



NIAGARA
MINING LIMITED
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19 January 2007

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

www.asxonline.com

Dear Sir

RE: DRILLING UPDATE – WNP

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

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Shareholder Enquiries

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Principal Office

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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.niagaramining.com.au



ASX Announcement

19 January 2007

Drilling Update – WNP

The Company is pleased to update shareholders on the progress of drilling at the Windarra Nickel Project - WNP

Four wedge holes have been successfully completed from the parent hole NMD0001 that was initially drilled to test an historic high-grade nickel intersection in BE 554-1C below the Mt Windarra mine workings. A fifth wedge hole (NMD0001F) drilled to test a second historic intersection south of and approximately 200m below BE 554-1C was abandoned at the target depth due to highly fractured ground conditions encountered and the angle of the hole at the depth limit of the drill rig. This target will be tested when a more powerful rig which is currently being fitted with equipment becomes available.

The results of the wedge drilling program have been progressively compiled and define two distinct zones of mineralization (refer also to attached figures)-

- hangingwall mineralization, characterized by high-tenor remobilized massive and stringer sulphides that form a steeply dipping sheet, intersected by NMD0001, NMD0001E and NMD0001B and probably the historic hole BE 554-1C. This zone forms the primary target for future drilling (Figures 1 and 2). The hangingwall mineralization is hosted by a shear zone that cuts banded iron formation and ultramafic lithologies and is intruded by mafic to intermediate dykes.
- footwall mineralization manifests as disseminated mineralization in ultramafic rocks and remobilized stringer mineralization in adjacent banded iron formation. The mineralization is of lower nickel tenor than the hangingwall mineralization but forms relatively thicker zones. An intersection of **22.3m at 1.28% nickel in NMD0001E** was recently received and represents the most significant intersection to date. This intersection was regarded as a low priority assay and was an unexpected positive result.

Down hole EM has been completed on all the wedge hole drilling and has defined a steeply dipping, south-plunging composite plate model (Figure 1). The results are consistent with south-plunging fold axes noted in surface mapping and may indicate a similar structural control.

In summary, the drilling to date has outlined a hangingwall zone of high - tenor, massive to stringer nickel sulphides having an indicated down-plunge extent of greater than 100m. The hangingwall mineralization has not been closed off along strike or down-plunge although appears to diminish in thickness and grade above NMD0001E, . Footwall mineralization consisting of



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disseminated and low - tenor remobilized stringer mineralization, although significant, remains a secondary target for future drilling.

The next phase of drilling at Mt. Windarra will target the modeled EM conductor between NMD0001E and NMD0001, a vertical distance of 50m. The hangingwall zone remains partly tested, with drilling still to repeat the historic intersections in BE 554-1C (totaling 43.85m @ 4.38%Ni). Although the position of BE 554-1C in relation to the current drilling is uncertain (now believed by Niagara to be located north of its plotted position on historic records) due to local magnetic interference in the original surveys undertaken by previous owners, this intersection together with recent results, fully justifies continued testing of the EM conductor.

The Company looks forward to updating shareholders on the progress of its activities at the WNP over the coming weeks.

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 Fellow 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.