



## **Prairie Lake Metallurgical Study Results Indicate Marketable Concentrate Grade Greater than 30% P<sub>2</sub>O<sub>5</sub>, less than 1% MgO in concentrate is the target**

**Toronto, April 2, 2012** – Nuinsco Resources Limited (“Nuinsco”)(TSX:NWI, [www.nuinsco.ca](http://www.nuinsco.ca)) today reported positive preliminary results from a second round of metallurgical testing from its 100%-owned Prairie Lake phosphorus - rare metals project in northwestern Ontario. These results confirm that the primary objective of the testing program is achievable - to produce a concentrate that meets the requirements of the fertilizer industry, namely phosphorus (P<sub>2</sub>O<sub>5</sub>) content of >30%, and magnesium oxide (MgO) content <1%, with a calcium oxide ratio of (CaO)/P<sub>2</sub>O<sub>5</sub><1.6<sup>1</sup>.

“Achieving these thresholds is a significant milestone for the project,” said Paul Jones, President. “Prairie Lake is one of the largest deposits of its type in the world. Not only does it have tremendous scale, but its location near existing infrastructure and transportation networks, the relative ease with which it could be exploited from surface using quarry methods, the continuing potential for expansion of the known mineralization and now favourable phosphorus metallurgy all point to Prairie Lake being a very valuable asset within Nuinsco's property portfolio.”

The NI-43-101-compliant Exploration Target Mineralization Inventory (ETMI) is 515 – 630 million tonnes grading between 0.09-0.11% niobium (Nb<sub>2</sub>O<sub>5</sub>) (0.9 to 1.1 kg/tonne) and 3.0-4.0% P<sub>2</sub>O<sub>5</sub> – making Prairie Lake one of the world's ten largest carbonatite hosted niobium deposits (and in North America second only to the Iron Hill Project in Colorado, USA, in contained tonnes - the grade at Prairie Lake is however greater). The current metallurgical work establishes the project as a substantial, recoverable, phosphorus inventory. The suite of minerals of potentially economic significance also includes tantalum (Ta), uranium (U) and rare earth elements (REE) (including lanthanum (La), cerium (Ce), samarium (Sm), neodymium (Nd) and yttrium (Y)).

An earlier metallurgical program indicated that the production of high-grade phosphorus concentrates was possible. A 1,000kg sample was submitted to COREM in Quebec City in September 2011 to follow up on that work. The program comprised a comprehensive series of tests including sample characterization gravity separation and pre-concentration tests using a Mozley Separator, shaking table and spiral tests; mineralogical investigation; development of an apatite grinding curve in preparation for flotation tests; magnetic separation; bench flotation to determine the most suitable apatite collectors; reverse flotation tests to further remove calcium containing minerals; Nb-Ta concentration by gravity separation using Mozley Separator, shaking tables and Kelsey Centrifugal Jig; Nb-Ta concentration by flotation. Comprehensive reporting of the test program is expected shortly at which point further options will be evaluated.

### **About Prairie Lake**

Located about 45 kilometres northwest of Marathon, Ontario, Nuinsco's Prairie Lake property covers the entire 2.8 km<sup>2</sup> (at surface) Prairie Lake Carbonatite Complex and is easily accessible from the TransCanada Highway. In January, 2012, Nuinsco bought back a 2% production royalty making the property royalty free.

The Prairie Lake project hosts an ETMI of 515 – 630 million tonnes grading between 0.09-0.11% Nb<sub>2</sub>O<sub>5</sub> (0.9 to 1.1 kg/tonne) and 3.0-4.0% P<sub>2</sub>O<sub>5</sub> (see news release dated October 26, 2011). The ETMI was undertaken by Eugene Puritch, P.Eng. and Antoine Yassa, P.Geo of P&E Mining Consultants Inc. of Brampton, Ontario.

All exploration work is supervised by Paul Jones, P.Geo, President and Laura Giroux, P.Geo, Senior Geologist, who act as Nuinsco's Qualified Persons under National Instrument 43-101. Mr. Jones and Ms. Giroux have reviewed and approved the technical contents of this news release. The potential quantity and grade of the ETMI is conceptual in nature and there has been insufficient exploration to

define a mineral resource. It is uncertain if further exploration will result in the discovery of a mineral resource.

<sup>1</sup> Sis, H. and S. Chander, 2003. Reagents used in the flotation of phosphorus ores; A critical review. In *Minerals Engineering*, v.16, pp577-585.

### **Conference Call – Monday April 2, 2012 at 4:00pm/ET**

Nuinsco Management will be hosting a conference call on **Monday April 2, 2012 at 4:00pm/ET** to discuss the Company's programs and plans.

**Dial-in** details are:

Number: **416 695 6616 Local / 800 952 4972 North American Toll Free**

N.B: Please connect at least 15 minutes prior to the conference call start time to secure a line. You will be put on hold until the conference call begins. Please quote **"Nuinsco Resources Update."**

**Webcast** details are:

Link: <http://www.gowebcasting.com/3255>

N.B: Please connect at least 15 minutes prior to the conference call to ensure adequate time for any software download that may be needed to hear the webcast.

**Replay** details are: **905 694 9451 Local / 800 408 3053 North American Toll Free**

Passcode: **2477141**

N.B: Available until **09-Apr-2012 11:59PM**

### **About Nuinsco Resources Limited**

Nuinsco is a growth-oriented, multi-commodity mineral exploration company that is focused on world-class mineralized belts in Canada and internationally when attractive opportunities arise. In addition to its property holdings, Nuinsco owns common shares in Coventry Resources Limited (ASX:CVY) and Victory Nickel Inc. (TSX:NI). Shares of Nuinsco trade on the Toronto Stock Exchange under the symbol NWI.

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**Forward-Looking Information:** This news release contains forward-looking information. All statements, other than statements of historic fact, that address activities, events or developments that the Company believes, expects or anticipates will or may occur in the future constitute forward-looking information including the expected use of proceeds. This forward-looking information reflects the current expectations or beliefs of the Company based on information currently available to the Company. Forward-looking information is subject to a number of risks and uncertainties that may cause the actual results of the Company to differ materially from those discussed in the forward-looking information, and even if such actual results are realized or substantially realized, there can be no assurance that they will have the expected consequences to, or effects on the Company. Factors that could cause actual results or events to differ materially from current expectations include, among other things: uncertainty of estimates of capital and operating costs, production estimates and estimated economic return; the possibility that actual circumstances will differ from estimates and assumptions; uncertainties relating to the availability and costs of financing needed in the future; failure to establish estimated mineral resources; fluctuations in commodity prices and currency exchange rates; inflation; recoveries being less than those indicated by the testwork carried out to date (there can be no assurance that recoveries in small scale laboratory tests will be duplicated in large tests under on-site conditions or during production); changes in equity markets; operating performance of facilities; environmental and safety risks; delays in obtaining or failure to obtain necessary permits and approvals from government authorities; unavailability of plant, equipment or labour; inability to retain key management and personnel; changes to regulations or policies affecting the Company's activities; the uncertainties involved in interpreting geological data; and the other risks disclosed under the heading "Risks and Uncertainties" and elsewhere in the Company's annual information form dated March 30, 2012 filed on SEDAR at [www.sedar.com](http://www.sedar.com). Forward-looking information speaks only as of the date on which it is made and, except as may be required by applicable securities laws, the Company disclaims any intent or obligation to update any forward looking information, whether as a result of new information, future events or results or otherwise. Although the Company believes that the assumptions inherent in the forward-looking information are reasonable, forward-looking information is not a guarantee of future performance and accordingly undue reliance should not be put on such information due to the inherent uncertainty therein.