METALLICA MINERALS LIMITED

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ASX AND MEDIA RELEASE - 22 FEBRUARY 2007

EXCELLENT NICKEL LEACHING TESTWORK RESULTS

Metallica is pleased to report that excellent results have been received from ongoing nickel leaching testwork on NORNICO and Lucky Break nickel oretypes. The testwork is being undertaken by HRL Testing (HRL) in Brisbane and Metals Finance Corp (MFC).

A range of representative nickel laterite samples have been tested from NORNICO and Lucky Break projects. To date, all have leached well providing highly encouraging nickel extractions and rates with generally modest acid consumption.

Nickel leaching testwork so far has shown all the ores tested to be highly amenable to dilute acid leaching (under both heap and vat conditions) of Ni-Co at ambient temperature.

Most significant results of the heap leach testwork (see table attached) are:-

Photo – Top of loaded large leaching column (4m high by 1.6m diameter) with agglomerated nickel laterite ore.

By HRL in 3m high columns

- **Minnamoolka sample - 85% Ni extraction after tail assays (previously reported 65%)**
- **Bell Creek South sample - 67% Ni extraction in 47 days (still leaching) – see graph attached**

By MFC in 4m high Columns

- **Bell Creek South &North sample - 65% Ni extraction in 57 days (still leaching)**
- **Lucky Break sample – 85% Ni extraction in 87 days (completed leaching)**

These results support the target range of nickel extraction rates of 65-85% within 4-9 months, and acid consumptions of 300-500 kg acid/t ore. The average nickel extraction range currently being proposed for the feasibility studies is 70-75% after 150-250 day leaching cycle using a nominal 4 m heap height.

Both pilot field scale and laboratory metallurgical testwork for heap leaching are well advanced and the precipitation testwork (both hydroxide and sulphide intermediate product) has been commissioned.

Managing Director, Mr Andrew Gillies said, “in addition to having a sizeable resource base, which we have so far defined as 222,000 tonnes of contained nickel at Bell Creek and Minnamoolka (*see ASX Release 23 November 2006*) we are steadily establishing that a range of our nickel laterite ores are highly amenable to heap leaching using dilute sulphuric acid. These are the two key criteria for us to establish a low capital cost, high margin and long life nickel operation”.

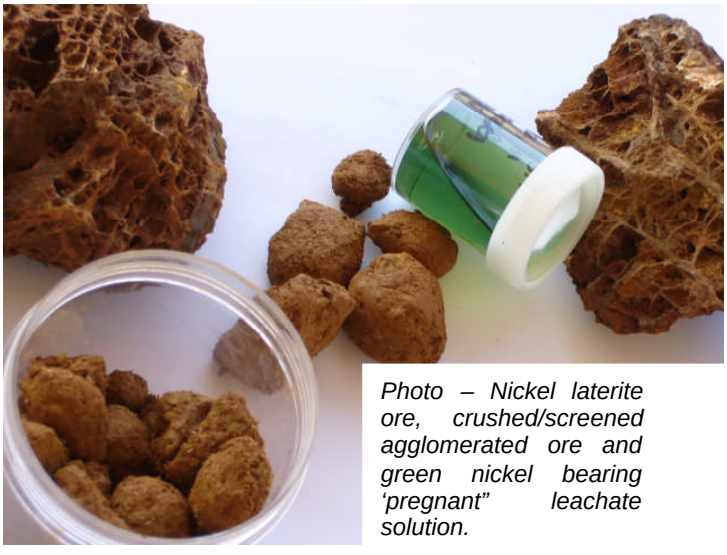

Photo – Nickel laterite ore, crushed/screened agglomerated ore and green nickel bearing ‘pregnant” leachate solution.

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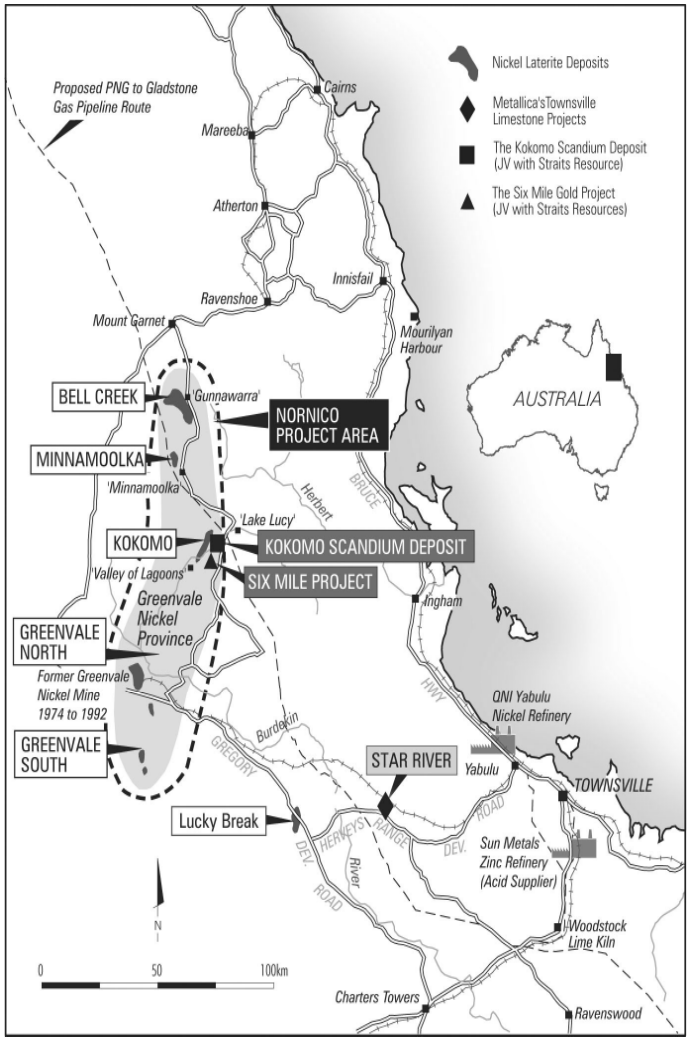
NORNICO Testwork & Update

Metallurgical testwork continued at both the HRL Testing (HRL) in Brisbane and at the Metals Finance Corporation (MFC) pilot plant at Charters Towers.

The Minnamoolka 3 metre high column leach test at HRL was shutdown after a period of 415 days. The nickel extraction was 85.1 %w/w (previously reported as 65% before tail assays) and the acid consumption was 264 kg/t. The column test was undertaken using very conservative parameters such as relatively low acid leachate and irrigation rates. The column was water washed for 60 days to pH neutral and then broken down in intervals for analysis. Water irrigation rate testing showed the agglomerates could support very high flow rates without slumping.

At HRL, a sample of Bell Creek South ore was agglomerated with acid addition and loaded into a 150mm diameter column to a height of 3 m. The agglomerates are being irrigated using a dilute sulphuric acid leachate in an open circuit. After a period of 47 days, the nickel extraction was 67%w/w (based on a presumed head assay from figures provided by Metallica and pregnant liquor solution (PLS) assays). The acid consumption was 438 kg/t of ore. This test is expected to operate for up to 120 days.



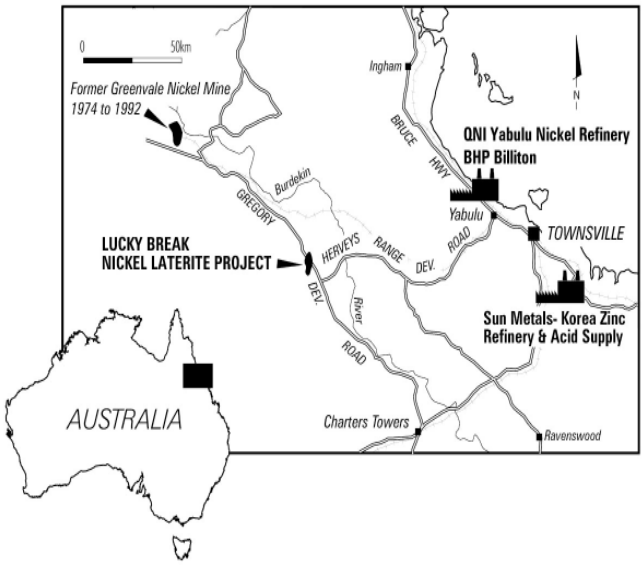
In addition a number of small 1.0 metre high columns for diagnostic tests have been undertaken and are ongoing (not reported on) which confirm that the leach cycle time can be reduced considerably resulting in very fast leach times. While leaching rates are quicker they are treated as diagnostic tests only in preparation for establishing leaching parameters for the larger 3-4m column tests which are more representative in the simulation of practical heap leaching conditions.

High grade Bell Creek nickel laterite being leached by MFC in large columns have recorded higher extraction rates, with up to 65% nickel extraction in 57 days, see table attached.

Precipitation testwork, using pregnant solution collected during the column leaching work to confirm the proposed base case Ni-Co hydroxide treatment route as well as other secondary options, has been initiated.

The Pre-feasibility Study is expected to be completed in the first half of 2007.

In-fill and step-out resource drilling has started on the Bell Creek nickel deposits. In conjunction with drilling, condemnation drilling over proposed NORNICO site infrastructure and development areas will also be completed (*see ASX release 20 February 2007*).



Lucky Break Testwork & Update

Metallurgical testwork on Lucky Break nickel ores continued at both HRL and at the MFC pilot plant at Charters Towers. A bulk sample of Lucky Break ore was agglomerated with acid and water addition, then loaded into a 150mm diameter column to a height of 3.5m. The agglomerates are currently being irrigated using a dilute sulphuric acid leachate in an open circuit manner.

Nickel extraction in the 3.5 metre high laboratory column loaded with agglomerated Lucky Break ore recorded 67% after a period of 338 days leaching and the acid consumption is 429 kg/t. Vat leaching testwork for the same period has achieved similar Ni extraction (66%) but at a marginally higher acid consumption.

High grade Lucky Break nickel laterite being leached by MFC in large columns have recorded higher extraction rates, with up to 85% nickel extraction in 87 days, see table attached.

Whilst initial observations of the MFC operated pilot plant heap leaching process (getting nickel in solution "front-end") are very positive, final process flow sheet development testwork for the "back-end" (getting nickel out of solution to a saleable product) treatment plant will be undertaken in late February-March 2007.

Detailed site layouts have been completed and preliminary process design is progressing awaiting final metallurgical results. MFC are presently preparing a detailed feasibility study which is due for completion at the end of the March 2007.

General Comment

With approximately 6 tonne samples and 4 m high columns, the pilot plant is considered to be a much better simulation of a commercial scale heap leaching operation than laboratory bench-tests. The column leaching recorded in the pilot plant was achieved in about one-third of the time indicated by the earlier more conservative laboratory testing (and for example the Minnamoolka column), mainly due to increased irrigation rate and acid strength in the leachate.

There are a number of contributing factors – but principally:

- The large MFC columns have been operated at a higher flow rate than the HRL laboratory columns.
- Acid concentration in the MFC columns has been maintained at a higher level than the HRL tests.

Higher operating temperature in the field pilot tests may be a further contributing factor to the results. However, it is clear from the above that there is a dramatic difference in the 'acid flux rate' (kg acid per tonne ore per day) between the two programmes – this being the primary driver behind the increased rate of leaching. The agglomerates have remained stable through the leaching test programme to date, with only minor slumping occurring and that is within expectations.

The higher-than-expected nickel recovery rates for Metallica Minerals Limited are very encouraging for the development prospects of its NORNICO and Lucky Break heap leach nickel projects, as they are significantly higher and faster than anticipated from earlier laboratory bench-testing undertaken in Brisbane.

The full testing program from the pilot plant, built and managed by MFC to test treat ore from the Lucky Break deposit will provide the technical data on which a development decision for the Lucky Break project will be made and be incorporated into the feasibility study for the much larger NORNICO heap leach nickel project.

A.L. Gillies BSc, M. AusIMM
Managing Director

"Metallica has a clear objective and strategy to achieve lower capital cost, high margin long-life nickel production"

The technical information contained in this report has also been summarised and compiled by Andrew Gillies B.Sc, M.AusIMM, who is the competent person and member of the Australasian Institute of Mining and Metallurgy. Mr Gillies has relevant experience to the mineralisation and the test work results provided by HRL and MFC being reported on to qualify as a Competent Person as defined by the Australasian Code for Reporting of Minerals Resources and Reserves. Mr Gillies consents to the inclusion in the report of the matters based on the information in the form and context in which it appears.

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HRL Nickel-Cobalt Leach Test Results

Sample	Start Column Leach Height	Number Days Leaching	Extraction: Nickel % w/w	Extraction: Cobalt % w/w	Column Head Grade Ni %	Acid kg/t ore Consumption	Notes
Minnamoolka Column (Agglomerated)	2.8m (150 mm Ø)	415	85.1 (Previously Reported as 65%)	79.04	**0.86** (8.3% Fe, 6.5% Mg)	264	• Completed, extractions based on tail assays • Excellent permeability • Conservative irrigation + acid addition • Silica Box Oretype dominant.
Bell Creek South Column (Agglomerated)	3.1m (150 mm Ø)	47	67.6	47.0	1.43 (11.65% Fe,13.5% Mg)	438	• Presumed head assays pending
Lucky Break Column (Agglomerated)	3.5m (150 mm Ø)	338	66.9	39.7	1.66 (14.5% Fe, 4.96% Mg)	430	• Slow start • Conservative irrigation + acid addition
Lucky Break Column Vat (Agglomerated)	3.6m (150 mm Ø)	338	66.2	48.8	1.66 (14.5% Fe, 4.96% Mg)	~500	• Same sample as above • Column flooded to simulate Vat leaching

(Note 1:- Except for the Minnamoolka Column, the results must be regarded as preliminary, until the leaches are 'broken down' and residue assays and dry weight are obtained and cross checked against the operating data. The Vat leach test was undertaken using similar conditions and ore as the column leach, however the column was flooded with leach solution forming a vat or tank leach environment.

MFC Nickel-Cobalt Leach Test Results

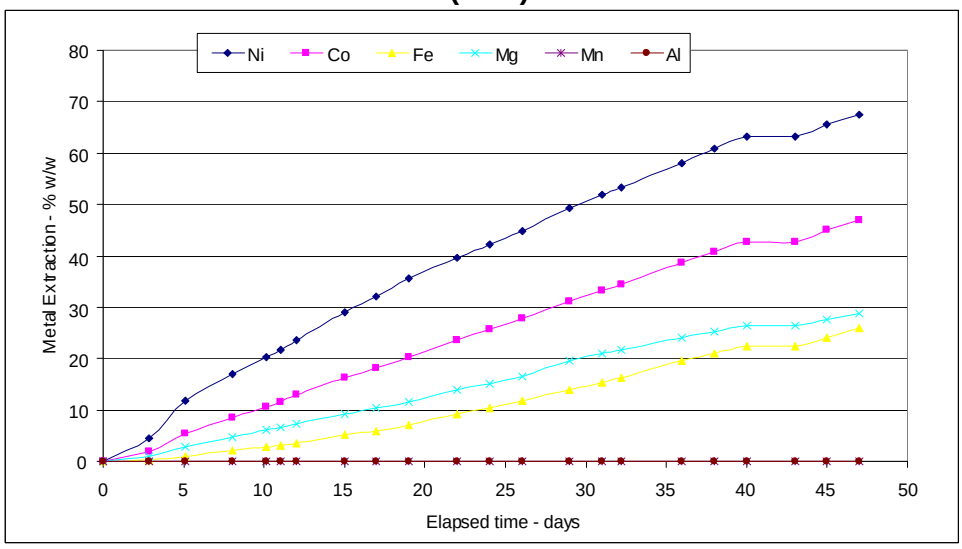
Sample	Column/Crib height (m)	Number days leaching	Column Head Grade Ni%	Nickel Extraction vs head grade %	General Notes
Lucky Break Vat 1	1	40	1.83	86	Test complete, recovery based on tails assay
Luck Break Vat 2	2	51	1.71	79	High flow test
Lucky Break Vat 3	1	32	1.91	50	Moderate flow, moderate acid
Lucky Break Column 1	4	87	1.93	85	Test completed, Tail assays net yet received.
Lucky Break Column 2	4	50	1.94	45	High pH at beginning of leach
Lucky Break Column 3	4	63	0.95	50	Low grade ore
Lucky Break Column 4	2	56	2.35	68	Shallow lift test
Bell Creek South Column 5	4	65	1.81	40	Finer and more clayey laterite oretype than 6.
Bell Creek S&N Column 6	4	57	2.14	65	Blended ore – incl silica box oretype.

Note 1:- Except for Lucky Break Vat 1, the results must be regarded as preliminary, until the leaches are 'broken down' and residue (or tail) assays and dry weight are obtained, and cross checked against the operating data. Note 2:- The Vat leach tests were undertaken using similar conditions and ore as the column leach, however the column was flooded with leach solution forming a vat or tank leach environment. Note 3:- Except for Lucky Break Vat1, all results are based on presumed head assay and pregnant liquor samples (PLS) ie no tail analysis.

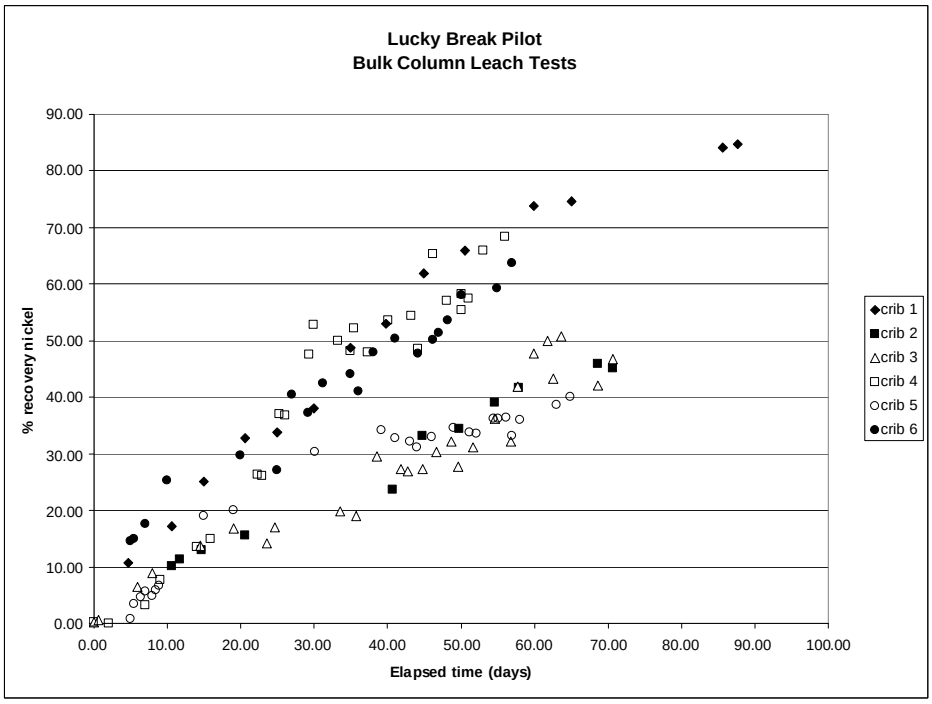
Note 4:- Large Column are 1.66 m Ø and the Vats are 1.1m Ø.

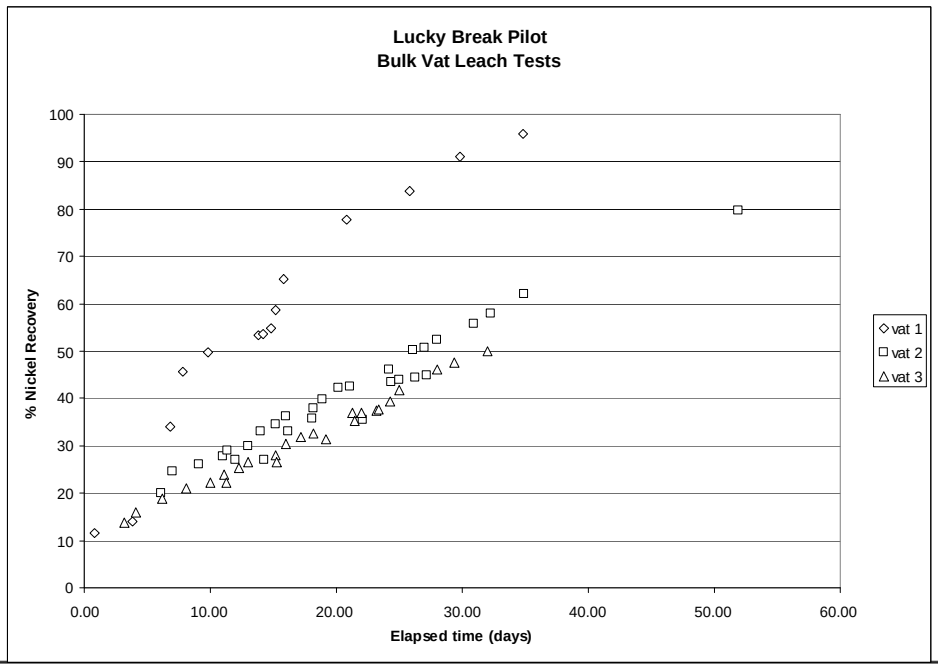
Note 5:- No progressive or final acid consumption rates have been calculated at time of MFC's reporting.

Bell Creek South Column Leach (HRL) Test - Metal Extraction vs Time



Lucky Break Column & Vat Leach (MFC) Test - Metal Extraction vs Time





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