



## MINDORO RESOURCES LTD

### **Agata Nickel Project Pilot Plant Commissioned, Operation Commenced**

CALGARY, ALBERTA, June 6, 2013, - Mindoro Resources Ltd. (TSXV: MIO; ASX: MDO; Frankfurt: WKN 906167) is pleased to report that its joint venture partner, TVI Pacific Inc. (TSX: TVI) (OTCQX: TVIPF), today announced that, as a result of positive bench-scale test work carried out at the Agata Nickel Processing Project, it has commissioned and commenced operation of pilot-plant testing which will further define the technological parameters to be used in producing a Bankable Feasibility Study with the goal of building a commercial processing plant.

The positive test work on nickel (Ni) laterite ore, from the Agata nickel laterite deposit, confirms the Agata ore is highly amenable to acid leaching with a high rate of nickel extraction achieved at a low acid consumption rate. The process technology TVI is developing, and which has produced these results, aims to achieve maximum nickel recovery and low acid consumption which translates into increased metal production and lower operating costs.

#### **Highlights:**

- **Extractions of 94% nickel achieved**
- **Agata ore highly amenable to acid leaching**
- **Low acid consumption rate of 650 kg/t ore**
- **More than 70 leach tests concluded to date**
- **TVI pilot plant testing expected to be completed during Q3 2013**

"We are extremely pleased with the results achieved," said Mr. Cliff James, Chairman and CEO of TVI Pacific Inc. "The process being developed could position the proposed Agata nickel processing plant amongst the lower cost producers."

The Agata Processing Project is located in Agusan del Norte province, within the Surigao mining region on the island of Mindanao, Philippines. The Surigao region is a major nickel producing region providing ore to processing plants in Australia, China, Korea and Japan.

#### **Bench-Scale Test Work Yields Positive Results**

Approximately one tonne of ore was sent to the Beijing General Research Institute of Mining & Metallurgy (BGRIMM) for the purpose of conducting bench-scale crushing, scrubbing, screening and leaching tests to confirm the optimal circuit configuration and validate the processing process identified by TVI.

A team of three TVI metallurgists were seconded to the BGRIMM team for the duration of the test work campaign. TVI also setup a bench-scale laboratory in Manila. All optimum conditions as identified in the BGRIMM tests have been validated, with excellent reproducibility of results between the TVI and BGRIMM tests. To date, more than 70 leach tests have been conducted. These tests conclusively illustrate that the Agata ore is highly amenable to acid leaching. Overall extractions of 94% Ni has been obtained at a relatively low acid consumption rate of 650 kg/t ore. This translates to approximately 49 t acid/t Ni produced for ore grades of 1.5% Ni. The acid utilisation efficiency is encouraging when compared to other atmospheric acid leach processes.

#### **BGRIMM Pilot Plant Established (China)**

Approximately twelve tonnes of ore were sent to BGRIMM in order to continuously operate a pilot plant that consists of, amongst others, primary leaching (atmospheric) and secondary leaching (low pressure autoclave). To date, all ore has been blended, crushed, screened and milled. Leaching commenced on May 13, 2013 to test a high grade (1.5% Ni) and a medium grade (1.3% Ni) ore.

#### **TVI Pilot Plant (Philippines)**

Pregnant leach solution (PLS) from the BGRIMM pilot plant will be shipped to the Philippines and processed in the TVI downstream Ni recovery pilot plant. This plant will be commissioned in June 2013 in order to be operational by July 2013. The TVI pilot plant work is expected to be completed during Q3 2013.

## Process Description

The process technology TVI is developing aims to achieve maximum nickel (Ni) recovery at an operating cost that could position the Agata process plant amongst the lower cost producers - while best representing the requirement to contain capital costs of the project.

The process involves the treatment of higher Ni grade ore (>1.3% Ni). Much of the high iron (Fe) grade limonite will be directly shipped as part of a direct shipment of ore operation (DSO). Therefore, the ore feed to the process plant is depleted of limonite. In addition, the higher grade Ni is associated mainly with the saprolite ore (which occurs beneath the limonite in the ore profile) - therefore, once the higher grade ore is considered, the ratio of limonite:saprolite that will be fed to the process plant is approximately 8% limonite:92% saprolite.

The process consists of separating the ore into a high Fe, low magnesium (Mg) fraction to feed the primary leaching stage and a low Fe, high Mg fraction, to feed the secondary leaching stage. Leaching is conducted in 2 stages to minimize acid consumption, as well as clean the pregnant leach solution (PLS) of Fe.

PLS is recovered by a counter current decantation (CCD) circuit and then further refined using ion exchange (IX), and finally precipitated and filtered to produce a nickel hydroxide product (NHP) of 53% Ni content. This NHP is a versatile product since it is a refined intermediate product, and therefore, due to its purity, it is easily refined into Ni metal by potential off-takers.

## Key Process Information

- Ore type: Ni grade >1.3%; 8% limonite, 92% saprolite
- Ore feed rate: 550,000 dtpa
- Leach Ni extraction: 94%
- Leach H<sub>2</sub>SO<sub>4</sub> consumption: 650 kg/t ore
- Overall Ni recovery: 92%
- Ni product: NHP; 53% Ni; 7,000 - 7,500 t contained Ni pa.

## Test Work Ore Selection

Approximately thirty tonnes of ore were mined from a variety of test pits that cover the Agata ore body. Test pits were carefully selected from the available drill hole data to accurately reflect the ore that is expected to feed the process plant. Limonite and saprolite ore was separately mined, blended and loaded into sealed drums to preserve ore moisture.

## TVI and Mindoro Joint Venture

Mindoro and TVI have signed four joint venture agreements, previously announced on October 1, 2012, relating to the Agata and Pan de Azucar mining projects located in the Philippines on the islands of Mindanao and Panay, respectively. The joint ventures present Mindoro and TVI with multiple growth opportunities for near-term and medium-term cash flow generating potential. TVI has options to earn up to 60% interest in the projects from Mindoro. Mindoro is currently negotiating to acquire 25% interest in the Agata project from Minimax Mineral Exploration Ltd., which would give Mindoro 40% interest in the projects, if all options are exercised.

## Mining Project Opportunities within the Agata Tenement

- a near-term high iron (Fe) laterite direct shipping ore (DSO) operation
- a near-term limestone DSO operation
- a medium-term lime production facility
- a medium-term nickel processing plant project

Prior extensive pre-feasibility and engineering works have been conducted on the Mindoro properties. These reports can be accessed on Mindoro's website at [www.mindoro.com](http://www.mindoro.com) or on SEDAR at [www.sedar.com](http://www.sedar.com).

Mindoro Resources Ltd. has filed an updated National Instrument 43-101 technical report on the Agata project on April 01, 2013. The National Instrument 43-101 technical report is available on SEDAR and on Mindoro's website.

On behalf of the Board of Directors,  
Tony Climie  
CEO

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### **About Mindoro**

Mindoro is a Tier 1 Issuer trading on the TSX Venture Exchange (MIO), Australian Securities Exchange (MDO) and Frankfurt Stock Exchange (WKN 906167). Mindoro has a 75% interest, and an option to acquire the remaining 25%, in the Agata Nickel Project, Mindanao, and the Pan de Azucar Sulphur-Copper-Gold Project, Iloilo. TVI Pacific Inc. has the option to earn up to a 60% interest in these projects by meeting the earn-in requirements outlined in the September 27, 2012 release. Mindoro also holds a 53.3% stake in ASX listed Red Mountain Mining (ASX: RMX), which has a 100% direct and indirect interest in the Batangas gold and copper-gold projects.

*Neither TSX Venture Exchange nor its Regulation Services Provider (as that term is defined in the policies of the TSX Venture Exchange) accepts responsibility for the adequacy or accuracy of this release.*

*Tony Climie P.Geol., is the CEO of Mindoro Resources Ltd and has 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 qualified person as defined by National Instrument 43-101. Tony Climie consents to the inclusion in the report of the matters based on the information in the form and context in which it appears.*

*This release may contain forward-looking statements including management's assessments of future plans and operations, and expectations of future production. These statements are based on current expectations that involve a number of risks and uncertainties, which could cause actual results to differ materially from those anticipated. These risks include, but are not limited to, the risks associated with the mining and exploration industry (e.g. operational risks in development, exploration and production; delays or changes in plans with respect to exploration or development projects or capital expenditures; the uncertainty of reserve estimates; the uncertainty with respect to results of exploration, the uncertainty of estimates and projections relating to production and the uncertainty of the availability of capital). The assumptions used in the preparation of such statements, although considered reasonable at the time of preparation, may prove to be imprecise and, as such, undue reliance should not be placed on forward-looking statements. The Company does not undertake to update forward-looking statements except where required to do so by law.*