



NIAGARA
MINING LIMITED
ABN 60 060 525 206

Unit 8, Level 1, Churchill Court
331-335 Hay Street
Subiaco WA 6008
PO Box 190
West Perth WA 6872
Tel: +61 8 9382 8799
Fax: +61 8 9382 4760

12 January 2006

Company Announcements Officer
Australian Stock Exchange Limited
Exchange Centre
Level 4, 20 Bridge Street
SYDNEY NSW 2000

www.asxonline.com

Dear Sir

Re: WINDARRA NICKEL PROJECT UPDATE

We enclose herewith a copy of an announcement in relation to the above.

Yours faithfully

Douglas C. Daws
EXECUTIVE CHAIRMAN

Enc

CORPORATE DIRECTORY

Director / Senior Management

Douglas Daws	Executive Chairman
Chris Daws	Chief Executive Officer
Bruno Sceresini	Non-Executive Director
Peter Landau	Non-Executive Director
Ross Kestel	Company Secretary

Corporate Enquiries

Mr Chris Daws - CEO
P: 61 8 9382 8799
F: 61 8 9382 4760
M: 0414 334 842
E: c.daws@niagamining.com.au

Media Enquiries

Mr David Griffiths – Gryphon Management
P: 61 8 9382 8300
F: 61 8 9381 2349
M: 0419 912 496
E: david.griffiths@gryphon.net.au

Shareholder Enquiries

Enquiries concerning shareholdings should be addressed to:
Computershare Investor Securities
GPO Box D182, Perth WA 6840
Tel: 61 8 9323 2000

Registered Office

Level 1, South Mill Centre
9 Bowman Street
South Perth WA 6151
Tel: 61 8 9367 8133
Fax: 61 8 9367 8812

Principal Office

Unit 8, Level 1 Churchill Court
331-335 Hay Street
Subiaco WA 6008
Tel: 61 8 9382 8799
Fax: 61 8 9382 4760

Home Exchange

The Company's shares are listed on the Australian Stock Exchange and the home exchange is Perth ASX code: NIA

Website Address

www.niagamining.com.au



ASX Announcement

12 January 2006

WINDARRA NICKEL PROJECT UPDATE

Niagara Mining Limited is today pleased to update shareholders on the progress of activities at the Windarra Nickel Project (WNP).

South Windarra

The Company has completed the initial work program for the assessment of the South Windarra heap-leach nickel operation. The program included;

- Re-establishment of the South Windarra ore-haulage road to allow access for heavy equipment and mine vehicles.
- The survey and volumetric calculations of the low-grade nickel sulphide stockpile.
- Site investigations including surveys to locate a suitable heap leach location.
- Extraction of a bulk representative sample for final testwork (permeability testing) – results expected within 6 weeks.

Previous work has indicated that 35% of the nickel content can be leached from the stockpile via a simple “water wash” (“acid leach” increases the recovery rates to over 75%) which would produce a clean high grade nickel product for sale.

The low capital and operating costs involved with heap leaching and the relatively high nickel prices should, following completion of final feasibility studies in the next quarter, enable the South Windarra heap-leach project to generate a substantial positive cashflow which will be used for exploration and development of the greater WNP area.

The Company views the South Windarra heap-leach nickel operation as having immense potential given that from historical records management believe target mineralisation of up to 2 million tonnes of 1% nickel containing 20,000 tonnes of nickel could exist. (see South Windarra stockpile fly-over @ www.niagaramining.com.au).

The Company has recently become aware of significant volumes of oxide nickel material located from surface above the former Mt Windarra mine and also at a location approximately 3km south of Mt Windarra (Windarra Well) which the Company believes will be amenable to similar simple low cost heap leaching methods as proposed for the current oxide stockpiles at South Windarra.

The Company expects to proceed with the heap-leaching of the South Windarra stockpile by the end of the June quarter pending confirmation of test work results and works approvals.



NIAGARA

MINING LIMITED

ABN 60 060 525 206

Unit 8, Level 1, Churchill Court
331-335 Hay Street
Subiaco WA 6008
PO Box 190
West Perth WA 6872
Tel: +61 8 9382 8799
Fax: +61 8 9382 4760

While the stockpile offers the potential for significant early revenue streams the management believes that the greatest value in the WNP area is the potential for significant high grade massive nickel sulphide orebodies to be discovered using modern geophysical methods.

Our immediate aim is to target these high grade nickel zones.

Mt Windarra

The Company has begun receiving and interpreting areas of interest from the historic Mt Windarra mine archives from BHP-Billiton. The Company is encouraged by what has been located thus far.

In particular the Company is processing information relating to the location (survey data) and the geological interpretation of the lower sections of D-Shoot which is situated in the area immediately adjacent to Mt Windarra. It is this area which the Company believes has the best potential for early profitable underground mine development via the extraction of high grade massive nickel sulphides identified in 1977 and 1981 drilling by WMC.

The mine data being received is providing the Company and its specialist resource advisors the information needed to locate drill sites designed to target the high grade massive nickel sulphides. These are believed to exist below the current mine development because of the intersections discovered by the Company in historic drill core located at the "Joe Lord" core library in Kalgoorlie WA.

The Company anticipates diamond drilling of this specific target area will begin by the end of the current calendar month using "Navidrill" techniques. Down-Hole TEM will be applied to locate the presence of conductors requiring further directional drilling. Results are likely to be received in the current quarter.

The Company expects that the full data transfer and audit process by BHP-Billiton should be completed by the end of the current quarter.

A trial SQUID ground TEM program is planned to be carried out later this quarter. This trial is being designed to identify the best method of applying this modern deep penetrating ground TEM technique in the Windarra Project area to generate priority drill targets.

Background - WNP

The WNP is located in Western Australia's North-Eastern Goldfields, 23kms north-west of the town of Laverton. There are two principal areas that have been mined, Mt Windarra and South Windarra which are part of the same geological belt which extends over more than 20kms.



NIAGARA

MINING LIMITED

ABN 60 060 525 206

Unit 8, Level 1, Churchill Court
331-335 Hay Street
Subiaco WA 6008
PO Box 190
West Perth WA 6872
Tel: +61 8 9382 8799
Fax: +61 8 9382 4760

The area has been mined through both open cut and underground methods from 1972 until 1991 when the South Windarra operation closed. It gained some prominence as the mine most commonly identified with the 1970s Western Australian nickel boom, and in particular the then well known nickel mining company Poseidon Limited.

Over the 20 years of operation, total production from Mt Windarra and South Windarra exceeded 7 million tonnes of ore containing an average 1.59% nickel. Treatment recovered 815,000 tonnes of nickel concentrate which contained 84,000 tonnes of nickel metal.

Recent independent re-assay of past drill cores from Mt Windarra have returned three significant intersections of 15.4m @ 7.72% nickel, 9.4m @ 7.63% nickel and from a zone 300 metres vertically below, 6.4m @ 7.23% nickel. This suggests the potential for previously unrecognised high-grade massive nickel sulphide channel.

Niagara Mining Limited completed the acquisition of the Windarra Nickel Project in December 2005.

Douglas C. Daws EXECUTIVE CHAIRMAN

Note: The information in this report that relates to exploration results is based on information compiled by Mr Mick Elias, consulting geologist, who is a member of the Australian Institute of Mining and Metallurgy. He has sufficient experience which is relevant to the style of mineralization and type of deposit under consideration, and to the activity undertaken. He is qualified as a competent person as defined in the 2004 Edition of the "Australian Code for Reporting Exploration Results, Mineral Resources and Ore Reserves". He has consented to the inclusion of this information in the form and context in which it appears. The Australian Stock Exchange has not received and does not accept responsibility for the accuracy or adequacy of this release.