



# Quarterly Report

to 31 March 2009



## ASX release

29 April 2009

### Metallica Minerals Ltd

*"An emerging Queensland multi-commodity resource company with major interests in Nickel-Cobalt, Coal and Bauxite"*

ASX : MLM

**Issued capital (31/3/2009):**  
114,562,628 Shares issued

6,750,000 Directors & Management  
Unlisted Performance Options

~1,600 shareholders

**Top 20 shareholders:** Hold 62%

#### Directors:

Mr David K. Barwick – Chairman  
Mr Andrew Gillies – Managing Director  
Mr Peter Nicholson – Director  
Mr Mark Ashley – Director  
Mr John Haley – Director &  
Company Secretary / CFO

#### Largest Shareholders 29/4/09:

Jien Mining Pty Ltd 15.1%  
RCF (Funds III LP & IV LP) 13.0%  
Golden Breed Pty Ltd 7.7%  
Kagara Limited 5.0%

#### Cash balance:

As at 31 March 2009, MLM's consolidated cash balance was approximately \$19.95 million.

## Highlights

- ▶ Jien Mining Pty Ltd (Jien), a subsidiary of Jilin HOROC Nonferrous Metal Group Co., Ltd – China's second largest nickel cobalt producer acquired a further 14 million shares in Metallica. Jien now holds 15.1% of Metallica's issued capital
- ▶ Increased resource at Kokomo takes the combined NORNICO Resource to 50.8 Mt at 0.72% Ni and 0.06% Co containing approximately 364,000 tonnes Ni (previously 282,000t Ni). Details of this Resource are in Tables 1 & 2
- ▶ Maiden Nickel-Cobalt Resource estimate for the Kokomo\* deposit of 12.2 Mt @ 0.67% Ni and 0.12% Co (see Tables 1 & 2, page 7)
- ▶ Results from Atmospheric Agitated Leaching on the Kokomo Ni-Co ores indicate that 90% extractions of both Ni and Co are achieved within 5–6 hours
- ▶ Drilling commenced on MetroCoal's (84% MLM owned) Wandoan underground coal gasification (UCG) project in the Surat coal basin
- ▶ Maiden scandium (Sc) resource estimate at Kokomo of 4.55 Mt at 131 g/t Sc for 596 t of contained scandium (see Tables 4 & 5, page 9)
- ▶ Metallica bids for Queensland Ores Ltd (ASX:QOL) on the basis of 1 MLM share for every 22 QOL shares.  
  
On 27th April 2009 MLM waived its minimum acceptance condition subject to receiving acceptances for at least 50.1% of QOL, and other offer conditions being satisfied or waived, Metallica will offer QOL up to \$1 million cash funding on terms to be agreed with QOL.  
  
QOL holds two attractive Queensland resource projects; 85% of the Wolfram Camp wolfram (tungsten) and molybdenite mine (currently on care and maintenance) and 100% of the Mt Cannindah copper gold deposit (see Figure 1)
- ▶ Metallica has a strategic shareholding and a convertible note in Brisbane based Queensland Gold & Minerals Ltd (ASX : QGM). The company in conjunction with MLM are continuing to seek opportunities suitable for this company
- ▶ Consolidated cash \$19.95 million (17.4 cents per share) at 31 March 2009
- ▶ Metallica's bauxite subsidiary Cape Alumina Limited (ASX : CBX) lists on ASX. MLM retains 32% shareholding (42.3 million shares) in the newly listed bauxite explorer

# Financial

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

As at 31 March 2009, Metallica's consolidated cash was \$19.95 million (17.4 cents per share) including interest income of \$650,000 received during the March Quarter, and including Metallica's 84% owned subsidiary MetroCoal Ltd cash of approximately \$440,000.

Current consolidated cash position at 29 April 2009 is \$19.4 million (~17 cents/share).

Exploration and evaluation expenditure totalled \$0.67 million, production \$0.12 million (Ootann) and administration expenditure was \$0.747 million for the quarter to 31 March 2009. The total combined March quarterly expenditure was \$1.55 million.

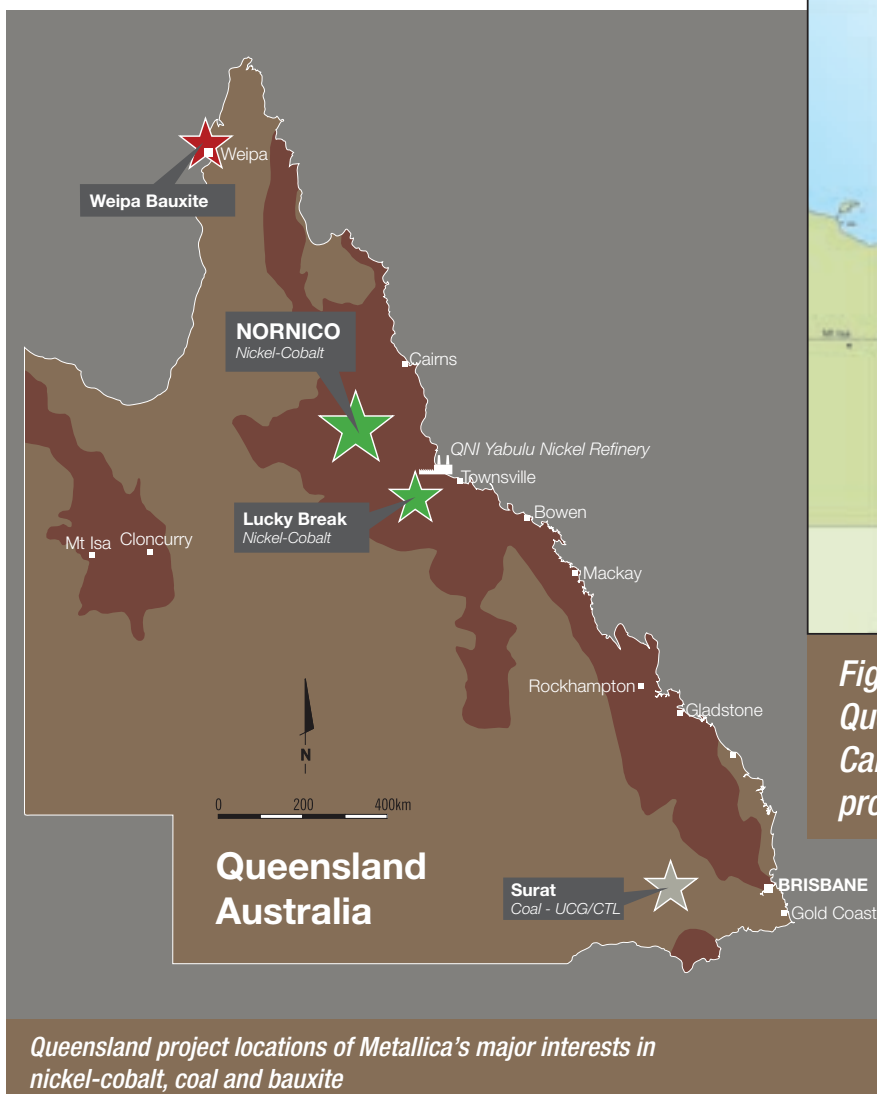
The estimated exploration and evaluation expenditure by Metallica for the June 2009 quarter is \$900,000. In addition to this, MetroCoal has forecast expenditure of approximately \$750,000. Significant additional project expenditure was completed in the December quarter by MetroCoal (84% holding) as well as through Metallica's shareholding in Cape Alumina (Weipa bauxite project).

MLM has lent \$300,000 to MetroCoal during the quarter. Metrocoal is using these funds towards the current drilling programme on the Wandoan coal UCG project.

No Directors or Management Unlisted Performance Options were issued during

the quarter. One million options expired on 21 March 2009.

The Company's significant cash reserves will be utilised to advance Metallica's key NORNICO nickel-cobalt project, its holdings in coal (MetroCoal) and significant Queensland-based exploration interests in zircon, rutile, gold, scandium, limestone and other minerals. In addition to its current take over bid for QOL, and its position in QGM, Metallica continues to assess corporate and project opportunities that are compatible to the Company's core operations.



**Figure 1 – Take over target: Queensland Ores (QOL) Wolfram Camp and Mt Cannindah project locations**

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 Ltd bauxite projects in this report are compiled by Dr Paul Messenger (CEO of Cape Alumina Ltd) who is a Member of the AusIMM and has 20 years experience in exploration and mining including a significant time studying bauxite projects. Mr Gillies, Mr Smith and Dr Messenger consent to the inclusion in the report of the matters based on the information in the form and context in which it appears.

**Andrew Gillies** – Managing Director, 29 April 2009

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# Metallica's assets

Metallica is in an excellent position to endure the downturn in financial markets and progress its core mineral properties and major investments.



Figure 2 – Metallica's core assets as at 31 March 2009

# Mineral Projects

## Nickel-Cobalt – NORNICO Nickel Project 100%

### Overview

The NORNICO Project is located 32 kilometres south of Mt Garnet, Northern Queensland; location and access to infrastructure is excellent.

The combined NORNICO resource base of the three deposits of Bell Creek, Minnamoolka and Kokomo is approximately 50Mt @ 0.72% Ni and 0.06% Co (364 Kt Ni and 29 Kt Co contained) (see Table 1 and 2 for resource categories).

The Bell Creek combined resource base is approximately 24Mt at 0.77% Ni and 0.04% Co containing 184 Kt Ni and 10Kt Co using a 0.45% Ni cut off grade (COG) (see Table 1 and 2 for resource categories).

In March, Metallica decided to defer the NORNICO Feasibility Study due to low metal prices and poor investment sentiment, and to allow inclusion of the Kokomo deposit, complete further metallurgy and enhance process flowsheet development. Metallica was undergoing evaluation and feasibility on its NORNICO nickel project for a 1.0 Mtpa heap leach nickel laterite operation with onsite acid plant and power generation to produce an average of approximately 8,000 tonnes per annum of combined nickel/cobalt in an intermediate product concentrate for at least 15 years. The proposed operation is planned to be initially based on the Bell Creek deposits, then supplemented by Minnamoolka and the cobalt rich Kokomo ores as well as additional operations to expand nickel-cobalt production post commencement.

The NORNICO nickel ores are highly amenable to dilute acid leaching for nickel and cobalt extraction.

NORNICO is in an excellent location, close to markets, fresh water, infrastructure, port facilities, is safe, and in an ideal climate and environment.

### NORNICO funding feasibility study

Key activities undertaken during the March Quarter included:

- Lycopodium Minerals Pty Ltd continued with the optimisation of the back-end process flow sheet based on IX resins for the Funding Feasibility Study
- The IX Resin Pilot Plant testwork at Ammtec, Perth was completed. Iron precipitation and Magnesium precipitation testwork was also concluded. Detailed reports are still outstanding
- Bell Creek South pit designs were reviewed and updated to accommodate the August 2008 resource extensions. The first 10 year mining schedule was reviewed and refined based on the updated operating costs and current financial parameters
- Preliminary Kokomo metallurgical testwork continued. The laboratory testwork is based on agitated tank leaching for recovery of Ni and Co
- A second water licence application was submitted to the Department of Natural Resources and Water for harvesting water from the Herbert River
- Site environmental monitoring continued

### Engineering studies

Metallica Minerals appointed Lycopodium Minerals Pty Ltd, Perth as the Feasibility Study Manager for the NORNICO Project in September 2007. In April 2008 it was necessary to change the definition of the project with respect to throughput (allowing higher grades the reserve life) and the “back end” metallurgical flowsheet. The feasibility study is based

on a 1.0 million tpa heap leach operation with ion exchange, onsite power and acid plant to produce approximately 8,000 tpa of NiOH product.

The flowsheet currently being investigated is based on minimising the unit processes involved and therefore minimising capital expenditure and also operating costs. The simplified flowsheet for recovery of Ni from pregnant liquor (PLS) entails single stage iron removal and then IX recovery of Ni only. The raffinate pH will be increased to precipitate the magnesium and calcium and then recycled to the heaps as wash water. The eluted solution from the IX columns containing the Ni will be further processed to produce a saleable product as NiOH.

In March 2009 the Metallica Board decided to defer the completion of the feasibility study (basically the engineering component) due to the current financial climate and low commodity prices, particularly nickel (<US\$5/lb Ni) and the sentiment towards nickel laterite projects (refer to the ASX announcement dated 26 March 2009). The feasibility study is at a stage that will enable it to be quickly restarted should nickel prices improve.

The study included the two most advanced nickel deposits, Bell Creek and Minnamoolka at the northern end of the NORNICO project but did not include the emerging cobalt-rich Kokomo nickel laterite deposit in the centre of the project area. Evaluation work will continue at Kokomo to upgrade its existing resource base (refer to ASX Release 19 January 2009) as well as ongoing metallurgical test-work, enhanced process flowsheet development and the permitting of mining tenements over NORNICO's key deposits – Bell Creek, Minnamoolka and Kokomo. Deferral of the feasibility will also allow management, once market conditions improve, to include Kokomo in a reactivated NORNICO feasibility study, most likely significantly enhancing the project's overall mining schedule, due to the addition of high cobalt bearing nickel laterite ores.

Lycopodium Minerals have been requested to close out the feasibility study. All aspects



of process engineering will be completed and the process design will include the results of the recent Pilot Plant testwork. Operating and capital estimates will also be updated and the study will be fully documented.

In the future all project development work and project enhancements related to nickel-cobalt laterites will be undertaken internally with our own in-house process management team and assisted by our consultants.

## Metallurgical testwork

### PILOT PLANT TESTWORK – AMMTEC, PERTH – (DEC 2008 TO MAR 2009)

In November 2008 Metallica committed to a major pilot plant test program at Ammtec, Perth to confirm the robustness of the new proposed back end flowsheet. The program entailed single stage Iron precipitation testwork with thickening and filtration, ion exchange for recovery of nickel, magnesium precipitation and NiOH precipitation to produce a saleable product. Samples were provided to equipment vendors for sizing and selection of equipment.

All the proposed pilot plant testwork has been successfully completed but some final reports are still outstanding.

### KOKOMO METALLURGICAL TESTWORK – HRL BRISBANE

Kokomo scoping metallurgical testwork based on atmospheric agitated leaching for recovery of nickel and cobalt from a high cobalt content laterite ore type was initiated last quarter. The preliminary agitated leach tests using dilute sulphur acid undertaken to date have been at elevated temperatures and with various sulphur dioxide (SO<sub>2</sub>) addition rates.

Initial atmospheric acid-leaching (AAL) metallurgy results on the Kokomo Ni-Co ores indicate that 90% extractions of both Ni and Co are achieved within 5–6 hours using 600 kg/t acid and SO<sub>2</sub> addition for just the first few hours only. Both iron and magnesium extractions are comparatively low. Further optimisation testwork is in progress.

### SUMMARY OF THE OTHER AREAS OF THE FEASIBILITY STUDY

All infrastructure design and costing has been completed.

A water harvesting licence for 1750 ML/year for sourcing water from the Herbert River was granted by the DME late 2008. The approved water allocation however is inadequate for the total project requirements and therefore a second licence application for the same quantity has been submitted to the department.

The preparation of the Environmental Impact Statement (EIS) document is on hold as it is pending finalisation of the flowsheet and site layout designs. It will be necessary to seek an extension of time for the lodgement of the EIS which is currently due in June 2009. The base line wet and dry season environmental

studies have been completed at both Bell Creek and Minnamoolka and final reports issued.

Marketing of the base case products, namely Nickel hydroxide (NiOH) and Cobalt as a mixed sulphide product, is on hold.

A three year development schedule is required for production to commence, but a decision for development go-ahead will be highly dependent on the future nickel (and to some extent cobalt) prices and ability to finance the project. The EIS will take 12 months for approval. In this market environment there is likely to be more emphasis on



Figure 3 – NORNICO project setting

gaining project development financing through joint ventures (eg Chinese nickel cobalt companies).

Metallica is investigating the benefits of adding the smaller but high grade Kokomo and Minnamoolka (with beneficiation) processing operations onto NORNICO by utilising the higher grade Nickel-Cobalt resources within each deposit and using relatively cheap local NORNICO acid without the acid plant capital cost incorporated in these add on operations. It could reasonably be considered that having the combination of higher grade (particularly the high cobalt Kokomo ore) and cheap local acid – both of these potential “add-on” projects would be expected to have a significantly higher IRR and add considerable value and robustness to the expanded NORNICO project.

## NORNICO Project – key work planned to 30 June 2009

- Review all options for going forward that could enhance the current NORNICO project
- Further evaluate Kokomo resource metallurgically for possible inclusion in the NORNICO project
- Progress permitting of mining lease application MLA 20549 “Bell Creek Consolidated”
- Negotiate a compensation agreement with the Bell Creek project landowner

## NORNICO resource and exploration update

**Golder Associates completed an independent resource estimate on the Kokomo nickel-cobalt laterite project in January 2009.**

The Kokomo Mineral Resource estimate identified an Inferred and Indicated Resource of 12.2 Mt @ 0.67% Ni and 0.12% Co, (using a 0.70% Ni Eq cutoff grade). Of this 5.2Mt @ 0.69% Ni and 0.13% Co is classified as Indicated with 7.0 Mt @ 0.66% Ni and 0.11 % Co as Inferred (see ASX Release dated 19 January 2009).

With the inclusion of the Kokomo Resource, the overall combined Measured, Indicated and Inferred NORNICO resource is 50.8Mt @ 0.72% Ni and 0.06% Co (see Table 1 and 2).

The Kokomo resource categories are presented pictorially in plan (see Figure 3).

A Mining Lease application is being prepared to cover the Kokomo nickel-cobalt deposit, access routes and possible infrastructure sites. Metallurgical testwork on drill core at HRL Testing in Brisbane is ongoing.

Metallica plans to complete further infill drilling, focused on the zones of higher grade nickel-cobalt mineralisation to increase the resource categories from Inferred and Indicated to Indicated and Measured. Drilling is also planned for the central and western part of the Kokomo Plateau where zones of high grade mineralisation remain open. This drilling programme is planned for June 2009.

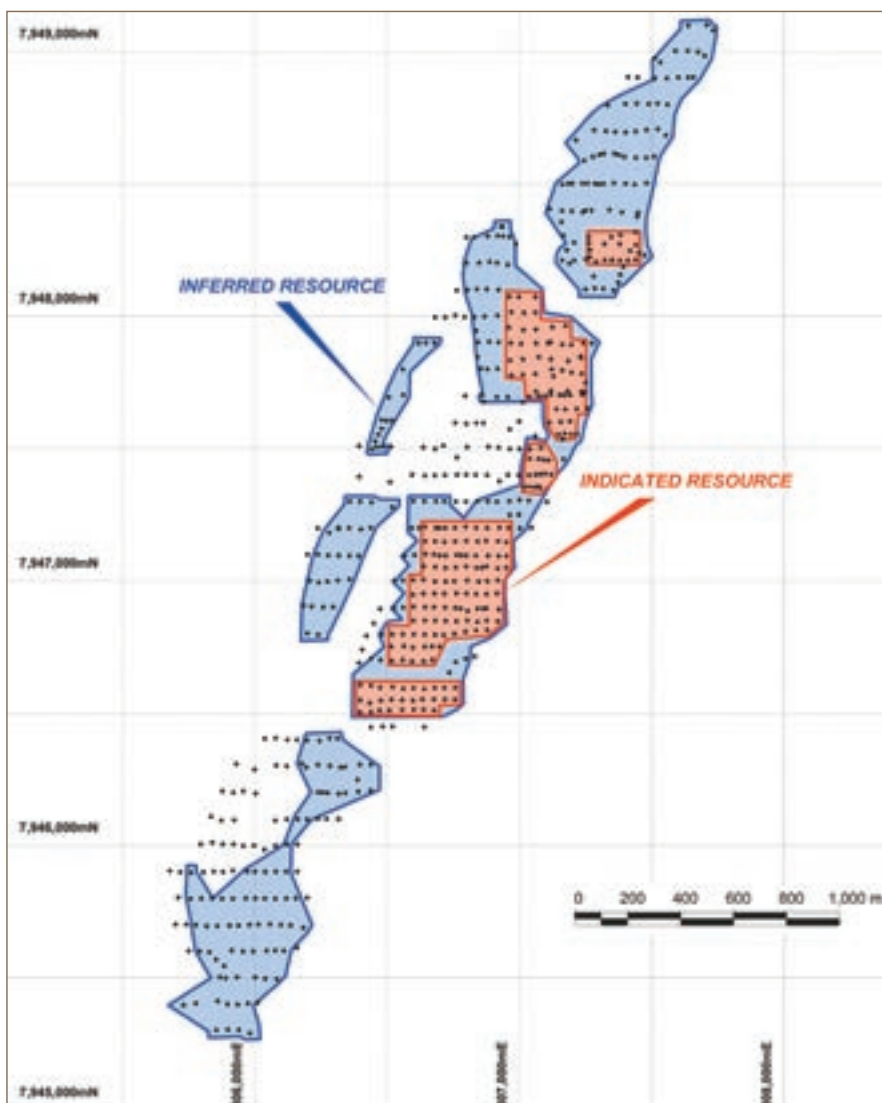


Figure 4 – Kokomo block model nickel-cobalt resources

Table 1: Resource totals for each of the NORNICO deposits – Measured, Indicated and Inferred (19/01/09)

Nickel deposit	Million tonnes (Mt)	Ni (%)	Co (%)	Fe (%)	Mg (%)	Insitu contained Ni metal	Insitu contained Co metal
Bell Creek South	11.41	0.88	0.06	11.0	7.7	100,580	6,690
Bell Creek North	5.64	0.65	0.02	8.3	8.9	36,660	1,180
Bell Creek Northwest	5.18	0.67	0.04	14.1	5.3	34,710	1,970
The Neck	1.39	0.73	0.02	8.3	6.9	10,120	320
The Pod	0.28	0.73	0.05	9.2	5.7	2,020	140
Minnamoolka	14.73	0.66	0.03	9.4	11.7	97,820	4,280
Kokomo <sup>#</sup>	12.20	0.67	0.12	21.7	3.70	82,080	14,460
<b>Totals</b>	<b>50.83</b>	<b>0.72</b>	<b>0.06</b>	<b>13.03</b>	<b>7.74</b>	<b>363,990</b>	<b>29,040</b>

# The above resources have been calculated using a 0.45% Ni cut-off grade(COG) with the exception of Kokomo which was estimated using a 0.70% Ni Eq (Ni + 3Co) COG.

Table 2: NORNICO nickel-cobalt resource inventory – Measured, Indicated and inferred (19/01/09)

Nickel deposit resource category	Tonnes (Mt)	Ni (%)	Co (%)	Fe (%)	Mg (%)	Insitu contained Ni metal	Insitu contained Co metal
Bell Creek South (BCS)							
Measured	10.90	0.89	0.06	11.2	7.7	97,010	6,540
Indicated	0.51	0.70	0.03	7.9	8.9	3,570	150
Bell Creek North (BCN)							
Indicated	5.64	0.65	0.02	8.3	8.9	36,660	1,180
Bell Creek Northwest (BCNW)							
Indicated	5.18	0.67	0.04	14.1	5.3	34,710	1,970
The Neck – between BCS and BCN							
Indicated	1.39	0.73	0.02	8.3	6.9	10,120	320
The Pod <sup>#</sup> – west of BCS							
Inferred	0.28	0.73	0.05	9.2	5.7	2,020	140
Minnamoolka							
Indicated	11.83	0.67	0.03	9.7	11.7	79,260	3,670
Inferred	2.90	0.64	0.02	8.3	11.6	18,560	610
Kokomo <sup>*</sup>							
Indicated	5.20	0.69	0.13	23.5	3.7	35,880	6,760
Inferred	7.00	0.66	0.11	20.3	3.7	46,200	7,700
<b>Totals</b>							
Measured	10.90	0.89	0.06	11.2	7.7	97,010	6,540
Indicated	29.75	0.67	0.05	12.5	8.3	200,200	14,050
Inferred	10.18	0.65	0.08	16.6	6.0	66,780	8,450
<b>Overall total</b>	<b>50.83</b>	<b>0.72</b>	<b>0.06</b>	<b>13.0</b>	<b>7.7</b>	<b>363,990</b>	<b>29,040</b>

1. Above categories all calculated using a 0.45% Ni cut-off grade-with the exception of Kokomo which was estimated using a 0.70% Ni Eq cog (1Ni + 3 Co).

2. Block models for the above resources (with exception of The Pod) estimates were constructed by filling wire frame surfaces representing nickel laterite mineralisation boundary with 10m by 10m by 1m blocks. Nickel (Ni) grades were estimated by ordinary kriging using various search radius, depending on the drill spacing of the deposit. A minimum of 4 and a maximum of 15 composites were used to estimate each block, with a maximum of three composites from any one drill hole. Therefore, at least three drill holes were used to estimate block grade values. At Bell Creek South, Minnamoolka and Kokomo a nominal 0.3% Ni mineralised envelope was used as a hard boundary for Ni and Co block grade estimation. Hard boundaries were also used between the laterite and basement zones.

3. Variations due to rounding factors.

4. Iron (Fe) and magnesium (Mg) are included to indicate the overall ore quality, as both metals influence acid consumption as well as dissolved Fe, Mg and other metals, which are contaminants to nickel loaded pregnant solution which is treated to produce a marketable nickel and cobalt intermediate product. As a rule, the lower the Fe and Mg in the laterite ore the better metallurgy and the ore is more suited to heap leach processing.

# The Pod Inferred resource was estimated using an arithmetic mean – cross sectional (polygonal) method, a 0.45%Ni external cut-off grade and a minimum assumed mining width of 2m was applied. (ASX Release Competent Person Patrick Smith).

\* A higher cut-off grade has been applied to the Kokomo Resource than the other NORNICO resources as the expected metal extraction process will be different and may require trucking of ore or transporting acid from Bell Creek located 60 km to the north.



# NORNICO exploration update

Due to the prolonged wet season this year, drilling has yet to re-commence on the NORNICO project area. Drilling is now unlikely to start until early May.

Re-assay of selected samples from the RC drilling at Kokomo for PGE's was completed in early February with highly anomalous Au, Pt and Pd identified in several holes. An initial resource for the scandium mineralisation contained in the Kokomo laterite was also estimated. Assay results for all the holes drilled at Mt Garnet between November and December 2008 have now been received and results are detailed below.

XRF geochemical surveys have been initiated over three areas south of Mt Garnet. The surveys cover the Emma Creek copper prospect, located 15km northwest of Minnamoolka, an intense magnetic anomaly 5km south of Bell Creek (Wombinoos prospect) and a magnetite skarn (Gum Creek Bore prospect) located 8km south east of Bell Creek.

## Kokomo laterite anomalous platinum and gold

Selected pulps from the Kokomo RC drilling (those with Cr levels >0.50%) were re-assayed for Au, Pt and Pd (PGE's), a total of 20 holes comprising 111 samples were selected, results indicate that there is gold, platinum and palladium associated with the nickel-cobalt mineralisation at Kokomo, with assays to 0.44g/t Au, 0.44g/t Pt and 0.20 g/t Pd being recorded over 1m intervals in the laterite. The significant results are tabulated in Table 3.

It is likely that if additional samples are selected other zones of elevated PGEs will be identified at Kokomo. The results to date broadly indicate that the zones of elevated Au, Pt and Pd are predominantly located on the eastern boundary fault where the lateritisation is the most pronounced and nickel, cobalt and scandium grades are generally high. Further exploration is required to investigate the source of Au-Pt-Pd anomalism.

Table 3: Kokomo RC drilling significant results

Hole number	Interval (m)	Au (g/t)	Pt (g/t)	Pd (g/t)
KK-143	2	-	0.17	0.006
KK-221	3	-	0.15	-
KK-227	5	-	0.13	0.040
KK-236	3	0.13	0.02	0.006
KK-242	1	0.44	0.01	0.040
KK-265	1	0.32	-	0.004
KK-284*	5	0.11	0.20	0.070
KK-337	2	-	0.11	0.020
<b>KK-597#</b>	<b>5</b>	<b>-</b>	<b>0.15</b>	<b>0.18</b>

\* Includes 1m @ 0.44g/t Pt # Includes 1m @ 0.20 g/t Pd

A 5,000m RC drilling programme to infill areas of high grade nickel-cobalt mineralisation is currently being designed. Step out holes around high grade cobalt zones are also being planned.

## Kokomo Scandium Deposit

### 80% MLM 20% STRAITS RESOURCES LTD

The Kokomo scandium deposit is located on the central Kokomo Plateau which is situated

approximately 50km north of the Greenvale township. Scandium was first identified at the deposit when Metallica completed a 29 hole drilling programme over the Kokomo nickel-cobalt laterite deposit in 2000.

A 530 hole RC programme totaling approximately 15,000m was completed over the Kokomo nickel laterite deposit in 2008, with the drilling also covering areas of anomalous scandium mineralisation. An in-house resource estimate has now been completed for the scandium content of the Kokomo scandium laterite deposit by Metallica.





Holes with greater than 60ppm Sc were plotted on a map and four zones of scandium mineralisation were defined, Zones 1-4, (Figure 5). The parameters used in the resource calculation are detailed below.

A maiden scandium resource estimate for the Kokomo Sc deposit has been estimated at 4.55 Mt @ 131g/t Sc for 596 kt contained Sc (see Table 4 and 5).

The Kokomo scandium resource has been estimated using the following criteria:

- The resource is based on 107 RC holes
- A COG for scandium of 60ppm was applied
- Only intercepts greater than 1m were included
- Internal dilution of up to 2m was used
- No top cut was applied
- Only the scandium mineralisation within the laterite zone was included in the estimate
- Scandium values >60ppm in fresh rock were not included in the resource. Individual holes with >60ppm Sc which plotted outside the four main zones were also not included in the resource
- The resource estimate was calculated by a manual arithmetic mean cross – sectional area method
- An SG of 1.65 was used for the laterite based on results from diamond drill core and shallow pits

In the areas where the drilling has been closed up to 50m by 40m, the resource is classified as Indicated and the remainder of the resource is classified as Inferred.

The high grade scandium mineralisation is predominantly confined to the eastern margin of the central Kokomo Plateau. The scandium mineralisation generally occurs above the nickel-cobalt zone but can occur within it. For the resource estimate four zones of scandium mineralisation have been identified (it is likely that with more drilling these zones may become more continuous) (see Figure 5).

High grade scandium has now been identified over a strike length of 4km and has been located on plateaus and in low lying areas between the nickel-cobalt plateaus in topographical lows covered by alluvial sediments.

**Table 4: Kokomo scandium deposit – resource**

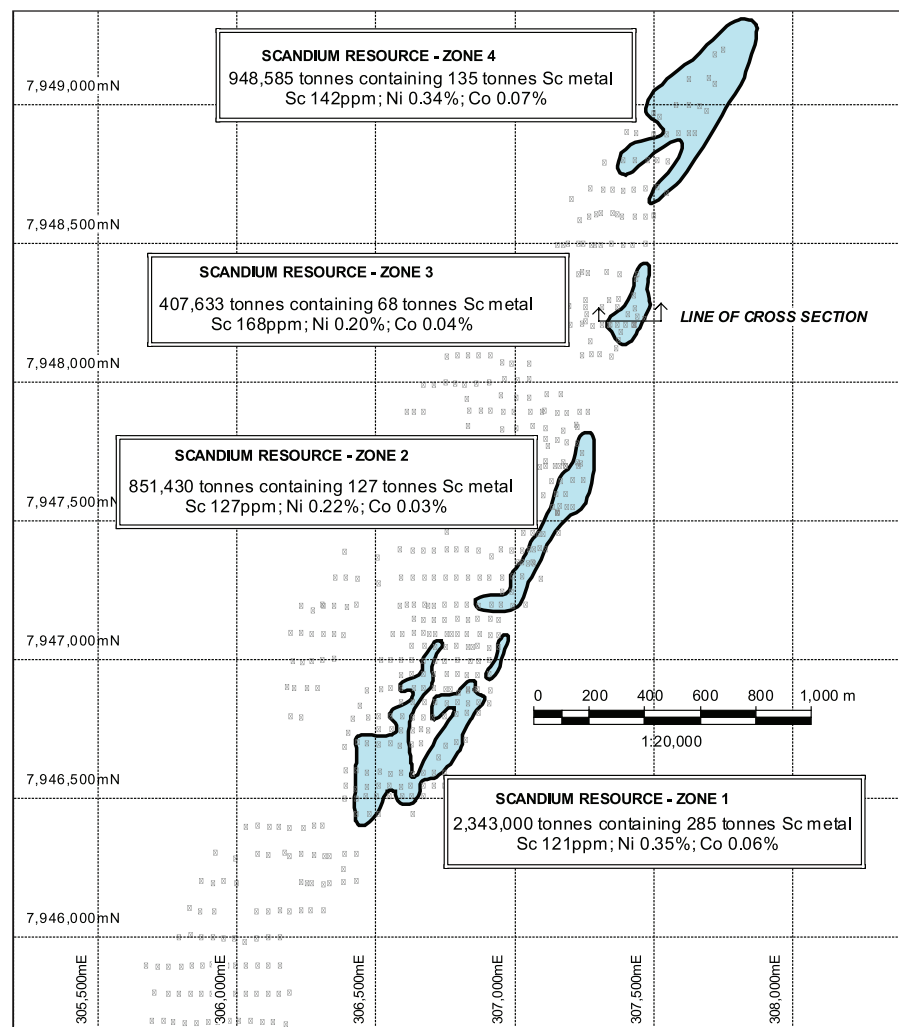
Zone	Tonnes	Sc (ppm)	Ni (%)	Co (%)	Tonnes Sc metal
Zone 1	2,343,000	121	0.35	0.06	285
Zone 2	851,430	127	0.22	0.03	109
Zone 3	407,633	168	0.20	0.04	68
Zone 4	948,585	142	0.34	0.07	135
<b>Total</b>	<b>4,550,648</b>	<b>131</b>	<b>0.31</b>	<b>0.05</b>	<b>596</b>

**Table 5: Kokomo scandium deposit – resource categories**

Category	Tonnes (Mt)	Sc (ppm)	Tonnes (Sc metal)
Indicated	3.60	128	462
Inferred	0.95	142	134
<b>Total</b>	<b>4.55</b>	<b>131</b>	<b>596</b>

COG of 60ppm Sc was used.

This Mineral Resource estimate is based upon and accurately reflects data compiled and validated by Patrick Smith (Metallica's Exploration manager) who is a Member of the Australasian Institute of Mining and Metallurgy and a full time employee of Metallica Minerals Ltd. Mr Smith has sufficient experience that is relevant to the style of mineralisation and the type of deposit under consideration and to the activity which he has undertaken to qualify as a Competent Person as defined in the 2004 edition of the 'Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr. Smith consents to the inclusion of this information in the form and context in which it appears in this document.



**Figure 5 – Kokomo scandium deposits**

# Regional exploration

## Mt Garnet sulphide targets

All the assay results from the November to December 2008 drilling programme have been received, the results of which are summarised below.

## Moonmyata (5km S of Mt Garnet)

At Moonmyata four holes were drilled to test gravity and magnetic targets. Holes MMDDH-001 and 002 intersected Norite (a favourable host rock for Ni sulphide mineralisation) from approximately 100m beneath Quaternary and Tertiary sands and gravels. MMDDH-001 was relatively unaltered, however MMDDH-002, which was drilled 1.1km southeast of MMDDH-001 was partially altered and contained quartz carbonate veining with sphalerite and chalcopyrite evident in and adjacent to these veins. Assay results received for MMDDH-002 returned values of 20 g/t Ag, 0.25% Zn, 0.15% Cu and 0.1% Pb over a 1m interval within a broad zone of elevated zinc mineralisation occurring between 198–221m which assayed at 0.07% Zn over the 23m interval, however no sulphide nickel mineralisation was identified.

MMDDH-004 drilled north of MMDDH-002 intersected granite which contains large xenoliths of norite (to 60cm) indicating possible close proximity to a norite-granite contact. The norite xenoliths within the granite are mineralised containing up to 20% pyrite. Assay results indicate that where the norite clasts occur there is elevated copper geochemistry, with the best recorded result being 1m @ 0.16% Cu.

At Moonmyata holes drilled closer to the granite-norite contact appear to exhibit a greater degree of mineralisation and alteration and three

angled holes have been designed to test the norite-granite contact. Follow-up work, including drilling of Moonmyata will commence in May.

## Rudd Creek prospect (2–3km N of Bell Creek)

Four holes at Rudd Creek were drilled to test gravity anomalies. All the holes intersected altered meta-sediments with weak to moderate skarn alteration, trace to 5% pyrite, and trace sphalerite and chalcopyrite were observed in the all the holes. The best mineralised intercepts were recorded in holes RCDDH-002 which intersected 8m @ 0.41% Zn and 0.10% Cu, (inc. 1m @ 1.22% Zn), and RCDDH-004 which intersected 22m @ 0.17% Zn.

The Rudd Creek prospect area is covered with between 10m and 80m of sands and gravels. The basement comprises strongly altered metasediments which are associated with gravity and magnetic highs. Weak to moderate skarn mineralisation has been identified in drill chips and anomalous copper (to 0.11% Cu), barium (to 0.31% Ba), sulphur (to 2.31% S) and silver (to 5g/t Ag) has been intersected. Weak gold (to 72ppb Au) and platinum (to 50ppb Pt) has also been intersected over 1m intervals. In light of the 2008 drill programme the drill data, gravity and magnetic data has been reviewed and four additional holes have been planned to test this broad zone of mineralisation and alteration.

## XRF soil surveys

Results from the Wombinoos soil survey have identified a 300m by 300m coincident copper-zinc anomaly (+120ppm Cu and + 60 ppm Zn) on the margin of the magnetic high. This area is covered with 2–10m of Tertiary sands and gravels and outcrop is rare. RC drilling has been planned to test this target.

## Reporting and tenements

A review of the NORNICO and Oresome tenements has been undertaken with two tenements (EPM14406-Prospect and EPM13663-Minnamoolka Extended) being relinquished in full. The renewal for the Kokomo tenement (EPM 10699), has been granted for an additional 5 years to August 2013.

## Work program for the June Quarter 2009

In the three months to the end of June 2009 the following work is planned:

- Initiate 5,000m (~120 holes) Kokomo drilling programme to drill out the high grade Ni-Co resource to Indicated and Measured status
- Continue Kokomo Ni-Co metallurgical testwork
- Drill three angled holes across the granite-norite contact at Moonmyata, Additional drilling at Rudd Creek to follow up elevated geochemistry
- Drill out the Dry River copper deposit located approximately 25km northwest of Greenvale to an Indicated – Inferred status and explore for extensions below the zones of known mineralisation
- XRF geochemical prospecting and regional reconnaissance of various prospects, including Emma Creek, The Gum Creek Bore skarn and Junction Bore at Six Mile

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

The Lucky Break nickel project, located 140km west of Townsville, (see Figure 6) is a joint venture between Metals Finance Corporation (ASX: MFC) and Metallica.

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 60% 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 would provide Metallica with invaluable operational experience and know-how, ahead of the much larger scale NORNICO development.

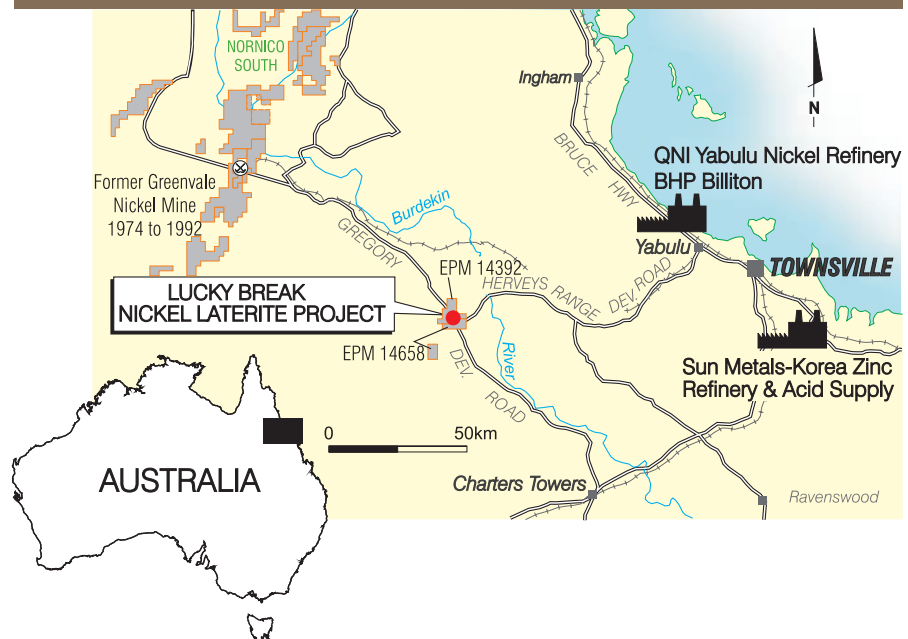
The deposit has an independently verified JORC resource of approximately 1.4 million tonnes as categorised in Table 6.

The Lucky Break Project comprises the Dingo Dam and The Circular Laterite Deposits. Details of the Mineral Resources contained within each deposit are tabulated in Table 6. Table 7 shows grade tonnage data for the nickel grade for the Lucky Break project.

MFC completed a comprehensive pilot programme on Lucky Break ore in May 2007. An independent feasibility study demonstrated that the project was technically and financially viable under the conditions prevailing at the time of the study and, as a consequence, Metals Finance and Metallica Minerals decided in June 2007 to progress towards implementation of the project.

The development of the project was delayed during the first half of 2008, due to a dispute with the project's planned acid supplier. In addition, recent fluctuation in acid price, changes in labour costs, fuel costs, steel costs, US/Aus \$ exchange rates and nickel markets, have all resulted in the need to review the Lucky Break

Figure 6 – Lucky Break Nickel Project Regional Setting



project in order to determine if there is an economically sound way to advance it.

MFC has completed a comprehensive review and revised feasibility study for the Lucky Break project, based on:

- Development of a smaller tonnage of significantly higher grade ore (approximately 1.4% nickel as opposed to the originally modelled 0.8% Ni)
- Downscaling of the project (approximately 750 tpa of nickel as opposed to 1,500 tpa)
- Simplification of the proposed flow sheet and production of a higher value nickel metal rather than the nickel carbonate/hydroxide product originally intended

The results of the current study show that the project is potentially more robust under the above conditions with updated projections illustrating:

- Significant reduction in acid consumption per pound of nickel produced
- Significantly lower capital cost (one third of that originally proposed)

- Higher potential revenue through the higher grade product

The current MFC financial model for the project indicates a positive NPV and Internal Rate of Return at global nickel value and acid price close to current levels (US\$5/lb Ni and assuming A\$80/tonne acid).

MFC has recommended discussions with potential acid suppliers and product offtake parties for the project, and intends to progress further studies over the coming months in relation to:

- Updating of permitting for the project
- Revised equipment quotes
- Further refinement of flow sheet and related test work
- Revised operating cost quotes
- Securing of acid supply agreement
- Securing of product off take agreement

Subject to the results of these studies MFC will then assess the potential for establishing a revised development timeline for Lucky Break.



Table 6: Lucky Break nickel resource (Dingo Dam and Circular Laterite)

Nickel deposit	Million Tonnes (Mt)	Ni (%)	Co (%)	Fe (%)	Mg (%)	Insitu contained Ni metal	Insitu contained Co metal
Dingo Dam							
Measured	640,700	0.82	0.06	13.1	3.7	5,25	360
Circular Laterite							
Indicated	850,700	0.72	0.04	11.1	4.3	6,12	340
<b>Total</b>	<b>1,491,400</b>	<b>0.76</b>	<b>0.05</b>	<b>12.0</b>	<b>4.1</b>	<b>11,375</b>	<b>700</b>

Note: 1. Mineral resources have been calculated using a 0.30% Nickel COG  
 2. Variations due to rounding  
 3. Resources prepared to JORC guideline  
 4. Competent Person Patrick Smith

Table 7: Lucky Break nickel resource using different cut off grades (COG)

Tonnes	COG	Ni (%)	Contained metal
303,600	1.00	1.34	4,070
421,360	0.90	1.23	5,180
560,970	0.80	1.13	6,340
722,220	0.70	1.05	7,580
905,070	0.60	0.96	8,690
1,106,290	0.50	0.89	9,840
1,341,310	0.40	0.81	10,860
1,491,400	0.30	0.76	11,375

# Bauxite

## MLM now holds approximately 32% of Cape Alumina

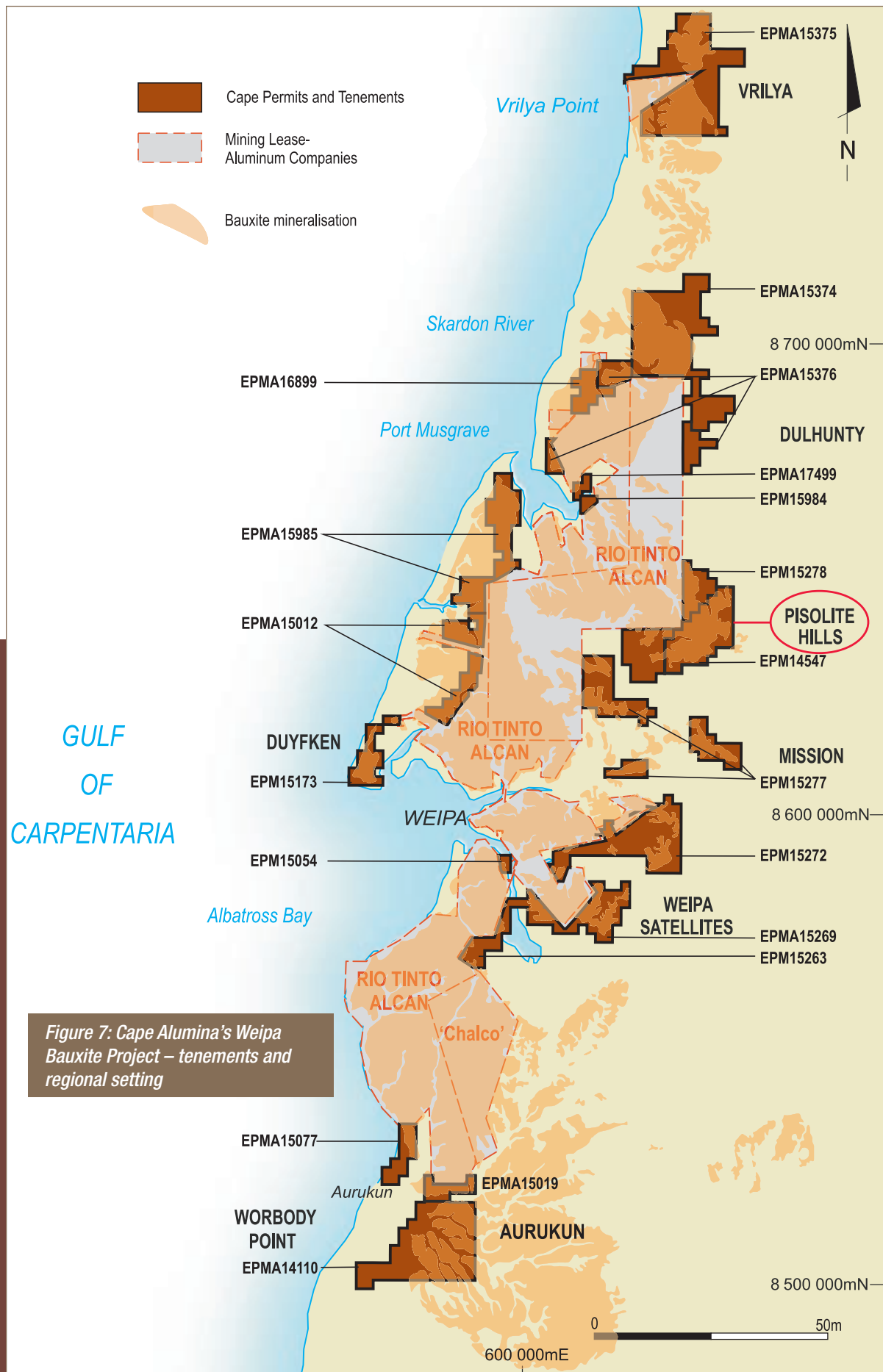
- MLM has a strategic 32% interest in specialist bauxite exploration and development company Cape Alumina, which holds 100% of the Weipa bauxite project located on Queensland's Western Cape York Peninsula (see Figure 2)
- Cape became listed on the ASX (code CBX) on 29 January, 2009 and was the only resource company to list on the ASX since September 2008
- Metallica's stake in the new bauxite listing comprises 42.3 million ordinary shares (32% of CBX)
- Offtake Agreement signed for 1 million tonnes of bauxite per annum to China.

- The Pisolite Hills resource model and an upgraded ore resource statement based on 438 additional holes (completed late 2008) is expected in the June quarter 2009
- Excellent progress on the Pisolite Hills Environmental Impact Study (EIS) including positive findings from hydrology studies
- Good progress in the negotiation of a landmark Indigenous Land Use Agreement (ILUA) for the Pisolite Hills project. Traditional Owners and Mapoon Deed of Grant in Trust (DOGIT) Trustees are working with Cape Alumina in a very positive and proactive approach

For further Information see  
 CBX ASX releases and website  
[www.capealumina.com.au](http://www.capealumina.com.au)

## About Cape Alumina and Pisolite Hills Bauxite Project

Cape Alumina is a Brisbane-based, Cape York Peninsula-focused emerging bauxite company. Cape Alumina has international support from Chinese alumina majors including Xinfu, one of China's largest aluminium and alumina producers. Cape Alumina is evaluating the development of the Pisolite Hills bauxite project, which is located 50km NE of Weipa on Cape York in Queensland. Cape Alumina plans to complete an Indigenous Land Use Agreement and Environmental Impact Statement in 2009 and Bankable Feasibility Study in early 2010. Project permits and approvals will be sought in 2010. Subject to positive feasibility study and successful financing, construction is expected to be carried out between 2011 and 2012 and bauxite production is planned to commence in 2012/2013 at the rate of 7Mtpa.



# Coal

## MetroCoal (MLM 84.2%) – SE QLD Coal Project

- Drilling program underway in MDLA 406 “Juandah” targeting the Macalister coal seams within the UCG Window
- MDLA 406 lodged over 60km<sup>2</sup> area with no overlapping petroleum tenure immediately down dip of the large Wandoan (Xstrata) coal deposits
- Combined UCG-GTL and Conventional Coal Strategy remains on track
- Nine exploration holes so far completed for 2,802m drilled

## Coal tenement portfolio

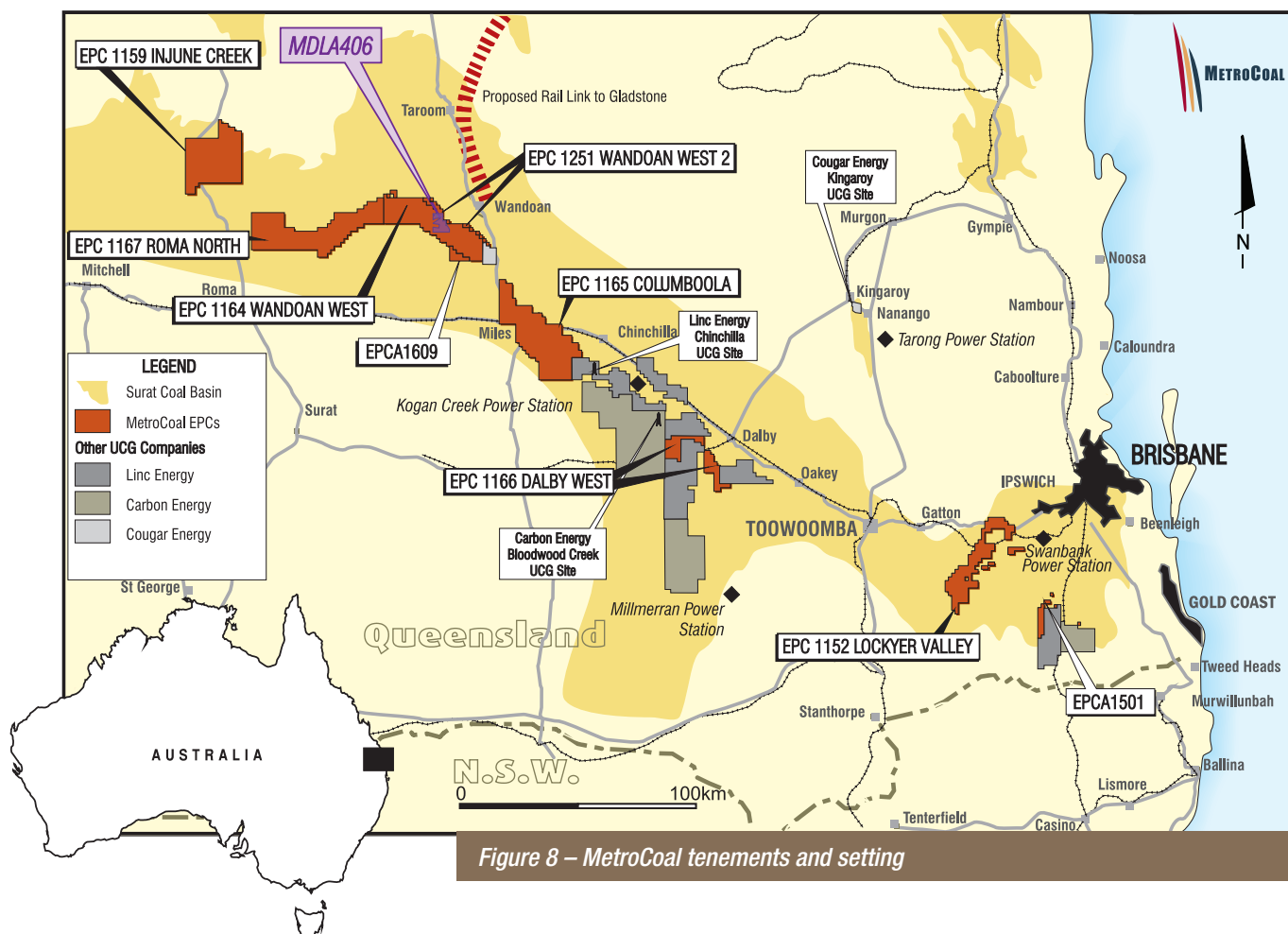
MetroCoal holds seven granted coal tenements (EPC's 1152, 1159, 1164-1167 and 1251) with two additional recently submitted applications in progress, covering over 4,000 square kilometres of coal bearing strata in the Surat and Moreton Coal Basins in southern Queensland (see Figure 8).

The region hosts a number of world class coal deposits and the MetroCoal tenements are directly down dip of well known shallow coal deposits including Wandoan (Xstrata), Elimatta (Northern Energy), Woori (previously Gulugaba, Cockatoo Coal), Camby 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 within the region.

A review of borehole data compiled from historic exploration reports completed by various exploration companies confirm that the majority of the known coal bearing strata in MetroCoal's tenements is between 100m to 400m below surface and several highly prospective target areas have been identified. In addition, where the coal is too shallow for UCG it may be economically mineable by underground mining methods and there may also be pockets of shallow, open pittable coal.

A big advantage of the UCG coal technology is that conventional mining can continue at shallower deposits, while UCG can be applied to the deeper portions of the coal deposits (see Figure 9).

The Queensland Government released their UCG Policy in February. This policy sets out a framework for the development of the UCG industry in Queensland. In terms of this policy, MetroCoal has exclusive tenure





over MDLA 406 and, in addition, MetroCoal will have priority over any areas that may be relinquished by the current petroleum tenement holders within the EPC's.

## Coal exploration

### HIGHLIGHTS

- Nine of the planned 15 drill holes within MDLA 406 completed, remainder to be completed next quarter
- Two core hole tails completed totalling 29.3m for coal quality analysis
- Hole locations based on preliminary geological model
- Exploration strategy is to increase target resource to Inferred and Indicated status level of confidence by way of the current program

On 24 March 2009 drilling commenced within MDLA 406. This second drilling program

follows the first phase of drilling completed in October 2008. A geological model constructed over large parts of EPC's 1164, 1251 and 1164 has been used to plan the 2009 exploration program and will form the basis for future resource estimation in the area.

Drilling will target the Macalister Seams, collectively made up of the Macalister Upper (MU), the Macalister Middle (MM) and the Macalister Lower (ML) in areas where they are interpreted to thicken and coalesce.

Most holes are PCD percussion and mud drilled, also referred to as "open" holes, and several holes will be cored through the Macalister Seam section for coal quality purposes. All holes will be wireline logged.

This relatively wide spaced drilling is the first step towards establishing a UCG resource. The 60km<sup>2</sup> tenement area near Wandoan has an exploration target(\*) of between 125 Mt and 155 Mt in the initial area of drilling. This target could be capable of supporting

a coal gas-to-liquids (GTL) plant producing 20,000 barrels of liquid fuels per day for more than 20 years and is expected to increase as the drilling program expands.

Drilling should be completed in April, and a following resource estimate is expected to be completed in May 2009.

Processing of exploration data is ongoing with the quoted seam picks (referred to in Table 8) being only at a preliminary stage pending further infill drilling. Coal quality assay results are pending.

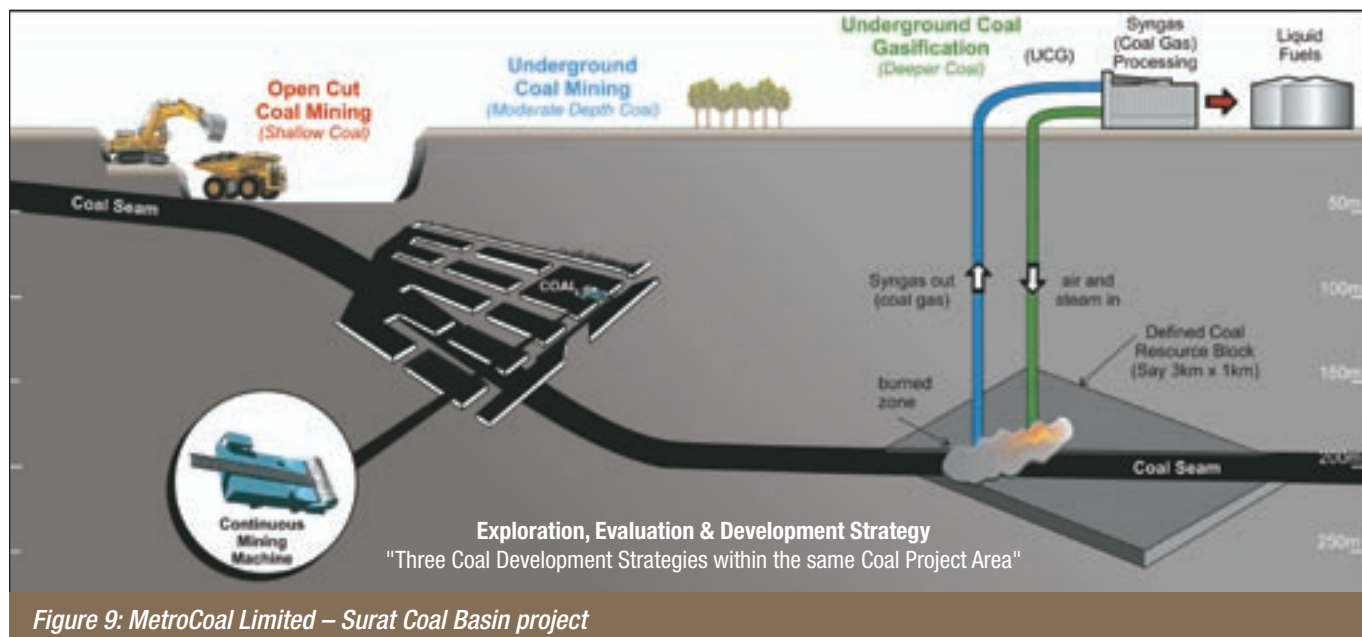
## Underground Coal Gasification (UCG)

UCG is a method of exploiting underground coal deposits typically 150m–350m (or even deeper) below surface without mining. The coal is gasified underground, in situ, by burning the coal seam in the presence of a controlled supply of oxygen, with the

Table 8: Drilling results form MDLA 406

Hole	Hole numbers	MGA 94 Easting*	MGA 94 Northing*	PCD	Core	Total Depth	Coal Roof	Coal Floor	Thickness	Unit	Potential working section
1	WW8	783,108	7,093,995	300		300	248.2#	248.8#	0.6	KO	
							253.3	254	0.7	KO	
							270	276.8	6.8	MU	11.6m @ 270m
							277.5	278.2	0.7	MU	
							279.4	281.6	2.2	ML	
2	WW8C	783,108	7,093,995	266	19.3	285.3					
3	WW9	780,999	7,095,337	300		300	247.3	251.5	4.2	MU	4.2m @ 247.3m
4	WW9C	780,999	7,095,337	244.8	10	254.8					
5	WW10	781,330	7,093,943	336		336	304.8	305.8	1.0	MU	3.9m @ 304.8m
							306.2	307.7	1.5	MU	
6	WW11	778,984	7,094,877	348		348	283.7	284.6	0.9	KO	
							292.3	295	2.7	MU	2.7m @ 292.3mm
							319.1	321.7	2.6	MM	
							329.2	331.8	2.6	ML	
7	WW12	783,000	7,095,000	312		312	246.1	249.2	3.1	MU	3.1m @ 246.1m
							266.9	268.5	1.6	ML	
8	WW13	782,000	7,094,300	342		342	291.8	292.7	0.9	KO	
							294.1	295.2	1.1	KO	
							300.3	302.6	2.3	MU	5.8m @ 300.3m
							303.7	304.6	0.9	MM	
							305.5	306.1	0.6	ML	
9	WW14	781,916	7,094,960	324		324	262.6	263.6	1.0	KO	
							274.3	277.3	3.0	MU	3.0m @ 274.3m
Total metres				2772.8	29.3	2802.1					

\*Survey pending #Preliminary seam picks, final interpretation pending



resulting coal gas, known as synthesis gas or syngas which is comprised principally of hydrogen, carbon monoxide, carbon dioxide, methane and water vapour. The resulting syngas is returned to the surface where it is cleaned and used for power generation and/or converted to liquids, such as clean diesel and other fuels, using new-age gas to liquids (GTL) technology. The process is ideally suited to carbon capture allowing the carbon footprint to be reduced to levels below that associated with conventional fuel production.

The UCG process does not involve mining and therefore has a limited impact on the surface and environmental controls, ensuring that sub surface aquifers are not adversely affected. A major attraction

of UCG is that it brings vast tonnages of otherwise stranded coal to account. The record oil prices over the past year, looming supply constraints, national energy independence concerns and a focus on alternative cleaner energy options will drive significant expansion of the UCG sector in the near and longer term.

Uhde Sheddon, a Thyssen Krupp company, has completed a comprehensive report describing the syngas conversion processes and resulting products that are technically and practically feasible. This work confirms the huge value locked into the deep (>150) coal that is realised through UCG. This information will be used in considering the technical options available to bring in UCG and

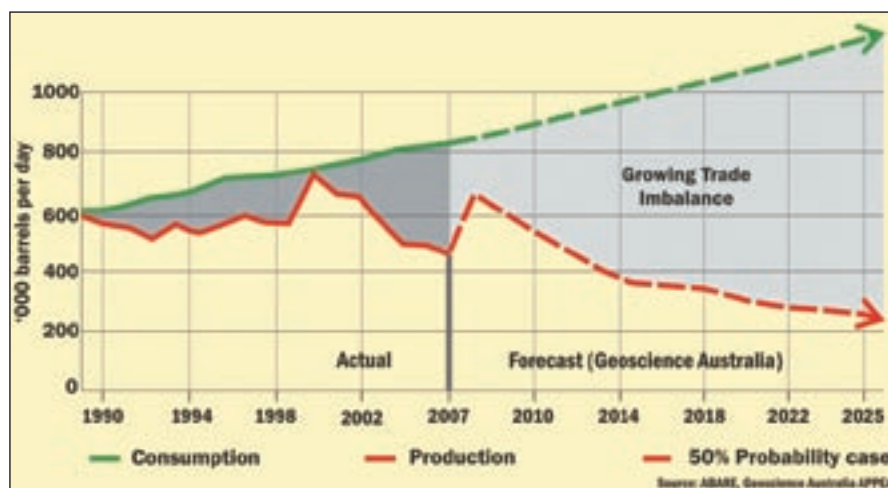
GTL expertise. As stated in the MetroCoal strategy the decision on a technology pathway will be made after more complete knowledge of the coal in the tenements has been gained.

Timing of this decision gives MetroCoal a substantial strategic advantage as a lot of developmental work is underway both in Australia and overseas and it is expected that there will be continuous improvement in all facets of the UCG-CTL industry over the next few years.

## Future fuels demand underpins UCG strategy

Forecasts of liquid fuel supply and demand carried out by various agencies all show Australia's growing trade imbalance and increasing reliance on imported liquid fuel. Figure 10 shows the forecasts sourced from ABARE, Geoscience Australia and APPEA. In 2015, based on these figures, Australia will be importing around 600,000 barrels a day which, at A\$100 per barrel, will cost almost A\$25 billion.

UCG-GTL can play a vital role in providing a secure alternative to these imports in the face of increasing global demand and tightening supply and MetroCoal's tenements provide an ideal base to participate in this future development.



## Conventional mining

MetroCoal is looking for areas where the coal seam structure would be suited to modern, mechanised underground mining systems and potentially even modest opencast mineable areas (see Figure 9). The coal in these shallower areas is not suited to UCG but could be economically mined and exported in the future. Discussions have commenced to obtain the necessary port and rail capacity.

Discussions are also continuing with potential Joint Venture partners to exploit these conventional mining opportunities.

### Competent person statement

The information in this statement that relates to targets is based on information compiled by GeoConsult and reviewed by Warwick Smyth, who is a member of the Australasian Institute of Mining and Metallurgy (CP) Geology; and the Australian Institute of Geoscientists. Warwick Smyth is a qualified geologist (BSc Geol, Grad Dip AF&I, MAusIMM (CP), MGSa, MAIG), and has over 17 years experience which is 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. Warwick Smyth 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.

The information in this statement that relates to in situ coal results are based on information compiled by Neil Mackenzie-Forbes, MetroCoal Ltd's coal geologist, who is a member of the Australian Institute of Geoscientists. 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.

# Limestone projects

## Metallica 100%

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

Phoenix Lime Pty Ltd (a wholly owned subsidiary of Metallica) holds 240 hectares of mining leases covering the 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. Metallica-Phoenix Lime is investigating the construction of a new lime kiln at the Ootann limestone quarry operation to support the NORNICO nickel project and service the growing regional market. During the December Quarter a comprehensive drilling program was completed on site. The June Quarter 2009 will see the completion of a detailed mine plan and a resource completed to JORC guidelines. The March Quarter saw continued sales of crushed limestone to the Tablelands Regional Council. This positive cash flow has assisted with holding and development costs associated with the project.

**Fairview** – Results of the drilling program completed in the December Quarter have

been used to define a resource at the Fairview limestone deposit to support the application for a Mineral Development Licence (MDL) lodged in May 2008. The MDL is yet to be granted.

**Boyne** – The two Boyne mining leases contain high quality limestone for crushed limestone and lime products suitable for markets in the Gladstone region. Field work and the preparation of a drilling program designed to define sufficient high grade limestone for a 20 year limestone quarry life was completed in the March Quarter. Proposed activities for the June Quarter 2009 include the completion of the drilling program and defining a resource within the Boyne SW mining lease.

**Star** – No field work or activities were undertaken during the March Quarter.

**Blue Rock** – This limestone deposit is conveniently located between Minnamoolka and Kokomo nickel deposits, approximately 60km from the proposed NORNICO nickel operation. Chip sampling taken during field work indicates the Blue Rock limestone outcrop to be predominantly high grade limestone averaging > 53.7% CaO.

**Mount Podge** – Since the granting of EPM17018 a review of historical data associated with the known limestone occurrences has been underway. At this stage we believe the Mount Podge limestone will prove suitable to provide lime and limestone to the developing North Queensland industrial market.





# Urquhart Point

## Heavy Mineral Sands (HMS) Project

### MLM 100%, Matilda Minerals Ltd can earn 70%

During October 2008 the Urquhart Point JV partner and manager Matilda Minerals Ltd went in to administration and no significant exploration was conducted on the project during the March Quarter.

### A high-grade zircon and rutile deposit

- Matilda (ASX: MAL) has identified an Indicated Resource of 2.8 million tonnes @ 7.0% heavy Mineral (HM) to a maximum depth of three metres
- 207 shell auger holes and 101 spiral auger holes were drilled at Urquhart Point on a nominal 200m by 30m grid. The valuable heavy mineral (VHM) suite is dominated by zircon and rutile. Based on data from six composite samples the likely VHM suite will contain an average of greater than 30% combined zircon and rutile, with most of the remainder being ilmenite and iron oxides. Significantly the non-

magnetic fraction is almost entirely zircon and rutile with very small percentages of trash minerals

- Significantly mineralised heavy mineral (HM) strands extend for over 5 kilometres (see Figure 11)
- Analysis indicates approximately 30% of the HM will be high quality zircon and rutile
- Results indicate low slimes and thus low cost processing and rehabilitation
- Nine kilometres of coastline still to be tested at Urquhart Point prospect

The exploration comments have been prepared by Mr Roger Hobbs BAppSc (Geophys & Geol), MAusIMM, an Executive Director of Matilda, 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.

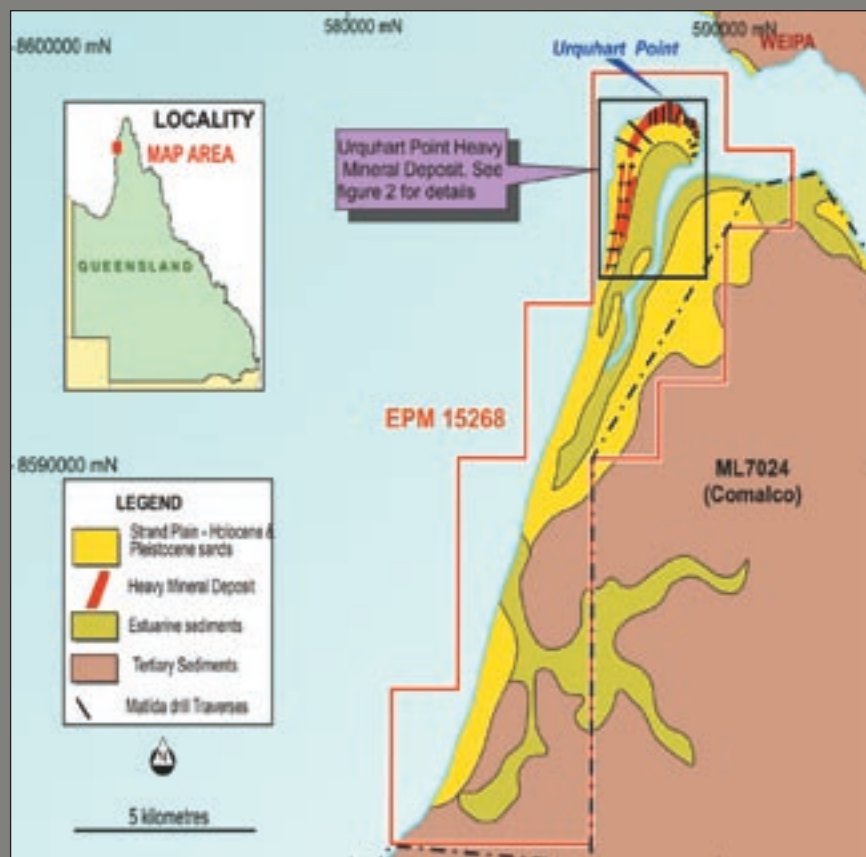


Figure 11: Urquhart Point Heavy Mineral Sands Project



*Metro Coal drilling on its Surat coal project (March 2009)*

# Tenement schedule (as at 31st March 2009)

## Nickel-Cobalt projects

Tenement	Project Name	Holder/ Applicant	Status (expiry date)	No. Sub Block	Commodity Targeted	Min. Annual 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 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	\$50,000
EPM 10235	Minnamoolka	NORNICO Pty Ltd	Granted (8/9/2008)*	5	Ni , Co	\$50,000
EPM 10699	Kokomo	NORNICO Pty Ltd	Granted (21/8/2008)*	21	Ni , Co, Sc, Au, PGE	\$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	\$40,000
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	\$30,000
EPM 14273	Moonmyata	NORNICO Pty Ltd	Granted (22/12/2012)	8	Ni , Co, Au , PGE	\$40,000
EPM 14381	Greenvale South 2	NORNICO Pty Ltd	Granted (14/12/2009)	15	Ni , Co, Cu	\$40,000
EPM 14392	Lucky Break	NORNICO Pty Ltd	Granted (29/6/2009)*	16	Ni , Co	\$40,000
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	\$40,000
EPM 15924	Gunnawarra	NORNICO Pty Ltd	Granted (7/12/2011)	6	Earthy dolomite	\$13,000
EPMA 17707	Pinnacles	NORNICO Pty Ltd	Application	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

Note: NORNICO Pty Ltd previously named QLD Gold Pty Ltd.  
NORNICO is held by Metallica Minerals Ltd 100%.



## Coal projects (MetroCoal Ltd)

Tenement	Project Name	Holder/ Applicant	Status (expiry date)	No. Sub Block	Commodity Targeted	Min. Annual Expenditure
EPC 1152	Lockyer Valley	MetroCoal Limited	Granted (11/12/2012)	150	Open Cut Thermal Coal & UCG	\$60,000
EPC 1159	Injune Creek	MetroCoal Limited	Granted (11/12/2010)	237	Open Cut Thermal Coal & UCG	\$55,000
EPC 1164	Wandoan West	MetroCoal Limited	Granted (11/12/2010)	215	UCG & UC	\$55,000
EPC 1165	Columboola	MetroCoal Limited	Granted (9/12/2010)	294	UCG & UC	\$55,000
EPC 1166	Dalby West	MetroCoal Limited	Granted (11/12/2012)	97	UCG & UC	\$60,000
EPC 1167	Roma North	MetroCoal Limited	Granted (11/12/2010)	289	UCG & UC	\$55,000
EPC 1251	Wandoan West 2	MetroCoal Limited	Granted (16/9/2013)	19	UCG & UC	\$20,000
EPCA 1501	Dugandan	MetroCoal Limited	Application	93	UCG & UC	\$40,000
EPCA 1609	Wandoan West 3	MetroCoal Limited	Application	18	UCG & UC	\$40,000
EPCA 1610	Wandoan West 4	MetroCoal Limited	Application	19	UCG & UC	\$40,000
EPCA 1640	Pentland South	MetroCoal Limited	Application	114	UCG & UC	\$120,000
MDLA 406	Juandah	MetroCoal Limited	Application	4986 ha	UCG & UC	\$330,000

Note: MetroCoal Limited owned 84% by Metallica Minerals Limited. All tenements held 100% by MetroCoal.

## Limestone projects

Tenement	Project Name	Holder/ Applicant	Status (expiry date)	No. Sub Block	Commodity Targeted	Min. Annual 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 (23/10/2007)*	2	Limestone	\$60,000
EPM 17018	Mt Podge	Phoenix Lime Pty Ltd	Granted (12/2/2014)	4	Limestone	\$22,500
MDLA 394	Fairview	Metallica Minerals Ltd	Application	776.6 Ha	Limestone	\$50,000
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

Note: Phoenix Lime Pty Ltd is a 100% subsidiary of Metallica.

## Gold, precious and base metals, other projects

Tenement	Project Name	Holder/ Applicant	Status (expiry date)	No. Sub Block	Commodity Targeted	Min. Annual Expenditure
EPM 13873	Six Mile	NORNICO Pty Ltd	Granted (10/12/2007)*	51	Gold, Copper	\$50,000
EPM 14477	Texas North	Oresome Australia Pty Ltd	Granted (22/08/2009)	11	Au, Ag	\$40,000
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
EPMA 15371	Doughboy	Oresome Australia Pty Ltd	Offered for grant	16	Rutile, Zircon, HMS	\$15,000
EPMA 15372	Jardine	Oresome Australia Pty Ltd	Offered for grant	45	Rutile, Zircon, HMS	\$15,000
EPM 15848	Tondoon	Oresome Australia Pty Ltd	Granted (22/05/2013)	18	Bauxite	\$17,000
EPMA 18015	Jackson River #2	Oresome Australia Pty Ltd	Application	3	Rutile, Zircon, HMS	\$15,000

Note: Oresome Australia Pty Ltd is owned 100% by Metallica Minerals Limited.

Note:

(\*) In Renewal

PGE = Platinum Group Elements, HMS = Heavy Mineral Sands,

All tenements 100% held unless expressed otherwise

NORNICO Pty Ltd previously named QLD Gold Pty Ltd

EPM = Exploration Permit for Minerals

EPMA = Application for Exploration Permit for Minerals

EPC = Exploration Permit for Coal

EPCA = Application for Exploration Permit for Coal

ML = Mining Lease

MLA = Application for Mining Lease

MDL = Mineral Development Licence

MDLA = Mineral Development Licence Application

UCG = Underground Coal Gasification targeted

UC = Underground Coal (conventional) mining targeted

[illegible]



# 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	March 31, 2009

### Consolidated statement of cash flows

	Cash flows related to operating activities	Current quarter \$A'000	Year to date (9 months) \$A'000
1.1	Receipts from product sales and related debtors	298	491
1.2	Payments for		
	(a) exploration and evaluation	(674)	(4,605)
	(b) development		
	(c) production	(125)	(125)
	(d) administration	(747)	(2,383)
1.3	Dividends received		
1.4	Interest and other items of a similar nature received	653	913
1.5	Interest and other costs of finance paid		
1.6	Income taxes paid		
1.7	Other (provide details if material)		121
	<b>Net Operating Cash Flows</b>	<b>(595)</b>	<b>(5,588)</b>
	<b>Cash flows related to investing activities</b>		
1.8	Payment for purchases of:		
	(a) prospects		
	(b) equity investments – shares in Cape Alumina Limited and other share investments	(637)	(1,812)
	(c) other fixed assets	(4)	(46)
1.9	Proceeds from sale of:		
	(a) prospects		
	(b) equity investments – shares in Cockatoo Coal Limited		
	(c) other fixed assets		
1.10	Loans to other entities – Cape Alumina Limited and Queensland Gold and Minerals Limited	(392)	(792)
1.11	Loans repaid by other entities – Cape Alumina Limited	500	500
1.12	Other (provide details if material)		
	<b>Net investing cash flows</b>	<b>(533)</b>	<b>17,650</b>
1.13	Total operating and investing cash flows (carried forward)	(1,128)	12,062
	<b>Cash flows related to financing activities</b>		
1.14	Proceeds from issues of shares, options, etc.		426
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)Sale of coal subsidiary companies		
	<b>Net financing cash flows</b>		
	Net increase (decrease) in cash held	(1,128)	12,488
1.20	Cash at beginning of quarter/year to date	21,072	7,456
1.21	Exchange rate adjustments to item 1.20		
1.22	<b>Cash at end of quarter</b>	<b>19,944</b>	<b>19,944</b>

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

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

		Current quarter \$A'000
1.23	Aggregate amount of payments to the parties included in item 1.2	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 \$19,944,000 includes \$440,000 held by an 84% owned subsidiary, Metrocoal Limited	

## Non-cash financing and investing activities

		Current quarter \$A'000
2.1	Details of financing and investing transactions which have had a material effect on consolidated assets and liabilities but did not involve cash flows	
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 \$A'000	Amount used \$A'000
3.1	Loan facilities		
3.2	Credit standby arrangements		

## Estimated cash outflows for next quarter

		\$A'000
4.1	Exploration and evaluation	900
4.2	Development	
	<b>Total</b>	<b>900</b>

## 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 \$A'000	Previous quarter \$A'000
5.1	Cash on hand and at bank	4,837	863
5.2	Deposits at call	15,107	20,209
5.3	Bank overdraft		
5.4	Other (provide details)		
	<b>Total: cash at end of quarter (item 1.22)</b>	<b>19,944</b>	<b>21,072</b>

## Changes in interests in mining tenements

		Tenement reference	Nature of interest (note 2)	Interest at beginning of quarter	Interest at end of quarter
6.1	Interests in mining tenements relinquished, reduced or lapsed	EPM 13663 EPM 14406 EPMA 15370	Exploration Permit Exploration Permit Exploration Permit (partial relinquishment)	EPM EPM EPM	None None EPM (reduced)
6.2	Interests in mining tenements acquired or increased	MDLA 406  EPMA 17018  EPMA 18015	Mining Development Lease Application Exploration Permit Application Exploration Permit Application	N/A  N/A  N/A	MDLA  EPMA  EPMA

## Issued and quoted securities at end of current quarter

		Total number	Number quoted	Issue price per security (see note 3) (cents)	Amount paid up per security (see note 3) (cents)
7.1	Preference +securities (description)				
7.2	Changes during quarter (a) Increases through issues (b) Decreases through returns of capital, buy-backs, redemptions				
7.3	*Ordinary securities	114,562,628	114,562,628		
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 (description and conversion factor)	2,000,000 Unlisted Options 500,000 Unlisted Options 2,250,000 Unlisted options  400,000 Unlisted Options 500,000 Unlisted Options		<b>Exercise price</b> 50 cents  25 cents  80 cents  30 cents  65 cents	<b>Expiry date</b> 31 Dec 2009  31 Dec 2009  31 Dec 2009 (vest 1 year after issue if employed) 31 Dec 2009  28 Sept 2012 (vest on 28 Sept 2009 if still employed)



		Total number	Number quoted	Issue price per security (see note 3) (cents)	Amount paid up per security (see note 3) (cents)
		500,000 Unlisted options	80 cents		31 Dec 2010
		600,000 Unlisted options	65 cents		28 September 2012 (do not vest until 28 Sept 2009)
7.8	Issued during quarter				
7.9	Exercised during quarter				
7.10	Expired during quarter	1,000,000 Unlisted options		30 cents	21 March 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.

Sign here:..........Date: April 29, 2009

(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 quoted securities The issue price and amount paid up is not required in items 7.1 and 7.3 for fully paid securities.
- 4 The definitions in, and provisions of, AASB 1022: Accounting for Extractive Industries and AASB 1026: Statement of Cash Flows apply to this report.
- 5 Accounting Standards ASX will accept, for example, the use of International Accounting Standards for foreign entities. If the standards used do not address a topic, the Australian standard on that topic (if any) must be complied with.



An emerging, 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