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Manager Announcements  
Company Announcements Office  
Australian Securities Exchange  
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SYDNEY NSW 2000

*via electronic lodgement*

## **50% RESOURCE UPGRADE FOR SANTA RITA UNDERGROUND PROJECT AND RESULTS OF SCOPING STUDY**

**PERTH, AUSTRALIA.** Mirabela Nickel Limited (TSX: MNB, ASX: MBN) is pleased to announce an upgrade to the underground resource for Santa Rita as follows:

**Santa Rita underground resource February 2009**

<b>JORC/Ni 43.101 status</b>	<b>Million Tonnes</b>	<b>Ni</b>	<b>Cu</b>
Inferred Resource	87.5	0.79%	0.23%

Contained nickel – 690,000t (1,500MM lbs)

This represents a 53% increase in contained nickel compared to the previous inferred resource estimate of 55mt at 0.82% Ni.

The resource upgrade is based upon the results of three additional holes recently announced for the underground drilling program. About 97% of the underground resource is contained within one continuous zone of mineralization, with the remaining 3% of the resource located within two footwall horizons. The main resource has an average true width of about 80m, a strike length of 600m, and an average dip of 45°. The resource remains open at depth and along strike both to the north and the south.

The resource has a vertical extent of about 550m, representing 1,260t of contained Ni per vertical meter. This is considered a high tonnes per vertical metre compared to industry averages for underground nickel mines, which means capitalized underground development can be reduced on a produced unit of nickel basis. The upper limit of the resource is located about 650m deep (at -450mRL), as defined by the base of the indicated and inferred resource within open-pit limits.

Further drilling is planned, but is awaiting completion of Santa Rita project financing. The location of the Inferred underground resource is shown in the attached schematic longsection.

### Scoping study results

A positive scoping study has provided the following estimates for the underground mining project based on a 5mtpa production rate using an inclined conveyor system and sublevel open stoping with paste backfill:

- Capital cost to full production - US\$235m (excluding concentrator expansion)
- Post production capital - US\$70m
- Sustaining capital - US\$8m pa from year 6
- Mining cost (including development) - US\$32 pt
- All costs have an accuracy of +/- 30%.

In addition, the estimated Ni recovery is 76% and the estimated ore dilution is 6%.

*Caution: Inferred resources are, by definition, of insufficient confidence to have economic considerations applied that would enable them to be categorised as mineral reserves, and there is no certainty that any preliminary assessment will be realised in respect of such resources.*

Work is continuing on the underground study and is comprised of detailed mine and scenario planning, geotechnical studies and paste fill characterisation based on tailings.

A 5mtpa underground production capacity would require an expansion of the existing mill facilities to about 11mtpa. This would result in an additional 28,000tpa of nickel production for a total of 55,000tpa of nickel in concentrate. There is currently no cost estimate for such a plant expansion. Such expansion would not require any substantial improvement in infrastructure. The Company intends to study the optimal economic and operational balance between the open-pit, underground and possible mill expansions.

*For and on behalf of the Board*

### Background

Mirabela Nickel Ltd owns 100% of the world class Santa Rita nickel sulphide project and is listed on the Australian and Toronto stock exchanges. With a JORC Indicated open-cut resource of 130mt grading 0.60% Ni for 780,000t of contained Ni, Santa Rita is the largest nickel sulphide discovery world-wide in the last 12 years.

Construction of a 6.4mtpa nickel sulphide concentrator commenced in November 2007. Construction is now about 80% complete and the project remains on track to commence production mid 2009.

The plant will produce 18,500tpa of nickel in a sulphide concentrate from one open-cut mine starting from mid 2009 increasing to 27,000tpa by mid 2010. At this rate of production the project will have a mine life of at least 20 years.

Photos of the construction progress are available on the Company website at:

[http://www.mirabela.com.au/projects\\_galleries.asp](http://www.mirabela.com.au/projects_galleries.asp).

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**Disclaimer:** *The information in this report that relates to Mineral Resources and Exploration Results is based on information compiled by Lauritz Barnes who is a Member of The Australian Institute of Geoscientists, and Brett Gossage, who is a Member of The Australasia Institute of Mining and Metallurgy. Lauritz Barnes is consultant to Mirabela Nickel Limited. Brett Gossage is the Senior Principal with Coffey Mining Pty Ltd, independent resource consultants engaged by Mirabela Nickel Limited.*

*Lauritz Barnes and Brett Gossage have sufficient experience which is relevant to the style of mineralization and 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 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserve' and are each a Qualified Person in accordance with NI 43-101. Lauritz Barnes and Brett Gossage consent to the inclusion in the report of the matters based on their information in the form and context in which it appears.*

*The information in this report that relates to mining production and cost estimation is based on information compiled by Carlos Guzman who is a professional Mining Engineer and Project Manager with NCL Brasil and a Member of the Australasian Institute of Mining and Metallurgy and is a Qualified Person in accordance with NI 43-101. Carlos Guzman is a consultant to Mirabela Nickel Limited. Mr. Guzman consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.*

*All other technical information in this report has been reviewed by Nicholas Poll, who is a Member of The Australasia Institute of Mining and Metallurgy. Nicholas Poll is the Managing Director of the Company. Nicholas Poll consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.*

*Caution Regarding Inferred Resources: Inferred resources are, by definition, of insufficient confidence to have economic considerations applied that would enable them to be categorised as mineral reserves, and there is no certainty that any preliminary assessment will be realised in respect of such resources.*

*Caution Regarding Forward Looking Statements: The forward-looking statements made in this announcement are based on assumptions and judgments of management regarding future events and results. Such forward-looking statements, including but not limited to those with respect to reserve targets or the development of a mine at Santa Rita and the Company's capital expenditures and estimated future production involve known and unknown risks, uncertainties, and other factors which may cause the actual results, performance or achievements of the Company to be materially different from any anticipated future results, performance or achievements expressed or implied by such forward-looking statements. Such factors include, among others, the actual market prices of nickel, the actual results of current exploration, the actual results of future mining, processing and development activities, changes in project parameters as plans continue to be evaluated, as well as those factors disclosed in the Company's filed documents.*

