# Rio Verde Minerals Announces Positive Agronomic Tests on Thermophosphate Produced from its Sapucaia Target, Fosfatar Phosphate Project

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TORONTO, ONTARIO -- (Marketwire - Feb. 15, 2012) - Rio Verde Minerals Development Corp. (TSX:RVD) ("Rio Verde" or the "Company") is pleased to announce the results of agronomic tests performed on Thermophosphate produced at its Sapucaia Target at the Fosfatar Phosphate Project, located in Pará State, Brazil. The results of these tests show Fosfatar's Thermophosphate performing favorably in comparison to its competitors.

In 2003, Fosfatar Mineração Ltda. (now a wholly-owned subsidiary of Rio Verde) initiated a study to engineer a new solubilization process using thermal methods. The aim was to create a fertilizer well-suited to tropical soils, without causing acidization, in order to yield higher absorption rates than other fertilizers on the market. In 2008, Fosfatar Mineração Ltda. produced Fosfatar Thermophosphate, a product obtained from the calcination of aluminous phosphate ore taken from the Sapucaia Target. Fosfatar Thermophosphate has a pH level of 8.0, and over 70% of its total phosphate content is soluble in NAC+H20 (Neutral Ammonium Citrate plus water), making it easily absorbed by plants.

Agronomic tests were conducted on the Fosfatar Thermophosphate under the supervision of Professor Dr. Juarez Patricio de Oliveira Junior, principle of the School of Agronomy and Food Engineering, Department of Soil, at the Universidade Federal de Goias. The objective of the tests was to assess the efficiency of the Fosfatar Thermophosphate as a phosphorus fertilizer. The tests were conducted on field-planted soybeans. Soybeans were selected as the first test subject as they are one of the most widely grown crops in Brazil, and they represent a large percentage of the Brazilian agricultural market. Additionally, soybeans have a short harvesting cycle (110 days), making them an ideal test subject. Tests were also conducted on black beans in greenhouses, now undergoing statistical analysis, and additional tests have recently commenced on field-planted sorghum.

In these agronomic tests, the same soil was used in each trial. This soil was first submitted to the standard cultural treatment, as calculated by the Goias State's Recommendations for Fertilizers (1998), and was then treated in the six different manners described below:

1. Application of commercially available Yoorin Thermophosphate;

2. Application of commercially available Natural Reactive Phosphate (Arad);

3. Application of commercially available Triple Superphosphate;

4. Application of Rio Verde's Fosfatar Thermophosphate;

5. Application of Natural Aluminous Phosphate (Sapucaia ore before calcination)

6. Application of a Control Soil (no added phosphorus).

Ten lines of soybean seeds, spaced 0.45m apart over a total area of 18m2, were planted in each of the six types of treated soil, with ten test repetitions each. The Natural Aluminous Phosphate, taken from the Sapucaia Target, was selected as a test subject in order to determine the effectiveness of the calcination process used by Rio Verde.

The agronomic productivity of Fosfatar Thermophosphate was then compared to the agronomic productivity of the other test subjects. The Fosfatar Thermophosphate was shown to perform favourably in relation to its competitors, the control soil, and the Natural Aluminous Phosphate. The results of these tests can be seen in the table below.

| Phosphate Type | Productivity Level (bag/ha) |
|---|---|
| Fosfatar Thermophosphate (Sapucaia Target - RVD) | 60 |
| Yoorin Thermophosphate | 57 |
| Natural Reactive Phosphate (Arad) | 51 |
| Triple Superphosphate | 48 |
| Control Soil (without P) | 46 |
| Natural Aluminous Phosphate (Sapucaia ore before calcination) | 45 |

Table 1: Productivity of the soybeans, measured in bags of soybeans per hectare, after being submitted to different forms of phosphorous in equal doses.

"The productivity level of our Fosfatar Thermophosphate is in line with our expectations based on previous data," said Stephen Keith, President & CEO of Rio Verde. "The Fosfatar Project has high-grade aluminous phosphate, ranging from 18-30% P205. We are pleased with the results as they show that our final product will compete well in the Brazilian market, taking full advantage of the country's favourable supply and demand dynamics. In the coming weeks, we will also be releasing a preliminary economic assessment (PEA) on the Fosfatar Phosphate Project. Assuming a favourable PEA and a positive construction decision by the board of directors, we expect to commence production in late 2012."

**Agronomical Engineer**

Professor Dr. Juarez Patricio de Oliveira Junior, principal of the School of Agronomy and Food Engineering, Department of Soil, of the Universidade Federal de Goias, has reviewed and approved the content of this press release.

**About the Fosfatar Phosphate Project**

The Fosfatar Phosphate Project possesses multiple phosphate assets in the North and Northeastern regions of Brazil, and is situated in close proximity to numerous fertilizer consumers and the port city of Belém, in the State of Pará. The three primary targets are the Sapucaia Phosphate Target, the Boa Vista Phosphate Target and the Trauíra Phosphate Target. Fosfatar is comprised of 15 exploration licences, in 10 separate land holdings, over a total area of 47,604.51 hectares, plus 136,608.36 hectares in 16 areas under application for exploration licenses, totaling 184,284.87 hectares of potential area for phosphate deposits in the Pará and Maranhão States.

**About Rio Verde**

Rio Verde Minerals Development Corp. (TSX:RVD) is a publicly traded company focused on the exploration and development of fertilizer projects in Brazil. The Company's goal is to become the leading Brazilian fertilizer mining and development company by selecting prime assets that are near infrastructure, with known mineralization, in regions without significant social or environmental issues. The Company plans to fast-track the best projects to development to create stakeholder value.

Rio Verde holds one potash project and a portfolio of phosphate projects in Brazil. Potash and phosphate fertilizers have favourable supply and demand dynamics, and Rio Verde has a significant cost advantage by being based in Brazil, a country that imports about 90% of its potash and 50% of its phosphate needs. Rio Verde's near-term primary objective is to focus its potash exploration on establishing a Canadian National Instrument 43-101 resource.

***Forward-Looking Statements***

*This press release contains forward-looking statements. All statements, other than of historical fact, that address activities, events or developments that the Company believes, expects or anticipates will or may occur in the future (including, without limitation, statements regarding the estimation of mineral resources, exploration results, potential mineralization, potential mineral resources and mineral reserves) are forward-looking statements. Forward-looking statements are often identifiable by the use of words such as "anticipate", "believe", "plan", may", "could", "would", "might" or "will", "estimates", "expect", "intend", "budget", "scheduled", "forecasts" and similar expressions or variations (including negative variations) of such words and phrases. Forward-looking statements are subject to a number of risks and uncertainties, many of which differ materially from those discussed in the forward-looking statements. Factors that could*

*cause actual results or events to differ materially from current expectations include, among other things, without limitation, failure to establish estimated mineral resources, the possibility that future exploration results will not be consistent with the Company's expectations, the price of potash and phosphate, changes to regulations affecting the Company's activities, including tax and trade laws and policies; delays in obtaining or failures to obtain required regulatory permits and approvals from government authorities; delays in commencing the Company's proposed drilling program, exploration costs varying significantly from estimates; uncertainties relating to the availability and costs of financing needed to complete exploration activities and demonstrate the feasibility of the Company's projects; the success of future exploration and development initiatives; and other risks involved in the mineral exploration and development industry. Any forward-looking statement 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 statement.*

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