

# METALLICA MINERALS LTD

ABN 45 076 696 092



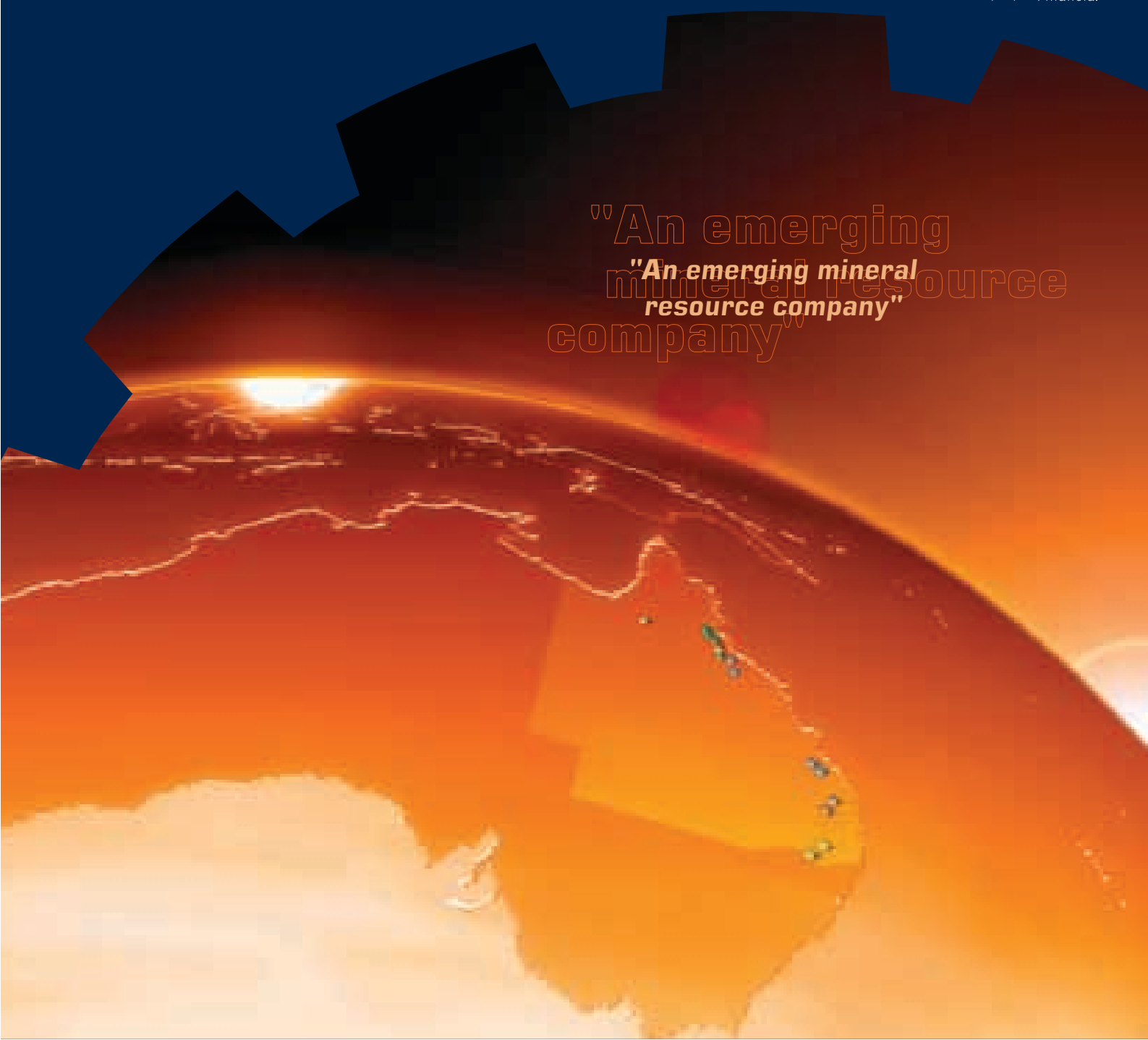
## PROSPECTUS

**For the public offer of 15 million fully paid ordinary Shares at 20 cents each to raise \$3 million together with 3.75 million attaching options**

Financial Adviser and Broker to the Issue  
Axis Financial Group (Australia) Limited  
ABN 32 006 711 995  
AFS Licence No. 238168



"An emerging  
mineral resource  
company"  
"An emerging mineral  
resource company"  
company"



## Important dates and indicative timetable

Date of Prospectus 14 September 2004

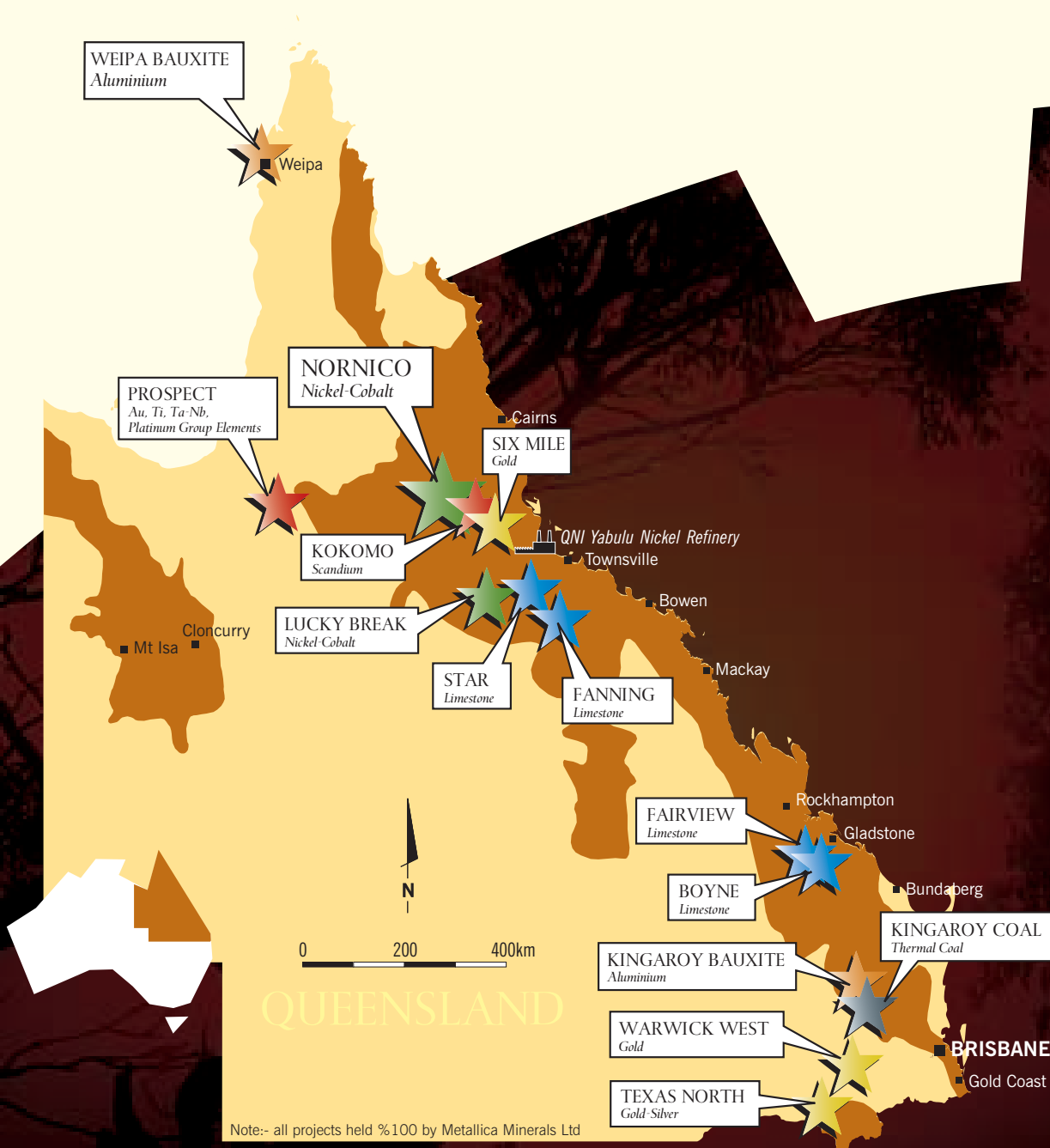
Offer opens 29 September 2004

Offer closes 5 November 2004

Expected date of quotation of Shares and Options on ASX 17 November 2004

Note: The Company may close the Offer before or after the Closing Date at any time after the expiry of the Exposure Period (see Section 1.9). The above dates are indicative only and may vary, subject to the requirements of the Listing Rules and the Corporations Act.

**FIGURE 1 - PROJECT LOCATIONS**



# chairman's letter

## chairman's letter

### **DEAR SHAREHOLDER AND INVESTOR,**

On behalf of the Board of Metallica Minerals Limited, it is my pleasure to present you with this opportunity to invest in our Share Offer.

Metallica is an emerging diversified resource company with an excellent portfolio of advanced projects covering nickel-cobalt, coal, bauxite, scandium, limestone and gold.

The Offer contained in this Prospectus seeks to raise \$3 million with the ability to accept a further \$2 million in Oversubscriptions and list Metallica on the ASX. These funds are to be used to supplement existing funds for progressing the evaluation and development of the Company's multi-commodity mineral portfolio.

From late 2003 there has been a major resurgence in the resources industry, principally due to rising mineral prices following growing world commodity demand, particularly from China. You can participate in that resurgence by becoming a shareholder of this growth orientated company.

Since its establishment in 1997 as a public unlisted company, Metallica has maintained a strategy focus on creating shareholder wealth through the acquisition of strategic mineral deposits and their subsequent evaluation, development and potential mining. Founding Director and experienced geologist Andrew Gillies has prepared a summary of Metallica's projects and business in the following Managing Director's letter.

The collective mineral industry experience of the Directors and their vested interests as shareholders, will ensure that funds raised are used in a prudent manner towards creating shareholder wealth. Towards this end, the Company has a vigorous and comprehensive exploration and evaluation programme which it intends to initiate with a number of drilling programmes on several of its properties following listing on the ASX.

I have been involved in the mining industry for over 30 years and in my opinion, Metallica, with its broad commodity portfolio, has established itself as one of the most promising and exciting local exploration and resource opportunities to emerge in recent years.

I would encourage you to read this Prospectus carefully, taking the opportunity to seek professional advice if necessary. My fellow Directors and I look forward to welcoming you as a shareholder and, in the case of our 360 existing shareholders, to you increasing your shareholding in Metallica Minerals Ltd.

Yours sincerely,



**DAVID K BARWICK**

**CHAIRMAN**

# important notes

# important notes

## NOTE

The Independent Consulting Geologist's Report and the Report on Tenements are not contained in this document, but have been lodged with ASIC and are taken by law to be included in this Prospectus (Refer Section 5 and 7). If you are unsure whether you require the information contained in these Reports to decide whether or not to invest in Metallica, it is recommended that you obtain copies of the Reports. Copies of each Report can be obtained during the Application Period free of charge by calling Metallica on 07 3211 7366, or by downloading from Metallica's Website at [www.metallicaminerals.com.au](http://www.metallicaminerals.com.au).

## IMPORTANT NOTICE

This Prospectus is available in electronic form via the Company's web site at [www.metallicaminerals.com.au](http://www.metallicaminerals.com.au). Persons having received a copy of this Prospectus in its electronic form may obtain a paper copy of the Prospectus (free of charge) during the life of this Prospectus by contacting the Company Secretary at the Company's principal place of business. Applications for Shares may only be made on the Application Form attached to the Prospectus in its paper copy form or as downloaded in its entirety from the Company's web site.

This Prospectus is dated 14 September 2004. A copy of this Prospectus was lodged with ASIC on that date. Neither ASIC nor the ASX takes any responsibility for the contents of this Prospectus. No securities will be issued on the basis of this Prospectus later than 13 months after the date of issue of this Prospectus. Before deciding to invest in the Company, potential investors should read this document in its entirety.

The securities offered under this Prospectus should be considered speculative. The risks associated with an investment in Metallica are significant. Potential investors should carefully consider the factors in light of their personal circumstances and consult with their professional advisers before deciding whether to apply for Shares. The securities offered under this Prospectus carry no guarantee with respect to return on capital investment, payment of dividends or the future value of the securities.

The distribution of this Prospectus in jurisdictions outside Australia may be restricted by law and does not constitute an offer in any place in which, or to any person to whom it would not be lawful to make such an offer. Persons who come into possession of this Prospectus should seek advice on and observe any restrictions on accepting an offer or distributing the Prospectus. Any failure to comply with such restrictions may constitute a violation of applicable securities law.

“metallica has a clear strategy for major growth”

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# contents

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# managing director's letter

# managing director's

## **DEAR SHAREHOLDER AND INVESTOR,**

Metallica was established with the primary objective of creating opportunity and wealth for its shareholders through the evaluation and development of mineral resource projects. Metallica is a specialist minerals company managed by a dedicated, energetic and experienced Board and management team, with considerable practical and commercial experience in the mining sector.

Metallica, with North Queensland Nickel Cobalt (NORNICO) as its flagship project, is an emerging mineral resource company with a quality multi-commodity portfolio of advanced exploration projects covering nickel-cobalt, coal, bauxite, scandium, limestone, and gold.

Our portfolio reflects our business strategy that seeks to take advantage of local knowledge and experience, new infrastructure development and the latest mineral exploration and processing technologies available. The emphasis on project selection criteria is based on the identification of new and expanding market opportunities.

Metallica's Directors and management team are proud of the quality of the mineral portfolio that has been carefully selected and secured over the last 7 years, particularly as all our key projects, (nickel-cobalt, coal, bauxite, scandium and limestone), have either resources or are known deposits in their own right. The portfolio has excellent development potential accompanied by considerable exploration upside, with exposure to a suite of other commodities, including Platinum Group Elements (PGE), copper, silver, titanium, diamonds and industrial minerals.

### **A brief summary of Metallica's 100% held key projects include:**

#### **1. Nickel-Cobalt**

NORNICO project comprises several drilled Ni-Co laterite deposits (Bell Creek, Minnamoolka and Kokomo) and is prospective for additional nickel laterite and the discovery of sulphide Ni-Cu-PGE deposits. NORNICO comprises a large 100% held contiguous tenement package (over 2000 sq km) covering the major portion of the Greenvale nickel province. Major nickel mining companies are attracted to the NORNICO project area and recently applied for tenements adjacent to Metallica's.

Within NORNICO, the most advanced nickel project is the Bell Creek South Lease that includes an Inferred nickel laterite Resource of 2.42 million tonnes at 1.40% nickel and 0.1% cobalt (containing approximately 33,900 t Ni and 1,900 t Co), based on a cut-off grade of 1% Ni, and an additional low grade Inferred Resource of 3.87 million tonnes at 0.78% Ni and 0.1% Co with a cut-off grade of 0.6% Ni. The total Inferred Resource contains approximately 64,000 t Ni and 4400 t Co and is within a granted Mining Lease. Over the next two years Metallica plans to complete infill resource drilling, metallurgical studies, a Scoping Study and a Pre-Feasibility Study on the mining and treatment of initially the Bell Creek resource using potentially low cost Atmospheric Leach (AL) Heap Leach processing to produce a Ni-Co concentrate for sale to the Yabulu Nickel Refinery or other nickel refineries.

It is our belief that nickel offers one of the best metal investment opportunities, taking advantage of a significant increase in price, as a result of surging world nickel demand and declining stockpiles. The rising demand for stainless steel (the major consumer of nickel) is expected to maintain this increasing nickel consumption.

A major portion of the funds raised from this Prospectus is allocated to Metallica's Ni-Co projects, totalling between \$1.14 million to \$2.38 million assuming Minimum and Maximum Subscription respectively.

## 2. Coal

Kingaroy coal project includes the Taabinga coal deposit, which is strategically located 25 km from the Tarong Power Station. A recent resource study by Runge Limited estimated a Measured and Indicated Resource of 181.9 Mt of thermal coal. Of this resource, preliminary mineability studies have indicated that at least 20 Mt is exploitable by Opencut mining.

## 3. Bauxite (aluminium ore)

Weipa bauxite project covers extensive areas of mapped bauxite and partly drilled (1970's) bauxite mineralisation within 50 to 80 km of the Port of Weipa with the potential for direct shipping of bauxite to domestic and overseas markets. Metallica has secured exclusive bauxite rights within tenement applications covering extensive areas (>800 sq. km) of mapped bauxite in the Weipa-Aurukun-Bamaga region. These tenements are adjoining and along strike of world-class bauxite reserves and mining operations. The Kingaroy bauxite project covers known, but as yet unquantified areas of bauxite located close to a power station, transportation and other key infrastructure. It is a concept driven exploration project and is modelled on the Darling Range bauxite-alumina-aluminium operations in Western Australia.

## 4. Scandium

Metallica has made a high grade scandium discovery within the Kokomo tenement in which Straits Resources Limited (Straits) can earn an interest. Scandium is a valuable rare earth metal mainly used to enhance aluminium alloys.

## 5. Limestone

High quality and strategically located limestone deposits at our Boyne, Fairview (Gladstone) and Star (Townsville) projects.

## 6. Gold

Straits has entered into a joint venture with Metallica to explore the Six Mile and Kokomo gold projects. A considerable portion of the NORNICO project area is also prospective for precious metals. Metallica also holds gold-silver exploration projects with the Warwick West and Texas North tenements close to a proposed silver-gold mining development.

I believe that Metallica merits particular attention from you as a potential investor for two key reasons, its excellent multi-commodity portfolio and the people who will manage Metallica on your behalf.

Yours Sincerely,



**ANDREW GILLIES**

**MANAGING DIRECTOR**



Altered outcrop sample from Bell Creek

A silhouette of a person wearing a hard hat and holding a geological hammer, set against a background of a sunset or sunrise with a blue sky above and orange/yellow clouds below. The text "minerals are our business" is overlaid in the center, with the words "minerals are" and "our business" appearing twice in a layered, semi-transparent font.

**“minerals are  
our business”**  
“minerals are  
our business”



# key investment information

## key information

This Prospectus contains important information and should be read in its entirety before making an investment decision. If you are in any doubt about the contents, you should consult your professional adviser. The mineral properties described in this Prospectus are at various stages of exploration and evaluation. Accordingly, investment in the **Shares offered by this Prospectus should be considered speculative in nature.**

Certain terms and abbreviations used in this Prospectus have defined meanings, which are summarised in the Glossary in Section 9 of the Prospectus.

### HOW TO APPLY

#### **Application Forms are included at the back of this Prospectus.**

Completed Application Forms and accompanying cheques must be presented or mailed to Metallica, or Axis Financial Group (Australia) Ltd or Metallica's Share Registry address.

Applications for Shares will only be accepted on the Application Form accompanying this Prospectus. Applications must be for a minimum of 10,000 Shares (\$2,000) and thereafter multiples of 2,500 Shares (\$500).

### ENQUIRIES

Investors with questions on the Application Form, requiring copies of Reports or additional copies of the Prospectus, should call Axis Financial Group (Australia) Ltd on (02) 9247 1164 or Metallica on (07) 3211 7366. The Prospectus, including the Application Form and Reports, is also available for download from [www.axisfinancial.com.au](http://www.axisfinancial.com.au) or [www.metallicaminerals.com.au](http://www.metallicaminerals.com.au).

### OFFER STATISTICS

<b>OFFER PRICE PER SHARE</b>	20 cents
<b>SHARES ON ISSUE AT DATE OF PROSPECTUS</b>	46.15 million
<b>MAXIMUM SHARES OFFERED UNDER THIS PROSPECTUS</b>	25 million
<b>MAXIMUM OPTIONS OFFERED UNDER THIS PROSPECTUS</b>	6.25 million
<b>CONVERTIBLE NOTES (ASSUME CONVERTED)</b>	3 million
<b>MAXIMUM AMOUNT TO BE RAISED UNDER THE OFFER</b>	\$5 million
<b>MINIMUM AMOUNT TO BE RAISED UNDER THE OFFER</b>	\$3 million
<b>SHARES ON ISSUE FOLLOWING THE OFFER ASSUMING MAXIMUM SUBSCRIPTION</b>	74.15 million*
<b>MARKET CAPITALISATION ASSUMING MINIMUM SUBSCRIPTION ON LISTING AND AT THE OFFER PRICE</b>	\$12.8 million
<b>MARKET CAPITALISATION ASSUMING MAXIMUM SUBSCRIPTION ON LISTING AND AT THE OFFER PRICE</b>	\$14.8 million
<b>* NOTE — SHARES TO BE ISSUED SUBSEQUENT TO LISTING (REFER SECTION 8)</b>	233,569

**diversified minerals portfolio**  
portfolio highlights

**“metallica holds  
a quality minerals  
portfolio”**

**NICKEL-COBALT**

**COAL**

**BAUXITE-(ALUMINIUM)**

**SCANDIUM**

**LIMESTONE**

**GOLD-SILVER**

Dump Truck — Not a Metallica Minerals Limited Asset

# multi-commodity portfolio highlights portfolio

## 1. Nickel-cobalt

Nickel has recently been a strong performer in the base metal sector particularly due to increased demand from China, increasing stainless steel demand, declining stockpiles and limited new significant supplies of nickel. The North Queensland Nickel Cobalt (NORNICO) project contains strategically located nickel-cobalt laterite deposits within a region which is prospective for additional nickel laterite and the discovery of sulphide Ni-Cu-PGE deposits. The NORNICO project area includes over 2000 square km (sq km) of contiguous tenements covering prospective and under-explored exploration ground in the Greenvale Nickel Province. NORNICO is conveniently located 250 km from BHP Billiton's Yabulu Nickel Refinery near Townsville North Queensland. With only limited nickel exploration having previously been conducted in the region surrounding the now closed Greenvale nickel mine, the NORNICO tenements have potential for the discovery of additional mineral resources. Metallica intends to complete a Pre-Feasibility Study for the commercial application of Atmospheric Leach (AL) Heap Leach processing on its Bell Creek nickel-cobalt resource held within a granted Mining Lease.

NORNICO has a similar geological setting and affinity to the world famous Noril'sk, Voisey's Bay and Jinchuan Ni-Cu-PGE deposit types. This has recently attracted major mining companies into the immediate area surrounding Metallica's tenements. Metallica is in a prime position with respect to host geology for such deposits and has already defined targets for immediate drilling. Detailed airborne gravity and electromagnetic geophysical surveys are also planned to generate new targets. The Greenvale Region is relatively under-explored for sulphide nickel deposits.

In addition to the NORNICO project, Metallica holds the Lucky Break nickel

project that contains a small high grade nickel resource (MDL-Dingo Dam) within trucking distance (140 km) to the Yabulu Nickel Refinery. The MDL is surrounded by two EPM's which have not yet been explored for nickel beneath extensive cover sediments.

## 2. Coal

Metallica's Taabinga coal deposit is only 25 km from the Tarong Power Station. A Resource Study by Runge Limited estimated a Measured and Indicated Resource of 181.9 million tonnes (Mt) of thermal coal. Of this resource, preliminary mineability studies have indicated that at least 20 Mt is exploitable by opencut mining.

## 3. Bauxite

Metallica has applied for a tenement comprising 100 sub-blocks (approximately 320 sq km) on the Cape York Peninsula centred 50 km northeast of Weipa. In addition Metallica has entered into a Mineral Rights Deed with Sigma Kaolin Ltd and Norkay Pty Ltd to gain exclusive access to over of 800 sq km of mapped bauxite deposits. Drilling results from previous explorers in the 1970's indicate that substantial bauxite deposits grading to 54%  $Al_2O_3$  are located within the Company's tenement boundaries. Metallica's strategy is to define a high grade bauxite resource, which can be directly shipped to markets either domestically or overseas. Metallica's Kingaroy bauxite project covers known, but as yet unquantified areas of bauxite located close to a power station, transportation and other key infrastructure. The Kingaroy bauxite project is a concept driven exploration project and is modelled on the Darling Range bauxite-alumina-aluminium operations in Western Australia.

## 4. Scandium

Scandium (Sc) is a rare earth metal of very high value but currently with a very limited market. It is used principally as a major enhancer of aluminium (Al) alloys but is also used in lighting and in the expanding fuel cell technology industry. Metallica has discovered open ended near-surface high grade scandium mineralisation ( $>100$  g/t Sc) that has the potential to be commercially attractive. Current and potential end-users have been unable to secure a reliable or competitively priced scandium supply, hence the high price and limited market. Metallica's business plan is to create a long-term reliable supply of scandium and thus establish a niche market within the global aluminium alloy-manufacturing sector. Straits Resources Ltd can earn a 70% interest in the Kokomo scandium project, by the expenditure of \$1.4 million during which Metallica is Free-carried.

## 5. Limestone

Metallica holds strategically located limestone deposits near Gladstone and Townsville, capable of supplying the current limestone demand in these areas for many years. These projects have the potential to gain cash flow from, either future limestone sales or from the sale of the tenements which cover the Star River, Fairview and Boyne limestone deposits.

## 6. Gold

Metallica has entered into a joint venture with Straits to explore its principal gold projects at Six Mile and Kokomo. A considerable portion of the NORNICO project area is also prospective for gold and copper. Metallica also holds gold-silver exploration tenements at Warwick West and Texas North near the Twin Hills Texas silver project which is owned by another party.

“our strength is our  
“our strength is our experience”  
experience”



**DAVID BARWICK**  
**CHAIRMAN**

Accountant – 32 years experience  
with mining, resource and  
public companies



**ANDREW GILLIES**  
**MANAGING DIRECTOR**

Geologist – 18 years minerals  
industry experience



**ROBERT PYPER**  
**FOUNDING DIRECTOR**

Geologist – 44 years minerals  
industry experience



**ROD SILLER**  
**DIRECTOR**

Engineer – 19 years resource industry experience



**JOHN HALEY**  
**DIRECTOR & COMPANY SECRETARY**

Accountant – over 20 years work experience, including 5 years with junior resource companies



**PAT SMITH**  
**EXPLORATION MANAGER**

Geologist - 13 years minerals industry experience



**JENNETTE BINNS**  
**ADMINISTRATION GEOLOGIST**

Geologist – 18 years minerals industry experience

# 1. details of the offer

## details of the offer

### 1.1 SHARES OFFERED FOR SUBSCRIPTION

Metallica is offering Shares for subscription at a price of \$0.20 per Share together with one (1) attaching Option to subscribe for a further Share for every four (4) Shares allotted to subscribers pursuant to this Prospectus. The rights attaching to the Shares and Options offered are summarised in Section 8 of this Prospectus.

#### Shares

The Shares will be issued at a price of \$0.20, payable in full on Application. The newly issued Shares will rank equally in all respects with all other existing Shares on issue.

#### Options

One (1) attaching Option for every four (4) new Shares subscribed for will be offered to participating investors. The Options will be exercisable at a price of \$0.25 on or before 31 December 2006.

#### Subscriptions

The Minimum Subscription is \$3,000,000 by the issue of 15,000,000 Shares at \$0.20, which would carry entitlement to 3,750,000 Options. The Company reserves the right to accept Oversubscriptions prior to the Closing Date up to a Maximum additional 10,000,000 Shares and 2,500,000 attaching Options. Accordingly the Maximum Subscription is \$5,000,000 by the issue of 25,000,000 Shares at \$0.20, which would carry an entitlement to 6,250,000 options.

#### Offer period

- **Opening Date** for receipt of Applications **29 September 2004**
- **Closing Date** for receipt of Applications

(subject to variation) **5 November 2004 (5.00pm AEST)**

#### Allotment

The Company will proceed to allotment once the Offer closes.

If the Minimum Subscription for the Offer (Table 2) is not achieved and the Application monies for these Shares are not received by the Company within three (3) months from the date of this Prospectus, the Company will repay all money received from Applicants within 7 days after that date.

These dates are indicative only and may vary. Metallica reserves the right to close the Issue at any earlier time and date, or to extend the closing time and date, without prior notice. This may have a consequential effect on the date for quotation of the Shares and Options on the Official List.

### 1.2 PURPOSE OF THE OFFER

The key purposes of the Offer are:

- to enable Metallica to comply with the admission requirements for companies seeking official quotation on the ASX;
- to provide Metallica with working capital to conduct further drilling and evaluation on its portfolio of tenements that are not already part of a joint venture arrangement;
- to provide sufficient funds to support the administration and increasing activities of this portfolio.

### 1.3 APPLICATION OF FUNDS & EXPENDITURE PLANS

Metallica's business objective is to explore, evaluate, and develop its mineral projects as rapidly as possible commensurate with acceptable risk. Its goal is to become a successful

resource company, producing nickel-cobalt products, other metals, bauxite, coal, limestone and other industrial minerals. Achieving Minimum Subscription under the Offer will allow Metallica to complete its proposed two year exploration and evaluation programmes as described in Section 5.

The planned exploration and evaluation expenditure programme may vary as new results and information is gathered. Funds allocated as presented could be re-directed to other mineral projects if deemed appropriate by management.

Investors in Metallica will gain exposure to carefully selected and advanced mineral exploration projects where the focus will be on rapidly progressing them towards a feasibility stage and if favourable, to a development and mining stage, as budgeted in the application of funds, Table 1.

On completion of the Issue, the Directors believe that the Company will have sufficient working capital to carry out its stated two year objectives.

### 1.4 SHARE CAPITAL STRUCTURE

At the date of this Prospectus the Company has 46,148,183 Shares on issue, which are held by approximately 360 shareholders, along with 5,050,000 Directors and Employees Performance Options on issue, the terms of which are set out in Section 8 of this Prospectus.

Subscribers for Shares pursuant to this Prospectus will be issued one (1) attaching Option for every four (4) Shares issued.

Immediately following the allotment of Shares pursuant to this Prospectus, the following securities will be on issue (Table 2).

**TABLE 1: APPLICATION OF FUNDS – TWO YEARS**

	<b>MINIMUM SUBSCRIPTIONS (\$3 MILLION)</b>	<b>MAXIMUM SUBSCRIPTIONS (\$5 MILLION)</b>
<b>FUNDS AVAILABLE</b>		
Opening Funds	300,000	300,000
Convertible note issue <sup>1</sup>	375,000	375,000
Funds raised by Issue	3,000,000	5,000,000
<b>SUB TOTAL</b>	<b>3,675,000</b>	<b>5,675,000</b>
<b>ISSUE AND OTHER COSTS</b>		
Prospectus/Issue Costs	420,000	550,000
QLD Gold Payments <sup>2</sup>	144,000	144,000
Deferred Fees and Loans	223,000	223,000
<b>SUB TOTAL</b>	<b>787,000</b>	<b>917,000</b>
<b>NET FUNDS AVAILABLE</b>	<b>2,888,000</b>	<b>4,758,000</b>
<b>EXPLORATION AND EVALUATION EXPENDITURE</b>		
Nickel Cobalt (NORNICO & Lucky Break)	1,140,000 <sup>3</sup>	2,380,000 <sup>4</sup>
Coal (Kingaroy)	125,000	270,000
Bauxite (Weipa & Kingaroy)	365,000	450,000
Scandium (Kokomo)	10,000	10,000
Limestone (Gladstone & Townsville)	160,000	180,000
Gold/Silver	180,000	180,000
Other	70,000	70,000
Project Generation	10,000	100,000
<b>SUB TOTAL</b>	<b>2,060,000</b>	<b>3,640,000</b>
<b>CORPORATE ADMINISTRATION</b> (net of project related expenses)	<b>660,000</b>	<b>700,000</b>
<b>TOTAL EXPENDITURE (100 %)</b>	<b>2,720,000</b>	<b>4,340,000</b>
<b>NET INTEREST INCOME @ 6 %<sup>5</sup></b>	<b>32,000</b>	<b>95,000</b>
<b>NETT EXPENDITURE</b>	<b>2,688,000</b>	<b>4,245,000</b>
<b>CLOSING FUNDS</b>	<b>200,000</b>	<b>513,000</b>

**NOTES:**

- Assuming the maximum 3,000,000 Convertible Notes are issued by the Company. Refer to Section 8.3.3 of this Prospectus for further details on the Convertible Note issue. The application of funds assumes that all Convertible Notes will convert to equity and no Convertible Notes will require repayment within the two years.
- Details of the QLD Gold Payments is set forth in Section 7.2(1) and Table 7.
- Includes the completion of a Scoping Study and the initiation of a Pre-Feasibility Study on the Bell Creek Nickel Project.
- Includes the completion of a Pre-Feasibility Study at the Bell Creek Nickel Project.
- Interest income minus interest payments for Convertible Notes assuming all the Convertible Notes are allocated and not converted to Shares. The terms of the Convertible Notes are summarised in section 8.3.3

# 1. details of the offer

## details of the offer

A number of important rights attaching to the Shares and Options, the subject of the Issue, are summarised in Section 8 of this Prospectus.

The terms and conditions of the Directors and Employee Performance Options on issue, and the Convertible Notes, are also summarised in Section 8 of the Prospectus.

### 1.5 UNDERWRITING

The Offer is not underwritten.

### 1.6 DIVIDEND POLICY

The Shares issued pursuant to this Prospectus will rank equally for dividends with all existing Shares from the date of allotment.

The major opportunity to shareholders will be in the potential growth of the Share price as Metallica progresses its projects. It is unlikely that Metallica will be in a position to pay dividends before it has mining projects in production.

### 1.7 RISK FACTORS

The Shares offered by this Prospectus should be considered speculative in nature, based on the current status of Metallica's exploration assets, their stage of evaluation and the price of the commodities being sought, which are subject to fluctuating market conditions. The risk factors that should be considered in relation to an investment in Metallica are set out in Section 4.

**TABLE 2: CAPITAL STRUCTURE**

SHARE DETAILS	MINIMUM SUBSCRIPTIONS (\$3 MILLION)		MAXIMUM SUBSCRIPTIONS (\$5 MILLION)	
	NUMBER OF SHARES	% TOTAL	NUMBER OF SHARES	% TOTAL
<b>CURRENT ISSUED SHARES PRIOR TO LISTING</b>				
Directors (direct and indirect) hold	11,961,093	18.6	11,961,093	16.1
Other existing Shareholders hold	34,187,090	53.4	34,187,090	46.1
Upon conversion of Convertible Notes <sup>1</sup>	3,000,000	4.7	3,000,000	4.1
<b>SHARES NOW OFFERED BY THIS PROSPECTUS</b>	15,000,000	23.3	25,000,000	33.7
<b>TOTAL ISSUED SHARES</b>	<b>64,148,183</b>	<b>100.0</b>	<b>74,148,183</b>	<b>100.0</b>
OPTION DETAILS	NUMBER OF OPTIONS	% TOTAL	NUMBER OF OPTIONS	% TOTAL
<b>CURRENT ISSUED OPTIONS PRIOR TO LISTING</b>				
Performance Options held by Metallica Directors exercisable at 20 cents on or before 31 December 2006 <sup>2</sup>	4,000,000	38.8	4,000,000	29.0
Current employees of Metallica Performance Options exercisable at 20 cents on or before 31 December 2006 <sup>2</sup>	1,050,000	10.2	1,050,000	7.6
<b>OPTIONS NOW OFFERED BY THIS PROSPECTUS</b>				
Options exercisable at 25 cents on or before 31 December 2006	3,750,000	36.4	6,250,000	45.3
<b>Axis OPTIONS<sup>3</sup></b>				
Options exercisable at 25 cents on or before 31 December 2006	1,500,000	14.6	2,500,000	18.1
<b>TOTAL ISSUED OPTIONS</b>	<b>10,300,000</b>	<b>100.0</b>	<b>13,800,000</b>	<b>100.0</b>

**NOTES:**

- Assuming the maximum 3,000,000 Convertible Notes are issued under the Convertible Note Facility and converted to Shares. The terms of the Convertible Note Facility and underlying Convertible Notes are summarised in Section 8.3.3.
- The exercise of these Options by the Directors and Employees is subject to the Company's Share price on the ASX trading at certain levels. Please refer to Section 8.3.2 for a summary of the terms.
- The terms upon which the Axis Options are to be issued is set forth more particularly in Section 8.6.
- Some of the above securities are subject to Escrow (refer to Section 1.14)



### 1.8 APPLICATION FOR SHARES

An Application for Shares under this Prospectus can only be made by:

- Completing and lodging the **Application Form** included at the back of this Prospectus; or
- Completing a paper copy of the Application Form which accompanies the electronic version of this Prospectus which can be downloaded from [www.axisfinancial.com.au](http://www.axisfinancial.com.au) or [www.metallicaminerals.com.au](http://www.metallicaminerals.com.au).

#### Exposure Period

This Prospectus is subject to an Exposure Period of 7 days from the date of this Prospectus. This period may be extended by ASIC for a further 7 days. The purpose of the Exposure Period is to enable the Prospectus to be examined by market participants prior to the raising of funds. Therefore no Applications will be accepted until the Exposure Period has expired.

#### How to Apply

Applications for Shares will only be accepted on the Application Form accompanying this Prospectus. The Application Form does not need to be signed to be a binding Application. Applications must be for a minimum of 10,000 Shares (\$2,000) and thereafter for multiples of 2,500 Shares (\$500). All Applications must be accompanied by payment in full for each Share applied for and cheques should be made payable to **"Metallica Minerals Limited – Share Offer Account"** and crossed "Not Negotiable". All payments must be made in Australian currency. No brokerage or stamp duty is payable by Applicants. The amount payable on Application will not vary during the period of the Issue and no further amount is payable on allotment. Application monies will be held

in trust in a subscription account established and controlled by the Company until allotment has taken place. Any interest accruing on this amount will be to the benefit of the Company.

Completed Application Forms and accompanying cheques must be received by Axis Financial Group (Australia) Limited or Metallica's Share Registry or Metallica at the addresses below by 5pm AEST on the closing date:

Completed Application Forms should be posted or delivered to:

#### Axis Financial Group (Australia) Limited

Level 25, Royal Exchange Building  
56 Pitt Street  
Sydney NSW 2000

P.O. Box R1464  
Royal Exchange  
NSW 1225

Telephone: (02) 9247 1164

#### ASX Perpetual Registrars Ltd

Level 22, 300 Queen Street,  
Brisbane Qld 4000

GPO Box 2537  
Brisbane Qld 4001

Telephone: (07) 3228 4219

#### Metallica Minerals Limited

Level 6  
379 Queen Street  
Brisbane Qld 4000

GPO Box 122  
Brisbane Qld 4001

Telephone: (07) 3211 7366

Completed Application Forms and accompanying cheques should be sent to one of the required addresses as soon as possible after the Issue opens in the event the Directors close the Issue early and in any event must be received by 5.00 pm AEST on 5 November 2004. As stated above, the Offer may be

closed before or extended beyond this date. Accordingly, investors are encouraged to submit their Applications as early as possible.

An Application for Shares may not be withdrawn after lodgement unless the applicant is permitted to withdraw the Application Form following the issue of a supplementary document in accordance with the Corporations Act.

### 1.9 INDICATIVE TIMETABLE

**Opening Date** 29 September 2004

**Applications Closing Date (5.00 pm AEST)** 05 November 2004

**Allotment of Shares & Options under this Prospectus** 11 November 2004

**Holding Statements to be Dispatched** 12 November 2004

**Expected date of quotation on ASX** 17 November 2004

These dates are indicative only and may vary. Metallica reserves the right to close the Issue at any earlier time and date, or to extend the closing time and date, without prior notice. This may have a consequential effect on the date for quotation of the Shares and Options.

### 1.10 ALLOTMENT OF SHARES AND OPTIONS

Subject to the ASX granting approval for Metallica to be admitted to the Official List, the Directors will proceed to the allotment of Shares and Options as soon as possible after the closing date. Holding statements will be mailed to Applicants within 14 days of allotment.

Applications for Shares and Options may be accepted in full or in part, or rejected by Metallica. Where the number of Shares and Options issued is less than the number applied

# 1. details of the offer

## details of the offer

for, or where no allotment is made, surplus application monies will be refunded within 14 days of the Allotment Date without interest.

It is the responsibility of Applicants to confirm the number of Shares and Options allotted to them prior to trading in the Shares or Options. Applicants who sell Shares or Options before they receive notification of the number of Shares and Options allocated to them do so at their own risk.

If no allotment or issue is made, all moneys paid on application for the Shares and Options will be refunded without interest within the time period set out in the Corporations Act.

### 1.11 BROKERAGE AND HANDLING FEES

Metallica has an agreement with Axis to act as Financial Adviser and Broker to the Issue. Under the agreement (the terms of which are summarised in Section 8.6) Axis is to assist the Company to obtain subscriptions to the Issue.

Brokerage and/or handling fees on Applications for Shares will be payable to member firms of the ASX or licensed investment advisers on such Application Forms bearing their stamp and accepted by the Company. Any such brokerage or handling fees will be paid by Axis out of its brokerage fee in accordance with the provisions of the Corporations Act.

In addition, the Company has established the Convertible Note Facility pursuant to which the Board has allocated a maximum of 3,000,000 Convertible Notes which may be issued at the discretion of the Board to member firms of the ASX or licensed investment advisers where those member firms or advisers have agreed to procure Application Forms. A summary of the Convertible Note Facility and

underlying Convertible Notes is set forth in Section 8.3.3 of this Prospectus.

### 1.12 AUSTRALIAN STOCK EXCHANGE (ASX) LISTING

Metallica will apply to be admitted to the Official List of the ASX, and for official quotation of its Shares and Options within 7 days after the date of this Prospectus.

Admission by the ASX to the Official List is not an indication of the merits of Metallica or of the Shares or Options offered for subscription. Quotation of the Shares and Options offered under this Prospectus, if granted, will commence as soon as practicable after allotment and dispatch of holding statements to successful Applicants. The ASX takes no responsibility for the contents of this Prospectus including the independent experts' reports contained within this Prospectus.

In the event the ASX does not grant permission for official quotation of the Shares and Options within three (3) months after the date of this Prospectus, none of the Shares or Options offered under this Prospectus will be allotted or issued.

### 1.13 CLEARING HOUSE ELECTRONIC SUBREGISTER SYSTEM (CHES)

Metallica will apply to be admitted to participate in CHES in accordance with the Listing Rules and the SCH Business Rules. On admission to CHES, Metallica will operate an electronic issuer sponsored subregister and an electronic CHES subregister. The two subregisters, together with a certificated subregister for Escrowed securities will make up Metallica's principal register of securities.

Metallica will not issue certificates to successful Applicants pursuant to this Prospectus.

Instead, successful Applicants who elect to hold their Shares and Options on the issuer sponsored subregister will be provided with a holding statement (similar to a bank account statement) which sets out the number of Shares and Options allotted. Successful Applicants who elect to hold their Shares and Options on the CHES subregister will receive an allotment advice from Metallica setting out the number of Shares and Options allotted and, at the end of the month of allotment, CHES (acting on behalf of Metallica) will provide a holding statement confirming the number of Shares and Options allotted. The holding statement will also advise successful Applicants of their holder identification number (in the case of a holding on the CHES subregister) or security holder reference number (in the case of a holding on the issuer sponsored subregister).

### 1.14 RESTRICTED SECURITIES (ESCROWED SHARES)

Shares and Options issued under this Prospectus will not be subject to Escrow.

Dealings with some or all of the Shares and Options on issue prior to the date of this Prospectus or to be issued after the date of this Prospectus may be restricted for such period or periods as will be determined by the ASX.

The length of any Escrow period will be announced to the market at the commencement of official quotation of Shares on the ASX.

Metallica has been notified of an indicative Escrow period for Shares issued prior to the date of this Prospectus. Based on this preliminary advice Metallica estimates the minimum number of Shares to be subject to Escrow will be as follows.

- 15.59 million Shares for 24 months from the date of listing.
- 1.87 million Shares for 12 months from the date of issue of those Shares.

This is an estimate only as ASX has a broad discretion in determining the number of Shares and other securities on issue or to be issued (including Options and Convertible Notes) to be subject to Escrow and the Escrow period. The actual number and Escrow period will be finally determined by the ASX when it considers the Company's application for admission to the Official List.

#### 1.15 OVERSEAS APPLICANTS

This Prospectus does not constitute an offer in any place in which, or to any person to whom it would not be lawful to make such an offer.

Applicants resident in countries other than Australia should consult their brokers or other professional advisers as to whether any government or other consents are required or whether formalities need to be observed to enable them to apply for Shares pursuant to this Prospectus. The failure to comply with any applicable restrictions may constitute a violation of securities law in those jurisdictions.

#### 1.16 INVESTOR ENQUIRIES

Additional copies of the Prospectus or further advice on how to complete the Application Form can be obtained through Axis, the broker to the Issue, by telephoning or visiting:

**Axis Financial Group (Australia) Limited**  
 Level 25, Royal Exchange Building  
 56 Pitt Street  
 Sydney NSW 2000

Contact: Gregory Wood  
 Telephone: (02) 9247 1164  
 Facsimile: (02) 9247 4844  
 Email: [gregory.wood@axisfinancial.com.au](mailto:gregory.wood@axisfinancial.com.au)  
 Website: [www.axisfinancial.com.au](http://www.axisfinancial.com.au)



# 2. metallica and its mineral projects

## mineral projects

### 2.1 METALLICA

Metallica was established with the primary objective of creating opportunity and wealth for its shareholders through the evaluation and development of mineral projects.

Following its incorporation in January 1997 Metallica Minerals Limited (Metallica) secured various mineral exploration projects by acquiring 100% of QLD Gold Pty Ltd (QLD Gold) and Oresome Australia Pty Ltd (Oresome) in March 1997. The principle asset was the NORNICO project which contained two granted Mining Leases and three granted Exploration Permits for Minerals (EPM) over known nickel laterite deposits north of the Greenvale Nickel Mine which closed in the early 1990's.

As an unlisted company from 1997 to the present time, Metallica has actively progressed

its mineral portfolio throughout what was considered a major downturn in the resources sector (mid 1997 to September 2003), by making timely capital raisings and attracting joint venture partners. In December 2003 Metallica raised over \$800,000 and increased its shareholder base to approximately 360 shareholders through an Offer Information Statement. In February 2004, Metallica formed a third wholly owned subsidiary, Kingaroy Aluminium Pty Ltd (KAPL), for the purpose of holding the Kingaroy and Weipa bauxite tenements and the Kingaroy coal tenement.

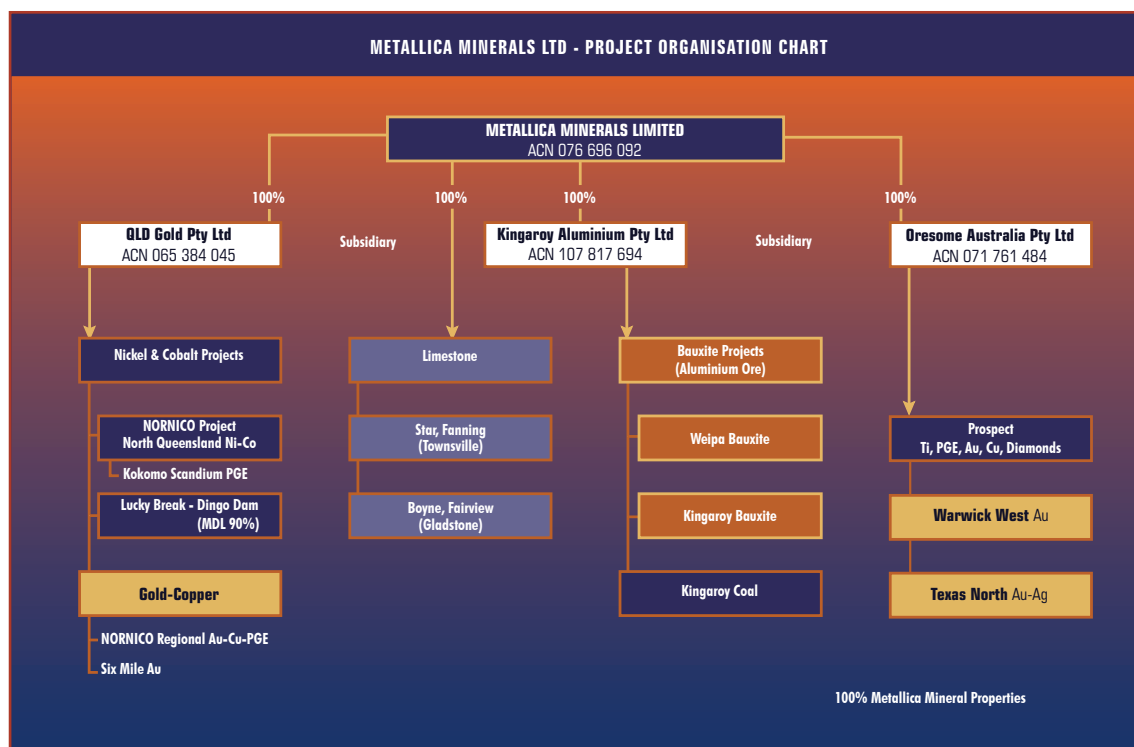
### 2.2 THE PROJECTS

Metallica has emerged as a Queensland focused mineral resources company with major interests in nickel-cobalt, coal, bauxite,

scandium, limestone and gold. It has exploration exposure to a suite of other minerals and metals including copper, platinum group elements, silver and titanium.

Metallica's principal assets are its advanced nickel-cobalt laterite, coal, scandium and limestone projects, and the exploration potential of its nickel-cobalt, bauxite, coal and gold-silver tenements. Many of the projects are close to markets, roads and associated infrastructure.

Agreements are currently in place with Straits over the Six Mile and Kokomo gold projects, and the Kokomo scandium project. Details of these Agreements can be found in the Material Contracts Section 7.2 of this Prospectus.



### 2.3 METALLICA'S BUSINESS STRATEGY

Metallica's business strategy and niche in the mining industry is to secure advanced exploration projects, preferably those with known significant mineralisation or resources. These projects can then be quickly and confidently evaluated with a view to adding considerable value. The projects are then progressed towards feasibility and the option of attracting a larger company as a joint venture partner. If a joint venture is established, the partner would then be expected to sole fund the project evaluation until the completion of a Feasibility Study or a decision to mine. At this point Metallica could elect to contribute pro rata to the mine development capital expense

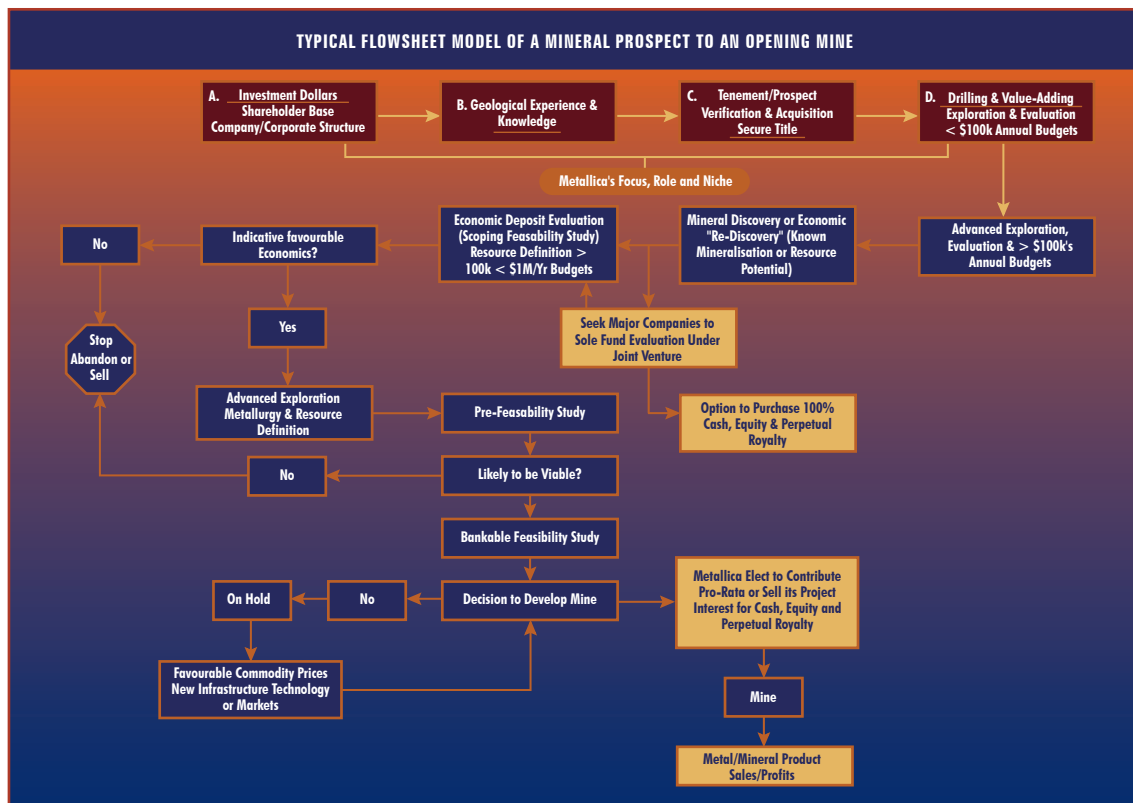
and retain its share of metal/mineral product sales, or elect to sell its interest and retain a royalty for the life of the mine.

Significant new mineral discoveries are often highly profitable, however exploitable discoveries are rare and are generally expensive and time consuming to secure, explore and develop. Lead-time from commencement of exploration to production is a complex and lengthy process and can range from 3 to 10 years or longer.

Metallica's business strategy has been designed to reduce this exploration and development burden significantly and greatly enhance the likelihood of success by a two stage process:

- (1) Acquire quality mineral projects where changed economic conditions have become more favourable. This could be due to new infrastructure, technology and/or markets which have enhanced the economic viability of previously identified mineral deposits (resources or mineralisation). Metallica's management develops exploration models and strategies that first define opportunities and markets, and then secures the identified area for further evaluation. In the optimal case the previously identified mineralisation will have a resource that has already undergone extensive drilling. The exploration industry has consistently shown that it is often better

Diagrammatic Mineral Project Development Flowsheet



# 2. metallica and its mineral projects

## mineral projects

not to be the first explorer to test a mineral prospect or grassroots exploration target. It is at a more advanced position of a tenement's exploration history (often after considerable expenditure by previous companies) that Metallica has concentrated its effort. Metallica's target projects are ones where economic mineralisation is indicated and where focused exploration and evaluation can produce the greatest value adding for the mineral project.

Since late 2003 there has been a major resurgence in the mineral resources industry with good mineral projects becoming highly sought after and now much harder to acquire. For this reason Metallica has put major emphasis on selecting quality mineral projects with known mineralisation, quantified resources or in high quality exploration areas.

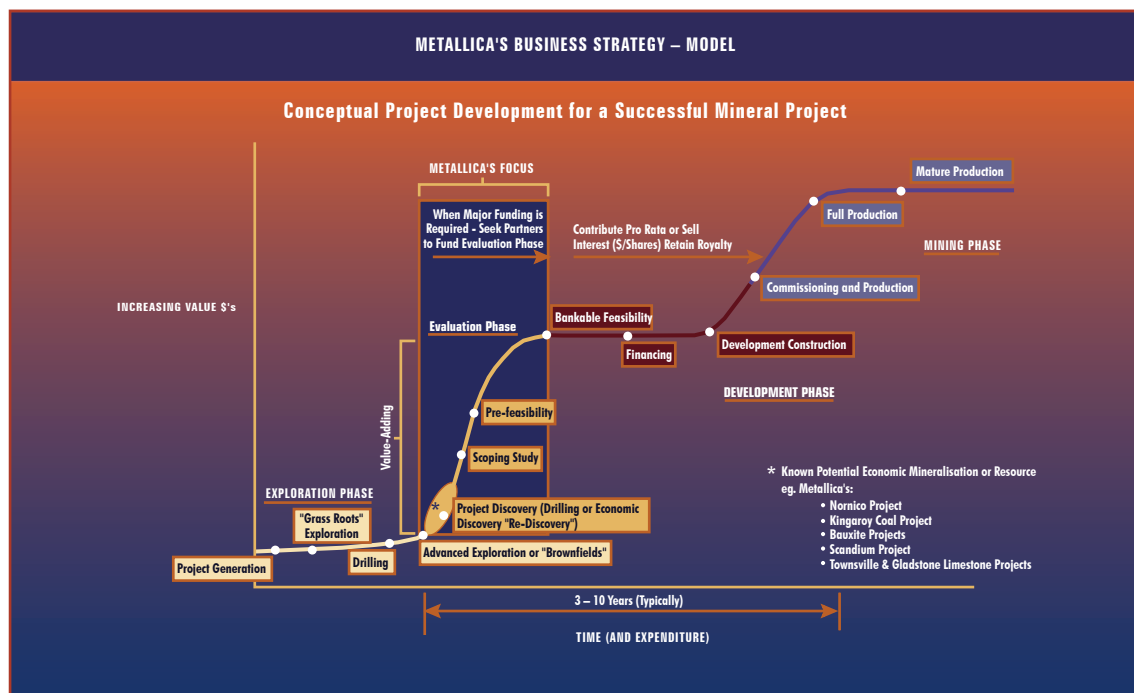
(2) Metallica adds value to projects by further evaluation with the intention of attracting established mining companies or mineral end-users as partners at an early stage to further fund evaluation, feasibility and development. Alternatively a project might be sold (cash, share equity and royalty). Metallica's belief and strategy is that by having several different partnerships with larger companies there is a much better chance of project development success. This strategy is designed to generate substantial shareholder wealth while limiting commercial risk. It also allows Metallica's management team to remain focused on creating shareholder wealth and maintain entrepreneurial spirit rather than managing day to day project operations. This is extremely important given the cyclical nature of the minerals

industry and the general reliance of junior resource companies on capital markets to fund their activities through periodic share issues. Metallica's medium to long-term objective is to be self funded through its mining activities, mineral asset sales and royalty payments.

### Implementation of Metallica's Business Strategy:

- the NORNICO project within the proven Greenvale nickel region using the latest nickel laterite processing methods with the objective to sell Ni-Co concentrate to the nearby Yabulu Nickel Refinery;
- the Kingaroy coal project which could be complimentary to the Kingaroy bauxite project and be strategically positioned for coal sales to the nearby Tarong Power Station;

Value-adding to Mineral Projects Chart – Metallica's Strategy



- the Weipa bauxite project is located close to the port of Weipa and Metallica will evaluate the opportunity for bauxite export;
- the Kingaroy bauxite exploration project modelled on the Darling Range bauxite-aluminium operations in Western Australia;
- securing and assessing major undeveloped limestone deposits around the industrial centres of Gladstone and Townsville;
- the newly recognised bulk tonnage gold-silver mineralisation in the Texas area and the development decision by a silver-gold developer on its Texas silver gold project has enhanced the prospectivity of the Texas-Warwick region and its potential economics by having the proposed silver-gold operation within trucking distance.

**Metallica's project selection and evaluation is guided by:**

- new, existing or expanding local markets (eg the nickel refinery at Yabulu), the increased demand for limestone in Gladstone, added local and overseas demand for bauxite-alumina, and the Kingaroy coal project close to Tarong Power Station which does not have its own local coal deposit;
- new and improved mineral processing technology such as atmospheric leaching (AL) and beneficiation (simple ore upgrading) techniques for nickel-cobalt laterite ores;
- strategic positioning with respect to established and growing markets (eg nickel, coal, limestone and bauxite/alumina markets) and to new and planned infrastructure developments such as roads, gas pipelines and reagent supplies;

- concept driven exploration, where a project model is based on current commercial operations (eg the Darling Ranges bauxite-alumina operations);
- world class mine address, such as the exceptional Weipa bauxite operations where high grade bauxite has been mined since the early 1960's. Even the unexploited or second tier slightly lower grade Weipa bauxite deposits have strong potential to become producing mines;
- new exploration concepts such as the recognition of a favourable geological setting for Ni-Cu-PGE sulphide style mineralisation potential in the NORNICO project, and the latest exploration techniques for locating such deposits (eg highly sensitive airborne gravity and electromagnetic surveys).

**Value adding comes about by:**

- careful selection and consolidation of tenement areas covering prospective

ground (eg NORNICO, Kingaroy and Weipa) where existing mineralisation is known and a reasonable chance of defining significant resources with grid drilling exists;

- in-fill and step-out drilling to better define the limits of the mineralisation and improve the resource status of the deposit, applicable to the NORNICO nickel laterite deposits, the Bell Creek South Lease nickel-cobalt resource, Weipa bauxite, Kingaroy coal, limestone projects, and the Kokomo scandium project.
- completing evaluations of the mineral projects and potential markets, including Scoping and more detailed Feasibility Studies;
- awareness of new development opportunities and the early recognition of embryonic niche commodities, which could have major importance in emerging industries (eg scandium's use in light metal alloys and fuel cells).



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### Proposed Exploration and Evaluation Expenditure

Metallica has excellent exposure to project development on at least ten mineral projects with five key commodities:

**TABLE 3: PROPOSED EXPLORATION AND EVALUATION EXPENDITURE**

MINERAL PROJECT	COMMODITY	TWO YEAR OBJECTIVES & EXPENDITURE	PROPOSED EXPENDITURES (2 YEAR) <sup>1</sup>	ULTIMATE OBJECTIVE
NORNICO - Bell Creek South Lease	Nickel-Cobalt	Infill resource drilling, metallurgy, Scoping Study & Pre-Feasibility Study	\$590,000 (\$1,140,000)	Produce Ni-Co concentrate from AL processing
NORNICO - other deposits	Nickel-Cobalt	Infill drilling to define a resource and then expand and increase the resource status at Minnamoolka, Bell Creek & Kokomo, permitting MDL/ML's	\$410,000 (\$1,040,000)	As for Bell Creek South Lease
NORNICO - Exploration	Nickel-Cobalt (laterite & sulphide) also PGE, Cu, Au.	Follow up of drill targets, EM and gravity surveys planned		Locate commercial sulphide and additional laterite nickel deposits
Lucky Break (Including Dingo Dam 90%)	Nickel-Cobalt	Exploration drilling of the EPMs surrounding the Dingo Dam resource. Drilling to expand the Indicated Resource within MDL312	\$140,000 (\$200,000)	Sell laterite ore to BHPB Yabulu Nickel Refinery and expand the current resource
Kingaroy Coal	Thermal Coal	Define a coal reserve, apply for a ML.	\$125,000 (\$270,000)	Sell coal to Tarong Power Station
Weipa Bauxite	Bauxite/Alumina	Permitting, infill drilling of 1970's drilling, resource definition to Indicated status, ML application, seek customers for bauxite sales.	\$220,000 (\$250,000)	Direct ship bauxite FOB and/or establish alumina plant near Weipa assuming PNG-Gladstone gas pipeline development
Kingaroy Bauxite	Bauxite/Alumina	Regional exploration drilling, metallurgy, Scoping Study for establishment of alumina plant.	\$145,000 (\$200,000)	Establish an alumina plant with product railed and sold to Gladstone refineries
Kokomo Scandium (Straits JV) <sup>2</sup>	Scandium	Straits JV, drilling, metallurgy, undertake feasibility studies and marketing.	\$10,000 (\$10,000)	Access the Al-alloy market and become the world's first significant scandium producer.
Boyne & Fairview Limestone	Limestone	Resource drilling, MDL/MLA permitting, seek partners and markets	\$110,000 (\$130,000)	Supply crushed limestone to regional markets or sell project(s) with royalty returns.
Star (Fanning) Limestone	Limestone	Establish markets and/or sale of the project	\$50,000	Supply crushed limestone to regional markets or sell project(s) with royalty returns.
Warwick West, Texas North, Six Mile <sup>2</sup> , Kokomo Gold <sup>2</sup>	Gold, Silver	Exploration and evaluation, drilling of existing prospects and generation of new targets.	\$180,000	Discover commercial Au, Ag deposit.
Prospect	Gold, Ti, PGE, Ta/Nb, diamonds	Drilling of existing exploration targets. Step out drilling next to drill intercept - 98m@15% TiO <sub>2</sub> within layered gabbro.	\$70,000	Discover commercial mineral deposit.

By having a multi-commodity portfolio of advanced mineral projects, Metallica provides shareholders with a high leverage to evaluation and development success. This smarter approach also greatly improves the chances of success compared to many junior exploration companies that are still seeking to establish an advanced mineral project(s) through greenfield exploration.

- Numbers shown based on a Minimum Subscription of \$3,000,000 and where shown in brackets (\$) is proposed where different expenditure assuming a Maximum Subscription of \$5,000,000 is raised.
- Straits earning into project. Further details on the Six Mile Joint Venture (JV) the Kokomo Gold JV and the Kokomo Scandium JV are set forth in Section 7.2 of this Prospectus.



A summary of the Company's current mineral projects is set out below. This summary is not intended to provide full details of the projects and investors are referred to the Independent Consulting Geologist's Report for additional information. The report is available separately on request or maybe downloaded from the Company's website. Contents of the report are summarised in Section 5 of this Prospectus.

#### 2.4 NICKEL-COBALT PROJECTS

Metallica through its wholly owned subsidiary QLD Gold Pty Ltd holds two nickel-cobalt projects. These are:

1. The North Queensland Nickel Cobalt (NORNICO) project, includes 2 granted MLs and over 2000 sq km of contiguous tenements covering prospective and under-explored exploration ground in the Greenvale Nickel Province. NORNICO is conveniently located 250 km from BHP Billiton's Yabulu Nickel refinery near Townsville North Queensland. The project includes several drilled Ni-Co deposits, one scandium deposit and considerable exploration potential for gold, PGE, base metals and other commodities.
2. The Lucky Break project comprises one granted MDL (Dingo Dam) which contains an Indicated Resource of 114,000 t of laterite at 1.50% Ni and 0.09% Co based on a cut-off grade of 1% Ni within two EPM's covering 300 sq km of exploration ground prospective for additional Ni - Co laterite deposits. There is considerable scope to increase the Dingo Dam resource and discover additional deposits in the project area. The project is within trucking distance (140 km) to the Yabulu Nickel Refinery which has indicated interest in purchasing delivered unprocessed high grade nickel laterite ore.

#### Nickel-Cobalt Markets

Nickel is mainly used as a component for producing stainless steel. The most recognisable stainless steel products include everyday consumer items such as knives, pots and pans, commercial kitchen benches and appliances.

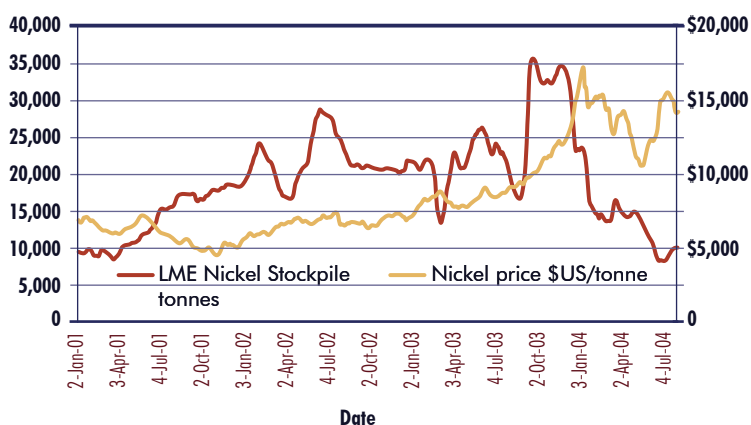
Nickel consumption has maintained a 5% plus annual growth, due largely to the stainless steel industry, which accounts for approximately two-thirds of nickel demand. Growth from this sector looks set to become even more important with increasing stainless steel consumption and manufacturing in China. China is now the largest importer and consumer of stainless steel in the world and its demand for stainless steel is driving the price of nickel, recently trading between US\$11,000/t and \$14,000 /t (\$/t).

Commodity analysts are predicting strong prices over the next few years due to tight sup-

ply and strong demand growth. Unlike most of the other base metals, there is an absence of major new nickel suppliers coming online in the near future. With no significant short term production capacity increases expected, a high nickel price is forecast to continue for the next few years giving companies a real incentive to explore and develop new sources of nickel. London Metal Exchange (LME) nickel inventories are near their lowest level in recent history, Chart 3.

Cobalt is a common by-product of nickel ore. It is mainly used in iron based alloys and as a constituent in high performance magnets. Cobalt is also used in batteries as well as in the chemical, ceramic, glass and medical industries. Although superalloys remain the major market for cobalt, the fastest-growing sector has been batteries. Recent data reports cobalt sales ranging from US\$24 to US\$28/lb.

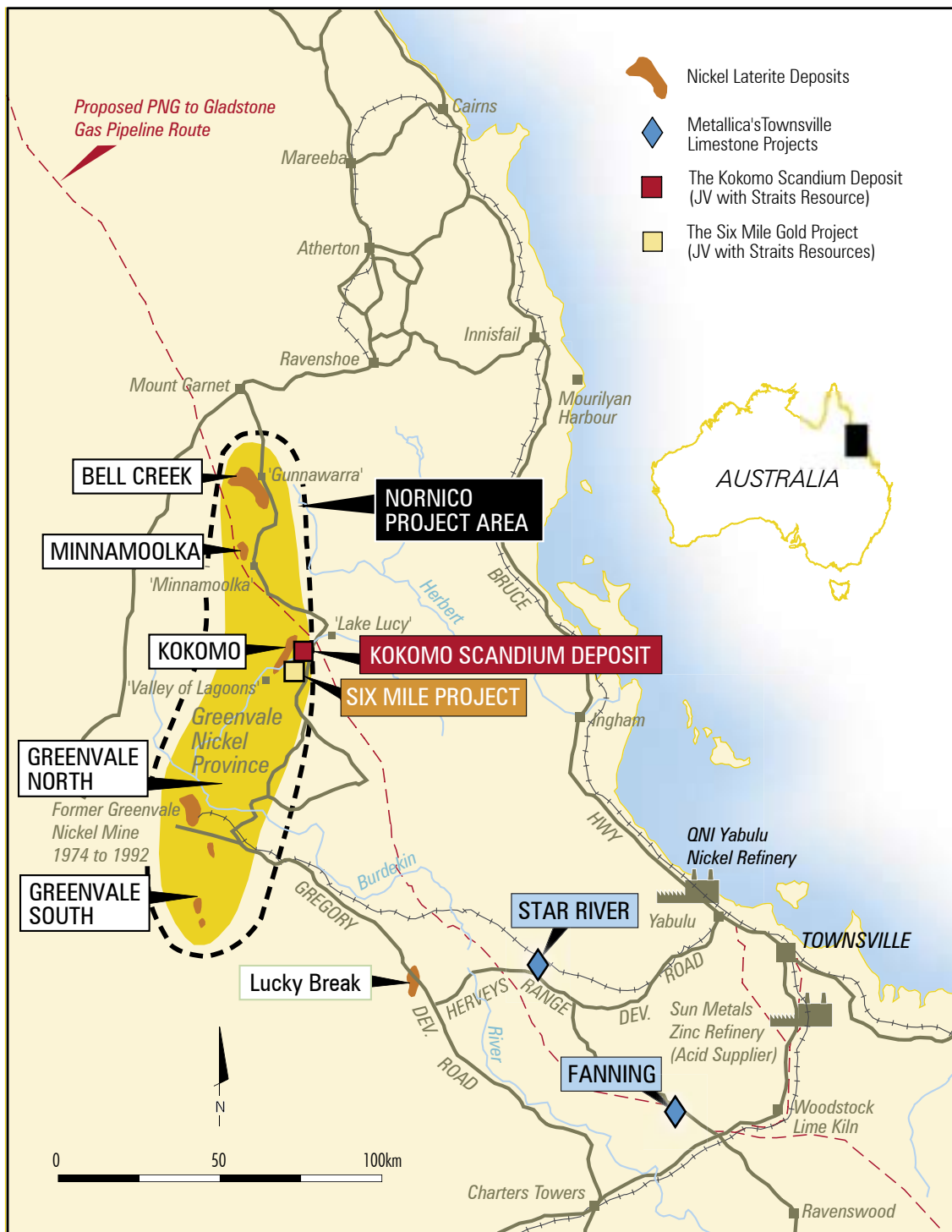
CHART 3: INTERNATIONAL NICKEL PRICE CHART BASED ON LME PRICES



# 2. metallica and its mineral projects

## mineral projects

FIGURE 2: NORNICO PROJECT LOCATIONS



## 1. NORNICO Project

The NORNICO project is located approximately 250 km northwest of Townsville, within the Greenvale Nickel Province, (Figure 2). It includes three main nickel-cobalt bearing areas at Bell Creek, Minnamoolka and Kokomo. These are contained within a relatively under explored 2000 sq km area comprising granted tenements and tenements under application held by Metallica.

Metallica's tenements are located along strike and in a similar geological setting to the former Greenvale mine (not held by Metallica), a large tonnage, high grade nickel-cobalt laterite deposit. The presence of the deposit suggests that the Greenvale area is highly prospective for high-grade nickel-cobalt deposits with the mine having produced approximately 40 Mt of high-grade

ore (1.56% nickel and 0.12% cobalt) over an 18 year period (1974 to 1992).

NORNICO has a similar geological setting and affinity to the world famous Noril'sk, Voisey's Bay and Jinchuan Ni-Cu-PGE deposit types. Metallica has secured a "first pick" tenement holding covering a potentially new Ni-Cu-PGE exploration province. This similarity has only recently been identified and has attracted major nickel mining companies to apply for tenements adjacent to Metallica's.

The Company has Ni-Cu-PGE and PGE-Au targets for immediate drilling. Detailed airborne gravity and electromagnetic geophysical surveys are planned to generate new drill targets.

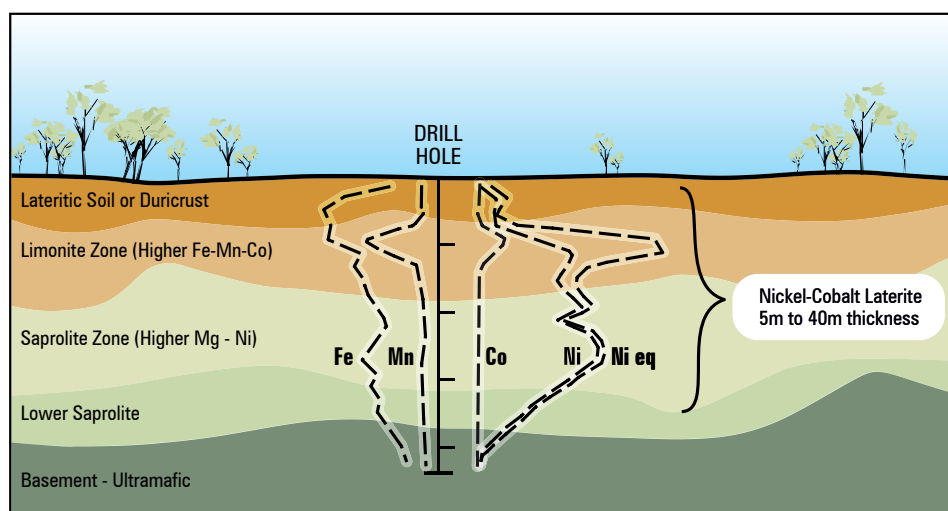
### NORNICO Project Key Features

- NORNICO currently includes over 2000 sq km of exploration tenure which

incorporates three main deposits, Bell Creek, Minnamoolka and Kokomo;

- Tenure comprises two granted ML's at Bell Creek, ten granted EPM's (Bell Creek, Minnamoolka, Minnamoolka Extended, Kokomo, Mt Garnet South, Moonmyata, Greenvale North and South, Lucky Downs and Six Mile) and two EPM Applications (Greenvale South 2 and Mt Garnet South 2), all within the Greenvale Nickel Province;
- An Inferred Resource in the Bell Creek South Lease of 2.42 Mt at 1.40% Ni, 0.1% Co based on a cut-off grade of 1% Ni. In addition there is also a low grade Inferred Resource of 3.87 Mt at 0.78% Ni, 0.1% Co based on a cut-off grade of 0.6% Ni.

FIGURE 3: WHAT ARE NICKEL LATERITES?



Laterites are secondary deposits formed near the surface by chemical weathering and oxidation over considerable time. Nickel and cobalt rich laterites are localised over ultramafic rocks, mainly peridotites, dunites and their serpentinised alteration products. Laterite formation and mineralisation is typically restricted to within a maximum depth from surface of 50 metres. Laterites are relatively soft and laterite profile characteristics vary with the bedrock composition and fracturing, the position within the local landscape and the weathering history. All deposits are characterised by variations and combinations on sub-horizontal weathering profiles.

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- Screening testwork on the silica rich laterite ore at Minnamoolka indicates that an upgrade to approximately 2.0% nickel may be achievable over portions of the deposits;
- Atmospheric Leaching (AL) Heap Leach (HL) technology may allow relatively low capital and treatment costs for the production of Ni-Co concentrate (containing approximately 30% Ni-Co metal) from NORNICO ores. A Scoping Study and then a Pre-Feasibility Study will examine the possible development of an AL Heap Leach operation, initially at Bell Creek and possibly at other NORNICO deposits, and the trucking of Ni-Co concentrate to the Yabulu Nickel Refinery and/or other nickel refineries.
- NORNICO is thought to have a similar geological setting and affinity to the world famous Noril'sk, Voisey's Bay and Jinchuan Ni-Cu-PGE deposit types.

### NORNICO Ni-Co DEPOSITS

The most advanced NORNICO nickel deposit, based on drill density and tenure, is the Bell Creek South Lease resource, which is within a granted ML. An Inferred Resource at Bell Creek South Lease of 6.29 Mt at 1.02% Ni and 0.1% Co based on a cut-off grade of 0.6% Ni was estimated by Computer Aided Geoscience (CAG) in August 2004 using historical and current company drill data. The deposit contains approximately 64,000 t Ni and 4400 t Co. Bulk density measurements of the nickel laterite and infill and step out drilling are required to upgrade the resource category of this deposit to Measured and Indicated.

In 1998 Metallica completed four widely spaced drillholes (BCL - 01, 03, 04, and 06) that were used to obtain samples for initial metallurgical test work and which were representative of the

high grade ore in the Bell Creek South Lease. In July 2004 four additional infill holes (BCLRC-07 - 10) were drilled to obtain further samples for metallurgy. High grade intercepts include: (refer to Figures 4 and 5)

**BCL-01 (3-19m) 16 m @**  
2.4% Ni, 0.14% Co (2.96 Ni eq)

**BCL-03 (3-27m) 24 m @**  
1.4% Ni, 0.19% Co (2.16 Ni eq)

**BCL-05 (5-29m) 24 m @**  
1.45% Ni, 0.14% Co (2.01 Ni eq) \*

**BCL-06 (24-42m) 18 m @**  
1.72% Ni, 0.18% Co (2.44 Ni eq) \*

**BCLRC-07 (9-27m) 18m @**  
1.25% Ni, 0.09% Co (1.61 Ni eq)

**BCLRC-09 (26-42EOH) 16m @**  
1.70% Ni, 0.19% Co (2.49 Ni eq) \*

**BCLRC-10 (14-40m) 26m @**  
1.02% Ni, 0.09% Co (1.38 Ni eq)

\* Hole ended in significant mineralisation

**NOTE:** Nickel equivalent (Ni eq) accounts for the combined value of nickel and cobalt. Unless stipulated otherwise, Metallica has used a Ni eq of the nickel grade plus four times the cobalt grade (Ni

At the drill tested areas of Bell Creek North Lease, Bell Creek North West, Minnamoolka and Kokomo, there has been insufficient drilling density to quantify resources. Drilling of these deposits to at least an Indicated Resource status will be a key objective within the next two years.

At Minnamoolka, free silica, boxwork laterite is the dominant ore type exposed over an area with maximum dimensions of 2.5 km x 1 km and was intersected by wide-spaced drilling in the early 1970's. A drilling programme in June 2003 designed to look for extensions of the prospective laterite under the surrounding sediment and basalt was unsuccessful.

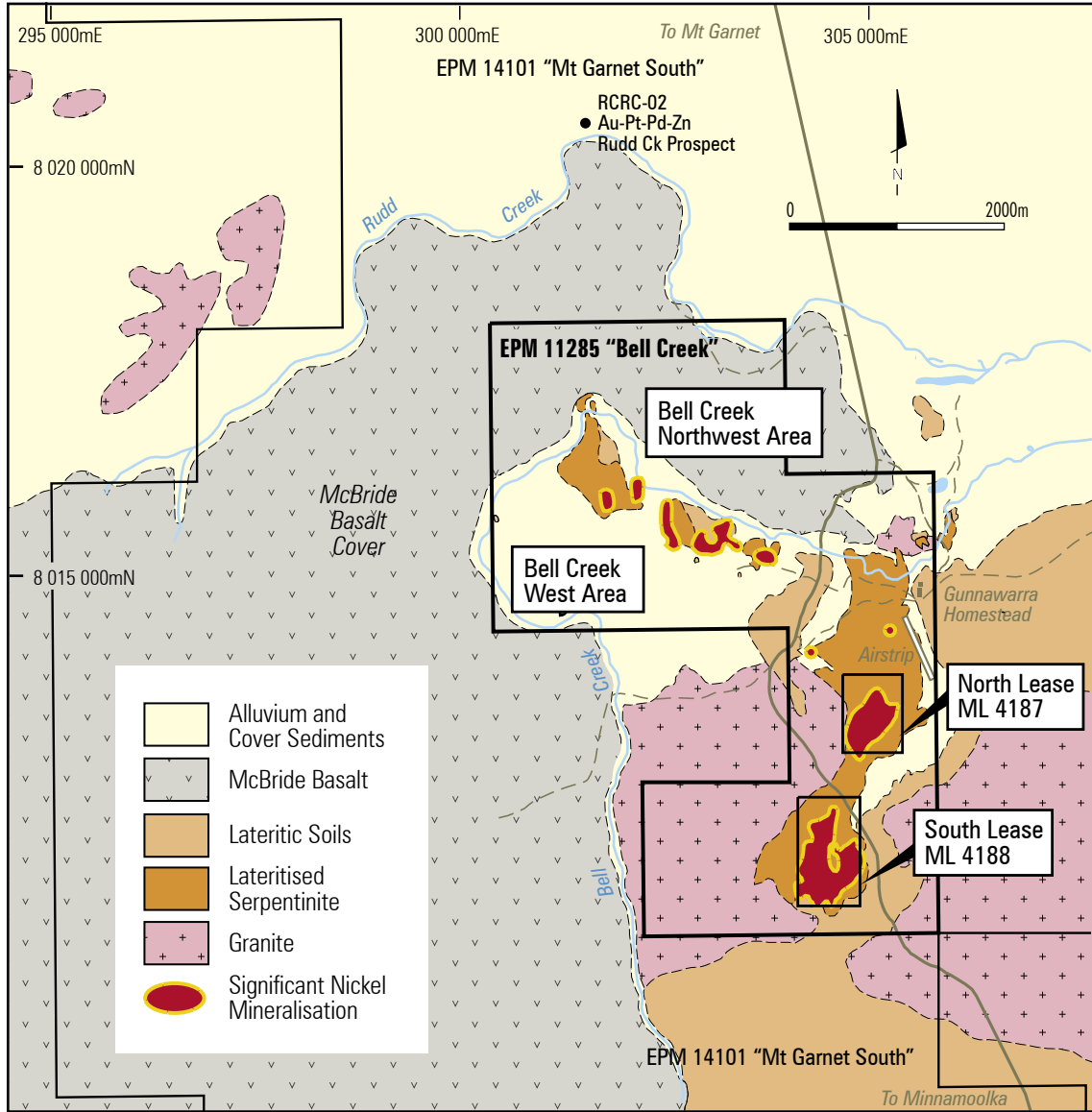
However two holes drilled in the same programme into outcropping laterites at Minnamoolka recorded wide zones of significant Ni mineralisation, i.e. MIN-06 intersected 32m at 0.75% Ni and MIN-07 which intersected 8m at 1.45% Ni and 0.38% Co from 2-10m within a 31m interval grading 0.89% Ni. Minnamoolka geology and drillhole locations are presented in Figure 6. Analysis of representative samples from the Minnamoolka gravel pit showed that substantial upgrading of the silica rich material (silica boxwork) is possible by simple screening (beneficiation) processes. Screening test results from a gravel pit sample grading at 1.36% Ni and 0.02% Co returned values of 2.3% Ni and 0.03% Co in the fines (minus 5mm size fraction). The fines accounted for 54% of the original sample weight and contained 91% Ni and 81% Co of the original sample.

No similar testwork has been conducted on Bell Creek or Kokomo nickel laterites, however similar ore upgrading characteristics are anticipated from existing drilling information and from exposures of laterite that show high proportions of free silica.

At Kokomo, laterite mineralisation is within a northerly trending ultramafic complex about 16 km long and up to 700m wide. High cobalt grades are present and drill intercepts of 20m (2-22m) at 0.77% Ni and 0.93% Co (equivalent to 4% Ni) have been recorded, (Figures 7 and 8).

In addition to the known deposits mentioned above there is considerable exploration potential within Metallica's exploration permits and applications in the NORNICO project area. With several target areas exhibiting similar anomalous features to those of known deposits, it is likely that additional resources will be identified.

**FIGURE 4: BELL CREEK GEOLOGY AND PROSPECTS**



**NORNICO-BELL CREEK PROJECT**

The Bell Creek project includes three known nickel laterite deposits, Bell Creek South Lease, Bell Creek North Lease and Bell Creek Northwest.

The Bell Creek South Lease contains a JORC compliant Inferred Resource of 6.29 Mt of

1.02% Ni and 0.1% Co based on a cut-off grade of 0.6% Ni. Exploration drilling to date has identified additional high grade Ni and Co mineralisation within Metallica’s tenements and additional resources are expected to be identified by infill drilling at the Bell Creek North Lease and the Bell Creek Northwest

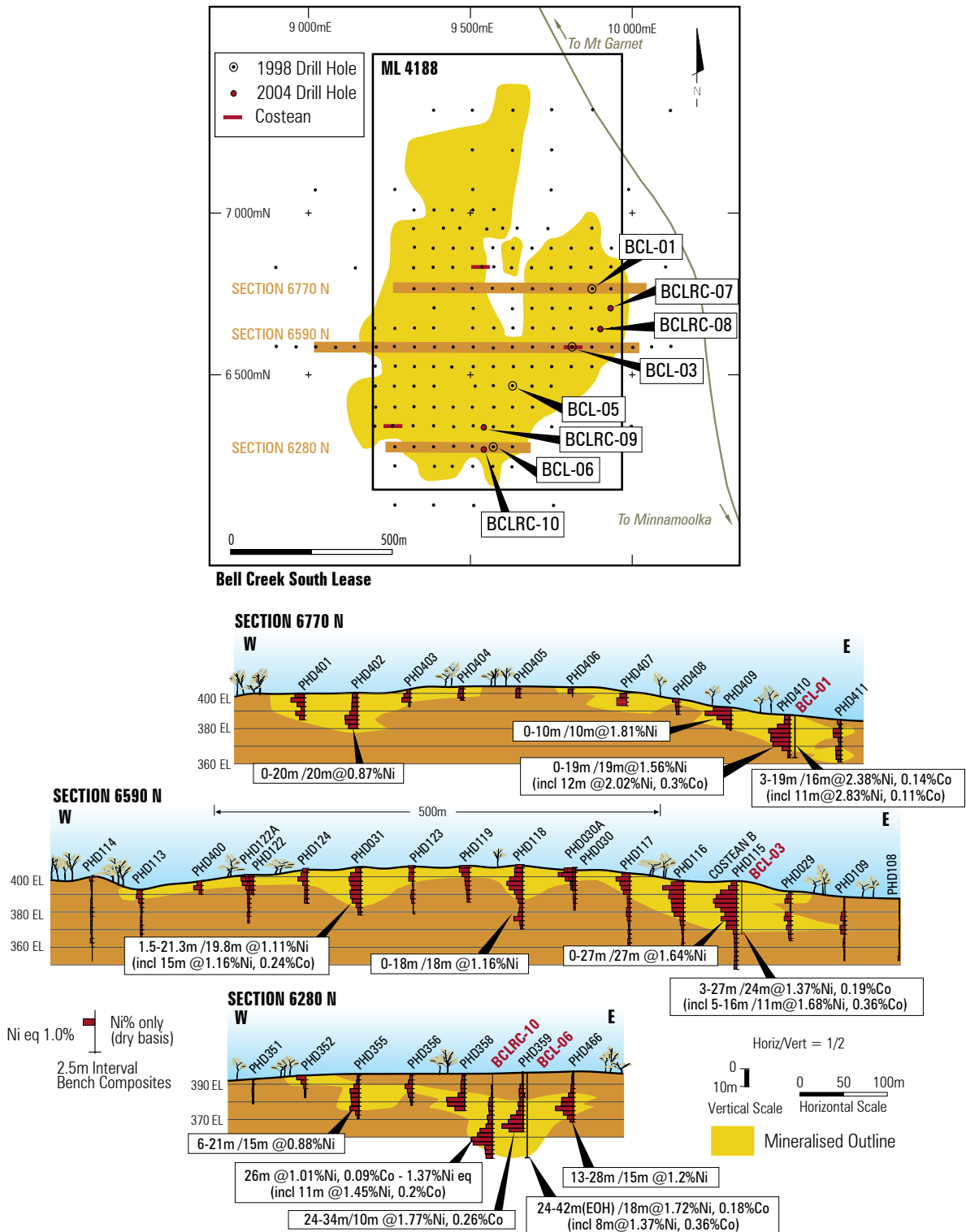
deposits. Metallica’s strategy at Bell Creek is to increase the resource base and status with further drilling and to advance the project to feasibility stage.

Metallica’s evaluation and development focus for the Bell Creek project is on a low capital, low operating cost process for the treatment of

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FIGURE 5: BELL CREEK SOUTH LEASE CROSS SECTIONS AND DRILL HOLES



nickel-cobalt laterite ores and the production of nickel/cobalt concentrate. Scoping and Pre-Feasibility Studies will be conducted over the next two years after the drilling programmes are completed. The studies will incorporate atmospheric leach (AL) metallurgical processes, including the option of Heap Leaching and Heated Agitated Tank Leaching (HATL) which are expected to offer considerably lower capital costs and operating costs than existing Pressure Acid Leach processes. BHP Billiton announced in March 2004 it will be using its AL technology for treating part of the ore body at the Ravensthorpe nickel project in Western Australia. At this stage no commercial arrangements exist between Metallica and BHP Billiton in relation to use of the BHP Billiton AL technology.

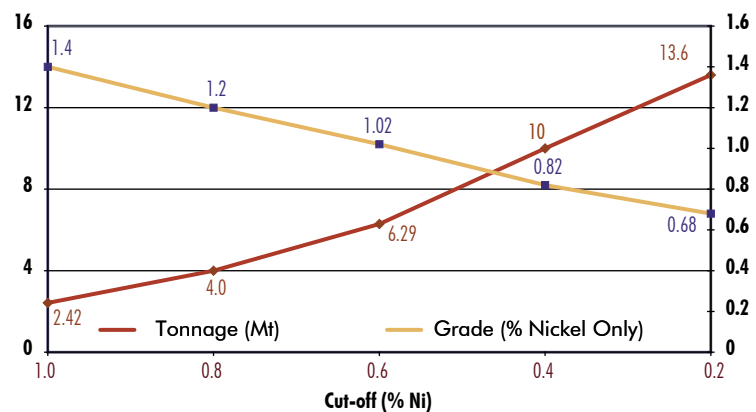
Metallica envisages producing an intermediate nickel-cobalt concentrate for sale to the nearby Yabulu Nickel Refinery or other refineries which produce nickel and cobalt metal.

Metallica has budgeted \$590,000 (assuming Minimum Subscription) over the next two years for the completion of detailed drilling, metallurgical testwork, and a Scoping Study into the exploitation of the Bell Creek South nickel cobalt laterites. Oversubscriptions will be allocated to initiating and progressing a Pre-Feasibility Study. If Maximum Subscription is achieved, Metallica has budgeted \$1.14 million for more detailed evaluation programmes and the completion of a Pre-Feasibility Study.

#### Metallurgy – Atmospheric Leaching (AL)

Metallica's NORNICCO evaluation and development strategy is directed towards AL, particularly the Heap Leaching option. To date the Company has carried out only limited indicative acid leach testwork and conceptual development studies. Metal-

**CHART 4: BELL CREEK SOUTH LEASE INFERRED RESOURCE**



lica has not yet undertaken specific Heap Leaching testwork, however it has undertaken preliminary AL-HATL testwork. The Company commissioned a metallurgical laboratory in Brisbane to conduct a preliminary evaluation of direct AL on saprolite ore from Bell Creek. Results indicate that after 6 hours of leaching, at 95°C, 82.6% of the nickel and 55% of the cobalt can be extracted from a saprolite sample assaying 1.93% Ni, 0.078% Co, 13% Fe and 12% Mg, with an acid consumption of 0.99 t/t.

Previous explorers carried out AL testwork on the Kokomo nickel laterite in 1995. A composite 5 kg sample from 25 RAB holes assaying 1.39% Ni, 0.21% Co, 27% Fe and 4% soluble Mg was used which gave extractions of 94.5% Ni, 74.7% Co at 95°C with an acid consumption of 334 kg/t.

Expected commercial benefits of this AL extraction process:

- AL Heap Leaching operations and HATL plant design should allow for smaller process plant size and increased flexibility, which in combination with high grade (>1.2%

Ni eq) plant feed is expected to produce robust operating margins;

- A major reduction in capital cost compared with PAL;
- Smaller scale operations can be feasible, particularly if high grade Ni + Co laterite feed is available;
- Shorter construction period and commissioning times;
- Relatively simple components and lower implementation risk;
- Can achieve comparable Ni/Co recoveries to PAL.



Silica Boxwork Laterite - NORNICCO

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As summarised new ore processing technologies are becoming available which could dramatically reduce both the capital cost (and hence minimum deposit size) and operating cost of producing nickel-cobalt products from laterite deposits. Patented alternative AL technology for processing nickel laterite ores, including tank leaching using heated sulphuric acid and Heap Leaching at ambient temperatures has also been developed. Both these processes can recover nickel and cobalt by acid leaching without pressurisation.

AL is new and relatively simple extraction technology that has yet to be used commercially and is currently being evaluated by several companies with nickel laterite projects. There are two basic options to the AL processing of nickel-cobalt laterites:-

### (1) Heap Leach

Heap Leaching is expected to be similar to conventional Heap Leaching of gold and copper ores. It has the potential to achieve competitive recovery rates (70-85% for Ni and 60-75% for Co) at relatively low capital and operating costs.

Heap leaching of metal ores using acid solutions is a well-proven process, especially in the copper industry. This process has also been successfully introduced for the extraction of other metals. The Heap Leaching of low grade nickel sulphide ores has been successfully tested on trial heaps.

Heap Leach processing technologies in the gold and copper industries treat ores with a typical unit metal content value of around \$20 to \$40/t, whereas the nickel-cobalt ore at Bell Creek is envisaged to have a metal content value of around \$100 to \$200/t.

Metallica envisages that the Bell Creek South Lease laterites would be selectively mined, crushed, screened and blended to an optimum

Ni-Co grade and physical consistency. The laterite material would then be agglomerated into pebble sized pellets and then stacked in to 3m to 10m high heaps on HDPE (High Density Poly-Ethylene) plastic liners. The liners act as an impermeable membrane to collect and channel the leached solutions to collection ponds. The heaps are covered with a network of plastic pipes and hoses that drip water and sulphuric acid solution on top of the heaps. The dilute acid solution percolates slowly through the heap and dissolves the Ni, Co and some other minerals. The solution flows down to the HDPE liner and then horizontally along a gentle slope to the collection pond. Dissolved Fe, Al, Mg and some other minerals are major contaminants in the acid leaching solution; these are selectively removed from the solution using elegant but simple chemical precipitation control with limestone raising the PH to approximately 4.4. The Ni-Co bearing solution is returned to the heap to increase the Ni-Co levels in the re-circulating solutions. From each cycle a portion of the Ni-Co or "pregnant" solution is bled away into tanks for selective Ni-Co precipitation (by further raising the PH) as a mixed Ni-Co hydroxide precipitate. The Ni-Co hydroxide concentrate after de-watering would have a Ni plus Co content of approximately 30%.

The Heap Leach method could be used on both high and low grade nickel-laterites provided the blended laterite ore types had iron levels generally below 25% and the material was not predominantly clayey.

### (2) Heated Agitated Tank Leaching (HATL)

HATL uses a sequence of large tanks containing a continuously stirred heated (95°C) acidic aqueous solution which leaches the nickel and cobalt from the laterite at atmospheric pressure. The leaching is non-selective with most minerals being absorbed into solution to a greater or lesser degree. The process leads to

the formation of a Ni-Co bearing solution. Up to 90% of the Ni can be absorbed into solution however contaminants such as Fe, Mg, Al, Cr and Mn are also present in the solution. These contaminants need to be removed prior to pure Ni Co precipitates being produced. The HATL method requires higher grade ores (i.e. > 1.5% Ni eq), more specialised and expensive design and materials (such as titanium alloys) due to the corrosive higher temperature of the acidic solutions and the solid/liquid separation steps. This results in a higher capital cost than the Heap Leaching option. However the process would be expected to have higher Ni-Co recoveries which can be achieved within 6 to 10 hours of leaching as opposed to up to 10 months for Heap Leaching. Because of the higher costs and higher acid requirement of HATL compared with the Heap Leach method, Metallica will orientate its processing evaluation and feasibility studies towards the AL-Heap Leach option.

### Bell Creek South Lease Scoping Study

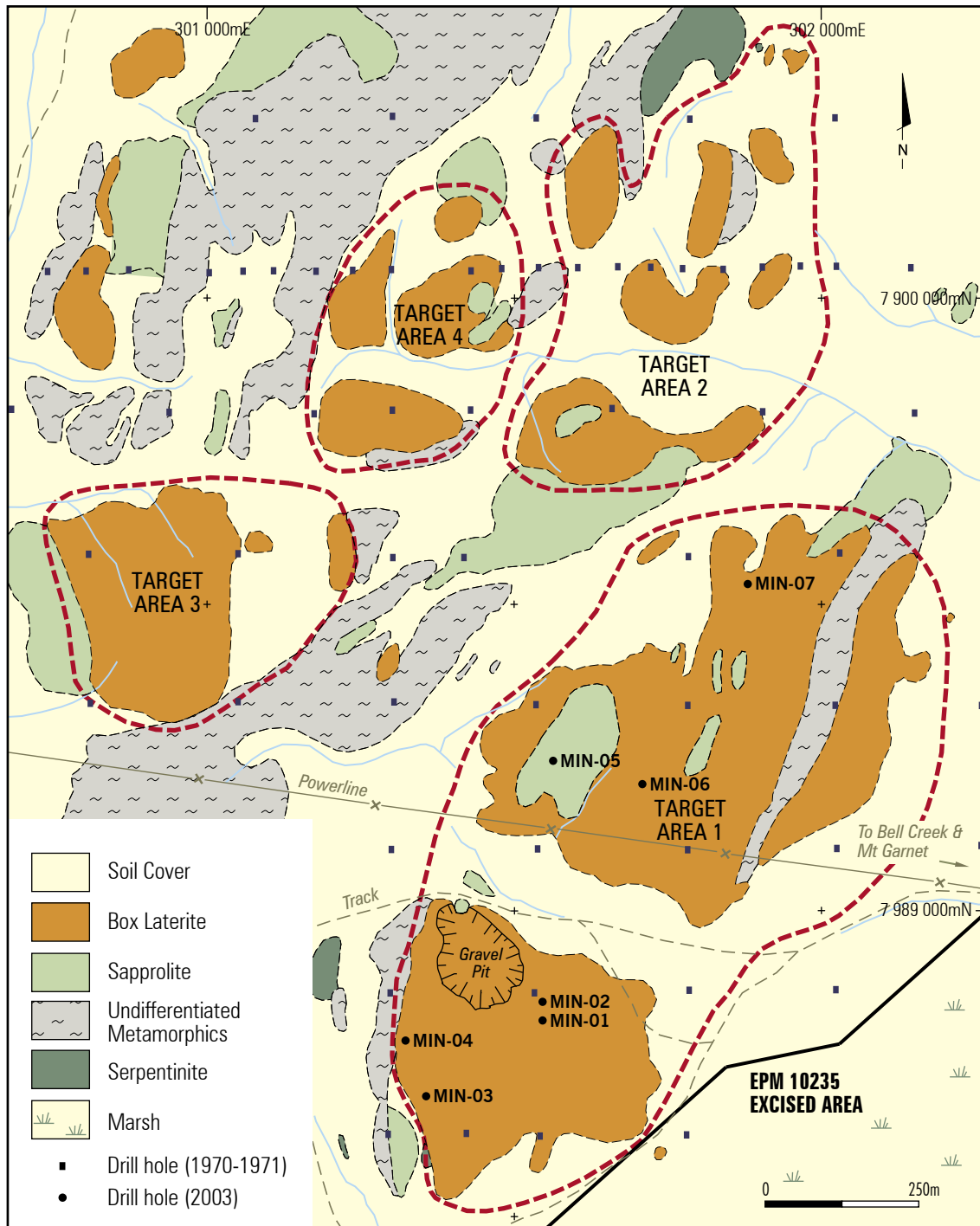
The Scoping Study will identify the major issues that will need to be addressed for advancing the project and providing a preliminary economic assessment of the project's commercial potential.

Preliminary metallurgical testwork and processing plant design will be a significant aspect of the Scoping Study. Testwork would involve bottle roll tests, heated agitated tank tests and column leach tests to replicate the Heap Leach operation and evaluate the amenability of the Heap Leach and/or the HATL methods on the Bell Creek laterites.

Consideration will be made for the most appropriate AL option, either Heap Leaching or HATL or both.

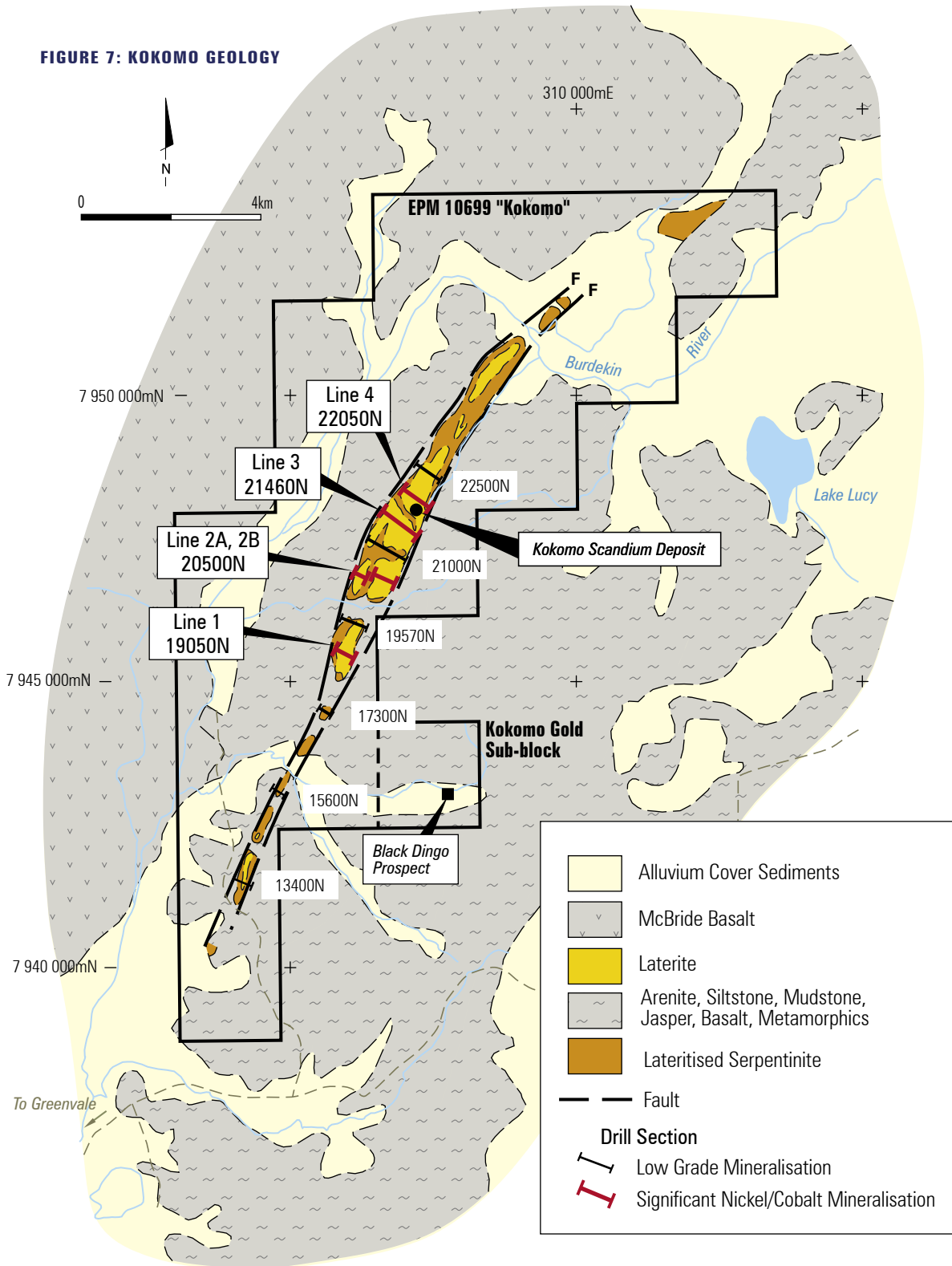


**FIGURE 6: MINNAMOOKLA GEOLOGY**

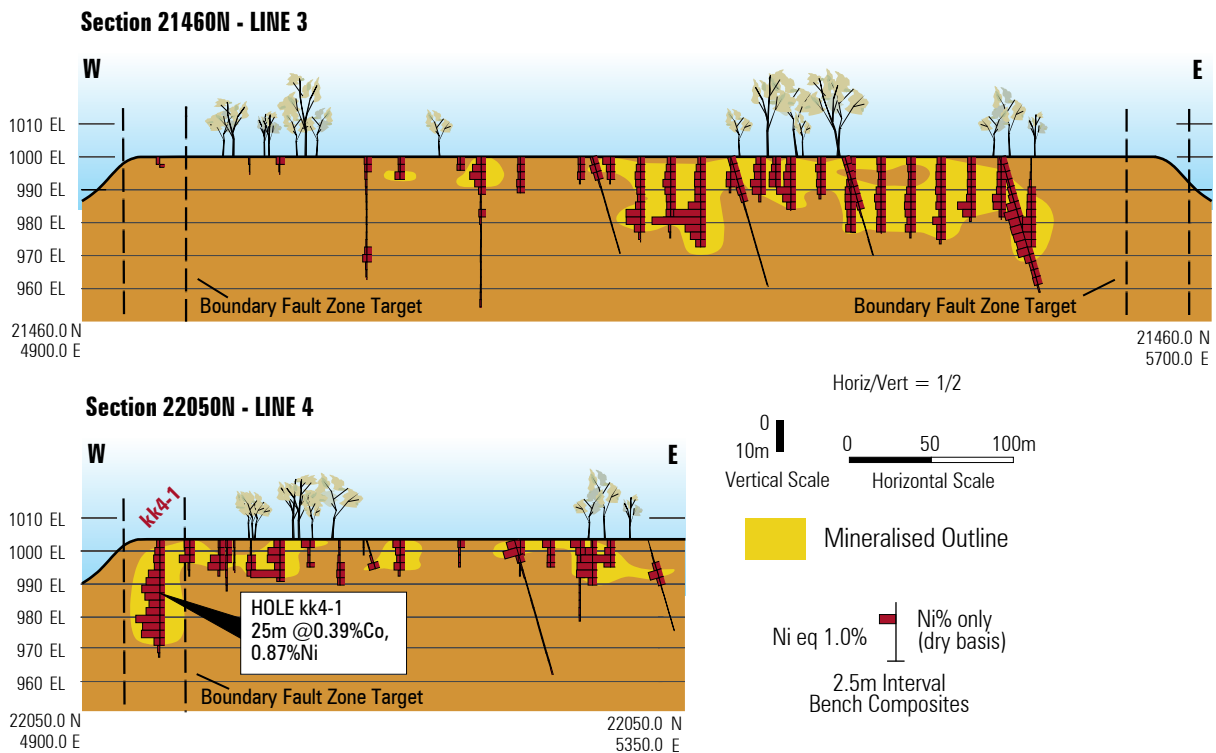


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**FIGURE 8: KOKOMO CROSS SECTIONS**



**Bell Creek South Lease Pre-Feasibility Study**

Bulk sample and beneficiation testwork is planned. More detailed metallurgical testwork will be undertaken in the second year, including laboratory Heap Leach testwork and a possible trial Heap Leach of at least 5,000 tonnes to demonstrate the process. The product from the respective metallurgical processes is planned to be a Ni-Co hydroxide concentrate.

The Pre-Feasibility Study will identify the major issues that need to be addressed for advancing the project and providing an economic assessment of commercial

potential. The Study will determine the viability of advancing to a full Feasibility Study, and assuming a favourable result, to continue on to project development. The Pre-Feasibility Study will assess a number of key areas including resource studies, metallurgy, processing selection, site selection, infrastructure, landowner and community relations, environmental impact and capital and operating costs.

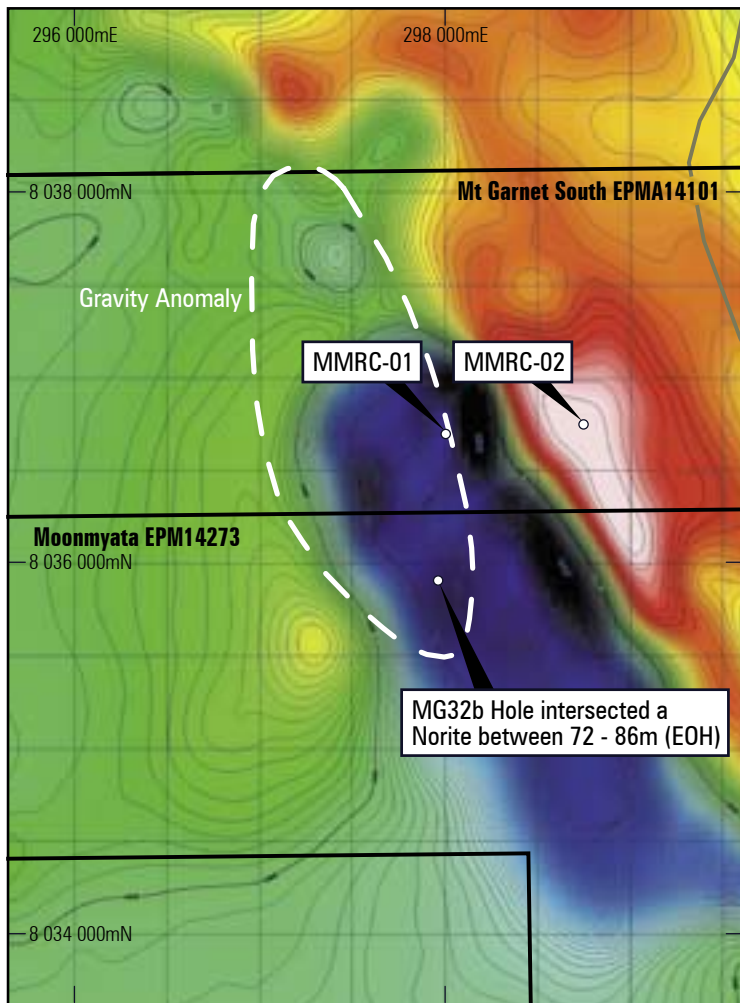
Subject to the results, Metallica's preferred intention is to initially develop the Bell Creek project and then gain supplementary high grade beneficiated Ni-Co laterite supply trucked from other deposits (such as Min-

namoolka and Kokomo) within NORNICO and produce a nickel-cobalt concentrate,

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**FIGURE 9: MOONMYATA AEROMAGNETIC IMAGE - NORNICO**



whether at sole risk or through a joint venture partnership.

### **Nornico Regional Exploration Strategy**

Metallica's principal strategy is to explore for major new nickel laterite deposits (Greenvale size targets) within the Greenvale-Mt Garnet region (2000 sq. km of tenements) and to find additional resources for the Bell Creek projects. Metallica is taking a fresh approach to the region and continues to compile a list

of regional exploration targets for inspection, exploration and testing. Several large targets have been generated from a combination of favourable geological and topographic settings, previous exploration geochemistry, and recent government geophysical data. The NORNICO project is also considered prospective for Ni-Cu-PGE sulphide deposits

### **NORNICO Ni-Cu-PGE Sulphide Exploration Model**

Giant magmatic hosted Ni-Cu-PGE deposits, like Noril'sk in Russia, Jinchuan in China, and Voisey's Bay in Canada, form as accumulates of sulphide minerals at the base of metal rich basaltic magma chambers. The deposits are associated with major crustal fracturing leading to the emplacement of metal rich magma and the formation of Ni, Cu, and PGE rich orebodies.

### **Key features for focusing exploration:**

Geological and chemical understanding of these major sulphide deposits is now sufficiently developed to provide exploration methodologies to target deposits in similar geological settings. Metallica's NORNICO Ni-Cu-PGE sulphide exploration model builds on this knowledge.

Metallica has identified in the NORNICO project area, the following geological factors which are consistent with the Ni-Cu-PGE sulphide model and conducive to the formation of these deposits. These key features are:

1. **Major Crustal Faulting:** Trans-crustal faults are considered to be the principal magma and ore controlling feature. The NORNICO project covers the eastern edge of the Georgetown Crustal Block, of Precambrian Age, where it is faulted against the younger Hodgkinson Block and the Broken River Embayment. The NORNICO tenements cover areas of ultramafic and mafic rocks spatially related to the Palmerville and Burdekin Fault (refer Figure 10).
2. **Mid-continental rift setting associated with Large Volcanic Provinces:** Extensive basaltic lava complexes, occupy in excess of 3850 sq km in North QLD where they form over 100 volcanic vents. Sampling of these vents may help identify chalcophile

depleted areas pointing to associated metal sulphide bearing intrusions. Metallica has recently interpreted two large perfectly circular features from the magnetic imagery which covers the McBride flood basalt. One of the features (Kinrara) is approximately 20 km in diameter and is characterised by magnetic high features on the outer rim. The second circular feature, Boomerang, is over 15 km in diameter. Circular features are prime exploration targets and are commonly related to caldera subsidence and strong hydrothermal alteration and mineralisation as a result of volcanic activity. In the case of the famous Sudbury nickel mine (Canada); the unusual associated structure was due to meteorite impact which caused deep crustal fracturing and mantle plumes of Ni-Cu-PGE rich magmas.

3. **Emplacement of mafic-ultramafic intrusions:** Large ore bodies are likely to be associated with large scale basic intrusions and flood basalts. The NORNICO project covers the major portion of the mapped and interpreted prospective rock types (ultramafic and mafic intrusions), which are exposed in a narrow belt, approximately 200 km long and up to 12 km wide, situated near the Palmerville and Burdekin Faults forming the eastern edge of the Georgetown Block.
4. **Identification of gravity layered mafic intrusions:** The best known intrusives or sills associated with flood basalts are in the Noril'sk region where differentiated Ni-Cu-PGE sulphide ore bearing intrusions occur in clusters and form elongated irregular bodies. Ultramafic rocks exhibiting gravity segregation have been identified in the NORNICO region and trace Ni - sulphide mineralisation

(pentlandite) has been recognised in a Ni-Cr bearing tremolite-serpentinite.

Figure 10 shows the key geological and tectonic features and supports Metallica's belief in the high prospectivity of the Nornico project area.

#### Current NORNICO priority Ni-Cu-PGE sulphide targets.

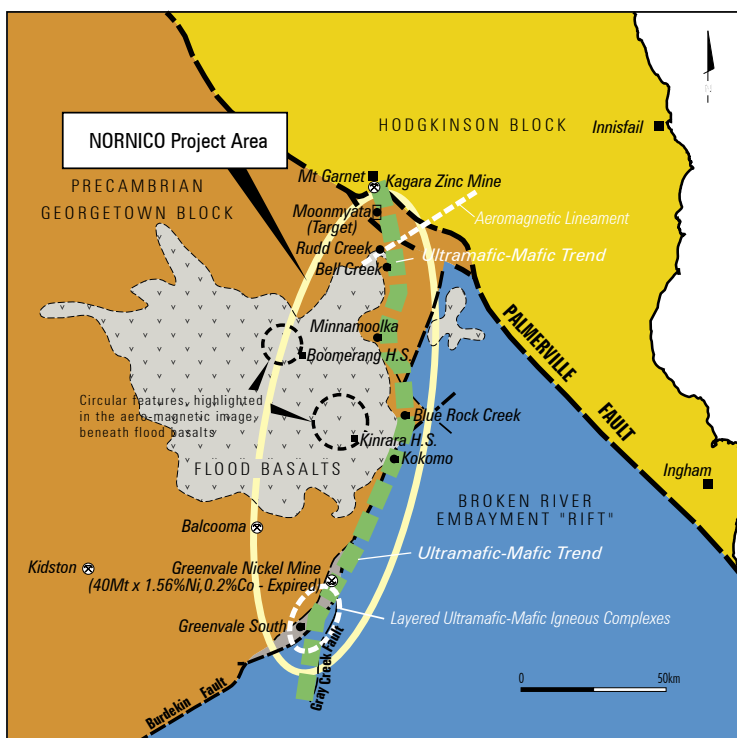
Metallica has identified many potential nickel-sulphide target areas within the NORNICO project.

One readily identified target is the Moonmyata Geophysical Anomaly (7 km south of Mt Garnet). It is represented by an intense magnetic high-low feature approximately 3 km x 1 km in size associated with a coincident

gravity high and is situated adjacent to the Palmerville Fault, (Figure 9) A hole drilled into this anomaly by a previous explorer in 1982 intersected a cumulate norite. Norite is a mafic igneous intrusive often found in gravity segregated plutons and associated with nickel sulphide deposits such as are found at Sudbury, Voisey's Bay and Noril'sk.

Metallica drilled two holes into the Moonmyata anomaly in July 2004. One hole (MMRC-01) intersected a norite from 92m to 198m end of hole (EOH) confirming a favourable geological host. The second hole, MMRC-02 intersected a magnetite rich granite. Drilling at Rudd Creek (located 4 km north of Bell Creek) in July 2004 intersected a Au-PGE anomaly over an 8m sample composite within a wide zone (20m) of plus 0.1% Zn mineralisation.

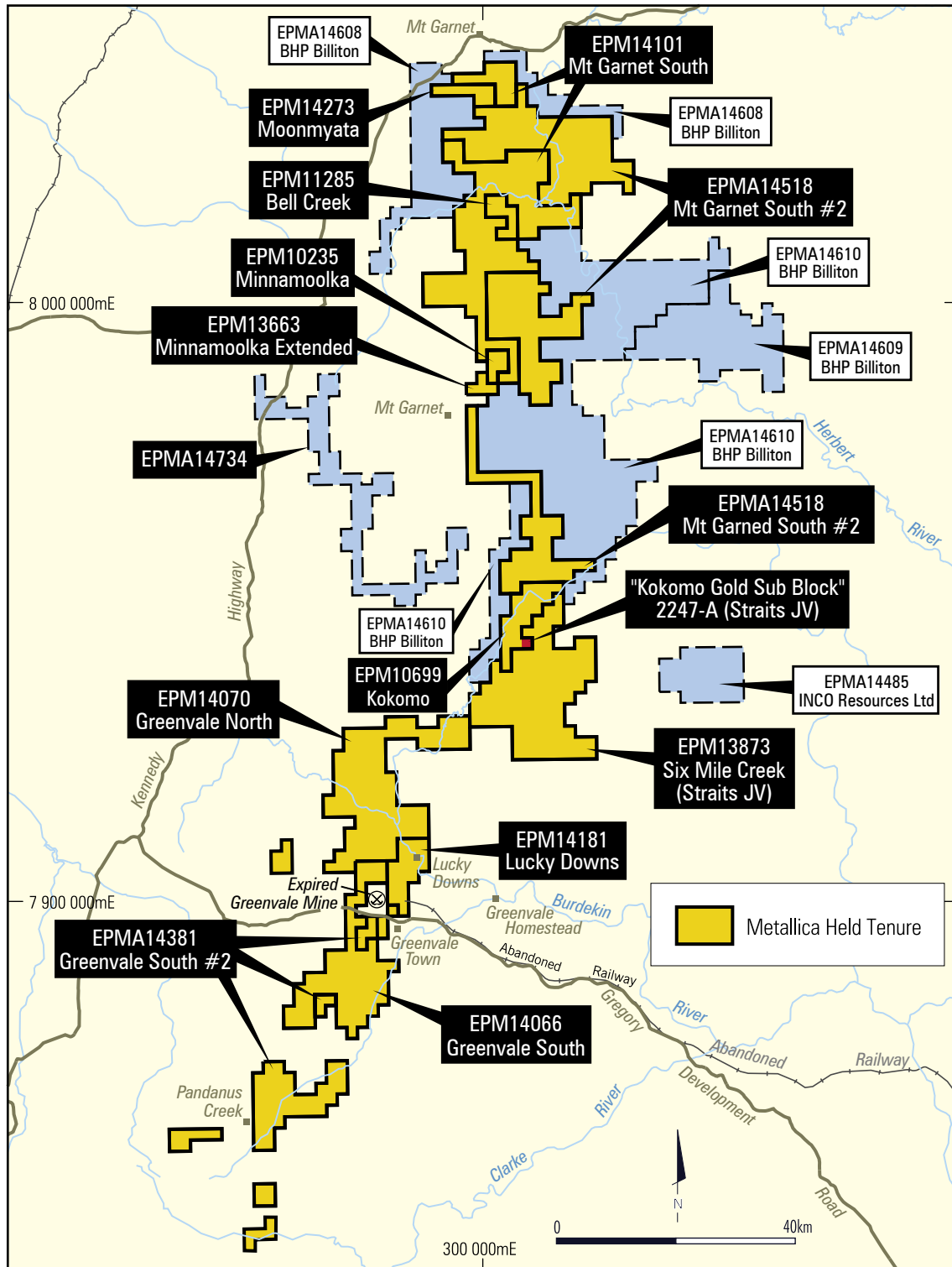
**FIGURE 10: REGIONAL GEOLOGICAL FEATURES**



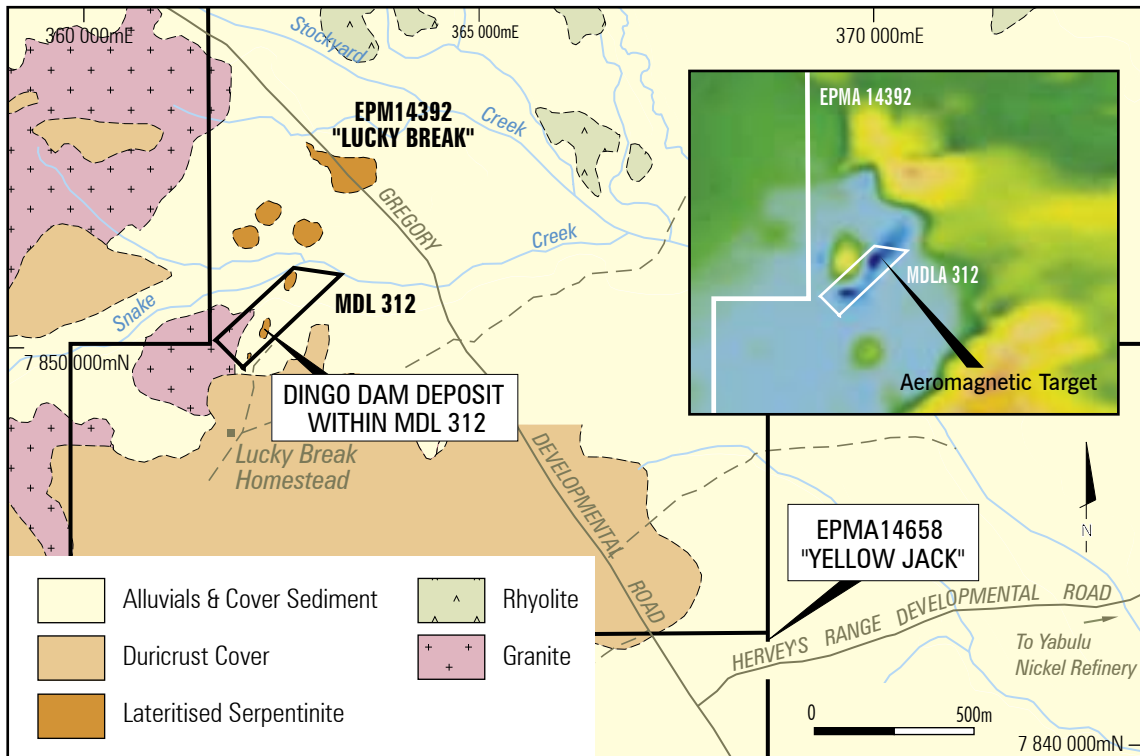
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FIGURE 11: NORNICO AND SURROUNDING TENEMENTS



**FIGURE 12: LUCKY BREAK GEOLOGY**



Metallica plans to complete additional drilling at Rudd Creek and to conduct down-hole and ground EM, and airborne gravity surveys at Moonmyata in order to generate more specific drill targets.

Major nickel mining companies have recently applied for large tenements adjacent to Metallica's northern NORNICO tenements, Figure 11.

## 2. Lucky Break - Nickel Project

Metallica holds 100% of the Lucky Break EPM and the Yellow Jack EPM Application and a 90% interest in the Dingo Dam (MDL), formerly named the Verde Tinto Project. Within the MDL Metallica has completed a total of 83 close-spaced air core drillholes which delineated an Indicated Resource of 114,000 tonnes

grading 1.50% Ni, 0.09% Co based on a cut-off grade of 1% Ni. This includes a higher grade Indicated Resource of 45,000 tonnes of 1.85% Ni, 0.11% Co and 17.5% Fe. The deposit is located approximately 140 km from the Yabulu Nickel Refinery near Townsville and is accessed via the Hervey's Range Developmental Road.

In 2000, Metallica investigated extracting the nickel laterite and trucking it directly to the Yabulu Nickel Refinery. However, despite negotiating an ore sales contract, the project was deemed to be marginal due to the limited mine life, high trucking costs and the relatively low price paid for delivered ore. There is now a sealed road to the Yabulu Nickel Refinery within 2 km of the Dingo Dam nickel resource which should reduce trucking costs

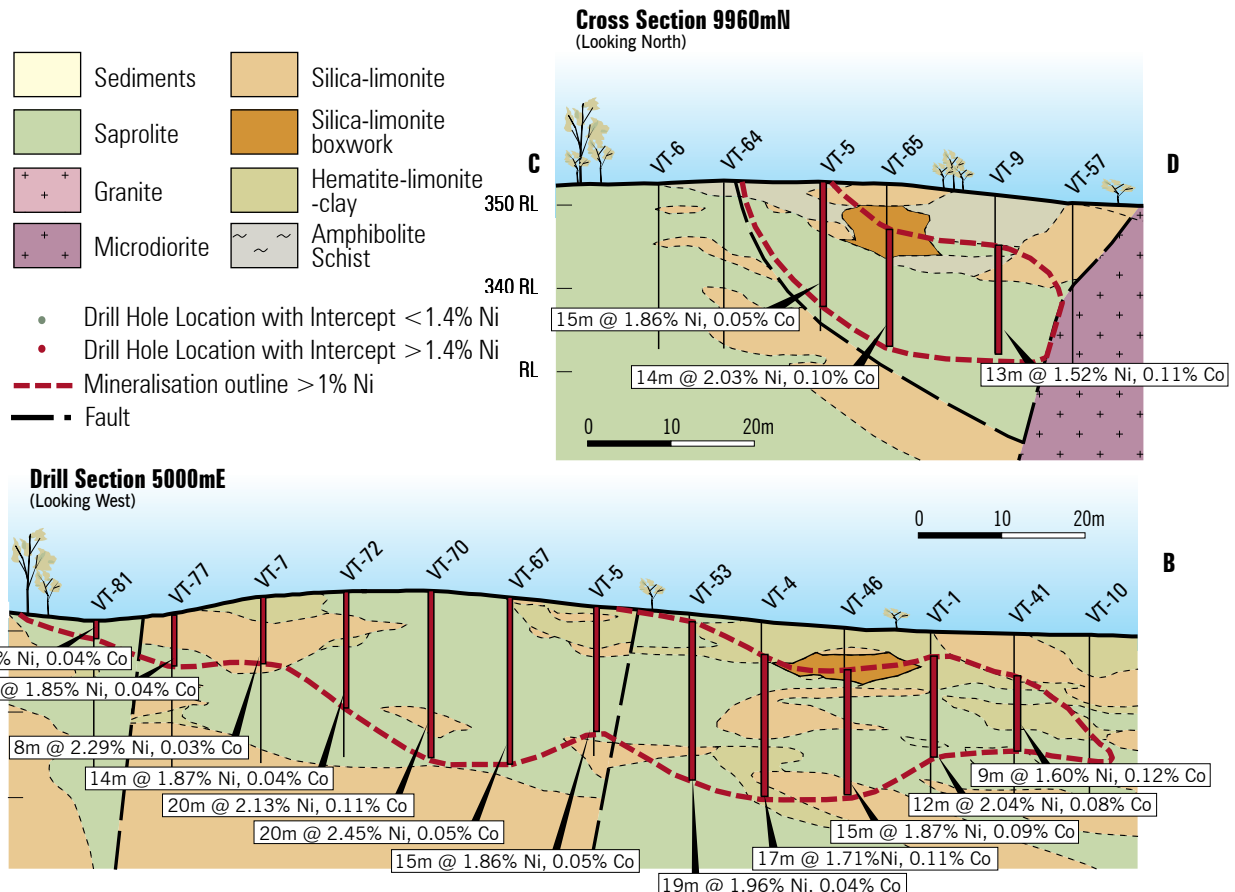
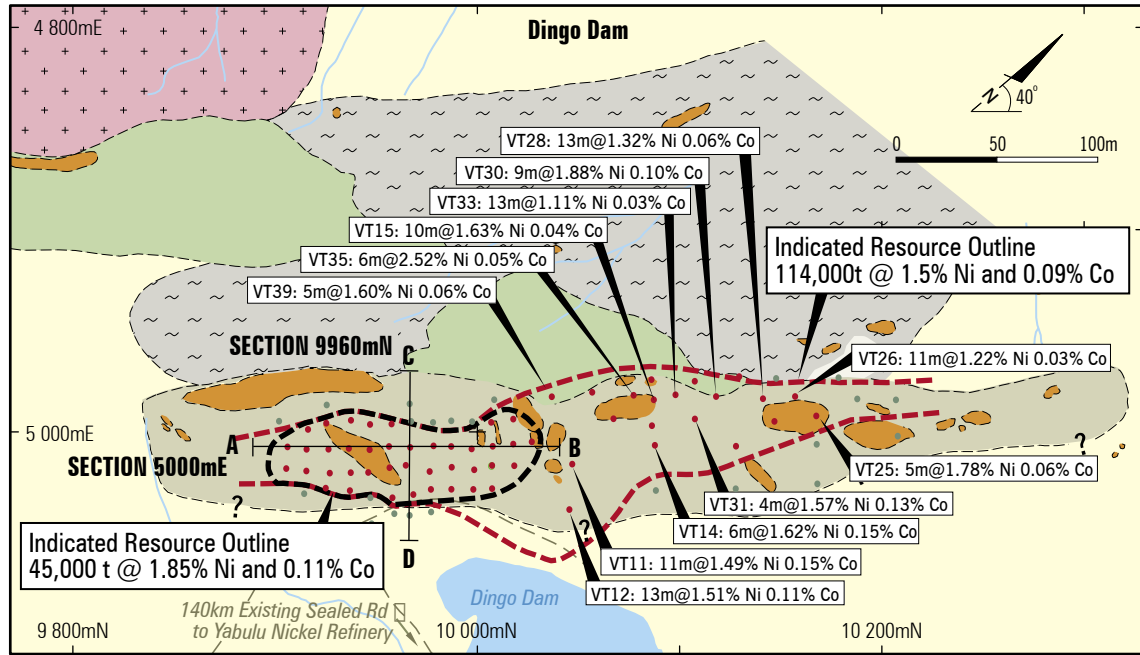
and the nickel price is now higher which may allow a higher price on delivery. These factors warrant a review of the project's viability.

Further drilling is planned within the MDL to find new deposits, increase the size of the Indicated Resource, and locate additional resources along strike. To expand the resource base and improve economies of scale, additional ground surrounding the MDL has been taken up. One EPM (EPM 14392, Lucky Break) comprising 43 sub-blocks surrounds the MDL and the second EPMA (EPMA 14658, Yellow Jack) comprising 50 sub blocks abuts EPM 14392 to the south. A number of mag-

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FIGURE 13: LUCKY BREAK-DINGO DAM DEPOSIT SURFACE GEOLOGY AND MINERALISATION





netic and radiometric anomalies which could represent possible basement ultramafic rocks have been identified within these tenements. These targets will be tested by shallow drilling shortly after the company becomes listed.

## 2.5 KINGAROY COAL PROJECT

Metallica through its wholly owned subsidiary Kingaroy Aluminium Pty Ltd, (KAPL) holds the Kingaroy coal project, EPC Application 882, which comprises the Taabinga coal Resource and other drilled coal prospects within the Tarong Basin. The Taabinga coal resource is approximately 10 km south of Kingaroy and only 25 km from the Tarong coal fired power station which supplies approximately 30% of Queensland's electricity. The Tarong Power Station was completed in 1986 and generates 1400 Megawatts of electricity from four 350 Megawatt boiler/turbo-generator units. Tarong Energy has recently expanded its capacity by a further 450 Megawatts with the construction of the Tarong North Power Station. As Tarong Energy does not own a coal deposit close to the Tarong Power Station it is reliant on purchasing coal from the nearby Meandu coal mine. Metallica will investigate the possibility

of being able to secure a portion of this local coal market estimated to be in the order of 6 Mt of thermal coal per annum.

In excess of 250 holes have been drilled by previous explorers within Metallica's current EPC boundary. The holes confirm the presence of a significant thermal coal deposit. The EPC application area covers Late Triassic Tarong Beds within the Tarong Basin. Three main coal seams, close to surface, have been identified; namely the Kunioon, Swain and Goodger Seams which have an average thicknesses of 9m, 5.3m and 10.7m respectively.

In July 2004 Metallica commissioned Runge Limited (Runge) to complete a resource study on the deposit. This study identified a Measured and Indicated Resource of 181.9 Mt of thermal coal within Metallica's EPC tenement boundary. Runge were also requested to undertake a preliminary investigation into the economic potential of the Taabinga coal Resource to assess its potential viability as a future supplier of coal to the Tarong Power Station. Figures 14 details the tenement and resource outline. Figure 15 shows geological sections across the deposit.

The geological model developed by Runge contains 208 holes and uses a thickness cut-off of 0.3m. A Measured and Indicated thermal coal Resource of 181.9 Mt was estimated. Results of the study and the coal specifications are detailed in Table 4. The

**TABLE 4: TAABINGA COAL RESOURCE SUMMARY**

RESOURCE CATEGORY	VOLUME MILLION M <sup>3</sup>	IN SITU MASS Mt	RD IN SITU t/m <sup>3</sup>	IM % a.d.	Ash % a.d.	SE MJ/kg	TS % a.d.
Measured	28.8	45.1	1.57	4.9	35.6	19.99	0.34
Indicated	87.3	136.7	1.57	4.9	37.1	19.68	0.35
Inferred	84.7	133.1	1.57	4.9	37.0	19.63	0.34
<b>M + Ind</b>	<b>116.1</b>	<b>181.9</b>	<b>1.57</b>	<b>4.9</b>	<b>36.7</b>	<b>19.75</b>	<b>0.34</b>
<b>M + Ind + Inf</b>	<b>200.8</b>	<b>315.0</b>	<b>1.57</b>	<b>4.9</b>	<b>36.8</b>	<b>19.70</b>	<b>0.34</b>

**NOTE:**

In Situ Mass

RD In Situ t/m<sup>3</sup>.

IM % a.d.

Takes into account the density of the coal

Relative density in situ tonnes per cubic metre

Included Moisture % after air drying

Ash % a.d.

SE MJ/kg

TS % a.d.

Other detritus in the coal after air drying

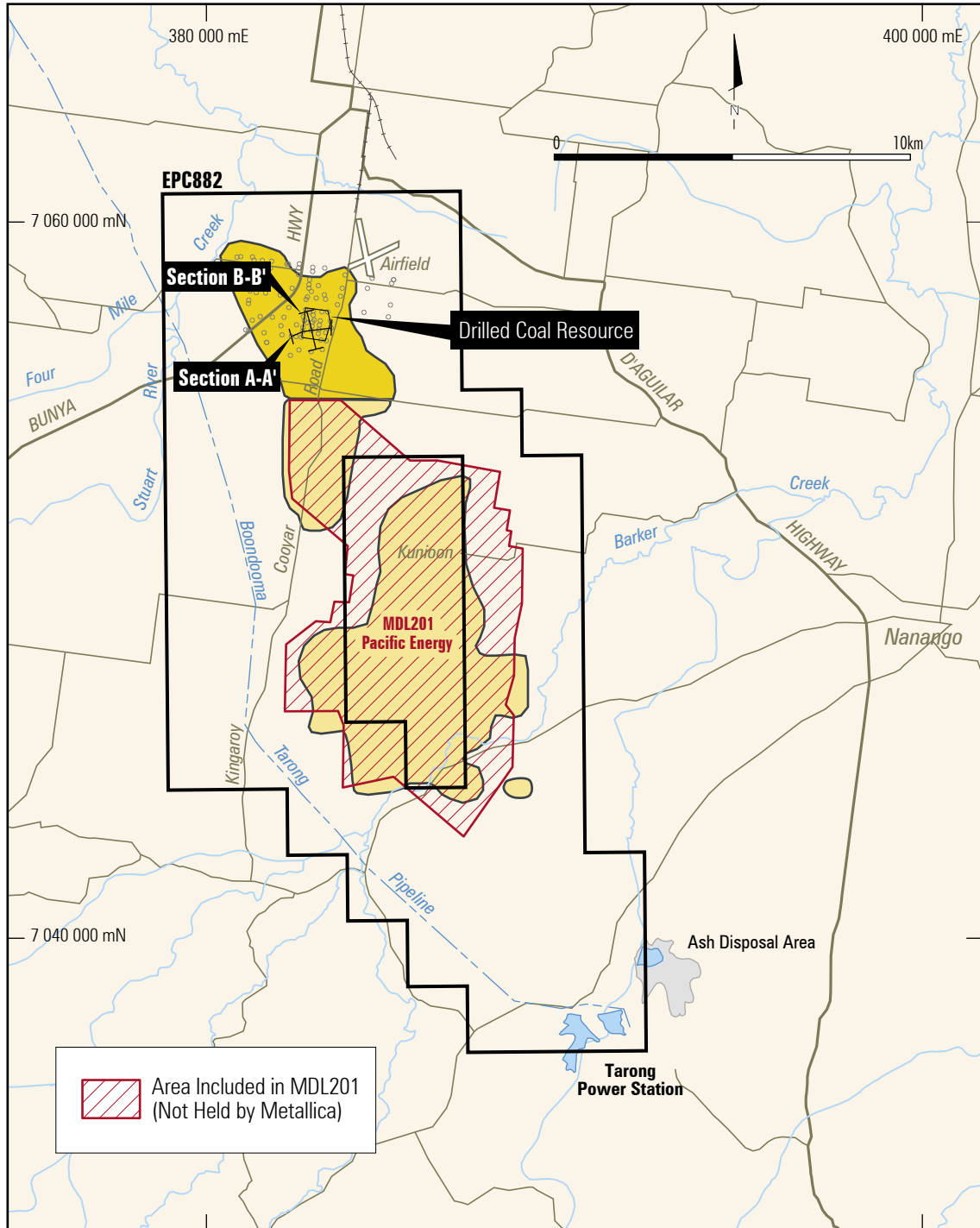
Specific Energy in Mega-Joules per kilogram

Total Sulphur % after air drying

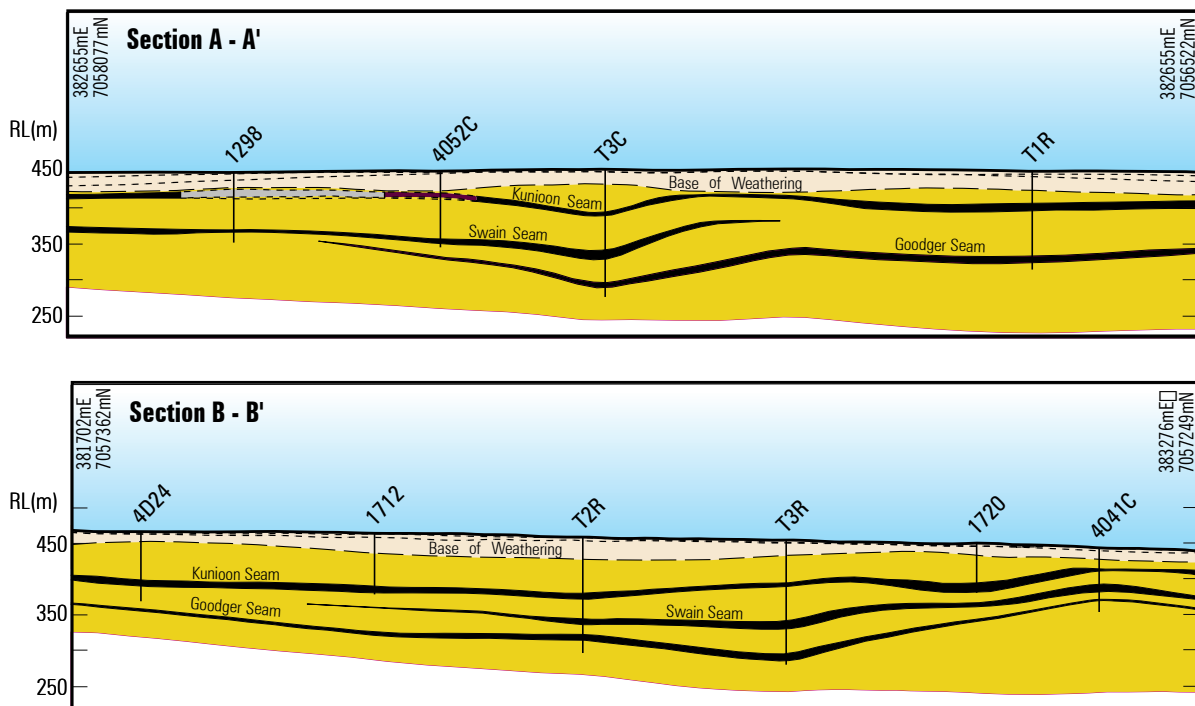
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FIGURE 14 KINGAROY COAL TEMEMENT PLAN



**FIGURE 15 KINGAROY COAL CROSS SECTIONS**



Taablinga Resource has a high ash content, however when washed it is similar in quality to the washed coal currently supplied to the Tarong power station.

The Resource estimate is JORC compliant.

Runge also reviewed the potential of the deposit to support an opencut mining operation supplying 1 to 1.5 Mtpa of coal to the local power station at less than 28% ash content for at least 20 years. A preliminary estimate of the delivered cost of coal was then made.

Three of the coal seams present were modelled for the study. In descending order from the surface, these are the Kunioon Seam, the Swain Seam and the Goodger Seam. The preliminary mineability study by Runge defined recoverable resources as those with a delivered mining cost of <\$1.00 per gigajoule.

The study found that:

- Some 23 Mt of thermal coal is available from all seams.

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- The average specific energy of the coal is 19.7 MJ/kg.
- After allowing for practical pit design and irregular coal zones, a supply of approximately 20 Mt of coal could be provided to specification at an average cost of \$1.00/ gigajoule.

### 2.6 BAUXITE PROJECTS

Metallica through its wholly owned subsidiary KAPL has recently applied for one tenement at Weipa and two tenements at Kingaroy over areas of known bauxite occurrences.

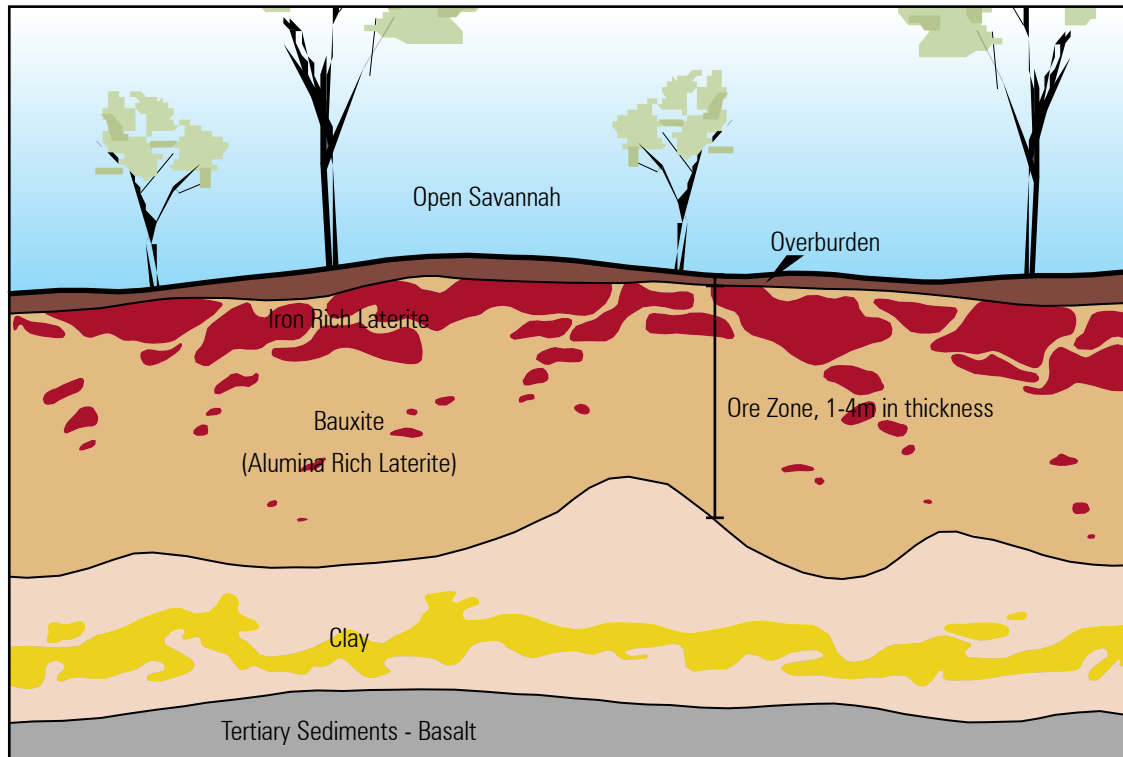
These tenements comprise Metallica's bauxite project.

#### Weipa Bauxite Project

Metallica has acquired an area covering significant bauxite deposits centred approximately 50 km North East of Weipa on the Cape York Peninsula. Metallica through its subsidiary KAPL has recently signed a Mineral Rights Sharing Deed with Sigma Kaolin Ltd and its subsidiary Norkay Pty Ltd; these are Queensland based exploration companies which have in excess of 500 sub blocks in the

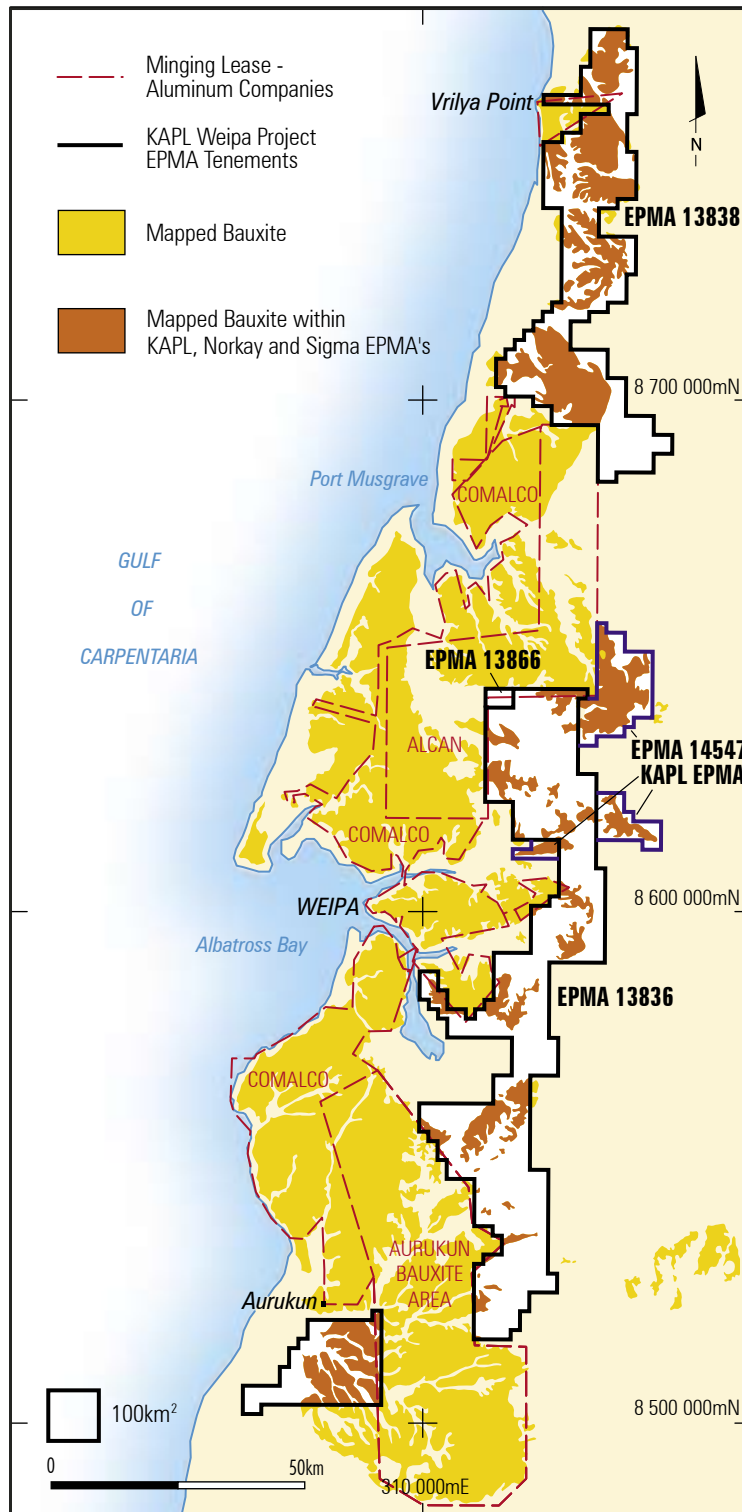
Weipa area under application. Norkay and Sigma are focussed on delineating high grade kaolin deposits in the Weipa area, and have allowed Metallica exclusive rights to explore for bauxite within their tenements. The area held by Metallica, Sigma and Norkay is shown in Figure 17. The Sigma - Norkay tenement applications cover extensive areas of mapped bauxite. Borehole data exists for this area and will be compiled by Metallica once tenure has been granted.

FIGURE 16: WHAT IS BAUXITE?



Bauxite is the principal ore from which aluminium oxide (alumina) is extracted and from which aluminium is eventually smelted. The name "bauxite" is applied to particular areas of laterite where the concentration of alumina is sufficient to consider economic extraction. Bauxite is a naturally occurring material, formed over millions of years by chemical weathering of rocks. It is primarily comprised of one or more aluminium hydroxide minerals plus various mixtures of silica, iron oxide and clays. Bauxite can be claylike and earthy and range in colour from white to deep brown or red according to the nature and quantity of its components. Bauxite also occurs characteristically in pisolitic form (i.e., composed of small, round concretions), as is typical of Weipa bauxites. Approximately four tonnes of bauxite are required to produce two tonnes of alumina, which smelts to approximately one tonne of aluminium metal (Al).

**FIGURE 17: NORKAY / METALLICA WEIPA TENEMENT MAP**



Metallica's Weipa tenement has deposits that are partly defined by exploration drilling in the 1960's-70's. Metallica has four main areas of bauxite within EPM Application (EPMA14547). These are:

- Catfish Creek (also named Dulcie River), the northern part of a large bauxitic laterite with maximum extent of approximately 20 km north-south and 10 km east-west;
- Wenlock River - the southern part of a bauxitic laterite that is probably continuous with the Catfish Creek-Dulcie River laterites;
- Wenlock - maximum extent of approximately 12km by 3km;
- Mission River - approximately 9 km by 2 km in extent.

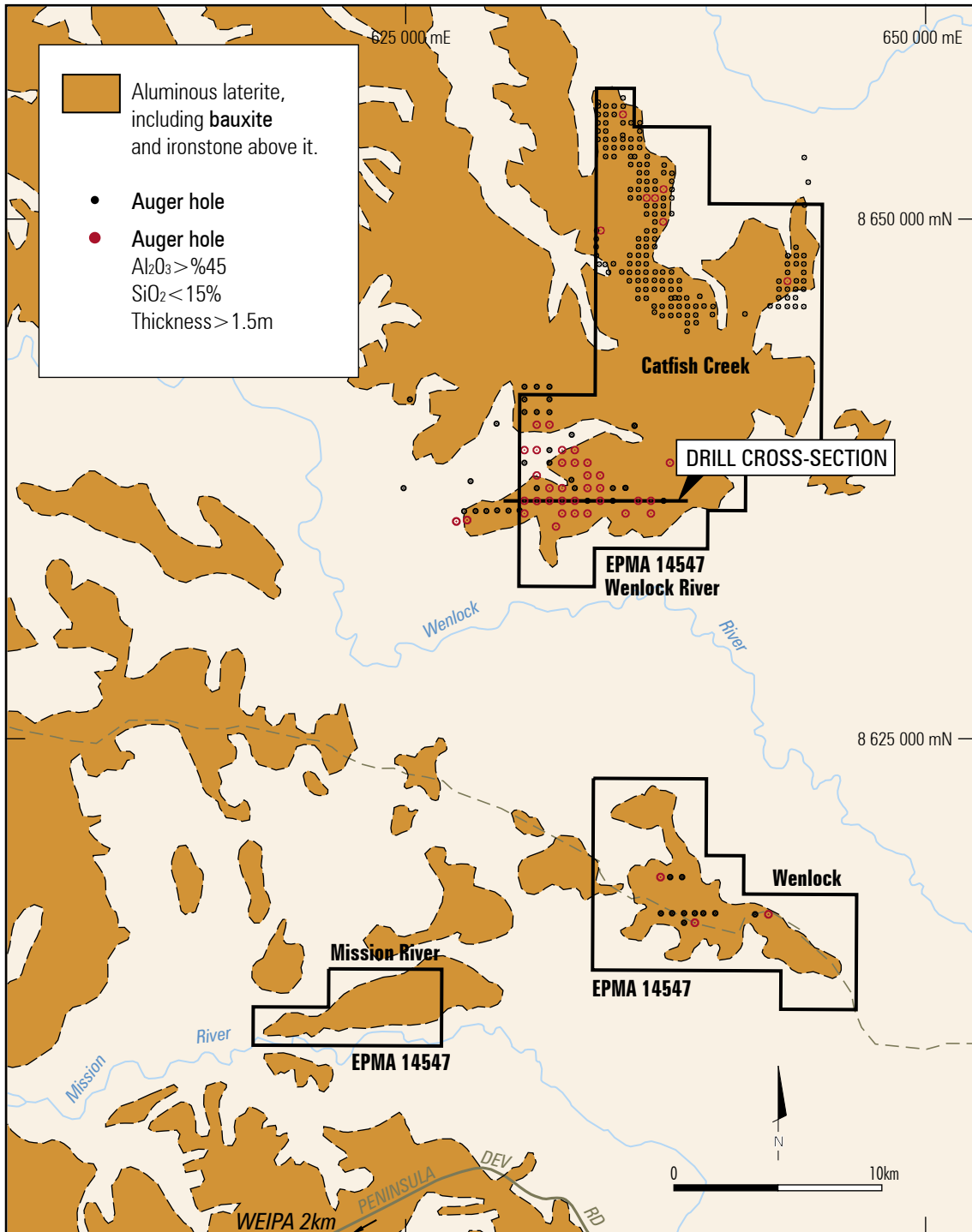
Previous explorers in the area delineated sizable bauxite deposits, with one explorer outlining a bauxite deposit in the Wenlock River area. Total reactive silica was higher than 9% and the total  $Al_2O_3$  was 54%. The greater part of this deposit is within Metallica's Weipa tenement application. Drillholes which intersected  $> 50\% Al_2O_3$ ,  $< 15\% SiO_2$  and had a thickness  $> 1.5m$  from the Wenlock Prospect are tabulated in Table 5. As the drillholes were completed on a grid pattern approximately 610m (2000 feet) apart, each drill intercept represents approximately a 37 hectare area. Figure 18 shows historical drillhole locations and a cross section across the Wenlock River prospect is presented in Figure 19.

The bauxites within the tenement boundary follow a discontinuous southeasterly extension of bauxite from the adjoining ML. The bauxite

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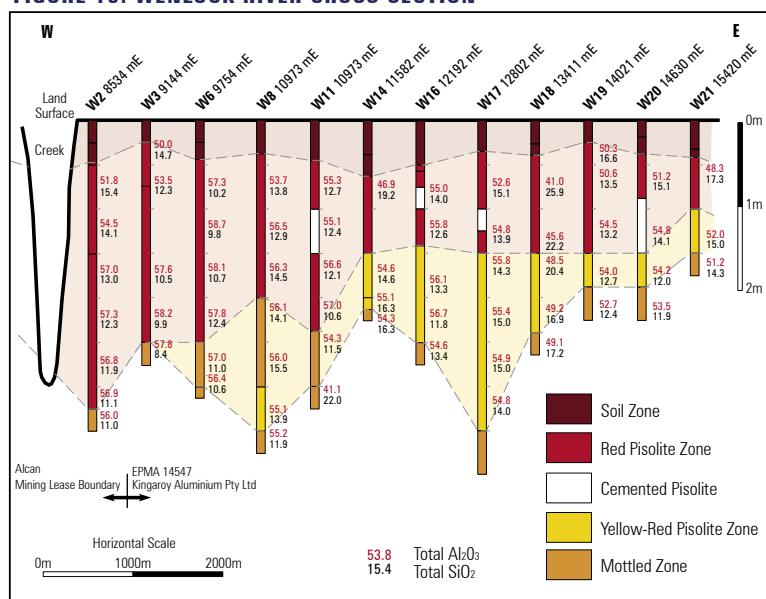
FIGURE 18: WEIPA TENEMENT (EPMA 14547) BOUNDARY AND DRILL HOLES



profile varies from about 1m to 4m thick and cementation occurs locally, generally in the 1m to 2m depth range. The major part of the deposit is not cemented. Pisolites are normally small, ranging from 2 mm to 10 mm in diameter in a fine grained red matrix, and there is an increase in size and a change to a mottled orange colour with increasing depth.

Metallica is targeting high grade bauxite in the Weipa region for the purpose of direct shipping to overseas or Australian markets. An alumina refinery situated near Weipa could also be considered, should the proposed PNG-Gladstone gas pipeline proceed.

**FIGURE 19: WENLOCK RIVER CROSS SECTION**



**TABLE 5: WENLOCK RIVER – EXPLORATION DRILLING RESULTS (1970'S DRILL PROGRAMME)**

HOLE NO	FROM (M)	TO (M)	THICKNESS (M)	Total Al <sub>2</sub> O <sub>3</sub> %	SiO <sub>2</sub> %	Fe <sub>2</sub> O <sub>3</sub> %	HOLE NO	FROM (M)	TO (M)	THICKNESS (M)	Total Al <sub>2</sub> O <sub>3</sub> %	SiO <sub>2</sub> %	Fe <sub>2</sub> O <sub>3</sub> %
W2	1.22	4.27	3.05	56.4	12.2	6.1	W28	0.61	2.74	2.13	57.3	11.5	6.4
W3	0.30	3.35	3.05	55.8	11.0	8.4	W29	0.61	2.44	1.83	51.8	13.7	10.1
W5	0.61	4.27	3.66	56.4	13.2	6.2	W30	0.61	3.96	3.35	55.5	12.3	7.1
W6	0.61	4.11	3.51	57.4	10.8	6.4	W34	0.61	3.05	2.44	55.7	13.3	6.1
W7	0.61	4.27	3.66	55.4	12.1	7.1	W35	0.61	2.90	2.29	53.8	13.4	10.1
W8	0.61	3.05	2.44	55.7	13.8	6.6	W36	0.61	2.74	2.13	56.3	11.5	6.2
W9	0.91	3.05	2.13	55.3	11.2	8.5	W37	1.22	2.82	1.60	55.6	12.9	6.4
W10	0.61	3.66	3.05	56.6	10.8	6.6	W40	0.61	3.05	2.44	58.6	12.0	5.4
W11	0.61	3.66	3.05	55.8	11.9	6.9	W41	0.61	2.44	1.83	57.5	12.9	5.7
W13	0.61	4.88	4.27	55.4	12.8	6.5	W44	0.61	3.05	2.44	57.5	11.5	7.9
W15	0.61	3.66	3.05	55.9	11.9	7.4	W48	0.61	3.66	3.05	55.7	12.8	7.2
W16	0.61	3.35	2.74	55.6	13.1	6.0	W49	0.61	3.35	2.74	56.1	12.0	7.2
W17	1.22	4.27	1.83	55.1	14.0	6.1	W50	1.22	2.90	1.68	55.9	12.0	6.5
W19	0.61	2.74	2.13	53.0	13.0	8.7	W78	0.61	3.66	3.05	54.8	13.9	5.8
W20	1.22	2.74	1.52	54.2	12.7	6.9	W91	0.61	2.74	2.13	56.6	11.9	6.6
W22	1.22	3.05	1.83	51.8	11.4	9.4	W86	0.61	2.44	1.83	55.7	12.3	4.9
W23	1.22	3.66	2.44	53.4	14.0	6.7	W94	1.22	2.74	1.52	58.3	10.9	4.1
W26	0.61	3.20	2.59	56.9	12.6	6.1	W95	1.22	3.05	1.68	59.2	9.3	4.3
W27	0.61	3.35	2.74	54.8	13.9	7.0	<b>AVERAGE</b>			<b>2.51</b>	<b>55.74</b>	<b>12.34</b>	<b>6.80</b>

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Key two year objectives are:

- Identify a resource with an average grade of >50% alkali soluble alumina and <12% soluble silica per tonne (insitu or beneficiated);
- Negotiate access agreements with indigenous land holders;
- Negotiate agreements for the use of existing infrastructure particularly port facilities.

### Kingaroy Bauxite Project

Metallica has applied for two EPM Applications (EPM 14639 and 14514) comprising 129 and 111 sub-blocks respectively over an area in the Kingaroy – Murgon region which is considered prospective for bauxite beneath the red clay soils, Figure 20. The EPMA's target part of a 320 km belt of Tertiary laterites located 100 km inland of and parallel to the Queensland

coast. To date the most important aluminous laterite and bauxite occurrences recognised in this belt occur in and around Wooroolin and south through Kingaroy to Nanango, where there is extensive lateritisation and red soil development.

Little or no exploration has been carried out in the Kingaroy area since the 1950's. Regional reconnaissance programmes by Government geologist's over fifty years ago sampled surface material which recorded in excess of 40% soluble  $Al_2O_3$  and low reactive silica. In the mid 1950's six areas in the vicinity of Kingaroy were tested by sinking shafts to depths of between 14 to 40 ft (4 - 13m) and collecting samples from different levels within these shafts. No bodies of commercial bauxite were identified but results confirmed the presence of lateritic bauxites with soluble alumina content assaying to 32%  $Al_2O_3$ , (of similar

grade to those being exploited in the Darling Ranges of WA).

Research by Metallica indicates that no further exploration for bauxite has been conducted in the Kingaroy region. On gaining access to the region Metallica will identify and drill test the most prospective areas defined from previous surface sampling.

Should Metallica establish that there are substantial bauxite deposits from surface sampling and drill testing, it will then investigate the viability of producing alumina. The project could be similar in an operational sense, to the relatively low grade (30-32% soluble  $Al_2O_3$ ) bauxite mining and alumina producing operations near the Darling Ranges in southern Western Australia.

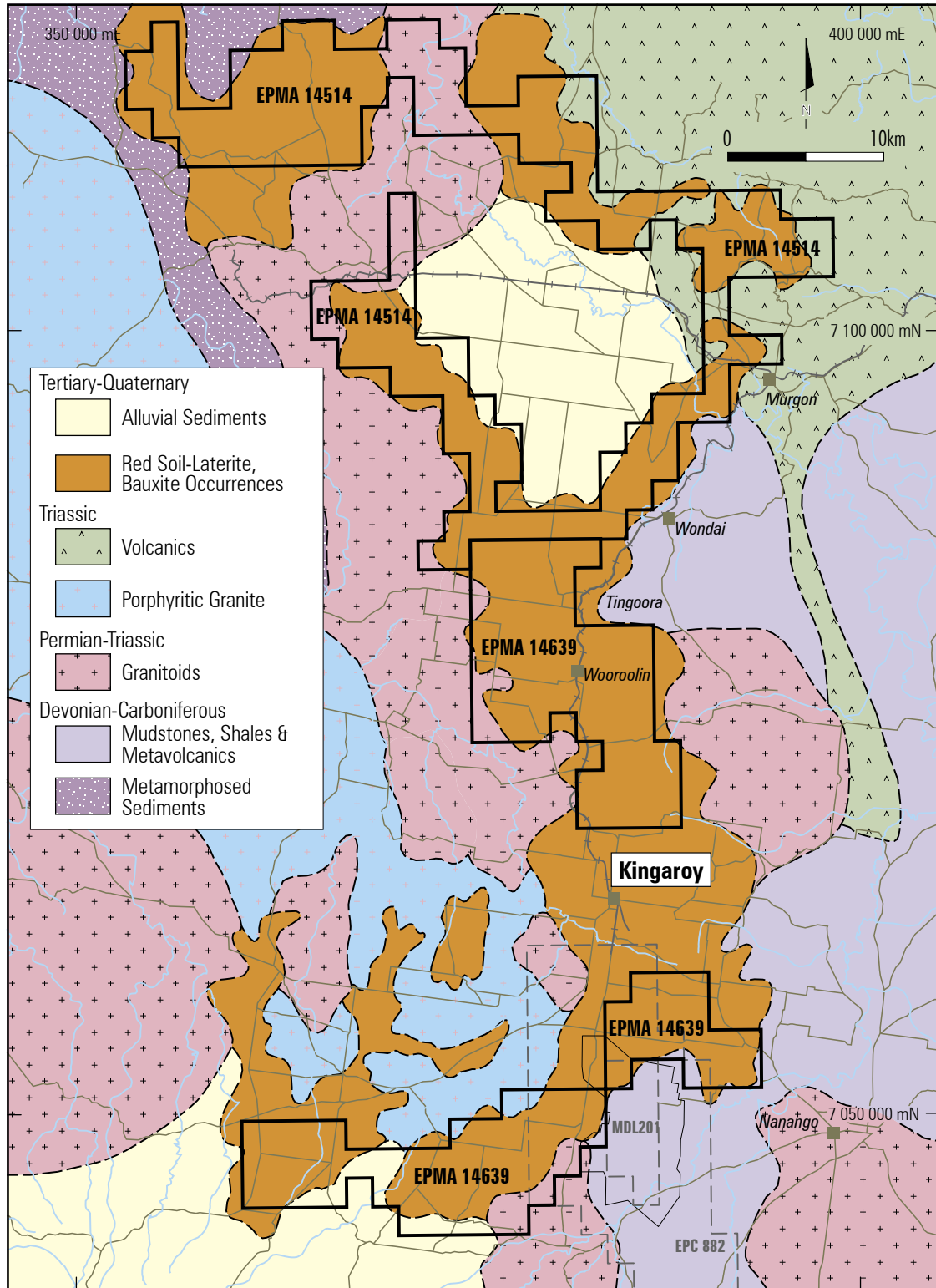
If a substantial resource is delineated Metallica would then investigate the potential



Bauxite from Weipa



**FIGURE 20: KINGAROY GEOLOGY AND TENEMENT BOUNDARIES**



# 2. metallica and its mineral projects

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and opportunity of establishing an alumina refinery at Kingaroy. Key objectives are:

1. Complete land access agreements with local landholders and farmers. The majority of the land is freehold.
2. Establishing an initial resource with an average grade of approximately 40% alkali soluble alumina. Indicative results from surface sampling are encouraging

but drilling is required to test the Kingaroy bauxite concept and resource potential;

3. Assuming encouragement in 2 complete a Scoping Study into the viability of an alumina plant near Kingaroy;

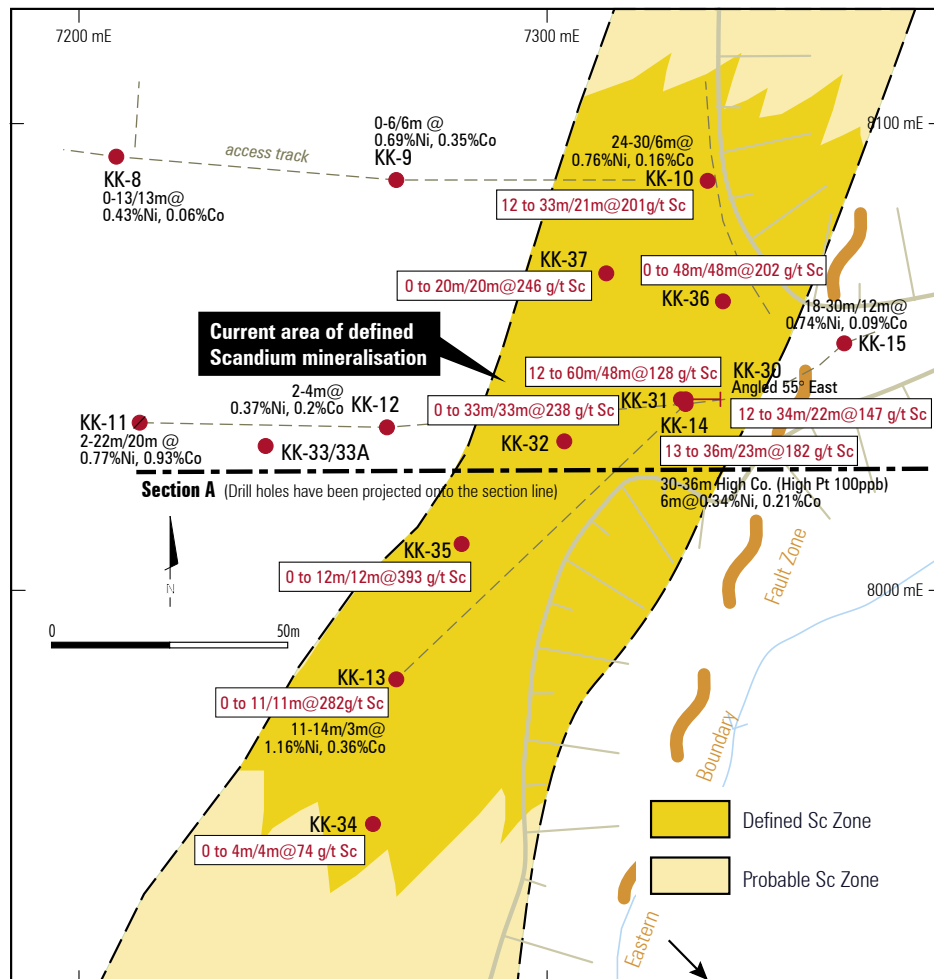
### 2.7 SCANDIUM PROJECT

Metallica discovered its scandium deposit in 2001 from drilling nickel-cobalt laterites in the Kokomo tenement.

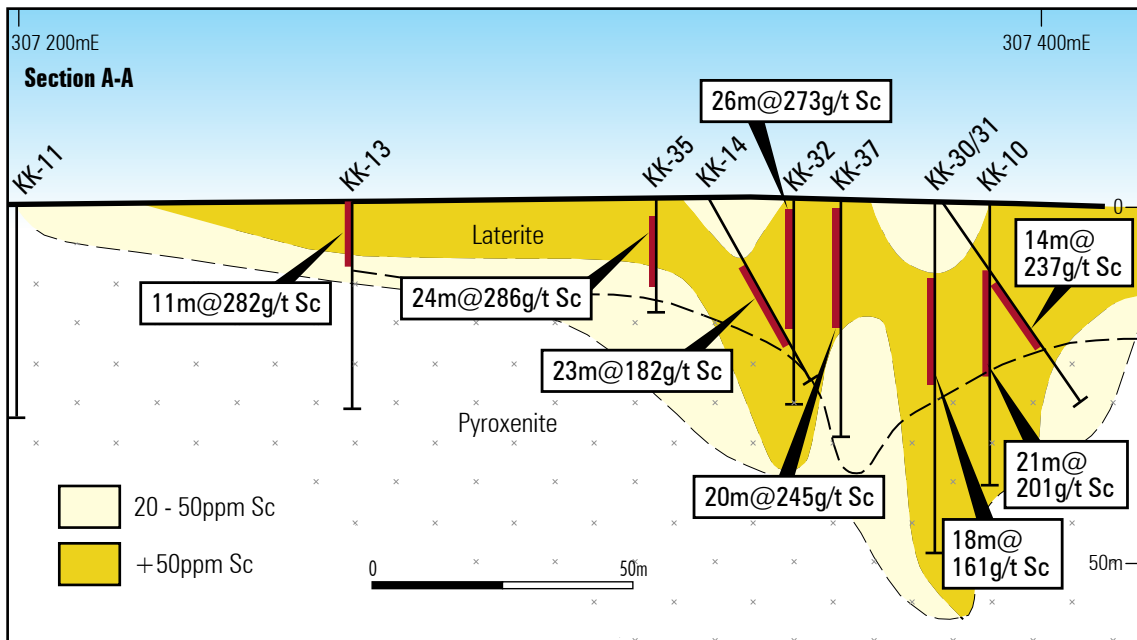
### Scandium Markets

Scandium is a valuable rare earth metal. It has always demanded premium prices, (up to US\$6,000 to US\$8,000 per kg of high purity refined scandium metal, Chart 5) due to its superior alloying abilities, especially with aluminium and magnesium. By adding small quantities (0.3 to 3% Sc) of scandium to aluminium alloys it has the ability to refine grain size, inhibit re-crystallisation, raise melting points and increase strength and fatigue resistance.

FIGURE 21: KOKOMO SCANDIUM DRILL HOLE LOCATIONS



**FIGURE 22: KOKOMO SCANDIUM CROSS SECTION**

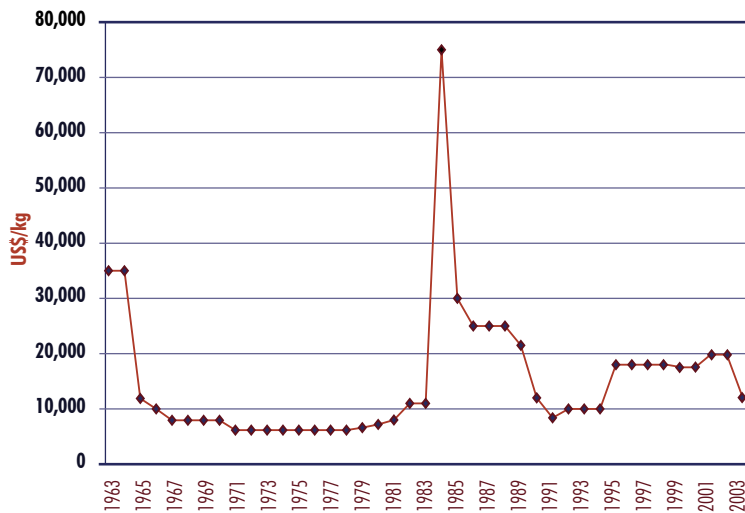


The current global scandium market is very small (several tonnes per annum) and the expected major applications are at an embryonic stage. Any significant use of scandium will require a long-term reliable supply at a substantially lower price before a major manufacturing commitment and supply agreement is likely to be made by possible end-users.

**Scandium Supply and Demand**

Scandium is in demand in aerospace, transport, sporting goods and other high performance applications that demand strength and lightness and where cost is a secondary consideration. It is also used in fuel cell research where Scandium Stabilised Zirconia, a ceramic electrolyte material shows superior properties to existing materials for Solid Oxide Fuel Cells.

**CHART 5: SCANDIUM PRICE PER KILOGRAM US\$ (SOURCE USGS)**



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There are currently no "Western World" mines producing scandium (other than possibly as a by-product). Access to the technology for processing scandium ores and concentrates has recently become available in Australia.

Although the global scandium market is small it is expected to grow as aerospace companies take advantage of the metal's unique alloy enhancing properties for aircraft components. Car, bicycle and other sporting manufacturers are also expected to increase their usage of higher strength light weight materials, especially aluminium alloys.

### **Kokomo Scandium**

Metallica's high-grade scandium zone is adjacent to the Kokomo nickel-cobalt mineralisation. Approximately 12 drillholes have defined a high-grade scandium zone which averages close to 170 g/t Sc, with drill intercepts of 48m at 202 g/t from surface being encountered, (Drillhole locations and a cross section are shown in Figures 21 and 22 respectively). Geological projections indicate that further drilling should increase this figure substantially as the deposit is open along strike (for 16 km) and at depth. Mineralisation commences at the surface and is minable by shallow Open cut methods. These advantages of wide, shallow intercepts and high grades should result in low production and operating costs.

A review of scandium uses and potential markets indicate that the deposit is potentially valuable. The only current sources of scandium tend to be erratic in supply, are comparatively low grade, and all scandium is obtained as a by-product. Its successful development would allow the Company to supply scandium on world markets and meet the demands of the expected growth in the aluminium super-alloy market, the electronics industry and fuel cells.

Metallica's initial goal is to investigate the potential for developing a long-term reliable supply of scandium for the aluminium alloy market. The Company intends to advance the project by looking at such factors as grade, resource size, metallurgical recovery, market growth and supply. Metallica has consulted with relevant groups with respect to extraction technology, marketing and end use. This work is continuing under the joint venture arrangement with Straits, (see Section 7.2 for further details) who are conducting a Scoping Study.

Metallica's high-grade scandium deposit presents a major opportunity for the joint venture partners to become a long-term major supplier of competitively priced scandium to light metal alloy producers and other end-users. The annual world aluminium industry is valued at approximately US\$30 billion. The possibility of capturing a small fraction of the light metal alloy market represents a major commercial opportunity for the Company and its joint venture partner, Straits. Metallica's objective is for the project to become a significant world supplier of scandium. While this could be an attractive commercial opportunity, the company will proceed cautiously, fully realising the development and marketing difficulties associated with new products and technology.

## **2.8 LIMESTONE PROJECTS**

### **Limestone Markets**

The importance of limestone is frequently overlooked. It plays an essential role in Queensland's industrial and infrastructure development. Many processes require limestone or lime in some phase of their production, either as a primary or incidental processing material. Limestone and burnt lime are key inputs for a number of manufacturing and chemical processes as well as building

materials for construction and infrastructure development.

Limestone is a key component in the manufacture of cement. The aluminium industry in Gladstone is expanding and burnt lime is required for pH control in various chemical processes. It is also used in the gold and base metal industry and in sugar refining.

The overall trend in limestone consumption in Queensland over the last decade has shown a general increase and this increase is expected to continue. More importantly, the demand for high quality limestone to manufacture burnt lime is predicted to be a high growth sector.

### **Metallica's Limestone Projects**

In 1999-2000 Metallica recognised an opportunity for the future supply of crushed limestone to the burnt lime, cement, agricultural and construction industries in Queensland. Metallica then secured and evaluated significant available limestone deposits that were close to the industrial centres of Gladstone and Townsville.

### **Gladstone Limestone Projects - Boyne and Fairview**

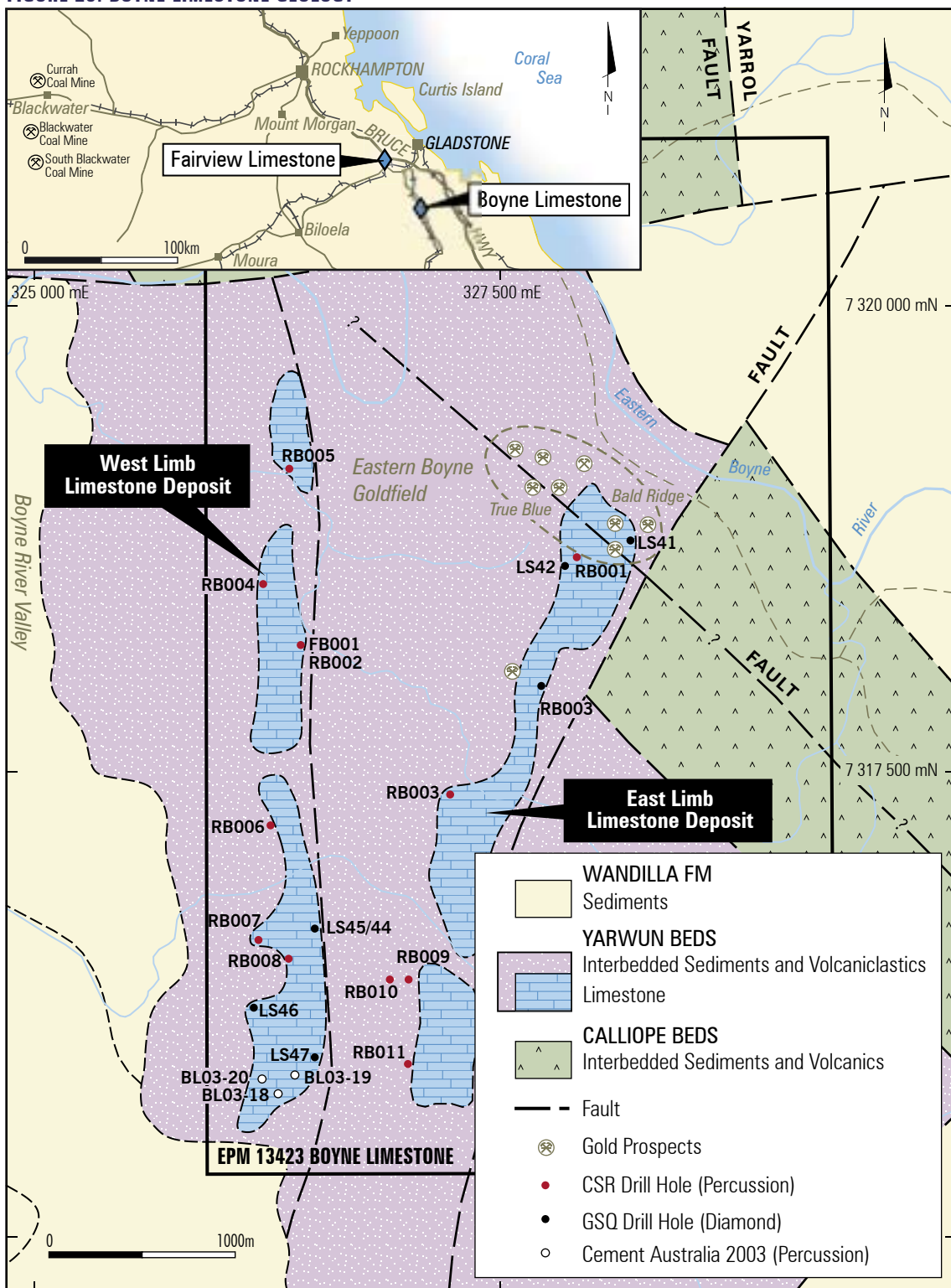
Gladstone is the site of major alumina refineries and cement clinker works, both of which require large quantities of high quality lime and limestone. Additionally, new limestone users in industries such as chemical processing plants, oil shale production, and iron/steel manufacture are proposed.

### **Boyne Limestone**

Key factors favourable to the development of the Boyne limestone project:

- The Boyne limestone project is located on freehold land close to road and rail links and approximately 45 km southwest

**FIGURE 23: BOYNE LIMESTONE GEOLOGY**



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**TABLE 6: BOYNE LIMESTONE DRILLING RESULTS**

HOLE	FROM (M)	TO (M)	INTERVAL (M)	CaO %	MgO %	Fe <sub>2</sub> O <sub>3</sub> %	SiO <sub>2</sub> %
BL03-18	3	54	51	54.65	0.48	0.19	0.63
BL03-19	2	20	18	50.40	0.80	0.84	4.55
BL03-19	29	65 (EOH)	36	54.10	0.56	0.23	0.97
BL03-20	5	59 (EOH)	54	54.85	0.30	0.12	0.58

NOTE: EOH = End Of Hole

of Gladstone's industrial markets.

The limestone deposit is within two sub-parallel belts (limbs of an anticline) with lenses being up to 600m wide and outcropping discontinuously over a distance of 3-4 km.;

- Previous work by exploration companies and the Geological Survey of Queensland (GSQ) included 11 percussion holes drilled in 1982 (RB1-11) and 7 diamond holes drilled in 1976 (LS41-47) (Figure 23). Drilling and mapping identified an extractable opencut limestone deposit estimated to be in the vicinity of 100 Mt and containing a substantial high grade (50 - 55% CaO) component. While the deposit has been drilled and the limestone bodies appear to be well defined, no resource category has been assigned that conforms to current JORC standards. Drilling has intersected wide zones of high quality limestone, eg. diamond drillhole LS45R recorded 92m @ 55% CaO, from 8 to 100m (Note: 100% pure limestone or CaCO<sub>3</sub> is approximately 56% CaO);
- Work completed in the last twelve months included geological mapping, a drilling programme and high resolution airborne magnetics and radiometrics to delineate the boundaries of the deposit and identify dykes within the deposit. The survey also

included a digital terrain model for the generation of accurate topographic maps. A total of 20 drillholes were completed for 370m, 17 shallow holes were drilled to identify possible dykes while three deeper holes (BL03-18 to 20) were targeted at providing data on the limestone quality. Results from the limestone drilling confirm the presence of high-grade (> 50%CaO) limestone. A summary of results is found in Table 6.

- Metallica is currently seeking limestone markets and intends to apply for a ML within the next twelve months.

### Fairview Limestone

Key factors favourable to the development of the Fairview limestone project:

- Fairview represents a medium to large limestone deposit situated on Fairview Station 25 km southwest of Gladstone, which has yet to be exploited;
- Government drilling in the 1980's defined a substantial body of limestone in the order of 1.5 to 4.75 Mt per vertical metre that included wide intersections of high quality limestone (LS50 recorded 8-66m@ > 54% CaO). While the deposit has been drilled and the limestone bodies appear to be well defined, no resource

category has been assigned under the current JORC code;

- It is situated on freehold, grazing land with no native title issues;
- The higher grade Fairview limestone (50% to 55% CaO) would be suitable for a variety of uses;
- It is the closest undeveloped major limestone deposit to Gladstone and the cement and lime industries;
- Preliminary investigations indicate there should be no significant access, cultural or environmental impediments to quarry development.

Metallica completed an open hole, reconnaissance drilling programme in May 2003 over part of the deposit defined by the GSQ. The 25 holes drilled were subject to contamination and are not suitable for resource estimations but they confirmed that a substantial body of limestone is present and zones of high quality limestone exist. Additional drilling using Reverse Circulation (RC) drilling and diamond core drilling methods is planned for late 2004.

Metallica is currently seeking limestone markets and intends to apply for a ML within the next two years.

### Townsville Limestone Projects - Star River and Fanning

#### Star River Limestone

The Star River deposit has a number of favourable features;

- It has a granted ML for a 20 year term with an access road that has been constructed to the site in preparation for future development;
- All permitting is in place for the extraction of limestone (for chemical and civil uses);

#### Fanning Limestone

Metallica's other Townsville Limestone project is the Fanning deposit, which is located closer than Star River to Townsville however additional exploration drilling is required to delineate high grade limestone. Part of the Fanning tenement is also prospective for gold mineralisation near the Mt Success and Golden Valley gold prospects (MLs within the EPM but not held by Metallica).

## 2.9 GOLD PROJECTS

The gold price has risen from around US\$260 per ounce in 2001 to current prices of around US\$400 per ounce, due to a combination of factors including, global political uncertainty, declining gold production and a weaker US dollar. Gold markets and the gold exploration sector generally are receiving increased market recognition as the gold price rises.

Australia is the world's third largest producer of gold. The combination of rising gold price, renewed stock market interest and declining production is expected to offer an improved environment for gold exploration companies to capitalise on any exploration success. It also enhances the opportunity to access the necessary capital to develop new gold mines and attract major joint venture parties.

### Metallica's Gold Projects

Metallica's principal gold interest centres on the Six Mile gold project within the NORNICOPRECINCT. This area comprises the Kokomo Gold Sub-block (approximately 3 sq km) within the Kokomo EPM and the adjoining Six Mile EPM, (comprising 100 sub blocks), both of which are in joint venture with Straits.

The Greenvale North, Texas North and Warwick West tenements are recent additions to Metallica's gold portfolio.

#### Kokomo Gold Sub-block

The Kokomo Gold Sub-block covers anomalous gold geochemistry with several high priority areas being identified for immediate drill testing. A broad area of anomalous surface gold (with values up to 21 g/t Au) extends into the adjoining Six Mile Gold EPM.

Metallica, and others have carried out rock chip sampling within the Kokomo Gold Sub-block. High gold values are associated with elevated values of Bi, Cu, Pb and As in gossanous quartz sulphide veins and stockworks within a sequence of basalts, cherts, jasper and siltstone. The veins themselves are in alteration zones within northeast trending linear structures that are associated with lower

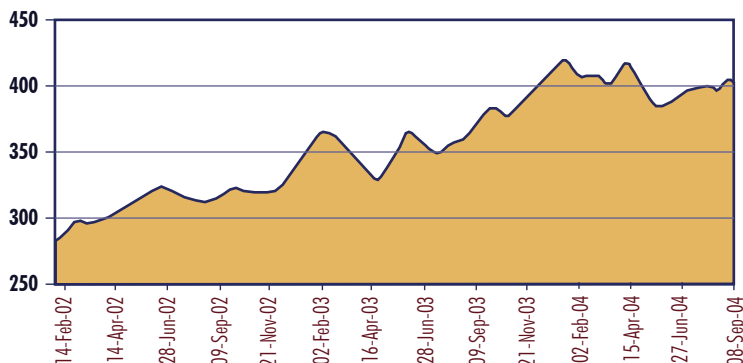
magnetic response. Higher gold values appear to be localised in cross structures.

A 10 hole drilling programme comprising 755m of RC drilling was completed at the Black Dingo prospect. The drillholes predominantly intersected basalts containing minor quartz veins with the best intercepts being 3m at 1.88 g/t Au (BDRC-006 from 3m) and 3m at 1.63 g/t Au (BDRC-005 from 30m). Drilling identified the presence of a porphyry related hydrothermal system and further exploration work is planned. The Kokomo Gold Sub-block is under a joint venture with Straits, details of which may be found in Section 7 of this Prospectus. A second joint venture with Straits covers the adjoining Six Mile EPM into which the Kokomo mineralisation extends.

#### Six Mile Gold Project

The Six Mile gold project, excluding the Kokomo Sub-block, is subject to native title and advanced exploration (including drilling) has been delayed due to access negotiations. An Indigenous Land Use Agreement (ILUA) is currently being negotiated with the relevant indigenous groups. The Directors believe the agreement will be completed to allow exploration access in the next six months. It is envisaged that the ILUA will cover the

CHART 6: US\$ GOLD PRICES 2002 – 2004



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majority of tenements in the belt from south of Greenvale to just north of the Kokomo and Six Mile tenements.

The Six Mile prospect area has similar geology to the Kokomo Sub-block and gold mineralisation extends several kilometres to the northeast and southwest from the sub-block into the Six Mile tenement. Several new areas of quartz veining including a previously unrecognised zone of epithermal quartz-adularia style veining over a 2 km strike length. There are several regional geochemical anomalies and geophysical targets that require investigation.

### Greenvale North Tenement

The Greenvale North tenement covers prospective ground that may conceal bodies of lateritised serpentinite north and north east of the expired Greenvale mine. There is also significant gold and base metal mineralisation within the tenement boundary, i.e. at the Wyndotte Copper / Dry River Copper Prospect, where previous 1970's drilling delineated a 400,000t zone of copper mineralisation grading approximately 2%, and the Silver Hills Prospect, which has outcropping gossan that assayed to 2.5% Pb, 3.8% Zn. Other gold prospects include Dido Hill and Gold Hill as well as four expired historical Mining Leases.

### Warwick West Gold Project

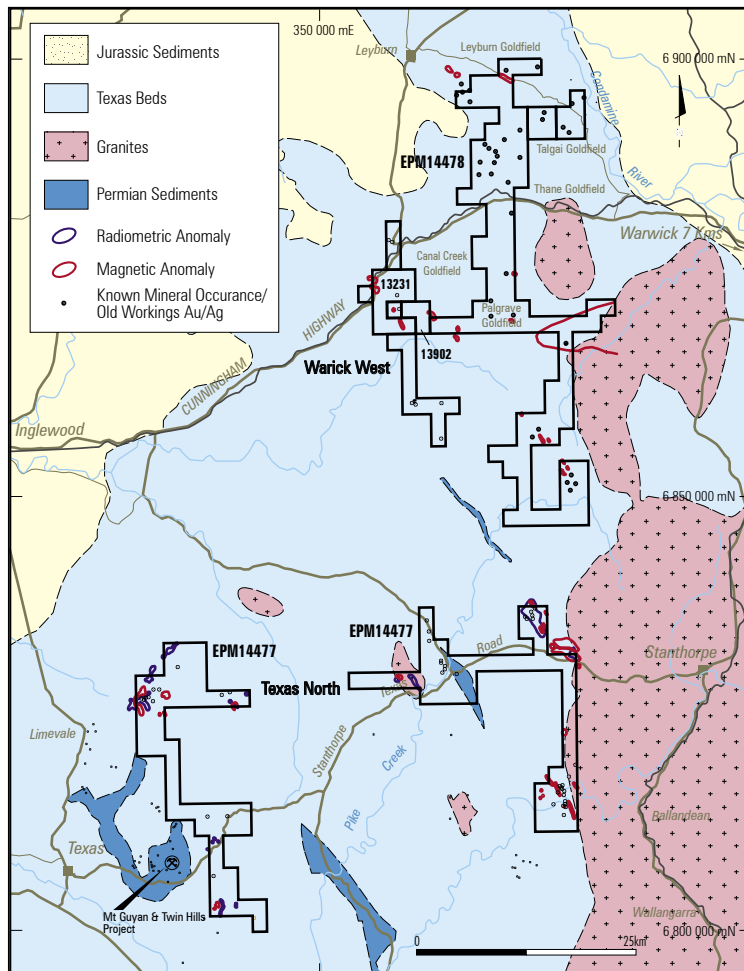
The tenement covers six small goldfields within the Warwick Mining District. They are the Leyburn, Talgai, Thanes Creek, Canal Creek, Palgrave and Pikedale Fields. In excess of 40 old gold workings and/or mineral occurrences are located within the EPM boundary and previous explorers in the area identified an 800m long by 50-70 m wide gold soil anomaly with a high of 385ppb Au. The anomaly is located on the northern side of the Herra Range in the Canal Creek

Goldfield (which produced 20,000 ounces of gold between 1863 and 1887). Part of this soil anomaly is located within Metallica's EPM and has yet to be drilled tested. Other areas of interest include the Wild Scotchman where a composite rock chip sample taken along the 25m length of the old workings assayed at 21 g/t Au, and the Guiding Star Mine, where two holes intersected 3m @ 1.51 g/t Au and 1m at 12.4 g/t Au from 34m and 30m

respectively. Historical records indicate that the Mine produced 238t at 16.89 g/t Au.

Although the Warwick area has been explored by a series of companies, recent work in the nearby Texas region indicates that the potential still exists to discover significant deposits of gold-silver mineralisation including bulk tonnage in brownfield exploration areas. A geology map of the Warwick - Texas region with EPM outlines is presented in Figure 24.

FIGURE 24: TEXAS NORTH & WARWICK WEST GEOLOGY & TENEMENT OUTLINES





### Texas North Gold-Silver Project

The Texas North EPM is located northeast of Texas in Southeast Queensland. The Company is principally targeting silver and gold mineralisation. A recent explorer in the Texas area has delineated a sizable silver deposit at Twin Hills and Mt Gonyan. An open pit and Heap Leach processing operation is planned and construction is scheduled to commence at this project within the next year. This creates a potential processing option and market for any further silver and gold discoveries in the region. Exploration targets that have been identified in the Texas area include the Wantee workings and a series of jasper units, which occur in the Texas Beds and have a distinct high magnetic signature. These jasper units have isolated radiometric highs on their margins associated with Au and Pb mineralisation. Drilling by previous explorers at the Wantee gold prospect intercepted a 2m zone grading 22 g/t Au in a quartz vein. The quartz vein hosting the Wantee workings outcrops sporadically for 1 km. A cluster of radiometric highs is located near the workings close to a discrete magnetic high.

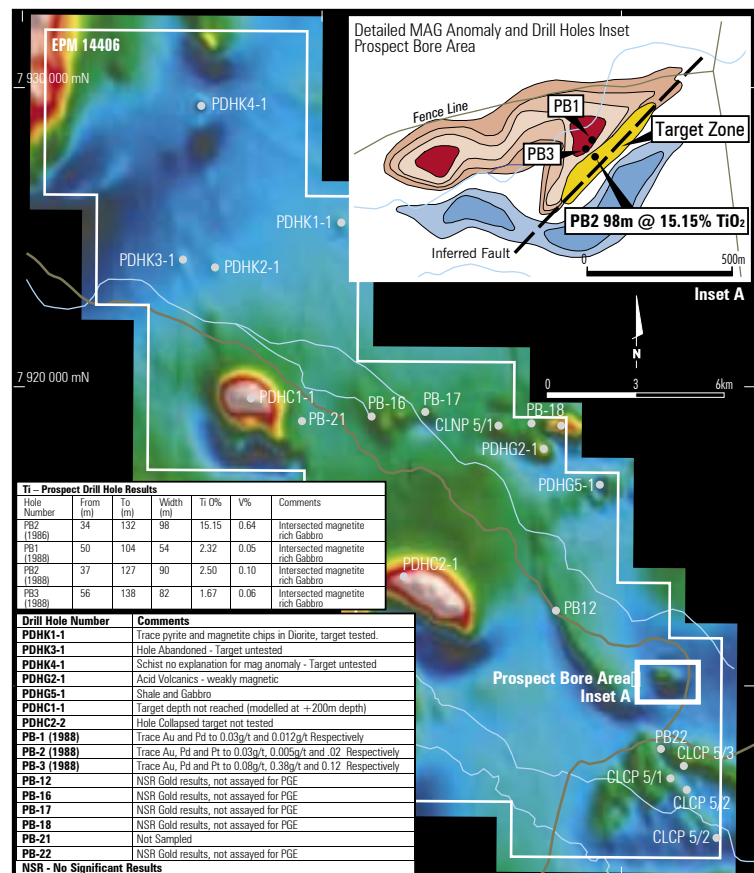
### 2.10 OTHER PROJECTS

In addition to Metallica's key projects the Company has the Prospect, (EPMA 14406) project, which is considered prospective for titanium, and a range of minerals including PGE, gold, tantalum-niobium, nickel and basemetal sulphides and diamonds.

The Prospect project is situated approximately 75 km SSW of Croydon and 200 km NNE of Julia Creek. The project's target minerals are hosted within basement rocks, which are completely covered by younger sandy sediments, typically 30m or more in thickness.

Exploration by previous companies within the tenement area identified a titanomagnetite

FIGURE 25: PROSPECT PROJECT AEROMAGNETIC IMAGE



rich layered gabbro with one hole PB-2 intersecting 98m @ 15% TiO<sub>2</sub> (titanium oxide) and 0.64% V<sub>2</sub>O<sub>5</sub> (vanadium oxide) from a depth of 34m. A similar style, the Barrambie Ti - V deposit, is found in Western Australia. Metallica's aim at Prospect is to drill down dip and along strike of PB 2 to determine the extent of the Ti - V mineralisation. Figure 25 shows the aeromagnetic image and previous drillhole locations at Prospect.

Metallica is targeting a number of metals at Prospect in addition to Ti-V-Fe mineralisation. These include tantalum, gold, platinum group metals (PGE), and nickel-copper sulphides.

Due to a lack of outcrop and surface geochemistry, Metallica is also targeting numerous discrete magnetic anomalies postulated by previous explorers as possible kimberlite or carbonatite intrusives. The area may have the potential to host diamonds. Previous companies completed drill testing of these anomalies failed to adequately explain all the anomalies because of holes being abandoned due to poor ground conditions or holes not reaching target depth.

# 3. board of directors & management

## board & management

The Board of Metallica is an experienced team comprising five Directors with strong commercial, management, exploration, development and operating experience in the mineral resource sector.

The exploration and evaluation programme to be undertaken by Metallica will be managed by the Exploration Manager, Mr Patrick Smith, under the direction of Managing Director Andrew Gillies. Patrick Smith is an experienced geologist who is familiar with Metallica's projects.

The minimum number of staff to conduct efficient exploration and development programmes will be recruited after listing. Contractors will be used to cover field exploration activities, and consultants will be used for specialised tasks on certain mineral projects where required.

### 3.1 BOARD OF DIRECTORS

**David Keith Barwick – Chairman  
Non-Executive**



#### **Age 60**

David Barwick is an accountant by profession with over 30 years experience in the management and administration of publicly listed companies in both Australia and North America. In his capacity as Chairman, Managing Director or President he has played a significant role in successfully funding and bringing into production four mining projects.

As a director, David has had significant experience in the management of over twenty public companies with his main strength being in the restructuring and financing of the entities, including preparation of prospectuses and other requirements for listing on the Australian Stock Exchange.

In addition to being Chairman of Metallica Minerals Limited, David is also Executive Chairman of Global Approach Limited. He is also Chairman of an unlisted public company, Queensland Underwriters Limited.

**Andrew Langham Gillies – Managing  
Director**



#### **BSc (Geology) MAusIMM – Age 41**

Andrew Gillies graduated from the University of Queensland in 1985. Since that date he has worked continuously as a geologist in the mining and exploration industry, accruing over 18 years experience across a range of commodities. He has been a company geologist with BHP Gold Mines Ltd, Perseverance Corporation Ltd and Cracow Mining Venture and a consulting geologist for Valdora Minerals NL, Auralia Resources NL and International Pursuit Corporation. During this period he gained valuable experience in the exploration, feasibility, development, open pit and underground mining of metalliferous deposits.

Andrew's key strength is strategic planning specialising in project generation, selection and acquisition. He has acquired a considerable database and significant knowledge of metalliferous mineralisation and mineral deposits in Queensland. Since 1996 he has been instrumental in the selection and acquisition of all the mineral assets now held by Metallica and its Subsidiaries.

From 1993 to date, he has conducted a Brisbane-based geological consultancy, Golden Breed Pty Ltd, consulting on gold, base metals and industrial minerals in Eastern Australia, the Philippines and the Solomon Islands.

Since the incorporation of Metallica, Andrew has gained extensive experience in all the usual commercial matters that form part of the Queensland resources business and as a founding Director and a major shareholder, he has remained the driving force behind Metallica.

**Robert Charles Woodhouse Pyper –  
Non-Executive Director**



**BSc (Geology) FAusIMM GAICD – Age  
66**

Robert Pyper graduated from the University of Melbourne in 1961. He has gained extensive experience in geology and mineral exploration throughout Australia and overseas and has worked for Mount Isa Mines Limited, Newmont Mining Corporation of Canada Limited, Penarroya-Australia Pty Ltd and Marathon Petroleum Australia Ltd, as well as for many smaller companies.

As Regional Geologist for Mines Administration Pty Ltd (Minad) 1972-1977 he was responsible for taking up new gold exploration tenements in 1972 in Meekatharra, Peak Hill, Gabanintha and other area of the Murchison District, Western Australia. After defining five potential open-cut deposits the ground was joint ventured out in 1976 and was then mined by Whim Creek, Dominion Mining NL and other companies. The Minad ground supported gold mining operations for over 25 years.

Since 1983 Robert has worked as a consultant to the mining industry both in Australia and in countries of the Pacific Rim, on projects, which have included gold, base metals, tin, nickel, diamonds, gemstones, rare earth minerals, industrial sands, gravels, clays, dimension stone, bauxite and bentonite deposits. Since 1988 he has undertaken geological and valuation reports for numerous mineral floats. Robert is well versed in the capital raising process and public company accountability issues.

He is a Graduate Member of the Australian Institute of Company Directors and holds a Certificate of Financial Management.

Robert Pyper is a founding Director of Metallica.

**Roderick William Siller –  
Non-Executive Director**



**BE (Mining and Petroleum) – Age 43**

Rod Siller was until recently a Director of Occupational and Medical Innovations Ltd (OMI), a medical research and development company. Rod was involved with OMI as a venture capitalist and was a Director during the period of its most successful listing on the Australian Stock Exchange in October 2000. OMI is currently capitalised at approximately \$45 million.

Rod is a mining and petroleum engineer who has worked for Anadrill-Schlumberger and consulted for Sperry-Sun International (now Halliburton Energy Services) and Schlumberger over the last 13 years. Rod has worked on projects involving oil companies including Shell, Agip, Texaco, Chevron, and various other oil companies in the Far East and Middle East.

Prior to this international experience, Rod was employed by Gencor (South Africa) as a graduate mining engineer. His last position in the mining industry was as the Mine Engineer for a medium size gold producer, Sons of Gwalia, at Leonora in Western Australia. He has worked in Mining Engineering consulting and has some mineral processing experience.

**John Kevin Haley – Non Executive Director,  
Company Secretary**



**B. Com, MBA, GradCert (Marketing),  
Grad. Dip. CSP, FCA, ASIA, FTIA  
– Age 42**

John Haley is a Chartered Accountant (Fellow of the Institute of Chartered Accountants) with over 20 years experience in taxation law and accounting (with Coopers & Lybrand and Arthur Andersen & Co), general management, financial reporting and company secretarial duties. He has extensive experience in the preparation of prospectuses and has been involved in the listing of companies in Australia and Canada. His work experience is in a diverse range of industries including mineral exploration, and he has participated as a seed capitalist in a number of mineral exploration companies.

# 3. board of directors & management

## board & management

### 3.2 CORPORATE GOVERNANCE

The Directors are responsible for protecting the rights and interests of the shareholders through the implementation of sound strategies and action plans and development of an integrated framework of controls over the Company's resources, functions and assets.

#### General

The Company does not have any formally constituted committees of the Board of Directors. The Directors consider that the Company is not of a size nor are its affairs of such complexity as to justify the formation of special or separate committees. The Board as a whole is able to address the governance aspects of the Company's activities and ensure it adheres to appropriate ethical standards.

This statement outlines the main corporate governance policies which the Directors have adopted.

#### Composition of the Board

The Board comprises five Directors. The names, qualifications and relevant experience of each Director is set out in Section 3.1. There is no requirement for any Director's shareholding qualification.

As the Company's activities increase in size, nature and scope, the size of the Board will be reviewed periodically and the optimum number of Directors required to supervise adequately the Company's activities determined within the limitation imposed by the Constitution.

#### Board Membership

The Board acts as a nomination committee. Members of the Board have been brought together to provide a blend of qualifications, skills and national and international

experience required for managing a company operating within the mining industry.

#### Appointment and retirement of non-executive directors

The Company's Constitution provides that Directors are subject to retirement by rotation, by order of length of appointment. Retiring Directors are eligible for re-election by shareholders at the annual general meeting of the Company.

#### Duties of Directors

Directors are expected to accept all duties and responsibilities associated with the running of a public company, to act in the best interests of the Company and to carry out their duties and responsibilities with due care and diligence.

Directors are required to take into consideration conflicts when accepting appointments to other Boards. Accordingly, Directors wishing to accept appointment to other Boards must first seek approval from the Board, approval of which will not be unreasonably withheld.

#### Independent Professional Advice

The Board has determined that individual Directors may, in appropriate circumstances engage outside advisers at the Company's expense. The engagement of an outside adviser is subject to the prior approval of the Board, which will not be unreasonably withheld.

#### Compensation Arrangements

The Board is responsible for reviewing and negotiating the compensation arrangements of senior executives and consultants.

#### Audit Committee

The Board does not presently have an audit committee. All matters which might be dealt with by such a committee are reviewed by the Directors meeting as a Board.

#### Internal Management Controls

The Company's main assets are located in Australia. Control over the operations is exercised by the Managing Director and Exploration Manager.

The Board also monitors the performance of outside consultants engaged from time to time to complete specific projects and tasks.

#### Identifying Significant Business Risks

The Board regularly monitors the operational and financial performance of the Company's activities. It monitors and receives advice on areas of operation and financial risk and considers strategies for appropriate risk management. All operational and financial strategies adopted are aimed at improving the value of the Company's Shares, however, the Directors recognise that mineral exploration and evaluation is inherently risky.

### 3.3 MANAGEMENT

In addition to Andrew Gillies as Managing Director and consultancy services available from the other Directors, Metallica has Pat Smith (Exploration Manager) and Jennette Binns (Administration Geologist) as employees.

#### Jennette Binns



#### **BSc, DipEd, M App Sc, MGSA, MGAA – Age 53**

Jennette's undergraduate degree is from Sydney University (1972). She has worked as an office geologist for Robertson Research Australia Pty Ltd, Encom Technology Ltd, Plutonic Operations Ltd and Minstat Pty Ltd. All these positions required general geological expertise, as well as more specialized functions such as database and tenement administration, statistical analysis and mapping, library and literature review. In 1998 she completed a M App Sc in Geological Data Processing at the University of New South Wales, followed by a Certificate IV in Database Administration from TAFE. Jennette was until recently the Honorary Editor of "The Australian Geologist", the newsletter of the Geological Society of Australia (GSA), and is Editor of the newsletter of the Geostatistical Association of Australasia (GAA).

#### Pat Smith



#### **BSc, MSc (Mining Geology) MAusIMM – Age 39**

Patrick Smith graduated from the Cambourne School of Mines in 1987. He has worked for Cyprus Gold, Arimco Gold Pty Ltd and Nord Pacific Ltd and has gained extensive experience in the exploration industry working in Australia, Papua New Guinea and the Solomon Islands. He has worked on a spectrum of projects ranging from grass roots exploration through to ore reserve definition and feasibility studies. In recent years Patrick has completed a management course at Queensland University of Technology and undertaken studies in accountancy and taxation prior to returning to the mining industry.

### 3.4 DIRECTORS' INTERESTS

As at the date of this Prospectus, the Shares and Options in Metallica held or to be held directly or indirectly by each Director (including controlling company interests) are listed in Table 9 in Section 8.4.

# 4. risk factors

## risk factors

### 4.1 INTRODUCTION

An investment in the Shares being offered under this Prospectus is not risk free. Exploration and evaluation for minerals is generally considered a high-risk activity, and the worst case scenario is that most or all of the investment could be lost.

The future performance of Metallica and the future investment performance of the Shares may be influenced by a range of factors. Many are outside the control of the Board and Metallica. Prior to making any decision to accept the Offer, investors should carefully consider the following risk factors applicable to the Company.

Careful consideration should be given to the following risk factors, as well as the other information contained in this Prospectus and the Applicant's own knowledge and enquiries, before an investment decision is made. Some of the risks may be mitigated by the Company using safeguards and appropriate systems and taking certain actions. Some of the risk may be outside the control of Metallica and not capable of mitigation. There are also general risks associated with any investment in Shares.

The risks described below are not to be taken as exhaustive. The specific risks considered and others not specifically referred to may in future materially affect the financial performance of the Company and the value of the Shares offered under this Prospectus.

### 4.2 GENERAL RISKS

The Company and its business operation are subject to general risks many of which are outside the control of the Board and Metallica. A summary of the major general risks are described below:

#### (a) Share Market Risk

The market price of Shares and Options can be expected to rise and fall in accordance with general market conditions and factors specifically affecting the Australian resources sector and exploration companies in particular.

There are a number of factors (both national and international) that may affect the share market price and neither the Company nor its Directors have control of those factors.

#### (b) General Economic Conditions

Changes in the general economic climate in which Metallica operates may adversely affect the financial performance of the Company. Factors that may contribute to that economic climate include the general level of economic activity, interest rates, inflation and other economic factors. The price of commodities and level of activity within the mining industry will also be of particular relevance to Metallica.

#### (c) Legislative Change

Changes in government regulations and policies may adversely affect the financial performance or the current and proposed operations generally of Metallica. Metallica is not aware of any current or proposed material changes in relevant regulations or policy.

#### (d) Unforeseen Expenses

While Metallica is not aware of any expenses that may need to be incurred

that have not been taken into account, if such expenses were subsequently incurred, the expenditure proposals of the Company may be adversely affected.

### 4.3 RISKS SPECIFIC TO AN INVESTMENT IN THE COMPANY

In addition to the general market and economic risks noted in Section 4.2, investors should be aware of the risks specific to an investment in the Company. The major risks are described below:

#### (a) Changes in Commodity Price

Metallica's possible future revenues will probably be derived mainly from the sale of nickel-cobalt, coal, bauxite, scandium, limestone and gold, and/or from royalties gained from potential joint ventures or from mineral projects sold. Consequently, Metallica's potential future earnings could be closely related to the price of any of these commodities.

Metal prices fluctuate and are affected by numerous industry factors including demand for metals, forward selling by producers, production cost levels in major metal producing regions and macroeconomic factors, eg inflation, interest rates, currency exchange rates and global and regional demand for, and supply of, the metal. If the market price of minerals or metals sold by Metallica were to fall below the costs of their production and remain at such a level for any sustained period, Metallica would experience losses and could have to curtail or suspend some or all of its proposed mining activities. In such circumstances, Metallica would also have to assess the economic impact of any sustained lower commodity prices on recoverability and,

therefore, on cut-off grades and the level of its ore reserves and mineral resources.

**(b) Exploration and Evaluation Risk**

Potential investors should understand that mineral exploration, evaluation and development are high-risk undertakings. While Metallica has attempted to reduce this risk by selecting projects that have identified advanced mineral targets or resources, there is still no guarantee of success. Even if an apparently viable deposit is identified, there is no guarantee that it can be economically exploited.

**(c) Competition**

There is a risk that a competing product or process of which Metallica is currently unaware may be under development and it could in the future reduce the demand or value for one or more of the Company's future products from its key projects.

**(d) Changes in structure of industry**

There is no guarantee or assurance that Metallica will be able to establish a positive workable market position.

**(e) Sustainability of growth and margins**

The sustainability of growth and the level of profit margins from operations are dependent on a number of factors outside of the Company's control. Industry margins in all sectors of the Company's activities are likely to be subject to continuing but varying pressures, including competition from other current or potential suppliers.

**(f) Financing**

Metallica's ability to effectively implement its business strategy over time may depend in part on its ability to raise additional funds. There can be no assurance that any such equity or

debt funding will be available to the Company on favourable terms or at all. If adequate funds are not available on acceptable terms, the Company may not be able to take advantage of opportunities or otherwise respond to competitive pressures.

**(g) Reliance on Key Personnel**

Whilst Metallica has just a few executives and senior personnel, its progress in pursuing its exploration and evaluation programmes within the time frames and within the costs structure as currently envisaged could be dramatically influenced by the loss of key personnel. The resulting impact from such loss would be dependent upon the quality and timing of the executive's replacement.

Although the key personnel of Metallica have a considerable amount of experience and have previously been successful in their pursuits of acquiring, exploring and evaluating mineral projects, there is no guarantee or assurance that they will be successful in their objectives pursuant to this Prospectus.

**(h) Importance of relationships**

Metallica currently has a joint venture relationship with Straits and a Mineral Sharing Rights Deed with Sigma - Norkay.

The loss or impairment of this relationship may have an adverse material effect on Metallica's operating and financial performance, at least until alternative arrangements could be implemented. In some instances, however, alternative arrangements may not be available or may be less financially advantageous than the current arrangements.

**(i) Risks related to joint ventures**

It is entirely possible that the joint venture and or mineral rights partner may elect not to continue at certain stages, to defer or suspend existing activities for a period of time, or withdraw entirely from the mineral project.

**(j) Foreign exchange risk**

The revenues, earnings, assets and liabilities of Metallica may be exposed adversely to exchange rate fluctuation.

**(k) Industrial risk**

Industrial disruptions, work stoppages and accidents in the course of Metallica's operations could result in losses and delays, which may adversely affect profitability.

**(l) Environmental risk**

The Company's operations and projects are subject to State and Federal laws and regulation regarding environmental hazards. These laws and regulations set various standards regulating certain aspects of health and environmental quality and provide for penalties and other liabilities for the violation of such standards and establish, in certain circumstances, obligations to remediate current and former facilities and locations where operations are or were conducted. Significant liability could be imposed on the Company for damages, clean up costs, or penalties in the event of certain discharges into the environment, environmental damage caused by previous owners of property acquired by the Company or its Subsidiaries, or non compliance with environmental laws or regulations. The Company proposes to minimise these risks by conducting its activities in an environmentally responsible manner, in accordance with

## 4. risk factors

# risk factors

applicable laws and regulations and where possible, by carrying appropriate insurance coverage.

### (m) Insurance Arrangements

The Company intends to ensure that insurance is maintained within ranges of coverage that the Company believes to be consistent with industry practice and having regard to the nature of activities being conducted. No assurance however, can be given that the Company will be able to obtain such insurance coverage at reasonable rates or that any coverage it arranges will be adequate and available to cover any such claims. The Company has established a separate insurance provision account with an initial amount of \$25,000 to be reserved to meet legal costs from any insurance claims and any possible future legal costs against the Company or the Directors. The provision account will be reviewed annually but may not be sufficient to cover potential or actual legal costs.

### (n) Management Actions

Directors of the Company will, to the best of their knowledge, experience and ability (in conjunction with their management) endeavour to anticipate, identify and manage the risks inherent in the activities of the Company, but without assuming any personal liability for the same, with the aim of eliminating, avoiding and mitigating the impact of risks on the performance of the Company and its securities.

### (o) Land Access risk

Land access is critical for exploration and evaluation to succeed. In all cases the acquisition of prospective tenements is a competitive business, in which proprietary knowledge or information is critical

and the ability to negotiate satisfactory commercial arrangements with other parties is often essential.

Access to land for exploration purposes can be affected by land ownership, including private (freehold) land, pastoral lease and Native Title land or claims under the Native Title Act 1993 (Commonwealth). These land ownership rights and obligations are set out further in Section 7.

Rights to mineral tenements carry with them various obligations in regard to minimum expenditure levels and responsibilities in respect of the environment and safety. Failure to observe these requirements could prejudice the right to maintain title to a given area.

### (p) Government Policy

The availability and rights to explore and mine, as well as industry profitability generally, can be affected by changes in government policy that are beyond the control of Metallica.

The Queensland Minister for Natural Resources, Mines and Energy does conduct reviews from time to time of policies in connection with the granting and administration of mining tenements. At present the Company is not aware of any proposed changes to policy that would affect its tenements.

In Queensland, the Aboriginal Cultural Heritage Act 2003 and the Torres Strait Islander Cultural Heritage Act 2003 (which commenced on 16 April 2004) impose duties of care which require persons, including the Company, to take all reasonable and practical measures to avoid damaging or destroying Aboriginal cultural heritage. This obligation will

apply across the State and will require the Company to develop suitable internal procedures to discharge its duty of care in order to avoid exposure to substantial financial penalties if its activities damage items of cultural significance. Under this legislation, indigenous people can exercise control over land with respect to cultural heritage without necessarily having established the connection element (as required under native title law). This creates a potential risk that the tenement holder may have to deal with several indigenous individuals or corporations, where no native title has been established, to identify and manage cultural heritage issues. This could result in tenement holders requiring lengthy lead times to manage cultural heritage for their projects.

Changing attitudes to environmental, land care, cultural heritage and indigenous land rights issues, together with the nature of the political process, provide the possibility for future policy changes. There is a risk that such changes may affect the Company's exploration plans or, indeed, its rights and/or obligations with respect to the tenements.

### (q) Native Title risk

The effect of the Native Title Act 1993 (Commonwealth) (NTA) is that existing and new tenements held by the Company may be affected by native title claims and procedures. The Company has not undertaken the historical, legal or anthropological research and investigations at the date of this Prospectus that would be required to form an opinion as to whether any existing or future claim for native title could be upheld over a particular parcel of land covered by a tenement.



There is a potential risk that a determination could be made that native title exists in relation to land the subject of a tenement held or to be held by the Company which may affect the operation of the Company's business and development activities. In the event that it is determined that native title does exist or a native title claim is registered, the Company may need to comply with procedures under the NTA in order to carry out its operations or to be granted any additional rights such as a Mining Lease. Such procedures may take considerable time, involve the negotiation of significant agreements, may involve a requirement to negotiate for access rights, and require the payment of compensation to those persons holding or claiming native title in the land the subject of a tenement. The administration and determination of native title issues may have a material adverse impact on the position of the Company in terms of cash flows, financial performance, business development, ability to pay dividends and the Share price.

Each of the granted NORNICO tenements has a variety of underlying land tenures. With the exception of the Kokomo and Six Mile EPM's, each tenement contains areas where the underlying land tenures should have extinguished native title. The underlying land tenure of the Kokomo and Six Mile project is land lease pastoral holding which is non-exclusive of native title. The Six Mile EPM is subject to a native title land claim as is a small portion of the Kokomo tenement. The Directors believe that the impact of native title with respect to land access on the NORNICO project for the purpose of exploration, other than causing delays, is likely to be minimal. These native title

and land access rights and obligations are set out further in Section 7. The native title status of all other tenements held by Metallica and its Subsidiaries and the land access rights and obligations are set out in Section 7.

#### (r) Intellectual Property

At this stage, Metallica has not investigated whether it will require licences or other intellectual property rights to enable it to take advantage of the process information and the technical and engineering design information associated with Atmospheric Leaching technologies associated with the treatment of nickel-cobalt laterite ores.

These matters will be investigated further as part of the Scoping Study and Pre-Feasibility Study.

If Metallica does require intellectual property rights in relation to certain aspects of plant design or the AL processes, there is a risk that the parties will be unable to negotiate a commercially acceptable agreement for the use of intellectual property by Metallica.

#### 4.4 GENERAL

Any combination of the above factors may materially affect any individual mineral project assets, operations or the financial performance of Metallica and the value of its securities. To that extent the Shares offered in this Prospectus are subject to significant risk and uncertainty with respect to return or preservation of capital, the price (if any) at which the Shares may trade and the payment of dividends in any future time.

# 5. independent consulting geologist's report

The Independent Consulting Geologist's Report prepared by N. F. Stuart and Associates (the Independent Geologist) and summarised in this section has been lodged with ASIC. Under Section 712(1) of the Corporations Act, a prospectus may simply refer to a document which has been lodged with ASIC instead of setting out the information contained in that document. The Corporations Act also requires certain information to be included in the reference. Such information in relation to the Independent Consulting Geologist's Report is contained in this Section.

During the Application Period, copies of the Report can be obtained free of charge by calling Metallica on (07) 3211 7366, or by downloading it from Metallica's website at [www.metallicaminerals.com.au](http://www.metallicaminerals.com.au)

## 5.1 BRIEF OUTLINE OF INDEPENDENT CONSULTING GEOLOGIST'S REPORT

The Independent Consulting Geologist's Report provides a geological review and appraisal of Metallica's work programmes.

The Report has been prepared in accordance with relevant requirements and Listing Rules, the Valmin Code of the AusIMM and ASIC Practice Note 42 covering Independent Expert's Reports. The Report addresses those EPM's and ML's which have actually been granted to Metallica (Refer Section 7), it also gives details of the tenements which Metallica has applied for but have yet to be granted, (EPMA's).

The Independent Consultant Geologist's Report contains details about, amongst other things:

### NORNICO Project

- The tenements forming part of the project;
- Location and tenure;

- Exploration history;
- Geology;
- Mineralisation;
- The Resources at Bell Creek and Minnamoolka;
- The Kokomo scandium mineralisation;
- NORNICO resource potential;
- NORNICO exploration programme and objectives;

### Other Nickel Projects

- Lucky Break Nickel Project;

### Coal Projects

- Kingaroy Coal Project;

### Bauxite Projects

- Weipa Aluminium Project;
- Kingaroy Bauxite Project;

### Limestone Projects

- The tenements relevant to the limestone areas;
- Star River Limestone geology and exploration potential;
- Boyne Limestone geology and exploration potential;
- Fairview Limestone geology and exploration potential;

### Other Projects

Summary information only, covering exploration history, geology and mineralisation for:

- Six Mile Project;
- Texas North Gold Project;
- Warwick West Gold Project;
- Prospect Project.

## 5.2 OPINION OF EXPLORATION PROGRAMME

The Report states that the planned exploration programmes are satisfactory and clearly defined and that the project expenditures and budgets are reasonable, having regard to the stated objectives of Metallica, the prospectivity of individual exploration areas, and the exploration database already available. In the opinion of the Independent Geologist, sufficient exploration work has taken place on the tenements in the last two years to justify the planned exploration and budget expenditure programmes.

The Report concludes that: – "Metallica has planned a two year exploration programme totalling \$2,060,000 minimum and a maximum of approximately \$3,640,000 depending on the total amount of funds raised by the Prospectus. The minimum amount budgeted should considerably advance Metallica's key projects and enhance the prospectivity of Metallica's existing tenements. Metallica's budget provides sufficient funds to conduct exploration and meet expenditure and rental commitments to keep its tenements in good standing".

## 5.3 ASSUMPTIONS AND SOURCES OF INFORMATION

The Report also contains important information about the assumptions used in the preparation of the Report, the sources of information used and the reliance of the Independent Geologist on such information. The Report contains references to statements by, or said to be based on statements by, various parties in public official documents.

# 6. independent accountant's report

## accountant's report



**BDO Kendalls**  
Chartered Accountants  
& Advisers

13 September 2004

**The Directors**  
**Metallica Minerals Limited**  
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Dear Sirs

### 1 INTRODUCTION

We have prepared this Independent Accountant's Report on historical financial information of Metallica Minerals Limited and controlled entities (Metallica) for inclusion in the Prospectus dated on or about 14 September, 2004. The prospectus deals with the proposed issue by the Company of a minimum 15,000,000 ordinary shares with the ability to accept oversubscriptions of 10,000,000 ordinary shares at a price of 20 cents per share to raise a maximum of \$5,000,000. Included as part of the capital raising will be the issue of up to 6,250,000 attaching options exercisable at 25 cents per share on or before 31 December 2006.

The purpose of this report is to illustrate the financial position of the Economic Entity as at 30 June 2004 and to provide investors with pro-forma statements of financial position as at 30 June 2004 adjusted to include pre IPO transactions and the capital raising assuming minimum and maximum subscription. This report does not address the rights attaching to the shares to be issued in accordance with the prospectus, the risks associated with the investment, nor forms the basis of an independent expert's opinion with respect to a valuation of Metallica or a valuation of the share issue price of 20 cents per share.

### 2 BACKGROUND

Metallica Minerals Limited is the Chief Entity in an Economic Entity comprising the Company, and its wholly owned subsidiaries, QLD Gold Pty Ltd (QLD Gold), Oresome Australia

Pty Ltd (Oresome) and Kingaroy Aluminium Pty Ltd. Metallica Minerals Limited was incorporated on 15 January 1997.

The Company acquired all the issued capital of QLD Gold and Oresome by issuing 16,603,052 shares and 2,000,000 shares respectively to the shareholders in the same proportion to which they held shares. The consideration for this purchase was \$139,221 and \$67,042 respectively. These acquisitions resulted in Metallica acquiring nickel, cobalt, and copper-gold properties in eastern Queensland.

In December 2003 Metallica raised approximately \$800,000 through an Offer Information Statement. This capital raising increased the number of shareholders to approximately 360.

### 3 SCOPE OF WORK

You have requested BDO Kendalls to prepare for inclusion in the prospectus a report covering the following:

- Historical financial information. BDO Kendalls are the appointed Auditor of Metallica and have audited the financial statements of the Company for the year ended 30 June 2003 and 30 June 2004. The financial statements for the period ended 30 June 2004, together with the significant accounting policies adopted by the Economic Entity, have been extracted from the 30 June 2004 financial report and are detailed in the Annexure to this report.

- The Pro-forma Statement of Financial Position of the Economic Entity as at 30 June 2004, set out in the Annexure to the report. The Economic Entity includes Metallica, QLD Gold, Oresome and Kingaroy Aluminium Pty Ltd.

The pro-forma reflects the financial position of Metallica after the Company has completed the capital raising. The pro-forma details the financial position of the company on the basis of both a minimum and maximum subscription, on the basis that the following transactions have occurred:

- Raising minimum capital of \$3,000,000 plus a full oversubscription amount of \$2,000,000 by issuing 25,000,000 ordinary shares at 20 cents each.
- Incurring preliminary and share issue expenses of a minimum of \$420,000 and a maximum of \$550,000. The costs are accounted for as a charge against equity.
- Repaying deferred fees and shareholder loans of \$223,383.
- Repaying \$96,464 by the issue of 233,569 ordinary shares of \$0.413 per share and \$143,536 in cash under the QLD Gold Agreement. The agreement for the purchase of QLD Gold provides that within 7 days of the shares in Metallica being quoted on the ASX, the Company would repay to each of the vendors, varying amounts totalling \$500,000. The beneficial party has since waived \$260,000 of the \$500,000.

# 6. independent accountant's report

## accountant's report

- Issuing 3,000,000 convertible notes at 12.5cents per note raising \$375,000. This issue occurred subsequent to 30 June 2004 and prior to the share issue under this prospectus.

The pro-forma does not reflect the financial effect of the attaching options that are exercisable at 25 cents per share on or before 31 December 2006.

#### Historical Financial Information and Pro Forma Financial Information as at 30 June 2004

In relation to the historical financial information, we have conducted an independent audit of the financial statements as at 30 June 2003 and 30 June 2004 in order to express an opinion on their preparation and presentation. The Company's directors are responsible for the financial report from which the information in the Annexure has been extracted.

We have completed an independent review in order to state whether, on the basis of the procedures described, anything has come to our attention that would indicate that the pro forma statement of financial position is not presented fairly in accordance with the measurement requirements of applicable Accounting Standards, other mandatory professional reporting requirements in Australia and the assumptions set out above. Our review has been conducted in accordance with Australian Auditing Standards applicable to review engagements.

We made such enquiries and performed such procedures as we, in our professional judgment, considered reasonable in the circumstances including:

- (a) Review of the financial statements;
- (b) Analytical review procedures applied to the financial data;

- (c) Comparison of consistency in application of applicable accounting standards and accounting policies;
- (d) Review of workpapers, accounting records and other documents; and
- (e) Inquiry of Directors, Management and Others.

These review procedures were substantially less in scope than an audit examination conducted in accordance with Australian Auditing Standards, the purpose of which is the expression of an opinion on the financial statements. Accordingly, we do not express such an opinion.

The opinion expressed in this report has been formed on the above basis.

#### 4 CONCLUSION

- (a) Based on our review of the pro forma statement of financial position, as set out in the Annexure, nothing has come to our attention which causes us to believe that the pro forma statement of financial position does not present fairly the financial position of the Economic Entity on the basis that all the transactions described previously in this report had taken place.
- (b) Based on our review of the financial statements as at 30 June 2004, as set out in the Annexure, nothing has come to our attention which causes us to believe that the financial statements do not present fairly the financial position of the Economic Entity as at 30 June 2004 and its performance for the period ended on that date.
- (c) In our opinion, the pro forma statement of financial position has been properly prepared in accordance with the recognition and measurement principles

prescribed in Accounting Standards and other mandatory professional reporting requirements and the accounting policies adopted by the Economic Entity described in the Annexure.

#### 5 SUBSEQUENT EVENTS

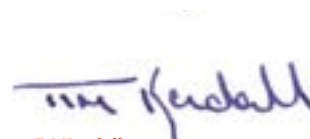
Apart from the matters dealt with in the report, and having regard to the scope of our report, to the best of our knowledge and belief no material items, transactions or events outside of the ordinary business of the Economic Entity have come to our attention which would require comment on, or adjustment to, the information referred to in our report or that would cause the information to be misleading or deceptive.

#### 6 INDEPENDENCE DISCLOSURE

BDO Kendalls does not have any pecuniary interests that could reasonably be regarded as being capable of affecting its ability to give an unbiased opinion in relation to this matter. BDO Kendalls has provided advisory services and will receive a professional fee for the preparation of this Report. The partners of BDO Kendalls do not hold nor have any interest in any ordinary shares of the Company or its subsidiaries.

Consent to the inclusion of the Independent Accountants Report in this Prospectus in the form and context in which it appears has been given. At the date of this Report consent has not been withdrawn.

#### BDO Kendalls



T J Kendall  
Partner

## ANNEXURE 1

METALLICA MINERALS LIMITED AND CONTROLLED ENTITIES

### STATEMENT OF FINANCIAL PERFORMANCE

	30 JUNE 2003 CONSOLIDATED (AUDITED)	30 JUNE 2004 CONSOLIDATED (AUDITED)
Revenue from ordinary activities	74,520	32,404
Employee benefit expense	(47,763)	(172,183)
Depreciation and amortisation expense	(2,088)	(4,173)
Other expenses from ordinary activities	(84,441)	(131,643)
<b>LOSS FROM ORDINARY ACTIVITIES BEFORE INCOME TAX EXPENSE</b>	<b>(59,772)</b>	<b>(275,595)</b>
Income tax expense relating to ordinary activities	—	—
<b>NET LOSS FROM ORDINARY ACTIVITIES AFTER INCOME TAX EXPENSE ATTRIBUTABLE TO MEMBERS OF THE PARENT ENTITY</b>	<b>(59,772)</b>	<b>(275,595)</b>

# 6. independent accountant's report accountant's report

## ANNEXURE 1

METALLICA MINERALS LIMITED AND CONTROLLED ENTITIES

### STATEMENT OF FINANCIAL POSITION

	30 JUNE 2003 CONSOLIDATED (AUDITED)	30 JUNE 2004 CONSOLIDATED (AUDITED)	PRO-FORMA (MIN SUB)	PRO-FORMA (MAX SUB)
<b>CURRENT ASSETS</b>				
Cash assets	52,917	476,924	3,140,357	5,010,357
Other	42,530	127,194	51,842	51,842
<b>TOTAL CURRENT ASSETS</b>	<b>95,447</b>	<b>604,118</b>	<b>3,192,199</b>	<b>5,062,199</b>
<b>NON – CURRENT ASSETS</b>				
Mineral Properties	1,250,811	1,415,209	1,655,209	1,655,209
Property, plant and equipment	4,684	17,329	17,329	17,329
<b>TOTAL NON-CURRENT ASSETS</b>	<b>1,255,495</b>	<b>1,432,538</b>	<b>1,672,583</b>	<b>1,672,538</b>
<b>TOTAL ASSETS</b>	<b>1,350,942</b>	<b>2,036,656</b>	<b>4,864,737</b>	<b>6,734,737</b>
<b>CURRENT LIABILITIES</b>				
Payables	291,776	263,900	40,517	40,517
<b>TOTAL CURRENT LIABILITIES</b>	<b>291,776</b>	<b>263,900</b>	<b>40,517</b>	<b>40,517</b>
<b>NON-CURRENT LIABILITIES</b>				
Interest-bearing liabilities	5,000		375,000	375,000
<b>TOTAL NON-CURRENT LIABILITIES</b>	<b>5,000</b>		<b>375,000</b>	<b>375,000</b>
<b>TOTAL LIABILITIES</b>	<b>296,776</b>	<b>263,900</b>	<b>415,517</b>	<b>415,517</b>
<b>NET ASSETS</b>	<b>1,054,166</b>	<b>1,772,756</b>	<b>4,449,220</b>	<b>6,319,220</b>
<b>EQUITY</b>				
Contributed equity	2,689,075	3,683,260	6,359,724	8,229,724
Retained profits	(1,634,909)	(1,910,504)	(1,910,504)	(1,910,504)
<b>TOTAL EQUITY</b>	<b>1,054,166</b>	<b>1,772,756</b>	<b>4,449,220</b>	<b>6,319,220</b>

# ANNEXURE 1

## METALLICA MINERALS LIMITED AND CONTROLLED ENTITIES

### STATEMENT OF SIGNIFICANT ACCOUNTING POLICIES

The financial report is a general purpose financial report that has been prepared in accordance with Accounting Standards, Urgent Issues Group Consensus Views and other authoritative pronouncements of the Australian Accounting Standards Board. The financial report has been prepared on the basis of historical costs and does not take into account changing money values or, except where stated, current valuations of non-current assets. Cost is based on the fair values of the consideration given in exchange for assets. The accounting policies have been consistently applied, unless otherwise stated.

The financial report covers Metallica Minerals Limited as an individual entity and Metallica Minerals Limited and Controlled Entity as an economic entity. Metallica Minerals Limited is a company limited by shares, incorporated and domiciled in Australia.

The following is a summary of the material accounting policies adopted by the economic entity in the preparation of the financial report.

#### (a) Principles of Consolidation

The consolidated financial statements comprise the financial statements of Metallica Minerals Limited and all of its controlled entities. A controlled entity is any entity controlled by Metallica Minerals Limited. Control exists where Metallica Minerals Limited has the capacity to dominate the decision making in relation

to the financial and operating policies of another entity so that the other entity operates with Metallica Minerals Limited to achieve the objectives of Metallica Minerals Limited.

All inter-company balances and transactions between entities in the economic entity, including any unrealised profits or losses, have been eliminated on consolidation.

Where controlled entities have entered or left the economic entity during the year, their operating results have been included from the date control was obtained or until the date control ceased.

#### (b) Income Tax

The economic entity adopts the liability method of tax effect accounting whereby the income tax expense is based on the operating profit from ordinary activities adjusted for any permanent differences.

Timing differences which arise due to the different accounting periods in which items of revenue and expense are included in the determination of accounting profit and taxable income, are brought to account as either provision for deferred income tax or an asset, described as future income tax benefit at the rate of income tax applicable to the period in which the benefit will be received or the liability will become payable.

Future income tax benefits are not brought to account unless realisation of the asset is assured beyond any reasonable doubt. Future income tax benefits in relation to tax losses are not brought to account unless there is virtual certainty of realisation of the benefit.

The amount of benefits brought to account or which may be realised in the future is based on the assumption that no adverse change will occur in income tax legislation and the anticipation that the economic entity will derive sufficient future assessable income and comply with the conditions of deductibility imposed by the law.

#### (c) Property, Plant and Equipment

Property, plant and equipment are carried at cost less, where applicable, any accumulated depreciation or amortisation. The carrying amount of property, plant and equipment is reviewed annually by directors to ensure it is not in excess of the recoverable amount from those assets. The recoverable amount is assessed on the basis of the expected net cash flows, which will be received from the assets employment and subsequent disposal. The expected net cash flows have not been discounted to present values in determining recoverable amount.

The depreciable amount of all fixed assets including buildings and capitalised

# 6. independent accountant's report

## accountant's report

### STATEMENT OF SIGNIFICANT ACCOUNTING POLICIES

leases assets, but excluding freehold land, is depreciated over their useful lives commencing from the time the asset is held ready for use. Properties held for investment purposes are not subject to a depreciation charge. Leasehold improvements are depreciated over the shorter of either the unexpired period of the lease or the estimated useful lives of the improvements.

The gain or loss on disposal of all fixed assets, including revalued assets, is determined as the difference between the carrying amount of the asset at the time of disposal and the proceeds of disposal, and is included in operating profit before income tax of the economic entity in the year of disposal. Any realised revaluation increment relating to the disposed asset, which is included in the asset revaluation, is transferred to the asset realisation reserve.

The depreciation rates used for each class of asset are:

Furniture and Fittings	20%
Computer Equipment	40%

#### (d) Leases

Leases on fixed assets, where substantially all the risks and benefits incidental to the ownership of the asset, but not legal ownership, are transferred to the economic entity are classified as finance leases. Finance leases are capitalised recording an asset and a liability equal to the present value of the minimum lease payments, including any guaranteed residual value. Leased assets are depreciated over their estimated useful lives. Lease payments are allocated between the reduction of the lease liability and the lease interest expense for the period.

Lease payments under operating leases, where substantially all the risks and benefits remain with the lessor, are charged as expenses in the periods in which they are incurred.

#### (e) Investments

Investments are brought to account at cost. The carrying amount of investments is reviewed annually by directors to ensure it is not in excess of the recoverable amount of these investments. The recoverable amount is assessed from the shares' current market value or the underlying net assets in the particular entities. The expected net cash flows from investments have not been discounted to their present value in determining the recoverable amounts, except where stated.

Dividends are brought to account in the profit and loss statement when received.

#### (f) Goodwill

Goodwill and Goodwill on consolidation are initially recorded at the amount by which the purchase price for a business or for the ownership interest in a controlled entity exceeds the fair value attributed to its net assets at the date of acquisition. Both purchased goodwill and goodwill on consolidation are amortised on a straight-line basis over the period of 20 years. The balances are reviewed annually and any balance representing future benefits for which the realisation is considered to be no longer probable are written off.

#### (g) Exploration and Development Expenditure

Exploration, evaluation and development expenditure incurred is accumulated in respect of each identifiable area of interest. These costs are only carried forward to the extent that they are expected to be recouped through the

successful development of the area or where activities in the area have not yet reached a stage that permits reasonable assessment of the existence of economically recoverable reserves.

Accumulated costs in relation to an abandoned area are written off in full against profit in the year in which the decision to abandon the area is made.

When production commences, the accumulated costs for the relevant area of interest are amortised over the life of the area according to the rate of depletion of the economically recoverable reserves.

A regular review is undertaken of each area of interest to determine the appropriateness of continuing to carry forward costs in relation to that area of interest.

#### (h) Interests in Joint Ventures

The economic entity's share of the assets, liabilities, revenue and expenses of joint ventures are included in the appropriate items of the statement of financial performance and financial position.

#### (i) Net Fair Value of Financial Assets and Liabilities

The economic entity's financial assets and liabilities, being cash, receivables, investments, property, plant and equipment, exploration expenditure, accounts payable and borrowings are carried at amounts that approximate net fair value.

#### (i) Credit Risk Exposure

The economic entity's exposures to credit risks are as indicated by the carrying amount of its assets.



## STATEMENT OF SIGNIFICANT ACCOUNTING POLICIES

### (k) Revenue

Revenue from the sale of goods is recognised upon the delivery of goods to customers.

Interest revenue is recognised on a proportional basis taking into account the interest rates applicable to the financial assets.

Dividend revenue is recognised when the right to receive a dividend has been established. Dividends received from associates are accounted for in accordance with the equity method of accounting.

All revenue is stated net of the amount of Goods and Services Tax (GST).

### (l) GST

Revenues, expenses, and assets are recognised net of the amount of GST, except where the amount of GST incurred is not recoverable from the Australian Tax Office. In these circumstances the GST is recognised as part of the cost of acquisition of the asset or as part of an item of expense. Receivables and payables in the Statement of Financial Position are shown inclusive of GST.

### (m) Employee Benefits

Provision is made for the company's liability for employee benefits arising from services rendered by employees to balance date. Employee benefits expected to be settled within one year together with entitlements arising from wages and salaries, annual leave and sick leave which will be settled after one year, have been measured at the amounts expected to be paid when the liability is settled plus related on-costs. Other employee benefits payable later than one year have been measured at the present value of the estimated future cash outflows to be made for those benefits.

Contributions are made by the economic entity to employee superannuation funds and are charged as expenses when incurred.

The company operates an ownership-based remuneration scheme through the employee option plan. Profits or losses incurred by employees being the difference between the market value and the issue price of the options acquired are recognised as an employee benefit expense at the time the employees are entitled to the options.

### (n) Adoption of Australian Equivalents to International Financial Reporting Standards

Australia is currently preparing for the introduction of International Financial Reporting Standards (IFRS) effective for financial years commencing 1 January 2005. This requires the production of accounting data for future comparative purposes at the beginning of the next financial year.

The economic entity's management, along with its auditors, are assessing the significance of these changes and preparing for their implementation. An IFRS committee has been established to oversee and manage the economic entity's transition to IFRS. We will seek to keep stakeholders informed as to the impact of these new standards as they are finalised.

**The directors are of the opinion that the key differences in the economic entity's accounting policies, which will arise from the adoption of IFRS, are:**

#### Business combinations

Amortisation of goodwill will be prohibited and will be replaced by annual impairment testing focusing on the discounted cash flow of the cash-

generating unit. Goodwill is currently amortised over 20 years

#### Exploration and Development Expenditure

Pending standard AASB 138: Intangible Assets further requires that costs associated with exploration be expensed in the period in which they are incurred. In terms of current policy, exploration costs are capitalised to the statement of financial position where it is expected beyond any reasonable doubt that sufficient future benefits will be derived so as to recover these deferred costs.

#### Impairment of Assets

The economic entity currently determines the recoverable amount of an asset on the basis of undiscounted net cash flows that will be received from the assets use and subsequent disposal. In terms of pending AASB 136: Impairment of Assets, the recoverable amount of an asset will be determined as the higher of fair value less costs to sell and value in use. It is likely that this change in accounting policy will lead to impairments being recognised more often than under the existing policy.

#### Income Tax

Currently, the economic entity adopts the liability method of tax-effect accounting whereby the income tax expense is based on the accounting profit adjusted for any permanent differences. Timing differences are currently brought to account as either a provision for deferred income tax or future income tax benefit. Under the Australian equivalent to IAS 12, the economic entity will be required to adopt a balance sheet approach under which temporary differences are identified for each asset and liability rather than the effects of the timing and permanent differences between taxable income and accounting profit.

# 7. detailed outline of independent & report on tenements and material contracts

The Independent Report on Tenements summarised in this section was prepared by Environmental & Licensing Professionals Pty Ltd and has been lodged with ASIC. Under Section 712(1) of the Corporations Act, a prospectus may simply refer to a document which has been lodged with ASIC instead of setting out the information contained in that document. The Corporations Act also requires certain information to be included in the reference. Such information in relation to the Independent Report on Tenements is contained in this Section 7.

During the Application Period, copies of the Report can be obtained free of charge by calling Metallica on (07) 3211 7366, or by downloading from Metallica's website at [www.metallicaminerals.com.au](http://www.metallicaminerals.com.au)

## 7.1 DETAILED OUTLINE OF INDEPENDENT REPORT ON TENEMENTS

### Tenement Holdings and Tenement Applications

Metallica holds the ownership or rights to the following tenements:

- Three Mining Leases (ML's);

- One Mineral Development Licence (MDL);
- Eighteen Exploration Permits for Minerals (EPM's); and
- Seven EPM Applications (EPMA's).
- One Exploration Permit for Coal Application (EPCA)

There is nothing in the independent tenement report that would indicate that these tenements are not in good standing.

The Table below sets out a summary of these Tenements and provides relevant notes on each Tenement:

### SCHEDULE OF PERMIT AND TENEMENT INTERESTS

TENEMENT	ENVIRONMENTAL AUTHORITY NUMBER	ENVIRONMENTAL AUTHORITY TYPE	PROJECT NAME	HOLDER/APPLICANT	STATUS (EXPIRY DATE)	NOTES
<b>NORNICO PROJECT</b>						
ML 4187	M2158	Standard	Bell Creek North Lease	QLD Gold Pty Ltd	Granted (29/2/2020)	8, 15, 28
ML 4188	M2158	Standard	Bell Creek South Lease	QLD Gold Pty Ltd	Granted (29/2/2020)	8, 15, 28
EPM 10235	M7179	Standard	Minnamoolka	QLD Gold Pty Ltd	Granted (8/9/2004 - being renewed)	2, 5, 8, 28
EPM 10699	MIM 400042502	Standard	Kokomo	QLD Gold Pty Ltd	Granted (21/8/2006)	2, 5, 6, 9, 10, 11, 12, 28
EPM 11285	M2158	Standard	Bell Creek	QLD Gold Pty Ltd	Granted (27/8/2004 - being renewed)	4, 8, 28
EPM 13663	M7179	Standard	Minnamoolka Extended	QLD Gold Pty Ltd	Granted (12/6/2006)	2, 5, 8, 28
EPM 13873	MIM 500062402	Standard	Six Mile	QLD Gold Pty Ltd	Granted (10/12/2007)	2, 5, 6, 9, 28, 29
EPM 14101	MIM 500154103	Standard	Mt Garnet South	QLD Gold Pty Ltd	Granted (22/12/2008)	1, 2, 4, 6, 12, 13, 28
EPM 14273	MIM 500188803	Standard	Moonmyata	QLD Gold Pty Ltd	Granted (22/12/2008)	12, 13, 28
EPM 14066	MIM 500212303	Standard	Greenvale South	QLD Gold Pty Ltd	Granted (22/08/2009)	13, 10, 11, 28
EPM 14070	MIM 500212303	Standard	Greenvale North	QLD Gold Pty Ltd	Granted (22/08/2009)	2, 5, 10, 11, 13, 28
EPM 14181	MIM 500168903	Standard	Lucky Downs	QLD Gold Pty Ltd	Granted (22/08/2009)	13, 10, 28
EPMA 14381	MIM 500212303	Standard	Greenvale South #2	QLD Gold Pty Ltd	Application	7, 9, 28
EPMA 14518	MIM 500154103	Standard	Mt Garnet South #2	QLD Gold Pty Ltd	Application	2, 3, 4, 5, 6, 11, 13, 28
<b>TOWNSVILLE LIMESTONE PROJECT</b>						
ML 10276	M7407	Standard	Star River Limestone	Metallica Minerals Ltd	Granted (30/4/2023)	8, 18, 28
EPM 13000	M5263	Standard	Star River	Metallica Minerals Ltd	Granted (19/9/2004)	6, 8, 14, 17, 28
EPM 12765	M5635	Standard	Fanning	Metallica Minerals Ltd	Granted (1/4/2005)	6, 7, 8, 14, 16, 19, 28

## SCHEDULE OF PERMIT AND TENEMENT INTERESTS (CONT.)

TENEMENT	ENVIRONMENTAL AUTHORITY NUMBER	ENVIRONMENTAL AUTHORITY TYPE	PROJECT NAME	HOLDER/APPLICANT	STATUS (EXPIRY DATE)	NOTES
<b>GLADSTONE LIMESTONE PROJECT</b>						
EPM 13423	M6099	Standard	Boyne Limestone	Metallica Minerals Ltd	Granted (1/1/2006)	8, 14, 16, 21, 22, 28
EPM 13756	MIM 50014303	Standard	Fairview Limestone	R.W. Siller	Granted (10/12/2004)	8, 14, 20, 22, 28
EPM 14042	MIM 50014303	Standard	Fairview Extended Limestone	R.W. Siller	Granted (23/10/2005)	8, 14, 22, 28
<b>OTHER METALLICA PROJECTS</b>						
MDL 312	M4560	Standard	Dingo Dam (Verde Tinto JV)	QLD Gold Pty Ltd (90%) and Canis Miner Pty Ltd (10%)	Granted (31/12/2006)	1,8,28
EPM 14392	MIM 500214203	Standard	Lucky Break	QLD Gold Pty Ltd	Granted (29/6/2009)	7,11,13,28
EPMA 14406	Application	Application	Prospect	Oresome Australia Pty Ltd	Application Expedited Procedure	9,10,11,14,28
EPM 14477	MIM 500228004	Standard	Texas North	Oresome Australia Pty Ltd	Granted (22/08/2009)	4,7,11,13,21,24,28
EPM 14478	MIM 500227904	Standard	Warwick West	Oresome Australia Pty Ltd	Granted (22/08/2009)	3,7,11,13,21,24,25,28
EPMA 14514	Application	Application	Kingaroy North Bauxite	Kingaroy Aluminium Pty Ltd	Application	7,11,13,14,21,23,24,25,28
EPMA 14547	Application	Application	Weipa Bauxite	Kingaroy Aluminium Pty Ltd	Application Expedited Procedure	11,13,14,24,28
EPMA 14639	Application	Application	Kingaroy Bauxite	Kingaroy Aluminium Pty Ltd	Application Expedited Procedure	7,11,13,14,21,23,24,25,26,27,28
EPMA 14658	Application	Application	Yellow Jack Gully	QLD Gold Pty Ltd	Application Expedited Procedure	4,7,9,11,24,28
EPCA 882	MIM 500234204	Standard	Kingaroy Coal	Kingaroy Aluminium Pty Ltd	Application Expedited Procedure	3,4,7,11,13,14,21,23,24,27,28

### NOTES

- Standard conditions have been imposed on this Environmental Authority, (EA).
- Environmentally Sensitive Areas that are yet to be classified have been identified within this tenement.
- This tenement contains a government owned weir or dam which requires a 50 metre exclusion zone and consent from the owner prior to access.
- This tenement contains an area that is listed on the Heritage Register. An exclusion zone of 100 metres exists around this area.
- Constrained land has been identified within or on the boundaries of this tenement. Access to this area is only possible under certain restrictions.
- This tenement contains a pipeline. An exclusion zone of 37 metres exists around this pipeline.
- This tenement contains access restrictions due to other tenement(s) occurring within its boundaries.
- This tenement has been granted on land which is completely exclusive. This means that native title has been extinguished and access is permitted within the entire area. A native title claim may still be lodged over the area however it is likely that the Public Extract of the claim will indicate that native title is sought only over non-exclusive land parcels.

# 7. detailed outline of independent & report on tenements and material contracts

9. This tenement has been granted on land which is completely non-exclusive. This means that native title has not been extinguished and in order to gain access, an Indigenous Land Use Agreement under the provisions of the Native Title Act 1993 (Cth) (NTA) is required, or the expedited procedures under the right to negotiate process of the NTA needs to be initiated, or an application needs to be made by the holder of this tenement to include the areas back into the tenement.
10. An Indigenous Land Use Agreement exists or is in progress in respect of this tenement.
11. The expedited procedures process has been or is intended to be initiated in respect of this tenement to gain access.
12. An application needs to be made by the holder of this tenement to include the areas subject to native title back into the tenement.
13. This tenement has been granted on land which is a mixture of exclusive and non-exclusive land. This means that there is a potential for a native title claim to exist over this land. The tenements that are currently applications could potentially be granted over only the exclusive tenure. (EPM 14392 has been granted over only the extinguished portions of land).
14. A native title claim exists over this tenement.
15. This tenement was granted prior to the commencement of the NTA and therefore is not affected by native title provided that its renewals are for like terms and no additional activities are authorised.
16. A Category A Environmentally Sensitive Area (a National Park which is classified as sterile land) is located within the boundaries or within 500 metres of the boundaries of this tenement. An exclusion zone of 100 metres exists around this area.
17. This tenement contains a river which requires a 200 metre exclusion zone.
18. There is a licence for extraction held by Metallica over this tenement.
19. This tenement is encumbered by a consent caveat associated with a royalty agreement.
20. Metallica has an option to acquire this tenement from the registered holder (the option price is \$1 for EPM's 13756 and 14042).
21. This tenement contains a Category B Environmentally Sensitive Area (an Endangered Regional Ecosystem). For Exploration and Mineral Development projects, activities are not permitted within 500 metres of this area. For Mining Lease projects, activities are not permitted within 1000 metres of this area.
22. An area classified as Restricted Land is contained within this tenement. This means that access may be limited and additional conditions may be placed on the tenement. (The Gladstone Area Water Board has stated that it has no objections to applications being made or granted in respect of the Restricted Land area in EPM 14042).
23. This tenement contains a Category C Environmentally Sensitive Area (a State Forest). This means that prior to carrying out activities, the relevant administering authority and the Environmental Protection Authority must be consulted and additional conditions may be added to the Environmental Authority.
24. This tenement contains an Environmentally Sensitive Area which could be either a Category B Endangered Regions Ecosystem, a Category C River Improvement Area, a Queensland Heritage Site, an area on the Directory of Important Wetlands, Sterile Land (including National, Environmental and Conservation Parks, Resources Reserves, Department of Primary Industries Research Sites), Constrained Land (including Scientific Area State Forests) a Restricted Area or a State Forest.
25. This tenement contains a railway line. An exclusion zone of 12 metres exists around this railway line.
26. This tenement contains a highway.
27. This tenement contains an aerodrome. An exclusion zone of 100 metres exists around this aerodrome.
28. This tenement is part of a project that has financial assurances lodged with the Queensland Department of Natural Resources, Mines and Energy (DNRME) which are in accordance with DNRME and Queensland Environmental Protection Agency requirements.
29. This tenement has Land Access Agreement in place.

## 7.2 MATERIAL CONTRACTS

The Company is a party to a number of material agreements. A summary of those agreements is set out below:

### (a) Bell Creek Royalty Deed

As a condition of QLD Gold acquiring Mining Leases 4187 and 4188 from AO Australia Pty Limited (AO), QLD Gold has entered into a Deed dated 8 August 1997 pursuant to which it has agreed to pay to Ashton Mining Limited a royalty (Royalty) calculated on the basis of production from the area of those tenements and EPM11285 at the following rates:

- \$1.00/t of production in relation to the first 5 Mt;
- \$2.00/t of production in excess of 5 Mt.

To better secure the payment of the Royalty, Ashton has the right to lodge a caveat against the mining leases to protect its royalty interest and can require QLD Gold on or before one month prior to the commencement of mining operations to grant to Ashton over the Mining Leases and EPM11285 a registrable mortgage to secure the payment of the Royalty.

### (b) Whim Creek Consolidated NL (WCC) Royalty Agreement – Kokomo Tenement

QLD Gold has entered into a Royalty Agreement dated 27 June 1997 with Whim Creek Consolidated NL (WCC). Pursuant to this agreement (as varied), QLD Gold has agreed to pay to WCC as part of the consideration for acquiring EPM10699 (Tenement) the sum of \$50,000 per year upon a Mining Lease or other production tenement being granted over the area presently covered by the Tenement (Yearly Payment). This Yearly Payment is to be reduced by a royalty which is also payable to WCC in the following amounts per dry tonne of ore mined from the Tenement area:

- \$1.00 per dry tonne of ore mined up to 1 Mt;
- \$1.50 per dry tonne of ore mined from 1 Mt to 3 Mt;
- \$2.00 per dry tonne of ore mined from 3 Mt.

If at any time QLD Gold wishes to surrender any part of the tenement other than for the purpose of acquiring replacement titles or as compelled by departmental requirements it must first offer the area to be surrendered to WCC for no consideration.

#### (c) Minnamoolka Royalty Agreement

On 11 December 1996, QLD Gold entered into an agreement with Renison Limited (**Renison**) and Goldfields Exploration Pty Ltd (**Goldfields**). Pursuant to this agreement QLD Gold agreed to purchase and Renison and Goldfields agreed to sell their respective right, title and interest in EPM1025 (**Tenement**). In consideration for the acquisition of the Tenement, QLD Gold agreed to pay to Goldfields a royalty (**Royalty**) based on ore extracted from the Tenement as follows:

- \$1.00/t of production in relation to the first 500,000 t;
- \$1.50/t of production in excess of 500,000 t.

To better secure the payment of the Royalty, Goldfields has the right to lodge a caveat against the Tenement and QLD Gold must consent to the lodgement of that caveat.

#### (d) Star River Royalty Deed

As a condition of Metallica discharging an amount of \$100,000 (**Loan Amount**) owing to Paul Dostal (as trustee for the Dostal Superannuation Fund) (**Dostal**), Metallica has entered into a Deed dated 30 May 2003 pursuant to

which it has agreed to pay to Dostal a royalty (**Royalty**) calculated on the basis of \$0.20/t of production of limestone from the Star River Mining Lease 10276.

To better secure the payment of the Royalty, Dostal has the right to lodge a caveat against this Mining Lease.

#### (e) Verde Tinto Farm in Agreement (Dingo Dam - MDL 312)

Metallica, QLD Gold and Canis Miner Pty Ltd (**Canis**) entered into a Farm-in Agreement on 10 August 1999 in relation to EPM 11370 (**Tenement**). QLD Gold and Metallica as the holders of EPM 11370 granted to Canis a right to acquire up to a 25% interest in the Tenement by Canis expending certain amounts on the exploration and development of the Tenement which may be summarised as follows:

- by 10 October 1999, to expend on exploration activities on the Tenement the sum of \$25,000 to earn a 10% participating interest. At that stage Canis had the right to either withdraw from the agreement without having a participating right in the Tenement but with the right to obtain 250,000 Shares or complete further expenditure on the Tenement of \$25,000 (making a total of \$50,000) to earn a cumulative 20% participating interest. Canis had until 10 February 2000 to complete the expenditure required to earn it an aggregate 20% participating interest;
- if it earned the 20% participating interest, Canis had the right to elect either to withdraw from the agreement with no participating interest in the Tenement but with a right to receive 500,000 Shares or to make a further \$20,000 expenditure to earn a further 5% participating interest to bring its total participating interest to

25%. Canis had until 10 August 2000 to complete the expenditure required to earn it an aggregate 25% participating interest;

- if it earned a 25% participating interest, Canis had the right to either continue to meet expenditure for the development and mining of the Tenement with Metallica in proportion to its participating interest or withdraw from the agreement with no participating interest in the Tenement but with a right to receive 700,000 Shares.

Since entering into the Farm-in Agreement, the Verde Tinto Tenement (EPM 11370) has been relinquished after the grant of MDL312 covering the Dingo Dam resource.

During the discharge of obligations under this Farm-in Agreement, a dispute arose after the first earn-in phase (10%), between QLD Gold and Metallica on one hand and Canis on the other hand the result of which is that Metallica considers that the Farm-in Agreement has ceased to apply between the parties.

The Company considers that Canis has a 10% interest in MDL312.

Further details of this dispute are set forth more particularly in Section 8.12 of this Prospectus.

#### (f) Fairview Option Agreement

On 10 August 2003, the Company entered into an Option Agreement (**Option Agreement**) with Roderick William Siller, a Director of Metallica (**Siller**), the registered holder of a 100% interest in EPM 13756 (**Fairview**) and EPM 14042 (**Fairview Extended**).

Under the Option Agreement, Siller grants the Company the right to acquire Fairview and Fairview Extended for an exercise price equal to one dollar (\$1.00) and for a period of two (2) years from the date of the Option Agreement.

# 7. detailed outline of independent & report on tenements and material contracts

The Option Agreement provides standard warranties given by Siller in favour of the Company as to the standing of Fairview and Fairview Extended and that all rents and other moneys payable in respect of those tenements are paid.

## **(g) Six Mile Joint Venture Agreement**

QLD Gold has entered into a joint venture arrangement with Mt Isa Mines Limited (**MIM**) dated 18 June 2002 in respect of EPM 13873 (**Tenement**) whereby MIM is entitled to earn a 70% interest in the Tenement and minerals (other than nickel, cobalt, platinumoids, rare earths, scandium, chrome, vanadium, chryso-prase and kaolin) by completing expenditure of \$1 million within 5 years of election (**Expenditure Period**) on the Tenement. Upon MIM earning a 70% interest in the Tenement, QLD Gold may, at its election, require MIM to earn a further 10% interest in the Tenement (taking its total interest to 80%) by expending a further \$1.5 million expenditure (equating total expenditure to \$2.5 million) on the Tenement or completing a Feasibility Study.

On 31 March 2003 MIM exercised the option to earn an interest in the Tenement and the project is now in joint venture. During the Expenditure Period, MIM is entitled to be the joint venture manager and sole contributor to any joint venture expenditure incurred in connection with exploration and development of the Tenement.

By way of a Deed of Accession dated 14 October 2003, Straits Exploration (Australia) Pty Ltd (**Straits**) assumed all rights and obligations of MIM under this agreement. Furthermore, by way of a variation agreement dated 26 September 2003, QLD Gold and Straits have agreed to vary this arrangement whereby Straits' rights to earn a 70% interest in the project will be achieved upon incurring

expenditure of \$1.5 million (increased from \$1 million under the original agreement). Should Straits not expend the minimum \$1.5 million, it shall be deemed to have withdrawn from this joint venture arrangement and will have no interest in the Tenement. As a result of this increase in expenditure to earn a 70% interest, Straits is required to expend a further \$1 million to earn a total interest of 80%. The total amount to be expended by Straits to earn the maximum 80% interest remains unchanged at \$2.5 million.

## **(h) Kokomo Gold Option and Joint Venture Agreement**

Pursuant to an agreement dated 10 January 2003 QLD Gold has granted certain rights to MIM in respect of an area of the Kokomo Tenement EPM10699 (**Tenement**) namely, the sub-block described as "Townsville 2247-A" (**Gold Sub-block**).

On 7 July 2003 MIM exercised the option to earn an interest in the Gold Sub-block and the project is now in joint venture.

The rights and obligations of MIM under this agreement have been assumed by Straits pursuant to a Deed of Accession dated 14 October 2003. Under these arrangements, QLD Gold has granted to Straits the right to earn up to a 70% interest in the area of the Gold Sub-block by completing \$1 million in expenditure during the farm-in period, being 5 years from 10 July 2003 (**Expenditure Period**). During the Expenditure Period, Straits is entitled to be the joint venture manager and sole contributor to any joint venture expenditure incurred in connection with exploration and development of the Gold Sub-Block.

Upon Straits earning a 70% interest in the Gold Sub-Block, QLD Gold may, at its election, require Straits to earn a further 10% interest (taking its total interest to 80%) by expending

a further \$1 million expenditure on the Gold Sub-block or completing a Feasibility Study.

QLD Gold in discharge of its obligations under the WCC Royalty Agreement has procured the consent of WCC to the proposed Kokomo joint venture arrangements, to the extent that they may relate to EPM10699 and WCC's corresponding royalty rights (summarised in paragraph **(b)** above) over that Tenement.

On 1 September 2004 Straits and QLD Gold entered into a binding letter agreement (**Letter Agreement**) which contemplates the expansion of the exploration and expenditure area contemplated in the Agreement from the Gold Sub-block to the entire Tenement. The parties have agreed that the Agreement is to be amended (to reflect the amendments contained within the Letter Agreement) before Straits is entitled to enter and explore any part of the Tenement (other than the Gold Sub-block). The rights held by Straits to enter and explore the Gold Sub-block under the Agreement are not affected by the Letter Agreement.

## **(i) Kokomo Scandium Joint Venture**

Pursuant to a Farm-in and Joint Venture Agreement dated 1st September 2004 (**Agreement**) QLD Gold has granted certain rights to Straits principally with respect to the potential of scandium deposits within EPM10699 (excluding the Gold Sub-block Townsville 2247-A (**Tenement**)).

Under the Agreement Straits will have a maximum 5 year period in which to earn a maximum 70% interest in the Tenement by contributing a total of \$1,400,000. Straits shall earn an interest in the Tenement at a rate of 10% interest for every \$200,000 expended (**Designated Rate**). Straits is obliged to incur at least \$100,000 per annum (**Minimum Expenditure Requirement**). If

Straits does not comply with the Minimum Expenditure Requirement it is deemed to have elected not to proceed to earn up to the 70% interest in the Tenement and will acquire an interest in the Tenement based on the Designated Rate.

The Agreement obliged Straits to pay QLD Gold an option fee of \$50,000 which reflects Straits exercising its option to enter into the Agreement with QLD Gold. This fee has been paid by Straits to QLD Gold.

In addition to the rights granted with respect to the Tenement, QLD Gold has granted Straits the right (but not the obligation) to fund any exploration of a commercial scandium project in any tenement that QLD Gold or any of its related bodies corporate has an interest in that falls within a 200km radius of the centre of the Tenement.

#### **(i) Sigma - Norkay Mineral Rights Sharing Deed**

Metallica and its wholly owned subsidiary Kingaroy Aluminium Pty Ltd (**KAPL**) have entered into a Mineral Rights Sharing Deed (**Deed**) with Sigma Kaolin Limited (**Sigma**) and its wholly owned subsidiary Norkay Pty Ltd (**Norkay**) on 9 July 2004.

The Deed grants the parties exclusive rights and licences to conduct exploration within the following tenements (**Designated Area**):

1. EPMA 14547 – held by Metallica; and
2. EPMA 13836, 13838, 14110 and 14114 – held by Sigma or Norkay.

The parties are entitled to explore for and commercially exploit the Designated Area for the following minerals:

- a) Sigma/Norkay – kaolin; and
- b) Metallica/KAPL – bauxite.

The party owning the relevant tenement within the Designated Area has rights to all other minerals.

Each party is obliged to ensure that tenements within the Designated Area are kept in good standing and all moneys owing on such tenements are paid in full. In particular, each party agrees to contribute thirty percent (30%) of the individual tenement annual rental cost for any tenement which is held by the other party.

Any party is entitled to apply for and acquire a mining lease over all or part of the Designated Area provided always that the other party has confirmed that it does not wish to continue exploration activities in the relevant mining lease area.

If any part of the Designated Area is commercially exploited by a party, on a tenement owned by the other party, the exploiting party is required to pay the following royalty to the party owning the tenement:

- a) Sigma/Norkay shall pay Metallica a royalty based on the following production of kaolin:
  - I. \$0.40/tonne for any production up to 500,000 tonnes; and
  - II. \$0.30/tonne for any production over 500,000 tonnes; and
- b) Metallica/KAPL shall pay Sigma a royalty based on the following production of bauxite:
  - I. \$0.40/tonne for any production up to 500,000 tonnes; and
  - II. \$0.30/tonne for any production over 500,000 tonnes.

The Deed may be terminated by the holder of a tenement within the Designated Area if the

other party has not spent at least one third (1/3) of the prescribed exploration commitment under the terms of that tenement for a particular year. If, however within four years from the date of the Deed, a party has commenced a Feasibility Study at a cost of more than \$1 million, on any one or more of the tenements, that party shall be entitled to retain its interests in all other tenements within the Designated Area and the right of termination shall not apply.

#### **(k) Oresome Australia Pty Ltd Purchase Agreement**

Pursuant to this agreement, Metallica acquired all of the issued shares in Oresome Australia Pty Ltd (**Oresome**) from its shareholders (**Vendors**) on 20 March 1997. On that date, Metallica issued 2 million Shares in the Vendors at an issue price of 3.35 cents per Share (which was deemed to be paid to Metallica by each of the Vendors) in proportion to each Vendor's respective percentage holding in Oresome. Each Vendor is an associate of Andrew Gillies a Director of Metallica.

This agreement obliges Metallica to cause the bank guarantees lodged with the Department as security for relevant mining tenements held by Oresome to be replaced with new bank guarantees obtained by Metallica at its cost within 60 days of the Shares being quoted on the ASX.

#### **(l) QLD Gold Pty Ltd Purchase Agreement**

Pursuant to this agreement (as amended on 31 March 1998), Metallica acquired all of the issued shares in QLD Gold Pty Ltd (**QLD Gold**) from its shareholders (**Vendors**) on 20 March 1997. On that date Metallica issued 14 million Shares at an issue price of 0.99 cents per Share (which was deemed to be paid to Metallica by each of the Vendors) in proportion to each Vendor's respective percentage holding in QLD Gold.

# 7. detailed outline of independent & report on tenements and material contracts

**TABLE 7: QLD GOLD AGREEMENT**

PARTIES	SHARES TO BE ALLOTTED AFTER LISTING	CASH
Associates of Andrew Gillies	157,392	Nil
Associates of George Nichols *	Nil	\$ 126,105.04
Associates of Robert Pyper	59,179	Nil
Other Vendors	16,998	\$ 17,420.70
<b>Total</b>	<b>233,569</b>	<b>\$ 143,525.74</b>

**NOTE:** \*At the time that the parties entered into the QLD Gold Agreement, neither George Nichols nor his associates were related parties of Metallica. Mr Nichols was a Director of Metallica from 26 November 1998 to 19 September 2000 and accordingly is no longer a related party of Metallica.

There remain two outstanding obligations under this agreement. These obligations are:

- within 60 days of Metallica's Shares being quoted on the ASX, Metallica must cause each of the bank guarantees which have been lodged by or on behalf of QLD Gold with the Department as security for the mining tenements held by it to be replaced with new bank guarantees which Metallica must obtain at its cost; and
- within seven days of Metallica's Shares being quoted by the ASX, Metallica must make cash payments and allot Shares to certain Vendors as set out in Table 7.

### 7.3 COMPENSATION AGREEMENTS

#### (a) Bell Creek

In relation to the Bell Creek Mining Leases 4187 and 4188 QLD Gold has entered into Compensation Agreements both dated 18 January 1999 with PA & FG Atkinson (**Landowner**) owners of the pastoral lease underlying part of the area of the Mining Leases. Prior to a development decision the

Landowners have no desire to seek monetary compensation from QLD Gold in respect to any approved activities.

Under these agreements, QLD Gold shall negotiate with the Landowners prior to the commercial exploitation of the Mining Leases. QLD Gold shall also be required to rectify any land the subject of the Mining Leases following cessation of mining operations and is also required to carry out mining operations in accordance with the Act and relevant environmental regulations.

#### (b) Star River

In relation to the Star River Mining Lease 10276, the Company has entered into a Compensation Agreement dated 24 September 2002 with J Nicholas (**Landowner**) holder of the land tenure underlying part of the area of this Mining Lease.

The Compensation Agreement obliges Metallica to pay \$0.37/t of trucked crushed limestone from the Mining Lease, with such amounts to be adjusted for inflation every three years.

Metallica is also obliged to construct relevant infrastructure for the purposes of the development of this limestone quarry and is to ensure suitable rehabilitation of any disturbed areas is completed to the satisfaction of the Environmental Protection Agency in consultation with the Landowner.



# 8. additional information

## additional information

### 8.1 RIGHTS ATTACHING TO SHARES

#### (a) Shares

The Shares currently on issue in Metallica are fully paid ordinary shares. The Shares issued pursuant to this Prospectus will rank equally with those currently on issue at the date of this Prospectus.

The following is a summary of the rights and liabilities that attach to the Shares. This summary does not purport to be exhaustive nor does it constitute a definitive statement of the rights and liabilities of shareholders that can involve complex questions of law. To obtain a definitive assessment of the rights and liabilities that attach to Shares, investors should seek independent advice.

For details of the rights and liabilities attaching to the Shares, reference should be made to Metallica's Constitution.

#### (b) Reports and Notices

Each shareholder is entitled to receive all notices, reports, accounts and other documents required to be furnished to shareholders under the Constitution of Metallica, the Corporations Act and the Listing Rules of the ASX. In the case of joint holders, such documents may be served on the joint holder whose name appears first in the share register.

#### (c) General Meetings

Each shareholder of Metallica will be entitled to receive notice of and attend and vote at general meetings of Metallica and to receive all notices, accounts and other documents required to be furnished to shareholders under the Constitution of Metallica, the Corporations Act and the Listing Rules of the ASX.

#### (d) Voting Rights

Subject to any rights or restrictions attached to or affecting any class of shares, every holder of fully paid shares present in person or by proxy, attorney or representative has one vote on a show of hands and on a poll, one vote for every Share held by them.

#### (e) Dividend Rights

Subject to the rights of holders of shares issued with any special rights, the profits of Metallica which the Directors may from time to time determine to distribute by way of dividend are divisible among the holders of fully paid shares equally, and among the holders of partly paid shares in proportion to the amounts paid (not credited as paid) of the total amounts paid or payable (including amounts credited) on the Shares in respect of which the dividend is paid.

All Shares currently on issue and the Shares to be issued under this prospectus are fully paid Shares.

#### (f) Rights on Winding Up

If Metallica is wound up, the liquidator may, with the authority of a special resolution, divide among the shareholders in specie or kind the whole or any part of the assets of Metallica and may for that purpose set such value as he considers fair upon any property to be so divided and may determine how the division is to be carried out as between the shareholders or different classes of shareholders.

The liquidator may, with the authority of a special resolution, vest any part of the assets of Metallica in trustees upon such trusts for the benefit of the shareholders or any of them as the liquidator thinks fit, but so that no shareholder is compelled to accept any Shares

or other securities in respect of which there is a liability.

#### (g) Transfer of Shares

Subject to the Constitution of Metallica, the Corporations Act, the Listing Rules of the ASX and any other laws, Shares of Metallica are freely transferable.

#### (h) Future Offers

The allotment and issue of any new Shares is under the control of the Directors. Subject to restrictions on the allotment of Shares contained in the Constitution of Metallica, the Listing Rules of the ASX and the Corporations Act, the Directors may allot or otherwise dispose of Shares on such terms and conditions as they see fit.

#### (i) Variation of Rights

At present, Metallica has only ordinary shares on issue. If shares of another class were issued, the rights and privileges attaching to ordinary shares could be altered with the approval of a special resolution passed at a separate general meeting of the holders of ordinary shares or with the consent in writing of the holders of three quarters of the issued ordinary shares.

### 8.2 SHAREHOLDING STRUCTURE

At the date of this Prospectus the top 10 existing shareholders of Metallica are listed in Table 8.

# 8. additional information

## additional information

**TABLE 8: MAJOR SHAREHOLDERS - AS OF THE DATE OF THE PROSPECTUS**

	SHAREHOLDER	SHARES	% TOTAL SHARES
1	GOLDEN BREED PTY LTD	8,463,933	18.34
2	ASDEN INVESTMENTS PTY LTD	2,618,474	5.67
3	CODAN TRUSTEES	2,500,000	5.42
4	KOREA ZINC AUSTRALIA PTY LTD	2,000,000	4.33
5	RODERICK WILLIAM SILLER	1,800,000	3.90
6	SENLAC GEOLOGICAL SERVICES PTY LTD	1,782,113	3.86
7	ROBERT JOHN GILLIES	1,657,775	3.59
8	PAUL DOSTAL	1,266,667	2.74
9	TRANSMERE PTY LTD	1,200,000	2.60
10	JUDY EMILY RUWOLT	1,171,974	2.54
<b>TOTAL OF TOP 10</b>		<b>24,460,936</b>	<b>53.01</b>
<b>OTHER EXISTING SHAREHOLDERS</b>		<b>21,687,247</b>	<b>46.99</b>
<b>TOTAL ISSUED AT DATE OF PROSPECTUS</b>		<b>46,148,183</b>	<b>100%</b>

### 8.3 RIGHTS ATTACHING TO OTHER SECURITIES OF THE COMPANY

#### 8.3.1 Options to be issued

A summary of the terms of the Options offered under this Prospectus are as follows:

- (a) The Options shall be on the basis of one (1) option for every four (4) Shares subscribed for under this Prospectus. The Options shall be issued for nil consideration.
- (b) The commencement date (**Commencement Date**) for the exercise of the Options shall be the date of the Company listing on the ASX.
- (c) The Options will, except to the extent earlier exercised, expire on 31 December 2006 (**Expiry Date**).
- (d) The exercise price for each Option shall be twenty-five cents (\$0.25) (**Exercise Price**).
- (e) The **Option Exercise Period** shall be the period commencing on the Commencement Date of the relevant Options and expiring on the Expiry Date of the relevant Options.
- (f) The Options will be freely transferable.
- (g) The Options may be exercised at any time wholly or in part by delivering a duly completed form of notice of exercise together with a cheque for the exercise price to the Company at any time during the Option Exercise Period.
- (h) The number of Options that may be exercised at one time must be not less than 1000.
- (i) Upon the valid exercise of the Options and payment of the Exercise Price, the Company will issue fully paid ordinary shares ranking pari passu with the then issued ordinary shares of the Company.
- (j) The Option holder will be permitted to participate in new issues of securities of the Company on the prior exercise of the Options, in which case the holder of the Options will be afforded the period of at least 14 days notice prior to and inclusive of the books closing date (to determine entitlements to the issue) to exercise the Options.
- (k) In the event of any reconstruction (including consolidation, subdivision, reduction or return) of the issued capital of the Company:
  - (i) the number of Options, the exercise price of the Options, or both will be reconstructed (as appropriate) in a manner consistent with the ASX Listing Rules, but with the intention that such reconstruction will not result in any benefits being conferred on the holders of the Options which are not conferred on shareholders; and

- (ii) subject to the provisions with respect to rounding of entitlements as sanctioned by a meeting of shareholders approving a reconstruction of capital, in all other respects the terms for the exercise of the Options will remain unchanged.
- (l) If there is a pro rata issue (except a bonus issue), the Exercise Price of an Option may be reduced according to the following formula:

$$O^n = O - E \frac{[P - (S + D)]}{N + 1}$$

Where:

- $O^n$  = the new exercise price of the Option;
- $O$  = the old exercise price of the Option;
- $E$  = the number of underlying securities into which one Option is exercisable;
- $P$  = the average market price per security (weighted by reference to volume) of the underlying securities during the 5 trading days ending on the day before the ex right date or the ex entitlements date;
- $S$  = the subscription price for a security under the pro rata issue;
- $D$  = dividend due but not yet paid on the existing underlying securities (except those to be issued under the pro rata issue);
- $N$  = the number of securities with rights or entitlements that must be held to receive a right to one new security.
- (m) The Company intends to apply for listing of the Options on the ASX.

- (n) The Company shall apply for listing of the resultant shares of the Company issued upon exercise of any Option.
- (o) If there is a bonus issue to the holders of shares in the Company, the number of shares over which the Option is exercisable may be increased by the number of shares which the Option holder would have received if the Option had been exercised before the record date for the bonus issue.
- (p) The terms of the Options shall only be changed if holders (whose votes are not to be disregarded) of ordinary shares in the Company approve of such a change. However, the terms of the Options shall not be changed to reduce the exercise price, increase the number of Options or change any period for exercise of the Options.

The Options to be issued to Axis, pursuant to the Axis Agreement which is summarised in section 8.6(c), shall be on the same terms as those set forth above.

### 8.3.2 Directors and Employee Performance Options

A summary of the terms of the Performance Options granted to Directors and current employees of the Company are as follows:

- (a) The Options have been issued for nil consideration.
- (b) The Options will vest on the day (**Vesting Date**) on which the Company is unconditionally admitted to the Official List of the ASX.
- (c) If the Vesting Date does not occur on or before 31 March 2005, the Options and the rights and obligations attaching to the Options shall lapse and shall have no further force or effect, and no consideration shall be payable to the

holder of Options by reason of such lapsing.

- (d) The commencement date (**Commencement Date**) for the exercise of the Options shall be the Vesting Date.
- (e) The Options will, except to the extent earlier exercised, expire on 31 December 2006 (**Expiry Date**).
- (f) The exercise price for each Option shall be twenty cents (\$0.20) (**Exercise Price**).
- (g) The **Option Exercise Period** shall be the period commencing on the Commencement Date of the relevant Options and expiring on the Expiry Date of the relevant Options.
- (h) The Options will not be transferable in whole or in part and may not be exercised by any other person (except, in the case of the Option holder's death, by his or her legal personal representative).
- (i) The qualifying price (**Qualifying Price**) enabling the Option holder to exercise the Options shall be:
- (i) In relation to the First Tranche being 1,550,000 of the total 5,050,000 Options issued - 25 cents;
- (ii) In relation to the Second Tranche being 1,650,000 of the total 5,050,000 Options issued - 30 cents;
- (iii) In relation to the Third Tranche being 1,850,000 of the total 5,050,000 Options issued - 40 cents,
- provided that on each occasion after the Vesting Date on which a bonus issue (of the kind dealt with in paragraph (t) occurs) or this Exercise Price is adjusted (as contemplated in paragraph (p) or paragraph (q) below) in consequence of a particular issue or event, the Qualifying Price shall be increased or

# 8. additional information

## additional information

decreased by the amount by which the Market Price in force on the 6th business day on which the Company's shares are traded on the ASX ex the entitlement involved in the issue or event in question (or otherwise on a basis which reflects the impact of the issue event) is greater or less than the Market Price in force on the last business day in which the shares of the Company are traded on the ASX cum that entitlement (or otherwise on a basis which does not reflect the impact of the issue or event).

- (j) For the purposes of the terms of the Options, the market price (**Market Price**) in force on a particular day or at a particular time is the weighted average closing price of shares in the Company on the ASX on the five business days immediately preceding that day or time.
- (k) On vesting, the Options may, subject to paragraph (l), be exercised at any time wholly or in part by delivering a duly completed form of notice of exercise together with a cheque for the exercise price to the Company at any time during the Option Exercise Period.
- (l) The Options may not be exercised on any day unless the Market Price in force on or any day prior to that day is equal to or greater than the Option's Qualifying Price, the intention being that the right to exercise the Options will not be available unless the Market Price in force previously was, or on the date of exercise is, at least:
- (i) **25 cents** - in the case of the First Tranche Options;
  - (ii) **30 cents** - in the case of the Second Tranche Options; or
  - (iii) **40 cents** - in the case of the Third Tranche Options.
- (m) The number of Options that may be exercised at one time must be not less than 5,000.
- (n) Upon the valid exercise of the Options and payment of the exercise price, the Company will issue fully paid ordinary shares ranking pari passu with the then issued ordinary shares of the Company.
- (o) The Option holder will be permitted to participate in new issues of securities of the Company on the prior exercise of the Options, in which case the holder of the Options will be afforded the period of at least 14 days notice prior to and inclusive of the books closing date (to determine entitlements to the issue) to exercise the Options.
- (p) Following vesting of the Options, in the event of any reconstruction (including consolidation, subdivision, reduction or return) of the issued capital of the Company:
- (i) the number of Options, the exercise price of the Options, or both will be reconstructed (as appropriate) in a manner consistent with the ASX Listing Rules, but with the intention that such reconstruction will not result in any benefits being conferred on the holders of the Options which are not conferred on shareholders; and
  - (ii) subject to the provisions with respect to rounding of entitlements as sanctioned by a meeting of shareholders approving a reconstruction of capital, in all other respects the terms for the exercise of the Options will remain unchanged.
- (q) Following vesting of the Options, if there is a pro rata issue (except a bonus issue), the exercise price of an Option may be reduced according to the following formula:
- $$O^N = O - E \frac{[P - (S + D)]}{N + 1}$$
- Where:
- $O^N$  = the new exercise price of the Option;
  - $O$  = the old exercise price of the Option;
  - $E$  = the number of underlying securities into which one Option is exercisable;
  - $P$  = the average market price per security (weighted by reference to volume) of the underlying securities during the 5 trading days ending on the day before the ex right date or the ex entitlements date;
  - $S$  = the subscription price for a security under the pro rata issue;
  - $D$  = dividend due but not yet paid on the existing underlying securities (except those to be issued under the pro rata issue);
  - $N$  = the number of securities with rights or entitlements that must be held to receive a right to one new security.
- (r) The Company does not intend to apply for listing of the Options on the ASX, and will not be obliged to do so.
- (s) The Company shall apply for listing of the resultant shares of the Company issued upon exercise of any Option.
- (t) Following vesting of the Options, if there is a bonus issue to the holders of shares in the Company, the number of shares over which the Option is exercisable may be

increased by the number of shares which the Option holder would have received if the Option had been exercised before the record date for the bonus issue.

- (u) The terms of the Options shall only be changed if holders (whose votes are not to be disregarded) of ordinary shares in the Company approve of such a change. However, the terms of the Options shall not be changed to reduce the exercise price, increase the number of Options or change any period for exercise of the Options.

The number of Options issued to each Director is set forth in Table 9 in Section 8.4. The number of Options issued to current employees of the Company is 1,050,000. The total number of Options on issue immediately following allotment of Shares pursuant to this Prospectus is set forth in Table 2 in Section 1.4.

### 8.3.3. Convertible Note Facility

The Board has allocated a maximum of 3,000,000 Convertible Notes (**Convertible Note Facility**). The offer of Convertible Notes under this Convertible Note Facility is restricted to member firms of ASX or licensed investment advisers (**Brokers**) that firstly enter into a Convertible Note Agreement (the terms of which are summarised in Section 8.6 of this Prospectus) with the Company and secondly subscribe for their entitlement to the Convertible Notes under the Convertible Note Agreement.

To be entitled to receive an allocation and apply for Convertible Notes under this Prospectus the Broker must:

- (a) agree to procure an amount of subscriptions and Application Forms for

Shares offered under this Prospectus (**Commitment Shares**);

- (b) subscribe for the Convertible Notes;
- (c) pay the Company the face value (12.5 cents) for each Convertible Note subscribed for.

Upon agreeing to procure the Application Forms for the Commitment Shares, the Broker shall under the terms of the Convertible Note Agreement be offered to apply for one (1) Convertible Note for every five (5) Commitment Shares the Broker has agreed to procure. The Board shall ensure that the Company shall not be obliged to issue any more than the maximum 3,000,000 Convertible Notes under this Convertible Note Facility.

The terms of the Convertible Notes that are to be issued pursuant to this Convertible Note Facility are as follows:

- (a) The face value for each Convertible Note is payable upon execution of the Convertible Note Agreement.
- (b) The Convertible Notes shall be issued by the Company within five (5) business days following the Company receiving the face value for the Convertible Notes from the relevant Broker (**Issue Date**).
- (c) The Convertible Notes will mature two (2) years from the Issue Date (**Maturity Date**) and those Convertible Notes not previously converted to Shares will be repaid at their face value by the Company. In addition, the Company shall be obliged to immediately repay (at the option of the Broker), the face value of the Convertible Notes on the Company suffering an insolvency related event.
- (d) Interest at the rate of 8% per annum will be paid on the face value of the

Convertible Notes. Interest shall be payable quarterly in arrears.

- (e) The Convertible Notes are not transferable or assignable.
- (f) The Convertible Notes are convertible at the option of the noteholder into Shares on the basis of one (1) Share for each Convertible Note held on or before the Maturity Date at the option of each noteholder. On conversion, the noteholder is required to convert all but not some of the Convertible Notes held by it.
- (g) The Company does not intend to apply for listing of the Convertible Notes on the ASX.
- (h) The Shares issued on conversion of the Convertible Notes shall be issued by the Company in such a manner to ensure that the Company is in compliance with the Secondary Sale Provisions.
- (i) Subject to the matters referred to in paragraph (h) above, the Company shall apply for listing of the resultant Shares issued upon conversion of the Convertible Notes.
- (j) Subject to the matters referred to in paragraph (h) above, the Shares issued on conversion of the Convertible Notes shall rank pari passu with the then issued ordinary shares of the Company.
- (k) Noteholders shall not be entitled to vote at meetings of members of the Company, but shall be entitled to attend and receive notifications of such meetings.
- (l) In the event of any reconstruction (including consolidation, subdivision, reduction or return of the issued capital of the Company), the number of Notes will be reconstructed (as appropriate) in a manner consistent with the Listing Rules

# 8. additional information

## additional information

**TABLE 9: DIRECTORS' INTERESTS**

DIRECTOR	SHARES HELD	ENTITLED SHARES (refer Section 7.2)	SALARY PACKAGE/ CONSULTING FEES	DIRECTOR FEES	DEFERRED FEES AND EXPENSES	DIRECTORS PERFORMANCE OPTIONS HELD
DAVID BARWICK	100,000	Nil	\$24,000	\$24,000	Nil	1,000,000
ANDREW GILLIES	8,700,602	Nil	\$136,250	Nil	\$128,287	750,000
ROBERT PYPYER	1,104,491	59,179	refer Section 8.4	\$12,000	\$9,652	750,000
ROD SILLER	1,856,000	Nil	refer Section 8.4	\$12,000	Nil	750,000
JOHN HALEY	200,000	Nil	refer Section 8.4	\$12,000	Nil	750,000

of the ASX, but with the intention that such reconstruction will not result in any benefits being conferred on the holders of the Notes which are not conferred on shareholders of the Company.

The Company shall be obliged to issue the Convertible Notes upon the Broker subscribing for the Convertible Notes under the Convertible Note Agreement. Accordingly, the issue of the Convertible Notes is not conditional upon the Company achieving Minimum Subscription or being admitted to the Official List of the ASX.

#### 8.4 DIRECTORS' INTERESTS

Except as set out below or described elsewhere in this Prospectus, no Director or proposed Director holds or held at any time in the last two years any interest in nor has received any material benefit other than reimbursement of costs in the:

- formation or promotion of Metallica;
- property acquired or proposed to be acquired by Metallica in connection with its formation or promotion or in connection with the Offer; or
- the Offer,

and no amount or benefit has been paid or given or agreed to be paid or given to any

Director or proposed Director either to induce him to become, or to qualify him as a Director or for services provided by him in connection with the formation or promotion of Metallica or in connection with the Offer:

- Under the Constitution of Metallica, its Directors may be paid such remuneration as is determined by Metallica in general meeting, to be apportioned amongst them as they agree. The Directors have agreed that the executive Directors shall not be paid Director's fees in addition to their salary packages and that, initially, the non-executive Directors will each be paid Directors' fees of \$12,000 per annum and the non-executive Chairman \$24,000 per annum. Directors' fees not exceeding \$200,000 in aggregate, has been approved in general meeting in accord with the Constitution. In addition, the Directors are entitled to be paid reasonable travelling, accommodation and other expenses which they incur in carrying out their duties, and any non-executive Director performing extra or special services (such as consulting services) for Metallica may be remunerated for those services on a commercial arms length basis.
- Metallica has entered into a service agreement with Andrew Gillies, pursuant to which Andrew Gillies has agreed to act as Managing Director of Metallica for a minimum period of three years at an annual salary package of \$136,250 inclusive of superannuation, to be reviewed annually. Further details of this service agreement are set forth in Section 8.6.
- Metallica has agreed to pay Andrew Gillies and Golden Breed Pty Ltd (a Company associated with Andrew Gillies) from the proceeds of the Issue, deferred fees and expenses totalling, \$128,287 for services provided prior to the date of commencement of Andrew Gillies' service agreement.
- Metallica has entered into an Agreement with Barwick Investments Pty Ltd, pursuant to which the services of David Barwick outside his role as Chairman will be provided to Metallica at an annual fee of \$24,000.
- Metallica may utilise the services of Roderick Siller, John Haley and Robert Pypyer outside of their roles as non-executive Directors. If such services are

required they will be provided at normal commercial rates.

- Metallica has agreed to pay Robert Pyper from the proceeds of the Issue deferred fees and expenses totalling \$9,652 for his services to Metallica.
- As at the date of this Prospectus, the interests of the Directors, including the securities in Metallica held or to be held by or on behalf of each Director or to which the Director is entitled, are listed in Table 9.

#### 8.5 EMPLOYEES' SHARE OPTION PLAN

The Company has established the Metallica Employee Share Option Plan (ESOP) to assist in the retention and motivation of employees by providing them with the opportunity to acquire Shares.

Under the ESOP, Options over unissued Shares in the Company will be offered. This Prospectus does not comprise an offer or invitation to acquire Options under the ESOP.

The ESOP contains usual provisions dealing with matters such as the administration, variation, termination or suspension of the plan.

Other features of the ESOP are as follows:

- The persons who are eligible to participate in the ESOP are employees of the Company (**Eligible Employee**) or their nominee who have been selected by the Board to participate in the ESOP;
- The Options will not be transferable or assignable to any person other than an Eligible Employee's nominee;
- The Options may be exercised at any time 12 months after their issue unless otherwise determined by the Board;
- The Options may be exercised wholly or in part by notice in writing to the Company received at any time during the relevant exercise period together with a cheque for the exercise price and the option certificate (if any) for those Options for cancellation by the Company;
- The Company shall allot the number of shares the subject of any exercise notice and apply at its cost for listing of the Shares within 14 days of the allotment of the shares;
- The Options will be exercisable at a price to be determined in the absolute discretion of the Board.

Shares issued on the exercise of the Options will rank *pari passu* with all existing Shares of the Company from the date of issue.

The number of Shares which may be acquired on the exercise of an option and the exercise price will be adjusted, as is appropriate, following any pro-rata bonus issue, rights issue, reconstruction or re-organisation of the issued ordinary capital of the Company.

The maximum number of Options that may be offered to participants under the ESOP is 5% of the issued capital at the time. If there is to be a reorganisation of the issued shares in the Company unexercised Options will be reorganised in accordance with the requirements of ASX Listing Rules.

Options not exercised lapse on the first to occur of the following:

- The expiration of such period nominated by the Board at its sole discretion, but being not less than 2 years after the date of issue;
- The expiry of 3 months, or any longer period which the Directors determine,

after the Eligible Employee ceases to be employed by the Company or a Subsidiary of the Company; or

- The Eligible Employee ceasing to be employed by the Company or a Subsidiary of the Company due to fraud or dishonesty.

Quotation of Options on the ASX will not be sought. The Company will apply for quotation of Shares arising upon the exercise of Options.

The above description is a summary only of the principal terms and conditions of the ESOP. A copy of the ESOP Rules are available for inspection at the offices of Hopgood Ganim, Level 8, Waterfront Place, 1 Eagle Street, Brisbane, QLD 4000.

#### 8.6 OTHER MATERIAL CONTRACTS

In addition to the material contracts relating to the Company's tenements (summarised in Section 7), the Company has entered into other material contracts as summarised below:

##### (a) Employment Contract Summaries

- (i) Employment Contract - Andrew Langham Gillies

The Company has entered into an Employment Contract (**Contract**) with Mr Andrew Gillies, dated 25 July 2004. Under the Contract, Mr Gillies is responsible for the general management of the Company and its Subsidiaries, as the Managing Director for a period of three (3) years. The Contract shall commence and is conditional upon the Company listing on the ASX.

Mr Gillies will receive a remuneration package which is comprised of a salary of \$136,250 (inclusive of superannuation) the reimbursement of expenses incurred

## 8. additional information

# additional information

by Mr Gillies in discharge of his services to the Company and an entitlement, at the sole discretion of the Board of the Company, to participate in the issue of options to subscribe for shares in the Company. The remuneration package may be adjusted annually at the sole discretion of the Board of the Company.

Both the Company and Mr Gillies are entitled to terminate the Contract upon giving three (3) month's notice in writing. The Contract may be terminated by the Company immediately provided that the Company pays to Mr Gillies an amount equal to Mr Gillies' remuneration package for the three (3) month notice period. Further, the Company is entitled to terminate the Contract upon the happening of various events in respect of the solvency or conduct of Mr Gillies.

(ii) Employment Contract - Patrick Smith

The Company has entered into an Employment Contract (**Contract**) with Mr Patrick Smith, dated 25 July 2004. Under the Contract, Mr Smith is employed for a period of three (3) years for the purposes of managing, directing and supervising the mining exploration, development and production programme of the Company and to promoting the interests of the Company generally. The Contract shall commence and is conditional upon the Company listing on the ASX.

Under this Contract, Mr Smith will receive a remuneration package which is comprised of a salary of \$81,750 (inclusive of superannuation) the reimbursement of expenses incurred by Mr Smith in discharge of his services to the Company and an entitlement, at the sole discretion of the Board of the Company, to participate in the issue of options to

subscribe for shares in the Company. The remuneration package may be adjusted annually at the sole discretion of the Board of the Company.

Both the Company and Mr Smith are entitled to terminate the Contract upon giving one (1) month's notice in writing.

### (b) Directors Indemnity and Access Deeds

Each of the Directors of the Company has entered into a Deed with the Company whereby the Company has:

- (i) provided certain contractual rights of access to books and records of the Company to those Directors;
- (ii) agreed to provide certain indemnities to each of the Directors, to the extent permitted by the Corporations Act; and
- (iii) agreed to use its best endeavours to maintain directors and officers' indemnity insurance for those Directors subject to such insurance being secured on reasonable commercial terms.

### (c) Axis Agreement

Metallica has an agreement with Axis to act as Financial Adviser and Broker to the Issue.

A financial advisory fee (\$75,000 if Minimum Subscription is achieved and \$100,000 if Maximum Subscription is achieved) will be paid to Axis as well as a fee of 5.5% of the total subscription amount.

In addition, Metallica will issue to Axis a minimum of 1,500,000 Options (if Minimum Subscription is achieved) up to 2,500,000 Options (if Maximum Subscription is achieved). The Options to be

issued to Axis under this arrangement are on the same terms and conditions of the Options offered under this Prospectus, a summary of which is set forth in Section 8.3.

In the event the Company accepts Application Forms exceeding the Minimum Subscription amount (\$3 million) but less than the Maximum Subscription amount (\$5 million) the financial advisory fee and number of Options issued shall be adjusted on a pro rata basis.

### (d) Convertible Note Agreements

The Company is seeking to enter into convertible note agreements with certain member firms of the ASX or licensed investment advisers (**Brokers**), under which the Broker shall agree to procure Application Forms for Shares issued under this Prospectus in consideration for receiving an entitlement under the Convertible Note Facility; the terms of which are summarised in Section 8.3.3.

The convertible note agreement contemplates that the issue of Convertible Notes (and the underlying Shares to be issued on conversion), are being issued by the Company on the basis that the Broker is a financial services licensee acting pursuant to and in accordance with Section 708(10) of the Corporations Act.

The issue of the Convertible Notes pursuant to the convertible note agreement shall occur upon the Broker agreeing to procure Application Forms for Shares issued under the Prospectus and payment of the requisite face value of the Convertible Notes to which the Broker is entitled.

The terms of the Convertible Notes are summarised in Section 8.3.3.



### **8.7 LIMITATION ON FOREIGN OWNERSHIP**

The only limitations under Australian law on the rights of non-Australian residents to hold or vote the shares of an Australian company are set forth in the Foreign Acquisitions and Takeovers Act (the **FATA**). The FATA regulates acquisitions giving rise to ownership of substantial amounts of a company's shares.

The FATA prohibits:

- any natural person not ordinarily resident in Australia; or
- any corporation in which either a natural person not ordinarily resident in Australia or a foreign corporation (as defined in the FATA); or
- two or more such persons or corporations which hold an aggregate substantial interest (defined below),

from entering into an agreement to acquire shares if after the acquisition such person or corporation would hold a substantial interest in a corporation, without first applying in the prescribed form for approval thereof by the Australian Treasurer and receiving such approval or receiving no response in the 40 days after such application was made.

A holder will be deemed to hold a substantial interest in a corporation if the holder alone or together with any associates (as defined in the FATA) is in a position to control not less than 15% of the voting power in the corporation or holds interests in not less than 15% of the issued shares in that corporation. Two or more holders hold an aggregate substantial interest in a corporation if they, together with any associates (as so defined), are in a position to control not less than 40% of the voting power in that corporation or hold not less than 40% of the issued shares in that corporation.

The Constitution of the Company contains no limitations on a non-resident's right to hold or vote the Company's Shares.

### **8.8 LIABILITY OF OTHER PERSONS NAMED IN THIS PROSPECTUS**

Except as set out below or described elsewhere in this Prospectus,

- (a) no person named in this Prospectus as performing a function in a professional, advisory or other capacity in connection with the preparation or distribution of this Prospectus;
- (b) promoter of Metallica; or
- (c) underwriter (but not a sub-underwriter) to the Offer,

holds or held at any time during the last two years any interest in:

- the formation or promotion of Metallica;
- property acquired or proposed to be acquired by Metallica in connection with its formation or promotion or in connection with the Offer; or
- the Offer,

and no amount or benefit was paid or given or agreed to be paid or given for services provided by any of them in connection with the formation or promotion of Metallica or in connection with the Offer:

- Hopgood Ganim Lawyers are named in the Corporate Directory as Solicitors to the Company. They have been involved in the process of reviewing this Prospectus for consistency with the material contracts summarised in Sections 7 and 8 of this Prospectus. In doing so, they have placed reasonable reliance upon information provided to them by the Company and

other third parties. They do not make any other statement in this Prospectus. Hopgood Ganim will be paid for work performed in accordance with usual time based charge out rates and estimate their professional costs at \$65,000, at the date of this Prospectus.

- BDO Kendalls is named in the Corporate Directory as Independent Accountants and Auditors to the Company. They were involved in the preparation of the Independent Accountant's Report set out in Section 6 of this Prospectus. In doing so, they have placed reasonable reliance upon information provided to them by the Company and other third parties. They do not make any other statement in this Prospectus. BDO Kendalls will be paid for work performed in accordance with usual time based charge out rates and estimate their professional costs at \$12,000 at the date of this Prospectus.
- N. F. Stuart and Associates (Independent Geologist) is named in the Corporate Directory as the Independent Consulting Geologist to the Company. The Independent Geologist was involved in the preparation of the Independent Consulting Geologist's Report, which is summarised in Section 5 of this Prospectus. In doing so, they have placed a reasonable reliance upon information provided by the Company and other third parties and have been indemnified by the Company in relation to the information supplied by it. They do not make any other statement in this Prospectus. The Independent Geologist will be paid for work performed in accordance with usual time based charge out rates and estimate their professional costs at \$3,600 at the date of this Prospectus.

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## additional information

- Environmental & Licensing Professionals Pty Ltd (ELP) is named in the Corporate Directory as the Tenement Consultant to the Company. ELP was involved in the preparation of the Independent Report on Tenements, which is summarised in Section 7 of this Prospectus. In doing so, they have placed a reasonable reliance upon information provided by the Company and other third parties. They do not make any other statement in this Prospectus. ELP will be paid for work performed in accordance with usual time based charge out rates and estimate their professional costs at \$12,000 at the date of this Prospectus.
- ASX Perpetual Registrars Ltd has given its written consent to be named as the Share Registrar in the form and context in which it is named and has not withdrawn its consent prior to lodgement of this Prospectus within ASIC. ASX Perpetual Registrars Ltd has not authorised or caused the issue of this Prospectus and does not make or purport to make any statement in this Prospectus.
- Axis Financial Group (Australia) Limited has given its written consent to be named in this Prospectus as Financial Advisor and Broker to the Issue in the form and context in which it is named and has not withdrawn its consent prior to the lodgement of this Prospectus with the ASIC. Axis Financial Group (Australia) Limited has not authorised or caused the issue of this Prospectus and does not make or purport to make any statement in this Prospectus.

### 8.9 CONSENTS AND DISCLAIMERS OF EXPERTS AND OTHER PERSONS NAMED

- Hopgood Ganim Lawyers, BDO Kendalls, N. F Stuart and Associates and Environmental & Licensing Professionals Pty Ltd have acted as experts and have given, and have not, before lodgement of this Prospectus, withdrawn their written consent to the issue of this Prospectus, with the statement purporting to be made by them or to be made on a statement by them, included in the form and context in which it is included. To the extent permitted by law, they each disclaim any responsibility for any misleading statements or omissions in this Prospectus.
- Runge Limited has given its written consents to the inclusion in this Prospectus of all statements referring to Runge Limited relating to the resource study of Metallica's Taabinga coal deposit in the form and context in which they appear and has not withdrawn such consent before lodgement of this Prospectus with the ASIC
- Computer Aided Geoscience has given its written consents to the inclusion in this Prospectus of all statements referring to Computer Aided Geoscience relating to the estimation of the Inferred Resource at the Company's Bell Creek South Lease and an Indicated Resource at Dingo Dam, in the form and context in which they appear and has not withdrawn such consent before lodgement of this Prospectus with the ASIC.
- Straits has given, and has not, before lodgement of this Prospectus, withdrawn their written consent to be named in the Prospectus. Apart from being so named, Straits has not authorised or caused the

issue of this Prospectus and, apart from this consent, has not been involved in the preparation of any part of this Prospectus.

- Sigma and Norkay has given, and has not, before lodgement of this Prospectus, withdrawn their written consent to be named in the Prospectus. Apart from being so named, Sigma and Norkay has not authorised or caused the issue of this Prospectus and, apart from this consent, has not been involved in the preparation of any part of this Prospectus.

There are a number of persons referred to elsewhere in this Prospectus who are not experts and who have not made statements included in this Prospectus nor are there any statements made in this Prospectus on the basis of any statements made by those persons. These persons did not consent to being named in the Prospectus and did not authorise or cause the issue of the Prospectus.

### 8.10 PRIVACY

By submitting an Application Form for Shares you are providing to the Company personal information about you. If you do not provide complete and accurate personal information, your Application may not be able to be processed.

The Company maintains the register of members of the Company through ASX Perpetual Registrars Ltd, an external service provider. The Company requires ASX Perpetual Registrars Ltd to comply with the National Privacy Principles with performing these services. The Company's register is required under the Corporations Act to contain certain personal information about you such as your name and address and number of securities held. In addition the Company collects personal information from members such as, but not

limited to, contact details, bank accounts and membership details and tax file numbers.

This information is used to carry out registry functions such as payment of dividends, sending annual and half yearly reports, notices of meetings, newsletters and notifications to the Australian Taxation Office. In addition, contact information will be used from time to time to inform members of new initiatives concerning the Company.

The Company understands how important it is to keep your personal information private. The Company will only disclose personal information we have about you:

- when you agree to the disclosure;
- when used for the purposes for which it was collected;
- when disclosure is required or authorised by law;
- to other members of the Company group of companies;
- to your broker;
- to external service suppliers who supply services in connection with the administration of the Company's register such as mailing houses and printers, Australia Post and financial institutions.

You have the right to access, update and correct your personal information held by the Company and ASX Perpetual Registrars Ltd, except in limited circumstances. If you wish to access, update or correct your personal information held by ASX Perpetual Registrars Ltd or by the Company please contact their respective offices.

If you have any questions concerning how the Company handles your personal information please contact the Company.

## 8.11 ELECTRONIC PROSPECTUS

### Prospectus Availability

This Prospectus is available in electronic form at [www.metallicaminerals.com.au](http://www.metallicaminerals.com.au). Any person receiving this Prospectus electronically will on request be sent a paper copy of this Prospectus (and attached Application Form) by Metallica free of charge during the period of the Offer.

### Electronic Prospectus

The Application Form may only be distributed attached to a complete and unaltered copy of this Prospectus. The Application Form included with this Prospectus contains a declaration that the investor had personally received the complete and unaltered Prospectus prior to completing the Application Form.

Metallica will not accept a completed Application Form if it has reason to believe that the Applicant has not received a complete paper copy or electronic copy of this Prospectus or if it has reason to believe that the Application Form or electronic copy of this Prospectus has been altered or tampered with in any way.

While Metallica believes that it is extremely unlikely that during the period of the Offer the electronic version of this Prospectus will be tampered with or altered in any way, Metallica can not give any absolute assurance that this will not occur. Any investor in doubt concerning the validity or integrity of an electronic copy of this Prospectus should immediately request a paper copy of this Prospectus directly from Metallica or a financial adviser.

## 8.12 LITIGATION

As at the date of this Prospectus, Metallica is not engaged in any litigation and so far as the Directors are aware (other than the matter summarised below), no litigation involving Metallica is threatened.

The Company, QLD Gold and Canis Miner Pty Ltd (Canis) entered into a Farm-In Agreement dated 10 August 1999 with respect to EPM 11370, which has been relinquished after the grant of MDL312. A summary of that agreement is set forth in Section 7.2 of this Prospectus.

In early 2000 a dispute between the Company and Canis arose in relation to the operation of the Farm-In Agreement.

Canis alleges that it has entered into the second earning phase to increase its interest to 20%. Metallica has maintained that Canis failed to make within time an election to continue to earn an interest in EPM 11370 after the first earning phase was completed and therefore Canis has only a 10% participating interest and the Farm-in Agreement has ceased to apply between the parties.

Metallica has served formal written notice on Canis that Canis no longer has any rights or interests under the Farm-in Agreement because it failed to make an election within time to earn a further interest beyond a 10% interest as well as notifying Canis that it is no longer manager of the joint venture. Canis in reply alleges that Metallica has repudiated (and is in breach of) the Farm-in Agreement. This allegation is strongly denied by Metallica.

Recently, Metallica has sought to resolve this dispute with Canis but has not received any response from Canis.

Before the dispute arose between Metallica and Canis, both parties had applied for the

# 8. additional information

## additional information

MDL over part of the area of EPM 11370. The parties' respective interests in MDL312 as recorded at the Department are 90% Metallica and 10% Canis.

### 8.13 SUBSEQUENT EVENTS

There has not arisen, at the date of this Prospectus any item, transaction or event of a material or unusual nature not already disclosed in this Prospectus which is likely, in the opinion of the Directors of the Company to affect substantially:

- the operations of the Company,
- the results of those operations; or
- the state of affairs of the Company.

### 8.14 EXPENSES OF THE OFFER

All expenses connected with the Offer including geological expert fees, accounting fees, legal fees, broker fees, share registry fees, ASIC and ASX fees, printing costs, public relation costs and other miscellaneous expenses are payable by Metallica. These expenses are estimated at \$550,000 if Maximum Subscription is achieved, and \$420,000 if the Minimum Subscription is achieved.

### 8.15 INSPECTION OF DOCUMENTS

Copies of following documents may be inspected free of charge at the registered office of the Company and at the offices of the Company's Solicitors, Hopgood Ganim Lawyers, Level 8, Waterfront Place, 1 Eagle Street, Brisbane during normal business hours:

- the Material Contracts in Section 7 and Section 8;
- the Constitution of the Company;
- the consents referred to in Section 8.8 of this Prospectus;
- the ESOP Rules summarised in Section 8.5;

- Environmental & Licensing Professionals Pty Ltd Independent Report on Tenements; and
- N. F. Stuart and Associates Independent Consultant's Geological Report.

### 8.16 DIRECTORS' STATEMENT

Every Director of Metallica has consented to the lodgement of this Prospectus with ASIC.

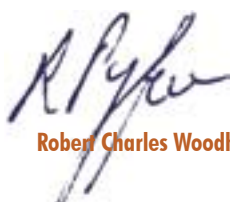
Each Director of Metallica has signed this Prospectus:



**David Keith Barwick**



**Andrew Langham Gillies**



**Robert Charles Woodhouse Pyper**



**Roderick William Siller**



**John Kevin Haley**

# 9. glossary

## glossary

### KEY DEFINITIONS

<b>ABN</b>	Australian Business Number
<b>Act</b>	Mineral Resources Act 1989 (Queensland)
<b>AEST</b>	Australian Eastern Standard Time
<b>Applicant</b>	A person applying for Shares offered by this Prospectus
<b>Application</b>	An application for Shares offered by this Prospectus
<b>Application Form</b>	The Application Form appearing at or near the last page in this Prospectus
<b>Application Period</b>	The period in which Applications are able to be completed and received by the Company
<b>ASIC</b>	Australian Securities and Investment Commission
<b>ASX</b>	Australian Stock Exchange Limited - ABN 98 008 624 691
<b>Axis</b>	Axis Financial Group (Australia) Limited - ABN 32 006 711 995
<b>AusIMM</b>	The Australasian Institute of Mining and Metallurgy
<b>BHP Billiton</b>	BHP Billiton Limited or subsidiary company within the BHP Billiton group
<b>Board</b>	The board of Directors of Metallica
<b>CHESS</b>	Clearing House Electronic Subregister System
<b>Company &amp; Metallica</b>	Metallica Minerals Limited ABN 45 076 696 092
<b>Constitution</b>	The constitution of Metallica Minerals Ltd
<b>Convertible Notes</b>	The Convertible Notes in Metallica to be issued under the Convertible Note Facility
<b>Convertible Note Facility</b>	The facility established by the Board to issue Convertible Notes, the terms of which are summarised more particularly in Section 8.3.3
<b>Corporations Act</b>	means the Corporations Act 2001 (Cth) as may be amended from time to time
<b>Department</b>	Queensland Department of Natural Resources Mines and Energy
<b>Director(s)</b>	The director(s) of Metallica from time to time
<b>EPC</b>	An exploration permit for coal granted pursuant to the Act
<b>EPCA</b>	An exploration permit application for coal granted pursuant to the Act
<b>EPM</b>	An exploration permit for minerals granted pursuant to the Act
<b>EPMA</b>	An exploration permit application for minerals pursuant to the Act
<b>Escrow</b>	In the context of this Prospectus, means the right of the ASX for a certain period of time, to withhold dealings in some or all of the Shares or other securities issued by the Company
<b>Exposure Period</b>	The period beginning on the date of lodgement of the Prospectus with the ASIC and ending 7 days after such lodgement, unless the period is extended by the ASIC in which event it means the extended period
<b>Feasibility Study</b>	A detailed study of the technical and economic aspects of developing an ore body generally to a stage at which bank financing can be sought
<b>Greenvale Nickel Province</b>	A large area or region considered as a whole between Broken River in the south to Greenvale to Near Mt Garnet in the north. The Greenvale Nickel Province encompasses a mafic-ultramafic lateritised or weathered serpentinite belt. Within this belt scattered and isolated areas of the laterites become highly enriched in nickel and cobalt to the extent that they can locally contain economic concentrations of those metals. The mafic-ultramafic belt may also contain nickel sulphide mineralisation.
<b>GST</b>	Goods and Services Tax

# 9. glossary

## glossary

<b>Issue</b>	The issue of Shares and Options by Metallica pursuant to this Prospectus
<b>JORC</b>	Joint Ore Reserves Committee (JORC) of the Australasian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and Minerals Council of Australia
<b>KAPL</b>	Kingaroy Aluminium Pty Ltd ACN 107 817 694
<b>Listing Rules</b>	Means the listing rules of the ASX
<b>MDL</b>	A mineral development licence granted pursuant to the Act
<b>MDLA</b>	A mineral development licence application pursuant to the Act
<b>Maximum Subscription</b>	The maximum subscription under this Prospectus of \$5,000,000 constituted by the Minimum Subscription and an additional 10,000,000 Shares and 2,500,000 attaching Options.
<b>Metallica</b>	Metallica Minerals Limited ABN 45 076 696 092
<b>Minimum Subscription</b>	The minimum subscription under this Prospectus of \$3,000,000 constituted by 15,000,000 Shares and 3,750,000 attaching Options.
<b>ML or Mining Lease</b>	A mining lease granted pursuant to the Act
<b>MLA</b>	A mining lease application pursuant to the Act
<b>MOU</b>	Memorandum of Understanding
<b>Norkay</b>	Norkay Pty Ltd ACN 101 655 298
<b>NORNICO</b>	North Queensland Nickel-Cobalt Project which currently includes the Bell Creek EPM, Bell Creek (Gunnawarra) Mining Leases, Minnamoolka EPM, Minnamoolka Extended EPM, Kokomo EPM, Six Mile EPM, Moonmyata EPM, Mt Garnet South EPM, Lucky Downs EPM, Greenvale North and South EPMs and two EPM applications
<b>Offer</b>	The Offer of Shares and Options by Metallica pursuant to this Prospectus
<b>Official List</b>	The official list of the ASX
<b>Option</b>	An option to subscribe for a Share the terms of which are summarised in this Prospectus
<b>Oresome</b>	Oresome Australia Pty Ltd ACN 071 762 484 a wholly owned subsidiary of Metallica
<b>Oversubscription</b>	The maximum additional \$2 million to be raised under the Offer constituted by 10,000,000 Shares and 2,500,000 attaching Options
<b>Pre-Feasibility Study</b>	An initial technical and financial study of a project to assess whether further work is justified as described in Section 2.4.
<b>Prospectus</b>	The Prospectus dated 14 September 2004
<b>QLD Gold</b>	QLD Gold Pty Ltd ACN 065 384 045 a wholly owned subsidiary of Metallica
<b>QNI</b>	Wholly owned subsidiary of BHP Billiton ACN 055 313 043
<b>Scoping Study</b>	Initial conceptual study to establish project concept and to provide an order-of-magnitude cost and viability as described in Section 2.4.
<b>Secondary Sale Provision</b>	Means those provisions of the Corporations Act which prevents the sale by the holder of an entity's securities within twelve (12) months after their issue without disclosure to investors where those securities were issued without disclosure to the holder under Part 6D of the Corporations Act.
<b>SCH Business Rules</b>	Means the SCH Business Rules issued by ASX Settlement and Transfer Corporation Pty Ltd
<b>Securities</b>	Shall have the meaning ascribed to it under the Corporation Acts.
<b>Sigma</b>	Sigma Kaolin Ltd ACN 101 340 514

<b>Share</b>	An ordinary share in the capital of Metallica, including but not limited to the ordinary shares offered pursuant to this Prospectus
<b>Straits</b>	Straits Resources Limited ACN 056 601 417 and or wholly owned subsidiary Straits Exploration (Australia) Pty Ltd ACN 061 614 695
<b>Subsidiary</b>	Shall have the meaning ascribed to it in the Corporations Act
<b>Tenements</b>	The tenements held by Metallica, the details of which are set out in Section 7 of this Prospectus

## ABBREVIATIONS

<b>dmt</b>	Dry metric tonne	<b>Mt</b>	Million tonnes
<b>g</b>	Gram	<b>PGE</b>	Platinum Group Elements
<b>g/t</b>	Grams /tonne (equivalent to ppm)	<b>ppb</b>	Parts per billion
<b>kg</b>	Kilogram (2.205 pounds)	<b>ppm</b>	Parts per million
<b>km</b>	Kilometre	<b>oz(s)</b>	Troy ounces of gold and silver
<b>lb</b>	Pound (0.454 kg)	<b>t</b>	Tonne
<b>m</b>	Metre	<b>tpa</b>	Tonnes per annum
<b>M</b>	Million	<b>\$</b>	Australian Dollars unless otherwise indicated.

## CHEMICAL SYMBOLS

<b>Ag</b>	Silver	<b>Ni</b>	Nickel
<b>Al</b>	Aluminium	<b>O</b>	Oxygen
<b>As</b>	Arsenic	<b>PGE</b>	Platinum Group Elements
<b>Au</b>	Gold	<b>Pd</b>	Palladium
<b>Ba</b>	Barium	<b>Pt</b>	Platinum
<b>C</b>	Carbon	<b>REE</b>	Rare Earth Elements
<b>Co</b>	Cobalt	<b>S</b>	Sulphur
<b>Cr</b>	Chromium	<b>Sc</b>	Scandium
<b>Cu</b>	Copper	<b>Si</b>	Silicon
<b>Fe</b>	Iron	<b>Ti</b>	Titanium
<b>H</b>	Hydrogen	<b>V</b>	Vanadium
<b>Mg</b>	Magnesium	<b>Zn</b>	Zinc
<b>Nb</b>	Niobium	<b>Zr</b>	Zirconium

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## glossary

### GLOSSARY OF TECHNICAL TERMS AND ABBREVIATIONS

<b>Adularia</b>	Potassium rich mineral.
<b>Agglomeration</b>	Term used for the mixing and binding of fine ore particles into rounded pellets typically 5mm to 20mm in diameter to minimise segregation of the coarse and fine ore components in the heap, which reduces the circulation of leach solutions. By agglomerating individual particles of the ores will be held together in a coarse, porous heap of pellets. The agglomeration process is commonly used in Heap Leaching operations to increase the permeability of the leaching solutions and therefore metal recoveries.
<b>Atmospheric Leach (AL)</b>	Atmospheric Leach or Leaching process on laterite ores, using sulphuric acid to extract nickel and cobalt into solution at atmospheric pressure and temperatures below 100 degrees Celsius, there are two main options, Heap Leaching (HL) and Heated Agitated Tank Leaching (HATL) as described in Section 2.4.
<b>Agricultural Lime</b>	Dominantly crushed limestone sometimes mixed with other minerals and usually pulverized to powder to enable spreading for soil conditioning.
<b>Airbornemagnetics</b>	Measurement of the magnetic qualities of the rocks using an airborne mounted instrument (also termed airborne magnetic survey).
<b>Alkali soluble</b>	Dissolves in an alkaline solution eg sodium hydroxide.
<b>Alteration</b>	A physical, chemical or mineral change to a rock generally caused by the influx of hot chemical (hydro-thermal) solutions.
<b>Alumina</b>	Aluminium oxide, a white crystalline powder ( $Al_2O_3$ ). Raw bauxite is screened and sometimes washed to remove clays and other impurities. Then the beneficiated bauxite is dissolved in hot caustic soda to form a gibbsite ( $Al(OH)_3$ ) solution. The resultant gibbsite precipitate is then calcined by heating to 1100°C to produce alumina.
<b>Anomalous</b>	Having values lying outside the normal range. Relatively high values may be directly or indirectly tested for significant mineralisation.
<b>Anomaly</b>	Usual soil or rock assay value or geophysical measurement considered by geoscientists to be distinctly different from normal or background values.
<b>Assay</b>	Any physical or chemical method used to measure the absolute content of an element in a rock sample.
<b>Bauxite</b>	An alumina rich laterite, a product of weathering which produces a mixture of aluminous oxides and hydroxides.
<b>Basalt</b>	A dark fine grained extrusive igneous rock or lava, composed mainly of feldspar, iron and magnesium rich minerals.
<b>Basement</b>	Crustal layer of rock beneath sedimentary cover, sometimes considered bedrock or solid rock underlying soil, alluvium, laterite etc.
<b>Base metal</b>	A term generally used for aluminium, copper, lead, nickel and zinc or a combination of these metals.
<b>Beneficiation</b>	Upgrading of the contained metal content of run-of-mine ore by screening out unwanted sized particles or by similar physical processes.
<b>Block</b>	Large crustal area comprising similar geology and/or time period.
<b>Bottle Roll Test</b>	Laboratory method of extracting metal from a sample of crushed rock. The sample is placed in a large bottle with a reagent and the mixture is agitated on rollers for a set time, i.e. 24 hours, to determine how much of the contained metal is extractable. Roll tests are used to determine the grade of the original sample and or the leach time required to recover a percentage of the contained metal. This process simulates and provides an indication of the amount of extractable metal a proposed mineral processing route will obtain.



<b>Boxwork</b>	A regular pattern of cavities in a rock from which material has been leached.
<b>Brownfield exploration</b>	Exploration within an advanced mineral project area, typically close to known mineral deposits or mines and where drill targets have been generated through exploration and or where the outcropping geology or geology is particularly favourable.
<b>Bulk Density</b>	The measurement of the mass of a given volume of a material recorded as mass/volume, eg tonnes/cubic metre.
<b>Bulk Sample</b>	Taking large samples consisting of tonnes or hundreds of tonnes and processing them to determine the ore grade or other properties.
<b>Burnt Lime</b>	See Lime.
<b>CAG</b>	Computer Aided Geoscience Pty Ltd.
<b>Caron Process</b>	A process for extracting nickel and cobalt from laterite ores, involving reduction of ore by roasting at 750°C followed by leaching with an ammonia-ammonium carbonate solution at atmospheric pressure and about 45°C. This is the process used at the Yabulu nickel refinery.
<b>Chalcophile</b>	Any element which has a strong affinity for sulphur, commonly found in sulphide ores.
<b>Cobalt</b>	A metallic element (Co) used in steel making and the manufacture of lead-acid batteries, and permanent magnets etc.
<b>Column Test</b>	Column tests are designed to determine the time required to recover a percentage of contained metal in a sample by simulating Heap Leach conditions. Columns can be 10 to 50 cm in diameter and 1 to 3m in height. The columns are filled with ore crushed to a predetermined size and a solution (reagent) percolates through the material. The percolate is collected and analysed to determine its metal content and extraction rates.
<b>Concentrate</b>	Mineral in which the valuable mineral fraction has been separated from the gangue or worthless material thereby upgrading the product.
<b>Country rock</b>	Rocks surrounding a vein or anomaly which in themselves have no economic value. The enclosing rock around a body of ore.
<b>Crustal</b>	The outermost layer of the earth.
<b>Cumulate</b>	An igneous rock formed by the accumulations of crystals that settle out from a magma by gravity.
<b>Cut-off</b>	The estimated lowest grade of mineralisation or ore that can be exploited profitably.
<b>Diamond drillhole (DDH)</b>	Hole made by rotary drill using diamond-edged bits which produces a solid continuous core sample of the rock.
<b>Dolerite</b>	A medium grained mafic intrusive rock composed mostly of pyroxenes and sodium-calcium feldspar.
<b>Duricrust</b>	A surficial lateritic layer or capping of strongly cemented siliceous or ferruginous material.
<b>Electrolyte</b>	A compound, which in solution, dissociates into ions.
<b>Electromagnetic (EM)</b>	A geophysical method which measures electromagnetic waves on or near the earth's surface, particularly useful in locating sulphide metal deposits.
<b>EOH</b>	End of hole
<b>Epithermal</b>	Type of hydrothermal mineral deposit formed at relatively low temperatures (<200°C) at or near the earth's surface, generally occur as veins or stockworks.
<b>Farm-in, Farm-out</b>	A joint venture or partnership in which an incoming (farm-in) partner earns an interest in a property by funding costs of exploration, while the (farm-out) partner owning the property does not contribute.
<b>Flood Basalt</b>	Basalts which are part of vast flows that flood parts of the earth on a regional scale.

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## glossary

<b>Free carried</b>	A party, commonly the tenement holder, is supported by one or more companies by expending agreed funds on the tenement to a certain stage over an agreed time frame, thereby no costs are borne by the 'free carried' party. In general this results in the supporting party earning an agreed equity in the tenement at a certain agreed stage of the expenditure.
<b>Free on board (FOB)</b>	A trading term requiring the seller to deliver goods on board a vessel designated by the buyer. The seller fulfils its obligation to deliver when the goods have passed over the ship's rail.
<b>Free silica</b>	Relatively pure silica that can be liberated from a rock by crushing and screening.
<b>Fuel Cell</b>	An electrochemical device that produces electricity and heat from fuel (often hydrogen) and oxygen. Unlike a conventional heat engine, it produces energy without burning the fuel making it efficient and environmentally clean. A technology proven in space missions.
<b>Gabbro</b>	A coarse grained, dark coloured, basic intrusive igneous rock, high in iron and magnesium minerals, composed mainly of plagioclase, clinopyroxene and sometimes olivine.
<b>Gangue</b>	Waste rock or mineral associated with ores.
<b>Geochemistry</b>	A study of the distribution and amounts of chemical elements in rocks and soil.
<b>Geophysical survey</b>	Used in this Prospectus to describe any prospecting technique which measures the physical properties of rocks (eg. conductivity, magnetic and gravity) and contrasts the properties of different rock types, thus defining geophysical anomalies.
<b>Gossan</b>	The leached and oxidised near surface expression of a sulphide mineral deposit, containing hydrated iron oxides.
<b>Giga</b>	$10^9$
<b>Grade</b>	The relative quantity or percentage of mineral or metal content.
<b>Grass roots exploration</b>	Initial stages of exploration in a relatively unexplored terrain.
<b>Gravity anomaly</b>	A region of the earth's gravity field that may be higher or lower than the surrounding readings.
<b>Greenfield exploration</b>	Grassroots or initial stages of exploration in a relatively unexplored terrain.
<b>HATL</b>	Heated Agitated Tank Leach, a type of AL as described in Section 2.4.
<b>Heap Leach (HL)</b>	A leach or leaching process from the construction of large heaps of crushed ore is placed on an impermeable layer or pad and the addition of solutions such as water and sulphuric acid to dissolve and extract select metal constituents from the ore, as described in Section 2.4.
<b>Host rock</b>	The wall rock of a defined ore deposit or the rock unit containing that mineralisation.
<b>Igneous</b>	Rocks derived from molten or partly molten material.
<b>Indicated resource</b>	(see Resources and Reserves).
<b>Inferred resource</b>	(see Resources and Reserves).
<b>IP (induced polarisation)</b>	An electrical geophysical exploration technique used in the search for disseminated sulphide deposits.
<b>Jasperoidal</b>	Fine grained silica rich rock coloured red by iron oxides.
<b>Joule (J)</b>	A unit of energy.
<b>Kiln</b>	Furnace used for driving off CO <sub>2</sub> from limestone to produce lime (CaO).
<b>Kiln rock</b>	Rock supplied to the kiln.
<b>Laterite</b>	A strongly leached iron-aluminium rock formed at the surface by weathering under tropical conditions. Oxidised nickel ores are referred to as laterites. Bauxite is a strongly aluminous laterite.

<b>Leaching</b>	A hydrometallurgical process in which metals in a rock are dissolved by chemicals in liquid solution.
<b>Lime</b>	Product from heating limestone above 825 °C, which drives off carbon, oxygen and moisture. This is also known as quicklime or burnt lime (CaO).
<b>Limestone</b>	A sedimentary rock consisting chiefly of calcium carbonate (CaCO <sub>3</sub> ).
<b>Limonite</b>	A term for hydrous iron oxide, usually yellow brown in colour, found in the upper part of the lateritic profile.
<b>LME</b>	London Metals Exchange.
<b>Magnetic survey</b>	Systematic collection of readings of the earth's magnetic field at a series of different locations in order to define the distribution and variations of values which may be indicative of different rock types, formations, ores etc.
<b>Mafic</b>	Pertaining to, or composed dominantly of, the generally dark coloured, ferromagnesian forming rock silicates.
<b>Magma</b>	Molten rock.
<b>Measured Resource</b>	(see Resources and Reserves)
<b>Mega-joule (MJ)</b>	Unit of energy, 1 million joules.
<b>Megawatt (MW)</b>	Unit of power, especially electrical. Equal to 1 million watt (W).
<b>Metallurgy</b>	Concerned with the production of metals from ores. Can be divided into hydrometallurgy, where aqueous solutions are used to extract metals from ore (eg leaching) and pyrometallurgy where heat is used to smelt metals from ore minerals.
<b>Mineralisation</b>	(a) A concentration of valuable or potentially valuable minerals in a rock body. A mineralised zone in which there is insufficient information to estimate a resource category. (b) A mineralised zone in which there is insufficient information or sufficient grade to estimate a mineral Resource, see Resources and Reserves).
<b>Nickel</b>	A metallic element (Ni).
<b>Nickel equivalent (Ni eq)</b>	Nickel equivalent grade expresses the combined value of both nickel and by-product cobalt using PAL or AL extraction. Unless stipulated otherwise, the Ni eq used in this Prospectus is the nickel grade plus four times the cobalt grade (Ni + 4Co) to account for the higher value of cobalt (eg US\$5.00/lb Ni and US\$20.00/lb Co). Actual Ni eq ratios can vary significantly from time to time due to variations in both nickel and cobalt prices.
<b>Nickel-cobalt laterite</b>	A lateritic profile containing an anomalous concentration of oxidised nickel and cobalt minerals.
<b>Norite</b>	A type of gabbro containing basic plagioclase and orthopyroxene as the dominant mafic mineral. Often associated with nickel sulphide deposits
<b>Olivine</b>	An olive green magnesian-iron silicate, common in mafic and ultramafic rocks.
<b>Opencut</b>	A mine worked at and from the surface (eg. a quarry).
<b>Ore</b>	A mineral deposit that can be extracted and marketed profitably.
<b>Orebody</b>	A well defined mass of ore.
<b>Ounce (or troy ounce)</b>	An ounce of precious metal (gold, silver or platinum group elements PGE's) with one ounce equalling approximately 31.1 grams.
<b>Oxide</b>	Any mineral in which oxygen is combined with a metal, often formed during weathering processes.

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## glossary

<b>PAL</b>	Pressure Acid Leach process, using sulphuric acid to extract nickel and cobalt into solution in an autoclave at elevated temperatures and pressures.
<b>Pentlandite</b>	A sulphide ore of nickel, FeNiS.
<b>Peridotite</b>	Coarse grained, olivine rich ultramafic rock.
<b>PGE</b>	An abbreviation for platinum group elements, a group of rare metals including platinum, palladium, rhodium, ruthenium, osmium and iridium (also termed platinoids).
<b>Prospect</b>	An area in which potential for economic mineralisation is suggested from analysis of geological, geochemical or geophysical data.
<b>Pyrite</b>	An iron sulphide mineral, FeS <sub>2</sub> .
<b>Pyroxene</b>	A mineral belonging to a common group of magnesium-iron silicates, divided into orthopyroxenes and clinopyroxenes on differing metal content and crystal lattice structure.
<b>Pyroxenite</b>	Pyroxene rich ultramafic rock.
<b>Quartz</b>	A mineral comprising crystalline silica, SiO <sub>2</sub> .
<b>Quicklime</b>	See Lime.
<b>RAB</b>	Rotary air blast.
<b>Radiometric Survey</b>	Collection of data (by ground traverse or from an aircraft) of the natural radioactivity emitted by rocks at or near the earth's surface. The results may help to identify distinct rock types, structures, formations, ores etc.
<b>Rare Earth Element (REE)</b>	A term applied to 17 metallic elements comprising the lanthanide group plus scandium and yttrium. They are not particularly rare in the earth's crust but economic concentrations are.
<b>Reactive silica</b>	Silica that interferes with the recovery of aluminium during refining.
<b>Refinery</b>	Means a plant where ore, concentrates, mixed sulphides or matte are processed into partially or fully refined metals.

## RESOURCES AND RESERVES

<b>Inferred resource</b>	An estimate of mineral resources made from geological evidence as defined by the JORC standard for reporting ore reserves and resources. Means a mineral resource inferred from geological evidence and sampling results where the lack of data is such that continuity cannot be predicted with confidence and the geological data may not be known with reasonable level of reliability.
<b>Indicated resource</b>	An estimate of mineral resources made from geological evidence as defined by the JORC standard for reporting ore reserves and resources. Means a mineral resource that has been sampled by drillholes or other sampling procedures at locations too widely spaced to ensure continuity but close enough to give a reasonable indication of continuity.
<b>Measured resource</b>	An estimate of mineral resources as estimated from geological data as defined by the JORC standard for reporting ore reserves and resources. This is part of a mineral resource where exploration data are distributed in sufficient density and are of sufficient reliability to allow the estimation of the resource, volume, shape, tonnage and grade to a level of confidence in their accuracy sufficient to allow a detailed mining Feasibility Study to be carried out.
<b>Reserves</b>	A well-defined estimate of tonnes and grade of ore, which is believed to be economic following a detailed study of all relevant economic and technical information.

<b>Resources</b>	A well-defined estimate of tonnes and grade of mineralisation on which there has been no detailed economic study carried out but there are reasonable prospects for eventual economic exploitation.
<b>Reverse circulation (RC) drilling</b>	A double tube drilling technique which uses compressed air to operate a down hole hammer and the resulting rock chip and powder sample is returned to the surface inside the drill rods. Sample contamination is reduced significantly using this technique.
<b>Rift</b>	A long narrow continental trough bounded by faults.
<b>Rock chip sampling</b>	Obtaining samples, generally for assay, by breaking chips off a rock exposure.
<b>Saprolite (saprolitic)</b>	A generally soft, earthy, clay-rich, decomposed rock formed in place (in situ) by weathering in the lower zone of a lateritic profile - literally "rotten rock".
<b>Serpentinite</b>	An ultramafic igneous rock almost entirely composed of the mineral serpentine, an alteration product of magnesium rich silicate minerals, especially olivine.
<b>Shear zone</b>	A zone in which crushed rock (or breccia) has been produced by the action of a shearing stress as on a fault.
<b>Silica</b>	A mineral, silicon dioxide, SiO <sub>2</sub> , which exists in many forms eg. quartz chalcedony, opal.
<b>Sill</b>	A sheet of igneous rock which is flat lying or has intruded parallel to strata.
<b>Soluble alumina</b>	Alumina that can be recovered during processing.
<b>Stockwork</b>	An interlocking, three-dimensional network of veins in a rock mass.
<b>Strike</b>	The direction or trend taken by a structural surface, eg a bedding plane, as it intersects the horizontal.
<b>Sub-blocks</b>	Exploration Permit Minerals (EPM) or Exploration Permit Coal (EPC) tenements in Queensland comprise of sub-blocks. Each sub-block covers one (1) minute of latitude and longitude. At Queensland latitudes it covers approximately 3.2 square kilometres.
<b>Sulphide</b>	Any mineral comprising only metals and sulphur (e.g. pyrite FeS).
<b>Tailings</b>	Material rejected from a treatment plant after the recoverable valuable minerals have been extracted.
<b>Tenement</b>	An area of land defined by government authority over which the holder may conduct exploration or mining activities (eg. EPM, ML).
<b>Tertiary</b>	Subdivision of geological time covering the period from 65 million years to 2 million years before present.
<b>Thermal Coal</b>	Coal which is mainly used in power stations.
<b>Ultramafic</b>	A generally intrusive igneous rock predominantly composed of mafic minerals, ie magnesium and iron silicates eg dunite, peridotite, pyroxenite, serpentinite, and harzburgite.
<b>USGS</b>	United States Geological Survey.
<b>Vein</b>	The narrow infill of a brittle rock structure (e.g. fault or joint), most commonly quartz with or without minor calcite, sulphides and/or occasionally native metals.
<b>Yabulu Nickel Refinery</b>	The nickel-cobalt ore processing plant owned and operated by QNI (subsidiary of BHP Billiton) at Yabulu, near Townsville, Queensland. This plant uses the CARON process.



Drilling at Bell Creek Nickel Project – NORNICO

### Directors

David Keith Barwick - Chairman  
Andrew Langham Gillies - Managing Director  
Roderick William Siller - Director  
Robert Charles Woodhouse Pyper - Director  
John Kevin Haley - Director

### Company Secretary

John Kevin Haley

### Head & Registered Office

**Metallica Minerals Limited**  
Level 6, 379 Queen Street  
Brisbane Qld 4000  
Tel: (07) 3211 7366  
Fax: (07) 3211 7114  
Postal: GPO Box 122, Brisbane Qld 4001  
Email: [admin@metallicaminerals.com.au](mailto:admin@metallicaminerals.com.au)  
Website: [www.metallicaminerals.com.au](http://www.metallicaminerals.com.au)

### Financial Adviser and Broker to the Issue

**Axis Financial Group (Australia) Limited**  
Level 25 Royal Exchange Building  
56 Pitt Street Sydney NSW 2000  
PO Box R1464 Royal Exchange  
Sydney NSW 1225  
Tel: (02) 9247 1164  
Fax: (02) 9247 4844  
Website: [www.axisfinancial.com.au](http://www.axisfinancial.com.au)

### Share Registry

**ASX Perpetual Registrars Ltd**  
Level 22, 300 Queen Street  
Brisbane Qld 4000  
GPO Box 2537  
Brisbane Qld 4001  
Tel: (07) 3228 4219  
Fax: (07) 3221 3149

### Auditors & Independent Accountants

**BDO Kendalls, Chartered Accountants**  
Level 18, 300 Queen Street  
Brisbane Qld 4000

### Solicitors

**Hopgood Ganim**  
Level 8, Waterfront Place  
1 Eagle Street  
Brisbane Qld 4000

### Independent Consulting Geologist

**N.F. Stuart and Associates**  
253 Rafting Ground Road  
Brookfield Qld 4069

### Tenement Consultant

**Environment & Licensing Professionals Pty Ltd**  
Level 27, 288 Edward Street  
Brisbane Qld 4000

### Metallica Minerals Limited - What's in a Name?

Metallica was named after the classic, medieval mining and metallurgy textbook "**De Re Metallica**", first published in 1556 by Georgius Agricola, a German physician and scientist.

Agricola, known as the father of mineralogy, was a pioneer in physical geology and the first to classify minerals scientifically.

De Re Metallica, his most celebrated work, was a standard in metallurgy and mining for over a century and was translated into English (1912) by Herbert C. Hoover. Hoover was a mining engineer who worked in Western Australia and became President of the United States of America in 1929.

**METALLICA MINERALS LIMITED**

PROSPECTUS 2004

"An emerging  
mineral resource  
company"  
**"An emerging mineral  
resource company"**



**METALLICA MINERALS LTD**

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