

Brazil Potash Corp. Initiates Artificial Intelligence Powered X-Ray Ore Sorting Trial as Technology Shows High Potential to Substantially Reduce Costs

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- *Unleashing Artificial Intelligence's power in the mining process could dramatically reduce costs and increase revenues.*
- *A.I. has the power to determine ore from waste rock, saving time and money.*
- *AI deployed at scale can achieve mining efficiencies that have been impossible with traditional equipment.*

[Brazil Potash Corp.](#) ("Brazil Potash" or the "Company") (NYSE-American: GRO), a mineral exploration and development company with a critical mineral potash agriculture project, the Autazes Project, today announced the initiation of an Artificial Intelligence Optical Ore Sorting trial to evaluate underground pre-concentration technology that could significantly enhance project economics and operational efficiency.

The Company is conducting trials with advanced AI-powered X-ray Transmission (XRT) sorting technology to pre-sort mined ore either underground prior to hoisting or at surface prior to processing. This innovative approach utilizes artificial intelligence algorithms combined with optical sensing technology to identify and separate valuable potash ore from waste material. This results in the potential to significantly reduce the main mine shaft diameter and/or processing plant size resulting in lower construction and operating costs.

"Artificial Intelligence is changing industries all over the world, now mining is joining the AI future. This AI powered X-ray optical sorting trial represents a potential game-changer for the Autazes Project economics," said Matt Simpson, CEO of Brazil Potash. "Recent successful application of AI at a commercial potash operation have demonstrated the ability to concentrate ore by approximately 50% underground before it is hoisted to surface and fed to the processing plant. If we can replicate these results at Autazes, the implications for our capital requirements and operational efficiency are profound."

AI Technology Overview and Potential Benefits

The AI optical ore sorting technology being trialed combines advanced X-ray Transmission sensing with sophisticated machine learning algorithms to identify and separate valuable potash minerals from waste rock in real-time. The system analyzes the atomic density and composition of individual rock particles as they pass through the sorting equipment, making split-second decisions to direct each particle to either the concentrate or waste stream.

The AI-powered optical ore sorting technology being evaluated offers several compelling advantages for the Autazes Project:

- **Reduced Processing Plant Size:** By concentrating ore underground prior to hoisting, the required capacity of the surface processing plant could potentially be reduced significantly, materially lowering construction capital requirements.
- **Improved Grade to Plant:** Increasing the potassium chloride content in the ore delivered to the processing plant could improved overall process efficiency resulting in lower operating costs.
- **Reduced Hoisting Shaft Diameter:** This AI technology could potentially enable the Company to either construct a smaller diameter main shaft, reducing both construction time and cost, or maintain current shaft specifications to accommodate substantial future production increases with minimal additional capital investment.

- **Enhanced Operational Efficiency and Sustainability:** Pre-concentration of ore underground reduces the volume of material required to be hoisted and processed, potentially lowering ongoing mine energy consumption and resulting operational costs.

About Brazil Potash

Brazil Potash (NYSE-American: GRO) (www.brazilpotash.com) is developing the Autazes Project to supply sustainable fertilizers to one of the world's largest agricultural exporters. Brazil is critical for global food security as the country has amongst the highest amounts of fresh water, arable land, and an ideal climate for year-round crop growth, but it is vulnerable as it imported over 95% of its potash fertilizer in 2021, despite having what is anticipated to be one of the world's largest undeveloped potash basins in its own backyard. The potash produced will be transported primarily using low-cost river barges on an inland river system in partnership with Amaggi (www.amaggi.com.br), one of Brazil's largest farmers and logistical operators of agricultural products. With an initial planned annual potash production of up to 2.4 million tons per year, Brazil Potash's management believes it could potentially supply approximately 20% of the current potash demand in Brazil. Management anticipates 100% of Brazil Potash's production will be sold domestically to reduce Brazil's reliance on potash imports while concurrently mitigating approximately 1.4 million tons per year of GHG emissions.

Cautionary Note Regarding Forward-Looking Statements

This document contains forward-looking statements as defined within Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended, or the United States Private Securities Litigation Reform Act of 1995, which are statements that are not historical facts. All statements, other than statements of historical facts, included herein and public statements by our officers or representatives, that address activities, events or developments that our management expects or anticipates will or may occur in the future, are forward-looking statements, including but not limited to such things as future business strategy, plans and goals, competitive strengths and expansion and growth of our business. These forward-looking statements, along with terms such as "anticipate," "expect," "intend," "may," "will," "should," and other comparable terms, involve risks and uncertainties because they relate to events and depend on circumstances that will occur in the future, and include risks related to changes in our operations; uncertainties concerning estimates; industry-related risks; the commercial success of, and risks related to, our development activities; uncertainties and risks related to our reliance on contractors and consultants. Those statements include statements regarding the intent, belief, or current expectations of the Company and members of its management, as well as the assumptions on which such statements are based, and such forward-looking statements include, without limitation, statements regarding the definitive offtake agreement with Kimia and its anticipated benefits, the possibility of advancing project financing discussions, project development timelines, construction advancement, production capacity, market demand projections, cost advantages, environmental benefits, and the status of the Company's project, government regulation, and environmental regulation. Although we have attempted to identify important factors that could cause actual results to differ materially from those described in forward-looking statements, there may be other factors that cause results not to be as anticipated, estimated or intended. Although these forward-looking statements were based on assumptions that the Company believes are reasonable when made, you are cautioned that forward-looking statements are not guarantees of future performance and that actual results, performance or achievements may differ materially from those made in or suggested by the forward-looking statements contained in this news release. In addition, even if our results, performance, or achievements are consistent with the forward-looking statements contained in this news release, those results, performance or achievements may not be indicative of results, performance or achievements in subsequent periods.

Forward-looking statements are subject to risks and uncertainties, many of which are beyond the control of the Company, including those described in the "Risk Factors" section of the Company's annual report on Form 20-F filed with the Securities and Exchange Commission and other filings. These risks include, but are not limited to, fluctuations in potash supply and demand, changes in competitive pressures, timing and amount of capital expenditures, changes in capital markets, currency and exchange rate fluctuations, unexpected geological or environmental conditions, changes in government legislation and regulations, political or economic developments in relevant jurisdictions, success in obtaining required licenses and permits, ability to secure project financing, and other operational risks.

Readers are cautioned not to place undue reliance on any of these forward-looking statements. These forward-looking statements speak only as of the date hereof. The Company expressly disclaims any obligations or undertaking to release publicly any updates or revisions to any forward-looking statements contained herein to reflect any change in the Company's expectations with respect thereto or any change in events, conditions, or circumstances on which any statement is based, unless required by law.

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