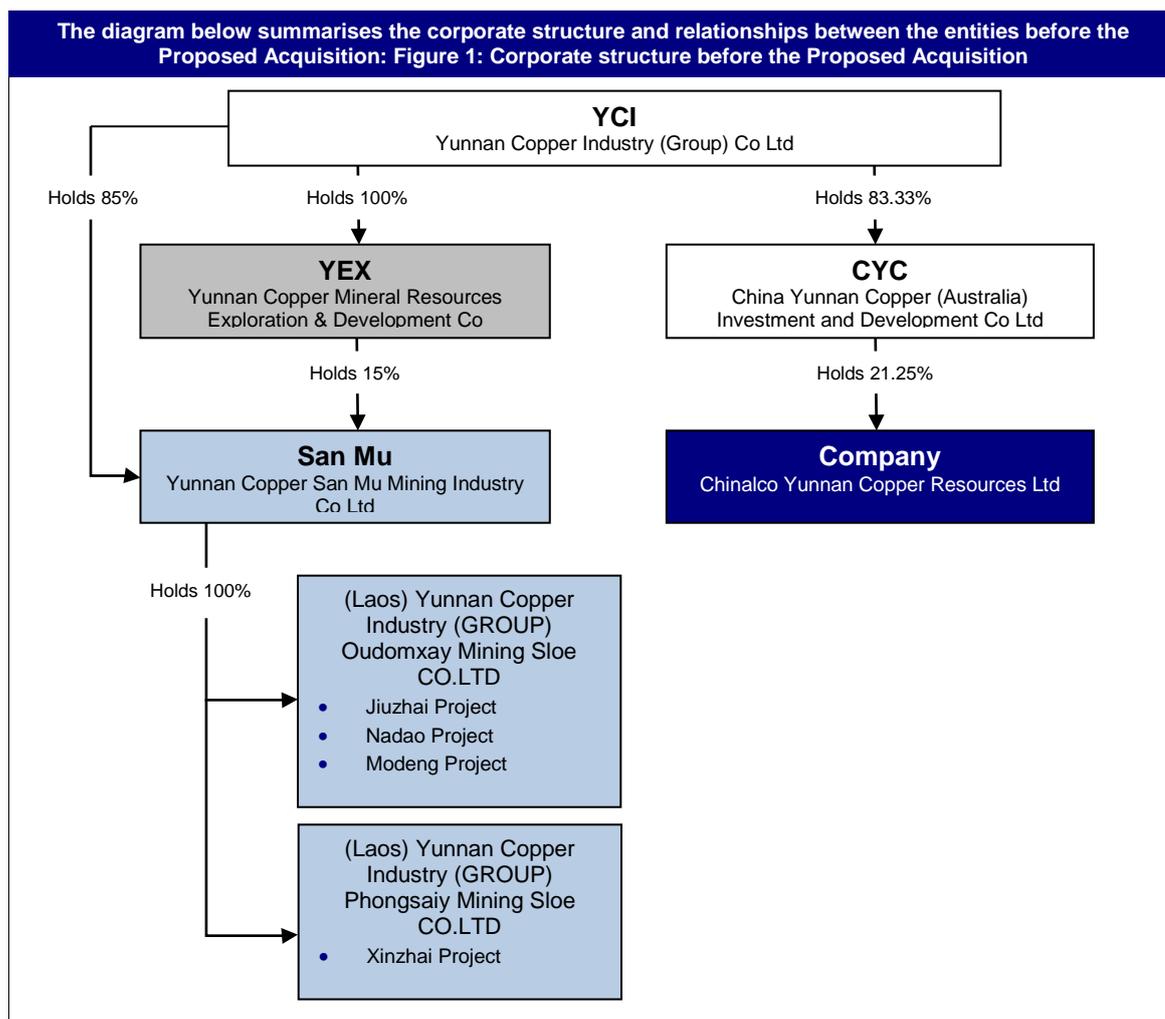
As announced to Shareholders and the market on 3 February 2011, the Company has entered into an agreement with Yunnan Copper Industry (Group) Co Ltd (**YCI**) to acquire a 51% equity interest in Yunnan Copper San Mu Mining Industry Co Ltd (**San Mu**), a Chinese registered company holding subsidiaries that own near-development copper silver projects in Northern Laos (**Proposed Acquisition**).

A summary of the terms of the Proposed Acquisition is set out below. Further details of the transaction are set out in the Independent Expert's Report accompanying this Notice and Explanatory Memorandum.

##### **Background**

Yunnan Copper Industry (Group) Co Ltd (**YCI**) and Yunnan Copper Mineral Resources Exploration and Development Co Ltd (**YEX**) hold 85% and 15% in San Mu respectively. YEX is a wholly owned subsidiary of YCI. YCI is the holding company of China Yunnan Copper (Australia) Investment and Development Co. Ltd (**CYC**) and CYC holds approximately 21.25% of shares in the Company.

# Notice of Extraordinary General Meeting and Explanatory Memorandum



**Note:** The above diagram excludes assets that are not directly affected by the Proposed Acquisition.

## Summary of Terms of Proposed Acquisition

The Company intends to acquire a 51% equity interest in San Mu in consideration for the payment to San Mu of the AU\$ equivalent of RMB17,827,700, payable in cash in three stages over the 12 months following final approvals for the transaction.

The investment in San Mu is by way of a subscription of new shares and the invested funds will be used to complete an approximate AU\$2.8 million exploration program. Consequently, YCI and YEX's shareholdings will be diluted due to the issue of new shares to the Company.

Pursuant to the Proposed Acquisition, San Mu's legal status will be modified to become a Chinese-foreign joint venture in accordance with the San Mu Joint Venture Contract.

The Proposed Acquisition is governed by three key documents, being:

- the Articles of Association of San Mu (**Articles of Association**);
- the Agreement on Capital Increase between YCI, YEX, San Mu and the Company dated 28 January 2011 (**Capital Increase Agreement**); and
- the San Mu Joint Venture Contract between YCI, YEX and the Company dated 28 January 2011 (**San Mu Joint Venture Contract**).

# Notice of Extraordinary General Meeting and Explanatory Memorandum

Below is a summary of the key terms of the Proposed Acquisition under the documents:

- San Mu's legal status will be modified to become a Chinese-foreign joint venture in accordance with the San Mu Joint Venture Contract. San Mu will be issued a new business license (**San Mu Business License**);
- San Mu will operate for a period of 20 years from the issue of the San Mu Business License;
- the registered capital of San Mu shall be increased by RMB17,827,700 (i.e. by Chinalco Yunnan's cash contribution), bringing the total registered capital of San Mu to RMB37,827,700;
- the increase in registered capital shall be contributed by Chinalco Yunnan, payable in cash. The cash payment shall be the AU\$ equivalent of RMB17,827,700. The exchange rate of RMB for AU\$ is to be based on the buying rate of the Bank of China on the actual day of the cash contribution;
- Chinalco Yunnan's cash contribution will be made in three instalments as follows:
  - RMB6,000,000 of increased registered capital shall be paid on the Contribution Date (defined as the first contribution to the increased capital by the Company);
  - RMB6,000,000 of increased registered capital shall be paid within 180 days after the issue of the San Mu Business Licence;
  - RMB5,800,000 of increased registered capital shall be paid within 360 days after the issue of the San Mu Business Licence;
- The final San Mu shareholding after the third and final payment of increased capital by Chinalco Yunnan is set out as follows:
  - YCI - registered capital contribution of RMB17,000,000 - 41.65%;
  - YEX - registered capital contribution of RMB3,000,000 - 7.35%; and
  - Chinalco Yunnan - registered capital contribution of RMB17,827,700 - 51%.
- Once Chinalco Yunnan has paid its registered contribution in full, there is no requirement to provide any further funds to or on behalf of San Mu;
- Chinalco Yunnan shall appoint three directors (out of a total of five) to San Mu's board of directors;
- After the issue of the San Mu Business License, disputes against San Mu relating to pre-existing debts (i.e. debts existing prior to the Company's contribution and becoming a shareholder in San Mu) will be dealt with and costs covered in full by YCI and YEX;
- The Articles of Association, Capital Increase Agreement and San Mu Joint Venture Contract are silent on any operational targets that are to be achieved after the implementation of the Proposed Acquisition. However, the San Mu Joint Venture Contract provides that San Mu's purpose shall be to establish an independent legal entity capable of exploring and developing mineral resources and obtaining mining rights in China and neighbouring countries in order to meet increasing demand for minerals, realise economic benefits and produce a return on investment. San Mu's scope of business includes mining exploration, the sale of minerals and technical services for the mining industry; and
- The Proposed Acquisition is subject to government approvals in Australia and China.

# Notice of Extraordinary General Meeting and Explanatory Memorandum

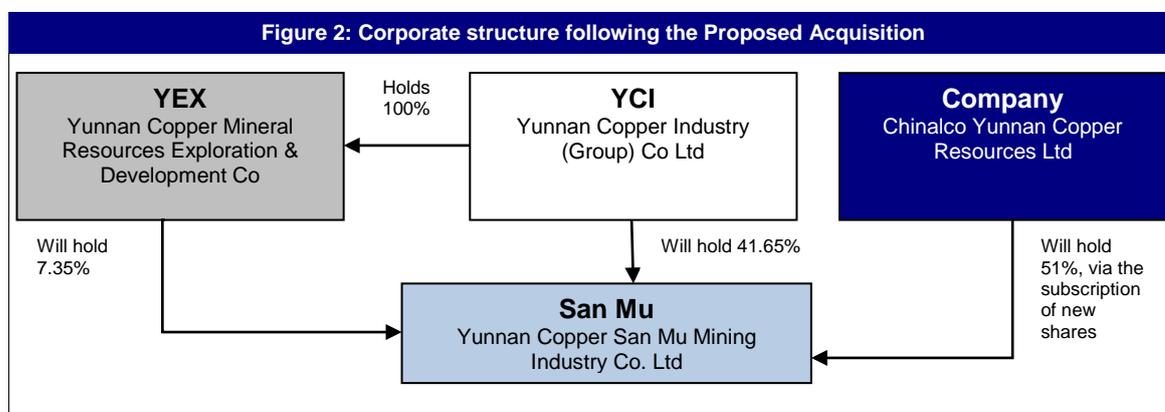
## Rationale for the Proposed Acquisition

The Proposed Acquisition will provide the Company with the opportunity to gain a controlling interest in San Mu and the Laos Projects. An overview of the Laos Projects is set out in the Independent Expert's Report accompanying this Notice and Explanatory Memorandum. The Directors have stated that of the Laos Projects, the Xinzhai Project represents a good opportunity for the Company (via San Mu) to realise revenues in the near term. While the Xinzhai Project mineral body is not JORC-compliant, the Company's investment in San Mu would allow a drilling program to be completed with a view to bringing the mineral body to a JORC-compliant status.

Chinalco Yunnan has the potential to gain synergies and infrastructure benefits by operating in a low-cost environment within Laos, utilising the Company's technical expertise and being in close proximity to a processing facility owned by YCI, situated 20 kilometres north of the Laos/Chinese border.

## Corporate Structure following Proposed Acquisition

The diagram below summarises the resulting effect on the corporate structure and relationships between the entities following the Proposed Acquisition:



**Note:** San Mu will still hold 100% equity interest in its two respective subsidiaries. The above diagram excludes other assets that are not directly affected by the Proposed Acquisition.

## Regulatory Requirements

### ASX Listing Rule 10.1

ASX Listing Rule 10.1 provides that a company must ensure that neither it, nor any of its subsidiaries, acquires a substantial asset from, or disposes of a substantial asset to, any of the following persons without shareholders' prior approval:

- (a) a related party;
- (b) a subsidiary;
- (c) a substantial shareholder, being a person who, together with the person's associates, holds a relevant interest, or held a relevant interest at any time in the 6 months before the relevant transaction, in at least 10% of the total votes attached to the voting securities in the company;
- (d) an associate of a person referred to in paragraphs (a), (b) or (c); or
- (e) a person whose relationship to the company or a person referred to in paragraphs (a) to (d) is such that, in ASX's opinion, the transaction should be approved by security holders of the entity.

## Notice of Extraordinary General Meeting and Explanatory Memorandum

An asset is substantial if its value, or the value of the consideration paid or given for it is, or in ASX's opinion is, 5% or more of the equity interests of the entity as set out in the latest accounts given to ASX under the Listing Rules.

China Yunnan Copper (Australia) Investment and Development Co. Ltd (**CYC**) is a substantial shareholder as it holds approximately 21.25% of the total votes attached to the voting securities in the Company. Yunnan Copper Industry (Group) Co Ltd (**YCI**) is the holding company of CYC, making it a substantial shareholder. San Mu is an associate of YCI and thus an associate of a substantial shareholder.

The Company's current equity interests are \$7,358,685 as set out in the latest accounts given to ASX under the Listing Rules (Financial Report for the Half Year ended 31 December 2010). The AU\$ equivalent of RMB17,827,700 (approximately AU\$2.8 million as announced on 3 February 2011) consideration for the acquisition of the equity interest represents approximately 38% of the Company's equity interests, making the interest a substantial asset.

Accordingly, the Company is seeking shareholder approval of the Proposed Acquisition of a 51% equity interest in San Mu pursuant to Listing Rule 10.1.

### ***ASX Listing Rule 10.10***

ASX Listing Rule 10.10 requires that a report on the transaction be obtained from an independent expert stating whether the transaction is fair and reasonable to the holders of ordinary securities whose votes are not to be disregarded (**Non-Associated Shareholders**).

The Company has engaged PKF Corporate Advisory (East Coast) Pty Limited (**PKFCA**) as an independent expert for the purposes of providing a report as to the fairness and reasonableness of the acquisition of a 51% equity interest in San Mu.

The Independent Expert's Report prepared by PKFCA is set out in Appendix A. The Directors urge Shareholders to read the Independent Expert's Report in its entirety. The Independent Expert's Report was prepared in respect of Listing Rule 10.1 and concluded that the Proposed Acquisition is fair and reasonable to all Non-Associated Shareholders.

### **Recommendation**

The Directors recommend that Shareholders vote in favour of Resolution 1.

# Notice of Extraordinary General Meeting and Explanatory Memorandum

## Resolution 2 - Approval of Disposal of 55% Interest in Cloncurry North and Waterford Projects

### Introduction

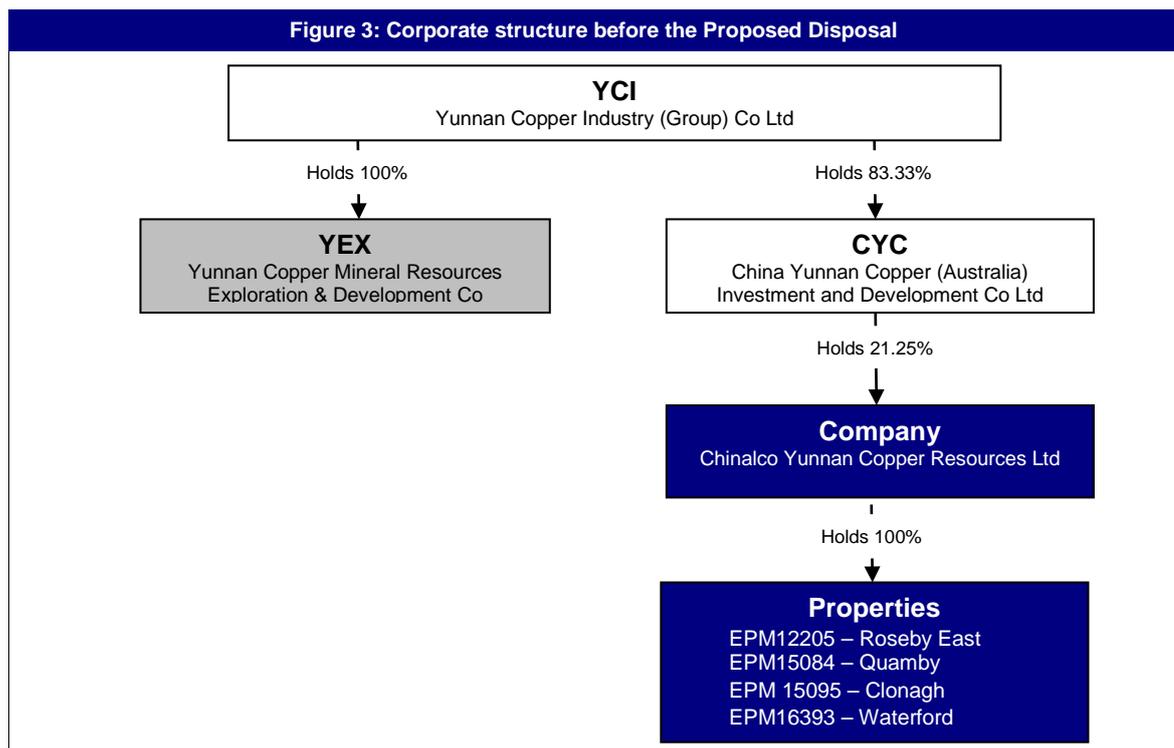
As announced to Shareholders and the market on 3 February 2011, the Company has signed a Letter of Intent with Yunnan Copper Mineral Resources Exploration and Development Co. Ltd. (**YEX**). The Letter of Intent proposed that the Company and YEX will execute a Joint Venture Agreement (**JV Agreement**) granting YEX the exclusive right to farm in and earn up to a 55% interest in the Company's Cloncurry North and Waterford Projects, by incurring a minimum exploration expenditure of AU\$5,000,000 on the projects over a three year period (**Proposed Disposal**). On 21 March 2011, the Company announced to Shareholders and the market that the Company and YEX had executed the JV Agreement.

A summary of the terms of the Proposed Disposal is set out below. Further details of the transaction are set out in the Independent Expert's Report accompanying this Notice and Explanatory Memorandum.

### Background

Yunnan Copper Industry (Group) Co Ltd (**YCI**) holds 100% of YEX. YCI is the holding company of China Yunnan Copper (Australia) Investment and Development Co. Ltd (**CYC**) and CYC holds approximately 21.25% of shares in Chinalco Yunnan.

The diagram below summarises the corporate structure and relationships between the entities before the Proposed Disposal:



**Note:** The above diagram excludes assets that are not directly affected by the Proposed Disposal.

# Notice of Extraordinary General Meeting and Explanatory Memorandum

## Summary of Terms of Proposed Disposal

Below is a summary of the key terms of the Proposed Disposal under the JV Agreement:

- the JV Agreement commences when the Company obtains the necessary shareholder approvals to the transactions contemplated by the JV Agreement (**JV Agreement Commencement Date**);
- the JV Agreement ends on 15 February 2014, or such later date as agreed by the Company and YEX (**JV Agreement End Date**);
- YEX shall earn up to a 55% participating interest in Queensland tenements EPM 12205, 15084, 15095 and 16393 (**Properties**), free of all encumbrances (**Farm-in Interest**) by:
  - spending a total of AU\$5,000,000 in exploration expenditure on or before the JV Agreement End Date; and
  - spending AU\$1,200,000 in exploration expenditure on or before the date being one year after the JV Agreement Commencement Date to earn a 10% participating interest in the Properties;
  - spending an additional AU\$1,800,000 in exploration expenditure on or before the date being two years after the JV Agreement Commencement Date to earn an extra 20% participating interest in the Properties;
  - spending an additional AU\$2,000,000 in exploration expenditure on or before the date being three years after the JV Agreement Commencement Date, but on or before the JV Agreement End Date, to earn an extra 25% participating interest in the Properties.
- Chinalco Yunnan is currently the 100% legal holder of the Properties and the assignment and registration of the incremental 10%, 20% and 25% participating interests (leading to a total of a 55% participating interest) to YEX will be affected in accordance with the staged exploration expenditure outlined above. That is:
  - once YEX spends AU\$1,200,000 in exploration expenditure on or before the date being one year after the JV Agreement Commencement Date, the Company will assign and register a 10% participating interest in the Properties to YEX;
  - once YEX spends an additional AU\$1,800,000 in exploration expenditure on or before the date being two years after the JV Agreement Commencement Date, the Company will assign and register a further 20% participating interest in the Properties to YEX;
  - once YEX spends an additional AU\$2,000,000 in exploration expenditure on or before the date being three years after the JV Agreement Commencement Date, but on or before the JV Agreement End Date, the Company will assign and register a further 25% participating interest in the Properties to YEX;
- in the event of partial expenditure below the staged expenditure obligations, YEX will not be entitled to a proportionate participating interest in the Properties. For example, if YEX spent AU\$500,000 in exploration expenditure (and no more), it would not be entitled to any participating interest in the Properties. If YEX spent AU\$1,200,000 in exploration expenditure on or before the date being one year after the JV Agreement Commencement Date, and subsequently spent an additional AU\$500,000 in exploration expenditure (and no more), it would only be entitled to a 10% participating interest in the Properties;
- if YEX does not satisfy the minimum exploration expenditure requirements (to keep the Properties in good standing) prior to the JV Agreement End Date, the JV Agreement shall be terminated and YEX shall have no further obligations;

## Notice of Extraordinary General Meeting and Explanatory Memorandum

- during the minimum expenditure farm-in period, YEX shall have sole and exclusive rights to carry out exploration on and have non-exclusive possession of the Properties;
- when YEX has performed its farm-in expenditure obligations, a joint venture will be formed between YEX and the Company with the following participating interests:
  - YEX - 55%; and
  - Chinalco Yunnan - 45%.
- the joint venture shall have an operating committee, which shall have management and control of joint venture operations and all other matters affecting the joint venture. YEX and the Company will each have one member on the operating committee, and each party shall have a block vote on the operating committee, proportionate to its respective participating interest. Decisions of the operating committee shall be made by majority vote representing at least 55% of the participating interests;
- YEX will be the operator of the joint venture and, subject to the control and direction of the operating committee, shall have day-to-day management and control of all joint venture operations;
- YEX is obliged to carry out the joint venture operations in accordance with work programs and budgets approved by the operating committee;
- fees, rents, rates and other monies levied or assessed upon the Properties (exclusive of the exploration expenditure payable by YEX pursuant to the Proposed Disposal) under Queensland's *Mineral Resources Act 1989* (Qld) are payable by YEX; and
- after the JV Agreement End Date, if a party does not contribute to all costs in connection with the Properties in accordance with each party's interest, that party's interest shall dilute so that its interest from time to time shall be calculated as:
  - For each AU\$1,000,000 or part thereof of expenditure not contributed by the party, that party's interest in the Properties shall be reduced by 5% of such AU\$1,000,000 or pro rata for expenditure less than AU\$1,000,000.

### **Rationale for the Proposed Disposal**

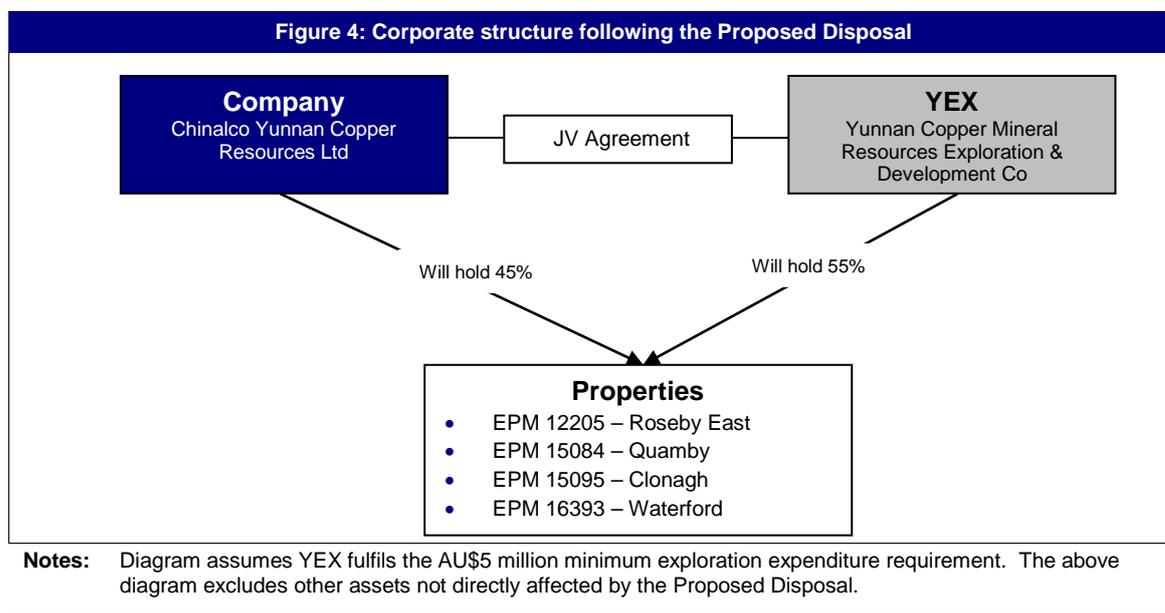
The Directors have stated that, in view of the other opportunities that the Company is pursuing, the Properties are a low priority, given the minimal resource results found to date. Accordingly, limited capital and staff time are budgeted towards further exploration work on the Properties.

The Proposed Disposal provides the opportunity for Chinalco Yunnan to participate in any positive results at a reduced cost to the Company on projects that are a low priority. The Directors have stated that, although the Proposed Disposal will result in a diluted interest in the Properties for the Company, the transaction is beneficial to the Company as Chinalco Yunnan, with limited resources, was unlikely to have embarked on an extensive exploration program of the Properties.

# Notice of Extraordinary General Meeting and Explanatory Memorandum

## Corporate Structure following Proposed Disposal

The expected corporate structure following the Proposed Disposal, assuming YEX fulfils the minimum exploration expenditure requirements, is summarised below:



## Regulatory Requirements

### ASX Listing Rule 10.1

As set out above, ASX Listing Rule 10.1 provides that a company must ensure that neither it, nor any of its subsidiaries, disposes a substantial asset to certain categories of persons without shareholders' prior approval.

China Yunnan Copper (Australia) Investment and Development Co. Ltd (**CYC**) is a substantial shareholder as it holds approximately 21.25% of the total votes attached to the voting securities in the Company. Yunnan Copper Industry (Group) Co Ltd (**YCI**) is the holding company of CYC, making it an associate of CYC.

Because YEX is an associate of YCI and CYC, shareholder approval is sought for the disposal of the Company's interest in the Cloncurry North and Waterford Projects.

The Company's current equity interests are \$7,358,685 as set out in the latest accounts given to ASX under the Listing Rules (Financial Report for the Half Year ended 31 December 2010). The \$5,000,000 total consideration for the disposal of the interest represents approximately 68% of the Company's equity interests, making the interest a substantial asset.

### ASX Listing Rule 10.10

ASX Listing Rule 10.10 requires that a report on the transaction be obtained from an independent expert stating whether the transaction is fair and reasonable to the holders of ordinary securities whose votes are not to be disregarded (**Non-Associated Shareholders**).

The Company has engaged PKFCA as an independent expert for the purposes of providing a report as to the fairness and reasonableness of the disposal of the interest in the Cloncurry North and Waterford Projects.

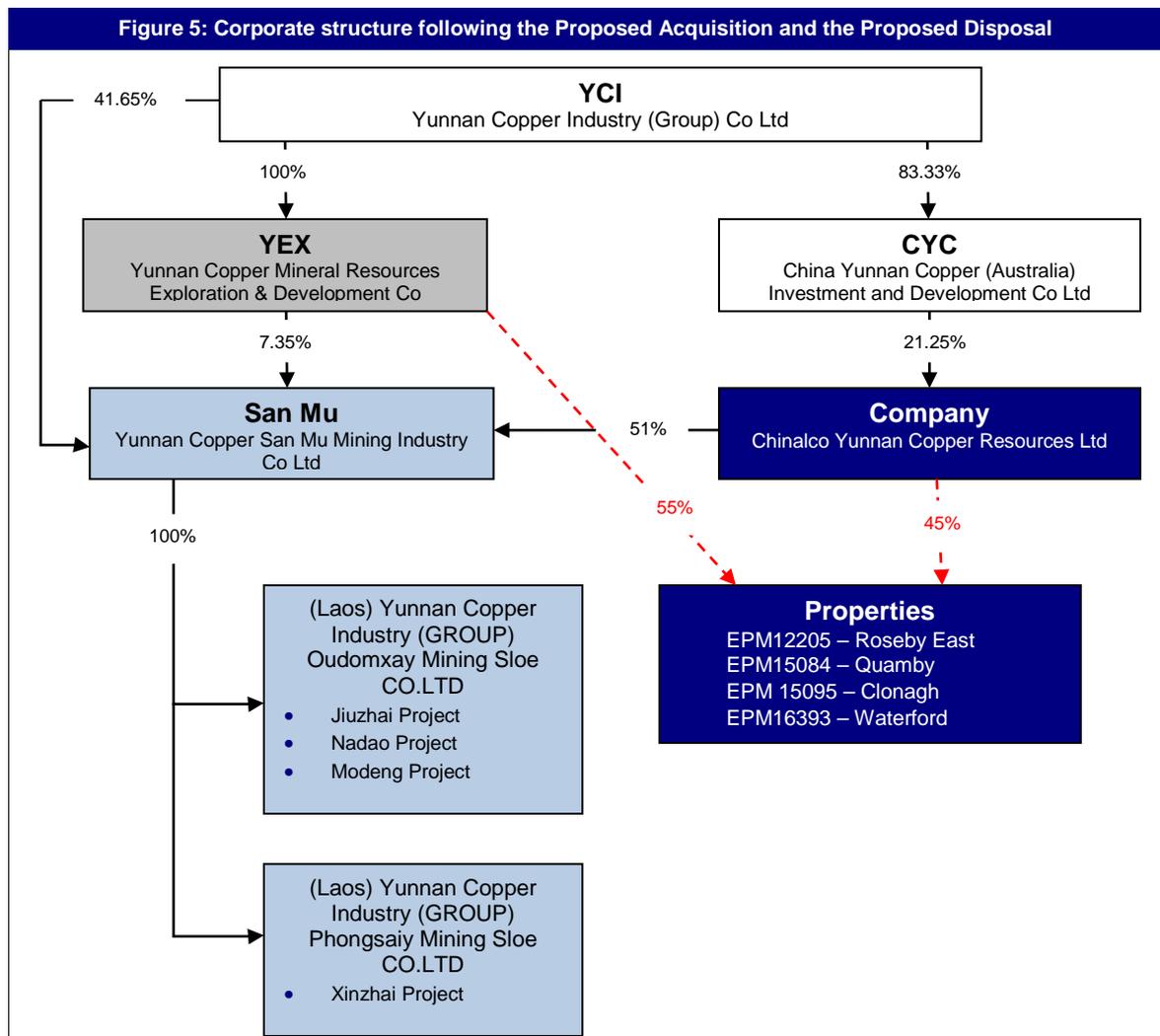
The Independent Expert's Report prepared by PKFCA is set out in Appendix A. The Directors urge Shareholders to read the Independent Expert's Report in its entirety. The Independent Expert's Report

# Notice of Extraordinary General Meeting and Explanatory Memorandum

was prepared in respect of Listing Rule 10.1 and concluded that the Proposed Disposal is fair and reasonable to all Non-Associated Shareholders.

## Corporate Structure following the Proposed Acquisition and the Proposed Disposal

Set out below is the anticipated corporate structure of the Company following the Proposed Acquisition and the Proposed Disposal:



**Note:** The above diagram assumes the Proposed Acquisition and the Proposed Disposal are approved by the Non-Associated Shareholders and YEX fulfils the minimum exploration expenditure on the Properties (i.e. the full amount of AU\$5 million). San Mu will still hold 100% equity interest in its two respective subsidiaries. The diagram excludes other assets that are not directly affected by the Proposed Acquisition and the Proposed Disposal.

## Recommendation

The Directors recommend that Shareholders vote in favour of Resolution 2.

# Notice of Extraordinary General Meeting and Explanatory Memorandum

## 2. Interpretation

---

**Articles of Association** means the Articles of Association of San Mu.

**ASX** means the Australian Securities Exchange.

**ASIC** means the Australian Securities and Investments Commission.

**Capital Increase Agreement** means the Agreement on Capital Increase between YCI, YEX, San Mu and the Company dated 28 January 2011.

**Chinalco Yunnan** or **Company** means Chinalco Yunnan Copper Resources Limited ACN 070 859 522.

**Corporations Act** means the *Corporations Act 2001* (Cth) as amended from time to time.

**CYC** means China Yunnan Copper (Australia) Investment and Development Co. Ltd ACN 110 345 750.

**Directors** means the board of directors of the Company from time to time.

**Explanatory Memorandum** means this explanatory memorandum accompanying this Notice.

**Extraordinary General Meeting** or **Meeting** means the extraordinary general meeting of shareholders of the Company convened by the Directors and detailed in the Notice of Meeting, or any adjournment thereof.

**Independent Expert's Report** means the Independent Expert's Report prepared by PKFCA dated 8 September 2011.

**JV Agreement** means the joint venture agreement in respect of the Properties between YEX and the Company dated 15 February 2011, as amended by the deed of variation between YEX and the Company dated 2 September 2011.

**JV Agreement Commencement Date** means the commencement date under the JV Agreement, being when the Company obtains the necessary shareholder approvals to the transactions contemplated by the JV Agreement.

**JV Agreement End Date** means 15 February 2014, or such later date as agreed by the Company and YEX.

**Laos Projects** means the four mining projects owned by the two subsidiaries of San Mu, being the Xinzhai Project, Jiuzhai Project, Nadao Project and Modeng Project.

**Listing Rules** means the listing rules of the ASX.

**Non-Associated Shareholders** means Shareholders whose votes are not to be disregarded in respect of the Proposed Acquisition and/or Proposed Disposal, as applicable.

**Notice of Meeting** or **Notice** means the notice of meeting giving notice to shareholders of the Extraordinary General Meeting, accompanying this Explanatory Memorandum.

**Ordinary Resolution** means a resolution passed by more than 50% of the votes cast at a general meeting of shareholders.

**PKFCA** means PKF Corporate Advisory (East Coast) Pty Limited.

**Properties** means Queensland tenements EPM 12205, 15084, 15095 and 16393 (which collectively represent the Company's Cloncurry North and Waterford Projects).

# Notice of Extraordinary General Meeting and Explanatory Memorandum

**Proposed Acquisition** means the proposed acquisition of a 51% equity interest in San Mu.

**Proposed Disposal** means the proposed disposal of a 55% interest in the Properties.

**RMB** means Renminbi, being the official currency of the People's Republic of China. The primary unit of Renminbi is the Chinese Yuan.

**San Mu** means Yunnan Copper San Mu Mining Industry Co Ltd.

**San Mu Business Licence** means the new business licence to be held by San Mu in accordance with the Capital Increase Agreement, San Mu Joint Venture Contract and Articles of Association.

**San Mu Joint Venture Contract** means the San Mu Joint Venture Contract between YCI, YEX and the Company dated 28 January 2011.

**Shareholder** means a shareholder of the Company.

**Shares** means fully paid ordinary shares in the capital of the Company.

**Special Resolution** means a resolution passed by at least 75% of the votes cast at a general meeting of shareholders.

**YCI** means Yunnan Copper Industry (Group) Co Ltd.

**YEX** means Yunnan Copper Mineral Resources Exploration and Development Co Ltd.

---

Any inquiries in relation to the Resolutions or the Explanatory Memorandum should be directed to Paul Marshall (Company Secretary):

Level 5, 10 Market Street, Brisbane QLD 4000

+61 7 3212 6204

# Notice of Extraordinary General Meeting and Explanatory Memorandum

## Proxies and representatives

Shareholders are entitled to appoint a proxy to attend and vote on their behalf. Where a shareholder is entitled to cast two or more votes at the meeting, they may appoint two proxies. Where more than one proxy is appointed, each proxy may be appointed to represent a specific proportion or number of votes the shareholder may exercise. If the appointment does not specify the proportion or number of votes each proxy may exercise, each proxy may exercise half of the votes. The proxy may, but need not, be a shareholder of the Company.

Shareholders who are a body corporate are able to appoint representatives to attend and vote at the meeting under Section 250D of the *Corporations Act 2001* (Cth).

The proxy form must be signed by the shareholder or his/her attorney duly authorised in writing or, if the shareholder is a corporation, in a manner permitted by the *Corporations Act*.

The proxy form (and the power of attorney or other authority, if any, under which the proxy form is signed) or a copy or facsimile which appears on its face to be an authentic copy of the proxy form (and the power of attorney or other authority) must be **deposited at, posted to, or sent by facsimile transmission to the address listed below** not less than 48 hours before the time for holding the meeting, or adjourned meeting as the case may be, at which the individual named in the proxy form proposes to vote.

**Chinalco Yunnan Copper Resources Limited**

**GPO Box 216, Brisbane QLD 4001**

**Telephone: +61 7 3212 6204 Facsimile No: +61 7 3212 6250**

If a representative of the corporation is to attend the meeting the appropriate "Certificate of Appointment of Corporate Representative" should be produced prior to admission. A form of the certificate may be obtained from the Company's share registry.

A proxy form is attached to this Notice.

## Voting entitlement

For the purposes of determining voting entitlements at the Meeting, shares will be taken to be held by the persons who are registered as holding the shares at 7.00pm (Sydney time) on 19 October 2011. Accordingly, transactions registered after that time will be disregarded in determining entitlements to attend and vote at the Meeting.

## Signing instructions

You must sign the proxy form as follows in the spaces provided:

- |                    |   |
|--------------------|---|
| Individual:        | Where the holding is in one name, the holder must sign.   |
| Joint Holding:     | Where the holding is in more than one name, all of the security holders should sign.  |
| Power of Attorney: | To sign under Power of Attorney, you must have already lodged this document with the registry. If you have not previously lodged this document for notation, please attach a certified photocopy of the Power of Attorney to this form when you return it.                    |
| Companies:         | Where the company has a Sole Director who is also the Sole Company Secretary, this form must be signed by that person. If the company (pursuant to section 204A of the <i>Corporations Act 2001</i> ) does not have a Company Secretary, a Sole Director can also sign alone. |

Otherwise this form must be signed by a Director jointly with either another Director or a Company Secretary.

Please indicate the office held by signing in the appropriate place.

# Chinalco Yunnan Copper Resources Limited

ACN 070 859 522

## LODGE YOUR VOTE



By mail:  
Chinalco Yunnan Copper Resources Limited  
GPO Box 216  
Brisbane QLD 4001



By fax: +61 7 3212 6250



All enquiries to: Telephone: +61 7 3212 6204



X99999999999

## SHAREHOLDER VOTING FORM

I/We being a member(s) of Chinalco Yunnan Copper Resources Limited and entitled to attend and vote hereby appoint:

### STEP 1

### APPOINT A PROXY

the Chairman  
of the Meeting  
(mark box)

OR if you are NOT appointing the Chairman of the Meeting as your proxy, please write the name of the person or body corporate (excluding the registered shareholder) you are appointing as your proxy

or failing the person/body corporate named, or if no person/body corporate is named, the Chairman of the Meeting, as my/our proxy and to vote for me/us on my/our behalf at the Extraordinary General Meeting of the Company to be held at 10am (Brisbane Time) on Friday, 21 October 2011, at HopgoodGanim Lawyers, Presentation Room, Level 7, Waterfront Place, 1 Eagle Street, Brisbane, QLD, 4000 and at any adjournment or postponement of the meeting.

Proxies will only be valid and accepted by the Company if they are signed and received no later than 48 hours before the meeting. Please read the voting instructions overleaf before marking any boxes with an

### STEP 2

### VOTING DIRECTIONS

#### Resolution 1

Approval of Acquisition of 51% Equity Interest in Yunnan Copper San Mu Mining Industry Co Ltd

For	Against	Abstain*
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

#### Resolution 2

Approval of Disposal of 55% Interest in Cloncurry North and Waterford Projects

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

\* If you mark the Abstain box for a particular Item, you are directing your proxy not to vote on your behalf on a show of hands or on a poll and your votes will not be counted in computing the required majority on a poll.

### STEP 3

### SIGNATURE OF SHAREHOLDERS - THIS MUST BE COMPLETED

Shareholder 1 (Individual)

Sole Director and Sole Company Secretary

Joint Shareholder 2 (Individual)

Director/Company Secretary (Delete one)

Joint Shareholder 3 (Individual)

Director

This form should be signed by the shareholder. If a joint holding, all shareholders must sign. If signed by the shareholder's attorney, the power of attorney must have been previously noted by the registry or a certified copy attached to this form. If executed by a company, the form must be executed in accordance with the company's constitution and the *Corporations Act 2001* (Cth).

CYU PRX101



## HOW TO COMPLETE THIS PROXY FORM

### Your Name and Address

This is your name and address as it appears on the company's share register. If this information is incorrect, please make the correction on the form. Shareholders sponsored by a broker should advise their broker of any changes. **Please note: you cannot change ownership of your shares using this form.**

### Appointment of a Proxy

If you wish to appoint the Chairman of the Meeting as your proxy, mark the box in Step 1. If the person you wish to appoint as your proxy is someone other than the Chairman of the Meeting please write the name of that person in Step 1. If you leave this section blank, or your named proxy does not attend the meeting, the Chairman of the Meeting will be your proxy. A proxy need not be a shareholder of the company. A proxy may be an individual or a body corporate.

### Votes on Items of Business - Proxy Appointment

You may direct your proxy how to vote by placing a mark in one of the boxes opposite each item of business. All your shares will be voted in accordance with such a direction unless you indicate only a portion of voting rights are to be voted on any item by inserting the percentage or number of shares you wish to vote in the appropriate box or boxes. If you do not mark any of the boxes on the items of business, your proxy may vote as he or she chooses. If you mark more than one box on an item your vote on that item will be invalid.

### Appointment of a Second Proxy

You are entitled to appoint up to two persons as proxies to attend the meeting and vote on a poll. If you wish to appoint a second proxy, an additional Proxy Form may be obtained by telephoning the company's share registry or you may copy this form and return them both together.

To appoint a second proxy you must:

- (a) on each of the first Proxy Form and the second Proxy Form state the percentage of your voting rights or number of shares applicable to that form. If the appointments do not specify the percentage or number of votes that each proxy may exercise, each proxy may exercise half your votes. Fractions of votes will be disregarded.
- (b) return both forms together.

### Signing Instructions

You must sign this form as follows in the spaces provided:

**Individual:** where the holding is in one name, the holder must sign.

**Joint Holding:** where the holding is in more than one name, all shareholders must sign.

**Power of Attorney:** to sign under Power of Attorney, you must lodge the Power of Attorney with the registry. If you have not previously lodged this document for notation, please attach a certified photocopy of the Power of Attorney to this form when you return it.

**Companies:** where the company has a Sole Director who is also the Sole Company Secretary, this form must be signed by that person. If the company (pursuant to section 204A of the *Corporations Act 2001*) does not have a Company Secretary, a Sole Director can also sign alone. Otherwise this form must be signed by a Director jointly with either another Director or a Company Secretary. Please indicate the office held by signing in the appropriate place.

### Corporate Representatives

If a representative of the corporation is to attend the meeting the appropriate "Certificate of Appointment of Corporate Representative" should be produced prior to admission in accordance with the Notice of Meeting. A form of the certificate may be obtained from the company's share registry.

## Lodgement of a Proxy Form

This Proxy Form (and any Power of Attorney under which it is signed) must be received at an address given below by **10am (Brisbane Time) on Wednesday, 19 October 2011**, being not later than 48 hours before the commencement of the meeting. Any Proxy Form received after that time will not be valid for the scheduled meeting.

Proxy Forms may be lodged using the reply paid envelope or:

 **by mail:**  
Chinalco Yunnan Copper Resources Limited  
GPO Box 216  
Brisbane QLD 4001

 **by fax:**  
+61 7 3212 6250

 **by hand:**  
delivering it to Chinalco Yunnan Copper Resources Limited,  
Level 5, 10 Market St, Brisbane, QLD 4000.

If you would like to attend and vote at the Extraordinary General Meeting, please bring this form with you.  
This will assist in registering your attendance.



# **Chinalco Yunnan Copper Resources Ltd**

Independent Expert's Report  
8 September 2011

8 September 2011

This Financial Services Guide ("**FSG**") is issued in relation to an independent expert's report ("**IER**") prepared by PKF Corporate Advisory (East Coast) Pty Limited (ABN 70 050 038 170) ("**PKFCA**") at the request of the directors ("**Directors**") of Chinalco Yunnan Copper Resources Ltd ("**Chinalco Yunnan**" or "**the Company**") in respect of:

- the acquisition of a 51% equity investment in Yunnan Copper San Mu Mining Industry Co. Ltd ("**San Mu**"), a Chinese registered company, for the Australian Dollar ("**AU\$**") equivalent of RMB17,827,700 (translating to approximately AU\$2.8 million) as announced to the Australian Securities Exchange ("**ASX**") on 3 February 2011 ("**Proposed Acquisition**"); and
- Chinalco Yunnan has entered into a joint venture agreement with YEX ("**JV Agreement**") granting YEX the right to farm-in and subsequently earn up to a 55% interest in Chinalco Yunnan's Cloncurry North Project and Waterford Project by incurring exploration expenditure of AU\$5 million on the projects over a three year period ("**Proposed Disposal**").

The Proposed Acquisition and the Proposed Disposal are collectively referred to as the "**Proposed Transactions**".

The Proposed Acquisition and the Proposed Disposal are independent of each other.

### Engagement

The IER is to accompany a notice of meeting and explanatory memorandum that are to be provided by the Directors to assist the Company's shareholders not associated with the Proposed Acquisition and the Proposed Disposal ("**Non-Associated Shareholders**") in deciding whether to accept the Proposed Acquisition and the Proposed Disposal.

### Financial Services Guide

PKFCA holds an Australian Financial Services Licence (Licence No: 247420) ("**Licence**"). As a result of our Report being provided to you, PKFCA is required to issue to you, as a retail client, a FSG. The FSG includes information on the use of general financial product advice and is issued so as to comply with our obligations as holder of an Australian Financial Services Licence.

### Financial services PKFCA is licensed to provide

The Licence authorises PKFCA to carry on a financial services business to (a) provide financial product advice for derivatives limited to old law securities, options contracts and warrants and securities and (b) deal in a financial product by arranging for another person to apply for, acquire, vary or dispose of financial products in respect of securities, to retail and wholesale clients.

PKFCA provides financial product advice by virtue of an engagement to issue the Report in connection with the issue of securities of another person.

Our Report includes a description of the circumstances of our engagement and identifies the party who has engaged us. You have not engaged us directly but will be provided with a copy of our Report (as a retail client) because of your connection with the matters on which our Report has been issued.

Our Report is provided on our own behalf as an Australian Financial Services Licensee authorised to provide the financial product advice contained in the Report.

### General financial product advice

Our Report provides general financial product advice only, and does not provide personal financial product advice, because it has been prepared without taking into account your particular personal circumstances or objectives (either financial or otherwise), your financial situation or your needs.

Tel: 61 7 3226 3555 | Fax: 61 7 3226 3500 | [www.pkf.com.au](http://www.pkf.com.au)

PKF Corporate Advisory (East Coast) Pty Ltd | Australian Financial Services Licence 247420 | ABN 70 050 038 170

Level 6, 10 Eagle Street | Brisbane | Queensland 4000 | Australia

GPO Box 1078 | Brisbane | Queensland 4001 | Australia

Some individuals may place a different emphasis on various aspects of potential investments. An individual's decision in relation to the Proposed Transactions described in the Document may be influenced by their particular circumstances and, therefore, individuals should consider the appropriateness of the Report having regard to your own objectives, financial situation and needs before you act on the advice in a Report and seek independent advice.

Where the advice relates to the acquisition or possible acquisition of a financial product, you should also obtain an offer document relating to the financial product and consider that document before making any decision about whether to acquire the financial product.

### **Associations and relationships**

PKFCA is the licensed corporate advisory arm of PKF (East Coast Practice), Chartered Accountants and Business Advisers. The directors of PKFCA may also be partners in PKF East Coast Practice, Chartered Accountants and Business Advisers.

PKF (East Coast Practice), Chartered Accountants and Business Advisers is comprised of a number of related entities that provide audit, accounting, tax and financial advisory services to a wide range of clients.

### **Benefits that PKFCA may receive**

PKFCA has charged fees for providing our IER. The basis on which our fees will be determined has been agreed with, and our fees will be paid by, the person who engaged us to provide the IER. Our fees have been agreed on either a fixed fee or time cost basis.

PKFCA will receive a fee based on the time spent in the preparation of this IER in the amount of approximately AU\$50,000 (plus GST and disbursements). PKFCA will not receive any fee contingent upon the outcome of the Proposed Transactions, and accordingly, does not have any pecuniary or other interests that could reasonably be regarded as being capable of affecting its ability to give an unbiased opinion in relation to the Proposed Transactions. In addition, fees of the independent mining valuation specialists for their reports have been paid by the Company and such fees are also on the same basis as that rendered by PKFCA.

### **Remuneration or other benefits received by our directors and employees**

Our directors and employees providing financial services receive an annual salary, a performance bonus or profit share depending on their level of seniority. Bonuses are based on overall productivity and contribution to the operation of PKFCA or related entities but any bonuses are not directly connected with any assignment and in particular are not directly related to the engagement for which our Report was provided.

### **Referrals**

PKFCA does not pay commissions or provide any other benefits to any parties or person for referring customers to us in connection with the reports that PKFCA is licensed to provide.

### **Complaints resolution**

As the holder of an Australian Financial Services Licence, we are required to have a system for handling complaints from persons to whom we provide financial product advice. All complaints must be in writing, addressed to The Complaints Officer, PKF Corporate Advisory (East Coast) Pty Limited, Level 10, 1 Margaret Street, Sydney NSW 2000.

On receipt of a written complaint we will record the complaint, acknowledge receipt of the complaint and seek to resolve the complaint as soon as practical. If we cannot reach a satisfactory resolution, you can raise your concerns with the Financial Ombudsman Service Limited ("FOS"). FOS is an independent body established to provide advice and assistance in helping resolve complaints relating to the financial services industry. PKFCA is a member of FOS. FOS may be contacted directly via the details set out below.

Financial Ombudsman Service Limited  
GPO Box 3  
Melbourne VIC 3001  
Toll free: 1300 78 08 08  
Email: info@fos.org.au

8 September 2011

The Directors  
Chinalco Yunnan Copper Resources Ltd  
Level 5  
10 Market Street  
BRISBANE QLD 4001

Dear Directors

## **INDEPENDENT EXPERT'S REPORT - IN RELATION TO VARIOUS PROPOSALS BY CHINALCO YUNNAN COPPER RESOURCES LIMITED**

Chinalco Yunnan Copper Resources Ltd ("**Chinalco Yunnan**" or "**the Company**"), formerly known as China Yunnan Copper Australia Limited, was incorporated in 1995 and is headquartered in Brisbane, Australia. The Company has been listed on the Australian Securities Exchange ("**ASX**") since 2007. The market capitalisation of the Company as at 19 August 2011 was AU\$35.5 million.

Chinalco Yunnan engages in the exploration and development of minerals, primarily copper, silver, rare earth elements, gold and uranium. The Company has exploration operations throughout Australia and Chile, and its strategy is supported and assisted by the Company's cornerstone investor, Yunnan Copper Industry Group Co. Ltd ("**YCI**").

The directors ("**Directors**") of Chinalco Yunnan have engaged PKF Corporate Advisory (East Coast) Pty Limited ("**PKFCA**") to prepare an independent expert's report ("**IER**") setting out our opinion as to whether each of the two proposed transactions ("**Proposed Transactions**") that the Company is contemplating is fair and reasonable to the non-associated shareholders of the Company ("**Non-Associated Shareholders**").

### **Proposed Transactions**

As announced to the ASX on 3 February 2011, the Proposed Transactions are outlined as follows:

#### ***Proposed Acquisition***

Chinalco Yunnan to acquire a 51% equity investment, via the subscription of new shares, in Yunnan Copper San Mu Mining Industry Co. Ltd ("**San Mu**"), a Chinese registered resource company, for the Australian Dollar ("**AU\$**") equivalent of RMB17,827,700 (translating to approximately AU\$2.8 million) ("**Proposed Acquisition**"). San Mu, via two subsidiaries, holds four copper and silver projects (Zinzhai Project, Jiuzhui Project, Modeng Project and Nadao Project) in northern Laos, (collectively referred to as the "**Laos Projects**").

The investment in San Mu will be by way of a subscription of new shares and the invested funds will be utilised to complete an approximately AU\$2.8 million exploration program. Currently, the two shareholders of San Mu are YCI (holding 85% of the total registered capital) and Yunnan Copper Mineral Resources Exploration and Development Co. Ltd ("**YEX**") (holding 15% of the total registered capital). The Proposed Acquisition would result in YEX's and YCI's shareholdings being diluted due to the issue of new shares to the Company.

Tel: 61 7 3226 3555 | Fax: 61 7 3226 3500 | [www.pkf.com.au](http://www.pkf.com.au)

PKF Corporate Advisory (East Coast) Pty Ltd | Australian Financial Services Licence 247420 | ABN 70 050 038 170

Level 6, 10 Eagle Street | Brisbane | Queensland 4000 | Australia

GPO Box 1078 | Brisbane | Queensland 4001 | Australia

## **Proposed Disposal**

Chinalco Yunnan has entered into a joint venture agreement with YEX ("**JV Agreement**"), dated 15 February 2011 and amended by the Deed of Variation between YEX and the Company dated 2 September 2011, granting YEX the right to farm-in and subsequently earn up to a 55% interest in the Company's Cloncurry North Project and Waterford Project by incurring exploration expenditure of AU\$5 million on the projects over a three year period ("**Proposed Disposal**").

The Cloncurry North Project comprises three Exploration Permits for Minerals ("**EPM**"), EPM 12205 – Roseby East, EPM 15084 – Quamby and EPM 15095 – Clonagh. The Waterford Project consists of a single EPM, EPM 16393 – Waterford. The four EPMs are collectively referred to as the "**Properties**".

We have been advised the Proposed Acquisition and the Proposed Disposal are independent of each other. The IER provides our opinion as to whether or not each of the Proposed Transactions is "Fair" and "Reasonable" to the Non-Associated Shareholders. Each transaction has been assessed separately with separate opinions issued for each transaction.

Our assessment and our opinions of the Proposed Transactions is at 19 August 2011 ("**Assessment Date**").

The details of the Proposed Transactions are set out fully in the Explanatory Memorandum accompanying the Notice of Extraordinary General Meeting that is to be provided to the Company's Non-Associated Shareholders by the Directors in relation to the Proposed Transactions. We understand that this IER will accompany the Notice of General Meeting and Explanatory Memorandum.

## **Summary of Regulatory Requirements**

### **ASX Listing Rules**

The Proposed Transactions are each subject to Chapter 10 "*Transactions with Persons in a Position of Influence*" of the ASX Listing Rules ("**ASX Listing Rules**").

ASX Listing Rule 10.1 requires the approval of an entity's shareholders where a company proposes to acquire a substantial asset from, or dispose of a substantial asset to:

- a related party or an associate of a related party;
- a subsidiary or an associate of a subsidiary;
- a substantial shareholder or an associate of a substantial shareholder. A substantial shareholder is defined by the ASX Listing Rules as a shareholder with a relevant interest at any time in the six months prior to a proposed transaction, in at least 10% of the total votes attached to the voting securities; or
- a person whose relationship to the entity or a person referred to in the first three bullet points is such that in ASX's opinion, the transaction should be approved by the entity's shareholders.

An asset is substantial if its value, or the value of the consideration for it, is greater than 5% of the total equity interests of an entity as at the date of the last accounts provided to the ASX.

Listing Rule 10.10.2 requires that the Notice of Meeting to approve the Proposed Acquisition and Proposed Disposal be accompanied by a report from an independent expert stating whether each of the Proposed Acquisition and Proposed Disposal is "fair" and "reasonable" to the Non-Associated Shareholders.

Under the Proposed Acquisition, Chinalco Yunnan proposes to acquire a 51% equity interest in San Mu, an associate of a substantial shareholder of the Company (YCI - holding 85% of the total registered capital of San Mu and YEX - holding 15% of the total registered capital of San Mu).

Under the Proposed Disposal Chinalco Yunnan proposes to dispose of a 55% farm-in interest in the Properties to YEX, an associate of a substantial shareholder in the Company (being China Yunnan Copper (Australia) Investment and Development Co Ltd ("**CYC**")).

Accordingly, ASX Listing Rule 10.1 will apply to each of the Proposed Transactions.

### **Corporations Act 2001**

The Directors have sought legal advice whether the Proposed Transactions constitute the giving and the receipt of a financial benefit to related parties of the Company under Chapter 2E of the *Corporations Act 2001* ("**Corporations Act**"). The Directors have provided a statement to PKFCA that they are of the view the Proposed Transactions are not related party transactions under the Corporations Act. We have relied upon this statement and accordingly prepared the IER on this basis that the Proposed Transactions are not subject to Chapter 2E of the Corporations Act.

### **ASIC Regulatory Guides**

Neither the Corporations Act nor the ASX Listing Rules define the expression "fair" and "reasonable". However, guidance is provided by the Australian Securities and Investments Commission's ("**ASIC**") Regulatory Guides ("**RG**") that establish certain guidelines in respect of independent expert's reports under the Corporations Act. In particular, RG 111 "*Contents of Expert's Reports*" and RG 112 "*Independence of Experts*" have been considered.

PKFCA has not considered RG 76 "*Related Party Transactions*" as the Directors have stated the Proposed Transactions do not constitute a related party transaction subject to Chapter 2E of the Corporations Act.

### **PKFCA role**

PKFCA has been engaged to prepare an IER setting out our opinion as to whether the Proposed Transactions, individually, are fair and reasonable to the Non-Associated Shareholders.

## **Summary of Conclusions**

### **Conclusion - Proposed Acquisition**

In our opinion, the Proposed Acquisition is "**Fair**" and "**Reasonable**" to the Non-Associated Shareholders.

#### *Fair*

For the purposes of assessing whether the Proposed Acquisition is "fair" to the Non-Associated Shareholders, PKFCA has compared the assessed fair market value of a 51% equity interest in San Mu to the assessed fair market value of the consideration offered by Chinalco Yunnan.

The value of San Mu, on a control basis, was determined based on an asset-based valuation method on a going concern basis. In applying this method PKFCA used the Net Tangible Asset ("**NTA**") approach.

We determined the NTA of San Mu as at the Assessment Date based on its latest available financial statements as at 30 June 2011 and have made certain adjustments to reflect the assessed market value of the net assets of San Mu and arrived at the fair market value of San Mu.

In assessing the fair market value, we have adjusted the net assets to reflect the market value of San Mu's Laos Projects as valued by Roma Appraisals Limited ("**Roma Appraisals**") on 21 July 2011 and adjusted for a liability known as Specific Accounts Payable. We understand that this liability represents a grant from the Chinese Government Finance Department of Yunnan Provincial Government to sponsor exploration activities and is expected to be written off in full in the financial year ending 30 June 2012.

The Joint Venture Contract for the Establishment of the Joint Venture Yunnan Copper San Mu Mining Industry Co Ltd ("**San Mu JV Contract**"), as we understand, indemnifies the Company from the impact of any liability of San Mu regarding the Specific Accounts Payable.

We have also adjusted for the investment of the proposed consideration in San Mu, by the Company, as the invested funds will be utilised to complete an approximately AU\$2.8 million exploration program.

On the above basis, we have assessed fair market value of a 51% shareholding interest in San Mu as at the Assessment Date to be in the range of AU\$3.3 million to AU\$3.8 million. We have assessed the fair market value of the consideration offered by Chinalco Yunnan to be AU\$2.7 million. Therefore, as the assessed value of the asset being acquired exceeds the consideration offered, we conclude the Proposed Acquisition is "**Fair**" to the Company's Non-Associated Shareholders.

Set out below is the comparison between the assessed value of the 51% fair market value of San Mu and the Proposed Acquisition Consideration:

**Table 1: Conclusion - Fairness of Proposed Acquisition**

AU\$	Section	Low	High	Mid-point
Fair market value of a 51% equity interest in San Mu	9.2	3,344,301	3,807,279	3,575,790
Cash consideration of the Proposed Acquisition	9.3	2,697,331	2,697,331	2,697,331
<b>Conclusion</b>		<b>"Fair"</b>	<b>"Fair"</b>	<b>"Fair"</b>

**Source:** PKFCA analysis

### *Reasonable*

In accordance with the guidelines set out in RG 111, as the Proposed Acquisition is "Fair it is also "Reasonable". Accordingly, we conclude the Proposed Acquisition is "**Reasonable**".

Nonetheless, we have also considered various factors that we believe Non-Associated Shareholders should consider when deciding whether to accept or not to accept the Proposed Acquisition. Set out below is a summary of our assessment of the various factors.

The advantages of the Proposed Acquisition are summarised as follows:

- acquisition of an interest in new mineral deposits;
- obtain control of San Mu;
- potential commerciality of the Xinzhai Project, one of the four component projects of the Laos Projects; and
- potential infrastructure benefits, as the Laos Projects are within close proximity to an existing YEX processing plant.

The disadvantages of the Proposed Acquisition are summarised as follows:

- uncertainty around the future performance of San Mu and the Laos Projects given the early stage of the Laos Projects;
- volatility in commodity prices and foreign exchange rates affecting the Laos Projects valuation; and
- subject to Australian and Chinese government regulatory approvals.

Having regard to the above, in our opinion, the advantages outweigh the disadvantages.

## Conclusion - Proposed Disposal

In our opinion, the Proposed Disposal is "**Fair**" and "**Reasonable**" to the Non-Associated Shareholders.

### Fair

The consideration to be provided by YEX for a 55% interest in the Properties is not being directly invested in, or paid to, Chinalco Yunnan. The consideration, to the extent that it is expended, will be spent on the exploration of the Properties, of which the Company will only own 45%, if the Proposed Disposal is fully implemented.

In our opinion, the assessment of the "fairness" of the Proposed Disposal should take into account that the consideration payable under the Proposed Disposal, to the extent that it is expended, will be spent on the exploration of the Properties. Accordingly, Chinalco Yunnan will share in the benefits of such expenditure to the extent of the Company's 45% ownership of the Properties, if the Proposed Disposal is fully implemented.

In our opinion, for the purposes of assessing whether the Proposed Disposal is "fair" to the Non-Associated Shareholders, it can be assumed that if all the Proposed Disposal consideration is expended, then the value of the Properties may be increased by the same amount and the Company will own 45% of the Properties with the enhanced value.

On the above basis, for the purposes of assessing whether the Proposed Disposal is "fair" to the Non-Associated Shareholders, PKFCA compared the assessed fair market value of a 55% interest in the enhanced value of the Properties (i.e. the fair market value of the Properties, as assessed by Mining Associates, plus the consideration payable under the Proposed Disposal, assuming that it will be fully expended) with the assessed fair market value of the consideration payable by YEX.

Based on the valuation of the Properties conducted by Mining Associates, of between AU\$3.6 million and AU\$6.9 million, and the assessed fair market value of the consideration offered, as at the Assessment Date, of AU\$4.6 million, we have assessed the fair market value of a 55% interest in the Properties to be within the range of AU\$4.5 million to AU\$6.3 million. The assessed fair market value of the consideration offered falls within the valuation range of the 55% interest in the Properties, albeit at the lower end. Therefore, we conclude that the Proposed Disposal is "**Fair**" to the Non-Associated Shareholders.

**Table 2: Conclusion - Fairness of Proposed Disposal**

AU\$	Section	Low	High	Preferred
Fair market value of the Properties before expenditure of the Proposed Disposal Consideration	10.2	3,626,000	6,888,000	4,850,000
Add: Proposed Disposal Consideration	10.4	4,627,667	4,627,667	4,627,667
<b>Fair market value of the Properties after expenditure of the Proposed Disposal Consideration</b>		<b>8,253,667</b>	<b>11,515,667</b>	<b>9,477,667</b>
Fair market value of a 55% interest in the Properties		4,539,517	6,333,617	5,212,717
Fair market value of the Proposed Disposal Consideration	10.4	4,627,667	4,627,667	4,627,667
<b>Premium / (Deficiency) of Proposed Disposal Consideration as compared with Fair market value of a 55% interest in the Properties</b>		88,150	(1,705,950)	(585,050)
		1.9%	(26.9%)	(11.2%)
<b>Conclusion</b>		<b>"Fair"</b>	<b>"Not Fair"</b>	<b>"Not Fair"</b>

Source: PKFCA analysis

### Reasonable

As the Proposed Disposal is "Fair", it is also "Reasonable" in accordance with the guidelines set out in RG 111. Accordingly, we conclude the Proposed Disposal is "**Reasonable**".

Nonetheless, we have also considered various factors that we believe Non-Associated Shareholders should consider when deciding whether to accept or not to accept the Proposed Disposal. Set out below is a summary of our assessment of the various factors.

The advantages of the Proposed Disposal are summarised as follows:

- future capital committed towards exploration of the Properties (up to an amount of AU\$5 million) will be funded by YEX;
- provides for continued participation by the Company in any future growth potential in the Properties (without further expenditure by the Company);
- the Properties are a low internal priority of the Company and, in the absence of the Proposed Disposal, further exploration on the Properties would not have occurred for some time; and
- fees, rents, rates and other monies levied or assessed upon the Properties (exclusive of the exploration expenditure payable by YEX pursuant to the Proposed Disposal) under Queensland's *Mineral Resources Act 1989* are payable by YEX.

The disadvantages of the Proposed Disposal are summarised as follows:

- reduced ownership participation in the Properties in the event of any significant mineral discoveries;
- forgo opportunity to realise cash by sale of the Properties; and
- Chinalco Yunnan's interest could be diluted further following the end of the JV Agreement, if the Company does not contribute its share of any costs.

Having regard to the above, in our opinion, the advantages outweigh the disadvantages.

## Other matters

### *Non-Associated Shareholders' individual circumstances*

Our analysis has been undertaken, and our conclusions are expressed, at an aggregate level. PKFCA has not considered the effect of the Proposed Transactions on the particular circumstances of individual Non-Associated Shareholders. Some individual Non-Associated Shareholders may place a different emphasis on various aspects of the Proposed Transactions from that adopted in this IER. Accordingly, individual Non-Associated Shareholders may reach different conclusions as to whether or not the Proposed Transactions are "fair" and "reasonable" based on their individual circumstances. As the decision of an individual Non-Associated Shareholder in relation to the Proposed Transactions may be influenced by their particular circumstances (including their taxation position), Non-Associated Shareholders are advised to seek their own independent advice.

### *Fair market value*

For the purposes of our opinion, the term "fair market value" is defined as the "*price that would be negotiated in an open and unrestricted market between a knowledgeable, willing, but not anxious purchaser, and a knowledgeable, willing, but not anxious vendor, acting at arm's length*".

### *Special value*

We have not considered special value in forming our opinion as to whether the Proposed Transactions are "fair". Special value is the amount that a potential acquirer may be prepared to pay for a business in excess of the fair market value. This premium represents the value to the particular potential acquirer of potential economies of scale, reduction in competition, other synergies and cost savings arising from the acquisition under consideration not available to likely purchasers generally. Special value is not normally considered in the assessment of fair market value as it relates to the individual circumstances of special purchasers.

### *Current market conditions*

Our opinions are based on economic, market and other conditions prevailing at the Assessment Date. Such conditions can change significantly over relatively short periods of time. Changes in those conditions may result in any valuation or other opinion becoming quickly outdated and in need of revision. PKFCA reserves the right to revise any valuation or other opinion, in the light of material information existing at the valuation date that subsequently becomes known to PKFCA.

### *Currencies referred to throughout the IER*

A number of currencies have been referred to throughout the IER.

The Proposed Acquisition involves the use of RMB, which is the official currency of mainland China. The Chinese Yuan ("**CNY**") is 1 unit of RMB. Calculations have been made in the IER using the spot AU\$/CNY exchange rates, as quoted by the Reserve Bank of Australia ("**RBA**") as at the Assessment Date. For the avoidance of doubt and to aide the reader, PKFCA has referred to all AU\$/CNY exchange rates as AU\$/RMB.

The Proposed Disposal involves the use of AU\$ and there is no need for foreign currency translations.

### *Limitations*

The IER has been prepared at the request of the Directors for the sole benefit of the Directors and the Non-Associated Shareholders to assist them in their decision whether to accept or reject each of the Proposed Transactions. This IER is to accompany the Explanatory Memorandum to be sent to the Non-Associated Shareholders to consider the Proposed Transactions and was not prepared for any other purpose.

This IER and the information contained herein may not be relied upon by anyone other than the Directors and Non-Associated Shareholders without the written consent of PKFCA. PKFCA accepts no responsibility to any person other than the Directors and Non-Associated Shareholders in relation to this IER.

The IER should not be used for any other purpose and PKFCA does not accept any responsibility for its use outside this purpose. Except in accordance with the state purpose, no extract, quote or copy of our IER, in whole or in part, should be reproduced without our written consent, as to the form and context in which it may appear.

PKFCA has consented to the inclusion of the IER with the Explanatory Memorandum. Apart from this IER, PKFCA is not responsible for the contents of the Explanatory Memorandum or any other document associated with the Proposed Transactions. PKFCA acknowledges that this IER may be lodged with regulatory authorities.

### *Summary*

This summary should be read in conjunction with the attached IER that sets out in full the purpose, scope, basis of evaluation, limitations, information relied upon, analysis and our findings.

### *Glossary*

A glossary of terms used throughout this IER is set out in Appendix 1.

## Sources of Information

Appendix 2 identifies the information referred to, and relied upon by PKFCA during the course of preparing this IER and forming our opinion.

## Financial Services Guide

PKFCA holds an Australian Financial Services Licence that authorises us (inter alia) to provide reports for the purposes of financial product advice for derivatives limited to old law securities, options contracts and warrants and securities. A Financial Services Guide is attached at the front of this IER.

Yours sincerely



**Fiona Hansen**  
Director



**Peter Cornell**  
Director

## TABLE OF CONTENTS

<b>FINANCIAL SERVICES GUIDE .....</b>	<b>2</b>
<b>1 PURPOSE, SCOPE AND LIMITATIONS .....</b>	<b>14</b>
1.1 PURPOSE .....	14
1.2 SCOPE .....	14
1.3 REGULATORY REQUIREMENTS .....	14
1.4 BASIS OF ASSESSMENT .....	15
1.5 LIMITATIONS .....	17
<b>2 PROPOSED TRANSACTIONS .....</b>	<b>20</b>
2.1 OVERVIEW .....	20
2.2 PROPOSED ACQUISITION .....	20
2.3 PROPOSED DISPOSAL .....	22
2.4 CORPORATE STRUCTURE FOLLOWING THE PROPOSED TRANSACTIONS .....	24
2.5 RATIONALE FOR THE PROPOSED TRANSACTIONS .....	25
<b>3 PROFILE OF CHINALCO YUNNAN COPPER RESOURCES LTD.....</b>	<b>27</b>
3.1 OVERVIEW .....	27
3.2 KEY MILESTONES.....	27
3.3 COMPANY OPERATIONS .....	28
3.4 KEY PERSONNEL .....	29
3.5 CAPITAL STRUCTURE AND OWNERSHIP .....	30
3.6 SHARE PRICE ANALYSIS.....	31
3.7 STATEMENT OF COMPREHENSIVE INCOME.....	34
3.8 STATEMENT OF FINANCIAL POSITION .....	35
3.9 SWOT ANALYSIS .....	36
<b>4 PROFILE OF YUNNAN COPPER INDUSTRY SAN MU MINING CO. LTD.....</b>	<b>37</b>
4.1 OVERVIEW .....	37
4.2 COMPANY OPERATIONS.....	37
4.3 CAPITAL STRUCTURE AND OWNERSHIP .....	39
4.4 STATEMENT OF COMPREHENSIVE INCOME.....	39
4.5 STATEMENT OF FINANCIAL POSITION .....	40
<b>5 ECONOMIC OVERVIEW .....</b>	<b>42</b>
5.1 INTRODUCTION .....	42
5.2 AUSTRALIAN ECONOMIC OVERVIEW .....	42
5.3 LAOTIAN ECONOMIC OVERVIEW .....	43
5.4 CONCLUSION .....	43
<b>6 INDUSTRY OVERVIEW .....</b>	<b>44</b>
6.1 OVERVIEW AUSTRALIA .....	44
6.2 OVERVIEW LAOS .....	44
6.3 COMMODITY PRICES .....	45
<b>7 SUMMARY OF TECHNICAL SPECIALISTS' REPORTS .....</b>	<b>47</b>
7.1 ROMA APPRAISALS VALUATION REPORT .....	47
7.2 MINING ASSOCIATES VALUATION REPORT.....	48
<b>8 VALUATION METHODOLOGY.....</b>	<b>50</b>
8.1 OVERVIEW .....	50
8.2 PROPOSED ACQUISITION.....	50
8.3 PROPOSED DISPOSAL .....	51
<b>9 EVALUATION OF THE PROPOSED ACQUISITION .....</b>	<b>52</b>
9.1 FAIR MARKET VALUE OF SAN MU .....	52
9.2 CONCLUSION AS TO FAIR MARKET VALUE OF SAN MU .....	53
9.3 VALUATION OF PROPOSED ACQUISITION CONSIDERATION.....	54
9.4 FAIRNESS ASSESSMENT.....	54

9.5	REASONABLENESS ASSESSMENT .....	54
9.6	CONCLUSION .....	56
<b>10</b>	<b>EVALUATION OF THE PROPOSED DISPOSAL .....</b>	<b>57</b>
10.1	APPROACH .....	57
10.2	VALUATION OF PROPERTIES .....	57
10.3	VALUATION CROSS CHECK .....	57
10.4	VALUATION OF PROPOSED DISPOSAL CONSIDERATION.....	58
10.5	FAIRNESS ASSESSMENT.....	59
10.6	REASONABLENESS ASSESSMENT .....	61
10.7	CONCLUSION .....	62
<b>11</b>	<b>QUALIFICATIONS AND DECLARATIONS .....</b>	<b>63</b>
11.1	QUALIFICATIONS.....	63
11.2	INDEPENDENCE .....	63
11.3	DISCLAIMER.....	64
<b>APPENDIX 1</b>	<b>GLOSSARY.....</b>	<b>65</b>
<b>APPENDIX 2</b>	<b>SOURCES OF INFORMATION.....</b>	<b>67</b>
<b>APPENDIX 3</b>	<b>VALUATION METHODS .....</b>	<b>68</b>
<b>APPENDIX 4</b>	<b>TECHNICAL SPECIALIST VALUATION REPORTS.....</b>	<b>70</b>

## 1 PURPOSE, SCOPE AND LIMITATIONS

### 1.1 Purpose

PKFCA has been appointed by the Directors to prepare an IER to the Non-Associated Shareholders expressing our opinion as to whether or not each of the Proposed Acquisition and Proposed Disposal is "Fair" and "Reasonable" to the Non-Associated Shareholders.

This IER is to accompany an Explanatory Memorandum required to be provided to the Non-Associated Shareholders and has been prepared to assist the Directors in fulfilling their obligation to provide the Non-Associated Shareholders with full and proper disclosure to enable them to assess the merits of the Proposed Transactions and to decide whether to accept the Proposed Transactions.

### 1.2 Scope

The scope of the procedures we undertook in forming our opinion on whether each of the Proposed Transactions is "Fair" and "Reasonable" were limited to those procedures we believed were required in order to form our opinion. Our procedures involved an analysis of financial information and accounting records. This did not include verification work, nor constitute an audit or assurance engagement in accordance with Australian Auditing and Assurance Standards and consequently does not enable us to become aware of all significant matters that might be identified in an audit or assurance engagement. Accordingly, we do not express an audit or assurance engagement opinion.

The assessment of whether the Proposed Transactions are "Fair" and "Reasonable" necessarily requires determining the "fair market value" of various securities, assets and interests.

For the purposes of our opinion, the term "fair market value" is defined as "*the price that would be negotiated in an open and unrestricted market between a knowledgeable, willing, but not anxious purchaser and a knowledgeable, willing, but not anxious vendor, acting at arm's length*".

### 1.3 Regulatory Requirements

The Proposed Transactions are each subject to Chapter 10 "*Transactions with Persons in a Position of Influence*" of the ASX Listing Rules.

#### **ASX Listing Rules**

ASX Listing Rule 10.1 requires the approval of an entity's non-associated shareholders where a listed company proposes to acquire a substantial asset from, or dispose of a substantial asset to:

- a related party or an associate of a related party;
- a subsidiary or an associate of a subsidiary;
- a substantial shareholder or an associate of a substantial shareholder. A substantial shareholder is defined by the ASX Listing Rules as a shareholder with a relevant interest at any time in the six months prior to a proposed transaction, in at least 10% of the total votes attached to the voting securities; or
- a person whose relationship to the entity or a person referred to in the first three bullet points is such that in ASX's opinion, the transaction should be approved by the entity's shareholders.

An asset is substantial if its value, or the value of the consideration for it, is greater than 5% of the total equity interests of the entity as at the date of the last accounts provided to the ASX.

ASX Listing Rule 10.10.2 requires that the notice of meeting to approve such a proposal be accompanied by a report from an independent expert stating whether the proposal is "fair" and "reasonable" to the Non-Associated Shareholders.

ASX Listing Rule 10.1 applies to each of the Proposed Transactions as:

- Chinalco Yunnan is acquiring a 51% equity interest in Sa Mu, which is ultimately wholly-owned by YCI;
- YEX is acquiring a 55% farm-in interest in the Properties owned by Chinalco Yunnan and YEX is wholly-owned by YCI;
- YCI owns 83.33% of CYC, which owns 21.25% of Chinalco Yunnan; and
- the value of the 51% interest in San Mu to be acquired by Chinalco Yunnan under the Proposed Acquisition and the value of the 55% interest in the Properties to be acquired by YEX under the Proposed Disposal, in each case, exceeds 5% of the total equity interest of Chinalco Yunnan as at 31 December 2010.

### **Corporations Act 2001**

The Directors have sought legal advice whether the Proposed Transactions constitute the giving and the receipt of a financial benefit to related parties of the Company under Chapter 2E of the Corporations Act. The Directors have provided a statement to PKFCA that they are of the view the Proposed Transactions are not related party transactions. We have relied upon this statement and accordingly have prepared the IER on the basis that the Proposed Transactions are not subject to Chapter 2E of the Corporations Act.

## **1.4 Basis of Assessment**

### **RG 111 and RG 112**

Neither the Corporations Act nor the ASX Listing Rules define the expression "fair" and "reasonable". However, guidance is provided by ASIC's RG's, which establish certain guidelines in respect of independent expert's reports required under the Corporations Act. In particular, RG 111 "*Content of Expert's Reports*" and RG 112 "*Independence of Experts*" have been considered.

PKFCA notes that pursuant to RG 111, separate assessments as to the fairness and reasonableness of each of the Proposed Transactions are required and these assessments are consistent with the assessment of control transactions.

### *Fair*

While the Proposed Transactions are not considered related party transactions, RG111.52 indicates that transactions under ASX Listing Rule 10 and related party transactions under the Corporations Act should be analysed on the bases as set out in RG111.53-63.

RG 111.57 indicates a proposed transaction is "fair" if the value of the asset or financial benefit to be provided by the entity to the related party is equal to or less than the value of the consideration being provided to the entity. This comparison should be made assuming a knowledgeable and willing, but not anxious, buyer and a knowledgeable and willing, but not anxious, seller acting at arm's length. In valuing the financial benefit/asset given and the consideration received by the entity, an expert should take into account all material terms of the proposed transaction.

Any special value of the 'target' to a particular 'bidder' (e.g. synergies that are not available to other bidders) should not be taken into account under this comparison, but should be considered under the test of "reasonable".

The assessment should be made assuming 100% ownership of the 'target' and irrespective of whether the consideration is scrip or cash. The expert should not consider the percentage holding of the 'bidder' or its associates in the 'target' when making this comparison.

### *Reasonable*

RG111.60 indicates a proposed transaction is "reasonable" if it is "fair". It might also be "reasonable" if, despite being "not fair", the expert believes there are sufficient reasons for members to vote for the proposal. When deciding whether a proposed transaction is "reasonable", factors that an expert might consider include:

- the financial situation and solvency of the entity, including the factors set out in RG 111.26, if the consideration for the financial benefit is cash;
- opportunity costs;
- the alternative options available to the entity and the likelihood of those options occurring;
- the entity's bargaining position;
- whether there is selective treatment of any security holder, particularly the related party;
- any special value of the transaction to the purchaser, such as particular technology or the potential to write off outstanding loans from the target; and
- the liquidity of the market in the entity's securities.

PKFCA has not considered RG 76 as the Directors are of the view the Proposed Transactions do not constitute related party transactions. We have been instructed not to prepare the IER on this basis.

### *APES 225*

APES 225 "Valuations Services" issued by the Accounting Professional & Ethical Standards Board Limited sets out mandatory requirements for the provision of quality and ethical valuation services. PKFCA has complied with this standard in the preparation of this IER.

### *General requirements in relation to the IER*

In preparing the IER, ASIC requires the independent expert, when deciding on the form of analysis for a report, to bear in mind that the main purpose of the report is to adequately deal with the concerns that could reasonably be anticipated for those persons affected by the Proposed Transactions. We, therefore, in preparing the IER have considered the necessary legal requirements and guidance of the Corporations Act, ASIC's RG's and commercial practice, as if the IER was required for legal purposes.

The IER includes the following information and disclosures:

- particulars of any relationship, pecuniary or otherwise, whether existing presently or at any time within the last two years, between PKF (East Coast Partnership) or PKFCA and any of the parties to the Proposed Transactions;
- the nature of any fee or pecuniary interest or benefit, whether direct or indirect, that we have received or will or may receive for or in connection with the preparation of the IER;
- in the IER, that PKFCA has been appointed as independent expert for the purposes of providing an IER for inclusion in the Explanatory Memorandum;
- that we have relied on information provided by the Directors and management of Chinalco Yunnan and San Mu. We have not carried out any form of audit or independent verification of the information provided; and
- that we have received representations from the Directors in relation to the completeness and accuracy of the information provided to us for the purposes of the IER.

## 1.5 Limitations

### 1.5.1 General

PKFCA has consented to the inclusion of the IER with the Explanatory Memorandum to be issued by Chinalco Yunnan. Apart from the IER, PKFCA is not responsible for the contents of the Explanatory Memorandum, any other document or announcement associated with the Proposed Transactions. PKFCA acknowledges that its IER may be lodged with the regulatory authorities, including the ASX.

The IER should not be used for any other purpose and PKFCA does not accept any responsibility for its use outside this purpose. Except in accordance with the stated purpose, no extract, quote or copy of our IER, in whole or in part, should be reproduced without our written consent, as to the form and context in which it may appear.

### 1.5.2 Non-Associated Shareholders' individual circumstances

Our analysis has been undertaken, and our conclusions are expressed, at an aggregate level. Accordingly, PKFCA has not considered the effect of the Proposed Transactions on the particular circumstances of individual Non-Associated Shareholders. Some individual Non-Associated Shareholders may place a different emphasis on various aspects of the Proposed Transactions from that adopted in this IER. Accordingly, individual Non-Associated Shareholders may reach different conclusions as to whether or not the Proposed Acquisition and the Proposed Disposal are fair and reasonable in their individual circumstances. As the decision of an individual Non-Associated Shareholder in relation to the Proposed Transactions may be influenced by their particular circumstances (including their taxation position), Non-Associated Shareholders are advised to seek their own independent advice.

### 1.5.3 Current market conditions

Our opinion is based on economic, market and other conditions prevailing at the Assessment Date. Such conditions can change significantly over relatively short periods of time. Changes in those conditions may result in any valuation or other opinion becoming quickly outdated and in need of revision. PKFCA reserves the right to revise any valuation or other opinion, in the light of material information existing at the valuation date that subsequently becomes known to PKFCA.

### 1.5.4 Reliance on information

This IER is based upon financial and other information provided by the Directors and management of Chinalco Yunnan and San Mu, a valuation report prepared by Mining Associates on the fair market value of the Properties ("**Mining Associates Valuation Report**") and a valuation report prepared by Roma Appraisals on the fair market value of the Laos Projects ("**Roma Appraisals Valuation Report**"). Mining Associates and Roma Appraisals are collectively referred to as the "**Technical Specialists**" and their valuation reports are collectively referred to as the "**Technical Specialists' Valuation Reports**".

PKFCA has considered and relied upon this information. PKFCA believes the information provided to be reliable, complete and not misleading, and we have no reason to believe that any material facts have been withheld.

It was not PKFCA's role to undertake, and PKFCA has not undertaken, any commercial, technical, financial, legal, taxation or other due diligence, other similar investigative activities or valuations in respect of the Proposed Transactions. PKFCA understands that the Directors have been advised by legal, accounting and other appropriate advisors in relation to such matters, as necessary. PKFCA does not provide any warranty or guarantee as to the existence, extent, adequacy, effectiveness and/ or completeness of any due diligence or other similar investigative activities by the Directors and/or their advisors.

PKFCA does not provide any warranty or guarantee that its inquiries have identified or verified all of the matters which an audit, extensive examination or "due diligence" investigation might disclose. An opinion as to whether a corporate transaction is "fair" and "reasonable" is in the nature of an overall opinion, rather than an audit or detailed investigation and it is in this context that PKFCA advises that it is not in a position, nor is it practical for PKFCA, to undertake such an extensive verification exercise.

It is understood that except where noted, the accounting information provided to PKFCA was prepared in accordance with generally accepted accounting principles (including adoption of Australian Equivalents to International Financial Reporting Standards) and prepared in a manner consistent with the method of accounting used by the Company in previous accounting periods.

### **1.5.5 Assumptions**

In forming our opinion, we made certain assumptions, including:

- that matters such as retention of key personnel, title to assets, compliance with laws and regulations and contracts in place are in good standing, and will remain so, and that there are no material legal proceedings, other than as publicly disclosed;
- information in relation to the Proposed Transactions that is distributed to Non-Associated Shareholders, or any information issued to a statutory body is complete, accurate and fairly presented in all material respects;
- publicly available information relied on by us is accurate, complete and not misleading;
- if the Proposed Transactions are implemented, that the Proposed Transactions will be implemented in accordance with its stated terms;
- the legal mechanisms to implement the Proposed Transactions are correct and effective;
- subject to the review undertaken in paragraphs Sections 1.5.6 and 1.5.7, we have relied on the Technical Specialists' Valuation Reports, which set out their respective opinions as to the fair market values of the Laos Projects and the Properties; and
- each of the Technical Specialists have provided their consent for PKFCA to rely on their report and for its inclusion in the IER. As at the date of this IER the Technical Specialists have not withdrawn this consent. The Technical Specialists' Valuation Reports are attached in Appendix 4 of this IER.

### **1.5.6 Review of the Mining Associates Valuation Report**

We have undertaken the following limited review of the Mining Associates Valuation Report in order to satisfy our self as to its reasonableness:

- the methodology and approach undertaken;
- that the report is consistent with our knowledge and understanding of the Properties; and
- the qualifications and experience of the provider appear to be appropriate.

Based on our limited review of the Mining Associates Valuation Report, nothing has come to our attention that would lead us to believe that the conclusions reached in that report are not reliable and fit for the purpose of this IER.

### **1.5.7 Review of the Roma Appraisals Valuation Report**

We have undertaken the following limited review of the Roma Appraisals Valuation Report in order to satisfy our self as to its reasonableness:

- the methodology and approach undertaken;
- that the report is consistent with our knowledge and understanding of San Mu and the Laos Projects; and
- the qualifications and experience of the provider appear to be appropriate.

Based on our limited review of the Roma Appraisals Valuation Report, nothing has come to our attention that would lead us to believe that the conclusions reached in that report are not reliable and fit for the purpose of this IER.

The Roma Appraisals Valuation Report has figures stated in RMB. Where appropriate, PKFCA has translated to AU\$ using a foreign exchange rate provided by the RBA as at the Assessment Date.

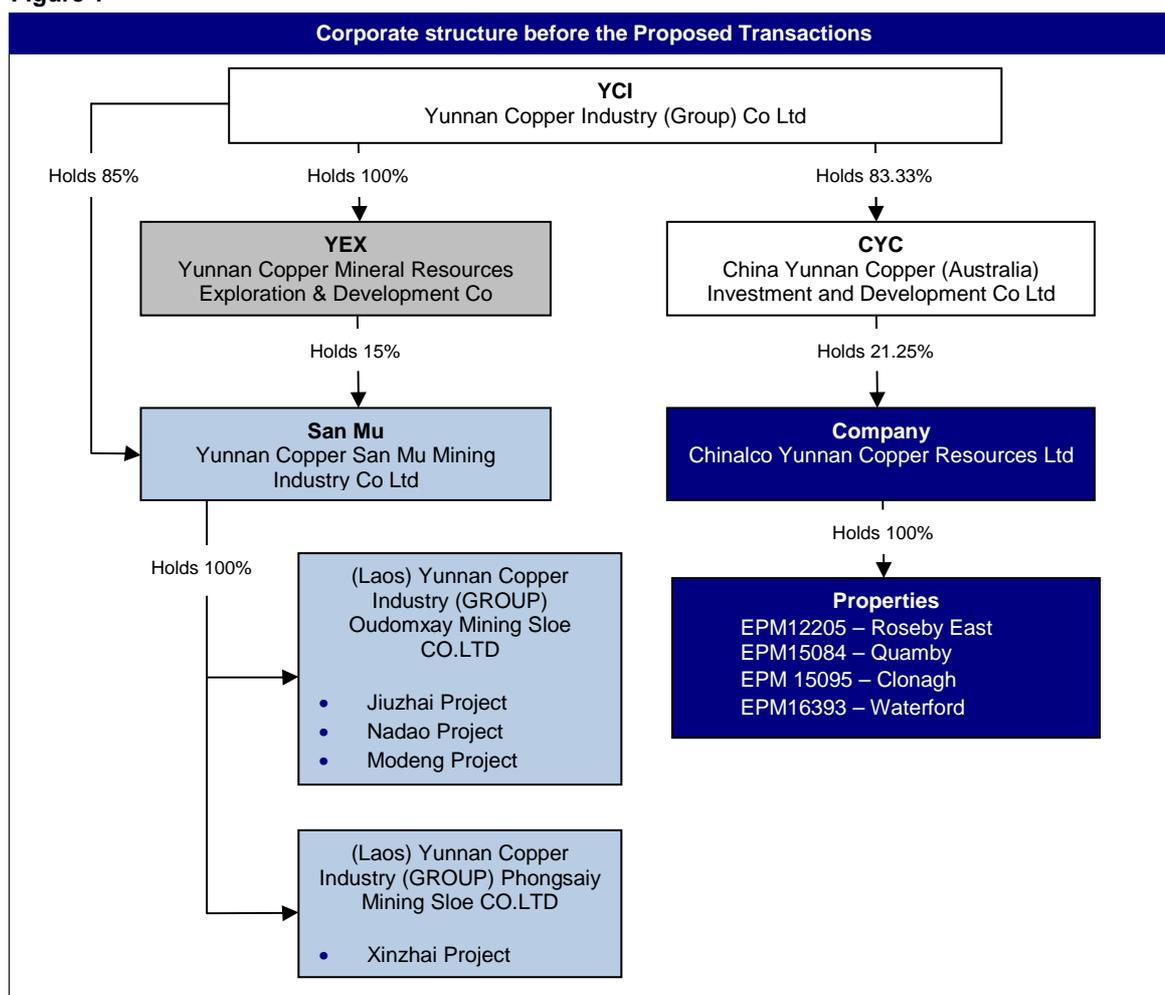
## 2 PROPOSED TRANSACTIONS

### 2.1 Overview

On 3 February 2011, the Directors announced to the ASX their intention to enter into the Proposed Acquisition and the Proposed Disposal.

The diagram below outlines the corporate structure and relationship between the entities involved in the Proposed Transactions. The diagram excludes other interests each party may hold that are not directly affected by the Proposed Transactions.

**Figure 1**



**Source:** Chinalco Yunnan management

**Note:** The above diagram excludes assets that are not directly affected by the Proposed Transactions

### 2.2 Proposed Acquisition

On 3 February 2011 the Directors announced to the ASX that the Company has entered into an agreement with YEX for Chinalco Yunnan to acquire a 51% equity interest in San Mu, via the subscription of new shares in San Mu to Chinalco Yunnan. Consequently, YEX's and YCI's shareholdings in San Mu will be diluted due to the issue of new shares to the Company.

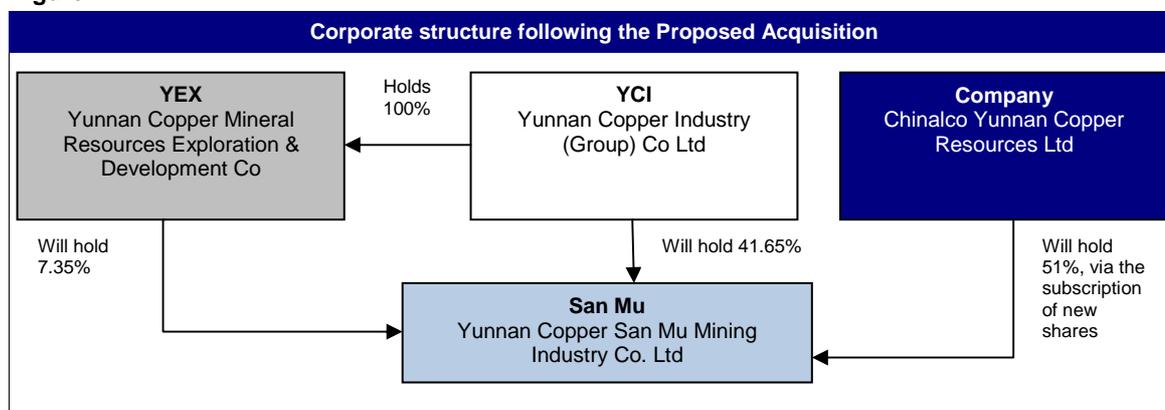
San Mu is a Chinese registered company holding four copper and silver projects in northern Laos, via two wholly-owned subsidiaries.

The consideration for the Proposed Acquisition is the AU\$ equivalent of RMB17,827,700, payable in cash, in three stages over a 12 month period ("**Proposed Acquisition Consideration**").

The investment in San Mu will be utilised to complete an approximately AU\$2.8 million exploration program.

The resulting effect on the corporate structure of San Mu following the approval of the Proposed Acquisition is summarised below:

**Figure 2**



**Source:** Chinalco Yunnan management

**Note:** San Mu will still hold 100% equity interest in its two respective subsidiaries. The above diagram excludes other assets that are not directly affected by the Proposed Transactions

## 2.2.1 Summary of Key Terms

The Proposed Acquisition is governed by three key documents, being:

- the Articles of Association of San Mu ("**Articles of Association**");
- the Agreement on Capital Increase ("**Capital Increase Agreement**"); and
- the San Mu JV Contract.

In general, the keys terms of the documents are outlined below:

- San Mu's legal status will be modified to become a Chinese-foreign joint venture in accordance with the San Mu JV Contract. San Mu will be issued a new business license ("**San Mu Business License**");
- San Mu will operate for a period of 20 years from the issue of the San Mu Business License;
- the registered capital of San Mu shall be increased by RMB17,827,700 (i.e. the Company's cash contribution), bringing the total registered capital of San Mu to RMB37,827,700;
- the increase in registered capital shall be contributed by Chinalco Yunnan, payable in cash. The cash payment shall be the AU\$ equivalent of RMB17,827,700. The exchange rate of RMB for AU\$ is to be based on the buying rate of the Bank of China on the actual day of the cash contribution;
- The Company's cash contribution will be made in three instalments as set out as follows:
  - RMB6 million of increased registered capital shall be paid on the Contribution Date (defined as the first contribution to the increased capital by the Company);
  - RMB6 million of increased registered capital shall be paid within 180 days after the issue of the San Mu Business Licence; and
  - RMB5.8 million of increased registered capital shall be paid within 360 days after the issue of the San Mu Business Licence.
- The final San Mu shareholding after the third and final payment of increased capital by Chinalco Yunnan is set out as follows:

- YCI - registered capital contribution of RMB17 million - 41.65%;
- YEX - registered capital contribution of RMB3 million - 7.35%; and
- Chinalco Yunnan - registered capital contribution of RMB17.8 million - 51%.

The Capital Increase Agreement states the relative shareholding under the Proposed Acquisition is calculated on a net asset position. The Directors have advised that Zhonghe Appraisals Co Ltd were commissioned in September 2010 to perform a valuation of San Mu as at 30 June 2010. The purpose of this valuation was for the existing shareholders of San Mu to determine the minimum subscription price the Company would pay for new shares based on the value of San Mu.

Zhonghe Appraisals Co Ltd concluded the value of San Mu was RMB17,807,400. Chinalco Yunnan was offered 51% of San Mu for RMB17,827,700, which would be issued as new share capital. The notional value of San Mu after this contribution would be RMB35,635,100 and the Company's stake would be 51%.

Furthermore, the Directors have advised that under the Chinese company incorporation system, a company's total registered capital and shareholding percentage need only to be recorded, not the number of shares issued. The Directors have confirmed that the Company's equity interest in San Mu after the Proposed Acquisition would be 51%.

- Once Chinalco Yunnan has paid its registered contribution in full, there is no requirement to provide any further funds to or on behalf of San Mu;
- The Company shall appoint three directors (out of a total of five) to San Mu's board of directors;
- After the issue of the San Mu Business License, disputes against San Mu relating to pre-existing debts (i.e. debts existing prior to Chinalco Yunnan's contribution and becoming a shareholder in San Mu) will be dealt with and costs covered in full by YCI and YEX;
- The Articles of Association, Capital Increase Agreement and San Mu JV Contract are silent on any operational targets that are to be achieved after the implementation of the Proposed Acquisition; and
- The Proposed Acquisition is subject to government approvals in Australia and China.

## 2.3 Proposed Disposal

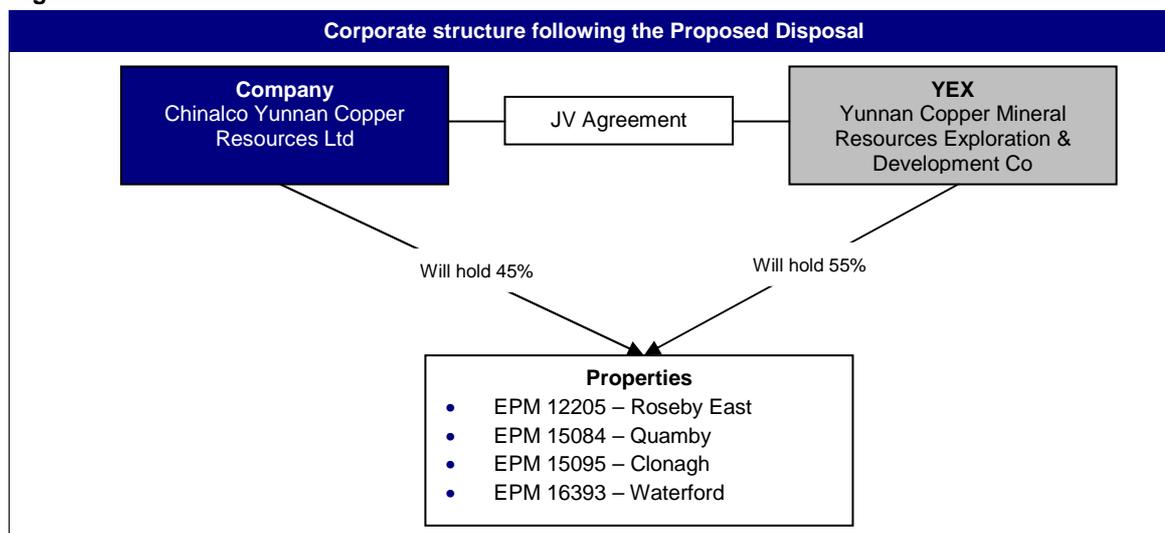
On 3 February 2011 Chinalco Yunnan announced to the ASX that a Letter of Intent ("**LOI**") had been signed between the Company and YEX. The LOI proposed that the Company and YEX will enter into a JV Agreement granting YEX the exclusive right to farm-in and earn up to a 55% interest in the Properties, free of all encumbrances ("**Farm-in Interest**"), by incurring a minimum exploration expenditure of AU\$5 million on the Properties over a three year period.

The minimum exploration expenditures noted above is referred to as the "**Proposed Disposal Consideration**".

On 21 March 2011 Chinalco Yunnan announced to the ASX that the Company and YEX executed the JV Agreement.

The expected corporate structure following the Proposed Disposal, assuming YEX fulfils the minimum exploration expenditure requirements, is summarised below:

**Figure 3**



**Source:** JV Agreement and Chinalco Yunnan management

**Notes:** Diagram assumes YEX fulfils the AU\$5 million minimum exploration expenditure requirement. The above diagram excludes other assets not directly affected by the Proposed Transactions

### 2.3.1 Summary of Key Terms of the JV Agreement

Outlined below is a summary of the key terms of the JV Agreement (as amended by the Deed of Variation dated 2 September 2011):

- the JV Agreement commences when the Company obtains the necessary shareholder approvals in relation to the transactions contemplated by the JV Agreement ("**JV Agreement Commencement Date**");
- the JV Agreement ends on 15 February 2014, or such later date as agreed by Chinalco Yunnan and YEX ("**JV Agreement End Date**");
- YEX shall earn up to a 55% participating interest in the Properties by spending a total of AU\$5 million in exploration expenditure on or before the JV Agreement End Date, as follows:

Tranche 1	spending AU\$1.2 million in exploration expenditure on or before the date being one year after the JV Agreement Commencement Date to earn a 10% participating interest in the Properties;
Tranche 2	spending an extra AU\$1.8million in exploration expenditure on or before the date being two years after the JV Agreement Commencement Date to earn an extra 20% participating interest in the Properties; and
Tranche 3	spending extra AU\$2 million in exploration expenditure on or before the date being three years after the JV Agreement Commencement Date, but on or before the JV Agreement End Date, to earn an extra 25% participating interest in the Properties.

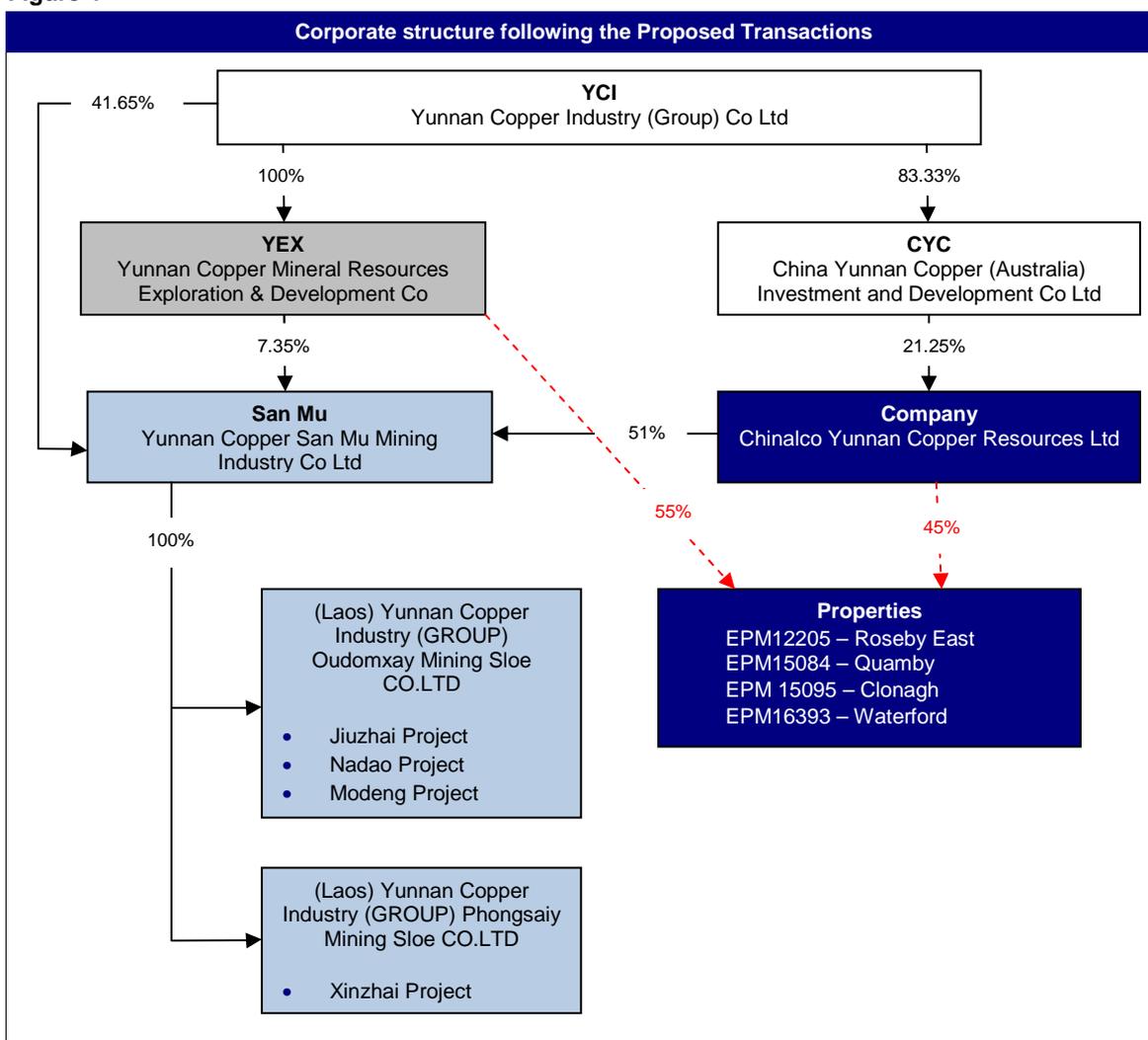
- Chinalco Yunnan is currently the 100% legal owner of the Properties and the assignment and registration of the incremental 10%, 20% and 25% participating interests (leading to a total of 55% participating interest) to YEX will be effected in accordance with the staged exploration expenditure outlined above. That is:
  - once YEX spends AU\$1.2 million in exploration expenditure on or before the date being one year after the JV Agreement Commencement Date, the Company will assign and register a 10% participating interest in the Properties to YEX;

- once YEX spends and additional AU\$1.8 million in exploration expenditure on or before the date being two years after the JV Agreement Commencement Date, the Company will assign and register a further 20% participating interest in the Properties to YEX; and
- once YEX spends an additional AU\$2 million in exploration expenditure on or before the date being three years after the JV Agreement Commencement Date, but on or before the JV Agreement End Date, the Company will assign and register a further 25% participating interest in the Properties to YEX.
- in the event of partial expenditure below the stage exploration expenditure obligations, YEX will not be entitled to a proportionate participating interest in the Properties. For example, if YEX spent AU\$500,000 in exploration expenditure (and no more), YEX would not be entitled to any participating interest in the Properties. If YEX spent AU\$1.2 million in exploration expenditure on or before the date being one year after the JV Agreement Commencement Date, and subsequently spent an additional AU\$500,000 in exploration expenditure (and no more), YEX would only be entitled to a 10% participating interest in the Properties;
- if YEX does not satisfy the minimum exploration expenditure requirement (to keep the Properties in good standing) prior to the JV Agreement End Date, the JV Agreement shall be terminated and YEX shall have no further obligations;
- during the minimum expenditure farm-in period, YEX shall have sole and exclusive rights to carry out exploration on and have non-exclusive possession of the Properties;
- when YEX has performed its farm-in expenditure obligations, a joint venture will be formed between YEX and the Company with the following participating interests:
  - YEX - 55%; and
  - Chinalco Yunnan - 45%.
- the joint venture shall have an operating committee, which shall have management and control of joint venture operations and all other matters affecting the joint venture. YEX and Chinalco Yunnan will each have one member on the operating committee, and each party shall have a block vote on the operating committee, proportionate to its respective participating interest. Decisions of the operating committee shall be made by majority vote representing at least 55% of the participating interests;
- YEX will be the operator of the joint venture and, subject to the control and direction of the operating committee, shall have day-to-day management and control of all joint venture operations;
- YEX is obliged to carry out the joint venture operations in accordance with work programs and budgets approved by the operating committee;
- fees, rents, rates and other monies levied or assessed upon the Properties (exclusive of the exploration expenditure payable by YEX pursuant to the Proposed Disposal) under Queensland's *Mineral Resources Act 1989* are payable by YEX. We have been advised by the Directors that these monies would be a maximum of AU\$20,000 per year; and
- after the JV Agreement End Date, if a party does not contribute to all costs in connection with the Properties in accordance with each party's interest, that party's interest shall dilute so that its interest from time to time shall be calculated as:
  - for each AU\$1 million or part thereof of expenditure not contributed by the party, that party's interest in the Properties shall be reduced by 5% of such AU\$1 million or pro rata for expenditure less than AU\$1 million.

## 2.4 Corporate structure following the Proposed Transactions

Set out below is the anticipated corporate structure of Chinalco Yunnan following the approval of the Proposed Acquisition and the Proposed Disposal by the Non-Associated Shareholders and other regulatory approvals:

Figure 4



**Source:** Chinalco Yunnan management

**Notes:** The above diagram assumes the Proposed Transactions are approved by the Non-Associated Shareholders and YEX fulfils the minimum exploration expenditure on the Properties (i.e. the full amount of AU\$5 million). San Mu will still hold 100% equity interest in its two respective subsidiaries. The diagram excludes other assets that are not directly affected with the Proposed Transactions

## 2.5 Rationale for the Proposed Transactions

Chinalco Yunnan's rationale for the Proposed Transactions is as follows:

### 2.5.1 Proposed Acquisition

The Proposed Acquisition provides the Company the opportunity to gain a controlling interest in San Mu and the Laos Projects. The Directors have stated the Xinzhai Project has shown an early indication of the project's commerciality. While the Xinzhai Project mineral body is not compliant with The Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (2004 edition) ("**JORC Code**"), the Company's investment in San Mu would allow a drilling program to be completed and potentially bring the mineral body to a JORC Code-compliant status. A feasibility study would be completed to Australian standards.

The Company has the potential to gain synergies and infrastructure benefits by operating in a low-cost environment within Laos, utilising the Company's technical expertise and being in close proximity to a processing facility owned by YCI, situated 20 km north of the Laos/Chinese border.

## 2.5.2 Proposed Disposal

The Directors have stated that the Properties are a low priority, given the minimal resource results found to date. Accordingly, limited capital and staff time are budgeted towards further exploration work on the Properties.

The Proposed Disposal provides the opportunity for Chinalco Yunnan to participate in any positive results of further exploration expenditure at a reduced cost to the Company on projects that are a low priority. The Directors have stated that a diluted interest in the Properties is of no concern, as the Company, with limited resources, would not have embarked on an extensive exploration program of the Properties, in the absence of the Proposed Disposal.

### 3 PROFILE OF CHINALCO YUNNAN COPPER RESOURCES LTD

#### 3.1 Overview

Chinalco Yunnan, formerly known as China Yunnan Copper Australia Limited, was incorporated in 1995 and is headquartered in Brisbane, Australia. The Company has been listed on the ASX since 2007. The market capitalisation of Chinalco Yunnan as at 19 August 2011 was AU\$35.5 million.

The Company engages in the exploration and development of minerals, primarily copper, silver, rare earth elements, gold and uranium. It operates throughout Australia and Chile.

#### 3.2 Key milestones

Outlined below is a summary of the key milestones of the Company since its incorporation:

**Table 3: Chinalco Yunnan - ASX announcements**

Date	Description
August 1995	Chinalco Yunnan was formed under the name Radhalve Pty Ltd and subsequently changed its name to Mt Stewart Gold Pty Ltd.
October 2007	Listed on the ASX.
August 2009	Entered into a purchase agreement with the owner of Mining Lease 1631 in the Pentland District of northern Queensland.
August 2009	Entered into a farm-in and joint venture agreement with Goldsearch Limited (" <b>Goldsearch</b> ") to explore Goldsearch's Mary Kathleen Project.
November 2009	Entered into a farm-in and joint venture agreement with ActivEX Limited (" <b>ActivEX</b> ") to explore ActivEX's Pentland Project.
December 2009	Chinalco Yunnan and YCI announced the formation of a major strategic alliance to conduct exploration activities in Yunnan Province, China.
February 2010	Entered into a purchase agreement with Carpentaria Exploration Ltd for Exploration Lease EPM16393 in north west Queensland.
March 2010	Entered into a purchase agreement with Rey Resources Ltd for Humitos Pty Ltd, which owned the Humitos Copper Porphyry property in the Copiapo District of northern Chile.
April 2011	Chinalco Yunnan withdraws from the ActivEX joint venture.
April 2011	Announces AU\$14 million capital raising by issue of 64,695,775 ordinary shares.
April 2011	China Yunnan Copper Australia Limitada (a Chilean subsidiary of Chinalco Yunnan) signed two Agreements with Rio Tinto Mining and Exploration Chile (" <b>RTMEC</b> ") for options to joint venture covering exploration properties in northern Chile.
May 2011	Changed name to Chinalco Yunnan Copper Resources Ltd from China Yunnan Copper Australia Ltd.
June 2011	70% interest earned in the Goldsearch joint venture.
July 2011	Significant initial results from a new sulphide zone discovered at the Elaine Dorothy prospect. Goldsearch announced to the ASX they have raised \$1 million via a placement to provide additional working capital to finance ongoing exploration contributions of the Mary Kathleen Joint Venture with Chinalco Yunnan.

**Source:** ASX announcements

### 3.3 Company Operations

The following provides an overview of the Company's operations:

#### 3.3.1 Australia

##### ***Copper Gold - Cloncurry North and Waterford Projects (i.e. projects associated with the Proposed Disposal)***

The Cloncurry North Project comprises EPM 12205, EPM 15084 and EPM 15095 which are centered approximately 30 kilometers north of Cloncurry, Queensland. The tenements are located near major sealed highways and numerous secondary roads which link the tenements via Cloncurry to the cities of Mt Isa and Townsville.

The Waterford Project comprises EPM 16393 and is located approximately 45 kilometers north of Boulia, Queensland. EPM 16393 is intersected by a formed gravel road that connects to Boulia which then has a sealed road to Mt Isa.

##### ***Copper Gold - Mount Isa (Mary Kathleen Joint Venture with Goldsearch)***

On 28 August 2009, the Company announced that it had entered into a farm-in/joint venture agreement with Goldsearch over three exploration permits (EPM 14019, EPM 14022 and EPM 15257) comprising the Mary Kathleen Joint Venture. A number of high priority targets with potential for the discovery of deposits of copper, gold, uranium and rare earth elements have been defined in the region. Target areas include uranium potential at the Elaine Dorothy and economic copper/gold deposits at Hardway, Pindora, Prince of Wales, Jubilee, Mount Dorothy and King Solomon. The projects covered in the Goldsearch joint venture are located an average 50 kilometers south-east of Mount Isa.

As at 30 June 2011, the Company had a 70% equity stake in the Goldsearch joint venture. Under the terms of the agreement, Chinalco Yunnan was obligated to carry out exploration programs (to the total amount of AU\$1.5 million) to investigate a number of high priority targets identified by Goldsearch, and previous tenement holders, within a three year period. Upon completion of the farm-in period, both parties will contribute to the joint venture in proportion to their participating interests with normal dilution applying thereafter.

On 14 July 2011, the Company announced to the ASX significant initial results from a new sulphide zone discovered at the Elaine Dorothy prospect. A total of four diamond drill holes were drilled to further test the area for copper sulphide, rare earths and other any other elements.

##### ***Other projects***

The Company had other projects in addition to the above, being the Clermont, Ravenswood and Pentland Projects. The Clermont and Ravenswood Projects were fully impaired by 30 June 2010. The Pentland Project (a joint venture with ActivEX) was fully impaired by 31 December 2010.

#### 3.3.2 Chile

##### ***Copper - Rio Tinto Joint Venture***

On 27 April 2011, China Yunnan Copper Australia Limitada (a Chilean subsidiary of Chinalco Yunnan) signed two agreements with RTMEC to commence a joint venture covering copper porphyry exploration properties, Palmani and Caramasa, in northern Chile.

The Palmani prospect is located 60 kilometers north-east of Arica and lies within the same belt of rocks that host the Cerro Colorado porphyry copper deposit and the Toquepala porphyry copper deposit in southern Peru.

The Caramasa prospect is located in the Palaeocene Porphyry Copper Belt of northern Chile, 80 kilometers north of BHP Billiton's Cerro Colorado mine.

The key components of the two joint ventures are:

- **Palmani:** Minimum expenditure commitment for first year of US\$250,000. Total expenditures (over five years) of US\$10 million and 5,000 meters of drilling to earn a 40% interest. After the exercise of the first option, RTMEC has 90 days to elect to resume management of the project or grant a second option for a further three years, with expenditures of US\$15 million needing to be incurred for Chinalco Yunnanto gain a further 20% (60% in total); and
- **Caramasa:** Minimum expenditure commitment for first year of US\$250,000. Total expenditures (over five years) of US\$8 million and 5,000 meters of drilling to earn a 40% interest. After exercise of the first option, RTMEC has 90 days to elect to resume management of the project or grant a second option for a further three years with expenditures of US\$15 million needing to be incurred for Chinalco Yunnanto gain a further 20% (60% in total).

### Copper - Humitos

On 22 February 2010, the Company announced that it had entered into a purchase agreement with Rey Resources Ltd for Humitos Pty Ltd. Humitos Pty Ltd owns the Humitos Copper Porphyry property. The Humitos project is located 90km north of Copiapo, Chile.

The Humitos project comprises 17 tenements over 4,500+ hectares and is the first time a Chinalco associated company has entered the Chilean copper industry as a direct participant.

The Humitos project is in the centre of a broad NNE-trending structural corridor bounded by the Atacama Fault to the east and the Domeyko Fault system to the west. This zone hosts a number of deposits including the El Salvador, Damiana and Caballo Muerto deposits, in addition to copper silver epithermal vein mineralisation of the Inca de Oro district. The Humitos project consists of numerous undrilled targets, including an untested supergene horizon in the Chilean Cordillera.

## 3.4 Key Personnel

The Directors and key management of Chinalco Yunnan and their background are outlined in the following table:

**Table 4: Chinalco Yunnan - key personnel**

Name	Position	Description
Mr Norman Zillman	Non-Executive Co-Chairman	Mr Zillman is a professional geologist with over 40 years experience in exploration and production in the petroleum, coal and mineral industries in Australia and internationally. Mr Zillman is the Non Executive Chairman on Burleson Energy Limited and a Non Executive Director of Earth Heat Resources Limited. Mr Zillman has filled the positions of Managing Director responsible for the initial public offering and ASX listing of Queensland Gas Company Limited, Chairman of Great Artesian Oil and Gas Limited and a Director of Planet Gas Limited. Mr Zillman holds a Bachelor of Science Degree in Geology and a Bachelor of Science (with Honours) in Botany from the University of Queensland.
Mr Zhihua Yao	Non-Executive Co-Chairman	Mr Yao is the Deputy General Manager of YCI. He has responsibility for the exploration, M&A and project development activities of YCI. Mr Yao has over 28 years experience in mining and exploration in China.
Mr Jason Beckton	Managing Director	Mr Beckton is a professional geologist with over 19 years experience in exploration, project development, production and management in Australia and internationally. Mr Beckton holds a Bachelor of Science (Honours) in Geology from Melbourne University, and a Masters in Economic Geology from the ARC Centre of Excellence in Ore Deposits at the University of Tasmania.

Name	Position	Description
Mr Zewen Yang	Executive Director	Mr Yang is the General Manger of China Yunnan Copper (Australia) Investment and Development Co Ltd and is based in Sydney. Mr Yang has 18 years experience in mineral resources trading and project investment areas in China and Australia. He has been with the Yunnan Copper Industry (Group) Co Ltd since March 2004.
Mr Paul Marshall	Company Secretary and Chief Financial Officer ("CFO")	Mr Marshall has more than 22 years in the accountancy profession, having worked for Ernst and Young for 10 years, and subsequently over ten years in commercial roles as Company Secretary and CFO for a number of listed and unlisted companies mainly in the resources sector. Mr Marshall is a Chartered Accountant holding a Bachelor of Laws degree from Liverpool University, England, and a post Graduate Diploma in Accounting and Finance from the London School of Economics, England.
Mr Richard Hatcher	Exploration Manager	Mr Hatcher is Senior Geologist of the Company, managing the north west project areas of Mount Isa and Cloncurry. Mr Hatcher has 16 years experience in gold, base metals, diamond, petroleum and lateritic nickel exploration and project development in Australia, the South Pacific, New Zealand and Central America.

**Source:** Chinalco Yunnan website and 2010 Annual Report

### 3.5 Capital structure and ownership

Chinalco Yunnan has the following securities on issue as at 12 August 2011:

- 173,358,349 ordinary shares; and
- 17,800,000 unlisted options.

#### 3.5.1 Ordinary shares

Chinalco Yunnan's top 10 shareholders and their respective shareholdings as at 12 August 2011 are summarised in the following table:

**Table 5: Top 10 Shareholders**

Shareholder	Number of Ordinary Shares	% of issued Ordinary Shares
China Yunnan Copper (Australia) Investment and Development Co Ltd	36,839,852	21.25%
Mr Norman Joseph Zillman	8,200,000	4.73%
Elliott Nominees Pty Ltd	7,150,000	4.12%
HSBC Custody Nominees (Australia) Limited – GSCO ECA	6,196,686	3.57%
Premar Capital Nominees Pty Limited	3,633,333	2.10%
Flatoak Pty Ltd	3,363,263	1.94%
UBS Wealth Management Australia Nominees Pty Ltd	2,808,514	1.62%
Bannerblock Pty Ltd	2,500,000	1.44%
Yunnan & Hong Kong Metal Co. Ltd	2,400,000	1.38%
HSBC Custody Nominees (Australia) Limited	2,369,435	1.37%
<b>Top 10 Shareholders</b>	<b>75,461,083</b>	<b>43.53%</b>
Other Shareholders	97,897,266	56.47%
<b>Total Shareholders</b>	<b>173,358,349</b>	<b>100.00%</b>

**Source:** Chinalco Yunnan share register as at 12 August 2011

In regard to the above table, we note that CYC is the only shareholder with a holding greater than 5%.

### 3.5.2 Unlisted options

A summary of Chinalco Yunnan's unlisted options as at 12 August 2011 is outlined in the table below:

**Table 6: Unlisted options**

Option expiry date	Exercise price	Number of options
20 August 2011	\$0.40	2,000,000
19 December 2011	\$0.40	300,000
20 August 2012	\$0.40	1,000,000
20 December 2012	\$0.40	100,000
20 December 2012	\$0.40	1,000,000
20 December 2012	\$0.40	3,500,000
20 December 2012	\$0.40	3,750,000
20 December 2012	\$0.40	3,750,000
12 August 2014	\$0.30	2,400,000
<b>Total</b>		<b>17,800,000</b>

**Source:** Appendix 5B: Mining exploration entity quarterly report - announced to ASX on 28 July 2011; Appendix 3B announced to ASX on 12 August 2011

### 3.6 Share price analysis

The graph below illustrates the movement in the daily share price, together with the volumes traded, from 20 August 2010 to 19 August 2011.

**Figure 5**



**Source:** Bloomberg, PKFCA analysis

Notable events announced to the ASX that may have impacted the Company's share price and volumes traded between 20 August 2010 and 19 August 2011 are set out below:

**Table 7: Chinalco Yunnan's ASX announcements**

Reference	Date	Details of Announcement
A	19 August 2010	Released results from its drill programme at its Mount Dorothy prospect.
B	20 September 2010	Announced update on work underway on its Mount Dorothy and Elaine Dorothy prospects.
C	18 October 2010	Announced progress on target definition from the Stanley's Hope Gold Mining Lease in the Pentland District, Queensland.
D	11 November 2010	Announced the Company is undertaking a share purchase plan.
E	17 November 2010	Announced commencement of drilling on its Mount Dorothy prospect.
F	15 December 2010	Announced results of drilling on its Mount Dorothy prospect.
G	6 January 2011	Announced a significant heavy rare earth element discovery at its Mount Dorothy prospect.
H	20 January 2011	Announce continuation of drilling at its Elaine and Mount Dorothy prospects.
I	<b>3 February 2011</b>	<b>Announced Proposed Acquisition and Proposed Disposal.</b>
J	21 March 2011	Received Chinese approval for the Proposed Disposal.
K	5 April 2011	Announced a capital raising of AU\$13.1 million.
L	5 April 2011	Chinalco Yunnan withdrew from the Pentland Joint Venture with ActivEX.
M	27 April 2011	Announced it had signed two agreements with RTMEC for options to a joint venture covering copper porphyry exploration properties, Palmani and Caramasa, in northern Chile.
N	18 May 2011	Announced updates on the Company's current projects.
O	9 June 2011	Announced that the Company has now earned a 70 per cent equity interest in the Mary Kathleen Joint Venture with Goldsearch.
P	14 July 2011	Significant initial results from a new sulphide zone discovered at the Elaine Dorothy prospect.

Source: ASX announcements

### *Share Price Analysis as at 19 August 2011*

In assessing Chinalco Yunnan's share price performance we have had particular regard to the following:

- the 'spread' of shareholders and the total number of shares that shareholders hold in the Company;
- the level of trading activity of the Company's ordinary shares (i.e. the volume of trades of the shares in the market as a percentage of the total number of shares, and the frequency of the trades);
- the number and frequency of 'unusual' and/or 'abnormal' trading that has taken place in the Company shares; and
- the level of knowledge that the 'willing' buyers and sellers may be considered to have in respect of the Company and the market in which it operates.

We have reviewed the following factors relating to the trading activity of Chinalco Yunnan's shares on the ASX:

- the daily high and low share price of the Company;
- the daily volume of the trades; and
- the Volume Weighted Average Share Price ("**VWAP**").

The table below summarises trades over the previous 12 months up to 19 August 2011:

**Table 8: Share price analysis as at 10 August 2011**

	High AU\$	Low AU\$	VWAP AU\$	Total value AU\$'000	Actual total volume traded 000's	Turnover %
As at 19 Aug 2011	0.22	0.20	0.20	42	205	0.16%
1 month to 19 Aug 2011	0.26	0.16	0.21	1,364	6,483	4.98%
3 months to 19 Aug 2011	0.28	0.16	0.21	6,022	28,364	21.78%
6 months to 19 Aug 2011	0.39	0.16	0.24	11,498	47,489	36.47%
12 months to 19 Aug 2011	0.44	0.11	0.28	27,441	96,756	74.31%

**Source:** Bloomberg, PKFCA analysis

We note the following with respect to the liquidity of Chinalco Yunnan's shares during the 12 months up to 19 August 2011:

- the shares traded on 19 August 2011 at a price between \$0.22 and \$0.20;
- the shares are very thinly traded;
- the shares traded within the price range of \$0.11 and \$0.44;
- the VWAP is observed to be on a downwards trend;
- the greatest number of shares traded occurred on 6 January 2011, where approximately 15 million shares were traded. This coincided with the Company's ASX announcement of a significant heavy rare earth element discovery at the Mount Dorothy prospect;
- as shown in Figure 5, over the period reviewed the Company outperformed the S&P/ASX 300 Metals and Mining Index; and
- the majority of trading occurred during the first half of the period reviewed.

### 3.7 Statement of Comprehensive Income

The Company's statement of comprehensive income for the financial year ended 30 June 2009 ("FY2009"), 30 June 2010 ("FY2010") and the six months ended 31 December 2010 are presented in the table below:

**Table 9: Chinalco Yunnan - Statement of Comprehensive Income**

AU\$	FY2009 Audited	FY2010 Audited	Six months ended 31 December 2010 Reviewed
Revenue	158,966	102,808	139,089
Employment and consultancy expenses	(495,649)	(687,739)	(302,826)
Depreciation expenses	(37,162)	(55,049)	(34,624)
Finance costs	(161)	-	(1,303)
Impairment of exploration expenditure	-	(1,986,924)	(544,220)
Project generation expenditure	-	(102,283)	(34,277)
Other expenses	(407,327)	(530,397)	(230,707)
<b>Total expenses</b>	<b>(940,299)</b>	<b>(3,362,392)</b>	<b>(1,147,957)</b>
Loss before income tax	(781,333)	(3,259,584)	(1,008,868)
Income tax expense	-	-	-
<b>Loss after income tax</b>	<b>(781,333)</b>	<b>(3,259,584)</b>	<b>(1,008,868)</b>
Other comprehensive income	-	(1,794)	(36,014)
<b>Total comprehensive income for the period</b>	<b>(781,333)</b>	<b>(3,261,378)</b>	<b>(1,044,882)</b>

**Source:** Chinalco Yunnan's 2009 and 2010 Annual Reports; Chinalco Yunnan's financial report for the half-year ended 31 December 2010

We note the following in relation to Chinalco Yunnan's statement of comprehensive income:

- **Revenue** – Chinalco Yunnan is an exploration company and does not have any operating mining activities. In FY2009 revenue consisted entirely of interest earned on cash on hand. In FY2010, interest earned accounted for AU\$100,883. For the six months ended 31 December 2010, revenue consisted of AU\$117,956 in government grants, with the balance made up of interest earned.
- **Impairment of exploration expenditure** – during FY2010, the Company wrote off AU\$2 million in exploration expenditure relating to a number of different projects. The projects with an impairment charge of greater than AU\$100,000 were Pentland - Mt Stewart (AU\$817,000), Cloncurry - Quamby (AU\$399,000), Clermont (AU\$255,000), Pentland (AU\$166,000) and Pentland East (AU\$149,000). During the six months ended 31 December 2010, the Company wrote off approximately AU\$544,000 in exploration expenditure relating to the Pentland joint venture with ActivEX.

### 3.8 Statement of Financial Position

The statement of financial position of the Company as at 30 June 2009, 30 June 2010 and 31 December 2010 are presented in the table below:

**Table 10: Chinalco Yunnan - Statement of Financial Position**

AU\$	As at 30 June 2009 Audited	As at 30 June 2010 Audited	As at 31 December 2010 Reviewed
<b>Current Assets</b>			
Cash and cash equivalent	1,617,277	1,585,996	1,613,101
Other receivables	205,845	313,970	64,985
Financial assets	1,091	1,091	1,091
Other current assets	8,994	11,154	38,738
<b>Total Current Assets</b>	<b>1,833,208</b>	<b>1,912,211</b>	<b>1,717,915</b>
<b>Non Current Assets</b>			
Other receivables	44,618	44,195	36,695
Plant and equipment	178,914	221,051	240,487
Exploration expenditure	4,189,673	5,183,362	5,899,598
<b>Total Non-Current Assets</b>	<b>4,413,206</b>	<b>5,448,608</b>	<b>6,176,780</b>
<b>TOTAL ASSETS</b>	<b>6,246,414</b>	<b>7,360,819</b>	<b>7,894,695</b>
<b>Current Liabilities</b>			
Trade and other payables	532,582	400,445	455,252
Interest bearing liabilities	-	-	26,390
Short-term provisions	20,553	33,047	32,778
<b>Total Current Liabilities</b>	<b>553,135</b>	<b>433,492</b>	<b>514,420</b>
<b>Non Current Liabilities</b>			
Interest bearing liabilities	-	-	21,590
<b>Total Non-Current Liabilities</b>	<b>-</b>	<b>-</b>	<b>21,590</b>
<b>TOTAL LIABILITIES</b>	<b>553,135</b>	<b>433,492</b>	<b>536,010</b>
<b>NET ASSETS</b>	<b>5,693,279</b>	<b>6,927,327</b>	<b>7,358,685</b>
<b>Equity</b>			
Share capital	6,934,322	11,212,656	12,610,434
Reserves	27,188	242,486	284,934
Accumulated losses	(1,268,231)	(4,527,815)	(5,536,683)
<b>TOTAL EQUITY</b>	<b>5,693,279</b>	<b>6,927,327</b>	<b>7,358,685</b>

**Source:** Chinalco Yunnan 2009 and 2010 Annual Reports; Chinalco Yunnan financial report for the half-year ended 31 December 2010

We note the following in relation to the financial position of the Company as at 31 December 2010 as outlined below:

- *Cash and cash equivalent* – cash and cash equivalents remained relatively consistent as at the reporting dates above.

- **Exploration expenditure** – Chinalco Yunnan incurred AU\$2.8 million in exploration expenditure during FY2010. During the six months ended 31 December 2010 the Company incurred AU\$1.2 million in exploration expenditure. Exploration expenditure has been primarily funded via the issue of new shares in the Company (see next point). On 30 March 2010, the Company acquired Humitos Pty Ltd from Rey Resources Ltd for AU\$200,000. Humitos Pty Ltd held tenements in the Humitos Porphyry property in the Copiapo District of northern Chile.

During FY2010 and the six months ended 31 December 2010 AU\$2 million and AU\$544,000 of exploration expenditure was impaired, respectively. Refer to Section 3.7 for commentary on exploration expenditure impairment.

- **Share capital** – During FY2010, the Company raised AU\$4.7 million by issuing 31,046,460 new shares through a 2-for-5 non-renounceable rights issue. During the six month period to 31 December 2010, the Company raised a further AU\$1.5 million by issuing 10 million new shares through a share purchase plan.

The above statements of financial position exclude the effect of the capital raising announced to the ASX on 5 April 2011, where the Company announced and received AU\$13.1 million via the issue of 54.7 million ordinary fully paid shares.

### 3.9 SWOT analysis

Set out below is a SWOT analysis in relation to Chinalco Yunnan:

**Table 11: SWOT analysis**

Strengths	Weaknesses
<ul style="list-style-type: none"> <li>• Key participant in Aluminium Corporation of China's ("Chinalco") (the ultimate holding company of YCI) long term exploration development.</li> <li>• Strong cash position with no immediate need to seek additional funds.</li> <li>• Highly experienced technical team with proven track record responsible for exploration successes worldwide.</li> </ul>	<ul style="list-style-type: none"> <li>• Association with Chinalco reduces the likelihood of a takeover, as the 90% compulsory acquisition threshold may not be reached due to CYC's substantial shareholding in the Company.</li> <li>• Chinalco Yunnan is reliant on a small number of highly skilled staff.</li> <li>• Chinalco Yunnan's value tied to commodity prices and high growth economies.</li> <li>• Chinalco Yunnan's value tied to exploration success.</li> </ul>
Opportunities	Threats
<ul style="list-style-type: none"> <li>• As a result of relationship with Chinalco, quality project opportunities of varying sizes will be presented to the Company from third parties and also from within the broader Chinalco group.</li> <li>• Ability to give technical guidance and assessment to Chinalco on projects beyond the resources of China Yunnan to develop in return for a small stake in the projects.</li> <li>• Chinalco Yunnan has exposure to different territories such as Laos and Chile which are geologically and commercially more attractive than Australia.</li> </ul>	<ul style="list-style-type: none"> <li>• Key staff at risk of being poached by other companies in highly competitive industry.</li> <li>• Operating in different territories presents risks such as foreign exchange, safety and political.</li> <li>• Company's value and ability to raise capital currently is tied to the success of a limited suite of projects.</li> </ul>

**Source:** Chinalco Yunnan management

## 4 PROFILE OF YUNNAN COPPER INDUSTRY SAN MU MINING CO. LTD

### 4.1 Overview

San Mu is a private company established on 18 November 2003 and incorporated in China. On 13 May 2005, San Mu changed its name from Xishuangbanna San Mu Mining Co. Ltd. Originally, the company had a registered capital of RMB3 million, jointly contributed by three people, being Wang Chunhua, Wang Yongjun and Wang Aimin.

In July 2004, YCI invested RMB17 million, increasing San Mu's registered capital from RMB3 million to RMB20 million and thus held 85% of the total shares. The original three investors jointly held the remaining 15%.

In December 2005, the original three investors transferred their 15% holding to YEX. In return, the three original investors obtained San Mu's two mineral rights in Laos, being Man Zha Wan antimony ore of Luang Nam Tha Province and Pu Ya Ka Oudomzay Province.

San Mu was established as an independent legal entity to explore and develop mining resources.

### 4.2 Company operations

San Mu wholly-owns the Laos Projects, via two wholly-owned subsidiaries. The Laos Projects are located within the Mohan Development Zone in northern Laos. The Laos Projects are close to the Pan South East Asian Highway and an operating copper processing plant owned by YCI.

Descriptions of the Laos Projects are outlined below:

#### *Xinzhai Project*

The Xinzhai Project covers an area of 140km<sup>2</sup> and is situated in the Phongsali Province. Preliminary economic studies have revealed a copper sulphide chalcocite deposit hosted in limestone and brecciated by cross cutting faults. The deposit is to the Chinese Mineral Resource/Reserve Classification ("**CMRRC**") Standard however not to Australian JORC Code standards. The preliminary studies suggest a Solvent Extraction Electro Winning operation could be constructed for the realisation of revenues in the near term.

#### *Jiuzhai Project*

The Jiuzhai Project, located in the Oudumaxai Province, covers an area of 31km<sup>2</sup>. A deposit to CMRRC Standard is based on the surface trenching and underground sampling and mapping. Currently, the confirmed mineralised structure is 2km long, 50m deep and an average 3m wide.

#### *Nadao Project*

The Nadao Project is a sediment hosted copper-silver deposit of 1km strike, proven to 50m down, with an average width of 2.6m, based on surface sampling.

#### *Modeng Project*

The Modeng Project is a very early stage project with similar surface expression to the other projects, however no drilling has been undertaken.

The following figure shows the locality of San Mu's Laos Projects:

Figure 6



Source: Company Quarterly Report for the three months ended 31 March 2011

The mineral estimates of the Laos Projects are outlined in the table below:

Table 12: Laos Projects mineral estimates

Project name	Tonnes	Grade Copper %	Grade Silver ppm	Classification*
Xinzhai Project	503,000	1.04	-	Inferred / Indicated
Jiuzhai Project	100,260	1.11	-	Inferred
Nadao Project	123,000	0.99	67 - 138	Inferred
Modeng Project	116,400	1.33	112 - 156	Inferred

Source: Laos - Copper Silver - Development Joint Venture, Joint Press Release 31 January 2011

Note: \*Classification is non-JORC Code compliant, but compliant to CMRRC

### 4.3 Capital structure and ownership

San Mu has a total registered capital of RMB20 million and paid-in capital of RMB20 million. There are two shareholders of San Mu. YCI holds 85% and YEX holds 15% of the total registered capital.

San Mu has no issued options over its share capital.

### 4.4 Statement of Comprehensive Income

The consolidated statement of comprehensive income of San Mu, for the year ended 31 December 2010 and the six months ended 30 June 2011 are presented in the table below:

**Table 13: San Mu - Statement of Comprehensive Income**

AU\$	Six months ended 30 June	
	FY2010 Audited	2011 Reviewed
<b>Revenue</b>	-	-
Less:		
Management fees	96,726	166,009
Finance costs	215	378
<b>Total expenditure</b>	<b>96,941</b>	<b>166,387</b>
Loss before income tax	(96,941)	(166,387)
Income tax expense	-	-
<b>Loss after income tax</b>	<b>(96,941)</b>	<b>(166,387)</b>
Other comprehensive income	-	-
<b>Total comprehensive income for the period</b>	<b>(96,941)</b>	<b>(166,387)</b>

**Source:** San Mu statement of comprehensive income for the six months ended 30 June 2011 and year ended 31

The financial accounts have been audited and reviewed by ShineWing Certified Public Accountants in China.

The statement of comprehensive income have been translated using the AU\$/RMB spot rate as at the Assessment Date of AU\$/RMB of 0.1513 (Source: RBA).

San Mu is an exploration company with no revenues. We have provided the statement of comprehensive income for information purposes only.

## 4.5 Statement of Financial Position

The translated consolidated statement of financial position of San Mu as at 31 December 2010 and 30 June 2011 are presented in the table below:

**Table 14: San Mu - Statement of Financial Position**

AU\$	As at 31 December 2010 Audited	As at 30 June 2011 Reviewed
<b>Current Assets</b>		
Cash and cash equivalents	25,728	29,012
Other receivables	-	25,976
Total Current Assets	25,728	54,988
<b>Non Current Assets</b>		
Fixed assets	89,000	80,173
Construction project	866,415	866,415
Other non current assets	4,273,911	4,273,911
Total Non Current Assets	5,229,326	5,220,499
<b>TOTAL ASSETS</b>	<b>5,255,054</b>	<b>5,275,487</b>
<b>Current Liabilities</b>		
Trade payables	219,525	219,525
Staff remuneration payable	14,145	25,380
Taxes and fees payable	91	6,788
Other payables	242,157	411,046
Total Current Liabilities	475,918	662,739
<b>Non Current Liabilities</b>		
Specific account payables	1,891,250	1,891,250
Total Non Current Liabilities	1,891,250	1,891,250
<b>TOTAL LIABILITIES</b>	<b>2,367,168</b>	<b>2,553,989</b>
<b>NET ASSETS</b>	<b>2,887,886</b>	<b>2,721,498</b>
<b>Equity</b>		
Share capital	3,026,000	3,026,000
Accumulated losses	(138,114)	(304,502)
<b>TOTAL EQUITY</b>	<b>2,887,886</b>	<b>2,721,498</b>

**Source:** San Mu financial accounts for the six months ended 30 June 2011, with 31 December 2010 comparatives

The statement of financial position have been translated using the AU\$/RMB spot rate as at the Assessment Date of AU\$/RMB of 0.1513 (Source: RBA).

We note the following in relation to San Mu's statement of financial position:

- *Other non current assets and construction project* – represents capitalised costs relating to the initial granting of the tenements and subsequent capitalised exploration and management expenditure incurred on the Laos Projects.
- *Specific account payables* – the Directors have advised the Specific Accounts Payables is a grant for exploration activity sponsorship from the Chinese Government Finance Department of Yunnan Provincial Government. The sponsorship funding was received in 2005 and 2006 for RMB 9 million and RMB 3.5 million, respectively.

PKFCA has been advised that pursuant to Chinese accounting standards, the grant monies must be recorded as a liability until such time as the Finance Department of Yunnan Provincial Government completes an audit of the exploration sponsorship funds.

After completion and acceptance of the audit, the liability will be written off in full. The audit has been in progress since early 2010 and is expected to be finalised late 2011.

The Directors have stated that if there are any issues with the audit, YCI and YEX have committed that the Specific Accounts Payable is their liability to resolve. PKFCA notes that Clause 4.6 of the Capital Increase Agreement states that any debt disputes relating to matters prior the San Mu Business License are the responsibility of YCI and YEX. The Directors are of the view that Clause 4.6 of the Capital Increase Agreement would indemnify Chinalco Yunnan from any liability of San Mu arising from a failure to fully write off the Specific Accounts Payable following the audit of the Laos Projects.

## 5 ECONOMIC OVERVIEW

### 5.1 Introduction

The following observations regarding economic conditions in Australia and Laos are based on our review of generally available economic analysis reports published by major trading banks and economic forecasting bodies at or about the Assessment Date.

### 5.2 Australian Economic Overview

Following the recent Global Financial Crisis ("**GFC**"), while several major countries had one of their most serious recessions in the post-World War II period, Australia had one of its mildest, with a relatively sharp but brief downturn in aggregate demand and economic activity late in 2008, with a return to expansion during the first half of 2009.

More recently, global financial markets have once again been characterised by a state of volatility, with concerns being raised that the United States is heading towards a double-dip recession. European sovereign debt issues continue to cause nervousness among investors as little progress seems to have been made toward reducing debt. China's economy continues to expand at a rapid pace with the March quarter 2011 GDP rising 9.5% from a year earlier. However, rising inflation in China has forced policy makers to raise interest rates as they attempt a 'soft landing' for the economy.

At its meeting in August 2011, the RBA left the cash rate unchanged at 4.75% p.a. In a statement made by the RBA, reasons for leaving interest rates unchanged were as follows:

- although the global economy is continuing to expand, the pace of expansion slowed in the June quarter. Key reasons for this were the supply-chain disruptions from the Japanese earthquake and the dampening effects of high commodity prices on income and spending in major economies;
- Australia's national income is growing strongly, helped by the terms of trade remaining at very high levels. Private investment activity has picked up, particularly in the resources sector, in response to high commodity prices. However, caution in the household sector, coupled with the high level of the exchange rate, is having a noticeable dampening effect in some areas of the service sector;
- employment growth has slowed over recent months, with the unemployment rate remaining little changed, near 5%. The RBA expects this slower pace of employment growth to continue in the near term. In addition, it was noted that wages growth had returned to rates seen prior to the GFC; and
- while the trend in inflation has remained consistent with the 2-3 per cent target on a year-ended basis, the RBA remains concerned about the medium-term outlook for inflation. Despite this, the RBA judged that it was prudent to leave the cash rate at 4.75%, particularly in view of the acute sense of uncertainty in global financial markets.

The Australian economy continues to be characterised by its 'two-speed' nature, referring to the rapid expansion in mining and energy sectors and the marked slowdown in the manufacturing and services sectors. The RBA projects that Australia's 2011 year-ended gross domestic product ("**GDP**") growth rate will be 3.25%, revised down from 4.25%. The RBA notes that this downward revision mostly reflects "*the slower-than-expected recovery in coal production and, to a lesser extent, a downward revision to consumer spending as domestic and international concerns have weighed on sentiment*". However, the 2012 forecast growth rate remained consistent with the RBA's earlier forecast of 3.75%.

Until recently, economic analysts from Australian financial institutions were forecasting an upward trend in interest rates over the medium term as the global recovery gained traction. The most recent reading of the Consumer Price Index ("**CPI**"), which indicated a year-on-year inflation rate of 3.6%, would tend to support this view.

However, in light of the recent flow of negative information regarding US and European debt issues, a slower than expected pickup in the US economy and a policy-induced slowdown in China, expectations are that the Australian cash rate will remain on hold or go down if the prevailing uncertainty in global financial markets further deteriorates.

### **5.3 Laotian Economic Overview**

The Laotian economy remained robust throughout the GFC, recording real GDP growth in excess of 7.5% from 2008 to 2010. This economic growth is predicted to continue with the World Bank forecasting real GDP growth of 8.6% in 2011 and 7.6% in 2012. The main sources of growth until the end of 2012 will be from the natural resources and services sectors.

The Laotian CPI headline inflation reached 7.7% year-on-year in March 2011, driven largely by fuel and other non-food commodity prices. Global movements in food prices typically have a limited impact upon Laos inflation due to the subsistence nature of food production and the relatively low levels of food exports.

In FY2010 the government's budget deficit was running at 4.6% of GDP, decreasing from 6.7% in the previous financial year. The reduction in the budget deficit is expected to continue, falling to 2.8% in FY2011 and 2.5% in FY2012. This trend will largely be due to a slower expansion of expenditure compared to real GDP growth, in conjunction with increased tax revenue, particularly from the resources sector.

The Laotian kip has appreciated marginally against the US dollar in recent months, though it has depreciated against other regional currencies such as the Thai baht.

Laos has sought to implement structural reforms throughout the economy over recent years. Throughout 2009 the Government of Laos completed the centralisation of the Treasury, Customs, and Tax functions to enable greater control over revenue sources and more timely budget execution. The Government has also started to implement the new public investment management mechanism which includes rule-based budget allocation norms aimed at providing more favourable allocations to poorer provinces.

### **5.4 Conclusion**

Based on the above it is noted that both the Australian and Laos economies came through the GFC relatively well compared to other similar nations. However, there remains a high degree of uncertainty with recent volatility in financial markets expected to continue amid concerns on the level of government debt and fragile consumer confidence in developed economies and the increased risk of the global economy slipping into recession.

## 6 INDUSTRY OVERVIEW

The following observations regarding industry conditions are based on PKFCA's review of generally available industry reports.

### 6.1 Overview Australia

The Australian mineral exploration industry consists of firms that explore for minerals (except crude petroleum and natural gas) on their own account. It covers in-house exploration activities of mining companies, but does not include firms that undertake exploration on a fee or contract basis.

The industry is expected to have spent AU\$2.5 billion on exploration in FY2011, compared with AU\$1.5 billion in FY2006. The main driver of growth in exploration expenditure was the increase in mineral commodity prices over the past five years. From FY2006 to FY2011 exploration spending increased 10.4% annually, despite falls in FY2009 as a result of the GFC. The first half of FY2011 saw considerable growth in spending on the search for copper, silver/lead/zinc, nickel, gold, iron ore, uranium and coal.

The major players that operate in this industry are large firms as a result of the considerable sums of capital required to undertake exploration activities. The four largest mineral explorers in Australia are BHP Billiton Limited (7.0%), Rio Tinto Limited (5.0%), Xstrata Holdings Pty Ltd (1.1%) and Newmont Australia Holdings Pty Ltd (0.9%).

Factors that may determine the level of exploration spending in Australia include:

- *Commodity prices* - it is expected that exploration activity will follow trends in the price of mineral commodities.
- *Exchange rate* - since most mineral commodities are traded in US dollars, the exchange rate plays a vital role in determining the return earned by Australian mineral producers.
- *Spread of new technologies* - improvements in technologies used in exploration will increase the number and size of mineral deposits considered viable.
- *Labour availability* - the Australian mining industry experienced an acute labour shortage in the years leading up to the GFC. Although the labour shortage eased throughout the GFC, it is expected that it will again become an issue as the Australian labour market becomes tighter. Higher wage costs will reduce the likelihood of exploration expenditure being undertaken on marginal projects.

Over the medium term, analysts are expecting an upward trend in commodity prices due to increased demand from China and other developing nations. On the other hand, major developed economies in Europe, as well as the US, continue to experience a relatively slow and protracted recovery from the GFC, providing some counterbalance to the growth in mineral commodity prices.

### 6.2 Overview Laos

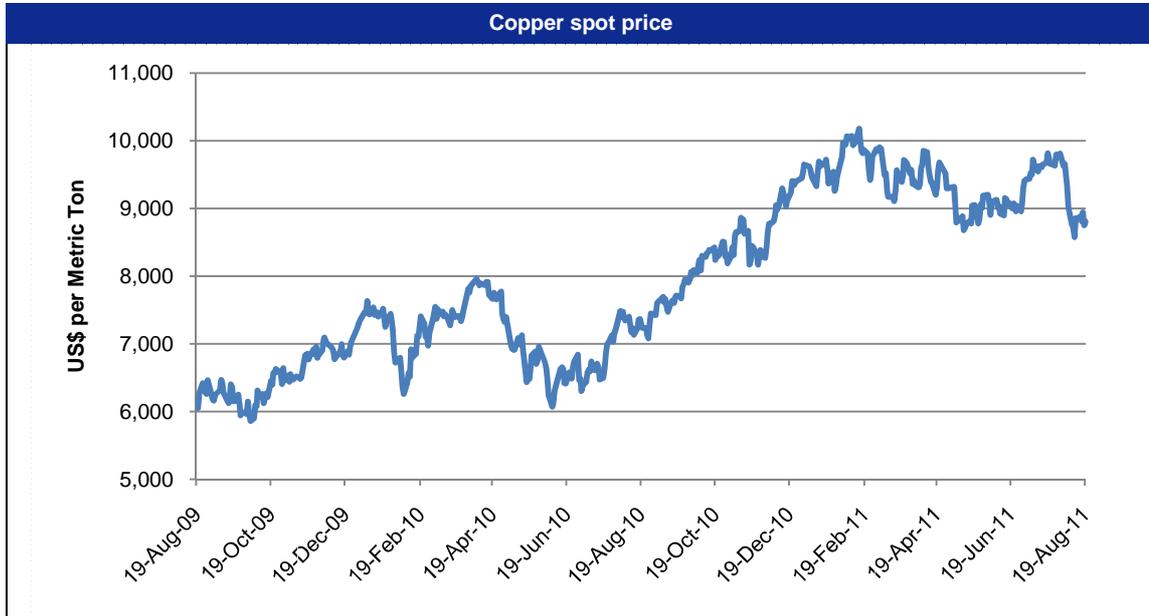
Please refer to the attached Roma Appraisals Valuation Report at Appendix 4 for an overview of key industry specific parameters relevant to the Proposed Acquisition.

### 6.3 Commodity prices

#### 6.3.1 Copper

Set out below is the copper spot price from 19 August 2009 to 19 August 2011.

**Figure 7**



Source: Bloomberg

We note that between August 2009 and August 2011 that there has been a general upward trend in the copper spot price, increasing from approximately US\$6,051/MT on 19 August 2009 to approximately US\$9,430/MT on 30 June 2011. However, the copper spot price has decreased in recent weeks and was US\$8,804/MT on 19 August 2011.

#### 6.3.2 Silver

Set out below is the silver spot price from 19 August 2009 to 19 August 2011.

**Figure 8**



Source: Bloomberg

We note that from August 2009 to September 2010 the silver spot price trended gradually upwards from approximately US\$13.00/troy ounce to approximately US\$19.00/troy ounce. From September 2010 to April 2011 the silver spot price trended strongly upward to reach a peak of US\$48.44/troy ounce on 28 April 2011 before falling sharply over the next 12 trading days to US\$33.58/troy ounce. Since then, the price has traded within a band between US\$33.58/troy ounce and US\$48.44/troy ounce.

### 6.3.3 Gold

Set out below is the gold spot price from 19 August 2009 to 19 August 2011.

**Figure 9**



Source: Bloomberg

We note that from 19 August 2009 to 19 August 2011 there has been an upward trend in the gold spot price, increasing from approximately US\$950/troy ounce to record highs of over US\$1,800/troy ounce over the period. As at 19 August 2011, the gold spot price was US\$1,852/troy ounce.

We note that throughout this period, volatility in the gold spot price has not been as pronounced as other commodities.

## 7 SUMMARY OF TECHNICAL SPECIALISTS' REPORTS

### 7.1 Roma Appraisals Valuation Report

Set out below are extracts from the Roma Appraisals Valuation Report. The report in its entirety is attached in Appendix 4. Roma Appraisals refer to the Laos Projects as the "Mines" throughout their report.

#### **Basis of valuation**

*[Roma Appraisals] valuation is conducted on a market value basis. Market value is defined as "the estimated amount for which an asset could be exchanged, or a liability settled, between willing parties in an arm's length transaction after proper marketing wherein the parties had each acted knowledgeably, prudently and without compulsion".*

#### **Mine valuation**

*In the process of valuing the Mines, [Roma Appraisals] has taken into account the uniqueness of their operations and the industries they are participating. The Income-Based Approach was not adopted in this case because there is insufficient historical information of the Mines. The Asset-Based Approach was also not adopted because it could not reflect the future potential growth of the Mines. [Roma Appraisals] has therefore considered the adoption of the Market-Based Approach in arriving at the market value of the Mines.*

*In the process of the valuation, [Roma Appraisals] has selected several transactions of comparable that had similar mineral resources with similar level of confidence in the resource estimation of the Mines and determined their price per tonnage of resources. [Roma Appraisals] fundamental selection criterion was similarity of the acquired mines of the comparable transactions with that of the Mines. Accordingly, all comparable transactions selected in [Roma Appraisals] valuation referred to the acquisition of multi-metal mines containing various metal resources such as copper, gold, silver and molybdenum. During the process of selection of comparable transactions, [Roma Appraisals] mainly focused on recent metal mine acquisitions, and [Roma Appraisals] adjusted the considerations of the comparable transaction to reflect the changes in metal prices between transaction dates and the date of valuation. To the best of [Roma Appraisals] knowledge, [Roma Appraisals] considered the adopted comparable transactions were sufficient and representative.*

The comparable transactions used by Roma Appraisals are as follows:

**Table 15: Comparable Transactions - Roma Appraisals Valuation Report**

Acquirer	Location	Date	Consideration	Equity Interest
Solartech International Holdings Limited	China	November 2009	HK\$1,500,000,000	100%
China Properties Investment Holdings Limited	China	August 2010	HK\$300,000,000	100%

**Source:** Roma Appraisals Valuation Report

The metal resource multiples used by Roma Appraisals to value the Laos Projects are:

**Table 16: Metal resource multiples - Roma Appraisals Valuation Report**

Acquirer	Copper resource multiple (RMB/tonne)	Silver resource multiple (RMB/tonne)
Solartech International Holdings Limited	1,158	79,948
China Properties Investment Holdings Limited	5,472	-
<b>Average</b>	<b>3,315</b>	<b>79,948</b>

**Source:** Roma Appraisals Valuation Report

*[Roma Appraisals] applied the industry average prices to the relevant resources of the Mines and determined [their] concluded value.*

*Although Inferred Resource was dominantly located in the Mines of [San Mu], both Measured and Indicated Resources of comparables were included in their valuation. Accounting for the higher level of confidence for the estimations of tonnage, densities, grade and mineral content for the Measured and Indicated Resources, the inclusion of the Measured and Indicated Resources in the valuation was treated appropriately by adopting a 50% premium on the Measured Resource and a 20% premium on the Indicated Resource (i.e. using 150% Measured Resource and 120% Indicated Resource for valuation) due to the substantially lower risk or uncertainty of Measured Resource and Indicated Resource compared to Inferred Resource.*

In correspondence between PKFCA and Roma Appraisals, Roma Appraisals considered other comparable transactions of mines that contained copper and silver deposits around the greater Asia region. However, Roma Appraisals considered that these comparable transactions do not provide sufficient information for Roma Appraisals to calculate the metal resource multiples. Accordingly, Roma Appraisals has eliminated those transactions during the selection process. Roma Appraisals assessed 15 comparable transactions, from which, two transactions were considered to be the most comparable.

### **Opinion of value**

*Based on the investigation and analysis stated above and on the valuation method employed, the market value of the Mines as at the date of valuation, in [Roma Appraisals'] opinion ranged from RMB29,000,000 to RMB35,000,000.*

## **7.2 Mining Associates Valuation Report**

Set out below are extracts from the Mining Associates Valuation Report. The report in its entirety is attached in Appendix 4.

### **Conclusions**

*The three generally accepted valuation approaches are:*

- *Income Approach*
- *Market Approach*
- *Cost Approach*

*The Income Approach is based on the principle of anticipation of benefits and includes all methods that are based on the income or cash flow generation potential of the Mineral Property. None of [the Properties are] sufficiently advanced for the Income Approach to be appropriate.*

*The primary methods used in this valuation are the Market Approach and the Cost Approach. The Market Approach is based primarily on the principle of substitution and is also called the Sales Comparison Approach. The Mineral Property being valued is compared with the transaction value of similar Mineral Properties, transacted in an open market. Methods include comparable transactions and option or farm-in agreement terms analysis.*

*The Cost Approach is based on the principle of contribution to value. The appraised value method is one commonly used technique where exploration expenditures are analysed for their contribution to the exploration potential of the Mineral Property.*

### **Cloncurry North EPMs 12205 and 15084**

*The range, average and even the highest value of comparable transactions for the Cloncurry North EPMs 12205 and 15084 are substantially less than the expenditure incurred on the project by previous and current explorers. This possibly indicates that the potential of the property has been more than adequately tested, and that the law of diminishing returns kicked in some time ago.*

The disappointing results from the RC drilling at the GEM prospect, which cost about AU\$1.5 million in 2010 dollars and led to a small and inconsequential copper resource estimate, did not enhance the value of the property. For this reason, [Mining Associates] regard most of the RC drilling expenditure as wasted, and reduce the Cost Approach value from AU\$4.5 million to AU\$3 million. This still falls short of the average value calculated by the Market Approach (AU\$2.4 million). Assuming that the real value falls somewhere between the two figures, AU\$2.4 million and AU\$3.0 million, suggests a Preferred Value of AU\$2.7 million.

#### Cloncurry North EPM 15095

The range of values of comparable transactions for EPM 15095 is very wide, from a low AU\$380,000 to a high of AU\$1.2 million. This is probably a reflection of the relative scarcity of transactions involving properties of this type. Also, in the aftermath of the GFC, corporate sentiment towards speculative properties like EPM 15095 has fluctuated wildly between risk averse to risk taking. So the concept underpinning the Market Approach, that in an informed market a pure transaction reflects "fair market value", is not being reflected in recent real transactions as companies are routinely grossly over-valuing or under-valuing speculative assets compared to the Cost Approach. Nevertheless, the average of the broad spread of market values (AU\$710,000) is similar to the sunk cost of exploration expenditure on the property (AU\$600,000). Again, assuming that the real value lies somewhere between these two figures suggests a Preferred Value of AU\$650,000.

#### Waterford EPM 16393

The range of values of comparable transactions for EPM 16393 is fairly normal, from a low AU\$1,066,000 to a high of AU\$2,188,000. As with EPM 15095, there is a relative scarcity of transactions involving uranium exploration properties. Also, in the aftermath of the Fukushima nuclear accident, sentiment towards uranium properties has fluctuated wildly between risk averse to risk taking in a similar fashion to the impact of the GFC, and companies are similarly grossly overvaluing or undervaluing uranium assets compared to the Cost Approach.

Nevertheless, the average of the broad spread of market values (AU\$1,630,000) is similar to the sunk cost of exploration expenditure on the property (AU\$1,400,000). Again, assuming that the real value lies somewhere between these two figures suggests a Preferred Value of AU\$1,500,000.

On the basis of an analysis of 16 comparable transactions, and a review and analysis of 161 open-file reports of previous exploration within the Projects, the following tabulation has been compiled. The "Preferred" column lists the most preferable value placed on each Project by Mining Associates:

**Table 17: Properties valuation**

EPM	Market Approach			Cost Approach AU\$	Preferred AU\$
	Low AU\$	High AU\$	Average AU\$		
12205 15084	2,180,000	3,500,000	2,400,000	3,000,000 <sup>1</sup>	<b>2,700,000</b>
15095	380,000	1,200,000	710,000	600,000	<b>650,000</b>
16393	1,066,000	2,188,000	1,600,000	1,400,000	<b>1,500,000</b>
<b>TOTAL</b>	<b>3,626,000</b>	<b>6,888,000</b>	<b>4,710,000</b>	<b>5,000,000</b>	<b>4,850,000</b>

**Source:** Mining Associates Valuation Report

**Note:** <sup>1</sup>The Cost Approach of EPM 12205 and 15084 has been adjusted by PKFCA by AU\$1.5 million for expenditure that Mining Associates have considered as 'wasted expenditure'

PKFCA notes that the Properties valuation summary, set out above, is the valuation for 100% of the Properties. Pursuant to the Proposed Disposal, YEX will have the opportunity to obtain up to a 55% interest in the Properties.

## 8 VALUATION METHODOLOGY

### 8.1 Overview

In arriving at our valuation conclusion in relation to the Proposed Acquisition and the Proposed Disposal, we have considered the following broad categories of valuation methods:

- capitalisation of future maintainable earnings;
- discounted cash flow ("DCF");
- asset-based valuations;
- comparable market transactions; and
- the most recent quoted market price of listed securities.

Set out at Appendix 3 are further descriptions of valuation methodologies considered.

Set out below is a discussion of the valuation methods we consider appropriate for the purposes of undertaking our valuation assessment of the Proposed Transactions.

### 8.2 Proposed Acquisition

#### 8.2.1 Primary valuation approach

We have adopted an asset-based valuation approach, whereby the various assets and liabilities of San Mu have been taken into account. The major component is derived from the fair market valuation of the Laos Projects as calculated by Roma Appraisals. The following components have been assessed independently and then aggregated to arrive at the equity value of San Mu:

- the fair market value of the Laos Projects as assessed in the Roma Appraisals Valuation Report; and
- the value of the other NTA of San Mu (excluding the Laos Projects and including the value of any surplus assets and liabilities).

We note that the liabilities and assets of San Mu (other than the Laos Projects) are largely payables and cash and receivables, with a small value amount of fixed assets. Having regard to this, we have assumed that all San Mu's other assets and liabilities, excluding the value of the Laos Projects, are recorded at their fair market value in the latest available San Mu balance sheet.

The Laos Projects have been valued in RMB. PKFCA has translated the RMB value to the AU\$ equivalent at the prevailing AU\$/RMB spot rate as at the Assessment Date using exchange rates as quoted by the RBA.

We note that the Laos Properties and other assets of San Mu have been assessed on the basis of 100% (i.e. control) values. We have pro-rated the 100% (control) value of all the equity of San Mu, thus obtaining a 51% equity interest that Chinalco Yunnan proposes to acquire pursuant to the Proposed Acquisition.

#### 8.2.2 Proposed Acquisition valuation cross check

PKFCA do not believe a valuation cross check is available for the valuation of San Mu. The Laos Projects have been valued on a comparable market transaction approach. As the Laos Project valuations comprise the majority of San Mu's assets and underpin the San Mu equity valuation derived by PKFCA, a comparable market transaction approach has been indirectly applied in valuing San Mu.

### **8.2.3 Proposed Acquisition Consideration**

The Proposed Acquisition Consideration is cash, payable within 12 months. Accordingly, the nominal value will represent fair market value.

## **8.3 Proposed Disposal**

### **8.3.1 Primary valuation approach**

Mining Associates has been engaged to provide an independent technical assessment of the Properties and their fair market value. A summary of the Mining Associates Valuation Report, including the valuation methodologies considered, is set out in Section 7.2.

Mining Associates has advised the preferred valuation approach is the market approach.

We note that the Properties have been assessed on the basis of 100% (i.e. control) values. We have pro-rated the Mining Associates 100% (control) fair market value for the 55% interest in the Properties that is to be disposed pursuant to the Proposed Disposal.

### **8.3.2 Proposed Disposal valuation cross check**

Mining Associates have used the cost approach to cross check their preferred valuation.

### **8.3.3 Proposed Disposal Consideration**

The Proposed Disposal Consideration is the amount of cash to be expended by the YEX on further exploration of the Properties. The cash is payable over a three year period. Accordingly, the discounted present value of the cash amount represents fair market value.

## 9 EVALUATION OF THE PROPOSED ACQUISITION

### 9.1 Fair market value of San Mu

To calculate the fair market value of San Mu at the Assessment Date on a net assets basis, it is necessary to adjust the latest available statement of financial position. Adjustments have been made for the valuations of individual assets and liabilities to better reflect the fair market value of San Mu at the Assessment Date. Set out below is San Mu's pro-forma statement of financial position as at 30 June 2011 ("**Pro-forma Statement of Financial Position**"), using the mid-point valuation of the Laos Projects.

We have assumed all other assets and liabilities, excluding the Laos Projects, are recorded at their fair market value.

**Table 18: San Mu Pro-forma Statement of Financial Position**

	As at	Adjustments		As at	As at
	30-Jun-11 Actual Audited (RMB)	A	B	30-Jun-11 Pro-forma Mid-point (RMB)	30-Jun-11 Pro-forma Mid-point (AU\$)
<b>Current Assets</b>					
Cash and cash equivalent	191,752	-	17,827,700 <sup>3</sup>	18,019,452	2,726,343
Other receivables	171,684	-	-	171,684	25,976
Total Current Assets	363,436			18,191,136	2,752,319
<b>Non Current Assets</b>					
Fixed assets	529,893	-	-	529,893	80,173
Construction project	5,726,469	(5,726,469) <sup>1</sup>	32,000,000 <sup>4</sup>	32,000,000	4,841,600
Other non current assets	28,247,926	(28,247,926) <sup>1</sup>	-	-	-
Total Non Current Assets	34,504,288			32,529,893	4,921,773
TOTAL ASSETS	34,867,724			50,721,029	7,674,092
<b>Current Liabilities</b>					
Trade payables	1,450,923	-	-	1,450,923	219,525
Staff remuneration payable	167,743	-	-	167,743	25,380
Taxes and fees payable	44,862	-	-	44,862	6,788
Other payables	2,716,764	-	-	2,716,764	411,046
Total Current Liabilities	4,380,292			4,380,292	662,739
<b>Non Current Liabilities</b>					
Specific account payables	12,500,000	(12,500,000) <sup>2</sup>	-	-	-
Total Non-Current Liabilities	12,500,000			-	-
TOTAL LIABILITIES	16,880,292			4,380,292	662,739
<b>NET ASSETS</b>	<b>17,987,432</b>			<b>46,340,737</b>	<b>7,011,353</b>

**Source:** San Mu statement of financial position as at 30 June 2011, Roma Appraisals Valuation Report, PKFCA analysis

**Notes:** AU\$/RMB as at the Assessment Date - 0.1513 as quoted by the RBA

<sup>1</sup> Elimination of line items at carrying value that comprise the Laos Projects

<sup>2</sup> Elimination of the Specific Accounts Payables - refer paragraph 4.5

<sup>3</sup> To account for the investment of the Proposed Acquisition Consideration by Chinalco Yunnan

<sup>4</sup> To account for the Laos Projects at the mid-point of the Roma Appraisals' valuation range

In relation to the Pro-forma Statement of Financial Position, we have adjusted San Mu's statement of financial position as at 30 June 2011 for the fair market value of the Laos Projects and the elimination of the Specific Accounts Payables at carrying value.

As the Proposed Acquisition Consideration is to be injected into San Mu to fund further exploration, and not used to purchase existing YCI or YEX shareholdings, we have included the Proposed Acquisition Consideration in San Mu's Pro-forma Statement of Financial Position.

#### *Specific Accounts Payables*

As noted previously in the IER (refer paragraph 4.5), the Specific Accounts Payable reflects grant monies to sponsor exploration activities from the Chinese Finance Department of Yunnan Provincial Government and we have been advised that the liability will be written off in full after completion and acceptance of the Laos Project audit. The Directors have stated that if there is any issue with the audit, YCI and YEX have committed that the Specific Accounts Payable is their liability to resolve. PKFCA notes that Clause 4.6 of the Capital Increase Agreement states that any debt disputes relating to matters prior to the issue of the San Mu Business License are the responsibility of YCI and YEX. The Directors are of the view that Clause 4.6 of the Capital Increase Agreement would indemnify the Company from any liability of San Mu arising from any issue with the failure to write off all the Specific Accounts Payable following the audit of the Laos Projects.

As such, PKFCA has adjusted San Mu's statement of financial position for the Specific Accounts Payable on the basis that it does not represent a liability of San Mu.

#### *Fair market value of the Laos Projects*

This item represents the recognition of the Laos Projects at the mid-point value as assessed by Roma Appraisals. We recommend the Non-Associated Shareholders read the Roma Appraisals Valuation Report in full as attached as Appendix 4 of this IER.

We have adopted the fair market valuations of the Laos Projects as assessed in the annexed Roma Appraisals Valuation Report (represented by the construction project and other non current assets recorded on San Mu's statement of financial position as at 30 June 2011) as follows:

**Table 19: Fair market value of the Laos Projects**

	Low	High	Mid-Point
Fair market value of the Laos Projects - RMB	29,000,000	35,000,000	32,000,000
Fair market value of the Laos Projects - AU\$	4,387,700	5,295,500	4,841,600

**Source:** Roma Appraisals Valuation Report, PKFCA analysis

**Note:** Translation has been done at the AU\$/RMB spot rate as at the Assessment Date - 0.1513 (Source: RBA)

## **9.2 Conclusion as to fair market value of San Mu**

The table below outlines the fair market value of San Mu as at the Assessment Date.

**Table 20: San Mu fair market value**

AU\$	Low	High	Mid-point
Fair market value of 100% equity interest in San Mu	6,557,453	7,465,253	7,011,353
<b>Fair market value of a 51% equity interest in San Mu</b>	<b>3,344,301</b>	<b>3,807,279</b>	<b>3,575,790</b>

**Source:** PKFCA analysis

PKFCA has assessed the fair market value of a 51% equity interest in San Mu between **AU\$3.3 million and AU\$3.8 million**, with a mid-point of AU\$3.6 million.

PKFCA has not applied an additional premium for control to the Pro-forma net assets of San Mu. The Laos Projects have been assessed using a market based approach. Accordingly, a control premium is already allowed for in the valuation of the Laos Projects and the other net assets of San Mu.

### 9.3 Valuation of Proposed Acquisition Consideration

The Proposed Acquisition Consideration is the AU\$ cash equivalent of RMB17.8 million, to be paid by Chinalco Yunnan in three equal stages over a 12 month period following completion of the Proposed Acquisition.

As the Proposed Acquisition Consideration is payable over 12 months, PKFCA has not calculated the present value of the Proposed Consideration as at the Assessment Date.

PKFCA has translated the Proposed Acquisition Consideration to Australian Dollars using the spot AU\$/RMB rate prevailing at the Assessment Date of AU\$/RMB 0.1513 (Source: RBA). The Proposed Acquisition Consideration is assessed at **AU\$2.7 million**.

### 9.4 Fairness Assessment

RG 111.57 provides that the Proposed Acquisition will be "fair" if the 51% fair market value of San Mu is greater than or equal to the value of the Proposed Acquisition Consideration being offered by the Company. The comparison should be made assuming a knowledgeable and willing, but not anxious, buyer and a knowledgeable and willing, but not anxious, seller acting at arm's length.

Set out below is the comparison between the assessed value of the 51% fair market value of San Mu and the Proposed Acquisition Consideration:

**Table 21: Fairness assessment - Proposed Acquisition**

	Section	Low AU\$	High AU\$	Mid-point AU\$
Fair market value of a 51% equity interest in San Mu	9.2	3,344,301	3,807,279	3,575,790
Cash consideration of the Proposed Acquisition	9.3	2,697,331	2,697,331	2,697,331
<b>Conclusion</b>		<b>"Fair"</b>	<b>"Fair"</b>	<b>"Fair"</b>

**Source:** PKFCA analysis

Based on the analysis set out in Table 21, the fair market value of the Proposed Acquisition Consideration is lower than the range of the fair market value of a 51% equity interest in San Mu. Accordingly, in our opinion, the Proposed Acquisition is **"Fair"**.

It could be argued that as the cash consideration payable under the Proposed Acquisition is payable over 12 months, the present value of the cash consideration should be calculated. However, the present value of the cash consideration would not be materially different and would not change our opinion that the Proposed Acquisition is Fair.

Furthermore, PKFCA has had regard to the forecast 2012 AU\$/RMB rate to translate the Proposed Acquisition Consideration as the cash consideration is payable over a 12 month period. However, the cash consideration would not be materially different and would not change our opinion that the Proposed Acquisition is Fair.

### 9.5 Reasonableness Assessment

RG 111.60 provides that a proposed related party transaction is "reasonable" if it is "fair". Therefore, applying that reasoning to the present circumstances, as we have concluded the Proposed Acquisition is **"Fair"**, pursuant to RG 111, the Proposed Acquisition is also **"Reasonable"**.

Nonetheless, in our "Reasonableness" assessment we have considered various factors that we believe Non-Associated Shareholders should consider when deciding whether or not to accept the Proposed Acquisition. Set out below is a summary of our assessment of the various factors.

### 9.5.1 Advantages of the Proposed Acquisition

#### *Acquisition of new mineral deposits*

The Proposed Acquisition provides the Company with a new mineral deposits base for further exploration and potential development. Chinalco Yunnan will be able to share in the future growth of the Laos Projects if they progress beyond an exploration stage.

#### *Control of San Mu*

The Proposed Acquisition provides the opportunity to acquire control of San Mu. Chinalco Yunnan will have the opportunity to acquire a 51% equity interest and have three seats (out of five) on the Board of Directors.

#### *Potential commerciality of the Xinzhai Project*

The Directors have indicated the Xinzhai Project has the potential to reach an operating stage by undertaking a feasibility study. The feasibility study would have the potential to bring the Xinzhai Project mineral estimates to a JORC Code-compliant status.

#### *Infrastructure benefits*

The Laos Projects are within transporting distance of YCI's existing processing centre in southern Yunnan Province, China. If the Laos Projects progress to the development stage, the Company would be able to benefit from having a processing plant in close proximity.

### 9.5.2 Disadvantages of the Proposed Acquisition

#### *Uncertainty around the future performance of San Mu and the Laos Projects*

Due to the early stage nature of the Laos Projects, there is a risk that the Laos Projects may not proceed to a development phase. Accordingly, there is uncertainty around future San Mu's profitability and shareholder returns.

#### *Funding of Laos Projects exploration activities*

In order to gain any advantage from the Proposed Acquisition it is likely that exploration will have to be undertaken and this will have to be funded. Chinalco Yunnan's equity injection is intended to fund a certain amount of exploration expenditure. Having regard to San Mu's Pro Forma Statement of Financial Position, it appears likely that any additional exploration expenditure subsequent to the expenditure of Chinalco Yunnan's equity injection, will have to come from San Mu's shareholders, including Chinalco Yunnan.

#### *Movements in commodity prices and foreign exchange rates*

The fair market value of San Mu is primarily dependent on the prevailing commodity prices for copper and silver, due to the Laos Projects comprising the majority of San Mu's assets. If the commodity prices decrease, value of the Laos Projects and the fair market value of Chinalco Yunnan's 51% equity interest may also decrease.

The purchase consideration is fixed as RMB17,827,700. If the AU\$ depreciates against the RMB, the cash consideration payable under the Proposed Acquisition will cost more in AU\$ terms.

However, the AU\$ equivalent of San Mu's net assets may increase. The net effect may be that the fair market value of Chinalco Yunnan's 51% equity interest in San Mu may remain greater than the cash consideration.

*Subject to regulatory approvals*

The Proposed Acquisition is subject to Chinese regulatory approval. There is a risk that the Proposed Acquisition will not receive Chinese regulatory approval and the Proposed Acquisition may not proceed.

### **9.5.3 Conclusion on "Reasonableness"**

As we have concluded the Proposed Acquisition is "Fair", pursuant to RG 111 it is considered "**Reasonable**".

### **9.6 Conclusion**

In our opinion, based on the analysis contained within this section, the Proposed Acquisition is "**Fair**" and "**Reasonable**" to the Non-Associated Shareholders.

Obviously, if the Non-Associated Shareholders have a more pessimistic view of the prospects and potential value of the Laos Projects, they can decide to vote against the Proposed Acquisition.

## 10 EVALUATION OF THE PROPOSED DISPOSAL

### 10.1 Approach

To evaluate the Proposed Disposal it is PKFCA's view that it is appropriate to:

- assess the fair market value of the Properties. We have relied on the Mining Associates Valuation Report for the fair market value of the Properties. A summary of the report is set out in Section 7.2, and in its entirety in Appendix 4;
- assess the fair market value of the Proposed Disposal Consideration;
- aggregate the fair market value of the Properties and the Proposed Disposal Consideration, (assuming that it is fully expended);
- pro rata the valuation for the aggregated value of the Properties and the Proposed Disposal Consideration, for the 55% ownership interest in the Properties that YEX is proposing to acquire pursuant to the JV Agreement; and
- compare the fair market value of a 55% interest in the aggregated value of the Properties and the Proposed Disposal Consideration with the Proposed Disposal Consideration.

### 10.2 Valuation of Properties

Set out below is a summary of the PKFCA adjusted valuation of 100% of the Properties. We recommend Non-Associated Shareholders read the Mining Associates Valuation Report in full as attached as Appendix 4 of this IER.

**Table 22: Properties valuation summary**

EPM	Market Approach			Cost Approach AU\$	Preferred AU\$
	Low AU\$	High AU\$	Average AU\$		
12205 15084	2,180,000	3,500,000	2,400,000	3,000,000 <sup>1</sup>	2,700,000
15095	380,000	1,200,000	710,000	600,000	650,000
16393	1,066,000	2,188,000	1,600,000	1,400,000	1,500,000
<b>TOTAL</b>	<b>3,626,000</b>	<b>6,888,000</b>	<b>4,710,000</b>	<b>5,000,000</b>	<b>4,850,000</b>

**Source:** Mining Associates Valuation Report

**Note:** <sup>1</sup>The Cost Approach of EPM 12205 and 15084 has been adjusted by PKFCA by AU\$1.5 million for expenditure that Mining Associates have considered as 'wasted expenditure'

### 10.3 Valuation cross check

To provide additional evidence of the value of the Properties, Mining Associates performed the valuation of the Properties using two different methods.

Mining Associates noted that disappointing results from RC drilling led to inconsequential copper resource estimates in the Cloncurry North Project. The RC drilling expenditure was approximately AU\$1.5 million. Mining Associates considered the expenditure 'wasted expenditure' as it did not enhance the value of the project. Accordingly, Mining Associates believe the Cost Approach should be adjusted by AU\$1.5 million.

Set out below is the adjusted Cost Approach method for the Projects, adjusting for the "wasted" RC drilling expenditure.

**Table 23: Valuation cross check - Proposed Disposal**

AU\$	Amount
Cost Approach of the Properties - 100% interest	6,500,000
RC drilling wasted expenditure	(1,500,000)
<b>Valuation cross check - Properties - 100% interest</b>	<b>5,000,000</b>

**Source:** Mining Associates Valuation Report

Adjusting the Cost Approach for the AU\$1.5 million for the RC drilling expenditure, which is considered as wasted by Mining Associates, the assessed value of the Properties under the Cost Approach falls within the range of the Properties under the market approach.

#### 10.4 Valuation of Proposed Disposal Consideration

The Proposed Disposal Consideration under the JV Agreement is AU\$5 million in exploration expenditure on the Properties to be incurred by YEX over a three year period.

The payment profile of the exploration expenditure is as follows:

- Tranche 1: AU\$1.2 million on or before the date of one year after the commencement of the JV Agreement, earning a 10% interest;
- Tranche 2: AU\$1.8 million on or before the date of two years after the commencement of the JV Agreement, earning a 20% interest; and
- Tranche 3: AU\$2 million on or before the date of three years after the commencement of the JV Agreement, earning a 25% interest.

As the Proposed Disposal Consideration is payable over three years, PKFCA believes it is appropriate to calculate the present value of the Proposed Disposal Consideration as at the Assessment Date.

The JV Agreement defines the 'End Date' as 15 February 2014. For the purposes of calculating the present value of the Proposed Disposal Consideration we have assumed that each tranche of exploration expenditure to occur on the following dates:

- Exploration expenditure Tranche 1 - 13 November 2011;
- Exploration expenditure Tranche 2 - 16 August 2012; and
- Exploration expenditure Tranche 3 - 16 August 2013.

The date of the exploration expenditure Tranche 1 is the mid-point between the Assessment Date and the 15 February 2012. Similarly, the date for the exploration expenditure Tranche 2 and 3 is the mid-point between 15 February 2013 and 2014, respectively. We have used 15 February each year as the JV Agreement stated the end date is 15 February 2014. Furthermore, we have used the mid-point to account for the fact that the exploration expenditure would be incurred throughout the period.

To calculate the present value of the Proposed Disposal Consideration, we have applied a discount rate to each tranche of exploration expenditure at 6.55%, comprising of the Australian 3-year Government Bond rate of 3.55% as at the Assessment Date and an assumed cost of debt margin applicable to YEX of 3%. We have benchmarked our adopted discount rate against the 3 year BBB Corporate Bond rate as at the Assessment Date of 5.96% (Source: Bloomberg).

We have adopted the assumed cost of debt applicable to YEX as the appropriate discount rate for the following reasons:

- on the one hand, we believe that a risk free rate is not applicable as would be appropriate if the expenditures were certain in amount and timing. However, the expenditures are not certain. YEX has discretion as to the amounts and timing of expenditures. In the extreme case, it may not make any expenditure (and conversely, would not acquire any interest in the Projects); and
- however, on the other hand, we believe that a cost of equity, or at least a weighted average cost of capital (representing the discount rate applicable to value an asset) is not applicable as the discount rate is being applied to a stream of cash flows, rather than an equity or asset investment.

The following table outlines the present value of the Proposed Disposal Consideration:

**Table 24: Present value - Proposed Disposal Consideration**

Nominal Exploration Expenditure	Assumed Date Payable By	Present Value as at Assessment Date AU\$
Tranche 1 - AU\$1.2 million	15 February 2012	1,180,552
Tranche 2 - AU\$1.8 million	15 February 2013	1,687,440
Tranche 3 - AU\$2 million	15 February 2014	1,759,675
<b>Nominal Total - AU\$5 million</b>		<b>4,627,667</b>

**Source:** PKFCA analysis

The present value of the Proposed Disposal Consideration is estimated at **AU\$4.6 million**.

## 10.5 Fairness Assessment

RG 111.57 provides that the Proposed Transaction will be "fair" if the value of the interest in the Properties being acquired is equal to or less than the value of the consideration being provided by YEX. The comparison should be made assuming a knowledgeable and willing, but not anxious, buyer and a knowledgeable and willing, but not anxious, seller acting at arm's length.

We note that the Proposed Disposal Consideration to be provided by YEX, for a 55% interest in the Properties, is not being paid to or invested directly in the Company. The Proposed Disposal Consideration, to the extent that it is expended, will be spent on the exploration of the Properties and Chinalco Yunnan will only own 45% of the Properties after the Proposed Disposal is fully implemented.

In our opinion, the assessment of the "fairness" of the transaction should take into account that the Proposed Disposal Consideration, to the extent that it is expended, will be spent on the exploration of the Properties and the Company will benefit to the extent of its 45% ownership of the Properties from the benefits of such expenditure.

One valuation approach (known as the cost approach) is to assume that exploration expenditure on a project can be assumed to enhance the value of the exploration project by the amount of the expenditure. Of course, exploration expenditure may result in no benefit (such as the RC drilling expenditure of approximately AU\$1.5 million referred to in the Mining Associates Valuation Report that produced disappointing results such that Mining Associates considered the expenditure 'wasted expenditure' as it did not enhance the value of the project (refer Section 10.3)).

On the other hand, exploration expenditure may enhance the value of the project by significantly more than the amount of the expenditure if additional positive information about mineralisation is generated or an economic deposit found.

In usual circumstances, before the exploration expenditure is spent and results obtained, it is usually the case that it is assumed that the exploration expenditure on a project can be assumed to enhance the value of the exploration project by the amount of the expenditure.

Applying that approach to the present circumstances, it can be assumed that if all the Proposed Disposal Consideration is expended, then the value of the Properties will be increased by the same amount and the Company will own 45% of the Properties with the enhanced value.

Set out below is the comparison between the value of the Properties and the Proposed Disposal Consideration provided by YEX on the above basis:

**Table 25: Fairness assessment - Proposed Disposal**

AU\$	Section	Low	High	Preferred
Fair market value of the Properties before expenditure of the Proposed Disposal Consideration	10.2	3,626,000	6,888,000	4,850,000
Add: Proposed Disposal Consideration	10.4	4,627,667	4,627,667	4,627,667
<b>Fair market value of the Properties after expenditure of the Proposed Disposal Consideration</b>		<b>8,253,667</b>	<b>11,515,667</b>	<b>9,477,667</b>
Fair market value of a 55% interest in the Properties		4,539,517	6,333,617	5,212,717
Fair market value of the Proposed Disposal Consideration	10.4	4,627,667	4,627,667	4,627,667
Premium / (Deficiency) of the Proposed Disposal Consideration as compared with fair market value of a 55% interest in the Properties		88,150	(1,705,950)	(585,050)
		1.9%	(26.9%)	(11.2%)
<b>Conclusion</b>		<b>"Fair"</b>	<b>"Not Fair"</b>	<b>"Not Fair"</b>

Source: PKFCA analysis

An alternative assessment approach is to consider the matter from the viewpoint of the value of Chinalco Yunnan's interests in the Properties, as follows:

**Table 26: Fairness assessment - Proposed Disposal**

AU\$	Ref	Low	High	Preferred
<b>Chinalco Yunnan's position before the Proposed Transaction</b>				
100% of the fair market value of the Properties before Proposed Transaction	10.2	3,626,000	6,888,000	4,850,000
<b>Chinalco Yunnan's position after the Proposed Transaction</b>				
100% of the fair market value of the Properties before expenditure of the Proposed Disposal Consideration		3,626,000	6,888,000	4,850,000
Add: Proposed Disposal Consideration	10.4	4,627,667	4,627,667	4,627,667
<b>Fair market value of the Properties after expenditure of the Proposed Disposal Consideration</b>		<b>8,253,667</b>	<b>11,515,667</b>	<b>9,477,667</b>
Fair market value of a 45% interest in the Properties after the Proposed Transaction		3,714,150	5,182,050	4,264,950
Premium / (Deficiency) of fair market value of a 45% interest in the Properties after the Proposed Transaction as compared with 100% fair market value of the Properties before Proposed Transaction		88,150	(1,705,950)	(585,050)
		2.4%	(24.8%)	(12.1%)
<b>Conclusion</b>		<b>"Fair"</b>	<b>"Not Fair"</b>	<b>"Not Fair"</b>

Source: PKFCA analysis

Based on the analysis set out above, the fair market value of the Proposed Disposal Consideration falls within the range of the assessed fair market value of a 55% interest in the Properties, albeit at the lower range. Accordingly, in our opinion, the Proposed Disposal is "**Fair**".

We note that the above analysis ignores that under the JV Agreement, fees, rents, rates and other monies levied or assessed upon the Properties (exclusive of the exploration expenditure payable by YEX pursuant to the Proposed Disposal) under Queensland's *Mineral Resources Act 1989* are payable by YEX.

## 10.6 Reasonableness Assessment

RG 111.60 provides that a proposed related party transaction is "reasonable" if it is "fair". Therefore, applying that reasoning to the present circumstances, as we have concluded the Proposed Disposal is "**Fair**", pursuant to RG 111, the Proposed Acquisition is also "**Reasonable**".

Nonetheless, we have considered various factors that we believe Non-Associated Shareholders should consider when deciding whether or not to accept the Proposed Disposal. Set out below is a summary of our assessment of the various factors.

### 10.6.1 Advantages of the Proposed Disposal

#### *Future capital committed to the Properties*

Under the JV Agreement it is YEX's responsibility to incur exploration expenditure up to the amount of AU\$5 million, although there is no obligation on YEX to make any expenditure at all. But if it does not, then it would not acquire any interest in the Properties. Accordingly, the Company will not have to commit exploration expenditure until after the JV Agreement End Date. Chinalco Yunnan can reallocate capital and focus towards other projects.

#### *Participation in the future growth of the Properties*

The Proposed Disposal provides Chinalco Yunnan with the opportunity to retain an interest of 45% in the Properties. This retention will allow the Company to benefit from any future growth in value to be derived from the Properties if there are any major mineral discoveries.

#### *Properties are a low priority for Chinalco Yunnan*

The Directors have stated the Properties are a low priority due to the current mineral estimates not reaching an economic stage. The Proposed Disposal presents the opportunity for further exploration to be undertaken on the Properties that would not have occurred for some time, if at all, in the absence of the Proposed Disposal.

#### *Limitation of future expenditure by Chinalco Yunnan*

Under the JV Agreement, fees, rents, rates and other monies levied or assessed upon the Properties (exclusive of the exploration expenditure payable by YEX pursuant to the Proposed Disposal) under Queensland's *Mineral Resources Act 1989* are payable by YEX.

### 10.6.2 Disadvantages of the Proposed Disposal

#### *Reduced participation in any future growth of the value of the Properties*

The exploration expenditure to be incurred on the Properties may enhance the value of the Properties and may translate to discoveries of an economic mineral base. Should the Non-Associated Shareholders approve the Proposed Disposal and YEX fulfils the minimum exploration expenditure requirements, the shareholders' future participation in the Properties will be reduced to 45%.

#### *Forgo opportunity to realise cash by sale of Properties*

By entering into the Proposed Transaction the Company would forgo the opportunity to sell the Properties and realise cash that would fund other more attractive activities.

The preferred value of the Properties is AU\$4,850,000. If this amount could be realised, it would be a significant sum for Chinalco Yunnan and the Company has indicated that the Properties were a low priority due to the current mineral estimates not reaching an economic stage.

#### *Possible further dilution of participation*

The JV Agreement states that after the End Date of the JV Agreement the Company's interest could dilute further if Chinalco Yunnan does not contribute its share of the costs towards the Properties in accordance with its participating interest. Accordingly, Chinalco Yunnan's participating interest in the Properties could be diluted further than 45% if Chinalco Yunnan does not contribute its share of the costs.

### **10.6.3 Conclusion on "Reasonableness"**

As we have concluded the Proposed Disposal is "Fair", pursuant to RG 111 it is considered "**Reasonable**".

## **10.7 Conclusion**

PKFCA concludes that the Proposed Disposal is "**Fair**" and "**Reasonable**" to the Non-Associated Shareholders.

Obviously, if the Non-Associated Shareholders have a more optimistic view of the prospects and potential value of the Properties, they can decide to vote against the Proposed Disposal.

## 11 QUALIFICATIONS AND DECLARATIONS

### 11.1 Qualifications

PKFCA is the licensed corporate advisory arm of PKF East Coast Practice, Chartered Accountants and Business Advisers. PKFCA provides advice in relation to all aspects of valuations and has extensive experience in the valuation of corporate entities and provision of expert reports.

Ms Fiona Hansen, CA, B.Com (Hons), is a Director of PKFCA. Ms Hansen is also a Partner of PKF East Coast Practice. Ms Hansen is the Director responsible for the preparation of this IER. Ms Hansen has in excess of 15 years experience in the chartered accountancy profession and has undertaken numerous corporate finance assignments involving acquisitions, divestments, valuations and financial due diligence.

Mr Wayne Schulz, CA, B.Com, Post-Graduate Diploma in Accounting, is a Principal of PKFCA. Wayne has over 10 years of corporate finance experience. He has had extensive experience in the areas of preparation and review of independent expert's reports, business valuations, valuation of intangible assets, employee options, purchase price allocations and due diligence reviews.

Mr. Peter Cornell B.Com, LLB, is a Director of PKFCA. Mr. Cornell has been actively involved in the review of this IER. Mr. Cornell has over 25 years experience in law, business valuation and corporate advisory and planning activities. He has had extensive experience in the areas of preparation and review of independent expert's reports, litigation accounting, business feasibility studies, financial investigations, business valuations and due diligence reviews.

Based on their experience, Messrs Hansen, Schulz and Cornell are considered to have the appropriate expertise and professional qualifications to provide the advice offered.

### 11.2 Independence

PKFCA is unaware of any matter or circumstance that would preclude it from preparing this IER on the grounds of independence under regulatory or professional requirements. In particular, PKFCA has had regard to the provisions of applicable pronouncements and other guidance statements relating to professional independence issued by Australian professional accounting bodies and ASIC.

PKFCA was not involved in advising on, negotiating, setting, or otherwise acting in any capacity for Chinalco Yunnan in relation to the Proposed Transactions, other than the preparation of this IER. Further, PKFCA has not held and, at the date of this IER, does not hold any shareholding in, or other relationship with, Chinalco Yunnan that could be regarded as capable of affecting its ability to provide an unbiased opinion in relation to the Proposed Transactions.

PKFCA considers itself to be independent in terms of *RG 112 Independence of experts*, issued by ASIC, dated March 2011.

PKFCA will receive a fee based on the time spent in the preparation of this IER in the amount of approximately AU\$50,000, (plus GST and disbursements). PKFCA will not receive any fee contingent upon the outcome of the Proposed Transactions, and accordingly, does not have any pecuniary or other interests that could reasonably be regarded as being capable of affecting its ability to give an unbiased opinion in relation to the Proposed Transactions. In addition, fees for the reports of the independent Technical Specialists have been paid by Chinalco Yunnan and such fees are also on the same basis as that rendered by PKFCA.

Two drafts of this IER were provided to the Directors of Chinalco Yunnan and the Technical Specialists for review of factual accuracy. Certain changes were made to the IER as a result of the circulation of the draft IERs. However, no changes were made to the methodology, conclusions or recommendations made to the Non-Associated Shareholders.

### **11.3 Disclaimer**

This IER has been prepared at the request of the Directors and was not prepared for any purpose other than that stated in this IER. This IER has been prepared for the sole benefit of the Directors and Non-Associated Shareholders. Accordingly, this IER and the information contained herein may not be relied upon by anyone other than the Directors and the Non-Associated Shareholders without the written consent of PKFCA. PKFCA accepts no responsibility to any person other than the Directors, and Non-Associated Shareholders in relation to this IER. The statements and opinions contained in this IER are given in good faith and are based upon PKFCA's consideration and assessment of information provided by the Directors, executives and management of Chinalco Yunnan and San Mu.

## APPENDIX 1 GLOSSARY

Term	Definition
ActivEX	ActivEX Limited
AFSL	Australian Financial Services Limited
AU\$	Australian Dollar
Articles of Association	San Mu's Articles of Association
ASIC	Australian Securities & Investments Commission
Assessment Date	19 August 2011
ASX	Australian Securities Exchange
Capital Increase Agreement	Agreement on Capital Increase for San Mu
Chinalco	The Aluminium Corporation of China
CMRRC	Chinese Mineral Resource/Reserve Classification Standard
CNY	Chinese Yuan
Company or Chinalco Yunnan Corporations Act	Chinalco Yunnan Copper Resources Ltd <i>Corporations Act 2001</i>
CPI	Consumer Price Index
DCF	Discounted Cash Flow
Directors	Directors of Chinalco Yunnan
EPM	Exploration Permit for Minerals
Explanatory Memorandum	The Explanatory Memorandum prepared by Chinalco Yunnan in respect of the Proposed Transactions, which this IER accompanies
Farm-in Interest	YEX's exclusive right to earn up to a 55% interest in the Properties, free of all encumbrances
FOS	Financial Ombudsman Service Limited
FSG	Financial Services Guide
FY	Financial Year
GDP	Gross Domestic Product
GFC	Global Financial Crisis
Goldsearch	Goldsearch Limited
IER	This Independent Expert's Report
JORC Code	The Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code, 2004 edition)
JV Agreement	Joint Venture Agreement in respect of the Properties between YEX and Chinalco Yunnan dated 15 February 2011, as amended by the Deed of Variation between YEX and Chinalco Yunnan dated 2 September 2011
JV Agreement Commencement Date	The date that the JV Agreement commences, being when the Company obtains the necessary shareholder approvals to the Proposed Disposal
JV Agreement End Date	The end date of the JV Agreement, being 15 February 2014 or such later date as agreed by Chinalco Yunnan and YEX
Laos Projects	The four developments owned by the two subsidiaries of San Mu, being Xinzhai Project, Jiuzhai Project, Nadao Project and Modeng Project
Licence	Australian Financial Services Licence
LOI	Letter of Intent
Mining Associates	Mining Associates Pty Ltd
Mining Associates Valuation Report	Valuation Report prepared by Mining Associates on the Properties
Non-Associated Shareholders	Shareholders of Chinalco Yunnan whose votes are not to be disregarded in respect of the Proposed Acquisition and/or Proposed Disposal, as applicable
NTA	Net Tangible Assets
PKFCA, us or we	PKF Corporate Advisory (East Coast) Pty Limited
Pro-forma Statement of Financial Position	San Mu's statement of financial position as at 30 June 2011, adjusted for valuations of individual assets and liabilities to better reflect fair market value of San Mu as at the Assessment Date
Proposed Acquisition	Chinalco Yunnan's proposed 51% equity investment in San Mu
Proposed Disposal	Chinalco Yunnan's proposed disposal of a 55% interest in the Properties

Term	Definition
Proposed Transactions	Collectively, the Proposed Acquisition and the Proposed Disposal
Proposed Acquisition Consideration	The AU\$ equivalent of RMB17,827,700, payable in cash by Chinalco Yunnan, over a 12 month period
Proposed Disposal Consideration	AU\$5 million in exploration expenditure to be incurred by YEX on the Properties
Properties	Collectively, the Cloncurry North and Waterford Projects comprising of EPM 12285 (Roseby East), EPM 15084 (Quamby), EPM 15095 (Clonagh) and EPM 16393 (Waterford).
RBA	Reserve Bank of Australia
RG	Regulatory Guideline, as issued by ASIC
RMB	Renminbi, being the official currency of the People's Republic of China. The primary unit of Renminbi is the Chinese Yuan
Roma Appraisals	Roma Appraisals Limited
Roma Appraisals Valuation Report	Valuation report prepared by Roma Appraisals on the equity value of San Mu
RTMEC	Rio Tinto Mining and Exploration Chile
San Mu	Yunnan Copper San Mu Mining Industry Co. Ltd
San Mu Business License	The new business license of San Mu issued after San Mu is modified to a Chinese-foreign joint venture in accordance with the San Mu JV Contract
San Mu JV Contract	Joint Venture Contract for the Establishment of the Joint Venture Yunnan Copper San Mu Mining Industry Co Ltd
Technical Specialists	Mining Associates and Roma Appraisals
Technical Specialists Valuation Report	Collectively, the Mining Associates Valuation Report and the Roma Appraisals Valuation Report
US\$	United States Dollar
YEX	Yunnan Copper Mineral Resources Exploration and Development Co. Ltd
VWAP	Volume Weighted Average Price

**Source:** PKFCA

## APPENDIX 2 SOURCES OF INFORMATION

In preparing this IER, PKFCA has had access to and relied upon the following principal sources of information:

- Explanatory Memorandum prepared by Hopgood Ganim;
- Chinalco Yunnan's 2009 and 2010 Annual Report;
- Chinalco Yunnan's Financial Report for the Half-Year Ended 31 December 2010;
- San Mu balance sheet as at 30 June 2011, with 31 December 2010 comparatives;
- San Mu profit and loss statement for the six months ended 30 June 2011 and the year ended 31 December 2010;
- Chinalco Yunnan Share Register, dated 12 August 2011;
- Chinalco Yunnan website, <http://www.cycal.com.au/irm/content/home.html>
- Mining Associates Valuation Report, dated 3 June 2011;
- Roma Appraisals Valuation Report, dated 21 July 2011;
- Joint Venture Agreement between Yunnan Copper Mineral Resources Exploration and Development Co. Ltd and China Yunnan Copper Australia Limited (now Chinalco Yunnan Copper Resources Limited);
- Deed of Variation between Chinalco Yunnan and YEX, prepared by Hopgood Ganim;
- Agreement on Capital Increase - Yunnan Copper San Mu Mining Industry Co. Ltd, dated 28 January 2011;
- Joint Venture Contract For the Establishment of the Joint Venture "Yunnan Copper San Mu Mining Industry Co. Ltd", dated 28 January 2011;
- Articles of Association of "Yunnan Copper San Mu Mining Industry Co. Ltd";
- Joint Press Release dated 31 January 2011, "Laos - Copper Silver - Development Joint Venture";
- Various ASX announcements;
- Various correspondence and discussions between PKFCA and Chinalco Yunnan;
- Information and research sourced from Bloomberg and RBA; and
- Information generally available and provided by major Australian economic forecasting bodies.

## APPENDIX 3 VALUATION METHODS

In conducting our assessment of the fair market value of the Proposed Transactions the following commonly used business valuation methods have been considered:

### Discounted Cash Flow Method

The DCF method is based on the premise that the value of a business or any asset is represented by the present value of its future cash flows. It requires two essential elements:

- the forecast of future cash flows of the business asset for a number of years (usually five (5) to 10 years); and
- the discount rate that reflects the riskiness of those cash flows used to discount the forecast cash flows back to net present value.

DCF is appropriate where:

- the businesses' earnings are capable of being forecast for a reasonable period (preferably five (5) to 10 years) with reasonable accuracy;
- earnings or cash flows are expected to fluctuate significantly from year to year;
- the business or asset has a finite life;
- the business is in a 'start up' or in early stages of development;
- the business has irregular capital expenditure requirements;
- the business involves infrastructure projects with major capital expenditure requirements; or
- the business is currently making losses but is expected to recover.

### Capitalisation of Future Maintainable Earnings Method

This method involves the capitalisation of estimated future maintainable earnings by an appropriate multiple. Maintainable earnings are the assessed sustainable profits that can be derived by the vendor's business and excludes any one off profits or losses. An appropriate earnings multiple is assessed by reference to market evidence as to the earnings multiples of comparable companies.

This method is suitable for the valuation of businesses with indefinite trading lives and where earnings are relatively stable or a reliable trend in earnings is evident.

### Net Realisable Value of Assets

Asset based valuations involve the determination of the fair market value of a business based on the net realisable value of the assets used in the business.

Valuation of net realisable assets involves:

- separating the business or entity into components which can be readily sold, such as individual business units or collection of individual items of plant and equipment and other net assets; and
- ascribing a value to each based on the net amount that could be obtained for the asset if sold.

The net realisable value of the assets can be determined on the basis of:

- *orderly realisation*: this method estimates fair market value by determining the net assets of the underlying business including an allowance for the reasonable costs of carrying out the sale of assets, taxation charges and the time value of money assuming the business is wound up in an orderly manner. This is not a valuation on the basis of a forced sale where the assets might be sold at values materially different from their fair market value;
- *liquidation*: this is a valuation on the basis of a forced sale where the assets might be sold at values materially different from their fair market value; or

- *going concern*: the net assets on a going concern basis estimates the market value of the net assets but does not take into account any realisation costs. This method is often considered appropriate for the valuation of an investment or property holding company. Adjustments may need to be made to the book value of assets and liabilities to reflect their going concern value.

The net realisable value of a trading company's assets will generally provide the lowest possible value for the business. The difference between the value of the company's identifiable net assets (including identifiable intangibles) and the value obtained by capitalising earnings is attributable to goodwill.

The net realisable value of assets is relevant where a company is making sustained losses or profits but at a level less than the required rate of return, where it is close to liquidation, where it is a holding company, or where all its assets are liquid. It is also relevant to businesses which are being segmented and divested and to value assets that are surplus to the core operating business. The net realisable assets methodology is also used as a check for the value derived using other methods.

These approaches ignore the possibility that the company's value could exceed the realisable value of its assets.

### Share Market Trading History

The application of the price that a company's shares trade on the ASX is an appropriate basis for valuation where:

- the shares trade in an efficient market place where 'willing' buyers and sellers readily trade the company's shares; and
- the market for the company's shares is active and liquid.

### Constant Growth Dividend Discount Model

The dividend discount model works best for:

- firms with stable growth rates;
- firms which pay out dividends that are high and approximate free cash flow to equity;
- firms with stable leverage; and
- firms where there are significant or unusual limitations to the rights of shareholders.

### Special Value

Special value is the amount which a potential acquirer may be prepared to pay for a business in excess of the fair market value. This premium represents the value to the potential acquirer of potential economies of scale, reduction in competition or other synergies arising from the acquisition of the asset not available to likely purchasers generally. Special value is not normally considered in the assessment of fair market value as it relates to the individual circumstances of special purchases.

APPENDIX 4 TECHNICAL SPECIALIST VALUATION REPORTS



VALUATION OF MINERAL PROPERTIES  
OF CHINA YUNNAN COPPER AUSTRALIA  
IN  
AUSTRALIA AND LAOS



Prepared by Mining Associate Pty Ltd  
for  
China Yunnan Copper Australia

**Authors:**  
Mining Associates Limited, 3 June 2011  
Roma Appraisals Limited, 09 June 2011

Mining Associates Pty Ltd  
ABN 29 106 771 671  
Level 4, 67 St Paul's Terrace  
PO Box 161  
Spring Hill QLD 4004 AUSTRALIA  
T 61 7 3831 9154  
F 61 7 3831 6754

## EXECUTIVE SUMMARY

At the request of (insert) of China Yunnan Copper Australia Limited ("CYCAL"), Mining Associates Pty Ltd ("MA") was commissioned in May 2011 to prepare a Valuation of the CYCAL tenements located in Queensland ("QLD") and Laos. The valuation of the assets was conducted in conjunction with Mining Associates' valuations partner in Hong Kong; Roma Appraisals Limited ("Roma"), who are licensed valuers for exploration and mining related assets.



Australian Projects



Loatian Projects

The scope of the inquiries and of the Valuations included the following:

- An analysis of all drilling, sampling, assaying, geological, geophysical and other exploration work conducted on the CYCAL tenements to date;
- A review of recent exploration costs where available, including current prices charged for drilling, sampling, assaying and other exploration work
- A review of transactions involving comparable properties in Australia, Laos and similar countries over the past 5 years

MA has not been requested to comment on the Fairness or Reasonableness of any vendor or promoter considerations, and therefore no opinion on these matters has been offered.

The MA valuation reviewed the three generally accepted Valuation approaches of Income Approach, Market Approach and Cost Approach. The Income Approach is based on the principle of anticipation of benefits and includes all methods that are based on the income or cash flow generation potential of the Mineral Property, most commonly Discounted Cash Flow or DCF. This approach is not applicable to the CYCAL Queensland projects as none contain measured resources or reserves that comply with the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves ("JORC Code") established by the Joint Ore Reserves Committee. The primary methods used in this Valuation are the Market Approach and the Cost Approach. The Market Approach is based primarily on the principle of substitution and is also called the Sales Comparison Approach. The Mineral Property being valued is compared with the transaction value of similar Mineral Properties, transacted in an open market. Methods include comparable transactions and option or farm-in agreement terms analysis. The Cost Approach is based on the principle of contribution to value. The method is one commonly used where exploration expenditures are analysed for their contribution to the exploration potential of the Mineral Property.

The Roma valuation was based on going concern premise and conducted on a market value basis. Market value is defined as "the estimated amount for which an asset could be exchanged, or a liability settled, between willing parties in an arm's length transaction after proper marketing wherein the parties had each acted knowledgeably, prudently and without compulsion". There are generally three accepted approaches to obtain the market value of the Business Enterprise, namely the Market-Based Approach, Income-Based Approach and Asset-Based Approach. Each of these approaches is appropriate in one or more circumstances, and sometimes, two or more approaches may be used together. Whether to adopt a particular approach will be determined by the most commonly adopted practice in valuing business entities that are similar in nature

For the Australian properties, on the basis of an analysis of 16 comparable transactions, and a review and analysis of 161 open-file reports of previous exploration within the Projects, the following tabulation of values was compiled. The "Preferred" column lists the most preferable value placed on each Project by MA:

EPM	Market Approach			Cost Approach	PREFERRED
	Low AUD \$	High AUD \$	Average		
12205	\$2,180,000	\$3,500,000	\$2,400,000	\$4,500,000	\$2,700,000
15084					
15095	\$380,000	\$1,200,000	\$710,000	\$600,000	\$650,000
16393	\$1,066,000	\$2,188,000	\$1,600,000	\$1,400,000	\$1,500,000
<b>TOTALS:</b>	<b>\$3,626,000</b>	<b>\$6,888,000</b>	<b>\$4,710,000</b>	<b>\$6,500,000</b>	<b>\$4,850,000</b>

For the Laotian properties, based on the investigation and analysis and on the valuation method employed, the market value of the 100% equity interest in the Laotian is reasonably estimated by Roma as RMB 29,000,000 (Renminbi twenty-nine million) or A\$4,200,000 (at an AUD:RMB exchange rate of 0.14497).

The combined Australian and Laotian projects are given range from A\$8,910,000 million to A\$10,700,000 with a preferred value of valued A\$9,050,000.

## TABLE OF CONTENTS

EXECUTIVE SUMMARY .....	II
TABLE OF CONTENTS.....	IV
VALUATION OF MINERAL PROPERTIES OF CHINA YUNNAN COPPER AUSTRALIA LIMITED IN QUEENSLAND, AUSTRALIA SUMMARY.....	5
BUSINESS VALUATION OF THE 100% EQUITY INTEREST IN YUNNAN COPPER INDUSTRY SANMU MINING CO LTD.....	63



**VALUATION OF MINERAL PROPERTIES OF CHINA  
YUNNAN COPPER AUSTRALIA LIMITED IN  
QUEENSLAND, AUSTRALIA SUMMARY**

**VALUATION OF MINERAL PROPERTIES OF  
 CHINA YUNNAN COPPER AUSTRALIA LIMITED  
 IN QUEENSLAND, AUSTRALIA**



Figure 1. Location of the mineral properties

David G Jones, BSc., MSc., FAusIMM, FIMMM, MAIME, MGSA  
 Effective Date: 3<sup>rd</sup> June 2011



Mining Associates Pty Ltd  
 ABN 29 105 771 571  
 Level 4, 57 St Paul's Terrace  
 PO Box 161  
 Spring Hill QLD 4004 AUSTRALIA  
 T 61 7 3831 9154  
 F 61 7 3831 6754

## TABLE OF ACRONYMS

ASL	Above sea level
AUD\$	Australian Dollar
B.App.Sc.	Bachelor of Applied Science degree
B.Sc.	Bachelor of Science degree
CAD\$	Canadian Dollar
CEO	Chief Executive Officer
CIMVal	Standards and Guidelines for Valuation of Mineral Properties set down by the Special Committee of the Canadian Institute of Mining, Metallurgy and Petroleum on Valuation of Mineral Properties
COMEX	New York Commodity Exchange
CYCAL	China Yunnan Copper Australia Limited
DDH	Diamond drill hole
DEM	Digital Elevation Model
EPM	Exploration Permit for Minerals
EPMA	Exploration Permit for Minerals Application
ERA	Environmental Risk Assessment
F.Aus.I.M.M.	Fellow of the Australasian Institute of Mining and Metallurgy
F.I.M.M.M.	Fellow of the Institute of Materials, Mining and Metallurgy
GFC	Global Financial Crisis
ICSG	International Copper Study Group
IP	Induced Polarisation
JORC	Joint Ore Reserves Committee
JORC Code	Australasian Code for Mineral Resources and Ore Reserves Reporting of Exploration Results
JV	Joint Venture
LME	London Metal Exchange
M	Million
M.A.I.G.	Member of the Australian Institute of Geoscientists
M.G.S.A.	Member of the Geological Society of Australia
M.Sc.	Master of Science degree
M.S.M.E.	Member of the Society for Mining, Metallurgy and Exploration Inc.
NI43-101	National Instrument 43-101
NNE	North northeast
NNW	North northwest
QA/QC	Quality Assurance/Quality Control
RC	Reverse Circulation
RTP	Reduction to Pole
SAG	semi-autogenous grinding
SEC-GIS	Securities and Exchange Commission General Information Sheet
SEDAR	System for Electronic Document Analysis and Retrieval
SG	Specific Gravity
sq km	Square kilometres
SRTM	Shuttle Radar Topographic Mission
tpd	Tonnes per day
USD\$	United States Dollar
UTM	Universal Transverse Mercator
VALMIN Code	Code for the Technical Assessment and Valuation of Mineral and Petroleum Assets and Securities for Independent Expert Reports
Vidoro	Vidoro Pty Ltd
WGS84	World Geodetic System 1984

## 2 TABLE OF CONTENTS

<b>1</b>	<b>SUMMARY</b> .....	<b>1</b>
	PURPOSE .....	1
	SCOPE .....	1
	PRÉCIS .....	1
	CONCLUSIONS .....	1
	<i>Cloncurry North EPMs 12205 &amp; 15084</i> .....	2
	<i>Cloncurry North EPM 15095</i> .....	2
	<i>Waterford EPM 16393</i> .....	2
<b>2</b>	<b>INTRODUCTION &amp; TERMS OF REFERENCE</b> .....	<b>3</b>
2.1	COMMISSIONING ENTITY .....	3
2.2	VALUATION MANDATE & TERMS OF REFERENCE .....	3
2.3	PURPOSE OF THE VALUATION & ITS INTENDED USE .....	3
2.4	VALUATION DATE .....	4
2.5	QUALIFIED VALUATOR & QUALIFIED PERSON .....	4
2.7	DEFINITION OF VALUATION TYPE .....	4
2.8	OTHER DEFINITIONS USED IN THE REPORT .....	6
<b>3</b>	<b>SCOPE OF THE VALUATION</b> .....	<b>8</b>
3.1	SCOPE .....	8
3.2	INFORMATION USED .....	8
3.3	RELIABILITY OF INFORMATION .....	8
3.4	DATA VERIFICATION .....	8
3.5	FIELD VISIT BY QUALIFIED PERSON .....	8
3.6	CONFIDENTIALITY .....	9
3.7	DISCLAIMERS .....	9
<b>4</b>	<b>COMPLIANCE WITH THE VALMIN CODE</b> .....	<b>9</b>
<b>5</b>	<b>PROPERTY LOCATION, ACCESS &amp; INFRASTRUCTURE</b> .....	<b>9</b>
5.1	LOCATION, ACCESS AND PHYSIOGRAPHY .....	9
5.1.1	<i>Cloncurry North Project</i> .....	9
5.1.2	<i>Waterford Project</i> .....	10
<b>6</b>	<b>HISTORY OF EXPLORATION &amp; PRODUCTION</b> .....	<b>12</b>
6.1	DISCOVERY & PREVIOUS EXPLORATION .....	12
6.1.1	<i>Cloncurry North EPMs 12205 &amp; 15084</i> .....	12
1948-1952	.....	12
1956-57 EPM 29	.....	12
1958 EPM 41 (2.6 sq km)	.....	12
1958-1959 EPM 84	.....	12
1959-1960 EPM 141	.....	12
1960-1961 EPM 170	.....	12
1963-1966 EPM 222	.....	12
1964-1966 EPM 242 (341.3 sq km)	.....	12
1966-68 EPM 362 (3082 sq km)	.....	12
1966 EPM 309 (235.2 sq km)	.....	12
1969-1970 EPM 622 (312.1 sq km)	.....	13
1970-1971 EPM 723 (45.1 sq km)	.....	13
1972 EPM 1069 (322.1 sq km)	.....	13
1973-1974 EPM 1270 (322.1 sq km)	.....	13
1973-1975 EPM 1305 (283.5 sq km)	.....	13
1975 EPM 1425 (228.9 sq km)	.....	13
1974-1976 EPM 1441 (322.1 sq km)	.....	13
1975-1976 EPM 1560 (322.1 sq km)	.....	13
1977-1978 EPM 1790 (360 sq km)	.....	13
1978 EPM 1866 (322.3 sq km)	.....	13
1979-1982 EPM 2082 (322.1 sq km)	.....	13

1980-1983 EPM 2491 (322.1 sq km) .....	13
1987 EPM 4514 (231.7 sq km) .....	14
1997 EPM 4793 (261 sq km) .....	14
1989-1991 EPM 5701 (322.2 sq km) .....	14
1989 EPM 5759 (57.97 sq km) .....	14
1989-1991 EPM 5951 (157.7 sq km) .....	14
1991-1995 EPM 7064 (157.7 sq km) .....	14
1991-1997 EPM 8508 (180.4 sq km) .....	14
1992-1999 EPM 8585 (135.3 sq km) .....	14
1992-1999 EPM 8587 (299.2 sq km) .....	14
1996-1997 EPM 10833 (386.7 sq km) .....	14
1995-1999 EPM 10857 (161 sq km) .....	14
2005 EPM 12250 (322.1 sq km) .....	14
2006 EPM 12250 (322.1 sq km) .....	14
2007 EPM 12250 (322.1 sq km) .....	14
2008 EPM 12250 (322.1 sq km) .....	15
2008 EPM 15084 (322.1 sq km) .....	15
2009 EPM 12250 (193.2 sq km) .....	15
2009 EPM 15084 (16.1 sq km) .....	15
2010 EPM 12250 (193.2 sq km) .....	15
2010 EPM 15084 (16.1 sq km) .....	15
<b>6.1.2 Cloncurry North EPM 15095 .....</b>	<b>15</b>
1984-1985 EPM 3693 (1,933 sq km) .....	15
1990-1992 EPM 7014 .....	15
1990-2007 EPM 8648 (650 sq km) .....	15
2006 (Aug-Dec) EPM 15095 (141.7 sq km) .....	15
2007 EPM 15095 (141.7 sq km) .....	15
2008 EPM 15095 (112.7 sq km) .....	15
2009 EPM 15095 (112.7 sq km) .....	15
2010 EPM 15095 (35.4 sq km) .....	16
2011 EPM 15095 (16.1 sq km) .....	16
<b>6.1.3 Waterford EPM 16303 .....</b>	<b>16</b>
1958-1967 EPP 54P (61,340 sq km) .....	16
1965-1972 EPM 415 (18,070 sq km) .....	16
1989-1991 EPP 168P (100,400 sq km) .....	16
1969-1970 EPM 748 .....	16
1973-1974 EPP 211P (85,690 sq km) .....	16
1981-1983 EPM 3056 .....	16
1982 EPM 3245 .....	16
1982 EPM 3246 .....	17
1982 EPM 3247 .....	17
1986-1987 EPP 354 (47,020 sq km) .....	17
1993-1995 EPM 9507 .....	17
2008 EPM 16393 .....	17
2009 EPM 16393 .....	17
2010 EPM 16393 .....	17
<b>7. GEOLOGY &amp; MINERALISATION .....</b>	<b>18</b>
7.1 REGIONAL GEOLOGY .....	18
7.2 LOCAL GEOLOGY .....	19
7.2.1 Cloncurry North EPMS 12205 & 15084 .....	19
7.2.2 Cloncurry North EPM 15095 .....	20
7.2.3 Waterford EPM 15095 .....	20
7.3 MINERALISATION .....	22
7.3.1 Cloncurry North EPMS 12205 & 15084 .....	22
7.3.2 Cloncurry North EPM 15095 .....	23
6.3.3 Waterford EPM 16393 .....	23
<b>8. EXPLORATION RESULTS &amp; POTENTIAL .....</b>	<b>24</b>
8.1 CLONCURRY NORTH EPMS 12205 & 15084 .....	24
8.2 CLONCURRY NORTH EPM 15095 .....	24
8.3 WATERFORD EPM 16393 .....	24
<b>9. MINERAL RESOURCES &amp; MINERAL RESERVES .....</b>	<b>26</b>

<b>10. KEY ASSUMPTIONS, RISKS &amp; LIMITATIONS .....</b>	<b>26</b>
10.1 ASSUMPTIONS .....	26
10.2 MATERIAL RISKS .....	26
10.2.1 Operating Risks.....	26
10.2.2 Financial Risks.....	27
10.2.3 Environmental Risks .....	27
10.2.4 Permitting Risks.....	27
<b>11. VALUATION .....</b>	<b>29</b>
11.1 CURRENCY & EXCHANGE RATES .....	29
11.2 DATABASE .....	29
11.3 MARKET APPROACH – COMPARABLE TRANSACTIONS.....	29
11.3.1 Cloncurry North EPMs 12205 & 15084.....	29
11.3.1.1 Sprogge, Yukon, Canada.....	29
11.3.1.2 Hawkwood, QLD, Australia.....	30
11.3.1.3 Yuinmery, WA.....	30
11.3.1.4 Evanston, WA.....	31
11.3.1.5 Paraburdoo, WA.....	31
11.3.1.6 Inza, BC, Canada.....	32
11.3.2 Cloncurry North EPM 15095.....	33
11.3.2.1 Lumacom, WA.....	33
11.3.2.2 DOK, BC Canada.....	33
11.3.2.3 Gunbarrel, WA, Australia.....	34
11.3.2.4 Kiaby Well, WA.....	34
11.3.2.5 Tepal, Mexico.....	34
11.3.3 Waterford EPM 16393.....	35
11.3.3.1 Samit, Mali.....	35
11.3.3.2 Headwaters, NT.....	36
11.3.3.3 Yambula, NT.....	37
11.3.3.4 North Maureen, Qld.....	38
11.3.3.5 Myroodah, WA.....	39
11.4 COST APPROACH.....	41
<b>12. VALUATION CONCLUSIONS .....</b>	<b>42</b>
12.1 SUMMARY OF ESTIMATES .....	42
12.1.1 Market Approach.....	42
12.1.2 Cost Approach .....	42
12.2 DISCUSSION .....	42
12.2.1 Cloncurry North EPMs 12205 & 15084.....	42
12.2.2 Cloncurry North EPM 15095.....	43
12.2.3 Waterford EPM 16393.....	43
<b>13. REFERENCES.....</b>	<b>44</b>
<b>14. CERTIFICATE OF QUALIFICATIONS.....</b>	<b>45</b>
<b>APPENDIX 1.....</b>	<b>47</b>
PREVIOUS EXPLORATION EXPENDITURE.....	47

## Figures

FIGURE 1. LOCATION OF THE MINERAL PROPERTIES.....	1
FIGURE 2. LOCAL ACCESS, INFRASTRUCTURE AND PHYSIOGRAPHY, CLONCURRY NORTH PROJECT .....	10
FIGURE 3. LOCAL ACCESS, INFRASTRUCTURE AND PHYSIOGRAPHY, WATERFORD PROJECT .....	11
FIGURE 4. BMR MAP 1958 .....	16
FIGURE 5. REGIONAL GEOLOGY, MT ISA INLIER.....	18
FIGURE 6. LOCAL GEOLOGY, EPMs 12205 & 15084.....	20
FIGURE 7. SURFACE GEOLOGY, EPM 16393 .....	21
FIGURE 8. EAST-WEST SECTION A-B THROUGH EPM 16393 .....	22
FIGURE 9. RECONNAISSANCE DRILLING BY PNC EXPLORATION (AUSTRALIA) PTY LTD .....	25
FIGURE 10. LOCATION PLAN, HAWKWOOD .....	30
FIGURE 11. LOCATION OF YUINMERY PROJECT .....	31
FIGURE 12. LOCATION OF THE INZA PROPERTY ON REGIONAL MAGNETIC IMAGE .....	32
FIGURE 13. LOCATION OF TEPAL PROJECT.....	35
FIGURE 15. LOCATION OF THE HEADWATERS PROJECT.....	37
FIGURE 16. LOCATION OF YAMBLA EL 26142 .....	38
FIGURE 17. NORTH MAUREEN TARGETS SUPERIMPOSED ON MAGNETIC IMAGE.....	39
FIGURE 18. LOCATION OF MYROODAH URANIUM JV ELS .....	40

## Tables

TABLE 1. SUMMARY VALUATIONS.....	2
TABLE 2. INFERRED RESOURCE ESTIMATION FOR THE GEM COPPER DEPOSIT .....	26
TABLE 3. EXPENDITURE SUMMARY IN AUD\$ .....	41
TABLE 4. SUMMARY OF COMPARABLE TRANSACTION VALUES IN 2010 DOLLARS .....	42

## 1 SUMMARY

### **Purpose**

To provide a Valuation of mineral tenements held by China Yunnan Copper Australia Limited ("CYCAL") located in Queensland ("QLD"), together called the "CYCAL tenements".

### **Scope**

At the request of (*insert*) of CYCAL, Mining Associates Pty Ltd ("MA") was commissioned in May 2011 to prepare a Valuation of the CYCAL tenements in accordance with the Code for the Technical Assessment and Valuation of Mineral and Petroleum Assets and Securities for Independent Expert Reports (the "VALMIN Code").

The scope of the inquiries and of the Valuation included the following:

- An analysis of all drilling, sampling, assaying, geological, geophysical and other exploration work conducted on the CYCAL tenements to date
- A review of recent exploration costs in Australia, including current prices charged for drilling, sampling, assaying and other exploration work
- A review of transactions involving comparable properties in Australia and similar countries over the past 5 years

MA has not been requested to comment on the Fairness or Reasonableness of any vendor or promoter considerations, and therefore no opinion on these matters has been offered.

### **Précis**

CYCAL has interests in mineral project areas in North QLD. These comprise 3 granted exploration permits for minerals ("EPMs") north of Cloncurry and one granted EPM near Boulia. The locations are shown in Figure 1.

The Cloncurry North Projects comprise EPM 12205 "Roseby East", EPM 15084 "Quamby" and EPM 15095 "Clonagh" centred about 30 km north of the town of Cloncurry. Past exploration has focussed on granite-hosted gold and copper deposits.

The Waterford Project consists of a single EPM 16393 "Waterford" located 45 km north of Boulia. Petroleum, phosphate and uranium companies have explored the region over the past 60 years, with some success in locating sediment-hosted uranium.

### **Conclusions**

The three generally accepted Valuation approaches are:

- Income Approach
- Market Approach
- Cost Approach

The *Income Approach* is based on the principle of anticipation of benefits and includes all methods that are based on the income or cash flow generation potential of the Mineral Property. None of the CYCAL properties is sufficiently advanced for the Income Approach to be appropriate..

The primary methods used in this Valuation are the Market Approach and the Cost Approach. The *Market Approach* is based primarily on the principle of substitution and is also called the Sales Comparison Approach. The Mineral Property being valued is compared with the transaction value of similar Mineral Properties, transacted in an open market. Methods include comparable transactions and option or farm-in agreement terms analysis.

The *Cost Approach* is based on the principle of contribution to value. The appraised value method is one commonly used technique where exploration expenditures are analysed for their contribution to the exploration potential of the Mineral Property.

### Cloncurry North EPMs 12205 & 15084

The range, average and even the highest value of comparable transactions for the Cloncurry North EPMs 12205 and 15084 are substantially less than the expenditure incurred on the project by previous and current explorers. This possibly indicates that the potential of the property has been more than adequately tested, and that the law of diminishing returns kicked in some time ago. The disappointing results from the RC drilling at the GEM prospect, which cost about AUD\$1.5M in 2010 dollars and led to a small and inconsequential copper resource estimate, did not enhance the value of the property. For this reason, I am inclined to regard most of the RC drilling expenditure as wasted, and reduce the Cost Approach value from \$4.5M to \$3.0M. This still falls short of the average value calculated by the Market Approach (\$2.4M). Assuming that the real value falls somewhere between the two figures, \$2.4M and \$3.0M, suggests a Preferred Value of \$2.7M.

### Cloncurry North EPM 15095

The range of values of comparable transactions for EPM 15095 is very wide, from a low \$380,000 to a high of \$1.2M. This is probably a reflection of the relative scarcity of transactions involving properties of this type. Also, in the aftermath of the Global Financial Crisis ("GFC"), corporate sentiment towards speculative properties like EPM 15095 has fluctuated wildly between risk averse to risk taking. So the concept underpinning the Market Approach, that in an informed market a pure transaction reflects "fair market value", is not being reflected in recent real transactions as companies are routinely grossly over-valuing or under-valuing speculative assets compared to the Cost Approach.

Nevertheless, the average of the broad spread of market values (\$710,000) is similar to the sunk cost of exploration expenditure on the property (\$600,000). Again, assuming that the real value lies somewhere between these two figures suggests a Preferred Value of \$650,000.

### Waterford EPM 16393

The range of values of comparable transactions for EPM 15095 is fairly normal, from a low \$1,066,000 to a high of \$2,188,000. As with EPM 15095, there is a relative scarcity of transactions involving uranium exploration properties. Also, in the aftermath of the Fukushima nuclear accident, sentiment towards uranium properties has fluctuated wildly between risk averse to risk taking in a similar fashion to the impact of the GFC, and companies are similarly grossly over-valuing or under-valuing uranium assets compared to the Cost Approach.

Nevertheless, the average of the broad spread of market values (\$1,630,000) is similar to the sunk cost of exploration expenditure on the property (\$1,400,000). Again, assuming that the real value lies somewhere between these two figures suggests a Preferred Value of \$1,500,000.

On the basis of an analysis of 16 comparable transactions, and a review and analysis of 161 open-file reports of previous exploration within the Projects, the following tabulation has been compiled. The "Preferred" column lists the most preferable value placed on each Project by MA:

EPM	Market Approach			Cost Approach	PREFERRED
	Low AUD\$	High AUD\$	Average		
12205	\$2,180,000	\$3,500,000	\$2,400,000	\$4,500,000	\$2,700,000
15084					
15095	\$380,000	\$1,200,000	\$710,000	\$600,000	\$650,000
16393	\$1,066,000	\$2,188,000	\$1,600,000	\$1,400,000	\$1,500,000
<b>TOTALS:</b>	<b>\$3,626,000</b>	<b>\$6,888,000</b>	<b>\$4,710,000</b>	<b>\$6,500,000</b>	<b>\$4,850,000</b>

Table 1. Summary valuations

## 2. INTRODUCTION & TERMS OF REFERENCE

### 2.1 Commissioning Entity

At the request of Jason Beckton, Managing Director of CYCAL, Mining Associates Pty Ltd ("MA") was commissioned in May 2011 to prepare a Valuation of the CYCAL tenements in accordance with the Code for the Technical Assessment and Valuation of Mineral and Petroleum Assets and Securities for Independent Expert Reports (the "VALMIN Code").

CYCAL is the trading name of Chinalco Yunnan Copper Resources Ltd ("CYCRL", an Australian public company duly organized and existing under the laws of Queensland, Australia. The tenements were each originally granted to unlisted Mount Stewart Gold Limited ("MSG" established 24 August 1995). MSG listed on the Australian Securities Exchange ("ASX") on 29<sup>th</sup> October 2007 as CYCAL.

The scope of the inquiries and of the Valuation included the following:

- An analysis of all drilling, sampling, assaying, geological, geophysical and other exploration work conducted on the CYCAL tenements to date
- A review of recent exploration costs in Australia, including current prices charged for drilling, sampling, assaying and other exploration work
- A review of transactions involving comparable properties in Australia and similar countries over the past 5 years

MA has not been requested to comment on the Fairness or Reasonableness of any vendor or promoter considerations, and therefore no opinion on these matters has been offered.

### 2.2 Valuation Mandate & Terms of Reference

CYCAL requested MA, an Australian Private Company duly organized and existing under the laws of Australia, to provide an Independent Valuation of the CYCAL tenements ("the Valuation") comprising the following exploration and mining tenements:

Project	Licence Number	Holder/ Applicant	Grant/ Application Date	Expiry Date	Area sq km
Cloncurry North	EPM 12205	CYCAL 100%	06/09/04	05/09/11	96.63
	EPM 15084		11/08/06	10/08/11	6.66
	EPM 15095		11/08/06	10/08/11	16.10
Waterford	EPM 16393	CYCAL 100%	22/04/08	21/04/13	158.70

CYCAL notified MA that complete, accurate and true disclosure has been made of all material data and information relevant to the Valuation and that MA has reasonable access to all relevant CYCAL records and personnel to enable a proper Valuation to be made.

CYCAL indemnified MA and the Qualified Valuator, David Jones, against any liability arising from their reliance on information provided by CYCAL that is materially inaccurate or incomplete; and relating to any consequential extension of workload through queries, questions or public hearings arising from the Independent Valuation.

### 2.3 Purpose of the Valuation & Its Intended Use

A Letter of Intent ("LOI"), between CYCAL and Yunnan Copper Mineral Resources Exploration and Development Co. Ltd. ("YEX") was signed in Kunming, China, in February 2011. The LOI proposes that subject to the related government and shareholder approvals, YEX will execute the Cloncurry North Projects Joint Venture Agreement ("Agreement") in order to farm in and subsequently obtain the opportunity of earning up to a 55% and potentially higher interest under standard dilution formulas. Subject to the Agreement being executed by the Parties, the Agreement is intended to create binding and enforceable obligations on CYU and YEX.

CYCAL will grant YEX the exclusive right to earn at least 55% participating interest in the Tenements, free of all Encumbrances ("Farm-in Interest"), by incurring Expenditure of AUD\$5M on the Tenements, which is approved and confirmed by a Management Committee. For YEX to be granted the Farm-in Interest, YEX must make a minimum expenditure of:

- (a) Not less than A\$1,200,000.00 of Expenditure before the first anniversary of the Agreement Date earning 10% participating interest in the Properties;
- (b) Additional A\$1,800,000.00 of Expenditure before the second anniversary of the Agreement Date earning extra 20% participating interest in the Properties;
- (c) Additional A\$2,000,000.00 of Expenditure before the third anniversary of the Agreement Date earning extra 25% participating interest in the Properties;

CYCAL and YEX announced to the ASX on 21<sup>st</sup> March 2011 that they had executed the Agreement, which is subject to FIRB approval and (if required) CYCAL shareholder approval. Chinese regulatory approvals are now in place. The purpose of this Valuation is to reassure CYCAL shareholders that the farm-in arrangement is fair and reasonable insofar as the Expenditure of AUD\$5M is adequate to earn 55% participating interest in the Tenements.

## 2.4 Valuation Date

All time-sensitive data used in this Valuation, including metal prices, exchange rates, cost-of-living indices etc. were taken as at 5pm Sydney time on Friday 3<sup>rd</sup> June 2011. Accordingly, this valuation is valid as of 3<sup>rd</sup> June 2011 and refers to the writer's opinion of the value of the Projects at this date.

This valuation can be expected to change over time having regard to political, economic, market and legal factors. The valuation can also vary due to the success or otherwise of any mineral exploration that is conducted either on the properties concerned or by other explorers on prospects in the near environs. The valuation could also be affected by the consideration of other exploration data, not in the public domain, affecting the properties which have not been made available to the author.

## 2.5 Qualified Valuator & Qualified Person

This Valuation was prepared by Mr David Jones. Mr Jones has sufficient experience which is relevant to the style of mineralisation and deposits under consideration and to their valuation to qualify as a Competent Person as defined in the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' (Australia) and is a Qualified Valuator as defined in NI43-101. Mr Jones was elected a Fellow of The Australasian Institute of Mining and Metallurgy in 1974 having joined initially as a Student Member in 1963. Mr Jones is an independent consultant employed by Vidoro Pty Ltd based in Sydney, Australia. He has no direct or indirect interest in the properties which are the subject of this Valuation, nor does he hold, directly or indirectly, any shares in CYCAL or any associated company, or any direct interest in any mineral tenements in Australia.

## 2.7 Definition of Valuation Type

The three generally accepted Valuation approaches under VALMIN are:

- Income Approach
- Market Approach
- Cost Approach

The *Income Approach* is based on the principle of anticipation of benefits and includes all methods that are based on the income or cash flow generation potential of the Mineral Property. This method provides an indication of the value of a property with identified reserves. It utilises an economic model based upon known resources, capital and operating costs, commodity prices and a discount for risk estimated to be inherent in the project. Alternatively a value can be assigned on a royalty basis commensurate with the in situ contained metal value. The Bullabulling Project does contain a mineral reserve that meets the standards of the JORC Code so the Income Approach is appropriate for this project.

The *Market Approach* is based primarily on the principle of substitution and is also called the Sales Comparison Approach. The Mineral Property being valued is compared with the transaction value of similar Mineral Properties, transacted in an open market. Methods include comparable transactions and option or farm-in agreement terms analysis. The terms of a proposed joint venture agreement may be used to provide a market value based upon the amount an incoming partner is prepared to spend to earn an interest in part or all of the property. This pre-supposes some form of subjectivity on the part of the incoming party when grass roots properties are involved.

The *Cost Approach* is based on the principle of contribution to value. The appraised value method is one commonly used method where exploration expenditures are analysed for their contribution to the exploration potential of the Mineral Property. The multiple of exploration expenditure method ('MEE') is used whereby a subjective factor (also called the prospectivity enhancement multiplier or 'PEM') is based on previous expenditure on a tenement with or without future committed exploration expenditure and is used to establish a base value from which the effectiveness of exploration can be assessed. Where exploration has produced documented positive results a MEE multiplier can be selected that takes into account the valuer's judgment of the prospectivity of the tenement and the value of the database. MEE factors can typically range between 0 to 3.0 and occasionally up to 5.0 applied to previous exploration expenditure to derive a dollar value.

MA has adopted the Market Approach and the Cost Approach as the principal bases for the exploration properties included in this Valuation.

The valuation methodology of mineral properties is exceptionally subjective. If an economic reserve or resource is subsequently identified then this valuation will be dramatically low relative to any later valuations, or alternatively if further exploration is unsuccessful it is likely to decrease the value of the tenements.

The values obtained are estimates of the amount of money, or cash equivalent, which would be likely to change hands between a willing buyer and a willing seller in an arms-length transaction, wherein each party had acted knowledgeably, prudently and without compulsion. This is the required basis for the estimation to be in accordance with the provisions of VALMIN.

There are a number of generally accepted procedures for establishing the value of mineral properties with the method employed depending upon the circumstances of the property. When relevant, MA uses the appropriate methods to enable a balanced analysis. Values are presented as a range and the preferred value is identified.

The readers should therefore form their own opinion as to the reasonableness of the assumptions made and the consequent likelihood of the values being achieved.

Other methods that are acceptable in some jurisdictions include:

#### *Ratings System of Prospectivity*

The most readily accepted method of this type is the modified Kilburn Geological Engineering/Geoscience Method and is a rating method based on the basic acquisition cost ('BAC') of the tenement that applies incremental, fractional or integer ratings to a BAC cost with respect to various prospectivity factors to derive a value. Under the Kilburn method the valuer is required to systematically assess four key technical factors which enhance, downgrade or have no impact on the value of the property. The factors are then applied serially to the BAC of each tenement in order to derive a value for the property. The factors used are: off-property attributes, on-property attributes, anomalies and geology. A fifth factor that may be applied is the current state of the market.

#### *Empirical Methods*

The market value determinations may be made according to the independent expert's knowledge of the particular property. This can include a discount applied to values arrived at by considering conceptual target models for the area. The market value may also be rated in terms of a dollar value per unit area or dollar value per unit of resource in the ground. This includes the range of values that can be estimated for an exploration property based on current market prices for equivalent properties, existing or previous joint venture and sale agreements, the geological potential of the properties,

regarding possible potential resources, and the probability of present value being derived from individual recognised areas of mineralisation. This method is termed a "Yardstick" or a "Real Estate" approach.

Both of the methods described above are inherently subjective according to technical considerations and the informed opinion of the valuer. Because they are subjective, MA prefers not to use them.

## 2.8 Other Definitions Used in the Report

*Commissioning Entity* means the organization, company or person commissioning a Valuation.

*Competence or Competent* means having relevant qualifications and relevant experience.

*Current* means current with respect to, and relative to, the Valuation Date.

*Data Verification* means the process of confirming that data has been generated with appropriate procedures, has been accurately transcribed from the original source and is suitable to be used.

*Development Property* means a Mineral Property that is being prepared for mineral production and for which economic viability has been demonstrated by a Feasibility Study or Prefeasibility Study and includes a Mineral Property which has a Current positive Feasibility Study or Prefeasibility Study but which is not yet financed or under construction.

*Exploration Property* means a Mineral Property that has been acquired, or is being explored, for mineral deposits but for which economic viability has not been demonstrated.

*Fair Market Value* means the highest price, expressed in terms of money or money's worth, obtainable in an open and unrestricted market between knowledgeable, informed and prudent parties, acting at arm's length, neither party being under any compulsion to transact.

*Feasibility Study* means a comprehensive study of a deposit in which all geological, engineering, operating, economic and other relevant factors are considered in sufficient detail that it could reasonably serve as the basis for a final decision by a financial institution to finance the development of the deposit for mineral production.

*Guideline* means a best practices recommendation, which, while not mandatory in the Valuation of Mineral Properties, is highly recommended.

*Independence or Independent* means that, other than professional fees and disbursements received or to be received in connection with the Valuation concerned, the Qualified Valuator or Qualified Person (as the case requires) has no pecuniary or beneficial (present or contingent) interest in any of the Mineral Properties being valued, nor has any association with the Commissioning Entity or any holder(s) of any rights in Mineral Properties which are the subject of the Valuation, which is likely to create an apprehension of bias. The concepts of "Independence" and "Independent" are questions of fact. For example, where a Qualified Valuator's fees depend in whole or in part on an understanding or arrangement that an incentive will be paid based on a certain value being obtained, such Qualified Valuator is not Independent.

*Materiality and Material* refer to data or information which contributes to the determination of the Mineral Property value, such that the inclusion or omission of such data or information might result in the reader of a Valuation Report coming to a substantially different conclusion as to the value of the Mineral Property. Material data and information are those which would reasonably be required to make an informed assessment of the value of the subject Mineral Property.

*Mineral Property* means any right, title or interest to property held or acquired in connection with the exploration, development, extraction or processing of minerals which may be located on or under the surface of such property, together with all fixed plant, equipment, and infrastructure owned or acquired for the exploration, development, extraction and processing of minerals in connection with such properties. Such properties shall include, but not be limited to, real property, unpatented mining claims, prospecting permits, prospecting licenses, reconnaissance permits, reconnaissance licenses, exploration permits, exploration licenses, development permits, development licenses, mining licenses, mining leases, leasehold patents, crown grants, licenses of occupation, patented mining claims, and royalty interests

*Mineral Reserves and Mineral Resources.* The terms Mineral Reserve, Proven Mineral Reserve, Probable Mineral Reserve, Mineral Resource, Measured Mineral Resource, Indicated Mineral Resource, and Inferred Mineral Resource and their usage have the meaning ascribed by the JORC Code (2004).

*Mineral Resource Property* means a Mineral Property which contains a Mineral Resource that has not been demonstrated to be economically viable by a Feasibility Study or Prefeasibility Study.

Mineral Resource Properties may include past producing mines, mines temporarily closed or on care-and-maintenance status, advanced exploration properties, projects with Prefeasibility or Feasibility Studies in progress, and properties with Mineral Resources which need improved circumstances to be economically viable.

**Prefeasibility Study** and **Preliminary Feasibility Study** mean a comprehensive study of the viability of a mineral project that has advanced to a stage where the mining method, in the case of underground mining, or the pit configuration, in the case of an open pit, has been established, and which, if an effective method of mineral processing has been determined, includes a financial analysis based on reasonable assumptions of technical, engineering, operating, economic factors and the assessment of other relevant factors which are sufficient for a Qualified Person, acting reasonably, to determine if all or part of the Mineral Resource may be classified as a Mineral Reserve. A Prefeasibility Study is at a lower confidence level than a Feasibility Study.

**Preliminary Assessment** means a preliminary economic study by a Qualified Person that includes Inferred Mineral Resources. The Preliminary Assessment must include a statement that the Inferred Mineral Resources are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as Mineral Reserves, outlines the basis for the Preliminary Assessment and any qualifications and assumptions made, and specifies that there is no certainty that the Preliminary Assessment will be realized.

**Production Property** is a Mineral Property with an operating mine, with or without processing plant, which has been fully commissioned and is in production.

**Professional Association** is a self-regulatory organization of engineers, geoscientists or both engineers and geoscientists that (a) has been given authority or recognition by law; (b) admits members primarily on the basis of their academic qualifications and experience; (c) requires compliance with the professional standards of competence and the code of ethics established by the organization; and (d) has disciplinary powers, including the power to suspend or expel a member.

**Qualified Person** is an individual who (a) is an engineer or geoscientist with at least five years of experience in mineral exploration, mine development or operations or mineral project assessment, or any combination of these; (b) has experience relevant to the subject matter of the mineral project and the Technical Report; and (c) is a member in good standing of a Professional Association

**Qualified Valuator** is an individual who (a) is a professional with demonstrated extensive experience in the Valuation of Mineral Properties, (b) has experience relevant to the subject Mineral Property or has relied on a Current Technical Report on the subject Mineral Property by a Qualified Person, and (c) is regulated by or is a member in good standing of a Professional Association or a Self-Regulatory Professional Organization.

**Reasonableness**, in reference to the Valuation of a Mineral Property, means that other appropriately qualified and experienced valuers with access to the same information would value the property at approximately the same range. A Reasonableness test serves to identify Valuations which may be out of step with industry standards and industry norms. It is not sufficient for a Qualified Valuator to determine that he or she personally believes the value determined is appropriate without satisfying an objective standard of proof.

**Report Date** means the date upon which the Valuation Report is signed and dated.

**Self-Regulatory Professional Organization** means a self-regulatory organization of professionals that (a) admits members or registers employees of members primarily on the basis of their educational qualifications, knowledge and experience; (b) requires compliance with the professional standards of competence and code of ethics established by the organization; and (c) has disciplinary powers, including the power to suspend or expel a member or an employee of the member.

**Standard** means a general rule which is mandatory in the Valuation of Mineral Properties.

**Technical Report** means a report prepared, filed and certified in accordance with NI 43-101 and Form 43-101F1 Technical Report.

**Transparency** and **Transparent** means that the Material data and information used in (or excluded from) the Valuation of a Mineral Property, the assumptions, the Valuation approaches and methods, and the Valuation itself must be set out clearly in the Valuation Report, along with the rationale for the choices and conclusions of the Qualified Valuator.

**Valuation** is the process of estimating or determining the value of a Mineral Property.

**Valuation Date** means the effective date of the Valuation, which may be different from the Report Date or from the cut-off date for the data used in the Valuation.

**Valuation Report** means a report prepared in accordance with the CIMVal Standards and Guidelines.

### 3. SCOPE OF THE VALUATION

#### 3.1 Scope

The scope of the inquiries and of the Valuation included the following:

- An analysis of all drilling, sampling, assaying, geological, geophysical and other exploration work conducted on the CYCAL tenements to date
- A review of recent exploration costs in Australia including current prices charged for drilling, sampling, assaying and other exploration work
- A review of transactions involving comparable properties in Australia and similar countries over the past 5 years

MA has not been requested to comment on the Fairness or Reasonableness of any vendor or promoter considerations, and therefore no opinion on these matters has been offered.

#### 3.2 Information Used

The following descriptions of the mineral tenements are compiled principally from open file and historic company internal reports, as well as data reviewed and personal observations made during past site visits by Mr David Jones. Many of the illustrations are reproduced or modified from various previous reports.

This report is based on historical technical data provided by CYCAL to MA. CYCAL provided open access to all available records, in the opinion of MA, to enable a proper assessment of the tenements. Readers of this report must appreciate that there is an inherent risk of error in the acquisition, processing and interpretation of geological and geophysical data, and Vidoro takes no responsibility for such errors.

#### 3.3 Reliability of Information

It should be noted that most of the projects have a long history and there have been many ownership transfers. While all reasonable efforts have been made to source historical reports, not all historical data could be found, particularly for work undertaken prior to the 1970's. A significant effort to locate historical documents has been undertaken by MA and although comprehensive data has been assembled it is not complete. Nevertheless it is considered that the information identified and reviewed provides a fair and reasonable representation of the material issues relevant to assessing this project as an advanced exploration and potential resource project. CYCAL has warranted in writing to MA that full disclosure has been made of all material information and that, to the best of CYCAL's knowledge and understanding, such information is complete, accurate and true.

#### 3.4 Data Verification

The references at the end of this report lists the sources consulted. This material was used to expand on the information provided by CYCAL and, where appropriate, confirm or provide alternative assumptions to those made by CYCAL.

Three weeks was spent on data collection and preparation of this Valuation.

#### 3.5 Field Visit by Qualified Person

Mr Jones has made a number of field visits to sites adjacent to the CYCAL tenements in 2008-09 as part of work conducted for other clients. He was based in Cloncurry for two years as Senior Geologist for Carpentaria Exploration Company Pty Ltd and is familiar with the properties that are the subject of this Valuation. The data acquired during and after the field visits have been supplemented by public domain data searches and copies of reports obtained from various sources.

### **3.6 Confidentiality**

The sources of data pertaining to current exploration costs, including current quotations for drilling, airborne geophysical, and staff (including geologist) salaries, have been kept confidential by MA at the request of the contractors who supplied the quotations, as the information is commercial-in-confidence.

### **3.7 Disclaimers**

Geological information usually consists of a series of small points of data on a large blank canvas. The true nature of any body of mineralization is never known until the last tonne of ore has been mined out, by which time exploration has long since ceased. Exploration information relies on interpretation of a relatively small statistical sample of the deposit being studied; thus a variety of interpretations may be possible from the fragmentary data available. Investors should note that the statements and diagrams in this report are based on the best information available at the time, but may not necessarily be absolutely correct. Such statements and diagrams are subject to change or refinement as new exploration makes new data available, or new research alters prevailing geological concepts. Appraisal of all the information mentioned above forms the basis for this report. The views and conclusions expressed are solely those of MA. When conclusions and interpretations credited specifically to other parties are discussed within the report, then these are not necessarily the views of MA.

The opinions expressed in this report have been based on information supplied to MA by CYCAL, its associates and their staff, as well as various State government agencies. MA has exercised all due care in reviewing the supplied information. Although MA has compared key supplied data with expected values with other similar deposits, the accuracy of the results and conclusions from this review are reliant on the accuracy of the supplied data. MA has relied on this information and has no reason to believe that any material facts have been withheld, or that a more detailed analysis may reveal additional material information. MA does not accept responsibility for any errors or omissions in the supplied information and does not accept any consequential liability arising from commercial decisions or actions resulting from them.

The author has not relied on reports, opinions or statements of legal or other experts who are not Qualified Persons for information concerning legal, environmental, political or other issues and factors relevant to this report.

## **4. COMPLIANCE WITH THE VALMIN CODE**

This Valuation complies with the VALMIN Code (2005 Edition) in its entirety. The author has taken due note of Regulatory Guide ("RG") 111 "Content of Expert Reports" (Oct 2007) and RG 112 "Independence of Experts" (Mar 2011 update) promulgated by the Australian Securities and Investments Commission ("ASIC") and this report meets the guidelines set out in RG 111 and RG 112.

## **5. PROPERTY LOCATION, ACCESS & INFRASTRUCTURE**

### **5.1 Location, Access and Physiography**

#### **5.1.1 Cloncurry North Project**

The Cloncurry North Project comprises EPM 12205, EPM 15084 "Quamby" and EPM 15095 "Clonagh" centred about 30 km north of Cloncurry.

The tenements are well located near major sealed highways and numerous secondary roads. These connect the tenements via Cloncurry to the city of Mt Isa (population 21,000 in July 2009) and the city of Townsville (population 182,000 in July 2009). Townsville is serviced by an international airport, the main road and rail system in Queensland, and is a thriving port.

The topography ranges from a flat grassy plain (EPM 15095) with elevation 150m above sea level ("asl") through flat rangeland (EPM 15084) with elevation 200-210m asl, to hilly (EPM 12205) with elevations from 200m to 270m asl.

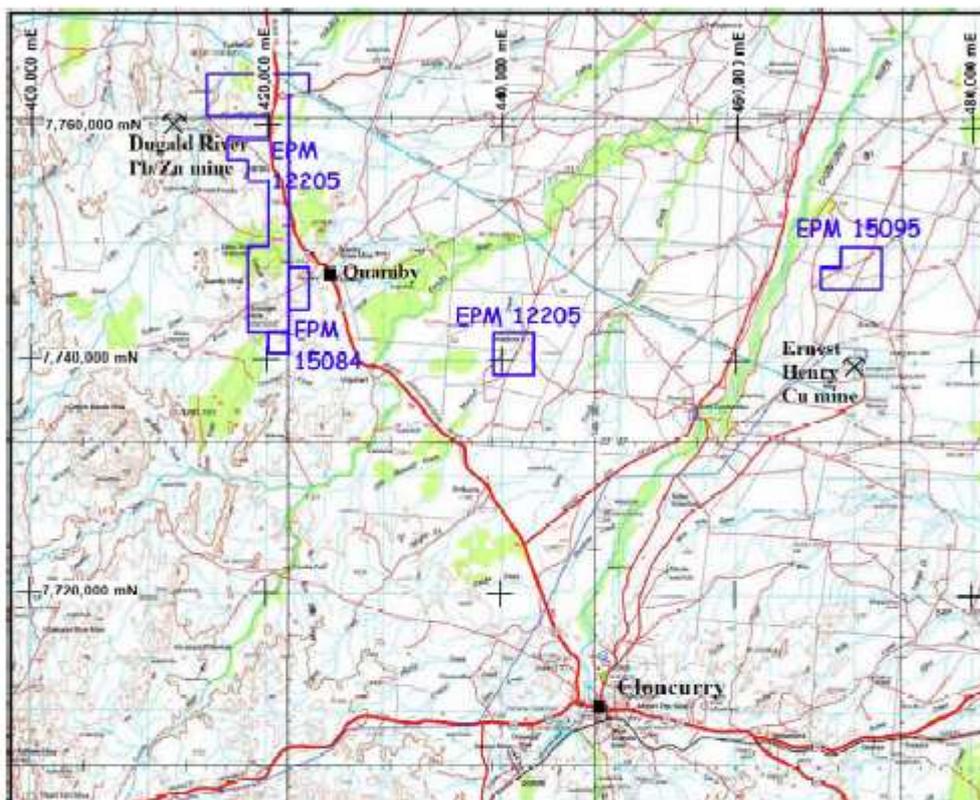


Figure 2. Local access, infrastructure and physiography, Cloncurry North Project  
Figure compiled by D G Jones

### 5.1.2 Waterford Project

EPM 16393 "Waterford" is located 45 km due north of Boulia (population 300 in the 2006 census). A sealed road connects Mt Isa to Boulia, while the sealed Burke Developmental Road connects Boulia to Winton. A formed gravel road from Boulia to Selwyn passes through the middle of EPM 16393.

The broad floodplain of the Burke River occupies the eastern third of the tenement. The rest is a flat Mitchell Grass plain about 200m asl.

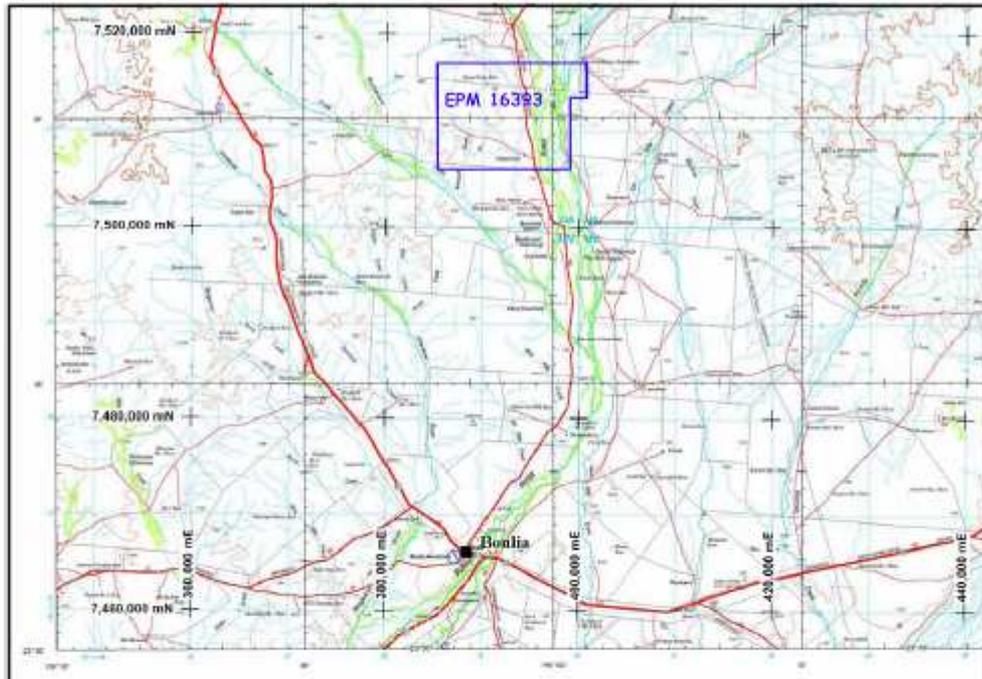


Figure 3. Local access, infrastructure and physiography, Waterford Project  
*Figure compiled by D G Jones*

## 6. HISTORY OF EXPLORATION & PRODUCTION

### 6.1 *Discovery & Previous Exploration*

#### 6.1.1 Cloncurry North EPMs 12205 & 15084

The first report of copper in the area was at the Native Companion prospect in 1906. Twelve shafts were sunk and to 1936, 506 t of copper @ 22.6% Cu was produced. In 1908 gold was discovered in creeks draining the southern end of a long (6 km) ridge of Quamby Conglomerate. From 1908 to 1921, alluvials were worked up to 1.5 km from source. An adit and at least 22 pits were sunk in the hilltop. Recorded hard rock production was 54.5t for 177 oz gold. The area was further worked during 1931-1935 and then by a prospector in the 1980s.

#### **1948-1952**

ConZinc Pty Ltd ("Rio"): geological mapping and diamond drilling delineated the Dugald River Pb-Zn deposits.

#### **1956-57 EPM 29**

Enterprise Exploration Company Pty Ltd ("CRAE"): mapping, geochemical sampling (161 samples).

#### **1956 EPM 41 (2.6 sq km)**

Mt Isa Mines Limited ("MIM"): spent \$2,042 bulldozing and sampling trenches.

#### **1958-1959 EPM 84**

Rio Tinto Australian Exploration Pty Ltd ("Rio"): ground follow-up of airborne scintillometer anomalies.

#### **1959-1960 EPM 141**

Rio Tinto Australian Exploration Pty Ltd ("Rio"): spent \$3,532 on mapping. About 10% of the work was done within EPM 12550.

#### **1960-1961 EPM 170**

ConZinc Pty Ltd ("Rio"): spent \$177,030 on ground follow-up of airborne scintillometer anomalies and 2 scout diamond core holes (305m). About 5% of the work was done within EPM 12550.

#### **1963-1966 EPM 222**

Ausminda Pty Ltd (operator of Placer/Noranda JV): spent \$167,129 on stream sediment (2060 samples), soil sampling (9070 samples) and auger sampling (361 samples); 6 diamond core holes (717m) and 1 rotary hole (82m). About 15% of the work was done within EPM 12205.

#### **1964-1966 EPM 242 (341.3 sq km)**

Ausminda Pty Ltd (operator of Placer/Noranda JV): spent \$349,477 on geological mapping (28.5 sq km), stream sediment (6070 samples), grid soil (14245 samples) and auger sampling (1140 samples); IP and EM geophysics (57.5 line km); trenching (150m); RAB (24 holes for 1858m) and diamond core drilling (14 holes for 2000m). About 10% of this work was carried out within the boundaries of present EPM 12205.

#### **1966-68 EPM 362 (3082 sq km)**

Kennecott Explorations (Australia) Pty Ltd ("Kennecott"): spent \$20,637 on stream sediment sampling. About 5% of this work was carried out within the boundaries of present EPM 12205.

#### **1966 EPM 309 (235.2 sq km)**



Ausminda: spent \$27,219 drilling 5 diamond core holes (773m). One hole was within EPM 12205.

**1969-1970 EPM 622 (312.1 sq km)**

CRA Exploration Pty Ltd ("CRAE"): sampled water bores for uranium in Toolebuc Formation. Drilled 4 rotary holes for 215m.

**1970-1971 EPM 723 (45.1 sq km)**

Placer Prospecting Australia Pty Ltd ("Placer"): spent \$54,883 on soil, auger and rock-chip sampling, ground magnetics and IP, followed by percussion drilling (20 holes for 528m for \$9,351 direct cost). About 25% of the work was done within EPM 12205.

**1972 EPM 1069 (322.1 sq km)**

Austral Pacific Mining Corp Ltd: took 31 rock chip samples from old workings.

**1973-1974 EPM 1270 (322.1 sq km)**

Carpentaria Exploration Pty Ltd ("CEC"): geological mapping, grid soil sampling (1200 samples), rock chip sampling (91 samples), RAB drilling (188 holes for 1064m). About 5% of the work was within EPM 12205.

**1973-1975 EPM 1305 (283.5 sq km)**

CRAE: geological mapping, stream sediment and rock chip sampling (142 samples); airborne magnetics/radiometrics (1280 line km @ \$6.22/line km). About 50% of the work was done within EPM 12205.

**1975 EPM 1425 (228.9 sq km)**

CRAE: geological mapping, auger soil sampling (160 samples); rock chip sampling (18 samples).

**1974-1976 EPM 1441 (322.1 sq km)**

Chevron Exploration Corporation ("Chevron"): drilling (360 holes; 12 for 1380m in Malakoff area within EPM12205) for uranium in Mesozoic.

**1975-1976 EPM 1560 (322.1 sq km)**

CEC: geological mapping, grid soil sampling (samples), GEMCO bedrock sampling (489 samples); ground magnetic survey; 10 diamond core holes (1488m). The work was done just outside the western boundary of EPM 12205.

**1977-1978 EPM 1790 (360 sq km)**

Sipos Mining & Industry Enterprises Pty Ltd ("Sipos"): ground follow-up of airborne radiometric anomalies.

**1978 EPM 1866 (322.3 sq km)**

Mines Administration Pty Ltd ("Minad"): spent \$1,989 reviewing past data. Then drilled 15 RAB holes (655m), followed by 56 RC holes (2275m). None of the holes were collared within EPM 12205.

**1979-1982 EPM 2082 (322.1 sq km)**

CRAE: airborne magnetics/radiometrics (1280 line km @ \$6.22/line km) with ground follow-up; stream sediment sampling.

**1980-1983 EPM 2491 (322.1 sq km)**

CEC: airborne EM/magnetics (430 line km) and gravity survey; 3 RC holes (588m) and 2 diamond core holes (507m). The work was done just outside the northern boundary of EPM 12205.

**1987 EPM 4514 (231.7 sq km)**

Menzies Gold NL: BLEG (75 samples) and rock chip sampling (207 samples).

**1987 EPM 4793 (261 sq km)**

Roebuck Resources NL: rock chip sampling (61 samples).

**1989-1991 EPM 5701 (322.2 sq km)**

CRAE: ground magnetics (26 line km @ \$6.22/line km) with ground follow-up; stream sediment sampling.

**1989 EPM 5759 (57.97 sq km)**

Black Mountain Gold NL: spent \$30,770 on BLEG (130 samples) and rock chip sampling. Around 60% of the work was within EPM 12205.

**1989-1991 EPM 5951 (157.7 sq km)**

Western Mining Corporation Limited ("WMC"): spent \$69,423 on stream sediment sampling (27 samples).

**1991-1995 EPM 7064 (157.7 sq km)**

Placer/CRAE: BLEG (23 samples) and stream sediment sampling (34 samples).

**1991-1997 EPM 8506 (180.4 sq km)**

CRAE: stream sediment (100 samples), rock chip (950 samples), auger and soil sampling (190 samples); ground geophysics; RAB and RC drilling (1 hole, 30m).

**1992-1999 EPM 8585 (135.3 sq km)**

Hunter Resources Limited ("Hunter") & MIM: spent \$400,000 on mapping, BLEG (155 samples), stream sediment (155 samples), rock chip (80 samples) and soil sampling (103 samples); RC drilling (8 holes for 828m). Over 50% of the work was undertaken within EPM 12205.

**1992-1999 EPM 8587 (299.2 sq km)**

Hunter Resources Limited ("Hunter") & MIM/Eagle: spent \$320,000 on mapping, BLEG (23 samples), stream sediment (34 samples), rock chip (15 samples); 35 RAB holes (511m) plus 89 RAB holes (1600m) at Malakoff, 4 RC holes. About 5% of the work was undertaken within EPM 12205.

**1996-1997 EPM 10833 (366.7 sq km)**

Rio Tinto: spent \$400,000 on mapping, BLEG (23 samples), stream sediment (34 samples), rock chip (15 samples). About 5% of the work was undertaken within EPM 12205.

**1995-1999 EPM 10857 (161 sq km)**

Pan Australian Exploration Limited ("PanAust"): data review.

**2005 EPM 12250 (322.1 sq km)**

Mt Stewart Gold Limited ("MSG"): spent \$33,960 on a review of aeromagnetic data.

**2006 EPM 12250 (322.1 sq km)**

MSG: spent \$78,439 on field reconnaissance.

**2007 EPM 12250 (322.1 sq km)**

China Yunnan Copper Australia Limited ("CYCAL"): spent \$44,219 on field reconnaissance.



**2008 EPM 12250 (322.1 sq km)**

CYCAL: spent \$763,607 on mapping, soil and rock chip sampling; ground magnetics & IP; RC drilling (28 holes for 4314m).

**2008 EPM 15084 (322.1 sq km)**

CYCAL: spent \$235,567 on mapping, soil sampling; ground magnetics & IP; RC drilling (2 holes for 4314m).

**2009 EPM 12250 (193.2 sq km)**

CYCAL: spent \$686,546 on mapping, soil and rock chip sampling; ground magnetics & TEM; RC drilling (22 holes for 2779m) and diamond core drilling (3 holes for 418m).

**2009 EPM 15084 (16.1 sq km)**

CYCAL: spent \$88,967 on data review.

**2010 EPM 12250 (193.2 sq km)**

CYCAL: spent \$735,683 on TEM geophysics; RC drilling (23 holes for 2942m).

**2010 EPM 15084 (16.1 sq km)**

CYCAL: spent \$44,329 on data review and geophysics.

**6.1.2 Cloncurry North EPM 15095**

Since EPM 15095 is covered by Mesozoic and younger sediments, it has received scant attention from early prospectors. Even the regional activity in the 1970s sparked by the discovery of the oil shale deposits at Julia Creek largely ignored the area. The discovery of the Ernest Henry copper-gold deposit, buried under Mesozoic cover, stimulated the first exploration in the area.

**1984-1985 EPM 3693 (1,933 sq km)**

Utah Development Company ("BHP"): airborne gradiometer magnetics and radiometric survey (5350 line km @\$6.22/line km) followed up by RC drilling (12 holes for 1009m). One hole (P007) was drilled within the present boundaries of EPM 15095. About 17% of the survey area was within EPM 15095.

**1990-1992 EPM 7014**

Hunter/WMC JV: data review.

**1990-2007 EPM 8648 (650 sq km)**

Hunter/WMC/MIM JV: airborne magnetics and radiometric survey (5000 line km @\$7/line km) followed up by regional gravity surveys, MMI soil geochem, ground magnetics, IP surveys, TEM surveys, RC drilling, diamond core drilling. About 15% of the survey area was within EPM 15095.

**2006 (Aug-Dec) EPM 15095 (141.7 sq km)**

CYCAL: data review

**2007 EPM 15095 (141.7 sq km)**

CYCAL: site visits

**2008 EPM 15095 (112.7 sq km)**

CYCAL: spent \$385,988 on aeromagnetic interpretation and 2 diamond core holes (1003m).

**2009 EPM 15095 (112.7 sq km)**

CYCAL: spent \$74,447 on data review.

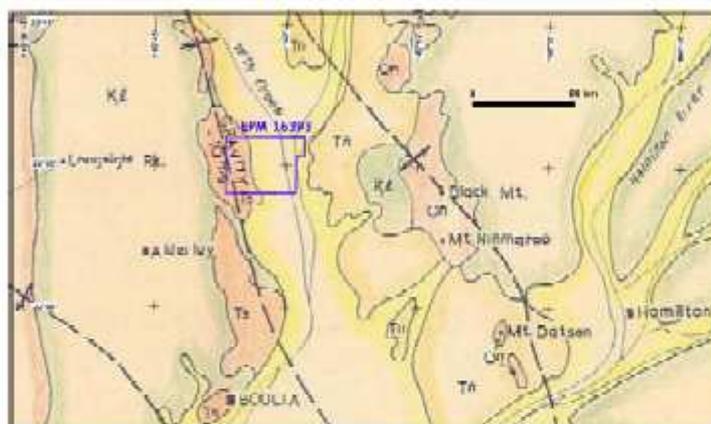
**2010 EPM 15095 (35.4 sq km)**

CYCAL: spent \$36,593 on data review.

**2011 EPM 15095 (16.1 sq km)**

CYCAL:

**6.1.3 Waterford EPM 16303**



The earliest reported work was regional mapping by the BMR in the 1950s. A gravity survey at 8 km grid spacing was completed and the Burke River anticlinal structure identified.

Figure 4. BMR map  
1958  
Figure from Laing (1958)

**1958-1967 EPP 54P (61,340 sq km)**

The Papuan Apinaipi Petroleum Company ("Minad"): spent \$923,527 on detailed gravity (1308 stations), mapping, seismic surveys. About 0.25% was within EPM 16393. Drilled Black Mountain No.1 stratigraphic well 20km east of EPM 16393, and 4 other stratigraphic holes.

**1965-1972 EPM 415 (18,070 sq km)**

Broken Hill South: discovery of Duchess & other phosphate deposits. Little work done in vicinity of EPM 16393.

**1969-1991 EPP 166P (100,400 sq km)**

US Natural Resources/BHP JV: spent \$22,467,000 on seismic and drilled 4 wells in 1972-1974. About 0.15% was within EPM 16393. The 4 wells gave invaluable stratigraphic information relevant to EPM 16393.

**1969-1970 EPM 748**

CRAE: reviewed water bore data; drilled 16 rotary holes (1072m).

**1973-1974 EPP 211P (85,590 sq km)**

Black Giant Oil Co: spent \$20,542 on data review.

**1981-1983 EPM 3056**

PNC Exploration (Australia) Pty Ltd ("PNC"): spent \$322,094 drilling 83 rotary mud holes (7789m) within EPM 16393.

**1982 EPM 3245**



PNC Exploration (Australia) Pty Ltd ("PNC"): spent \$72,713 on water bore sampling (including within EPM 16393) and drilling 6 rotary mud holes (389m).

**1982 EPM 3246**

PNC Exploration (Australia) Pty Ltd ("PNC"): spent \$72,713 on water bore sampling (including within EPM 16393) and drilling 6 rotary mud holes (542m).

**1982 EPM 3247**

PNC Exploration (Australia) Pty Ltd ("PNC"): spent \$21,799 on water bore sampling (including within EPM 16393) and drilling 7 rotary mud holes (523m).

**1986-1987 EPP 354 (47,020 sq km)**

Gulf Resources JV: Landsat structural studies.

**1993-1995 EPM 9507**

Wells Fargo Resources NL: reprocessing BMR gravity data, ground magnetics. Identified magnetic/gravity target under present EPM 16393.

**2008 EPM 16393**

Carpentaria Exploration Limited ("CAP"): data review

**2009 EPM 16393**

CYCAL: data review

**2010 EPM 16393**

CYCAL: data review

## 7. GEOLOGY & MINERALISATION

### 7.1 Regional Geology

The Mount Isa Inlier in Northwest Queensland (see Figure 5 below) is subdivided by major north-striking faults into three broad tectonic belts: the Western Succession, the Kalkadoon-Leichhardt Belt and the Eastern Succession. These all contain Paleoproterozoic to Mesoproterozoic metasediments, volcanics and intrusive rocks. EPMs 12205, 15084 and 15095 lie within the Eastern Succession.

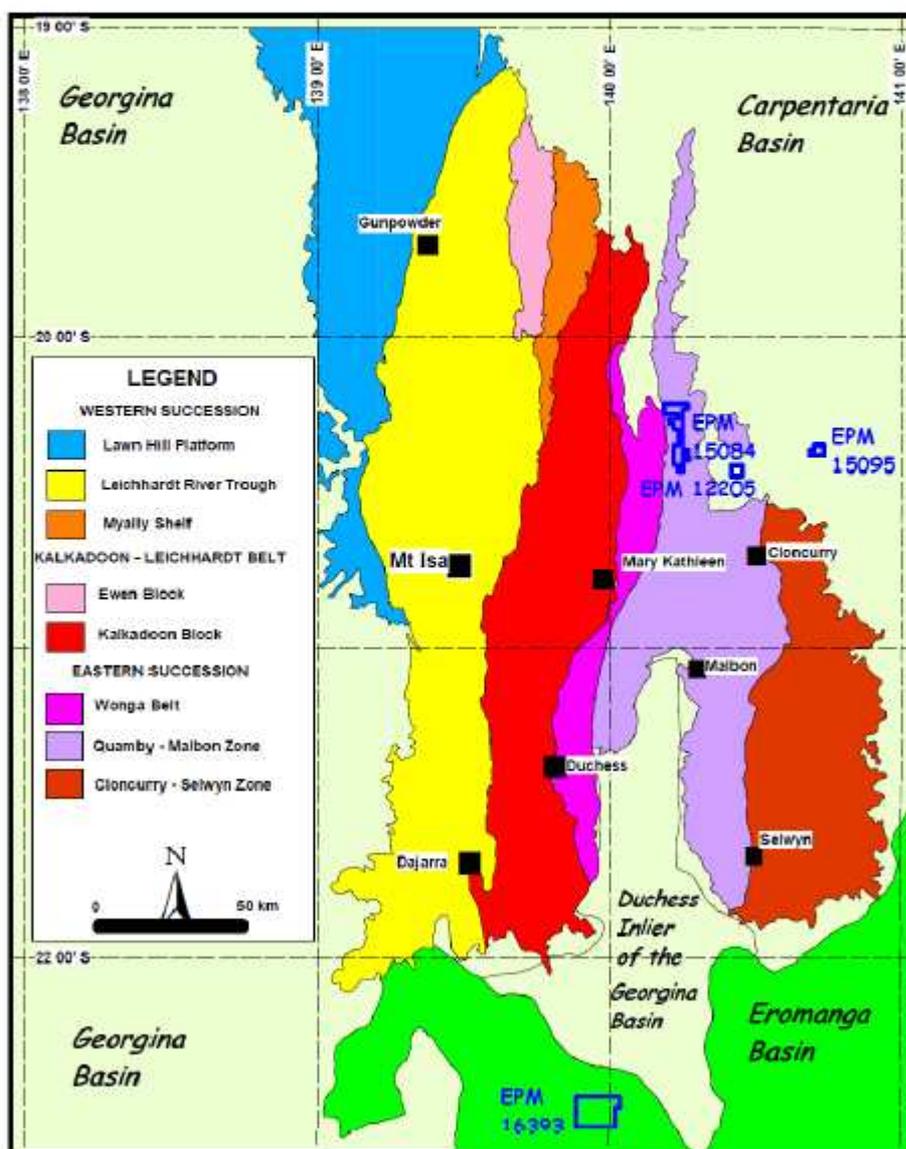


Figure 5. Regional geology, Mt Isa Inlier  
Figure compiled by D G Jones

The Western Succession consists of the Lawn Hill Platform, Leichhardt River Fault Trough and the Myally Shelf. The Kalkadoon-Leichhardt Belt is bounded to the west and east, respectively, by the Quilalar and Pilgrim Fault zones. This belt is made up of the Ewen Block and the Kalkadoon-Leichhardt Block. The Eastern Succession is subdivided into the Mary Kathleen zone in the west, the Quamby-Malbon zone, and the Cloncurry-Selwyn zone in the east (Blake, 1987).

The basement rocks consist of sequences of sedimentary, volcanic and intrusive rocks that were highly deformed during the 1900-1870 Ma Barramundi Orogeny. The basement is overlain by three cover sequences, which are Paleoproterozoic volcano-sedimentary packages separated by regional unconformities (Blake, 1987). The cover sequences were deformed and regionally metamorphosed up to upper amphibolite facies during the 1620-1520 Ma Isan Orogeny.

The Mount Isa Inlier has been intruded by granitic batholiths of Paleoproterozoic and Mesoproterozoic age, respectively termed the Wonga and Williams igneous events. The Proterozoic rocks are overlain unconformably by unmetamorphosed Paleozoic, Mesozoic and Cainozoic sedimentary sequences.

## 7.2 Local Geology

### 7.2.1 Cloncurry North EPMs 12205 & 15084

EPMs 12205 and 15084 lie in the Quamby-Malbon zone of the Eastern Fold Belt Province of the Proterozoic Mt Isa Inlier. The oldest rocks belong to the Middle Proterozoic Soldiers Cap Group. These rocks comprise feldspathic quartzite, orthoquartzite, amphibolite, schist and minor calc-silicates, and crop out as a north trending belt (Boomara Horst) east of the Mt Roseby Prospect. The Soldiers Cap Group is overlain by the Middle Proterozoic Corella Formation.

The Corella Formation is characterised by thinly banded, granofelsic to gneissic calc-silicate rocks that are variably scapolitic, amphibolitic, siliceous, calcareous, feldspathic and diopsidic. It also includes brecciated calc-silicate rocks, marble, felsic and mafic metavolcanics, mica schist, black slate, phyllite, shale and quartzite. Minor metabasalt is present in the upper part of the Corella Formation and some metadolerite mapped as sills in the formation may be extrusive rather than intrusive. The Corella Formation may have been deposited on a near-shore evaporitic carbonate shelf or possibly in a lagoonal environment, and the presence of scapolite is considered to result from the regional metamorphism of halite-bearing sediments (Blake, 1987).

The Corella Formation is exposed west and south of Quamby, and is conformably overlain by the Middle Proterozoic Knapdale Quartzite which comprises mainly feldspathic and calcareous sandstone. The Knapdale Quartzite is overlain by the Middle Proterozoic Lady Clayre Dolomite which consists of well bedded to laminated dolomite and pyrrhotitic dolomitic siltstone.

The Upper Proterozoic Quamby Conglomerate rests unconformably on the Corella Formation and is exposed in two elongated fault-bounded grabens, west and southwest of Quamby. The main rock types are conglomerate, arkose, quartz sandstone and greywacke.

The Naraku Granite (1500 Ma) which forms part of the Williams Supersuite is mainly exposed in the western part of the Project area where it intrudes the Soldiers Cap Group and the Corella Formation. The largest exposure is an elongated pluton northwest of Quamby. The Naraku Granite is highly fractionated and enriched in incompatible elements.

The Proterozoic rocks in the Malakoff outlier of EPM 12205 are overlain by Mesozoic and Cainozoic sediments which form part of the Carpentaria Basin. The Mesozoic rocks are poorly exposed, with the main rock types being mudstone, calcareous shale, limestone, sandstone and siltstone.

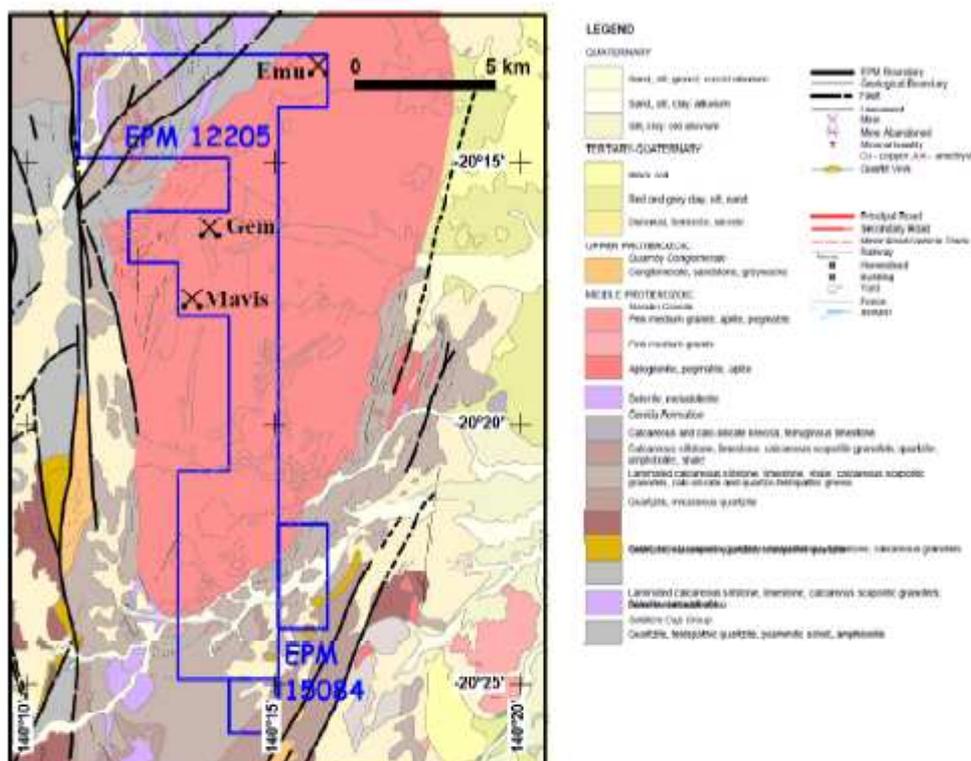


Figure 6. Local geology, EPMs 12205 & 15084  
Figure compiled by D G Jones from CYCAL data

The Proterozoic geology underlying the Mesozoic cover is largely inferred from geophysical datasets, supported by scattered outcrop and drilling. The basement rocks comprise meta-sedimentary and metavolcanic sequences thought to correlate with the Corella and Argylla Formations and Soldiers Cap Group. Large granitoid plutons and smaller stocks and cupolas intrude these units, correlating with the outcropping Naraku Granite to the southwest and west. An outcrop of metavolcanics near Mount Fort Constantine is thought to be equivalent to the Middle Proterozoic Argylla Formation.

Quaternary and Tertiary sediments form alluvial, colluvial, residual (including silcrete and ferricrete) and lacustrine deposits blanketing outcrop throughout most of the central and eastern parts of the Project.

### 7.2.2 Cloncurry North EPM 15095

The basement geology in the Emuford area consists of sandstones and mudstones of the Devonian Hodgkinson Formation. The sediments are intruded by granites of the Ootan and O'Briens Creek Supersuites. Pollard (1984, 1988) subdivided the granites in the Emuford area into two main types based on grain size and field relationships (Donchak and Bultitude, 1994): early granites and late-stage granites; the Emuford Granite being the most extensive of the early granites.

### 7.2.3 Waterford EPM 15095

EPM 16393 lies within the Boulia Shelf of the Eromanga Basin (see Figure 5). The Proterozoic basement is overlain by a sequence (<800m thick) of shallow marine Cambrian to Ordovician clastic

sediments of the Georgina Basin, covered by a thin veneer of flat-lying Mesozoic sediments of the Eromanga Basin.

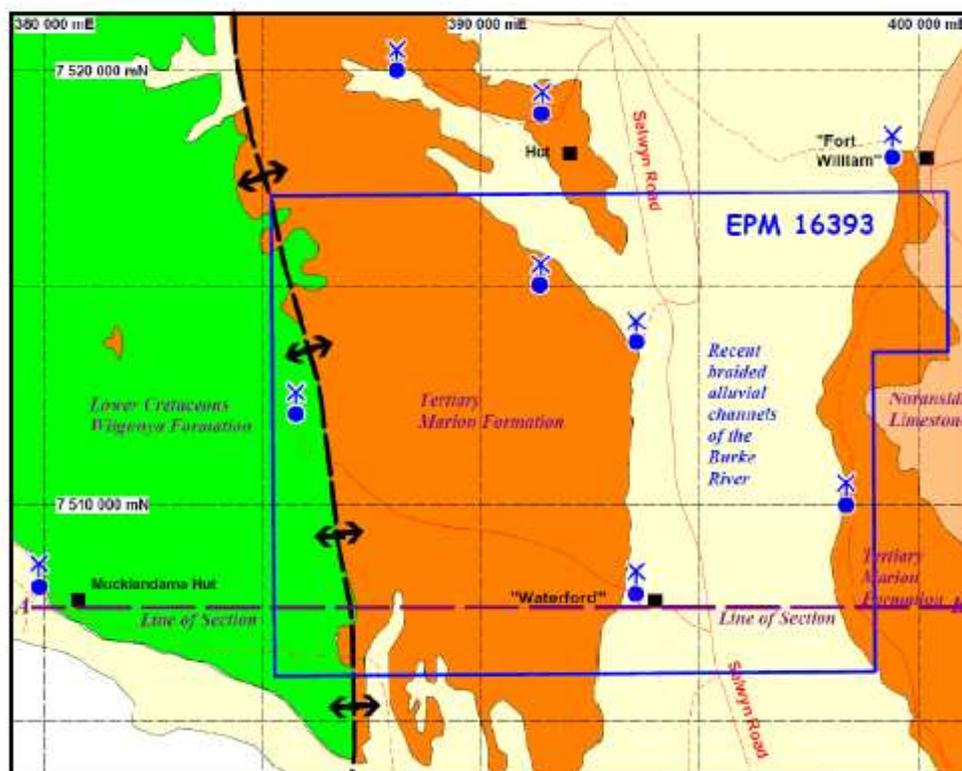


Figure 7. Surface geology, EPM 16393  
Compiled by D G Jones from Casey et al (1967)

Stratigraphic drilling indicates that the Cambrian sediments consist predominantly of calcareous, dolomitic cherty and phosphatic units that are flat-lying to gently dipping except near some faults. The oldest identifiable unit is the Pomegranate Limestone, composed of limestone, marl and breccia, overlain by calcarenite of the Gola Beds. These are in turn overlain by the Chatsworth Limestone, succeeded by the Cambro-Ordovician Ninmaroo Formation, then passing up into the Ordovician Swift Formation siltstones, sandstones and interbedded chert.

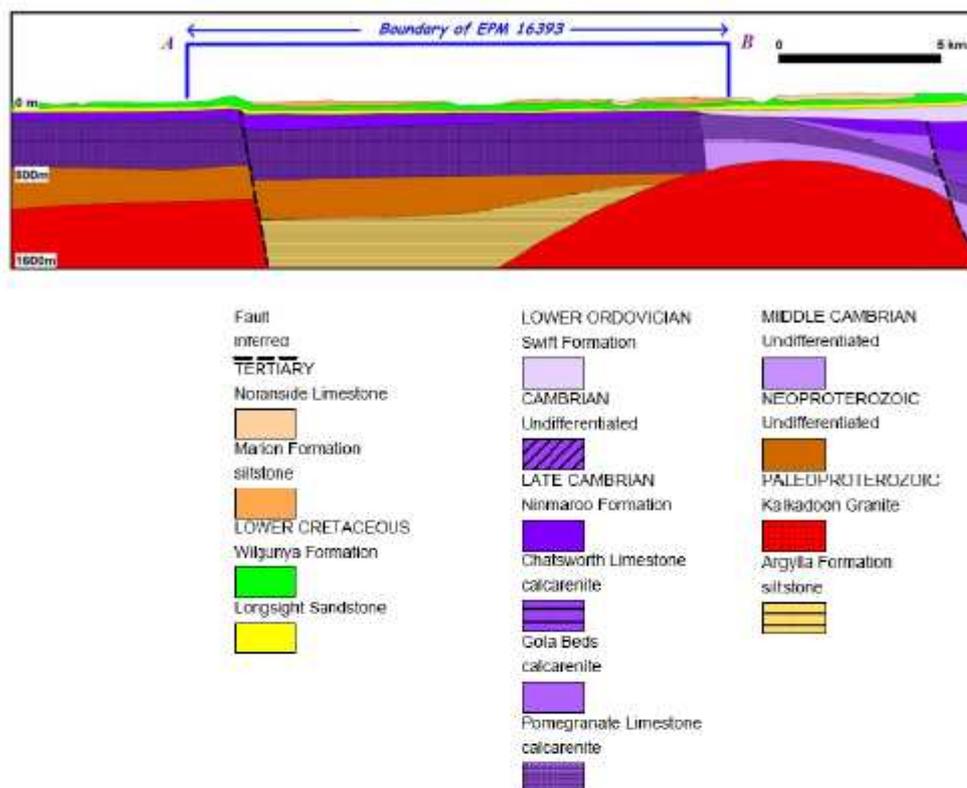


Figure 8. East-west section A-B through EPM 16393  
Compiled by D. G. Jones from Casey et al (1967)

The Mesozoic units are fluvial and shallow marine deposits that typically form mesas and partly dissected shallow plateaus, lying unconformably on the Cambrian and Ordovician sediments. In the vicinity of EPMA 16393, the basal Longsight Sandstone is completely covered by the outcropping Wilgunya Formation siltstone.

Non-marine Tertiary and Quaternary alluvial and colluvial sediments partly cover the Mesozoic rocks. Residual ferruginous and siliceous duricrusts are widespread.

### 7.3 Mineralisation

#### 7.3.1 Cloncurry North EPMs 12205 & 15084

In the Roseby mineral system, extensive deposits of oxide copper and native copper are related to deep weathering of primary copper-gold mineralisation emplaced along major north-trending shear fault zones. The mineralised trend extends into the western part of EPM 12205 where a coincident splay fault enhances the probability of higher grade near surface mineralisation. Preliminary ground investigation in the vicinity of this splay fault shows the development of significant amounts of mylonitic alteration.

The Gem copper deposit is unique for the Cloncurry district as the Cu mineralisation is hosted largely within quartz veins through a host granite, and occasionally as disseminations through aplitic granitoids. The mineralised system consists of chalcopyrite ± pyrite ± pyrrhotite sulphides within tensional quartz ± actinolite ± biotite veins through a coarse, leucocratic granite with occasional

biotite. The copper is oxidised to malachite and minor azurite at shallow levels (generally above 20m). No significant transitional sulphide zone exists between the oxide and sulphide mineralisation. A system of post-mineralisation granitic dikes probably stope out mineralisation in parts.

At the Malakoff prospect within the EPM 12205 outlier, there is potential for sediment-hosted uranium deposits occurring in medium to coarse-grained sandstones deposited in a continental fluvial or marginal marine sedimentary environment. Impervious shale/mudstone units are interbedded in the sedimentary sequence and often occur immediately above and below the mineralised sandstone. Uranium sourced from uplifted basement rock could be precipitated under reducing conditions caused by a variety of reducing agents within the sandstone including: carbonaceous material (detrital plant debris, amorphous humate, marine algae), sulphides (pyrite, H<sub>2</sub>S), hydrocarbons (petroleum), and interbedded basic volcanics with abundant ferro-magnesian minerals (e.g. chlorite).

The three main types of sediment-hosted deposits that may occur are:

- rollfront deposits - arcuate bodies of mineralisation that crosscut sandstone bedding;
- tabular deposits - irregular, elongate lenticular bodies parallel to the depositional trend, deposits commonly occur in paleochannels incised into underlying basement rocks;
- tectonic/lithologic deposits - occur in sandstones adjacent to a permeable fault zone.

### 7.3.2 Cloncurry North EPM 15095

EPM 15095 is situated 8 km due north of the Ernest Henry iron oxide copper-gold deposit. CYCAL is working on the premise that the Ernest Henry deposit formed when high temperature saline fluids were pumped along deep crustal faults adjacent to granitic intrusive bodies, and that EPM 15095 contains geology similar to this style of deposit.

### 6.3.3 Waterford EPM 16393

Previous exploration on the Boullia Shelf has demonstrated the potential for roll-front uranium mineralisation confined within Mesozoic paleochannels. Although uranium is a relatively common element in nature, it normally is a highly charged ion (4+ or 6+) and does not fit easily into the common rock-forming minerals. Hence it tends to be concentrated in minerals such as zircon, monazite, allanite and apatite, the primary source of which are highly fractionated igneous rocks such as felsic granites, rhyolites, alkali trachytes etc. Secondary apatite (chemical formula Ca<sub>5</sub>(PO<sub>4</sub>)<sub>3</sub>) is the principal phosphatic mineral in the phosphorite mined from the Cambrian sediments on the edge of the Georgina Basin inlier only 50 km north of EPMA 16393. These phosphatic horizons are typically anomalous in uranium, with the U<sup>4+</sup> ion substituting for Ca<sup>2+</sup> in apatite, as well as UO<sub>2</sub><sup>2-</sup> substituting for PO<sub>4</sub><sup>3-</sup>. The uranium probably originally came from the highly anomalous granites in the Williams Batholith, which may still be contributing uranium directly into the groundwaters of the Great Australian Basin.

Uranium has two oxidation states that have dramatically differing solubilities in geological environments. In an oxidising environment, the hexavalent (U<sup>6+</sup>) ion is highly mobile. In a reducing environment such as a phosphorite bed, tetravalent uranium U<sup>4+</sup> is highly insoluble and immobile ("fixed"). When phosphorite horizons are exposed to weathering such as around the rim of the Georgina Basin, the U<sup>4+</sup> ion is oxidised to the highly mobile U<sup>6+</sup> state and leached into the groundwater. The presence of carbonate can enhance the solubility and mobility of the U<sup>6+</sup> ion.

Groundwater from the Duchess Inlier of the Georgina Basin flows south, carrying uranium as a complex uranyl carbonate ion. Specific permeable units within the Mesozoic strata of the Great Australian Basin (formerly known as the Great Artesian Basin) carry most of the groundwater. The highly permeable Longsight Sandstone is the main aquifer of the Great Australian Basin in the Boullia Shelf, covered by the impermeable Wilgunya Formation which is an aquiclude. Precipitation of uranium could occur if the migrating groundwater encountered reducing conditions such as carbonaceous horizons or lignites within the Longsight Sandstone.

## 8. EXPLORATION RESULTS & POTENTIAL

### 8.1 Cloncurry North EPMs 12205 & 15084

The first phase of CYCAL's exploration included an induced polarisation (IP) geophysical survey of the area, a geochemical soil survey primarily to test for Cu and Au anomalies, and a first pass of geological mapping. Following encouraging results coupled with the significant size of the historical Gem workings, the decision to drill an initial five reverse circulation ("RC") program at the Gem prospect was made. The success of this program, including 38m at 1.25% Cu and 0.20g/t Au from 33m in drill hole GR003, furthered the argument for a larger program utilising both RC and diamond core drilling. Ten RC and three diamond core holes, including one diamond core twin of GR003, produced encouraging results and following a third RC program of four holes (again with significant Cu intersections) and a TEM geophysical survey, an initial inferred resource drill out program was undertaken consisting of twenty-two RC drill holes. Total numbers from the Gem prospect are forty five drill holes, consisting of forty two RC and three diamond, amounting to 6138.62m. Data from all drill holes was then compiled to create an initial inferred resource for the Gem copper prospect, in a joint effort from CYU and independent resource consultants Hellman and Schofield.

The resource methodology for the Gem copper deposit used the ordinary kriging method at 1m composites to define the initial inferred resource of 492,000 tonnes at 0.5% Cu and 0.2g/t Au at a 0.2% Cu cut-off. This modest resource is a technical success as a new deposit style has been defined in the Cloncurry district and therefore opens a new window of exploration potential for significant granite-hosted Cu-Au mineralisation in the region.

Future exploration work for the Gem copper prospect will be limited as the small and patchy nature of the deposit implies that a significant increase in resource tonnage is unlikely even though the deposit is considered to be open.

### 8.2 Cloncurry North EPM 15095

Within EL 6333, detailed exploration commenced in late 2004 at Kingsgate. Trial mining was successfully completed in December 2006 with results forming part of a scoping study. Drilling of the quartz pipe which was the subject of trial mining revealed an average grade of 0.34% Mo and 0.64% Bi. The amount and grade of bismuth was unexpected and, if maintained, will add significant value to the project.

### 8.3 Waterford EPM 16393

Previous exploration by PNC Exploration (Australia) Pty Ltd ("PNC") identified a fluvial paleochannel in the Waterford area which the company named the Binfield Channel. A total of 98 open hole percussion holes for 9,230m were drilled between May 1981 and May 1983 over a wide area, spaced initially 4km apart. The presence of a roll-front geochemical cell was proven in the Waterford area (Dunn, 1983). Scintillometer counts of drill cuttings returned up to 2m @ 470 counts per second ("cps") but the corresponding assays were only 140 ppm U, which PNC considered too low to be of interest and they relinquished the tenement at the end of 1983. No follow-up work has been done.

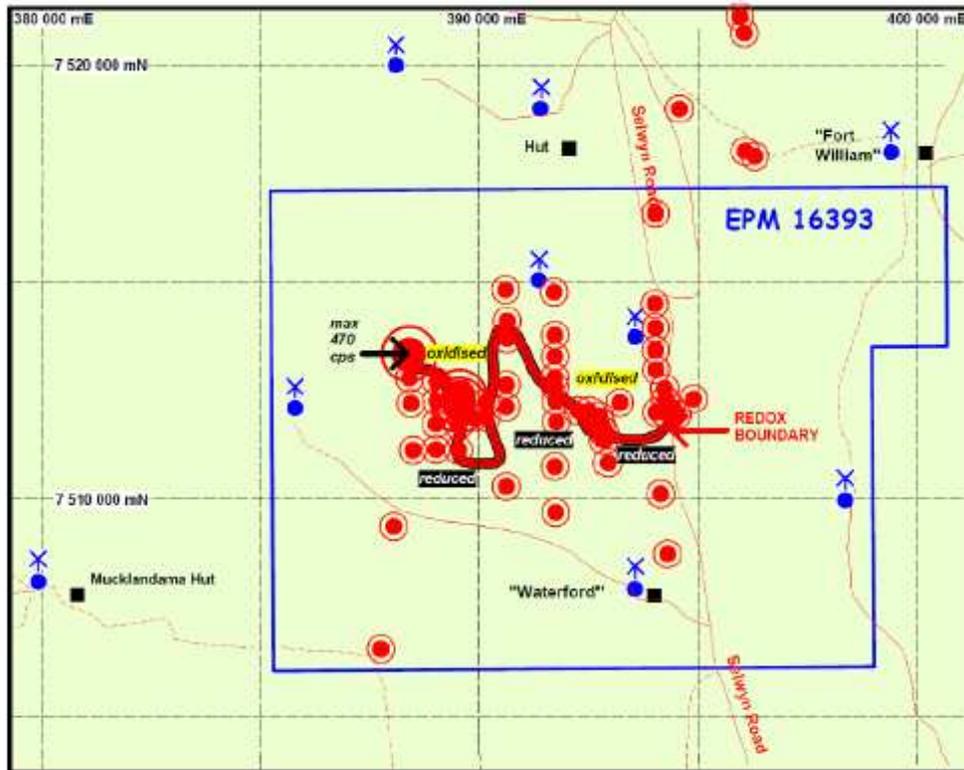


Figure 9. Reconnaissance drilling by PNC Exploration (Australia) Pty Ltd  
Compiled by D G Jones from McKay (1983) and Dunn (1983)

## 9. MINERAL RESOURCES & MINERAL RESERVES

Hellman & Schofield Pty Ltd were commissioned to work in a collaborative effort with CYCAL on the initial inferred mineral resource estimate for the Gem copper deposit for public reporting as defined by the JORC Code. The resource estimate utilised the interpreted plan geology and lithological and mineralised intersections to create a reliable geological model of the Gem copper deposit. Using the Ordinary Kriging geostatistical method with 1m composites, the maiden inferred resource estimate was completed in June 2005.

Table 2. Inferred Resource Estimation for the Gem Copper Deposit

Cu Grade	Cut Off	Tonnes	Cu %	Au g/t	Cu Tonnes	Au oz
0.5		169,516	0.83	0.22	1,404	1,210
0.4		279,675	0.68	0.20	1,888	1,835
0.3		372,171	0.59	0.20	2,207	2,417
0.2		491,936	0.51	0.19	2,499	3,021
0.1		693,956	0.40	0.16	2,790	3,526

The maiden Inferred Mineral Resource for the Gem Copper Deposit was officially released to the Australian Stock Exchange ("ASX") on 9<sup>th</sup> June 2010 and announced a resource of 492,000t @ 0.5% Cu and 0.2g/t Au with a 0.2% Cu cut-off.

## 10. KEY ASSUMPTIONS, RISKS & LIMITATIONS

### 10.1 Assumptions

The Projects generally have a long history of assessment and exploration. Historical work was not documented to the current standards demanded by modern disclosure requirements. Hence a judgement has had to be made as to the weighting given to each element of the data available.

### 10.2 Material Risks

The material risks faced by any future development of the Projects are no different from those faced by other mining and processing operations in Australia.

#### 10.2.1 Operating Risks

Mines by their nature are subject to many operational risks and factors that are generally outside of the control of the operator and could impact the business, operating results and cash flows. These operational risks and factors include, but are not limited to

1. unanticipated ground and water conditions and adverse claims to water rights,
2. geological problems, including earthquakes and other natural disasters,
3. metallurgical and other processing problems,
4. the occurrence of unusual weather or operating conditions and other force majeure events,
5. lower than expected ore grades or recovery rates,
6. accidents,
7. delays in the receipt of or failure to receive necessary government permits,
8. the results of litigation, including appeals of agency decisions,
9. uncertainty of exploration and development,
10. delays in transportation,
11. labour disputes,
12. inability to obtain satisfactory insurance coverage,
13. unavailability of materials and equipment,
14. the failure of equipment or processes to operate in accordance with specifications or expectations,

15. unanticipated difficulties consolidating acquired operations and obtaining expected synergies and
16. the results of financing efforts and financial market conditions.

In addition, any company's business depends on its ability to attract and retain skilled and experienced employees. There is significant competition between mining companies for key executives and other employees with applicable technical skills and experience in the mining industry.

## 10.2.2 Financial Risks

### 10.2.2.1 Metal Price Volatility

The financial performance of any mine is heavily dependent on the price of the commodity produced, which is affected by many factors beyond the control of the mining company. The price of commodities as reported publicly is influenced significantly by numerous factors, including:

1. the worldwide balance of demand and supply,
2. rates of global economic growth and trends in energy consumption, both of which correlate with demand for minerals,
3. economic growth and political conditions in China, which has become the most rapidly-expanding minerals consumer in the world, and other major developing economies such as India,
4. the decline in availability of secondary sources of minerals e.g. scrap copper,
5. technical or regulatory problems could reduce mine supply,
6. material owned by speculators and investors could temporarily flood the market
7. currency exchange fluctuations.

In addition, sustained low metal prices could:

- reduce revenues as a result of production cutbacks due to curtailment of operations or temporary or permanent closure of mines or portions of deposits that have become uneconomical at the then prevailing copper prices,
- delay or halt exploration or the development of new process technology or projects and
- reduce funds available for exploration and the building of ore reserves.

### 10.2.2.2 Energy Costs

Energy represents a significant portion of the production costs of mining operations. If miners are unable to procure sufficient energy at reasonable prices in the future, it could adversely affect profits and cash flow.

## 10.2.3 Environmental Risks

The Cloncurry region, in which CYCAL's North Queensland tenements are located, has a long and continuing history of mining. No unusual environmental risks that are not faced by current mining operations in the area have been identified in the CYCAL tenements.

## 10.2.4 Permitting Risks

Mining operations and exploration activities are subject to extensive laws and regulations governing exploration, development, production, exports, taxes, labour standards, occupational health, waste disposal, protection and remediation of the environment, protection of endangered and protected species, mine safety, toxic substances and other matters. Mining also is subject to risks and liabilities associated with pollution of the environment and disposal of waste products occurring as a result of mineral exploration and production. Compliance with these laws and regulations imposes substantial costs and subjects mining companies to significant potential liabilities.

The laws and regulations that apply in Australia are complex and are continuously evolving. Costs associated with environmental and regulatory compliance have increased over time, and it is expected that these costs will continue to increase in the future. In addition, the laws and regulations



that apply may change in ways that could otherwise have an adverse effect on operations or financial results. The costs of environmental obligations may exceed the reserves established for such liabilities.

Mining operations are subject to various stringent federal, provincial and local environmental laws and regulations related to improving or maintaining environmental quality. Environmental laws often require parties to pay for remedial action or to pay damages regardless of fault and may also often impose liability with respect to divested or terminated operations, even if the operations were terminated or divested many years ago.

## 11. VALUATION

### 11.1 Currency & Exchange Rates

The currency used in this Valuation is the Australian dollar ("AUD\$"). The exchange rates utilized are the Monthly and Annual Noon Exchange Rate Averages published by the Reserve Bank of Australia (<http://www.rba.gov.au/statistics/frequency/exchange-rates.html>). The price index used is the historical Consumer Price Index published by the Reserve Bank of Australia (<http://www.rba.gov.au/inflation/measures-cpi.html>).

### 11.2 Database

The database used for the valuations includes all the 161 company reports lodged with the QLD DME relevant to the tenements, together with geological survey reports (including those from GeoScience Australia), public company announcements, annual reports, annual information forms, management discussions and analysis, news releases and NI43-101 technical reports filed under SEDAR.

### 11.3 Market Approach – Comparable Transactions

#### 11.3.1 Cloncurry North EPMs 12205 & 15084

Some 30 transactions that occurred in the period 2007-2011 have been examined. Of these, 6 have been analysed in detail and a summary of each is set out below. Metal prices used to calculate metal equivalents are London Metal Exchange ("LME") quotations in USD\$ at close on Friday 03 June 2011 and include copper (USD\$9,225/t), gold (USD\$1,543/oz) and silver (USD\$38/oz).

##### 11.3.1.1 Sprogge, Yukon, Canada

On 12th April 2011, Northern Tiger Resources Inc. ("Northern Tiger") announced that it had executed an Option Agreement with Alexco Resource Corp and Newmont Canada Corporation, a subsidiary of Newmont Mining Corporation ("Newmont") (the "Vendors") for the Sprogge property. The Sprogge property is located in southeast Yukon and adjoins the eastern boundary of Northern Tiger's 3Ace Property, where the Company recently announced a new gold discovery, including a drill-hole intercept grading 14.8 g/t gold over 10.9 m.

The most advanced target on the Sprogge Property is the Sugar Bowl Zone, defined by a highly anomalous gold and pathfinder element geochemical signature measuring 2,400 m by 1,200 m. A 1,200 m by 600 m core area averages more than 200 ppb gold in soils and returned a maximum gold-in-soil value of 10.3 g/t Au. Rock chip samples taken along a 2.5 km ridge bisecting the Sugar Bowl Zone contain numerous multi-gram gold values up to a maximum of 34.8 g/t Au, and including 6.9 g/t Au over 12.0 ms and 9.6 g/t Au over 4.0 m. Four holes (762 m) drilled in 2000 intersected considerable hydrothermal alteration, but did not replicate the grades found in the surface exploration. The drilling program was hampered by poor weather, and only tested the lowest elevation targets along the northern boundary of the surface anomaly. Most of the Sugar Bowl Zone remains to be drill tested, and a number of other geochemical targets warranting follow-up have been identified on the property.

The Option Agreement, which is subject to TSX Venture Exchange approval, provides Northern Tiger with an option to earn a 100% interest in the property from the Vendors. Under the terms of the proposed agreement, Northern Tiger will be required to make cash payments of CAD\$0.5M over a three year period and incur CAD\$1.0M in exploration expenditures over a four year period. The Vendors will retain a 2% net smelter return interest (NSR) on the property. Northern Tiger can purchase 1% of the NSR for CAD\$1.0M. The Vendors will have a first right of offer on any proposed sale of the property for four years.

The transaction values the Sprogge property at CAD\$3.5M (AUD\$3.5M). Sprogge could be regarded as equivalent to the combined EPMs 12205 & EPM 15084.

### 11.3.1.2 Hawwood, QLD, Australia

On 23 December 2008, Carlyle Mining Corp ("Carlyle") announced that it had entered into an option to acquire 60% of the issued and outstanding shares of Sunland Properties Limited. Sunland Properties Limited controls 520 sq km of prospective copper-gold tenements situated near Hawwood in SE QLD.



Figure 10. Location plan, Hawwood  
Figure from Carlyle website

The properties (the "Hawwood Project") consist of two EPMs and one EPMA. The exploration permits were acquired by Rugby Mining Pty Limited ("Rugby"), a wholly owned subsidiary of Sunland Properties Limited ("Sunland"), from Newcrest Operations Limited ("Newcrest"). The Hawwood Project, which is very well located with respect to infrastructure, has been the subject of exploration activities over the last 40 years with reported results from previous explorers of 0.55% copper over 3m in trenches and drill results of 0.51% copper over 20m, from a depth of 2m. In addition, trenching results from the mid 90's are also reported to include up to 12m of 0.3% copper, 0.4 ppm platinum and 0.6 ppm palladium.

Carlyle will advance a non-refundable deposit. In order to maintain its option, the Agreement provided that Carlyle will pay AUD\$200,000 cash and must incur exploration expenditures totalling AUD\$3.0 million, or make cash payments in lieu thereof, (including 20,000m of bedrock drilling) within 42 months, of which AUD\$500,000, to be incurred within 18 months, is a minimum commitment.

The Hawwood and CYCAL's EPMs 12205/15084 tenements are at a similar exploration stage and this transaction provides an indication of AUD\$3.2M as a guide to the value.

### 11.3.1.3 Yuinmery, WA

On 26 October 2006, Empire Resources Limited ("EMP") acquired 79% of the Yuinmery project tenements from Meekal Pty Ltd, through the expenditure of AUD\$358,456 on exploration and the issue of 2 M ordinary fully paid shares at 20 cents. The transaction valued 100% of the 4 prospecting licences ("PLs") and 2 mining leases ("MLs") at AUD\$960,000 (AUD\$1.075M in 2010 dollars).

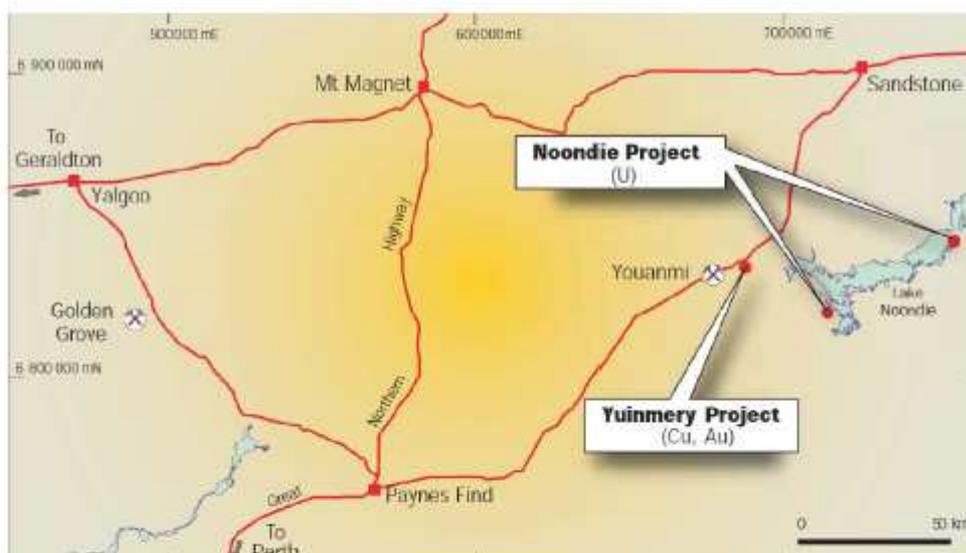


Figure 11. Location of Yuinmery project  
Figure from Empire Resources 2007 Annual Report

The Yuinmery Copper-Gold Project is situated 475 km northeast of Perth, within the Youanmi Greenstone Belt that forms part of the Archaean Yilgarn Craton. The project comprises a 9.2 sq km block of tenements, which cover a folded sequence of mafic and felsic volcanic rocks with ultramafic and mafic layered intrusives. Previous exploration within the project area has located copper and gold mineralisation, with drill intersections including 1.79 m @ 6.82% copper and 3.07 m @ 3.09% copper.

The Yuinmery tenements cover a smaller area the EPMs 12205 & 15084, and do not have a resource that meets JORC standards, but comprise PLs and MLs that are a more advanced style of tenement than EPMs. In general terms Yuinmery is comparable to CYCAL's Gem prospect and tenement package. The transaction would place a comparable value of AUD\$1.075M on EPMs 12205 & 15084.

#### 11.3.1.4 Evanston, WA

On 28 Feb 2007, Australian company International Goldfields Ltd signed a conditional agreement with fellow Australian explorer Polaris Metals NL ("POL") for the sale of its Evanston gold project to Polaris for \$1 million cash and \$1 million in scrip.

The Evanston project is located in the Southern Cross Province within the Yilgarn Mineral Field, near Coolgardie in WA, and is located next to one of Polaris' advanced gold and base metals exploration projects. RAB drilling had demonstrated potential for copper.

On the basis of similarities with EPMs 12205/15084, the comparable value is AUD\$2.18M in 2010 dollars.

#### 11.3.1.5 Paraburdoo, WA

In Mar 2008 Metminco Ltd reached agreement with Peak Resources NL to earn a 40% interest in the Paraburdoo Project by spending A\$1M over 2 years. The project is located 70 km south of Paraburdoo, and is said to be prospective for "large-scale base metal deposits" based on coincident geophysical and geochemical anomalies, similar to EPMs 12205/15084. This transaction values 100% of Paraburdoo at A\$2.5M which MA regards as a guide to the value on EPMs 12205/15084.

**11.3.1.6 Inza, BC, Canada**

On 27 April 2011, Strongbow Exploration Inc. ("SBW"), announced that it had entered an agreement with Xstrata Copper Canada, allowing Xstrata the option to earn up to a 75% interest in Strongbow's Inza copper-gold property, located in the Quesnel Trough region of central British Columbia. The 6,104 ha property is road accessible, approximately 54 km NNW of the community of Fort St. James.

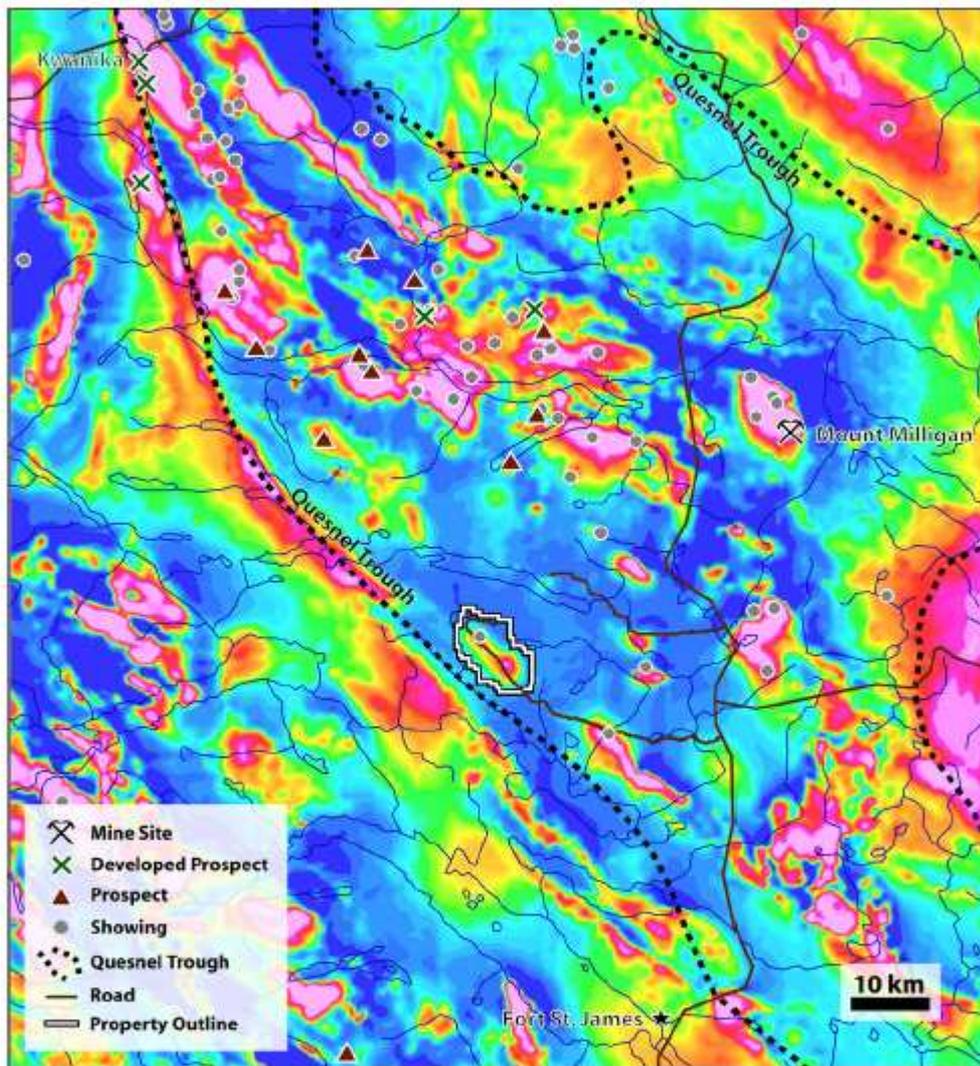


Figure 12. Location of the Inza property on regional magnetic image  
*Figure from Strongbow website*

Exploration work completed by Strongbow has identified a 1,100 by 1,200 metre, drill ready copper-gold porphyry target on the property and Xstrata intends to complete a drilling program during the 2011 summer field season. All required approvals and permits are in place for the drilling program.

Under the terms of the agreement, Xstrata may earn an initial 51% interest by making staged cash payments to Strongbow totalling CAD\$100,000 and incurring cumulative exploration expenditures

totalling CAD\$1.1M over a 4 year period. This values 100% of the Inza property, which has some similarities to the present stage of EPMs 12205/15084, as AUD\$2.42M. MA regards as a guide to the value of EPMs 12205/15084.

### **11.3.2 Cloncurry North EPM 15095**

Some 20 transactions that occurred in the period 2007-2011 have been examined. Of these, 5 have been analysed in detail and a summary of each is set out below. Metal prices used to calculate metal equivalents are London Metal Exchange ("LME") quotations in USD\$ at close on Friday 03 June 2011 and include copper (USD\$9,225/t), gold (USD\$1,543/oz) and silver (USD\$38/oz).

#### **11.3.2.1 Lumacom, WA**

In Aug 2008 Lumacom Ltd acquired from an undisclosed vendor a 100% interest in E40/212 for A\$30,000 cash and 12 million shares deemed to be worth 1 cent per share. The transaction valued E40/212 at A\$190,000.

The small 50 sq km tenement is located in the Northeastern Goldfields region. Lumacom reported that the tenement is prospective for zinc, copper and gold mineralisation. The property is similar to EPM 15095 although not as advanced and EPM 15095 is probably worth about double the value.

#### **11.3.2.2 DOK, BC Canada**

On 26 May 2011, Boxxer Gold Corp announced that it had signed an Option Agreement with two private property owners to earn a 100% interest in the DOK copper-gold porphyry property located approximately 40 km southwest of Telegraph Creek, in northwest British Columbia, Canada. The property consists of seventeen contiguous mineral claims covering approximately 18,500 acres. The addition of the DOK property is part of Boxxer's strategy to acquire up to four early-stage, essentially un-explored, poly-metallic porphyry projects with large tonnage potential. The majority of the exploration on the DOK property was completed in the early 1970's. Since that time very little exploration has been completed.

Two large, copper-gold-molybdenum-silver soil geochemical anomalies have been outlined over a five kilometre strike length on the property. The first zone measures 2,000 m long by 1,400 m wide. The second zone measures 1,500 m long by 900 m wide. Both anomalies are open along strike. Copper concentrations in the soil geochemical anomalies range from 200 to 9,820 parts per million ("ppm"); as well as 0.03g/t to 2.2 g/t gold; 14 to 135ppm molybdenum; and 0.6g/t to 84.5g/t silver. Chip sampling of copper mineralization in bedrock during the early 1970s returned 0.66% copper over 38 m, 0.73% copper over 16 m, and 0.32% copper over 25 m.

Under the terms of the Option Agreement, Boxxer has the right to earn a 100% interest in the DOK property (subject to the NSR payable to the vendors) by making the following payments and exploration commitments:

- a) Cash payments totalling \$340,000 over six years, \$20,000 of which is due on signing;
- b) Exploration expenditures totalling \$5,000,000 over six years, \$500,000 of which is required in year one, following which there are no specific annual exploration expenditure requirements.
- c) A one-time bonus payment of either \$1,000,000 cash or \$1,050,000 in common stock of the Company. This bonus shall become due and payable upon attaining certain minimum mineral resources, which will be established by an independent National Instrument 43-101 resource report. The Company has the right to determine whether the bonus is paid in cash or shares. The number of shares to be issued would be calculated using the closing price of the Company's common stock on the date of the release of the National Instrument 43-101 resource estimation report.
- d) A 3% NSR to the property vendors, of which Boxxer has the right to repurchase 2% of the NSR at any time for a cash payment of \$2,000,000.

The actual commitment by Boxxer at the exploration stage is a cash payment of CAD\$340,000 plus required CAD\$500,000 of exploration expenditure, i.e. a total of CAD\$840,000. Further payments are conditional on attaining a mineral resource, which would substantially enhance the value of the

totalling CAD\$1.1M over a 4 year period. This values 100% of the Inza property, which has some similarities to the present stage of EPMs 12205/15084, as AUD\$2.42M. MA regards as a guide to the value of EPMs 12205/15084.

### **11.3.2 Cloncurry North EPM 15095**

Some 20 transactions that occurred in the period 2007-2011 have been examined. Of these, 5 have been analysed in detail and a summary of each is set out below. Metal prices used to calculate metal equivalents are London Metal Exchange ("LME") quotations in USD\$ at close on Friday 03 June 2011 and include copper (USD\$9,225/t), gold (USD\$1,543/oz) and silver (USD\$38/oz).

#### **11.3.2.1 Lumacom, WA**

In Aug 2008 Lumacom Ltd acquired from an undisclosed vendor a 100% interest in E40/212 for A\$30,000 cash and 12 million shares deemed to be worth 1 cent per share. The transaction valued E40/212 at A\$190,000.

The small 50 sq km tenement is located in the Northeastern Goldfields region. Lumacom reported that the tenement is prospective for zinc, copper and gold mineralisation. The property is similar to EPM 15095 although not as advanced and EPM 15095 is probably worth about double the value.

#### **11.3.2.2 DOK, BC Canada**

On 26 May 2011, Boxxer Gold Corp announced that it had signed an Option Agreement with two private property owners to earn a 100% interest in the DOK copper-gold porphyry property located approximately 40 km southwest of Telegraph Creek, in northwest British Columbia, Canada. The property consists of seventeen contiguous mineral claims covering approximately 18,500 acres. The addition of the DOK property is part of Boxxer's strategy to acquire up to four early-stage, essentially un-explored, poly-metallic porphyry projects with large tonnage potential. The majority of the exploration on the DOK property was completed in the early 1970's. Since that time very little exploration has been completed.

Two large, copper-gold-molybdenum-silver soil geochemical anomalies have been outlined over a five kilometre strike length on the property. The first zone measures 2,000 m long by 1,400 m wide. The second zone measures 1,500 m long by 900 m wide. Both anomalies are open along strike. Copper concentrations in the soil geochemical anomalies range from 200 to 9,820 parts per million ("ppm"); as well as 0.03g/t to 2.2 g/t gold; 14 to 135ppm molybdenum; and 0.6g/t to 84.5g/t silver. Chip sampling of copper mineralization in bedrock during the early 1970s returned 0.66% copper over 38 m, 0.73% copper over 16 m, and 0.32% copper over 25 m.

Under the terms of the Option Agreement, Boxxer has the right to earn a 100% interest in the DOK property (subject to the NSR payable to the vendors) by making the following payments and exploration commitments:

- a) Cash payments totalling \$340,000 over six years, \$20,000 of which is due on signing;
- b) Exploration expenditures totalling \$5,000,000 over six years, \$500,000 of which is required in year one, following which there are no specific annual exploration expenditure requirements.
- c) A one-time bonus payment of either \$1,000,000 cash or \$1,050,000 in common stock of the Company. This bonus shall become due and payable upon attaining certain minimum mineral resources, which will be established by an independent National Instrument 43-101 resource report. The Company has the right to determine whether the bonus is paid in cash or shares. The number of shares to be issued would be calculated using the closing price of the Company's common stock on the date of the release of the National Instrument 43-101 resource estimation report.
- d) A 3% NSR to the property vendors, of which Boxxer has the right to repurchase 2% of the NSR at any time for a cash payment of \$2,000,000.

The actual commitment by Boxxer at the exploration stage is a cash payment of CAD\$340,000 plus required CAD\$500,000 of exploration expenditure, i.e. a total of CAD\$840,000. Further payments are conditional on attaining a mineral resource, which would substantially enhance the value of the

property. Thus the comparable transaction value to CYCAL's EPM 15095 is CAD\$840,000 (AUD\$805,000).

### **11.3.2.3 Gunbarrel, WA, Australia**

On 6 August 2008, ATW Venture Corp Metals ("ATW") announced that it had signed a Heads of Agreement with private vendors to acquire a 90% interest in the Gunbarrel Project for AUD\$140,000 cash and 2M shares deemed to be worth CAD\$0.49 per share (AUD\$885,800). The transaction valued 1005 of the tenement at AUD\$1.14M (AUD\$1.2M in 2010 dollars).

The 98 sq km Gunbarrel Project is located approximately 450 km north of Perth and 110 km east of Wiluna. The project is said to be prospective for gold, nickel sulphides and associated platinum group elements (PGEs) and other base metals. It is located directly north along strike from Cullen Resources Ltd's Gunbarrel Project which is reported to contain narrow high-grade base metal mineralisation.

At the time Gunbarrel was at a similar stage and proximity to a known deposit to be considered comparable to EPM 15095. The transaction equates to a value of AUD1.2M for EPM 15095.

### **11.3.2.4 Kiaby Well, WA**

In January 2008, the Silver Swan Group Ltd obtained from Mawson West Ltd the right to earn a 60% interest in the Kiaby Well project by spending AUD\$300,000 in exploration over 3 years.

The Kiaby Well Project consists of an Exploration Licence Application (ELA59/934) located in the Yandhanoo Fold Belt, approximately 320 km northeast of Perth and some 40 km south of Paynes Find. The tenement covers 84 sq km and is centred to the east of the Yandhanoo Hills, which host the historical Bonnie Venture Gold Mine and the Wolfram King and Wolfram Queen Tungsten mines. The Mt Gibson Gold Mine which to date has produced approximately 870,000 oz of gold from several open pits, is located approximately 10 km to the south west of the project.

The Kiaby Well Project has potential to host a number of styles of mineralisation. These include gold mineralisation associated with anomalous rock chip (up to 0.6g/t gold) and soil samples collected by previous explorers together with the potential for copper (0.165% Cu) and nickel (up to 0.68% from the bottom of an RAB hole) mineralisation.

The contact zone between the metasediments of the Mougooderra Formation and the mafic volcanics of the Singleton Basalt is known to host significant gold mineralisation at Minjar, 70 km to the northwest. Within the Kiaby Well tenement, 10 kilometre strike length of this contact is completely under cover and has not been tested to date.

The transaction valued 100% of Kiaby Well as AUD\$500,000 (\$525,000 in 2010 dollars), which could be considered a comparable value for EPM 15095.

### **11.3.2.5 Tepal, Mexico**

On 5 November 2009, Geologix Explorations Inc. ("Geologix") announced that it had entered into an agreement with Arian Silver Corp. ("Arian") whereby Geologix was granted the exclusive rights to purchase Arian's 100% interest in the Tepal Gold-Copper Project in the state of Michoacán, Mexico.



Figure 13. Location of Tepal project  
Figure from Geologix website

The Tepal Project is located in the northwest portion of Michoacán State, Mexico. Local and regional infrastructure is excellent, with paved roads, deep sea port access, and low topographical relief. The project is comprised of 6 concessions covering approximately 138 square kilometres. The area has been well explored by 129 drill holes (62 diamond core and 67 RC) totalling 20,121m which led to the identification of two main mineralised zones, the North Zone and the South Zone. In addition, surface geochemical surveys throughout much of the project area indicate numerous highly prospective untested gold and copper anomalies; most notably to the east of the current deposits.

Under the terms of the agreement, Geologix can elect to complete the purchase of 100% of the property, subject to a 2.5% net smelter return royalty, by delivering to Arian USD\$3.0 million in staged payments before 23 February 2011. Assigning a value of USD\$1.25M to the royalty gives a total transaction price of USD\$4.25M (AUD\$4.25M). Tepal is a well-defined porphyry copper-gold project as opposed to the IOCG style targeted on CYCAL's EPM 15095 and is much more advanced but in general could be loosely considered to be comparative. Reducing the Tepal transaction to 15% of AUD\$4.25M to allow for the significantly greater drilling information at Tepal gives a rough notional value of AUD\$640,000 for EPM 15095.

### 11.3.3 Waterford EPM 16393

Some 20 transactions that occurred in the period 2007-2011 have been examined. Of these, 5 have been analysed in detail and a summary of each is set out below. Metal prices used to calculate metal equivalents are London Metal Exchange ("LME") quotations in USD\$ at close on Friday 03 June 2011 and include copper (USD\$9,225/t), gold (USD\$1,543/oz) and silver (USD\$38/oz).

#### 11.3.3.1 Samit, Mali

On 25 May 2011, Cascade Resources Ltd. ("Cascade") announced that it had amended a July 20, 2009 agreement concerning the acquisition of the Samit Uranium Project, in Mali, from the Bayswater Uranium Corporation ("Bayswater").

The amendment to the purchase agreement pertains to the payable considerations provided to Bayswater in exchange for Northern Canadian Minerals Inc. (Mali) ("NCM"), which holds the uranium property. As consideration for NCM, the original purchase agreement committed Cascade to (1) issuing to Bayswater an aggregate of 1,000,000 common shares; (2) paying Bayswater \$250,000 in cash pursuant to a promissory note due within 36 months of completing the acquisition of NCM; and (3) granting to Bayswater a 2.5% net smelter returns royalty from production on the Samit uranium property.



The Amending Agreement cancels the promissory note in favour of the provision of an additional 1,000,000 common shares in Cascade. As a result of the amendment, the considerations for NCM are now made up of (1) the issuance to Bayswater of a total of 2,000,000 common shares in Cascade (valued at CAD\$0.08 each at the time) and (2) the granting of a 2.5% net smelter returns royalty from production occurring on the property. The transaction values the acquisition of NCM at CAD\$160,000 (AUD\$155,800) plus the NSR royalty. Common recent re-purchases of NSR royalty average about AUD\$500,000 per 1%, thus the 2.5% royalty would be worth around AUD\$1.5M if the project went into production.

The Samit Uranium Project includes an area previously explored by PNC Exploration, a wholly-owned subsidiary of Power Reactor and Nuclear Fuel Development Corporation of Japan. PNC drilled over 400 holes in the Samit area and identified a historical (non JORC compliant) resource estimate of approximately 440,000 lbs U3O8. Samit is located in a favourable sedimentary basin setting, adjacent to the Adrar des Lforhas Massif. This structural setting is analogous to the area in Niger which hosts Areva's Arlit and Cominak uranium mines, as well as the Imouraren uranium deposit.

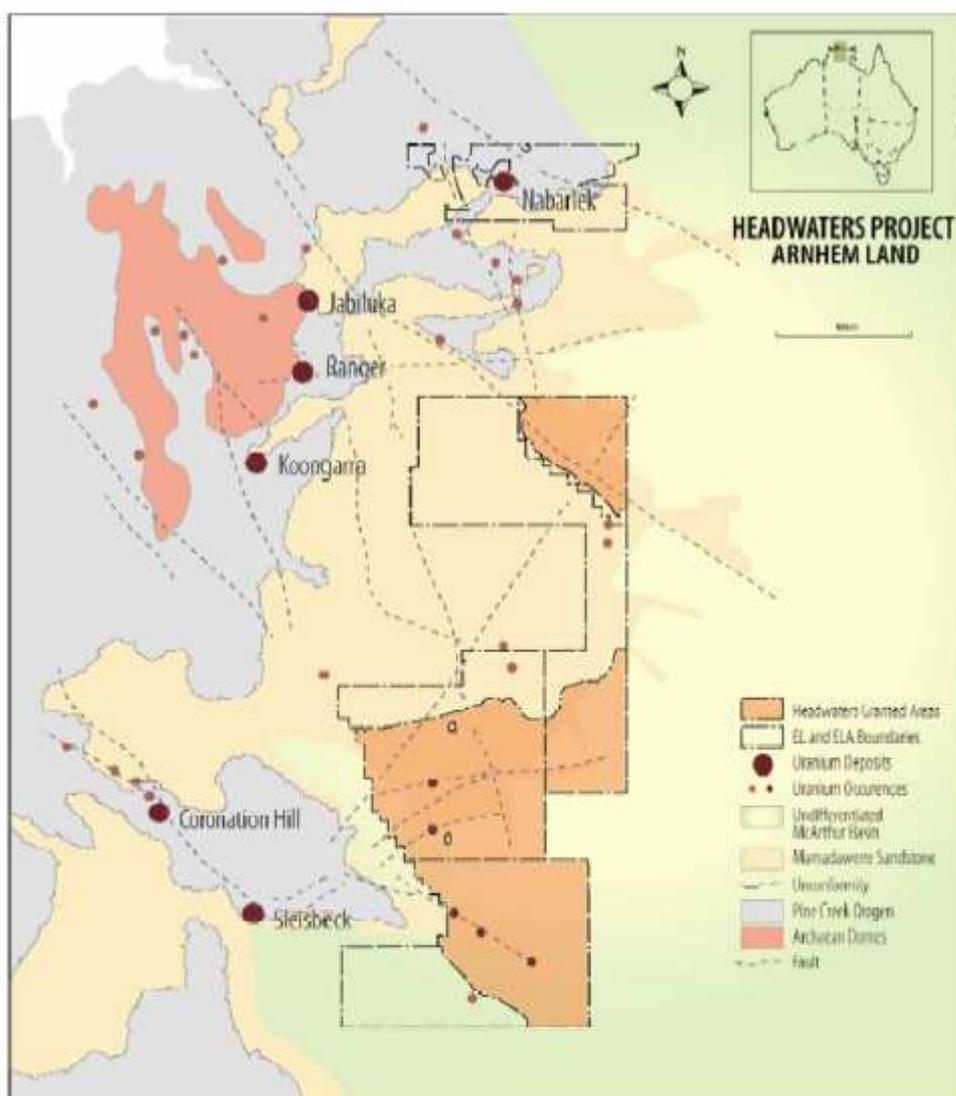
The Samit project is very similar to the Waterford project EPM 16393, and the transaction would value Waterford as AUD\$1.66M.

#### **11.3.3.2 Headwaters, NT**

On 23 March 2010, Uranium Equities Limited ("UEQ") announced an agreement with Vale Exploration Pty Ltd ("Vale") regarding its Headwaters uranium project located in Arnhem Land. Vale would earn a 70% interest in the project through the expenditure of AUD\$1M on exploration within 2 years of the commencement of the joint venture.

The tenements lie within the Arnhem Land Plateau along the western margin of the Proterozoic McArthur Basin. Rocks consist of fluvial sandstone with minor interbedded volcanic sequences overlying the strongly deformed and metamorphosed basement rocks which host the major unconformity-related uranium deposits of the Alligator Rivers Region.

A review of the exploration potential of the Headwaters Project has identified geological environments that hold similarities to the style of uranium mineralisation present at Westmoreland in north-west Queensland. Mineralisation at Westmoreland is associated with regional structures and volcanic rocks within McArthur Basin sequences which are equivalent to the sequences widely distributed throughout the Headwaters Project area. Previous exploration in the Headwaters region from 1996 – 2000 identified significant uranium, gold and platinum group mineralisation within the near surface environment, associated with outcropping volcanic lithologies of the McArthur River Basin sequences.



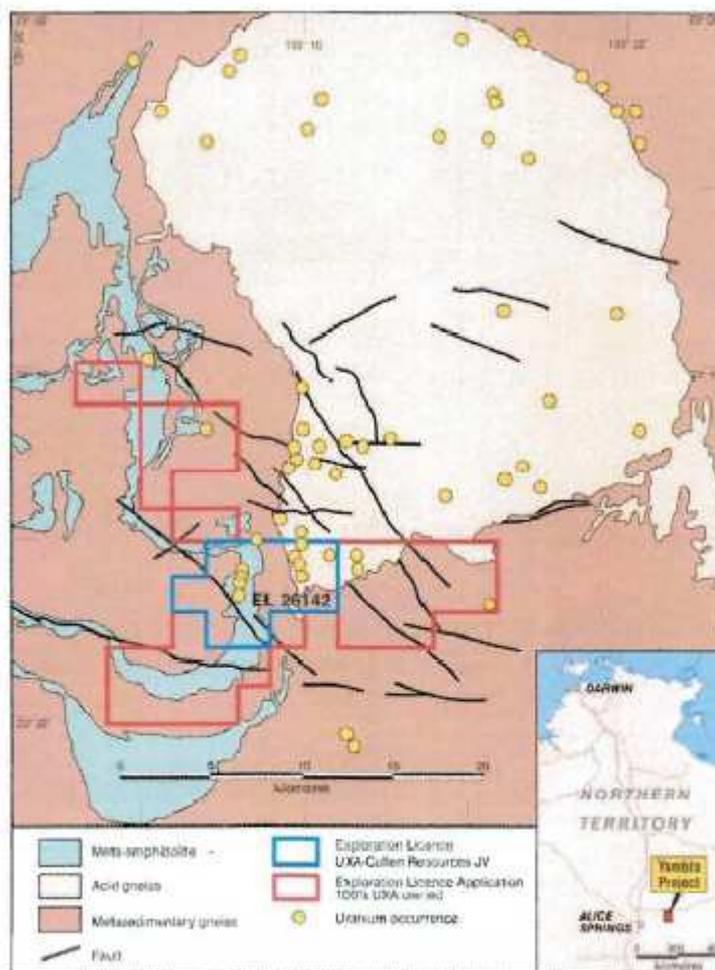
**Figure 14. Location of the Headwaters project**  
Figure from UEQ Report for the Quarter ended 31 March 2010

The transaction values 100% of the Headwaters project at AUD\$1.33M, and provides a comparable value for the Waterford EPM 16393.

### 11.3.3.3 Yambla, NT

On 14 April 2010, Uranium Exploration Australia Limited ("UXA") announced an agreement with Cullen Exploration Pty Ltd ("Cullen") to jointly explore for uranium at Yambla in the Harts Ranges of the NT. Yambla is covered by granted EL 26142, which contains a number of historical uranium prospects. UXA would earn a 75% interest in the project through the expenditure of AUD\$800,000 on exploration within 2 years of the commencement of the joint venture.

The agreement values 100% of EL 26142 at AUD\$1.07M, and provides a comparable value for the Waterford EPM 16393.



**Figure 15. Location of Yambla EL 26142**  
*Figure from UXA announcement to ASX of 14 April 2010*

#### 11.3.3.4 North Maureen, Qld

On 23 February 2010, Bondi Mining Ltd ("Bondi") announced an agreement with Japan Oil Gas and Metals National Corporation ("JOGMEC") to jointly explore for uranium at Bondi's North Maureen project in Qld. JOGMEC would earn a 51% interest in the project by making a cash payment of AUD\$63,000 plus the expenditure of AUD\$900,000 on exploration within 2 years of the commencement of the joint venture.

The North Maureen area contains a number of untested targets said to be similar to the Maureen uranium prospect which lies immediately to the south and contains a JORC resource of 31 Mt @ 0.09% U<sub>3</sub>O<sub>8</sub>.





Figure 17. Location of Myroodah uranium JV ELs  
Figure from Ray ASX announcement 17 February 2010

### 11.4 Cost Approach

Details of expenditure on each project are often (but not always) included in the exploration reports lodged with the QLD DME. Where actual expenditure has not been reported, MA has estimated the cost where possible, based on the work programme reported each year and the contemporaneous costs for each activity reported by other companies. A tabulation of these expenditures for each project is given in Appendix 1. A summary of the expenditures on each project is given below:

EPM	Expenditure	
	\$ of day	2010 \$
12205 & 15084	\$3,861,061	\$4,458,798
15095	\$569,617	\$621,846
16393	\$634,419	\$1,361,133

Table 3. Expenditure summary in AUD\$

The expenditures shown in the table above are regarded as conservative, as some company reports contain no expenditure data and some work programme reports lacked sufficient detail to estimate expenditure.

Thus a reasonable estimate of the value of the EPMs using the cost approach would be as follows:

12205 & 15084	\$ 4.5M
15095	\$ 0.6M
16393	\$ 1.4M

## 12. VALUATION CONCLUSIONS

### 12.1 Summary of Estimates

#### 12.1.1 Market Approach

There is a steady trade in copper and uranium exploration properties, hence there are a reasonable number of transactions available for comparison. This also tends to make values fairly consistent since the market is transparent.

Of the 30 transactions examined in detail, 16 are considered relevant to the market value of CYCAL's exploration Projects. The 16 comparable transactions are summarised in the table below:

Transaction	Cloncurry North		Waterford
	EPMs 12205/15084	EPM 15095	EPM 16393
Evanston	\$2,180,000		
Inza	\$2,420,000		
Hawkwood	\$3,200,000		
Paraburdoo	\$3,200,000		
Sprogge	\$2,500,000		
Yuinmery	\$3,500,000		
DOK		\$805,000	
Gunbarrel		\$1,200,000	
Kiaby Well		\$525,000	
Lumacom		\$380,000	
Tepal		\$640,000	
Headwaters			\$1,330,000
Myroodah			\$2,188,000
North Maureen			\$1,888,000
Samit			\$1,660,000
Yambla			\$1,066,000
<b>Average</b>	<b>\$2,358,333</b>	<b>\$710,000</b>	<b>\$1,626,400</b>

Table 4. Summary of Comparable Transaction Values in 2010 dollars

The wide range of values for each of the Projects is considered normal for this type of Valuation.

#### 12.1.2 Cost Approach

A conservative estimate of the cost of replicating the effective exploration work done to date on the Projects is given below. There is no question that work by previous explorers has substantially enhanced the value of the properties:

12205 & 1508	\$ 4.5M
15095	\$ 0.6M
16393	\$ 1.4M

## 12.2 Discussion

### 12.2.1 Cloncurry North EPMs 12205 & 15084

The range, average and even the highest value of comparable transactions for the Cloncurry North EPMs 12205 and 15084 are substantially less than the expenditure incurred on the project by previous and current explorers. This possibly indicates that the potential of the property has been



more than adequately tested, and that the law of diminishing returns kicked in some time ago. The disappointing results from the RC drilling at the GEM prospect, which cost about AUD\$1.5M in 2010 dollars and led to a small and inconsequential copper resource estimate, did not enhance the value of the property. For this reason, I am inclined to regard most of the RC drilling expenditure as wasted, and reduce the Cost Approach value from \$4.5M to \$3.0M. This still falls short of the average value calculated by the Market Approach (\$2.4M). Assuming that the real value falls somewhere between the two figures, \$2.4M and \$3.0M, suggests a Preferred Value of \$2.7M.

### 12.2.2 Cloncurry North EPM 15095

The range of values of comparable transactions for EPM 15095 is very wide, from a low \$380,000 to a high of \$1.2M. This is probably a reflection of the relative scarcity of transactions involving properties of this type. Also, in the aftermath of the Global Financial Crisis ("GFC"), corporate sentiment towards speculative properties like EPM 15095 has fluctuated wildly between risk averse to risk taking. So the concept underpinning the Market Approach, that in an informed market a pure transaction reflects "fair market value", is not being reflected in recent real transactions as companies are routinely grossly over-valuing or under-valuing speculative assets compared to the Cost Approach.

Nevertheless, the average of the broad spread of market values (\$710,000) is similar to the sunk cost of exploration expenditure on the property (\$600,000). Again, assuming that the real value lies somewhere between these two figures suggests a Preferred Value of \$650,000.

### 12.2.3 Waterford EPM 16393

The range of values of comparable transactions for EPM 15095 is fairly normal, from a low \$1,066,000 to a high of \$2,188,000. As with EPM 15095, there is a relative scarcity of transactions involving uranium exploration properties. Also, in the aftermath of the Fukushima nuclear accident, sentiment towards uranium properties has fluctuated wildly between risk averse to risk taking in a similar fashion to the impact of the GFC, and companies are similarly grossly over-valuing or under-valuing uranium assets compared to the Cost Approach.

Nevertheless, the average of the broad spread of market values (\$1,630,000) is similar to the sunk cost of exploration expenditure on the property (\$1,400,000). Again, assuming that the real value lies somewhere between these two figures suggests a Preferred Value of \$1,500,000.



### 13. REFERENCES

Blake, D.H., 1987. *Geology of the Mount Isa Inlier and environs, Queensland and Northern Territory*. BMR Bull.225.

Cox, D. P., and Singer, D.A., 1986. *Mineral Deposit Models*. USGS Bull.1693. 379pp.

Denaro, T.J., Withnall, I.W., Culpeper, L.G., Burrows, P.E., and Morwood, D.J., 2003. *Mines, Mineralisation and Mineral Exploration in the Duchess and Boulia 1:250,000 Sheet Areas, Northwest Queensland*. Qld. Dept. Mines & Energy Geological Record 2003/4. 258 pp.

Dunn, M., 1983. *Report for the 6 Months 29 Nov 1982 to 28 May 1983 & Final Report Authority to Prospect 3056M Boulia, Queensland*. PNC Exploration Report to Qld DME. Qld.Geol.Surv. Company Report No.12486, 218p.

Laing, A.C.M., 1958. *Oil Prospects of Boulia 54P*. Minad Report to Qld DME. Qld.Geol.Surv. Company Report No.342, 7p.

## 14. CERTIFICATE OF QUALIFICATIONS

DAVID GARRED JONES, F.Aus.I.M.M., F.I.M.M.M., M.S.M.E., M.G.S.A

### STATEMENT OF QUALIFICATIONS

I, David Garred Jones, HEREBY CERTIFY THAT:

1) I am an independent consulting geologist with a business address 56 Fallon Drive, DURAL NSW 2158, Australia

2) I am a graduate of the University of Adelaide, Adelaide, South Australia with a B.Sc. in Geology (1964) and M.Sc. in Geology (1976).

3) I have been a Fellow in good standing of the Australasian Institute of Mining and Metallurgy ("The AusIMM") since 1973 with member number 102460 having first joined that organisation in 1963; a Fellow in good standing since 1993 of the Institute of Materials, Minerals and Mining (London) with member number 99301104; a Registered Member in good standing of the Society for Mining, Metallurgy & Exploration Inc. (Denver) since 1973 with member number 1637220; and a Member in good standing of the Geological Society of Australia since 1963 with member number 3192. Membership of The AusIMM meets the requirement of Section 37(d) of the Code for Technical Assessment and Valuation of Mineral and Petroleum Assets and Securities for Independent Expert Reports (the VALMIN Code (2005) – "VALMIN"). All of these are Professional Associations as defined in S1.0 of the Standards and Guidelines for Valuation of Mineral Properties (CIMVal Final Version February 2003 – "CIMVal").

4) I have carried out geological work on projects in 11 countries including Australia, Fiji, Great Britain, Greece, Indonesia, Ireland, New Zealand, Papua New Guinea, Romania, Solomon Islands and Vietnam. I have overseen exploration in a further 14 countries including Bolivia, Brazil, Bulgaria, Burma, Canada, China, Czech Republic, Hungary, Kyrgyz Republic, Laos, Slovakia, Turkey, Vanuatu and the USA. I am familiar with the geology and mineralisation in the areas where CYCAL holds mineral tenements.

5) I have read the definition of "Independent Individual Expert" set out VALMIN Section 37 and certify that by reason of my education, affiliation with a professional association (as defined in VALMIN) and past relevant work experience, I fulfil the requirement to be an "Expert" for the purposes of VALMIN. I have read the definition of "qualified valuator" set out in CIMVal and certify that by reason of my education, affiliation with a professional association (as defined in CIMVal) and past relevant work experience, I fulfil the requirement to be a "qualified valuator" for the purposes of CIMVal.

6) I am author of the Valuation entitled "Valuation of Mineral Properties of China Yunnan Copper Australia Ltd in Queensland, Australia dated 3<sup>rd</sup> June 2011 ("the Valuation"). I have reviewed all sections of the report for which I am responsible and found them to be accurate and reliable within the limitations of this Valuation.

7) I have previously inspected the properties that are the subject of the Valuation.

8) I am not aware of any material fact or material change with respect to the subject matter of the Valuation that is not reflected in the Valuation, the omission to disclose which would make the Valuation misleading.

9) I am fully independent of the issuer applying all of the tests set out in Sections 24-27 of VALMIN and in section 1.4 of NI43-101 and as defined in S1.0 Definitions of CIMVal.

10) I have read the VALMIN Code (2005), NI43-101, Form 43-101F1 and CIMVal. This Valuation is in compliance with that Code instrument, form and standard.



11) I consent to the public filing of the Valuation with any stock exchange and any other regulatory authority and any publication by them for regulatory purposes, including filings and electronic publication in the public company files on their websites accessible by the public, of the Valuation and to extracts from, or a summary of, the Valuation in any written disclosure being filed, by CYCAL Resources Limited, in public information documents so being filed including any offering memorandum, preliminary prospectus and final prospectus.

12) As of the date of this certificate, to the best of my knowledge, information and belief, the Valuation contains as much scientific and technical information that is available to be disclosed at this time to make the Valuation not misleading.

---

David G Jones  
BSc, MSc, FAusIMM, FIMMM, MSME, MGSA  
Dated at Sydney, NSW, Australia  
3<sup>rd</sup> June 2011

## APPENDIX 1

### *Previous Exploration Expenditure*

**EPMs 12205 "Roseby East" & 15084 "Quamby"  
Historical Expenditure**

Year	Company	Activity	No. samples	No.m drilled	Expenditure Reported	Expenditure Estimated in 12205	Cost per sample	Cost per m drilled	CPI	Expenditure 2010 \$	Expenditure credited 2010 \$
1956	MIM				\$2,042	\$2,042			13.75	\$28,078	\$28,078
1959	ConZinc	TOTAL:			\$3,532	\$353			13.00	\$4,592	\$4,592
1960	Rio	TOTAL:			\$177,030	\$8,852			12.53	\$110,909	\$110,909
1964	Noranda	SSG	2060				\$15		11.91	\$0	\$0
		SG	9070				\$15		11.91	\$0	\$0
		TOTAL:			\$167,129	\$25,069			11.91	\$298,451	\$298,451
1965	Ausminda	SSG	6070						11.47	\$0	\$0
		SG	14246						11.47	\$0	\$0
		RAB		1858					11.47	\$0	\$0
		DD		2000					11.47	\$0	\$0
		TOTAL:			\$349,477	\$34,948			11.47	\$400,650	\$400,650
1966	Kennecott	SSG			\$20,637	\$1,032			11.12	\$11,474	\$11,474
1966	Ausminda	DD		773	\$27,219	\$5,444		\$35	11.12	\$60,535	\$60,535
1970	CRA	RC		215		\$3,225		\$15	9.82	\$31,670	\$31,670
1971	Placer	RC		528	\$9,351				\$18	\$0	\$0
		TOTAL:			\$54,883	\$13,721			9.27	\$127,191	\$127,191
1973	CRA	SSG	142		\$3,266	\$1,633		\$23	8.00	\$13,064	\$13,064
1974	CEC	SG	1200		\$36,000	\$1,800	\$30		6.94	\$12,492	\$12,492
		RCS	91		\$2,730	\$137	\$30		6.94	\$947	\$947
		RAB		1064	\$10,640	\$532		\$10	6.94	\$3,692	\$3,692
1975	CRA	SSG	160			\$4,800	\$30		6.02	\$28,896	\$28,896
		RCS	18			\$540	\$30		6.02	\$3,251	\$3,251
		Geophys		1280	\$7,962	\$7,962		\$6	6.02	\$47,929	\$47,929
1976	Chevron	RC		1380	\$27,600	\$13,800		\$20	5.31	\$73,278	\$73,278
1978	Minad	RAB		655				\$10	4.38	\$0	\$0
		RC		2275				\$20	4.38	\$0	\$0
1987	Menzies Gold	BLEG	75		\$3,000	\$300	\$40		2.07	\$621	\$621
		RCS	207		\$8,280	\$828	\$40		2.07	\$1,714	\$1,714
1989	Black Mtn	BLEG			\$30,770	\$18,462			1.79	\$33,047	\$33,047
1991	WMC	SSG	27		\$69,423	\$6,942			1.62	\$11,247	\$11,247

**EPMs 12205 "Roseby East" & 15084 "Quamby"  
Historical Expenditure**

Year	Company	Activity	No. samples	No.m drilled	Expenditure Reported	Expenditure Estimated in 12205	Cost per sample	Cost per m drilled	CPI	Expenditure 2010 \$	Expenditure credited 2010 \$
1996	CRAE	SSG	100		\$4,000	\$200	\$40		1.44	\$288	\$288
		RCS	950		\$38,000	\$1,900	\$40		1.44	\$2,736	\$2,736
1996	Hunter/MIM/Eagle	TOTAL:			\$320,000	\$16,000			1.44	\$23,040	\$23,040
1998	Hunter/MIM/Eagle	RAB		1600		\$32,000		\$20	1.42	\$45,440	\$45,440
1999	Hunter/MIM/Eagle	TOTAL:			\$400,000	\$200,000			1.40	\$280,000	\$280,000
2005	Mt Stewart Gold	Geophys			\$33,960	\$33,960			1.16	\$39,394	\$39,394
2006	Mt Stewart Gold	RCS			\$78,439	\$78,439			1.12	\$87,852	\$87,852
2007	CYCAL	TOTAL:			\$44,219	\$44,219			1.09	\$48,199	\$48,199
2008	CYCAL 12205	RC		4314	\$300,903	\$300,903		\$70	1.05	\$315,948	
		TOTAL:			\$763,607	\$763,607			1.05	\$801,787	\$801,787
2008	CYCAL 15084	RC		170	\$22,331	\$22,331		\$131	1.05	\$23,448	
		TOTAL:			\$235,567	\$235,567			1.05	\$247,345	\$247,345
2009	CYCAL 12205	TOTAL:			\$686,546	\$686,546			1.03	\$707,142	\$707,142
2009	CYCAL 15084	TOTAL:			\$88,967	\$88,967			1.03	\$91,636	\$91,636
2010	CYCAL 12205	RC		2942	\$423,989	\$423,989		\$144	1.00	\$423,989	
		TOTAL:			\$735,683	\$735,683			1.00	\$735,683	\$735,683
2010	CYCAL 15084	TOTAL:			\$44,329	\$44,329			1.00	\$44,329	\$44,329
<b>TOTALS:</b>					\$3,861,061					\$4,458,798	
DD	Diamond Core Drilling			RCS	Rock Chip Sampling						
Geophys	Geophysics			SAM	Sampling						
RAB	Rotary Air Blast Drilling			SG	Soil Geochemistry						
RC	Reverse Circulation Drilling			SSG	Stream Sediment Geochemistry						

**EPM 15095 "Clonagh"  
Historical Expenditure**

Year	Company	Activity	No. samples	No.m drilled	Expenditure Reported	Expenditure Estimated in 15095	Cost per sample	Cost per m drilled	CPI	Expenditure 2010 \$	Expenditure credited 2010 \$
1985	BHP	Geophys		5350	\$33,277	\$5,657		\$6	2.45	\$13,860	\$13,860
		RC		1009	\$20,180	\$1,682		\$20	2.45	\$4,120	\$4,120
1993	WMC	Geophys		5000	\$35,000	\$5,250		\$7	1.62	\$8,505	\$8,505
1996	WMC				\$5,000	\$5,000			1.44	\$7,200	\$7,200
1997	WMC				\$5,000	\$5,000			1.44	\$7,200	\$7,200
1998	WMC/MIM				\$5,000	\$5,000			1.42	\$7,100	\$7,100
1999	WMC/MIM				\$5,000	\$5,000			1.40	\$7,000	\$7,000
2000	WMC/MIM				\$5,000	\$5,000			1.34	\$6,700	\$6,700
2001	WMC/MIM				\$5,000	\$5,000			1.29	\$6,450	\$6,450
2002	WMC/MIM				\$5,000	\$5,000			1.25	\$6,250	\$6,250
2003	WMC/MIM				\$5,000	\$5,000			1.22	\$6,100	\$6,100
2004	WMC/MIM				\$5,000	\$5,000			1.19	\$5,950	\$5,950
2005	WMC/MIM				\$5,000	\$5,000			1.16	\$5,800	\$5,800
2006	WMC/MIM				\$5,000	\$5,000			1.12	\$5,600	\$5,600
2007	WMC/MIM				\$5,000	\$5,000			1.09	\$5,450	\$5,450
2008	CYCAL	DD		1003	\$227,807			\$227	1.05		
		TOTAL:			\$385,988	\$385,988			1.05	\$405,287	\$405,287
2009	CYCAL	TOTAL:			\$74,447	\$74,447			1.03	\$76,680	\$76,680
2010	CYCAL	TOTAL:			\$36,593	\$36,593			1.00	\$36,593	\$36,593
		<b>TOTALS:</b>				\$569,617					\$621,846

DD Diamond Core Drilling  
Geophys Geophysics  
RC Reverse Circulation Drilling

**EPM 16393 "Waterford"  
Historical Expenditure**

Year	Company	Activity	No. samples	No.m drilled	Expenditure Reported	Expenditure Estimated in 15095	Cost per sample	Cost per m drilled	CPI	Expenditure 2010 \$	Expenditure credited 2010 \$
1959	Minad	Geophys	1308		\$28,132	\$70			13.00	\$914	\$914
1960	Minad	Geophys			\$241,322	\$603			12.53	\$7,559	\$7,559
1961	Minad	Geophys			\$91,364	\$228			12.22	\$2,791	\$2,791
1962	Minad	Rotary		3719	\$562,779	\$1,407		\$151	12.24	\$17,221	\$17,221
1970	CRAE US Nat	Rotary		326	\$48,900	\$0		\$150	9.82	\$0	\$0
1972	Res/BHP	Rotary			\$22,467,000	\$33,701			8.74	\$294,542	\$294,542
1974	Black Giant Oil	Geol			\$20,542	\$0			6.94	\$0	\$0
1981	PNC EPM 3056	Rotary		980	\$25,718	\$25,718		\$26	3.33	\$85,641	
		TOTAL:			\$38,284	\$38,284			3.33	\$127,486	\$127,486
1982	PNC EPM 3056	Rotary		5368	\$150,304	\$150,304		\$28	2.99	\$449,409	
		TOTAL:			\$223,747	\$223,747			2.99	\$669,004	\$669,004
1983	PNC EPM 3056	Rotary		1441	\$40,348	\$40,348		\$28	2.72	\$109,747	
		TOTAL:			\$60,063	\$60,063			2.72	\$163,371	\$163,371
1986	Gulf JV	Geol			\$10,000	\$10,000			2.25	\$22,500	\$22,500
1995	Wells Fargo	Geophys			\$10,000	\$10,000			1.48	\$14,800	\$14,800
2008	Carpentaria	Geol							1.05		
2009	CYCAL	Geol			\$39,946	\$39,946			1.03	\$41,144	\$41,144
2010	CYCAL					\$0			1.00	\$0	\$0
<b>TOTALS:</b>					\$24,058,449	\$634,419					\$1,361,333
	Geol	Geology									
	Geophys	Geophysics									
	Rotary	Open hole mud drilling									



## **MINE VALUATION**

**FOR  
MINING ASSOCIATES LIMITED**

**PREPARED BY  
ROMA APPRAISALS LIMITED**

**DATE : 21 JULY 2011  
CASE REF : KY/BV591/MAY11**

**We Value Assets | We Value Our Clients**



CASE REF: KY/BV591/MAY11

Unit 3806, 38/F, China Resources Building,  
26 Harbour Road, Wan Chai, Hong Kong  
Tel (852) 2529 6878 Fax (852) 2529 6806  
E-mail [info@roma-international.com](mailto:info@roma-international.com)  
[http:// www.roma-international.com](http://www.roma-international.com)

21 July 2011

**Mining Associates Limited**  
Level 4, 67 St Paul's Terrace,  
P.O. Box 161, Spring Hill,  
QLD, Australia 4004

Case Ref: KY/BV591/MAY11

Dear Sir/Madam,

**Re: Mine Valuation of the Four Mines Owned by Yunnan Copper Industry Sanmu Mining Co. Ltd.**

---

In accordance with the instructions from Mining Associates Limited (hereinafter referred to as the "Company") to us to conduct a mine valuation of the four mines (hereinafter referred to as the "Mines") owned by Yunnan Copper Industry Sanmu Mining Co. Ltd. (hereinafter referred to as the "Business Enterprise"), we are pleased to report that we have made relevant enquiries and obtained other information which we considered relevant for the purpose of providing our valuation as at 30 June 2011 (hereinafter referred to as the "Date of Valuation").

This report states the purpose and basis of valuation, scope of work, economic and industry overview, an overview of the Business Enterprise and the Mines, major assumptions, valuation methodology, limiting conditions, and presents our estimate of value.

This report has been prepared in accordance with the Accounting Professional and Ethical Standard ("APES") 225 set by the Accounting Professional and Ethical Standards Board ("APESB") in Australia.



CASE REF: KY/BV591/MAY11

## 1. PURPOSE OF VALUATION

This report is prepared solely for the use of the directors and management of the Company and the Business Enterprise in the preparation of independent expert's report and management's explanatory memorandum. In addition, Roma Appraisals Limited (hereinafter referred to as "Roma Appraisals") acknowledges that this report may be made available to the Company and the Business Enterprise for public documentation purpose only.

Roma Appraisals assumes no responsibility whatsoever to any person other than the Company in respect of, or arising out of, the contents of this report. If others choose to rely in any way on the contents of this report they do so entirely on their own risk.

## 2. SCOPE OF WORK

Our valuation conclusion is based on the assumptions stated herein and on information provided by the management of the Company, and/or its representative (together referred to as the "Management").

In preparing this report, we have had discussions with the Management in relation to the development, operations and other relevant information of the Business Enterprise and the Mines. As part of our analysis, we have reviewed such information and other pertinent data concerning the Business Enterprise and the Mines provided to us by the Management and have considered such information and data as attainable and reasonable.

We have no reason to believe that any material facts have been withheld from us, however, we do not warrant that our investigations have revealed all of the matters which an audit or more extensive examination might disclose.



CASE REF: KY/BV591/MAY11

## 1. PURPOSE OF VALUATION

This report is prepared solely for the use of the directors and management of the Company and the Business Enterprise in the preparation of independent expert's report and management's explanatory memorandum. In addition, Roma Appraisals Limited (hereinafter referred to as "Roma Appraisals") acknowledges that this report may be made available to the Company and the Business Enterprise for public documentation purpose only.

Roma Appraisals assumes no responsibility whatsoever to any person other than the Company in respect of, or arising out of, the contents of this report. If others choose to rely in any way on the contents of this report they do so entirely on their own risk.

## 2. SCOPE OF WORK

Our valuation conclusion is based on the assumptions stated herein and on information provided by the management of the Company, and/or its representative (together referred to as the "Management").

In preparing this report, we have had discussions with the Management in relation to the development, operations and other relevant information of the Business Enterprise and the Mines. As part of our analysis, we have reviewed such information and other pertinent data concerning the Business Enterprise and the Mines provided to us by the Management and have considered such information and data as attainable and reasonable.

We have no reason to believe that any material facts have been withheld from us, however, we do not warrant that our investigations have revealed all of the matters which an audit or more extensive examination might disclose.



CASE REF: KY/BV591/MAY11

### 3. ECONOMIC OVERVIEW

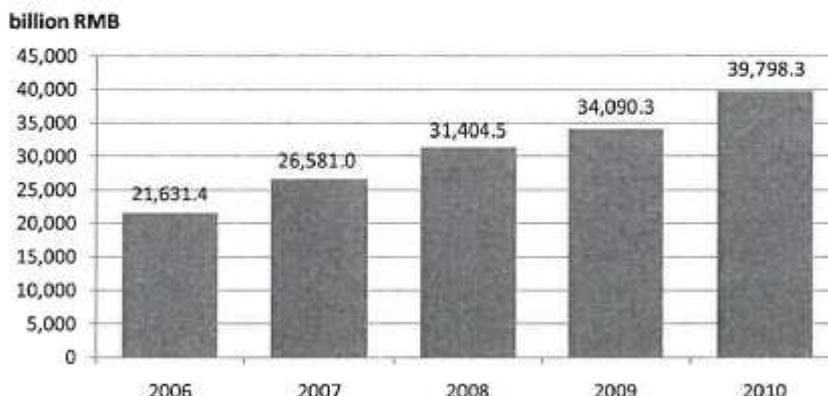
#### 3.1 Overview on the Economy of China

According to the National Bureau of Statistics of China, the nominal Gross Domestic Product ("GDP") in 2010 was RMB 39,798.3 billion, an increase of 10.3% in real term over the previous year. China is the third largest economy in the world, ranked after the European Union and United States, in terms of nominal GDP measured by the International Monetary Fund in 2010. Despite the global financial crisis in late 2008, the Chinese economy continued to be supported by the Chinese government through spending in infrastructure and real estates.

Throughout 2009, the global economic downturn reduced foreign demand for Chinese exports for the first time in many years. The government vowed to continue reforming the economy and emphasized the need to increase domestic consumption in order to make China less dependent on foreign exports. China economy rebounded quickly in 2010, outperforming all other major economies with robust GDP growth and the economy appears to remain in strong growth in 2011.

Over the past decade from 2001 to 2010, compound annual growth rate of China's GDP was 9.3% and in the government's latest plan, it is targeted to grow at 7% for the period from 2011 to 2015. Figure 1 further illustrates the GDP from 2006 to 2010 in China.

**Figure 1 - China's Gross Domestic Product in 2006-2010**



Source: National Bureau of Statistics of China



CASE REF: KY/BV591/MAY11

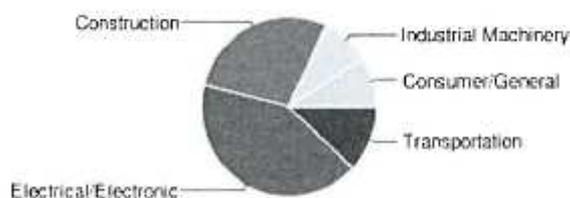
**4. Industry Overview**

**4.1 Copper Industry**

Copper was one of the materials that human beings started extracting on earth which gave rise to the Bronze Age. Its usage has been increasing alongside with the advancement of technology. Copper is easily stretched, molded, and shaped; is resistant to corrosion; and conducts heat and electricity efficiently. As a result, there are a number of applications involving the use of copper including industrial, electrical and transportation.

Since copper is an excellent conductor of electricity, the production of cable, wire and electrical products for both the electrical and building industries accounts for its major usage, sharing 42% of total industrial consumption together. The construction industry, whose applications of copper include pipes for plumbing, heating and ventilating as well as building wire and sheet metal facings, ranks the second largest in terms of industrial usage. Figure 2 shows the share of global industrial consumption of copper by different industries.

**Figure 2 - World Industrial Consumption of Copper**



Industry	%
Electrical/Electronic	42
Construction	28
Transportation	12
Consumer/General	9
Industrial Machinery	9
<b>Total</b>	<b>100</b>

Source: Standard CIB Global Research



CASE REF: KY/BV591/MAY11

#### 4.1.1 Copper Demand, Production and Price

According to the International Copper Study Group (“ICSG”), a surplus of about 580,000 tonnes in the refined copper market balance for 2010 is estimated as growth in copper supply is expected to exceed the projected weak growth in industrial copper demand.

The global economic crisis in late 2008 reduced world refined copper consumption significantly. There exist uncertainties in copper consumption in the year 2010 due to a severe recession in 2008 and 2009 experienced by a number of major copper consuming regions.

While actual industrial demand in 2010 is expected to increase in all of the major consuming regions, copper market is expected to decline slightly from the 2009 level owing to lower apparent Chinese demand. A forecast on mine production, refined production and copper usage by the ICSG is listed below.

**Figure 3 - Forecast of Mine Production, Refined Production and Usage of Copper**

	2009	2010	2011
	('000 tonnes)	('000 tonnes)	('000 tonnes)
Mine Production	15,756	16,805	17,301
Refined Production	18,401	18,515	19,094
Copper Usage	18,206	17,937	18,851

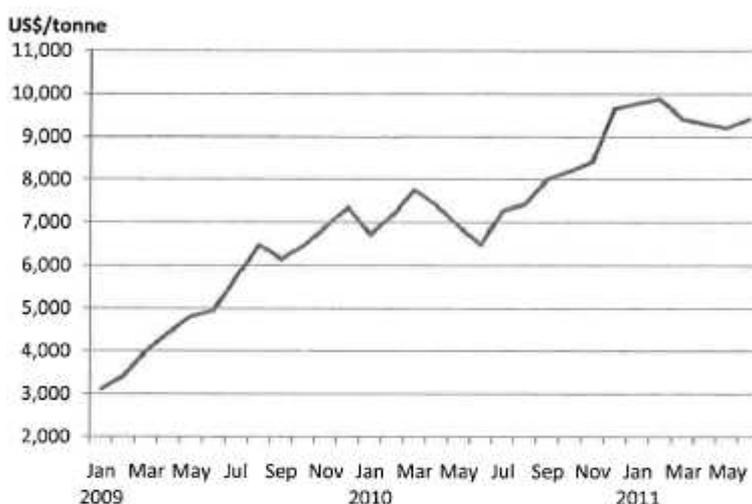
Source: 'Forecast 2010-2011', International Copper Study Group

Copper spot price from the London Metal Exchange (“LME”) from January 2009 to June 2011 is depicted in figure 4.



CASE REF: KY/BV591/MAY11

**Figure 4 - LME Copper Spot Price from January 2009 to June 2011**



Source: Bloomberg

## 4.2 Silver Industry

### 4.2.1 Overview

Silver has been regarded as a precious metal long time ago. It has been used for thousands of years for producing ornaments and utensils, for trade, and as a basis for several monetary systems worldwide. Its value as a precious metal has always been considered second only to gold.

Demand for silver is built on three main pillars, namely industrial uses, photography and jewelry and silverware according to the Silver Institute. These three categories altogether represent more than 95% of annual silver consumption. Common applications include the sectors of currency production, dentistry, photography and electronics, mirror and optics.



CASE REF: KY/BV591/MAY11

#### 4.2.2 Silver Demand, Production and Price

The global economic crisis in late 2008 reduced world silver consumption significantly. In economic downturns, fewer electronics, optical systems and other silver-centric applications are also manufactured, which dragged down the industrial demand for silver. On the other hand, silver, like gold, has high intrinsic value. Storage of silverwares during the time of recession can be regarded as securing stable assets against plummeted price in other financial assets. Combining the two factors, silver price movement has been volatile in the past few months, but the price is expected to rise steadily in the long run when more attentions from investors are drawn from future, alongside with the associated inflation.

Figure 5 shows the silver mine production by country in 2008 and 2009. Peru is the largest silver mine producer in 2009, while China surpassed Mexico to be the second largest producer during the year.

Figure 5 - Silver Mine Production by Country in 2008 and 2009

Country	2008 (tonnes)	2009 (tonnes)
Peru	3,690	3,900
China	2,800	3,000
Mexico	3,240	2,500
Chile	1,400	2,000
Australia	1,930	1,800
Bolivia	1,110	1,360
Russia	1,300	1,300
United States	1,230	1,230
Poland	1,190	1,200
Canada	730	700

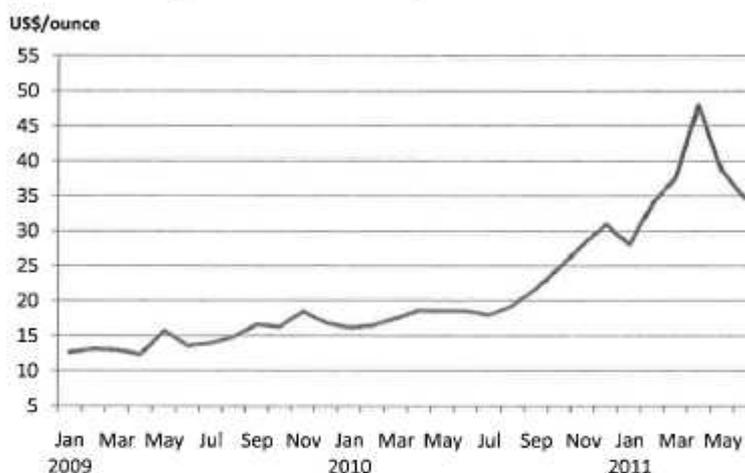
Source: U.S. Geological Survey

Silver spot price extracted from Bloomberg from January 2009 to June 2011 is depicted in figure 6.



CASE REF: KY/BV591/MAY11

**Figure 6 - Silver Spot Price from January 2009 to June 2011**



Source: Bloomberg

**5. THE BUSINESS ENTERPRISE AND THE MINES**

**5.1 The Business Enterprise**

The Business Enterprise was incorporated in November 2004 in China with limited liability. 85% equity interest of the Business Enterprise was owned by Yunnan Copper Industry (Group) Ltd. (hereinafter referred to as "YCI") and 15% equity interest was owned by Yunnan Exploration Group Ltd. The business nature involves the sale of mining products, service and consultation of mining technologies, import and export of commodities. The Business Enterprise owned the four Mines in Laos and the properties of the mining development were adjacent to the Mohan Economic Development Zone on the Laos' border with China. Currently government investment is facilitating a transport link from southern China to the Vientiane, capital of Laos and further south to Bangkok and Singapore. Figure 7 shows the resources estimate of the Mines of the Business Enterprise we have considered in our valuation.



CASE REF: KY/BV591/MAY11

**Figure 7 – Resources Estimate of the Mines**

Name	Tonnes	Grade Cu %	Grade Ag ppm	Classification
Ban Sichai	503,000	1.04	TBA	Inferred/Indicated
Ban Mouten	100,260	1.11	TBA	Inferred
Ban Natao	123,000	0.99	67 - 138	Inferred
Ban Kiochep	116,400	1.33	112 - 156	Inferred

*Note: TBA denotes to be announced*

*Source: Joint press release made by Yunnan Copper Industry (Group) Co. Ltd., China Yunnan Copper Australia Limited and Chinalco Yunnan Copper Resources Limited dated 31 January 2011*

## 5.2 The Mines

As aforementioned the Mines situated in Laos are owned by the Business Enterprise, namely Ban Sichai, Ban Mouten, Ban Natao and Ban Kiochep. The general descriptions of the Mines are listed below.

The mine of Ban Sichai is located within the Yuewu County of Phongsali Province in northern Laos. Its geographic coordinates are E longitude 101°52'25"-101°58'20", and N latitude 22°09'15"-22°17'00", covering an area of 140 km<sup>2</sup>, about 10 km west to the mine area and there is a road linking to the Jiangcheng County of China. The direct distance from the north of the mine area to the Chinese borderline is only about 30 km, with the transportation distance being 50 km. Within the working area there is a bypass linking all the corners, but the accessibility is very poor during the rainy season.



CASE REF: KY/BV591/MAY11

The exploration area of Ban Mouten and Ban Kiochep are both located in Namong district of Oudomsay Province, Laos, along the road from Mengla County of Yunnan Province, China to Muang Say, the provincial capital of Oudomsay, 30 km to 70 km away from the capital. To its north, Muang Say is 800 km away from Kunming, the provincial capital of Yunnan Province, and to the south, nearly 600 km Vientiane, the capital of Laos. The road section from Kunming to Jinghong, the prefectural capital of Xishuangbanna, is a high-grade one; the section from Jinghong to Mohan, a Chinese-Lao cross-border port is a class-3 asphalt road; most of the section from Menghan to Muang Say, some 70 km in length, is in bad conditions, with only some rural path to the mines and poor accessibility.

The exploration area of Ban Natao is located in Namong and Muang Say districts of Oudomsay Province, Laos, along the road from Mengla County of Yunnan Province, China to Muang Say, the provincial capital of Oudomsay, about 70 km away from the capital. To its north, Muang Say is 800 km away from Kunming, the provincial capital of Yunnan Province, and to the south, nearly 600 km Vientiane, the capital of Laos. The road section from Kunming to Jinghong, the prefectural capital of Xishuangbanna, is a high-grade one; the section from Jinghong to Mohan, a Chinese-Lao cross-border port is a class-3 asphalt road; most of the section from Menghan to Muang Say, some 70 km in length, is in bad conditions, with only some rural path to the mines and poor accessibility.

## 6. BASIS OF VALUATION

Our valuation is conducted on a market value basis. **Market value** is defined as "the estimated amount for which an asset could be exchanged, or a liability settled, between willing parties in an arm's length transaction after proper marketing wherein the parties had each acted knowledgeably, prudently and without compulsion".



CASE REF: KY/BV591/MAY11

## 7. INVESTIGATION AND ANALYSIS

Our investigation included discussions with members of the Management in relation to the development, operations and other relevant information of the Business Enterprise and the Mines. In addition, we have made relevant inquiries and obtained further information and statistical figures regarding the economy of China as we considered necessary for the purpose of the valuation. As part of our analysis, we have reviewed such information and other pertinent data concerning the Business Enterprise and the Mines provided to us by the Management and had considered such information and data as attainable and reasonable. We have also consulted other sources of financial and business information.

The valuation of the Mines requires consideration of all pertinent factors, which may or may not affect the operation of the business and its ability to generate future investment returns. The factors considered in our valuation include, but are not necessarily limited to, the following:

- The nature and prospect of the Business Enterprise and the Mines;
- The economic outlook in general and the specific economic environment and market elements affecting the business, industry and market;
- Relevant licenses and agreements;
- The business risk of the Mines such as the ability in maintaining competent technical and professional personnel; and
- Investment returns and market transactions of entities engaged in similar lines of business.



CASE REF: KY/BV591/MAY11

## 8. VALUATION METHODOLOGY

There are generally three accepted approaches to obtain the market value of the Mines, namely the Market-Based Approach, Income-Based Approach and Asset-Based Approach. Each of these approaches is appropriate in one or more circumstances, and sometimes, two or more approaches may be used together. Whether to adopt a particular approach will be determined by the most commonly adopted practice in valuing mineral assets that are similar in nature.

### 8.1 Market-Based Approach

The Market-Based Approach values a mineral asset by comparing prices at which other mineral assets in a similar nature changed hands in arm's length transactions. The underlying theory of this approach is that one would not pay more than one would have to for an equally desirable alternative. By adopting this approach, the valuer will first look for valuation indication of prices of other similar mineral assets that have been sold recently.

The right transactions employed in analyzing indications of values need to be sold at an arm's length basis, assuming that the buyers and sellers are well informed and have no special motivations or compulsions to buy or to sell.

### 8.2 Income-Based Approach

The Income-Based Approach focuses on the economic benefits due to the income producing capability of the mineral asset. The underlying theory of this approach is that the value of the mineral asset can be measured by the present worth of the economic benefits to be received over the useful life of the mineral asset. Based on this valuation principle, the Income-Based Approach estimates the future economic benefits and discounts them to their present values using a discount rate appropriate for the risks associated with realizing those benefits.

Alternatively, this present value can be calculated by capitalizing the economic benefits to be received in the next period at an appropriate capitalization rate. This is subject to the assumption that the mineral asset will continue to maintain stable economic benefits and growth rate.



CASE REF: KY/BV591/MAY11

### **8.3 Asset-Based Approach**

The Asset-Based Approach values a mineral asset by aggregating the costs of developing the asset to its current condition, or replacing that asset.

### **8.4 Mine Valuation**

In the process of valuing the Mines, we have taken into account the uniqueness of their operations and the industries they are participating. The Income-Based Approach was not adopted in this case because there is insufficient historical financial information of the Mines. The Asset-Based Approach was also not adopted because it could not reflect the potential value of the Mines. We have therefore considered the adoption of the Market-Based Approach in arriving at the market value of the Mines.

In the process of the valuation, we have selected several transactions of comparable that had similar mineral resources with similar level of confidence in the resource estimation as the Mines and determined their price per tonnage of resources. Our fundamental selection criterion was the similarity of the acquired mines of the comparable transactions with the Mines of the Business Enterprise. Accordingly, all comparable transactions selected in our valuation referred to the acquisition of multi-metal mines containing various metal resources such as copper, gold, silver and molybdenum. During the process of selection of comparable transactions, we mainly focused on recent metal mine acquisitions, and we have adjusted the considerations of the comparable transactions to reflect the changes in metal prices between transaction dates and the Date of Valuation. To the best of our knowledge, we considered the adopted comparable transactions were sufficient and representative. The details of the comparable transactions are as follows:



CASE REF: KY/BV591/MAY11

#### Comparable Transactions

Acquirer	Location	Stock Code	Date	Consideration (HK\$)	Equity Interest (%)
Solartech International Holdings Limited	China	1166.HK	November 2009	1,500,000,000	100
China Properties Investment Holdings Limited	China	736.HK	August 2010	300,000,000	100

#### Adjusted Consideration-to-Metal Resource Multiples (RMB/tonne)

Acquirer	Copper	Silver
Solartech International Holdings Limited	1,158	79,948
China Properties Investment Holdings Limited	5,472	-
<b>Average (RMB/tonne)</b>	<b>3,315</b>	<b>79,948</b>

Then, we applied the industry-average prices to the relevant resources of the Mines and determined our concluded value. For a mine transaction with more than one type of minerals, the adjusted consideration-to-metal resource multiples are estimated based on the following equation:

$$X_1 = \frac{V_1 \times MP_1}{V_1 \times MP_1 + V_2 \times MP_2 + \dots} \times \frac{\text{Adjusted Consideration}}{\% \text{ of Total Interest} \times V_1}$$

where:

- $X_1$  = Adjusted consideration-to-metal resource multiple of resource 1 (RMB/tonne)
- $V_1$  = Total amount of mineral resource 1 (tonnes)
- $V_2$  = Total amount of mineral resource 2 (tonnes)
- $MP_1$  = Market price of metal 1 as at acquisition month (RMB/tonne)
- $MP_2$  = Market price of metal 2 as at acquisition month (RMB/tonne)



CASE REF: KY/BV591/MAY11

Although Inferred Resource was dominantly located in the Mines of the Business Enterprise, both Measured and Indicated Resources of comparables were included in our valuation. Accounting for the higher level of confidence for the estimations of tonnage, densities, grade and mineral content for Measured and Indicated Resources, the inclusion of Measured and Indicated Resources in the valuation was treated appropriately by adopting a 50% premium on the Measured Resource and 20% premium on the Indicated Resource (i.e. using 150% Measured Resource and 120% Indicated Resource for valuation) due to the substantially lower risk or certainty of Measured Resource and Indicated Resource compared to Inferred Resource.

#### 8.5 Sensitivity Analysis

To determine how the different values of an independent variable would impact a particular dependent variable under a given set of assumptions, we carried out a sensitivity analysis on the market value of the Mines in respect of 5% and 10% deviation in the metal grades of copper and silver from the status quo. The results of the sensitivity analysis were as follows:

Percentage Change in Metal Grades of Copper and Silver	Market Value of the Mines (RMB)
+10%	35,000,000
+5%	33,000,000
0%	32,000,000
-5%	30,000,000
-10%	29,000,000

#### 9. MAJOR ASSUMPTIONS

We have adopted certain specific assumptions in our valuation and the major ones are as follows:

- All relevant legal approvals and business certificates or licenses to operate the business in the localities in which the Mines operates or intends to operate would be officially obtained and renewable upon expiry;



CASE REF: KY/BV591/MAY11

- There will be sufficient supply of technical staff in the industry in which the Mines operate, and the Mines will retain competent management, key personnel and technical staff to support its ongoing operations and developments;
- There will be no major change in the current taxation laws in the localities in which the Mines operate or intend to operate and that the rates of tax payable shall remain unchanged and that all applicable laws and regulations will be complied with;
- There will be no major change in the political, legal, economic or financial conditions in the localities in which the Mines operate or intend to operate, which would adversely affect the revenues attributable to and profitability of the Mines; and
- Interest rates and exchange rates in the localities for the operation of the Mines will not differ materially from those presently prevailing.

#### 10. INFORMATION REVIEWED

Our estimate requires consideration of relevant factors affecting the market value of the Mines. The factors considered included, but were not necessarily limited to, the following:

- Financial statements of the Business Enterprise;
- Historical information of the Business Enterprise and the Mines;
- Market trends of the copper and silver industry and other dependent industries;
- General descriptions in relation to the Business Enterprise and the Mines; and
- Economic outlook in China.



CASE REF: KY/BV591/MAY11

We have discussed the details with the Management. We have also conducted research from various sources to verify the reasonableness and fairness of information provided and we believe that such information is reasonable and reliable. We had assumed the accuracy of information provided and relied to a considerable extent on such information in arriving at our estimate.

#### **11. LIMITING CONDITIONS**

The valuation reflects facts and conditions existing at the Date of Valuation. Subsequent events or circumstances have not been considered and we are not required to update our report for such events and conditions. The valuation result may be different if the valuation is performed by other professional parties.

We would particularly point out that our valuation was based on the information such as company background, business nature and market share of the Business Enterprise provided to us.

To the best of our knowledge, all data set forth in this report are reasonable and accurately determined. The data, opinions, or estimates identified as being furnished by others that have been used in formulating this analysis are gathered from reliable sources; yet, no guarantee is made nor liability assumed for their accuracy.

We have relied to a considerable extent on the historical and/or prospective information provided by the Management and other third parties in arriving at our opinion of value. The information has not been audited or compiled by us. We are not in the position to verify the accuracy of all information provided to us. However, we have had no reason to doubt the truth and accuracy of the information provided to us and to doubt that any material facts have been omitted from the information provided. No responsibilities for the operation and financial information that have not been provided to us are accepted.

We assumed that the Management is competent and perform duties under the company regulation. Also, ownership of the Mines was in responsible hands, unless otherwise stated in this report. The quality of the Management may have direct impact on the viability of the business as well as the market value of the Mines.



CASE REF: KY/BV591/MAY11

We have not investigated the title to or any legal liabilities of the Mines and have assumed no responsibility for the title to the Mines appraised.

Our conclusion of the market value was derived from generally accepted valuation procedures and practices that rely substantially on the use of various assumptions and the consideration of many uncertainties, not all of which can be easily quantified or ascertained. The conclusion and various estimates may not be separated into parts, and/or used out of the context presented herein, and/or used together with any other valuation or study.

We assume no responsibility whatsoever to any person other than the directors and management of the Company in respect of, or arising out of, the content of this report. If others choose to rely in any way on the contents of this report, they do so entirely on their own risk.

No change to any item in any part of this report shall be made by anyone except Roma Appraisals. We have no responsibility for any such unauthorized change. Neither all nor any part of this report shall be disseminated to the public through any means of communication or referenced in any publications, including but not limited to advertising, public relations, news or sales media.

This report may not be reproduced, in whole or in part, and utilized by any third parties for any purpose, without the written consent and approval of Roma Appraisals.

The working papers and models for this valuation are being kept in our files and would be available for further references. We would be available to support our valuation if required.

## 12. REFERENCES

The list of sources of information cited in this report is stated as follows:

- Bloomberg;
- International Copper Study Group;



CASE REF: KY/BV591/MAY11

- Joint press release made by Yunnan Copper Industry (Group) Co. Ltd., China Yunnan Copper Australia Limited and Chinalco Yunnan Copper Resources Limited dated 31 January 2011;
- London Metal Exchange;
- National Bureau of Statistics of China;
- Silver Institute;
- Standard CIB Global Research; and
- U.S. Geological Survey.

### 13. REMARKS

Unless otherwise stated, all monetary amounts stated in this valuation report are in Renminbi (RMB).

We hereby confirm that we have neither present nor prospective interests in the Company, the Business Enterprise and the associated companies, or the value reported herein.

The compensation regarding this valuation is not contingent on the conclusion, content or future use of the valuation report.



CASE REF: KY/BV591/MAY11

**14. OPINION OF VALUE**

Based on the investigation and analysis stated above and on the valuation method employed, the market value of the Mines as at the Date of Valuation, in our opinion, was ranged from **RMB 29,000,000 (RENMINBI TWENTY NINE MILLION ONLY)** to **RMB 35,000,000 (RENMINBI THIRTY FIVE MILLION ONLY)**.

Yours faithfully,  
For and on behalf of  
**Roma Appraisals Limited**

---

**Kelvin Luk**  
CIM  
Director

*Note:*

*Mr. Kelvin Luk is a member of the Canadian Institute of Mining, Metallurgy and Petroleum. He has over five years of experience in valuation and consultation related to similar assets or companies engaged in similar business activities worldwide as that of the Business Enterprise.*