

# Quarterly Report to

to 31 Dec 2009



### **ASX** release

29 January 2010

#### **Metallica Minerals Ltd**

A Queensland multi-commodity resource company with major interests in Nickel—Cobalt, Coal, Bauxite, Tungsten, Scandium, Zircon-Rutile & Gold-Copper

#### ASX:MLM

### Issued Capital (31/12/2009):

121,740,917 Shares issued

1,600,000 Directors & Management Unlisted Performance Options as at 1.01.2010

~ 2,489 shareholders

**Top 20 shareholders:** Hold 61.1%

#### **Directors:**

David K. Barwick - Non Exec Chairman Andrew Gillies - Managing Director John Haley - Director & Company Sec Peter Nicholson - Non Executive Director Shu Wu - Non Executive Director

#### **Largest Shareholders:**

Jien Mining Pty Ltd 18.8% RCF (Funds III LP & IV LP) 12.3% Golden Breed Pty Ltd 7.2%

#### Cash balance:

As at 31 December 2009, MLM's consolidated cash balance was approximately \$10.25 million.

# **Highlights**

- MetroCoal Ltd (ASX:MTE) lists on ASX.
   MLM has a 56% shareholding (80M MTE shares)
- ▶ Ni-Co Kokomo Resource upgrade to 16.3Mt @ 0.67% Ni & 0.12% Co containing approximately 108,000 tonnes Ni & 19,400 tonnes Co metal (see Table 1)
- ➤ Kokomo Scandium resource upgrade to 9Mt @ 109g/t Sc containing 1,480t Sc oxide
- ► Acquisition 100% of Greenvale & Lucknow Ni-Co projects added to NORNICO project
- Greenvale contains a 37.7Mt @ 0.80%Ni Inferred and Indicated resource (see Table 7) which contains drilled high grade zones (>1.4% Ni) and is an excellent development site
- ► Current cash \$10.25 million
- In late 2009, the Pre-Feasibility Study for the NORNICO development option for a 1.0 mtpa size processing operation was completed.
- ► A recently commissioned NORNICO Scoping Study will include the Kokomo cobalt rich nickel deposit and the Greenvale nickel deposit. The Scoping Study is based on a new development plan under investigation.
- Metallica 76% held Planet Metals (ASX:PMQ) completed a 2,270m (45 hole) diamond drilling program on its Wolfram Camp wolfram (tungsten) and molybdenite mine. A 2,500 infill RC drill program has commenced.
- Cape Alumina Limited (ASX:CBX) (MLM holds 33%) completed its Pre-Feasibility Study on its 100% held Weipa Bauxite project Pisolite Hills bauxite deposit with positive results and has commenced definitive Feasibility Study.

## Corporate

- ▶ MetroCoal raised \$10 million from its IPO and listed on the ASX on 4 December 2009. Funds will be used to actively establish a large thermal coal resource base in the Surat Basin.
- ▶ Planet Metals Ltd (ASX:PMQ) [previously named Queensland Ores Ltd] successfully completed its Rights Issue in November 2009 fully subscribed raising approximately \$2M - MLM maintained its 76% shareholding of PMQ.
- Metallica has a major shareholding 47% of Brisbane based Orion Metals Limited (ASX:ORM) Orion's focus is on gold and rare earth projects in Australia. Orion in conjunction with MLM are continuing to seek mineral resource opportunities suitable for this company.
- Maintaining strong cash position of approximately \$10.25 million with effectively no debt. Metallica's ASX listed investments and major projects are summarised graphically on page 3 – Metallica's Company and Listed Investment Structure.

# **Financial**

To be read in conjunction with **Appendix 5B** attached

As at 31 December 2009, Metallica's cash was \$10.25 million including interest income of \$140,000 received during the December Quarter.

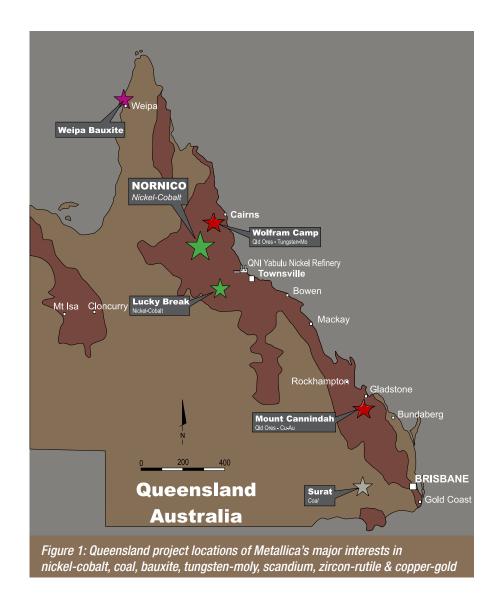
Exploration and evaluation expenditure totalled \$884,000, production \$56,000 (Ootann) and administration expenditure was \$508,000 for the quarter to 31 December 2009. The total combined December quarterly expenditure was approximately \$3.8 million, including \$1.5 million invested in Planet Metals and \$0.65 million acquiring the Greenvale tenements.

The estimated exploration and evaluation expenditure by Metallica for the March 2010 quarter is \$0.55 million Significant additional project expenditure was completed in the December quarter through Metallica's 33% shareholding in Cape Alumina (100% Weipa bauxite project).

No Directors or Management Unlisted Performance Options were issued during the quarter. 5,150,000 Director and Employee options expired at 31 December 2009. The Company's significant cash reserves will be utilised to progress Metallica's key 100% NORNICO nickel-cobalt project, and its significant Queensland-based wholly owned exploration interests in zircon, rutile, gold, scandium (80%), limestone and other minerals.

Metallica intends to support its 76% holding in Planet Metals Ltd (ASX:PMQ), and its 47.2% holding in Orion Metals Limited (ASX:ORM).

Metallica continues to assess attractive corporate and project opportunities that are compatible to the Company's core operations.



Technical information contained in this report has been compiled by Andrew Gillies B.Sc (Geology) (Managing Director of Metallica Minerals Ltd) and Metallica Minerals Ltd, Exploration Manager, Mr Pat Smith MSc. B.Sc (Hons), M.AusIMM, who are competent persons and Members of the Australasian Institute of Mining and Metallurgy (AusIMM). Mr Gillies and Mr Smith have relevant experience to the mineralisation, Exploration Targets and Mineral Resources being reported on to qualify as Competent Persons as defined by the Australasian Code for Reporting of Minerals Resources and Reserves. Information on Cape Alumina bauxite projects in this report are compiled by Mr John Cameron, Exploration Manager of Cape Alumina Limited who is a Member of the AusIMM and has 20 years experience in exploration and mining including a significant time studying bauxite projects. Mineral Resource information on Planet Metals Limited, Wolfram Camp project in this report has been compiled by Mr Andrew Border, previously the project geologist of Planet Metals Limited. Mr Gillies, Mr Smith, Mr Border and Mr Cameron consent to the inclusion in the report of the matters based on the information in the form and context in which it appears. A separate Competent Person Statement is presented included in each relevant page of this report for the MetroCoal Ltd (Coal) and Cape Alumina Ltd (bauxite) sections of this report, see page 16 and page 18 respectively.

Andrew Gillies – Managing Director, 29 January 2010
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# Metallica Company and Investment Structure

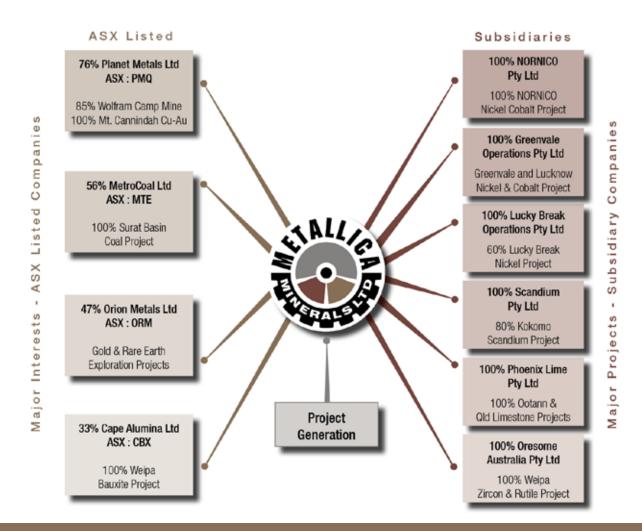


Figure 2: Metallica's Company and ASX Listed Investment Structure as at 29 January 2010

# Mineral Projects

# Nickel-Cobalt NORNICO Project 100%

The NORNICO Project is located between 30 kilometres south of Mt Garnet and the Greenvale area, North Queensland; location and access to infrastructure is excellent (see Figure 3).

Previously NORNICO Resource estimates were quoted using a cut off grade (COG) of 0.45% Ni, and were based on a heap leach operation, but due to a fall in metal prices and the fact that Metallica is investigating an AAL processing option the COG for all the NORNICO deposits has been raised to reflect new economic parameters due to higher recoveries of nickel and particularly cobalt. The COG for the NORNICO Resources has been raised to a 0.70% Ni Eq COG. The COG for the NORNICO Resources has been raised to a 0.70% Ni Eq COG (Ni + 3Co) (which has been used in the Kokomo Resource estimate). The increase in the COG has result in a decrease in the overall contained tonnage for the NORNICO deposits with a subsequent increase in the nickel and cobalt grades.

The revised NORNICO Measured, Indicated and Inferred Resource now stands at 38.6Mt @ 0.78% Ni and 0.08% Co (1.02% Ni Eq - Ni + 3Co) (with contained Nickel content of 302,000t Ni and 30,600t of Co). Details of the revised NORNICO resource for each deposit and resource categories are included as Tables 10 and 11 at the back of this report.

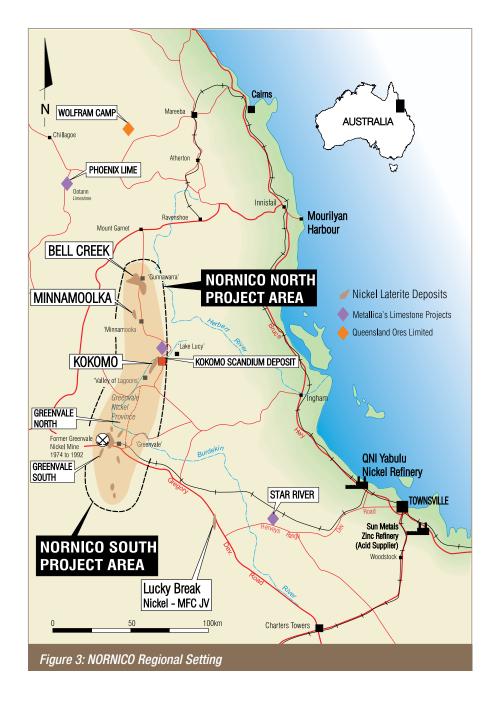
In addition to these three key NORNICO deposits, the Greenvale mine site and the Lucknow Ni-Co deposits were acquired 100% in December 2009. Further resource definition and exploration is being planned for the Greenvale and Lucknow projects in the March quarter and is expected to increase the size and status of the Greenvale nickel resource.

Most importantly, within the combined NORNICO resource base, advanced exploration, feasibility and development emphasis will be focused on the high grade portions of each deposit to provide the highest Ni-Co (and potentially Sc) grade for at least the first 10 years of the proposed NORNICO operation i.e. the best 7-10 Mt of NORNICO resource base. Exploration and resource drilling work has generally been completed on the Bell Creek, Minnamoolka

and Kokomo deposits – all efforts will now be focused on the Greenvale and Lucknow deposits.

# Key Activities Undertaken During the December Quarter:

 The in-house Pre-Feasibility Study based on 1.0 mtpa heated agitated



Atmospheric Acid Leaching (AAL), solvent extraction and electrowinning of nickel was completed.

- Kokomo Ni/Co heated agitated AAL testwork was completed.
- Metallurgical testwork of Kokomo Ni-Co-Sc ore from the Wild Honey Deposit was initiated for recovery of Scandium.
- Laboratory Pyrometallurgical testwork at CSIRO investigating the suitability of IsaSmelt Technology for recovery of nickel and cobalt from different laterite ore types was completed.
- In December, Metallica Minerals acquired from Straits Resources Ltd and Resource Mining Corporation three tenements covering the Greenvale Nickel Minesite (mined 1974-92) and the Lucknow Ni-Co deposit.

### NORNICO Project Studies

In May 2009 it was decided to investigate further possible project enhancements internally with Metallica's in-house process management team assisted by consultants. It was concluded that the preferred option going forward would be for a 1mtpa project based on heated agitated Atmospheric Acid Leach (AAL) and solvent extraction/electrowinning (SX/EW) to produce LME Nickel Metal (~10,000 tpa) and Cobalt (~1,000 tpa) as cobalt sulphide with its own acid and power plant. An internal Scoping Study/Pre-Feasibility was initiated to confirm the process suitability and hopefully to enhance the financial position of the project.

The Study was completed in November 2009. The key project parameters are as follows:

- Total Capital Expense (CAPEX) was estimated at \$A620 million including all contingencies and EPCM costs.
- Operating Expense (OPEX) was \$US4.17/lb Nickel produced, however after, Cobalt credits, the OPEX was estimated at \$US2.85/lb.

The OPEX estimates a very favourable return, however given the high capital cost required and the financial climate for funding base metal projects, Metallica

has decided not to further progress the study for the 1.0 mtpa ICO project at this stage. Instead the project team including external consultants has commenced a feasibility study on establishing a smaller processing operation of at least 100Ktpa in size (NORNICO stage 1), at the Greenvale mine site using selected high grade Ni & Co (>1.6%Ni Eq) feed sourced from the Greenvale deposit and blended with trucked cobalt rich Kokomo nickel laterite ores. Acid supply for the project would be sourced via Townsville. Metallurgical testwork for flowsheet confirmation has vet to be initiated. The Greenvale mine site is an excellent location to establish a Ni-Co ore processing facility as it is within a previously disturbed large mining area, has remnant zones of high grade nickel, it is close to the Greenvale township, sealed roads, existing infrastructure, water and limestone supplies.

It is envisaged that after NORNICO stage 1 (small scale) the processing could then be scaled up with a much larger or full scale size, in the order of a 700kt to 1Mtpa operation (NORNICO stage 2) with its own acid generation and power plant.

### **Metallurgical Testwork**

## 1. NICKEL-COBALT-SCANDIUM TESTWORK

During the December quarter heated AAL metallurgical testwork commenced on a representative blend of nickel-cobalt-scandium samples from the Kokomo Wild Honey ore deposit. The testwork program to be conducted at HRL Testing included:

- Single stage small scale heated agitated atmospheric leach tests (1Litre).
- 2. Large scale single heated atmospheric leach test (60Litre).
- Conduct small scale batch neutralisation tests to determine iron, aluminium and scandium precipitation profiles.
- 4. Conduct solvent extraction and precipitation testwork to produce a high purity scandium oxide product.

To date, preliminary results from the single stage small scale heated agitated atmospheric leach tests have been completed with good results reported.

### NORNICO Project Activities Planned for March Quarter 2010

- Continue the Kokomo Ni/Co/Sc metallurgical test program for recovery of Scandium.
- Further investigate Pyrometallurgical process options, particularly the suitability of IsaSmelt Technology.
- Progress the Scoping Study for a minimum 100Ktpa size Nickel processing plant located at Greenvale sourcing high grade nickel ores from Greenvale and cobalt rich nickel ores from Kokomo (+Lucknow).
- Initiate pit design and mining schedule for the high Ni-Co and Sc zones in the Kokomo project – Mona, Blue berry and Wild Honey area
- Initiate initial AAL metallurgical testwork on the Greenvale ore
- Progress permitting of mining lease application MLA 20549 "Bell Creek Consolidated" and MLA 10342 "Kokomo".
- A wet season Environmental study will be undertaken over the Kokomo project area in the March Quarter.
- Planning of Mining Lease
   Application(s) over portion(s) of the
   Greenvale nickel project

The summary of these test indicated high extractions of scandium were achieved, exceeding 90 % Sc extraction. Tests also indicated the extraction of scandium is closely associated with the extraction of iron. To achieve the high scandium extractions, higher acid additions were required, up to exceeding 800 kg of acid per tonne of ore. It should be noted that the

Wild Honey deposit is particularly high in iron ( $\sim$ 40% Fe).

The additional tests associated with the proposed testwork program will be completed in the next quarter.

#### 2. CANOPEAN TESTWORK – CMN METALLURGICAL PROCESS

Investigations into the extraction of scandium via a Solvent Extraction process have been initiated.

### 3. PYROMETALLURGICAL PROCESSES (ISASMELT TECHNOLOGY) AND TESTWORK

Laboratory bench scale testwork undertaken at CSIRO has been completed and a report issued to Metallica.

Preliminary results have been promising. A Ferro Nickel alloy containing 35% Nickel has been produced with recoveries of nickel and cobalt in excess of 90%. Slag foaming and phase separation were initially a concern however these have been resolved.

Estimates of capital and operating costs are presently being compiled in order to ascertain if there are any merits in pursuing the Pyrometallurgical option for recovery of nickel from the NORNICO nickel laterite deposits. Commitment to a pilot plant program is highly dependent on the outcomes of a financial analysis.

### **Environmental**

During the September and December quarters it was decided not to progress the EIS document until the project definition is finalised. As such it will be necessary to re-introduce the project to DERM and recommence the environmental approval process. This will further delay the larger NORNICO Project schedule. Base line wet and dry season environmental studies have been completed at both Bell Creek and Minnamoolka and final reports issued. The Kokomo dry season flora and fauna study was completed in the September quarter and the wet season survey is planned for March 2010.

Environmental studies will be initiated on the Greenvale nickel project during the March quarter.



# **NORNICO Exploration Update**

# Kokomo Nickel–Cobalt & Scandium (EPM 10699/ MLA 10342)

A second round of drilling was initiated at Kokomo in October 2009 to drill out an area of higher grade Nickel — Cobalt mineralisation and an area of high grade Scandium mineralisation to Measured status. A total of 141 RC holes (KK-914 to KK 1054) were drilled for a total of 3,071m (Details of the Kokomo drilling programme are included in the ASX release dated 9th December 2009).

These holes were designed to drill out two separate areas of high grade nickel — cobalt mineralisation (referred to as Mona and Blueberry) and a high grade scandium zone (Wild Honey) (see Figure 4).

Drilling in each of these areas was on a nominal 20m by 20m grid. Cobalt and scandium rich nickel laterite mineralisation predominately occurs along the eastern and western margins of the Kokomo laterite plateau.

The drilling was aimed at defining predominantly Measured Resources in these higher grade areas which can be used for initial mine design, starter pits and scheduling of ore for the current NORNICO pre-feasibility study.

### Kokomo Ni-Co and Sc Resource Update

Measured, Indicated and Inferred Mineral Resource for Kokomo increased to 16.3Mt @ 0.67% Ni & 0.12% Co containing approximately 109,000t of Ni and 19,500t Co, (see Table 1). After an additional 449 holes for 10,700m were added to the

previous resource estimate.

- 150% Increase in Kokomo Indicated & Measured Minerals Resource categorise - up from 5.2Mt to 13Mt of the total resource.
- 36% Increase in size of the Kokomo resource as a whole .
- A higher grade nickel cobalt zone (Mona) and a scandium rich area (Wild Honey deposit) drilled out to Measured Resource status.
- Defined a Measured Scandium (Sc) resource of 327Kt @ 201g/t Sc (Wild Honey) within a total Measured, Indicated & Inferred Resource of 9Mt @ 109g/t Sc containing approximately 980t of Sc metal or approximately 1,500t Sc Oxide (see Table 3).
- Kokomo sourced high cobalt bearing nickel ores have considerable potential to enhance NORNICO's economics by having cobalt as an important nickel by product to enhance revenues.

An updated resource estimate for the Kokomo Ni-Co-Sc project was completed in January by Golder Associates of Brisbane. The resource was completed using data from 1,066 RC and Diamond holes comprising 26,384 assays. The resource was modelled using Ordinary Kriging (OK) of 10m by 10m by 1m blocks. (For further information, see Kokomo Resource Update ASX Release dated 27th January 2010.)

The majority of the Kokomo resource is now in the Measured and Indicated categories with only 20% of the resource classified as Inferred. Using a similar cut-off grade to that used in the previously released December 2008 resource, the total Kokomo Measured, Indicated and Inferred Ni — Co contains approximately 109,000t Ni and 19,500t Co metal.

A breakdown of the updated Kokomo Resource and a comparison with the 2008 resource is included in Table 1.

Details pertaining to the Kokomo resource estimate are detailed in the ASX release dated 27th January 2010.

# Activities Planned For the March Quarter 2010

- XRF geochemical surveys and mapping of remnant nickel laterite outcrop within historical mine boundaries at Greenvale
- Detailed XRF geochemical surveys and mapping of the Lucknow Co-Ni deposit
- Close spaced RC drilling at Greenvale around areas of high grade nickel laterite mineralisation previously identified by Straits Resources
- Planning to Lodge an ML over
   Greenvale mine site for future Ni-Co
   mining and potential processing plant
- Initiate Environmental Studies at

  Greenvale
- Continue negotiations with the Gugu Badhun the Native Title Claimants for the Kokomo and Greenvale areas
- Undertake preliminary metallurgical testwork on ore grade material from Greenvale

Table 1: Kokomo Resource Comparison at a 0.7% NiEq cut-off grade<sup>1</sup>

| Resource Estimate | Classification | Mt   | Ni % | Co % | Sc ppm | Nickel Contained<br>Metal (t) | Cobalt Contained<br>Metal (t) |
|-------------------|----------------|------|------|------|--------|-------------------------------|-------------------------------|
| Dec-08            | Indicated      | 5.2  | 0.69 | 0.13 | 38     | 35,880                        | 6,760                         |
|                   | Inferred       | 7.0  | 0.66 | 0.11 | 36     | 46,200                        | 7,700                         |
|                   | Total          | 12.2 | 0.67 | 0.12 | 37     | 82080*                        | 14,460*                       |
| Dec-09            | Measured       | 1.3  | 0.81 | 0.17 | 59     | 10,530                        | 2,210                         |
|                   | Indicated      | 11.7 | 0.66 | 0.12 | 34     | 77,220                        | 14,040                        |
|                   | Inferred       | 3.2  | 0.63 | 0.10 | 30     | 20,160                        | 3,200                         |
|                   | Total          | 16.3 | 0.67 | 0.12 | 36     | 108,000*                      | 19,450*                       |

<sup>1</sup>For the 2008 resource estimate the Ni Eq value was calculated based on 1Ni+3Co which reflected the respective nickel and cobalt prices at the time. The 2009 resource has been quoted using this ratio so a direct comparison of the respective resources can be made.

Grade Tonnage data for the Kokomo Ni-Cobalt resource at various Ni Eq Cut-off grades is presented in Table 2 below.

Table 2: Grade Tonnage Data for the Kokomo Resource

| <br>            |      |      |       |         |        |
|-----------------|------|------|-------|---------|--------|
| Cut-off Ni Eq % | Mt   | Ni % | Co %  | Ni Eq % | Sc ppm |
| 0.30            | 36.4 | 0.51 | 0.077 | 0.74    | 30.0   |
| 0.40            | 31.1 | 0.55 | 0.085 | 0.81    | 30.5   |
| 0.50            | 27.4 | 0.58 | 0.092 | 0.86    | 31.7   |
| 0.60            | 21.9 | 0.62 | 0.103 | 0.93    | 33.3   |
| 0.70            | 16.3 | 0.67 | 0.121 | 1.03    | 35.5   |
| 0.80            | 11.9 | 0.71 | 0.141 | 1.13    | 38.3   |
| 0.90            | 8.5  | 0.75 | 0.164 | 1.25    | 41.4   |
| 1.00            | 6.2  | 0.79 | 0.188 | 1.36    | 43.7   |

For further information on the Kokomo Scandium Resource estimate, see Metallica Minerals ASX release Kokomo Ni-Co-Sc resource dated 27 January 2010.



Drilling at Kokomo

<sup>\*</sup> Rounding may lead to inconsistent results if multiplying figures in the table (Contained Ni and Co Tonnes have been rounded to the nearest 100).

# Kokomo Scandium Project

### Metallica 80% Straits Resources Ltd 20%

The Kokomo scandium deposit is located on the central Kokomo Plateau which is situated approximately 45km north of the Greenvale township, see Figure 5.

In addition to the Kokomo nickel-cobalt resources, there is a large and high grade scandium resource at Kokomo. The Kokomo scandium rights are owned by Metallica 80% and Straits Resources Ltd 20%. Scandium is a rare earth "tech metal" which is used as an additive to enhance the properties of aluminium alloys, in fuel cells and lighting.

As part of the infill programme completed in October 2009, an area of high Scandium mineralisation was drilled out, this area is referred to as Wild Honey deposit.

High grade scandium zones were intersected which include:

KK-1020 28m @ 438g/t Sc from 3m KK-1032 23m @ 194g/t Sc from 11m KK-1037 12m @ 338g/t Sc from 12m

A complete summary of this drilling is included in a press release lodged with the ASX dated 9th December 2009.

### Kokomo Sc Resource

In addition to the resource calculated for the Kokomo Nickel Cobalt Resource, Golder Associates completed a separate resource for the scandium mineralisation based on a 70g/t Sc cut-off grade using the same block model. The total Measured, Indicated and Inferred Sc Mineral resource (at a COG of 70g/t Sc) stands at 9.0Mt @ 108.6 g/t Sc containing approximately 970 tonnes of scandium metal

or 1,480 tonnes scandium oxide (Sc2O3) — its most likely marketable product. A break down of this resource is presented in Table 3 below.

Within the Kokomo Scandium resource, a separate Measured, Indicated and Inferred Mineral Resource for the discrete high grade scandium area which is referred to as the Wild Honey deposit has been estimated, (using a 70g/t Sc COG). This resource has been estimated at 474,000t @ 191.9g/t Sc containing approximately 91 tonnes of Sc metal or 139 tonnes of Scandium oxide Sc203. A break down of this resource is presented in Table 4 below. The Wild Honey scandium resource would be the starter open pit for any future development of the Kokomo scandium resource. (For further information on the Kokomo Scandium Resource – see ASX release dated 27th January 2010.)

Table 3: Kokomo Scandium Mineral Resource for a 70 ppm Sc cut-off grade - Excluding the Ni-Co Resource

| Classification | Mt   | DBD t/m3 | Sc g/t | Ni % | Co %  | Ni Eq % |
|----------------|------|----------|--------|------|-------|---------|
| Measured       | 0.70 | 1.72     | 154.0  | 0.22 | 0.035 | 0.33    |
| Indicated      | 3.80 | 1.80     | 120.8  | 0.32 | 0.046 | 0.45    |
| Inferred       | 4.40 | 1.82     | 91.0   | 0.18 | 0.022 | 0.25    |
| Total          | 9.00 | 1.80     | 108.6  | 0.24 | 0.033 | 0.34    |

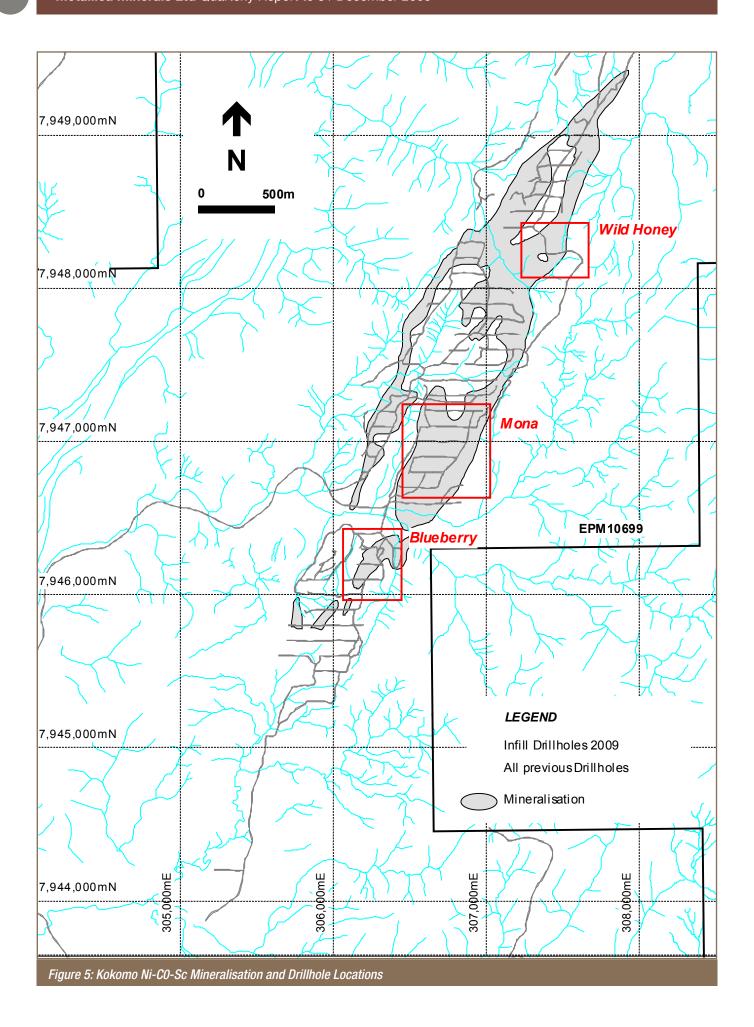
DBD= Day Bulk Density, ppm = g/t, COG = Cut off Grade

Table 4: Wild Honey Scandium Resource (Using a 70ppm Sc COG)

| Classification | Kt  | DBD t/m3 | Sc g/t | Ni % | Co %  | Ni Eq % |
|----------------|-----|----------|--------|------|-------|---------|
| Measured       | 372 | 1.70     | 200.9  | 0.24 | 0.041 | 0.37    |
| Indicated      | 20  | 1.77     | 239.4  | 0.33 | 0.062 | 0.52    |
| Inferred       | 83  | 1.83     | 140    | 0.18 | 0.035 | 0.29    |
| Total          | 474 | 1.73     | 191.9  | 0.24 | 0.041 | 0.36    |

#### **Competent Persons Statement**

Technical information and exploration results for the NORNICO project contained in this report has bee compiled by Metallica Minerals Ltd full time employees Andrew Gillies in the position of Managing Director and Metallica Minerals Ltd Exploration Manager, Mr Pat Smith MSc. B.Sc. (Hons). Mr Gillies and Mr Smith are members of the Australasian Institute of Mining and Metallurgy and have relevant experience in the mineralisation being reported on to qualify as Competent Persons as defined by the Australasian Code for Reporting of Minerals Resources and Reserves. Mr Gillies and Mr Smith consent to the inclusion in this report of the matters based on the information in the form and context in which it appears.



# Greenvale Nickel Project Acquisition

- In December 2009, Metallica purchased the Greenvale Mine site tenements 100% for \$1.65M, comprising \$650,000 cash and 3.33 million Metallica ordinary shares at a deemed price of A\$0.30 per share
- The Greenvale nickel project contains a remnant Inferred & Indicated Resource of:
  - 38 million tonnes (Mt) at 0.8% Nickel (see Table 7)
  - Remnant high grades confirmed by drilling – including 24m @ 1.94% Ni and 24m @ 1.65% Ni from separate areas, (see Tables 5 & 6, Figure 6)
  - Excellent development site and existing infrastructure
  - Pre-feasibility study started on establishing a processing operation at the Greenvale site, using feed sourced from Greenvale and blended with trucked cobalt rich Kokomo nickel laterite ores.

In December 2009 Metallica purchased the Greenvale and Lucknow tenements off Straits Resources Ltd. (see ASX Release dated 21st December 2009.) These tenements contain significant deposits of nickel and cobalt, plus the Greenvale mine site is an excellent development location for proposed nickel-cobalt processing operation.

The Greenvale Mine operated for 18 years from 1974 to 1992, mining ore from a 3 km2 area, that produced 40 million tonnes (Mt) of nickel laterite ore grading 1.56% Ni and 0.12% Co, making it the largest high grade nickel laterite mine in Australia.

Straits Resources and their JV partner RMI joint venture undertook Reverse Circulation (RC) drilling on the Greenvale mine site to define the extent of the remnant nickel resource. Between May 2007 and July 2008, Straits drilled 141 RC holes for 5,935m, with approximately 25% of the holes drilled intersecting Ni grades greater than 1% over a 5m interval.

Two main areas of high grade nickel laterite were identified by the Straits drilling and are referred to by Metallica as the Greenvale Mine Central and Southern Areas, see Figure 6, with significant higher grade drilling results summarised in the Tables below.

An Inferred and Indicated Resource for Greenvale of 38Mt @ 0.80% Ni and 0.05% Co was announced by Straits Resources Ltd (see ASX release dated 29th July 2009) using a cut off grade of 0.5% Ni - see Table 7 for a breakdown of this resource.

It is highly likely that high grade zones of +1% Ni will be defined within this resource. Metallica is planning a drilling campaign for the March quarter to increase the resource categories at Greenvale and to define a high grade zone of nickel laterite mineralisation.

Metallica has an initial Exploration

Target\* of between 10Mt to 15Mt grading between 1.0% and 1.4% Ni of remnant mineralisation on the Greenvale mine site.

The feasibility and development team is currently assessing the opportunity for a modest size atmospheric acid leaching

Table 5: Drill Results From Greenvale Mine Central Area

| Hole No. | From (m) | To (m) | Interval (m) | Ni (%) |
|----------|----------|--------|--------------|--------|
| GV046    | 29       | 53     | 24           | 1.94   |
| GV067    | 35       | 52     | 17           | 1.69   |
| GV070    | 21       | 29     | 8            | 1.19   |
| GV090    | 30       | 47     | 17           | 1.81   |
| GV092    | 27       | 40     | 13           | 1.16   |
| GV093    | 18       | 33     | 15           | 1.14   |
| GV094    | 23       | 35     | 12           | 1.45   |
| GV095    | 19       | 35     | 16           | 1.31   |
| GV096    | 32       | 41     | 9            | 1.50   |
| GV097    | 30       | 42     | 12           | 1.66   |

Table 6: Drill Results From Mine South-western Area

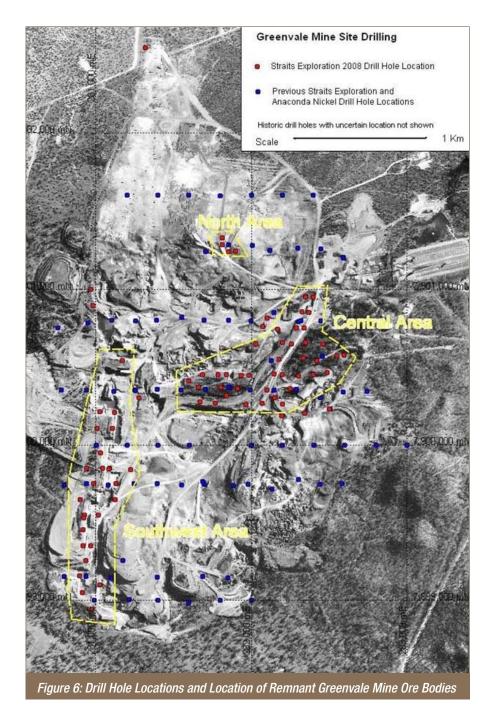
| Hole No. | From (m) | To (m) | Interval (m) | Ni (%) |
|----------|----------|--------|--------------|--------|
| GV055    | 1        | 15     | 14           | 1.14   |
| GV110    | 23       | 33     | 10           | 1.34   |
| GV111    | 16       | 40     | 24           | 1.65   |
| GV112    | 23       | 36     | 13           | 1.07   |
| GV113    | 26       | 38     | 12           | 1.19   |
| GV114    | 11       | 19     | 8            | 1.24   |
| GV119    | 17       | 30     | 13           | 1.26   |
| GV120    | 33       | 51     | 19           | 1.15   |
| GV130    | 10       | 20     | 10           | 1.40   |
| GV097    | 30       | 42     | 12           | 1.66   |

<sup>#</sup>The above intercepts have been calculated using a 1% Ni COG, Due to the horizontal nature of the laterite mineralisation, reported intersections from the vertical drill holes represent true widths.

Table 7: Mineral Resource at Greenvale Nickel Mine site

| Classification | Ni % (COG) | Mt    | Nickel % | Cobalt % | Contained<br>Ni tonnes | Contained<br>Co tonnes |
|----------------|------------|-------|----------|----------|------------------------|------------------------|
| Indicated      | 0.5        | 4.8   | 0.90     | 0.05     | 40,000                 | 2,400                  |
| Inferred       | 0.5        | 32.90 | 0.80     | 0.05     | 270,000                | 17,300                 |
| Total          | 0.5        | 37.70 | 0.80     | 0.05     | 310,000                | 19,700                 |

<sup>\*</sup> This resource information was previous released by Straits Resources Ltd in a Quarterly Report to the ASX dated 29th July 2009. The information in this report relating to the Greenvale Mineral Resource is based on information estimated by Byron Dumpleton, who is a a member of the Australian Institute of Geoscientist. Mr Dumpleton is a Resource Geologist Consultant and has sufficient experience relevant to the style of mineralisation, type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2004 Edition of the "Australian Code for reporting of Minerals Resources and Ore Reserves." Mr Dumpleton consents to the inclusion in the report of the matters based on their information in the form and context in which it appears is JORC compliant



(AAL) operation as NORNICO Stage 1, in the order of 100,000 to 150,000 tonnes per annum (tpa) on the Greenvale mine site.

It is envisaged the operation would source very high grade nickel-cobalt ore from Greenvale and blended with trucked cobalt and scandium-rich nickel ores from the Kokomo project approximately 50km northeast of Greenvale. Acid used in the processing could be trucked from Townsville.

After a few years of NORNICO Stage 1 operations, there could then be the development of much larger NORNICO Stage 2 operation (in the order of 1.0 to 0.7Mtpa) which would have its own acid and power plant.

### **Competent Persons Statement**

Technical information and exploration results contained in this report has been compiled by Metallica Minerals Ltd full time employees Andrew Gillies in the position of Managing Director and Metallica Minerals Ltd Exploration Manager, Mr Pat Smith MSc. B.Sc (Hons), Mr Gillies and Mr Smith are members of the Australasian Institute of Mining and Metallurgy and have relevant experience to the mineralisation being reported on to qualify as Competent Persons as defined by the Australasian Code for Reporting of Minerals Resources and Reserves. Mr Gillies and Mr Smith consent to the inclusion in this report of the matters based on the information in the form and context in which it appears.

\*With regards to Exploration Targets –
The potential quantity and quality or grade is
conceptual in nature, and that there is insufficient
exploration to define a Mineral Resource and that
it is uncertain if future exploration will result in the
determination of a Mineral Resource.

# Lucky Break Nickel-Cobalt Project – MFC 40% MLM 60% JV

The Lucky Break nickel project, located 140km west of Townsville (see Figure 7) is a joint venture between Metals Finance Corporation (ASX:MFC) and Metallica. Metallica holds two granted Mining Leases (ML 10324 and 10332).

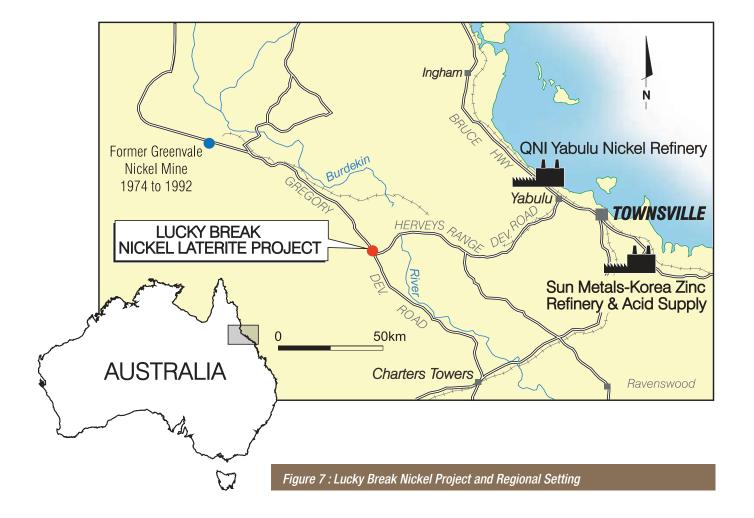
MFC is the manager of the Lucky Break nickel project and is responsible for all development costs as part of its earn-in agreement. Metallica is free carried and will receive a share of the operating surplus once the project is in operation, initially 15% until MFC has recouped its capital investment and then sharing cash flow thereafter. The project is to be developed and brought into nickel production at no extra cost to Metallica and hence does not dilute shareholder equity.

The other key advantage is that it provides Metallica with invaluable hydrometallurgical operational experience and know-how, ahead of the larger scale NORNICO development.

In 2009, MFC worked on a revised internal feasibility study, incorporating revisions in scale to approximately 60ktpa higher grade processing operation.

MFC is now at anadvanced stage in estimating capital and operating costs and other related studies, with a view to finalising a Feasibility Study on the revised project by the end of February 2010. The proposed nickel operation is of modest size, with nickel production in the order of 800t nickel metal per annum. The study is targeted at providing a basis for recommencing development of the

project during 2010 MFC have commenced discussions with suppliers of consumables and purchases of the expected product with a view to locking in pricing during the early stage of the project.



# MetroCoal SE QLD Coal Project – MLM 56%

### **Highlights**

- \$10 Million IPO successfully completed in December 2009
- MetroCoal's IPO was the second ASX listing achieved in the 2009 calendar year for a subsidiary of Metallica
- Metallica holds 80 million MetroCoal shares
- In late January Metrocoal announced a maiden Inferred Resource of 58Mt thermal coal in their Bundi Project located near Wandoan, see Figure 9. (For more information see MTE's ASX announcement dated 27 January 2010.)

MetroCoal is an emerging coal based energy company focused on the Surat Basin, with a vision to build a substantial cleaner energy and coal business.

### MetroCoal Initial Public Offering (IPO)

MetroCoal (ASX:MTE) successfully raised \$10 million and was admitted to the ASX on 4 December 2009. The funds raised will principally fund a two-year exploration drilling and evaluation program to deliver MetroCoal's core strategy, which is to establish exploitable thermal coal deposits.

MetroCoal's Exploration Target\* total between 2.5 and 3.5 billion tonnes (Bt), thermal coal and it is planning to confirm this target by the end of 2011.

MetroCoal's coal exploration target will be used to underpin its dual strategy to:

- Develop an export thermal coal business through conventional underground mining operations; and
- Develop one or more underground coal gasification (UCG) operation producing syngas for cleaner power generation and potentially clean transport fuels.



MetroCoal's ASX Listing: (L-R) CEO Mike O'Brien, Exploration Manager Neil Forbes, Chairman David Barwick, Directors John Haley, Andrew Gillies and Michael Hansel, Chief Operating Officer Theo Psaros

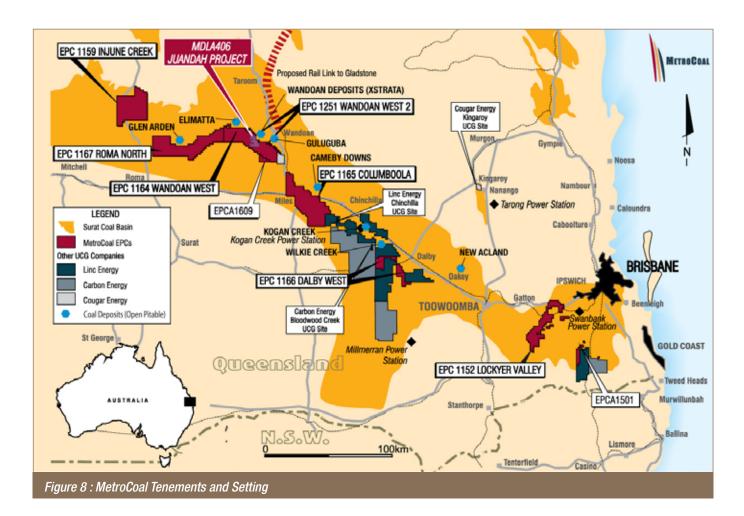
# MetroCoal's Investment Highlights

- MetroCoal holds 100% of extensive coal tenements covering 4,000km² in the Surat Basin region, which provides shareholders with excellent exposure to the increasing world and domestic demand for energy.
- MetroCoal has identified thermal coal Exploration Targets (\*) totalling between 2.5 to 3.5 billion tonnes (Bt) and expects to confirm these targets within the next two years.
- MetroCoal Surat Coal project includes the 100% owned Juandah thermal coal project, which has a 172Mt (149.2Mt Inferred and 22.5Mt Indicated) resource within MDLA 406, and this area represents ~1.5% of MetroCoal's prospective coal tenements (For further information see MLM's ASX announcement dated 28 May 2008).
- MetroCoal also recently announced an initial resource of 58Mt (Inferred) for the Bundi project within EPC 1164 Wandoan West (see ASX Release dated 27 January 2010). The Bundi coal project (see figure 9) covers a large highly prospective area down dip of the Northern Energy Limited's (ASX:NEC) Elimatta and Xstrata Limited's Wandoan mining project areas (see figure 8).
- The Macalister Coal Seam package is continuous and correlateable over most of MetroCoal's tenements. The Macalister Upper seam generally has a thickness and continuity that is highly prospective for longwall mining.
- MetroCoal anticipates certain tenements will hold extensive thermal coal seams suited to Underground Coal Gasification (UCG).
   MetroCoal's Juandah Project area MDLA 406, is one of the few areas in Queensland that has no overlapping gas tenure.

- UCG is an attractive new source of cleaner coal energy, producing syngas for electricity generation and clean liquid fuels. UCG unlocks vast quantities of previously stranded coal resources.
- Experienced Brisbane based Board of directors and management within the mining industry.
- (\*) Under the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (Paragraph 18) the Company is required to make the following statement with regard to Exploration Targets the potential quantity and quality is conceptual in nature, and that there has been insufficient exploration to define a Mineral Resource of Ore Reserve and that it is uncertain if further exploration will result in the determination of a Mineral Resource of Ore Reserve.

# Coal Tenement Portfolio

MetroCoal holds eight granted coal tenements (EPC's 1152, 1159, 1164-1167, 1251 and 1501) with two additional applications in progress, covering over 4,000 square kilometres of thermal coal



bearing strata in the Surat, Moreton and Ipswich Coal Basins in southern Queensland, see Figure 8.

Within this tenement area, Metrocoal has four Mineral Development Licence applications (MDLA's 406,417,418 & 419)The region hosts a number of world class thermal coal deposits and the MetroCoal tenements cover coal strata extensions of well known shallow coal deposits including Wandoan (Xstrata), Elimatta (Northern Energy), Woori (previously Gulugaba, Cockatoo Coal),

Cameby Downs (Syntech) and Wilkie Creek (Peabody). The Surat Basin coals are highly amenable to Underground Coal Gasification (UCG) with Linc Energy and Carbon Energy both developing their demonstration plants in the region.

A review of borehole data compiled from previous exploration reports completed by various exploration companies over the last few decades confirm that the majority of the known coal bearing strata in MetroCoal's tenements is between 100m to 400m below surface, with several

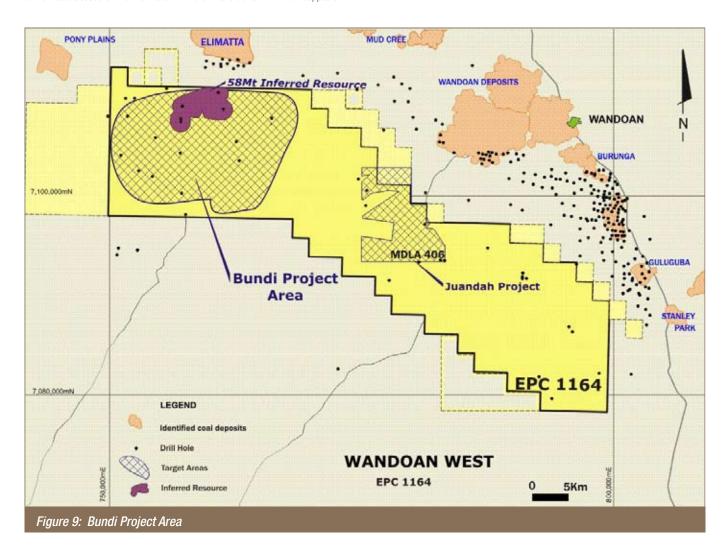
highly prospective Exploration Target areas identified.

The coal in MetroCoal's tenement areas is ideally suited to conventional underground mining and underground coal gasification, in addition there may also be pockets of shallow, open pitable coal.

The coal in the Surat Basin is ideally suited to provide high quality export thermal product and also to provide the feedstock for an alternative energy source as UCG.

#### **Competent Persons Statement**

The information in this statement that relates to in situ coal results, Exploration Targets and coal resources are based on information compiled by Neil Mackenzie-Forbes, who is a member of the Australian Institute of Geoscientists and a full time employee of MetroCoal Ltd. Neil Mackenzie-Forbes is a qualified geologist (B App Sc, MAIG), and has over 15 years experience with over 9 years relevant to the style of mineralisation, the type of deposit under consideration and to the activity which has been undertaken to qualify as a Competent Person as defined by the 2004 edition of the Australia Code for Reporting of Coal Resources. Neil Mackenzie-Forbes consents in writing to the inclusion in the statement of the matters based on the information in the form and context in which it appears.



# Bauxite

# Cape Alumina Ltd (MLM 33%)

Metallica has a strategic 33% shareholding (comprising 42.3 million ordinary shares) in Cape Alumina.

Cape Alumina Ltd (Cape) listed on the ASX (ASX:CBX) in January, 2009, on the back of its 100% ownership of the Weipa Bauxite project on Queensland's Cape York Peninsula (see Figure 10). Cape is a specialist bauxite (ore for aluminium) exploration and development company.

# December Quarter Highlights

- Cape Alumina completed its
   Pre-Feasibility Study on its 100% held
   Pisolite Hills Bauxite project with positive results and has commenced a definitive Feasibility Study.
- New tenements granted with excellent bauxite potential.
- Drilling near to proposed Pisolite Hills port site at Port Musgrave outlines an additional bauxite resource.
- Minister rejects activist petition

### **Feasibility Study**

During the December quarter, Cape Alumina completed its Pre-Feasibility Study on its 100% held Pisolite Hills Bauxite project near Weipa in far north Queensland with positive results and has commenced a definitive Feasibility Study.

Stage one of the Pisolite Hills project bankable feasibility study is underway and is focused on the mine plan, water balance, fines disposal and rehabilitation. The life of mine plan was finalised on the basis of average ore thickness and grades within each mining block and an alternative method of overburden removal was investigated.

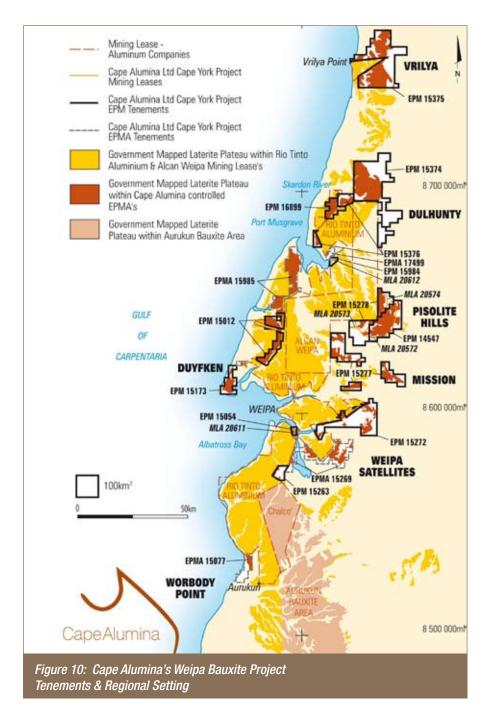
# Exploration and Tenure

Cape Alumina controls approximately 2,100km² of tenements including thirteen granted and four pending Exploration Permits for Minerals adjoining Rio Tinto mining leases in the Weipa Bauxite Province of Cape York, Queensland. Cape Alumina

holds a further granted Exploration Permit for Minerals and seven pending applications on its Central Queensland project.

#### **PISOLITE HILLS**

Drill samples from the 2009 infill drilling programme at Pisolite Hills are in storage at Weipa awaiting transport to Brisbane for analysis later in 2010.



#### **PORT MUSGRAVE**

Assay results from detailed 80m x 80m spaced drilling on EPM15984 at Port Musgrave were received during the quarter. The deposit (\*) has potential to deliver early cash flow for the Pisolite Hills project. Further work is underway to determine the amenability of this deposit to beneficiation by dry screening.

#### **WESTERN CAPE YORK REGIONAL**

Drilling was postponed at Namaleta and Skardon Exploration Target areas due to the onset of the wet season. These prospects will now be drilled together with Dulhunty and Andoom North prospects in 2010.

Scout drilling programmes are planned to commence in the June quarter with the intention to move directly to 320 x 320m spaced drilling of the Exploration Targets to enable estimation of inferred resources(\*) and confirmation of the quality and extent of bauxite mineralisation.

The Andoom North prospect on EPM15012 is of particular interest as it lies adjacent to Rio Tinto's previously mined Andoom mine, which reportedly contained some of the highest grade bauxite on the western Cape York Peninsula.

\*The potential quantity and quality and grade of both deposits are conceptual in nature. There is insufficient information to define a mineral resource and it is uncertain if further exploration will result in the determination of a mineral resource in these areas.

### **Environment**

#### WILD RIVERS

The Queensland Government has deferred its decision on the proposed declaration of the Wenlock River Basin as a Wild River Area for up to a further 12 months pending receipt and assessment of further information.

Cape Alumina will continue to consult with the Government and provide additional data about the Pisolite Hills bauxite project as required to assist the process.

### **EIS Studies**

Most of the component studies of the Environmental Impact Statement (EIS) have now been completed and reports are in preparation. The Social Impact Assessment and the Economic Impact Assessment will both be completed in the March Quarter.

The EIS remains on track for submission to the Queensland Department of Environment and Resource Management and the Federal Department of Environment, Water, Heritage and the Arts in the first half of 2010.

### Media

A petition, with Mrs Irwin as the principal petitioner and activist urging the Queensland Government to "Stop mining on the Steve Irwin Wildlife Reserve (SIWR)" has been unsuccessful.

The Queensland Government has announced that it will base its decision on the Pisolite Hills bauxite project on the project's EIS, which will identify how the project would potentially impact on the environmental values of the area and propose measures to avoid or mitigate those impacts. Cape Alumina welcomed the Government's commitment to proper lawful due process.

#### **Competent Persons Statement**

Technical information relating to Cape Alumina Limited contained in this report has been compiled by Mr John Cameron who is a competent person and full time employee of Cape Alumina Limited and member of the Australasian Institute of Mining and Metallurgy with relevant experience to the mineralisation being reported on to qualify as a Competent Persons as defined by the Australasian Code for Reporting of Minerals, Resources and Reserves. Mr Cameron consents to the inclusion in this presentation of the matters based on the information in the form and context in which it appears.

### **Financial**

As at 31 December 2009, Cape Alumina Limited had funds on hand of approximately \$ 8.2 million.

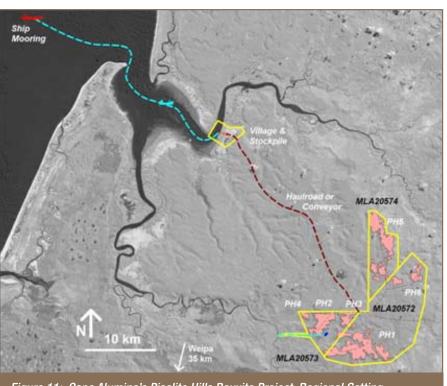


Figure 11: Cape Alumina's Pisolite Hills Bauxite Project, Regional Setting and Proposed Bauxite Transport Route

# Planet Metals Limited ASX:PMQ

## MLM ~76%

### Wolfram Camp Tungsten-Molybdenum Project

### Mt Cannindah Copper-Gold-Project

Metallica successfully acquired 76% of Planet Metals Limited (previously named Queensland Ores Limited) which holds two significant Queensland resource projects – Wolfram Camp W-Mo (85%) and Mt Cannindah Cu-Au (100%) – both with granted Mining Leases

The Wolfram Camp Tungsten (W) and Molybdenum (Mo) project in North Queensland has a full scale commercial processing plant and equipment under care and maintenance (see image on page 25). The Company is continuing to evaluate the Wolfram Camp Tungsten and Molybdenum project with a view to returning it to production. However no timing will be placed on this program until an updated and revised resource (using new drilling data) and metallurgical review is undertaken.

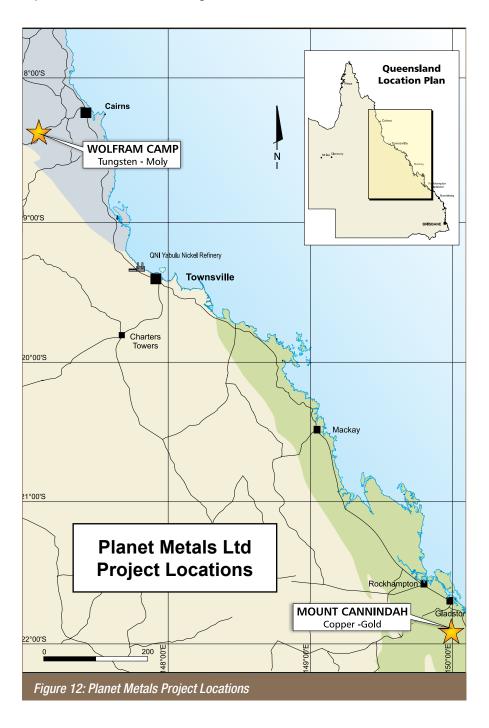
In September, the Company announced a one for two non-renounceable rights issue at 10 cents per share to its shareholders. The rights issue raised approximately \$2 million and closed in November 2009. The Company now has 59,717,114 shares on issue at 31 December 2009.

The rights issue funds will be used for an additional resource drilling program which has commenced. A resource estimate which will now be completed after the current drilling program is completed.

The funds will also be used for mining studies, a mine site and processing plant evaluation review of the Wolfram Camp tungsten/molybdenum mine, further assessment of the Mt Cannindah project and for working capital.

Dependant on the results of the drilling

program, resource estimate results, additional metallurgical testwork, and tungsten and molybdenum price movements; any remaining budgeted funds will be put towards further progressing the Wolfram Camp Project toward a decision for recommencing production.



### Wolfram Camp Operations (PMQ 85%)

### (TUNGSTEN-MOLYBDENUM PROJECT, NEAR DIMBULAH, NORTH QUEENSLAND)

Care and maintenance activities continued during the quarter at the Wolfram Camp Project. Regular inspections of the site took place.

Site remedial earthworks related to the storm water diversion drain, site roadworks and cleaning out of the sediment traps were completed.

Investigations have commenced on run of mine ore pre-concentration via X Ray Ore Sorting in order to enhance the Wolfram and Molybdenum mill feed grade. Initial testwork on specific size fractions indicated that a high proportion of barren material could be rejected with minimum loss of valuable minerals. It has been estimated that an increase in mill feed grade of 250% could be achievable. Testwork is still in progress.

In addition to X Ray Sorting investigations testwork has also commenced using a "novel" optical sorting technique currently being developed for applications in the coal industry.

# Diamond Drilling Program

A total of 45 HQ (WCD-037 to 081) diamond holes comprising 2,270m of drilling have been completed at the Wolfram Camp, Wolfram – Molybdenum mine. The drilling was designed to infill areas in the existing resource model where there was a paucity of drilling data and to provide additional geological information for an updated resource estimate which will be undertaken prior to any decision to resume mining.

To date assay results have been received for holes WCD-037 to WCD-049. Assay results are listed in Table 9. (For further information see Planet Metals Quarterly Report for the period ending December 2009.)

Assay results to date indicate that the mineralisation is predominantly confined to quartz greisens with high grade zones occurring in quartz pipes. Several quartz greisens have been intersected by the drilling but not all the greisens which have been intersected contained mineralisation. This does not necessarily mean that the greisens are barren but due to the spotty nature of the ore the holes may have intersected the greisen but missed the potential nearby wolfram and molybdenum mineralisation, which occur as blebs. This style of mineralisation is very difficult to quantify and this is why the decision has been made to undertake additional work with closed spaced RC drilling to further delineate the mineralisation before the resource estimation study, which is now expected March 2010.

# Wolfram Camp RC Drilling Program

In December 2009, a 2,500m RC drilling program at Wolfram Camp was initiated. Prior to the Christmas break a total of 22 RC holes comprising 586m of RC drilling had been completed. The majority of the RC holes (BP-001 to BP-019 comprising 344m) were drilled on a nominal 10m by 10m grid on the existing pit floor to provide more detailed information for resource definition purposes and possible mine planning and scheduling. RC drilling re-commenced in mid January when the remainder of the pit floor will be drilled out.

Three exploration RC holes, WCRC-139 to 141 comprising 242m were also drilled at Wolfram Camp to explore for additional mineralisation outside the existing pit boundary, these holes were drilled on the southern side of hill (approximately 300m south of the pit) close to extensive workings. Two of the three holes failed to intersect any mineralisation of note, however hole WCRC-141 intersected a wide zone of visible molybdenum mineralisation, assay results are pending.

### Wolfram Camp Resource Estimate

All the information from the completed diamond drilling and the RC programs will be incorporated into an updated Independent Resource estimate.

# Activities for March Quarter 2010

- Complete the resource definition and exploration drilling program at Wolfram Camp to further evaluate the open cut mineable tungsten & molybdenum resources.
- Complete a revised resource estimate for the Wolfram Camp W-Mo open pit area.
- Normal care and maintenance activities will continue at the Wolfram Camp Mine, sampling and monitoring of both surface and groundwater will continue as per regulatory requirements.
- Data compilation of past exploration for the Bamford Hill project.
- Data compilation and possible field work for the Mt Cannindah Cu-Au project and evaluate options to progress the project.

The updated resource estimate for the Wolfram Camp deposit will be undertaken by Golder Associates of Brisbane. A representative of Golders visited the site in December to assess sampling techniques and procedures as part of the due diligence process and it is expected that the new resource estimate will be available by March once all the results from the RC program have been received. Once the resource has been completed and evaluated, a decision to resume mining at the site will be undertaken.

# Mount Cannindah (PMQ 100%)

# (COPPER-GOLD PROJECT, NEAR MONTO, SOUTH-EAST QUEENSLAND)

Planet Metals holds 100% of the Mt Cannindah copper-gold project near Monto in South East Queensland. Mt Cannindah includes nine granted mining leases covering 6km² and two surrounding EPMs. The project includes a Measured Resource of 5.6Mt at 0.95% Cu and 0.4g/t Au (see Table 8) and several large mineralized prospects within a large porphyry coppergold system. Due to the focus on Wolfram Camp, no exploration took place at Mount Cannindah Mining Leases or Exploration Permits during the December Quarter.

Table 8: Mt Cannindah Resource Inventory (March 2008)

| Category | Million<br>tonnes | Cu<br>% | Au<br>g/t |
|----------|-------------------|---------|-----------|
| Measured | 5.57              | 0.95    | 0.41      |
| Inferred | 1.9               | 1.0     | 0.3       |
| Total    | 7.47              | 0.97    | 0.38      |

The JORC compliant resource estimate was undertaken by Golder Associates Pty Limited and is based on the 25 diamond drillholes (DD) and 17 reverse circulation (RC) holes.

For the March Quarter, Planet is considering drilling some deep exploration holes under existing resources seeking "feeder zones" and additional mineralisation in this large gold bearing porphyry copper style system.

Rising Copper (>US\$7,000/t) and Gold (>US\$1,000/oz) prices are providing enhanced encouragement to reactivate exploration, resource re-evaluation and feasibility work by Planet. In addition the company has received expressions of interest in the project from several third parties.

The Company is continuing to evaluate several options to progress the Mount Cannindah project.

# Bamford Hill (PMQ earning up to 85%)

### (TUNGSTEN, MOLYBDENUM, TIN, LEAD, SILVER AND GOLD PROSPECT, 30KMS SW FROM WOLFRAM CAMP)

Planet Metals is earning in to the highly mineralized W-Mo-Sn-Pb-Ag-Au Bamford Hill project (EPM 14028), 30km south west of Wolfram Camp. In order to conserve cash and focus on Wolfram Camp, no exploration took place on the Bamford Hill Exploration Permit, however approximately \$200,000 is budgeted for an exploration program planned to be undertaken by the end of the June 2010 quarter. Work is planned to start in April after the wet season.

Table 9: Wolfram Camp Late 2009 Drill Assay Results Received

| Table of Wellian | Camp Late 2000 | Dilli Adday Hood |          |       |         |         |         |
|------------------|----------------|------------------|----------|-------|---------|---------|---------|
| Hole No          | From (m)       | To (m)           | Interval | W (%) | W03 (%) | Mo ppm# | Bi ppm# |
| WCD-037          | 23             | 25               | 2        | 0.21  | 0.26    | 1.17%   | 0.47%   |
| WCD-041          | 0.0            | 0.5              | 0.5      | 0.17  | 0.21    | 201     | 320     |
| WCD-044          | 9              | 10               | 1        | 1.10  | 1.38    | 335     | -       |
|                  | 11             | 12               | 1        | 0.28  | 0.35    | -       | -       |
|                  | 16             | 19               | 3        | 0.90  | 1.13    | 89      | -       |
|                  | 27             | 28               | 1        | 13.25 | 16.67   | 2.19%   | 2.71%   |
|                  | 37.0           | 37.5             | 0.5      | 0.54  | 0.66    | 0.13%   | -       |
| WCD-045          | 22             | 25               | 3        | 0.28  | 0.36    |         |         |
|                  | 30             | 31               | 1        | 1.77  | 2.23    | 0.59%   | -       |
|                  | 48             | 49               | 1        | 6.51  | 8.19    | 1.39%   | 752     |
| WCD-046          | 29             | 31               | 2        | 0.12  | 0.15    | -       | -       |
|                  | 32             | 33               | 1        | 0.57  | 0.71    | -       | -       |
|                  | 46             | 47               | 1        | -     | -       | 0.22%   | 0.15%   |
|                  | 55             | 56               | 1        | -     | -       | 0.26%   | 115     |
|                  | 65             | 67               | 2        | 0.93  | 1.17    | 0.87%   | 927     |
|                  | 65             | 67               | 2        | 0.93  | 1.17    | 0.87%   | 927     |
| WCD-048          | 10             | 11               | 1        | 0.79  | 0.99    | 49      | 30      |
| WCD-049          | 3              | 4                | 1        | 0.90  | 1.13    | 200     | 50      |
|                  | 22             | 23               | 1        | -     | -       | 0.21%   | 405     |

#### COMPETENT PERSONS STATEMENT

The information in this report that relates to Mineral Resources for the Mt Cannindah Copper Gold Project is based upon information compiled and/or supervised by Mr Andrew Border and Dr Andrew Richmond, both of whom are Members of the Australiasian Institute of Mining and Metallurgy. Dr Richmond, a full time employee of Golder Associates Pty Ltd, is responsible for the resource block model and estimation. Mr Border, was a full time employee of Planet Metals Limited and was responsible for all other aspects of the Mineral Resource estimate. Both Mr Border and Dr Richmond have sufficient experience that is relevant to the style of mineralisation and the type of deposit under consideration and to the activity which they have undertaken to qualify as Competent Persons as defined in the 2004 edition of the 'Australiasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Border and Dr Richmond consent to the inclusion of this information in the form and context in which it appears in this report.

# Zircon-Rutile Project Weipa Heavy Mineral Sands (HMS)

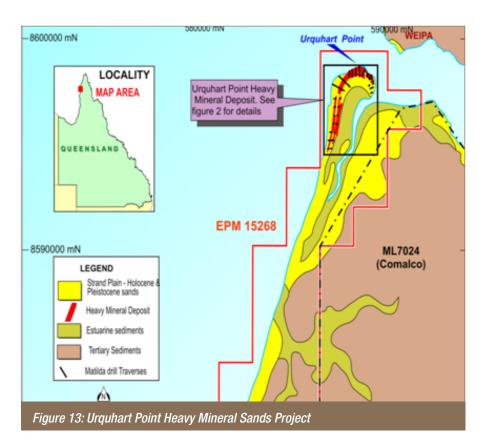
### **MLM 100%**

Through wholly owned subsidiary
Oresome Australia Pty Ltd, Metallica
holds 100% of three granted tenements
(Urquhart Point, Jardine and Doughboy)
and three tenement applications
Jackson River, Jackson River 2 and
newly applied Sandman 1, EPMA18377
(see Table 16 at the back of this report)
targeting rutile and zircon in sand dunes
and strandlines along the coast line
near Weipa and Western West Cape York
Peninsula's coastline.

In 2008, an Indicated Resource of 2.8Mt @ 7.0% heavy Mineral (HM) to a maximum depth of three metres was identified at the Urquhart Point deposit, three kilometres south-west of Weipa (see Figure 13). The valuable HMS suite is dominated by zircon and rutile, likely greater than 30% combined. There is a further 9km of coastline still to be tested within just the Urquhart Point tenement.

Exploration to date has defined a high grade zircon & rutile sand deposit (Urquhart Point) with significant local and regional strandlines with potentially minimal sand cover and low slime content which have excellent potential to form the basis of a relatively low capital and operating cost operation to produce a zircon-rutile concentrate.

Metallica is reviewing its options on how it should progress the Weipa heavy mineral sands project. Field work is being planned around April 2010 (following the wet season).



#### **Competent Person Statement**

The exploration comments have been prepared by Mr Roger Hobbs B. App. Sc. (Geophys & Geol), MAuslM, who was a Director of Matilda Minerals Limited (previously Oresome Australia Pty Ltd's joint venture partner), who has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which is to be undertaken to qualify as a Competent Person as defined in the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Hobbs consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

# Limestone Projects

### Metallica 100%

Metallica owns six strategically located, high quality limestone projects comprising Ootann (near NORNICO), Star and Mt Podge (near Lucky Break & Townsville), Boyne and Fairview (both near Gladstone), and the newly recognised Blue Rock deposit between Minnamoolka and Kokomo.

### OOTANN

Phoenix Lime Pty Ltd (a wholly owned subsidiary of Metallica) holds 240 hectares of mining leases covering a large high grade limestone deposit suitable for calcining and underpinning NORNICO's lime and limestone requirements. Ootann is located approximately 130km via road from the proposed NORNICO processing site.

#### **FEASIBILITY**

Metallica-Phoenix Lime has investigated the construction of a new lime kiln at the Ootann limestone quarry operation for the life span of the NORNICO nickel-cobalt project. To support this, a comprehensive drilling program was completed on site. The results of this drilling program are being used to determine a JORC resource and this information will then be used to prepare a detailed whole of mine plan.

#### **LIMESTONE SALES 2008-2009**

The past year saw significant sales of crushed limestone to the Tablelands Regional Council (TRC) for use in roadworks. The 5km of road-works sheeted with Ootann's crushed rock prior to Christmas 2008 continues to stand up well after an extended wet season. Sales of agricultural lime and crushed rock products have been solid over the past year.

### **FAIRVIEW**

Results of the drilling program completed in the September Quarter have been assayed and this information has been collated to prepare a resource statement. In addition to the existing MDLA offered for grant, an MLA has been placed over the Fairview Limestone deposit to ensure we are in a position to extract limestone at Fairview when the opportunity arises.

### **BOYNE**

The two Boyne mining leases contain large high quality limestone deposits for crushed limestone and lime products suitable for markets in the Gladstone region. Proposed activities for early 2010 include a drilling program for the purpose of defining a limestone resource within the Boyne SW mining lease.

### **STAR**

No field work or activities have been undertaken recently. Should the Bowen Alumina Refinery proceed, CHALCO have revealed that they will require 50,000tpa of limestone for boiler desulphurisation, and limestone from Star River will be included in our supply proposal.

### **BLUE ROCK**

This limestone deposit is conveniently located between Minnamoolka and Kokomo nickel deposits, approximately 60km from the proposed NORNICO nickel operation.

Site 4WD access, mapping and sampling was completed in the September Quarter 2009. Stone samples assayed indicate outcropping limestone to be of high quality. It's Phoenix's intention to peg a mining lease encompassing this outcrop and surveying access roads accordingly.

### **MOUNT PODGE**

The Mount Podge EPM was granted in January 2009. The project is located 80km West of Townsville near the Herveys Range Road and close to the Star River mining lease. A 15 hole drilling campaign was completed in September 2009 and the results are currently being assessed. This area has the potential to provide a significant high grade limestone deposit close to infrastructure.



# Exploring for Copper-Gold Uranium on South Australian Targets

# Metallica has earned a 75% interest in three IOCGU style targets

In mid 2009, Metallica signed a joint venture agreement with unlisted Adelaide based minerals explorer Salisbury Resources Ltd (Salisbury) and Metallica has now earned a 75% interest in three exploration tenements (Toby, Lake Torrens and Merna Mora). Within each of the three tenements, attractive Iron Oxide-Copper-Gold-Uranium (IOCGU) — Olympic Dam style targets have been identified. Metallica has also taken a \$100,000 cornerstone seed capital investment in Salisbury, and has injected approximately \$350,000 into exploration campaigns on the three Salisbury JV Projects.

The three IOCGU farm-in projects are:

- The 188km<sup>2</sup> EL 3402 (Toby), 65km east of Oodnadatta
- The 293km² EL 3630 (Mema Mora)
   30km south-west of Hawker
- The 1,207km<sup>2</sup> EL 4118 and EL 4119 (Lake Torrens) project, 50km east of the Carrapateena IOCGU Cu-Au deposit.

The targets have coincident prominent gravity highs associated with interesting magnetic features under cover in a similar exploration setting to Olympic Dam, Carrapateena and Prominent Hill deposits. To date gravity surveys have been completed on the Mena Mora and Lake Torrens IOCGU projects, with targets identified.

The first deep drill hole (TB02 – 670m) in the Toby gravity feature and magnetic complex has been completed. Granite basement was reached at 240m with the hole predominately intersecting weak to moderately clay chlorite altered intrusives. Unfortunately no pervasive hematite or economic minerals were observed. This drilling will most likely be followed by drilling on Merna Mora and Lake Torrens gravity-magnetic anomaly targets once current ground gravity and magnetic survey data modelling are completed to better define the anomalies for a drill site selection.

Drill testing Merna Mora target(s) is likely to be around April 2010.





Table 10: Revised NORNICO Resource

| Totals               | Million<br>Tonnes<br>(Mt) | Ni (%) | Co (%) | Fe (%) | Mg (%) | Insitu<br>Contained<br>Ni Metal | Insitu<br>Contained<br>Co Metal |
|----------------------|---------------------------|--------|--------|--------|--------|---------------------------------|---------------------------------|
| Bell Creek South     | 9.12                      | 0.97   | 0.07   | 11.61  | 7.55   | 88,086                          | 6,040                           |
| Bell Creek North     | 2.30                      | 0.83   | 0.03   | 8.60   | 7.70   | 19,090                          | 621                             |
| Bell Creek Northwest | 3.07                      | 0.77   | 0.05   | 15.70  | 5.20   | 23,639                          | 1,443                           |
| The Neck             | 0.84                      | 0.84   | 0.03   | 8.80   | 6.50   | 7,056                           | 218                             |
| Minnamoolka          | 7.08                      | 0.80   | 0.04   | 10.91  | 10.53  | 56,408                          | 2,872                           |
| Kokomo               | 16.20                     | 0.67   | 0.12   | 21.23  | 3.27   | 107,910                         | 19,450                          |
| Totals               | 38.61                     | 0.78   | 0.08   | 15.60  | 6.10   | 302,189                         | 30,644                          |

Table 11: Revised NORNICO Resource Categories

| Nickel Deposit    | Million<br>Tonnes<br>(Mt) | Ni<br>(%) | Co<br>(%) | Fe<br>(%) | Mg<br>(%) | Insitu<br>Contained Ni<br>Metal | Insitu<br>Contained Co<br>Metal |
|-------------------|---------------------------|-----------|-----------|-----------|-----------|---------------------------------|---------------------------------|
| Bell Creek South  |                           |           |           |           |           |                                 |                                 |
| Measured          | 8.85                      | 0.97      | 0.07      | 11.70     | 7.50      | 85,845                          | 5,930                           |
| Indicated         | 0.27                      | 0.83      | 0.04      | 8.50      | 9.10      | 2,241                           | 111                             |
| Totals            | 9.12                      | 0.97      | 0.07      | 11.61     | 7.55      | 88,100#                         | 6,000#                          |
| Bell Creek North  |                           |           |           |           |           |                                 |                                 |
| Indicated         | 2.3                       | 0.83      | 0.03      | 8.60      | 7.70      | 19,090                          | 621                             |
| Totals            | 2.3                       | 0.83      | 0.03      | 8.60      | 7.70      | 19,100#                         | 600#                            |
| Bell Creek Northw | est                       |           |           |           |           |                                 |                                 |
| Indicated         | 3.07                      | 0.77      | 0.047     | 15.70     | 5.20      | 23,639                          | 1,443                           |
| Totals            | 3.07                      | 0.77      | 0.05      | 15.70     | 5.20      | 23,600#                         | 1,400#                          |
| Minnamoolka       |                           |           |           |           |           |                                 |                                 |
| Indicated         | 5.92                      | 0.8       | 0.044     | 11.30     | 10.60     | 47,360                          | 2,605                           |
| Inferred          | 1.16                      | 0.78      | 0.023     | 8.90      | 10.20     | 9,048                           | 267                             |
| Totals            | 7.08                      | 0.80      | 0.04      | 10.91     | 10.53     | 56,400#                         | 2,900#                          |
| The Neck          |                           |           |           |           |           |                                 |                                 |
| Indicated         | 0.84                      | 0.84      | 0.026     | 8.80      | 6.50      | 7,056                           | 218                             |
| Totals            | 0.84                      | 0.84      | 0.03      | 8.80      | 6.50      | 7,100#                          | 200#                            |
| Kokomo            |                           |           |           |           |           |                                 |                                 |
| Measured          | 1.3                       | 0.81      | 0.17      | 20.40     | 4.60      | 10,530                          | 2,210                           |
| Indicated         | 11.7                      | 0.66      | 0.12      | 21.90     | 3.20      | 77,220                          | 14,040                          |
| Inferred          | 3.20                      | 0.63      | 0.1       | 19.10     | 3.00      | 20,160                          | 3,200                           |
| Totals            | 16.2                      | 0.67      | 0.12      | 21.23     | 3.27      | 107,900#                        | 19,400#                         |
| Totals            | Million<br>Tonnes<br>(Mt) | Ni<br>(%) | Co<br>(%) | Fe<br>(%) | Mg<br>(%) | Ni Eq (%)                       |                                 |
| Measured          | 10.15                     | 0.95      | 0.08      | 12.81     | 7.13      | 1.19                            |                                 |
| Indicated         | 24.10                     | 0.73      | 0.08      | 16.63     | 5.88      | 0.97                            |                                 |
| Inferred          | 4.36                      | 0.67      | 0.08      | 16.39     | 4.92      | 0.91                            |                                 |
| Overall Total     | 38.61                     | 0.78      | 80.0      | 15.60     | 6.10      | 1.02                            |                                 |

<sup>#</sup> Rounding may lead to inconsistent results if multiplying figures in the table (Contained Ni and Co Tonnes have been rounded to the nearest 100).

# Tenement schedule (as at 31st Dec 2009)

# **Nickel-Cobalt Projects**

## Table 12

| Tenement   | Project Name           | Holder/<br>Applicant | Status<br>(expiry date) | No. Sub<br>Block | Commodity<br>Targeted | Min. Annual<br>Expenditure |
|------------|------------------------|----------------------|-------------------------|------------------|-----------------------|----------------------------|
| ML 4187    | Bell Creek North Lease | NORNICO Pty Ltd      | Granted (29/2/2020)     | 71.35 Ha         | Ni , Co               | N/A                        |
| ML 4188    | Bell Creek South Lease | NORNICO Pty Ltd      | Granted (29/2/2020)     | 98.11 Ha         | Ni , Co               | N/A                        |
| ML 10324   | Dingo Dam              | NORNICO Pty Ltd      | Granted (28/02/2026)    | 36.17 Ha         | Ni , Co               | N/A                        |
| ML 10332   | Lucky Break            | NORNICO Pty Ltd      | Granted (30/11/2027)    | 241.7 Ha         | Ni, Co                | N/A                        |
| MLA 10342  | Kokomo                 | NORNICO Pty Ltd      | Application             | 3593.07 Ha       | Ni, Co                | N/A                        |
| MLA 20549  | Bell Ck Consolidated   | NORNICO Pty Ltd      | Application             | 2145 Ha          | Ni, Co                | N/A                        |
| MDL 387    | Minnamoolka            | NORNICO Pty Ltd      | Granted (30/6/2013)     | 654.26 Ha        | Ni, Co                | \$100,000                  |
| EPM 10235  | Minnamoolka            | NORNICO Pty Ltd      | Granted (8/9/2008)*     | 5                | Ni , Co               | \$60,000                   |
| EPM 10699  | Kokomo                 | NORNICO Pty Ltd      | Granted (21/8/2013)     | 21               | Ni , Co, Sc, Au       | \$100,000                  |
| EPM 11285  | Bell Creek             | NORNICO Pty Ltd      | Granted (27/8/2008)*    | 8                | Ni , Co               | \$50,000                   |
| EPM 14066  | Greenvale South        | NORNICO Pty Ltd      | Granted (22/08/2009)*   | 48               | Ni , Co, PGE          | \$50,000                   |
| EPM 14070  | Greenvale North        | NORNICO Pty Ltd      | Granted (22/08/2009)*   | 65               | Ni , Co, Cu, Au       | \$50,000                   |
| EPM 14101  | Mt Garnet South        | NORNICO Pty Ltd      | Granted (22/12/2008)*   | 80               | Ni , Co, Au, PGE      | \$60,000                   |
| EPM 14181  | Lucky Downs            | NORNICO Pty Ltd      | Granted (22/08/2009)*   | 18               | Ni , Co, Cu           | \$40,000                   |
| EPM 14273  | Moonmyata              | NORNICO Pty Ltd      | Granted (22/12/2012)    | 8                | Ni , Co, Au , PGE     | \$50,000                   |
| EPM 14381  | Greenvale South #2     | NORNICO Pty Ltd      | Granted (14/12/2009)*   | 15               | Ni , Co, Cu           | \$50,000                   |
| EPM 14518  | Mt Garnet South #2     | NORNICO Pty Ltd      | Granted (7/3/2010)*     | 87               | Ni , Co, Au, Cu       | \$40,000                   |
| EPM 14608  | Pinnerendi             | NORNICO Pty Ltd      | Granted (16/6/2010)#    | 12               | Ni                    | \$60,000                   |
| EPM 14658  | Yellow Jack            | NORNICO Pty Ltd      | Granted (26/6/2010)#    | 13               | Ni , Co               | \$40,000                   |
| EPM 14987  | Sandy Creek            | NORNICO Pty Ltd      | Granted (8/11/2010)#    | 50               | Ni , Co, Au, U.       | \$40,000                   |
| EPM 15198  | Kinrara                | NORNICO Pty Ltd      | Granted (26/9/2008)*    | 67               | Ni , Co, PGE, Cu      | \$50,000                   |
| EPM 15924  | Gunnawarra             | NORNICO Pty Ltd      | Granted (7/12/2011)     | 6                | Mg                    | \$13,000                   |
| EPM 17707  | Pinnacles              | NORNICO Pty Ltd      | Granted (26/4/2014)     | 16               | Ni, Co                | \$50,000                   |
| EPMA 17892 | Lockup Well            | NORNICO Pty Ltd      | Application             | 1                | Ni, Co                | \$15,000                   |
| EPMA 17893 | Broken River South     | NORNICO Pty Ltd      | Application             | 3                | Ni, Co                | \$20,000                   |
| EPMA 18167 | Canoona                | NORNICO Pty Ltd      | Application             | 22               | Ni, Co                | \$20,000                   |
| EPMA 18175 | Pinnacles Consolidated | NORNICO Pty Ltd      | Application             | 21               | Ni, Co                | \$50,000                   |

# Greenvale - Nickel Cobalt Three Rivers Projects

# Table 13

| Tenement  | Project Name  | Holder/ Applicant            | Status<br>(expiry date) | No. Sub<br>Block | Commodity<br>Targeted | Min. Annual<br>Expenditure |
|-----------|---------------|------------------------------|-------------------------|------------------|-----------------------|----------------------------|
| EPM 10680 | Lucknow North | Greenvale Operations Pty Ltd | Granted (31/12/2010)+   | 3                | Ni, Co                | \$60,000                   |
| EPM 10866 | Lucknow South | Greenvale Operations Pty Ltd | Granted (31/12/2010)+   | 4                | Ni, Co                | \$60,000                   |
| EPM 11223 | Dinner Creek  | Greenvale Operations Pty Ltd | Granted (31/12/2010)+   | 7                | Ni, Co                | \$61,000                   |



## Gold and Base Metals

## Table 14

| Tenement  | Project Name | Holder/ Applicant | Status<br>(expiry date) | No. Sub<br>Block | •            | Min. Annual<br>Expenditure |
|-----------|--------------|-------------------|-------------------------|------------------|--------------|----------------------------|
| EPM 13873 | Six Mile     | NORNICO Pty Ltd   | Granted (10/12/2009)*   | 51               | Gold, Copper | \$50,000                   |

# **Limestone Projects**

## Table 15

| Tenement  | Project Name         | Holder/ Applicant      | Status<br>(expiry date) | No. Sub<br>Block | Commodity<br>Targeted | Min. Annual<br>Expenditure |
|-----------|----------------------|------------------------|-------------------------|------------------|-----------------------|----------------------------|
| ML 10276  | Star River Limestone | Metallica Minerals Ltd | Granted (30/4/2023)     | 18.54 Ha         | Limestone             | N/A                        |
| ML 80131  | Boyne Limestone NE   | Metallica Minerals Ltd | Granted (30/4/2027)     | 54.40 Ha         | Limestone             | N/A                        |
| ML 80132  | Boyne Limestone SW   | Metallica Minerals Ltd | Granted (30/9/2027)     | 52.70 Ha         | Limestone             | N/A                        |
| EPM 13423 | Boyne Limestone      | Metallica Minerals Ltd | Granted (1/1/2011)      | 4                | Limestone             | \$10,000                   |
| EPM 13756 | Fairview Limestone   | Metallica Minerals Ltd | Granted (10/12/2011)#   | 2                | Limestone             | \$10,000                   |
| EPM 14042 | Fairview Extended    | Metallica Minerals Ltd | Granted (23/10/2012)#   | 2                | Limestone             | \$60,000                   |
| EPM 17018 | Mt Podge             | Phoenix Lime Pty Ltd   | Granted (12/2/2014)     | 4                | Limestone             | \$22,500                   |
| MDL 394   | Fairview             | Metallica Minerals Ltd | Granted (31/8/2014)     | 776.6 Ha         | Limestone             | \$50,000                   |
| MLA 80162 | Fairview             | Metallica Minerals Ltd | Application             | 692.8 Ha         | Limestone             | N/A                        |
| ML 4788   | Crotty 1             | Phoenix Lime Pty Ltd   | Granted (31/1/2026)     | 2.023 Ha         | Limestone             | N/A                        |
| ML 4789   | Crotty 2             | Phoenix Lime Pty Ltd   | Granted (31/1/2026)     | 2.023 Ha         | Limestone             | N/A                        |
| ML 5079   | Crotty               | Phoenix Lime Pty Ltd   | Granted (30/4/2025)     | 25.95 Ha         | Limestone             | N/A                        |
| ML 5372   | Crotty 3             | Phoenix Lime Pty Ltd   | Granted (31/1/2013)     | 210 Ha           | Limestone             | N/A                        |

## Mineral Sands

## Table 16

| Tenement   | Project Name     | Holder/ Applicant         | Status<br>(expiry date) | No. Sub<br>Block |                     | Min. Annual<br>Expenditure |
|------------|------------------|---------------------------|-------------------------|------------------|---------------------|----------------------------|
| EPM 15268  | Urquhart Point   | Oresome Australia Pty Ltd | Granted (24/10/2012)    | 24               | Rutile, Zircon, HMS | \$30,000                   |
| EPMA 15370 | Jackson River    | Oresome Australia Pty Ltd | Offered for grant       | 14               | Rutile, Zircon, HMS | \$15,000                   |
| EPM 15371  | Doughboy         | Oresome Australia Pty Ltd | Granted (28/9/2014)     | 16               | Rutile, Zircon, HMS | \$15,000                   |
| EPM 15372  | Jardine          | Oresome Australia Pty Ltd | Granted (28/9/2014)     | 45               | Rutile, Zircon, HMS | \$15,000                   |
| EPMA 18015 | Jackson River #2 | Oresome Australia Pty Ltd | Offered for grant       | 3                | Rutile, Zircon, HMS | \$15,000                   |
| EPMA 18377 | Sandman #1       | Oresome Australia Pty Ltd | Application             | 63               | Rutile, Zircon, HMS | N/A                        |

#### Note:

All tenements 100% held unless expressed otherwise

(\*) Renewal pending

(#) Surrender pending

(+) Assignment pending

PGÉ = Platinum Group Elements

HMS = Heavy Mineral Sands

**EPM** = Exploration Permit for Minerals

 $\label{eq:entropy} \text{EPMA} = \text{Application for Exploration Permit for Minerals}$ 

 $\mathsf{ML} = \mathsf{Mining}\;\mathsf{Lease}$ 

 $\label{eq:MLA} \textbf{MLA} = \textbf{Application for Mining Lease}$ 

 $\mathsf{MDL} = \mathsf{Mineral\ Development\ Licence}$ 

MDLA = Mineral Development Licence Application



# Appendix 5B Mining Exploration Entity Quarterly Report

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

| Name of entity             |                                   |
|----------------------------|-----------------------------------|
| Metallica Minerals Limited |                                   |
| ABN                        | Quarter ended ("current quarter") |
| 45 076 696 092             | December 31, 2009                 |

### Consolidated statement of cash flow

|      | Cash flows related to operating activities   | Current quarter<br>\$A'000 | Year to date<br>(6 months) \$A'000 |
|------|--|----------------------------|------------------------------------|
| 1.1  | Receipts from product sales and related debtors                                      | \$A 000                    | 34                                 |
| 1.2  | Payments for   |                            | 34                                 |
| 1.2  | (a) exploration and evaluation   | (1,224)                    | (2,985)                            |
|      | (b) development  | (1,221)                    | (2,000)                            |
|      | (c) production   | (56)                       | (102)                              |
|      | (d) administration   | (428)                      | (1,085)                            |
| 1.3  | Dividends received   |                            |                                    |
| 1.4  | Interest and other items of a similar nature received                                | 140                        | 417                                |
| 1.5  | Interest and other costs of finance paid   |                            |                                    |
| 1.6  | Income taxes paid  |                            |                                    |
| 1.7  | Other (provide details if material)  |                            |                                    |
|      | Net Operating Cash Flows   | (1,568)                    | (3,721)                            |
|      | Cash flows related to investing activities   |                            |                                    |
| 1.8  | Payment for purchases of:  |                            |                                    |
|      | (a) prospects  | (650)                      | (650)                              |
|      | (b) equity investments   |                            |                                    |
|      | - Shares in Salisbury Resources Limited and East West Corporation                    | - (1.510)                  | (120)                              |
|      | - Shares in Planet Metals Limited  | (1,516)                    | (1,516)                            |
| 1.9  | (c) other fixed assets  Proceeds from sale of:                                       |                            |                                    |
| 1.9  | (a) prospects  |                            |                                    |
|      | (b) equity investments   | _                          | _                                  |
|      | (c) other fixed assets   |                            |                                    |
| 1.10 | Loans to other entities – Orion Metals Limited                                       | (50)                       | (100)                              |
| 1.11 | Loans repaid by other entities   | -                          | -                                  |
| 1.12 | Other (provide details if material) -Loan and IPO costs Metrocoal                    | (50)                       | (125)                              |
|      | Net investing cash flows   | (2,266)                    | (2,511)                            |
| 1.13 | Total operating and investing cash flows (carried forward)                           | (3,834)                    | (6,232)                            |
|      | Cash flows related to financing activities   |                            |                                    |
| 1.14 | Proceeds from issues of shares, options, etc.  | -                          | 1,000                              |
| 1.15 | Proceeds from sale of forfeited shares   |                            |                                    |
| 1.16 | Proceeds from borrowings   |                            |                                    |
| 1.17 | Repayment of borrowings  |                            |                                    |
| 1.18 | Dividends paid   |                            |                                    |
| 1.19 | Other (provide details if material) Cash in subsidiary MetroCoal Limited included at | (860)                      | (860)                              |
|      | 31/09/2009 but not included at 31/12/2009 as separately listed                       |                            |                                    |
|      | Net financing cash flows   | (860)                      | 140                                |

|      | Net financing cash flows (brought forward) | (860)   | 140     |
|------|--|---------|---------|
|      | Net increase (decrease) in cash held       | (4,694) | (6,092) |
| 1.20 | Cash at beginning of quarter/year to date  | 14,944  | 16,342  |
| 1.21 | Exchange rate adjustments to item 1.20     |         |         |
| 1.22 | Cash at end of quarter                     | 10,250  | 10,250  |

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

|      |   | Current quarter<br>\$A'000 |
|------|---|----------------------------|
| 1.23 | Aggregate amount of payments to the parties included in item 1.2  | 125                        |
| 1.24 | Aggregate amount of loans to the parties included in item 1.10  |                            |
| 1.25 | Explanation necessary for an understanding of the transactions  |                            |
|      | The closing consolidated cash balance of \$10,250,000 includes \$860,000 held by a 79% owned subsidiary, Metrocoal Limited. |                            |

### Non-cash financing and investing activities

|     |   | Current quarter<br>\$A'000 |
|-----|---|----------------------------|
| 2.1 | Details of financing and investing transactions which have had a material effect on consolidated assets and lia   | abilities but did not      |
|     | involve cash flows  |                            |
| 2.2 | Details of outlays made by other entities to establish or increase their share in projects in which the reporting | entity has an interest     |

### Financing facilities available

Add notes as necessary for an understanding of the position

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

### Estimated cash outflows for next quarter

|     |                            | \$A'000 |
|-----|----------------------------|---------|
| 4.1 | Exploration and evaluation | 400     |
| 4.2 | Development                | 150     |
|     | Total                      | 550     |

### **Reconciliation of cash**

|     | Reconciliation of cash at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts is as follows                                    | Current quarter<br>\$A'000 | Previous quarter<br>\$A'000 |
|-----|---|----------------------------|-----------------------------|
| 5.1 | Cash on hand and at bank  | 599                        | 2,314                       |
| 5.2 | Deposits at call  | 9,651                      | 12,630                      |
| 5.3 | Bank overdraft  |                            |                             |
| 5.4 | Other (provide details)   |                            |                             |
|     | <b>Total: cash at end of quarter (item 1.22)</b> Including (at 30 September 2009) \$860,000 in subsidiary listed in December 2009 and cash on hand therefore not included at 31 December 2009 | 10,250                     | 14,944                      |

## Changes in interests in mining tenements

|     |   | Tenement reference | Nature of interest<br>(note 2) | Interest at<br>beginning of<br>quarter | Interest at end of quarter |
|-----|---|--------------------|--------------------------------|--|----------------------------|
| 6.1 | Interests in mining tenements relinquished, reduced or lapsed | EPM 15848          | EPM                            | EPM                                    | Nil                        |
| 6.2 | Interests in mining tenements acquired or increased           | EPMA 18377         | EPMA                           | Nil                                    | EPMA                       |

## Issued and quoted securities at end of current quarter

|     |  | Total number                | Number quoted | Issue price per<br>security (see note<br>3) (cents) | Amount paid up per security (see note 3) (cents) |
|-----|--|-----------------------------|---------------|---|--|
| 7.1 | Preference +securities (description)   |                             |               |   |  |
| 7.2 | Changes during quarter (a) Increases through issues (b) Decreases through returns of capital, buy-backs, redemptions     |                             |               |   |  |
| 7.3 | +Ordinary securities   | 121,740,917                 | 121,740,917   |   |  |
| 7.4 | Changes during quarter  (a) Increases through issues Escrow Release  (b) Decreases through returns of capital, buy-backs |                             |               |   |  |
| 7.5 | *Convertible debt securities (description)   |                             |               |   |  |
| 7.6 | Changes during quarter  (a) Increases through issues  (b) Decreases through securities matured, converted                |                             |               |   |  |
| 7.7 | Options  |                             |               | Exercise price                                      | Expiry date                                      |
|     | (description and conversion factor)  | 500,000<br>Unlisted Options |               | 65 cents  | 28 September 2012                                |
|     |  | 500,000<br>Unlisted options |               | 80 cents  | 31 December 2010                                 |
|     |  | 600,000<br>Unlisted options |               | 65 cents  | 28 September 2012                                |

|      |                               | Total number                  | Number quoted | Issue price per<br>security (see note<br>3) (cents) | Amount paid up per<br>security (see note<br>3) (cents) |
|------|-------------------------------|-------------------------------|---------------|---|--|
| 7.8  | Issued during quarter         |                               |               |   |  |
| 7.9  | Exercised during quarter      |                               |               |   |  |
| 7.10 | Expired during quarter        |                               |               | Exercise price                                      | Expiry date  |
|      |                               | 2,000,000<br>Unlisted Options |               | 50 cents  | 31 December 2009                                       |
|      |                               | 500,000<br>Unlisted Options   |               | 25 cents  | 31 December 2009                                       |
|      |                               | 2,250,000 Unlisted options    |               | 80 cents  | 31 December 2009                                       |
|      |                               | 400,000<br>Unlisted Options   |               | 30 cents  | 31 December 2009                                       |
| 7.11 | Debentures (totals only)      |                               |               |   |  |
| 7.12 | Unsecured notes (totals only) |                               |               |   |  |

### **Compliance statement**

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

(Director/Company secretary)

Print name: JOHN KEVIN HALEY

### **Notes**

- 1 The quarterly report provides a basis for informing the market how the entity's activities have been financed for the past quarter and the effect on its cash position. An entity wanting to disclose additional information is encouraged to do so, in a note or notes attached to this report.
- 2 The "Nature of interest" (items 6.1 and 6.2) includes options in respect of interests in mining tenements acquired, exercised or lapsed during the reporting period. If the entity is involved in a joint venture agreement and there are conditions precedent which will change its percentage interest in a mining tenement, it should disclose the change of percentage interest and conditions precedent in the list required for items 6.1 and 6.2.
- 3 Issued and guoted securities The issue price and amount paid up is not required in items 7.1 and 7.3 for fully paid securities.
- 4 The definitions in, and provisions of, AASB 1022: Accounting for Extractive Industries and AASB 1026: Statement of Cash Flows apply to this report.
- Accounting Standards ASX will accept, for example, the use of International Accounting Standards for foreign entities. If the standards used do not address a topic, the Australian standard on that topic (if any) must be complied with.





A Queensland focused multi-commodity resource company

### **ASX:MLM**

### **Subsidiary companies:**

NORNICO Pty Ltd ACN 065 384 045 Oresome Australia Pty Ltd ACN 071 762 484 Lucky Break Operations Pty Ltd ACN 126 272 580 MetroCoal Limited ABN 45 117 763 443 Phoenix Lime Pty Ltd ACN 096 355 761 Greenvale Operations Pty Ltd ACN 139 136 708 Scandium Pty Ltd ACN 138 608 894