

NEWS RELEASE  
16 August 2018

## **Q3 2018 ARAGUAIA OPERATIONAL UPDATE**

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**16 August 2018 – Horizonte Minerals Plc, (AIM/TSX: HZM)** ('Horizonte' or 'the Company') the nickel development company focused in Brazil, is pleased to provide an update on its operations covering its 100% owned flagship Araguaia nickel project ('Araguaia'). Horizonte is a multi-asset company focused on its objective of becoming a nickel producer.

### **Highlights**

- Final results of the Araguaia 43-101 Feasibility Study ('FS') are being prepared and expected to be announced to the market in October 2018;
- Optimisation around the plant layout, engineering design and process flow sheet now complete and resulting in considerable opportunities;
- Plant design has been modified to accommodate the potential expansion of a second Rotary Kiln Electric Furnace ('RKEF') process line in the future after the first line is fully commissioned, providing flexibility to double the output of the operation;
- Final Araguaia capex estimate is currently being prepared for internal review;
- Water permit has been obtained for full-scale operation at Araguaia;
- Brazil's environment agency (SEMAS) visited Araguaia in late July 2018, a key part of construction licence approval process; and,
- Company cash position of £8.9 million as at 30 June 2018.

### **Horizonte CEO, Jeremy Martin, commented:**

*"I am pleased to provide an operational update on our progress on a number of key workstreams as we move towards completion of the Feasibility Study on our 100% owned Araguaia nickel project, representing an important milestone in the transition of the Company from an explorer to a developer. There has been a considerable amount of work involved in the optimisation of the plant layout and design where we have been able to successfully reduce the overall plant footprint, close-couple the equipment packages leading to a reduction in the overall material quantities (cut and fill material, concrete and steelwork). Additionally, we have now designed the plant in such a way to allow the potential to include a second RKEF process line in the future allowing for an increase in the annual nickel production.*

*“As the various feasibility workstreams are coming together, we have also been working hard on the social, infrastructure and licensing aspects of the project that will allow us to move to the development stage in 2019.*

*“From a markets perspective, recent talk of tariff related barriers has negatively affected the prices of a number of commodities during the last couple of months. However, the nickel price, given its strong fundamentals, has been more resilient in relation to the wider metals market. LME inventories continue to be drawn down and the demand side driven by the stainless-steel market and EV battery sector continues to show strong growth, this bodes well for the longer-term fundamentals of nickel.*

*“The Company has a strong cash position to allow us to deliver the key milestones going forward. It is an exciting time for the Company and we look forward to updating the market on the Company’s developments as we move through the next phase of development at Araguaia, in addition to providing updates on the Vermelho Ni-Co project.”*

### **Araguaia Nickel Project Feasibility Study Update**

The FS for Araguaia is designed around an open pit mining operation targeting 900,000 tonnes per annum of ore feeding a central processing RKEF smelting facility, and designed to produce 14,500 tonnes of nickel per annum contained in 52,000 tonnes of ferronickel.

The current mineral reserve supports a 28-year mine life with a two-year construction period. Work on the ground is nearing completion, with the following work streams either in near final form or complete.

The FS results are expected to be available for announcement to the market in October 2018.

### **Geology and Mining**

Snowden Mining Industry Consultants ('Snowden'), who are conducting the geology and mining sections of the study, have optimised the mine plan and schedule such that the study will be in a position to publish mineral reserves sufficient for more than 25 years of mine life. Snowden has also completed an update of the mining costs with respect to the latest economic conditions in Brazil.

In addition, further geotechnical work has been completed that supports the study and the detailed engineering.

### **Infrastructure and Process**

As previously reported, the de-risked RKEF technology will be deployed and detailed engineering work has been completed for the plant. The Plant design has been optimised and modified to accommodate a second RKEF process line in the future after the first line is fully

commissioned, providing flexibility to double the output of the plant and increasing overall revenue.

The higher cost equipment items are being sourced from suitably qualified engineering firms around the world in a bid to identify high quality, cost-effective vendors. A detailed operating cost and capital cost estimate is well advanced with the updated plant layout and the selected large equipment items.

Detailed designs for roads, the powerline, river abstraction and a cooling dam have been complete and costed. This includes detailed surveys of the various routes, and development of early works packages with firm quotations from vendors for construction.

All logistics challenges have been identified and engineered including those around sourcing of coal, energy and consumables, which have been costed with quotations and proposals from prospective vendors.

Significant effort has been expended on risk management and risk mitigation that covers sovereign, climate, logistics, geographical, and geological risk factors. This work has resulted specific changes to designs, and operational plans so that the project risks are minimised while still delivering tier 1 economics.

The Project implementation schedule is well advanced, taking into account the updated engineering and current operating regime in Brazil.

## **Financial**

Operating ('OPEX') and capital cost ('CAPEX') work for the FS is in the final stage. All CAPEX items have now been received from equipment vendors together with material and installation costs from Brazilian suppliers. Savings have also been pursued by optimising plant layout as well as sourcing from appropriate vendors.

## **Social & Environmental Status**

The company is on track with its programme of licence applications and approvals for and construction permit requests for a number of key environmental and regulatory parts of the overall project effectively de-risking the permitting component of the project. Milestones in this area include:

- Successfully obtained the water permit for full-scale operation of the Araguaia project;
- Submission of the Fauna and Flora inventories as well as the vegetation suppression request in early 2018; and,
- In July, we welcomed a team from the environmental agency (SEMAS) to the Araguaia project. This is an important step in the process for the approval of the construction licence.

We have also signed an agreement, with SENAI's Institute of Innovation to research potential uses for Araguaia slag. SENAI operates a network of 208 certified laboratories in the country

and this particular research has already commenced with testing of slag produced from Araguaia's pilot-plant process at the SENAI Institution in Belem.

Agreement has also been reached with Brandt Medio Ambiente consulting Llc. to undertake environment studies and permitting for the energy Transmission Line. This commenced in June 2018.

### **Nickel and Cobalt Market Developments**

Nickel has continued its strong performance this year rising to US\$14,823 per tonne by the end of June, up 18% since the start of the 2018. The average price for the period, at US\$14,465 per tonne, was also the highest quarterly average since the three months to end December 2014.

Global demand for nickel has been reported to be increasing by 7.3% this year, while supply rises 6.8% to 2.210 million tonnes<sup>1</sup>. Analysts in the sector have also stated this year that they expect the global nickel market deficit to widen to 88,000 tonnes, from 72,000 tonnes in 2017.

Of significance for the Company is that long term analyst forecasts are pricing nickel above the current levels. These forecasts are being driven by both traditional uses for nickel in stainless steel, as well as the new drivers; super-alloys and the battery sectors.

This bodes well for Horizonte as we look to benefit from the growth in both end markets, through the development of the advanced stage Araguaia ferronickel project and the Vermelho nickel-cobalt project, which was acquired in December 2017.

This announcement contains inside information for the purposes of Article 7 of EU Regulation 596/2014.

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<sup>1</sup> Source: Japan's Sumitomo Metal, <https://www.reuters.com/article/sumitomo-ntl-min-nickel/japans-sumitomo-metal-says-global-nickel-deficit-to-widen-this-year-idUSL4N1TG3WV>

### **About Horizonte Minerals:**

Horizonte Minerals plc is an AIM and TSX-listed nickel development focused in Brazil. The Company is developing the Araguaia Project as the next major ferronickel mine in Brazil. With the Vermelho nickel-cobalt project being advanced with the aim of being able to supply nickel and cobalt to the EV battery market. Both projects are 100% owned.

Horizonte shareholders include; Teck Resources Limited, Canaccord Genuity Group, JP Morgan, Lombard Odier Asset Management (Europe) Limited, City Financial, Richard Griffiths and Glencore.

### **CAUTIONARY STATEMENT REGARDING FORWARD LOOKING INFORMATION**

Except for statements of historical fact relating to the Company, certain information contained in this press release constitutes "forward-looking information" under Canadian securities legislation. Forward-looking information includes, but is not limited to, the ability of the Company to complete the Acquisition as described herein, statements with respect to the potential of the Company's current or future property mineral projects; the success of exploration and mining activities; cost and timing of future exploration, production and development; the estimation of mineral resources and reserves and the ability of the Company to achieve its goals in respect of growing its mineral resources; the ability of the Company to complete the Placing as described herein, and the realization of mineral resource and reserve estimates. Generally, forward-looking information can be identified by the use of forward-looking terminology such as "plans", "expects" or "does not expect", "is expected", "budget", "scheduled", "estimates", "forecasts", "intends", "anticipates" or "does not anticipate", or "believes", or variations of such words and phrases or statements that certain actions, events or results "may", "could", "would", "might" or "will be taken", "occur" or "be achieved". Forward-looking information is based on the reasonable assumptions, estimates, analysis and opinions of management made in light of its experience and its perception of trends, current conditions and expected developments, as well as other factors that management believes to be relevant and reasonable in the circumstances at the date that such statements are made, and are inherently subject to known and unknown risks, uncertainties and other factors that may cause the actual results, level of activity, performance or achievements of the Company to be materially different from those expressed or implied by such forward-looking information, including but not limited to risks related to: the inability of the Company to complete the Acquisition as described herein, exploration and mining risks, competition from competitors with greater capital; the Company's lack of experience with respect to development-stage mining operations; fluctuations in metal prices; uninsured risks; environmental and other regulatory requirements; exploration, mining and other licences; the Company's future payment obligations; potential disputes with respect to the Company's title to, and the area of, its mining concessions; the Company's dependence on its ability to obtain sufficient financing in the future; the Company's dependence on its relationships with third parties; the Company's joint ventures; the potential of currency fluctuations and political or

economic instability in countries in which the Company operates; currency exchange fluctuations; the Company's ability to manage its growth effectively; the trading market for the ordinary shares of the Company; uncertainty with respect to the Company's plans to continue to develop its operations and new projects; the Company's dependence on key personnel; possible conflicts of interest of directors and officers of the Company, the inability of the Company to complete the Placing on the terms as described herein, and various risks associated with the legal and regulatory framework within which the Company operates. Although management of the Company has attempted to identify important factors that could cause actual results to differ materially from those contained in forward-looking information, there may be other factors that cause results not to be as anticipated, estimated or intended. There can be no assurance that such statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements.