Power Metallic Partners with Ideon Technologies to Unlock Deep Discovery Potential at Nisk Lion Zone using Muon Tomography

written by Raj Shah | May 13, 2026

May 13, 2026 (Source) – **Power Metallic Mines Inc. (**the **“Company”** or **“Power Metallic”)** (TSXV: PNPN) (OTCBB: PNPNF) (Frankfurt: IVV1) is pleased to announce an engagement with Vancouver-based Ideon Technologies (“Ideon”) to activate a borehole muon tomography imaging program at the Lion Zone discovery within the Nisk Polymetallic project area in Quebec, Canada. A global leader in subsurface intelligence, the Ideon REVEAL™ solution will generate a high-resolution, three-dimensional density model of the rock composition in and around the Lion deposit.

The program is structured in two stages: first, validating the Ideon density model against Power Metallic’s existing 100-plus hole drill dataset at Lion; then applying the calibrated mineralization fingerprint to rank and test deep targets across the 330 km² Nisk district scale property that are below the detection limit of conventional surface-based geophysical methods (i.e., below 200 m).

About the Technology: Seeing Deep into the Earth using Energy from Space

The Ideon REVEAL™ Platform detects cosmic-ray muons – naturally occurring subatomic particles created by supernova explosions in

deep space. Muons lose energy progressively in direct proportion to the density of the material they pass through. By positioning arrays of muon detectors in boreholes at varying depths, Ideon can construct 3D tomographic models of subsurface density over millions of cubic metres of earth, potentially replacing hundreds of drillholes while providing greater subsurface visibility at a fraction of the cost and time, and with significantly less environmental impact.

The Ideon REVEAL™ Platform and is designed for the most demanding of exploration and mining environments. It uses proprietary hardware, software and imaging systems with advanced AI-powered analysis and data fusion capabilities. It has been field-proven at some of the world's most demanding mine sites, including at Rio Tinto's Kennecott Utah Copper operation at Bingham Canyon, BHP's Nickel West and Olympic Dam mines in Australia, Vale Base Metals' Creighton and Totten mines in Sudbury, Ontario, and Fireweed Metals' remote Macmillan Pass District in the Yukon Territory.

Why Lion Is an Exceptional Muon Target

The mineralogy of the Lion Zone is ideally suited to muon tomography. The deposit's high-grade core is dominated by massive to brecciated chalcopyrite, cubanite, pyrrhotite, pentlandite, and pyrite – minerals with bulk densities of 4.0 to 5.0+ g/cc. These contrast sharply with the surrounding felsic, mafic and ultramafic host rocks, which carry background densities of approximately 2.8 to 3.0 g/cc. The Ideon solution will be used to produce 3D density models of individual dipping stratigraphic horizons and potential extensions of the deposit at multi-metre scale resolution.

The initial phase of the program will deploy borehole muon detectors into dedicated drill holes at the Lion Zone. The

imaging program will run autonomously, passively and continuously collecting data over several months and delivering to Power Metallic a three-dimensional density model of the deposit. This phase will be conducted blindly, meaning that no constraining data (other than surface topography) will be provided.

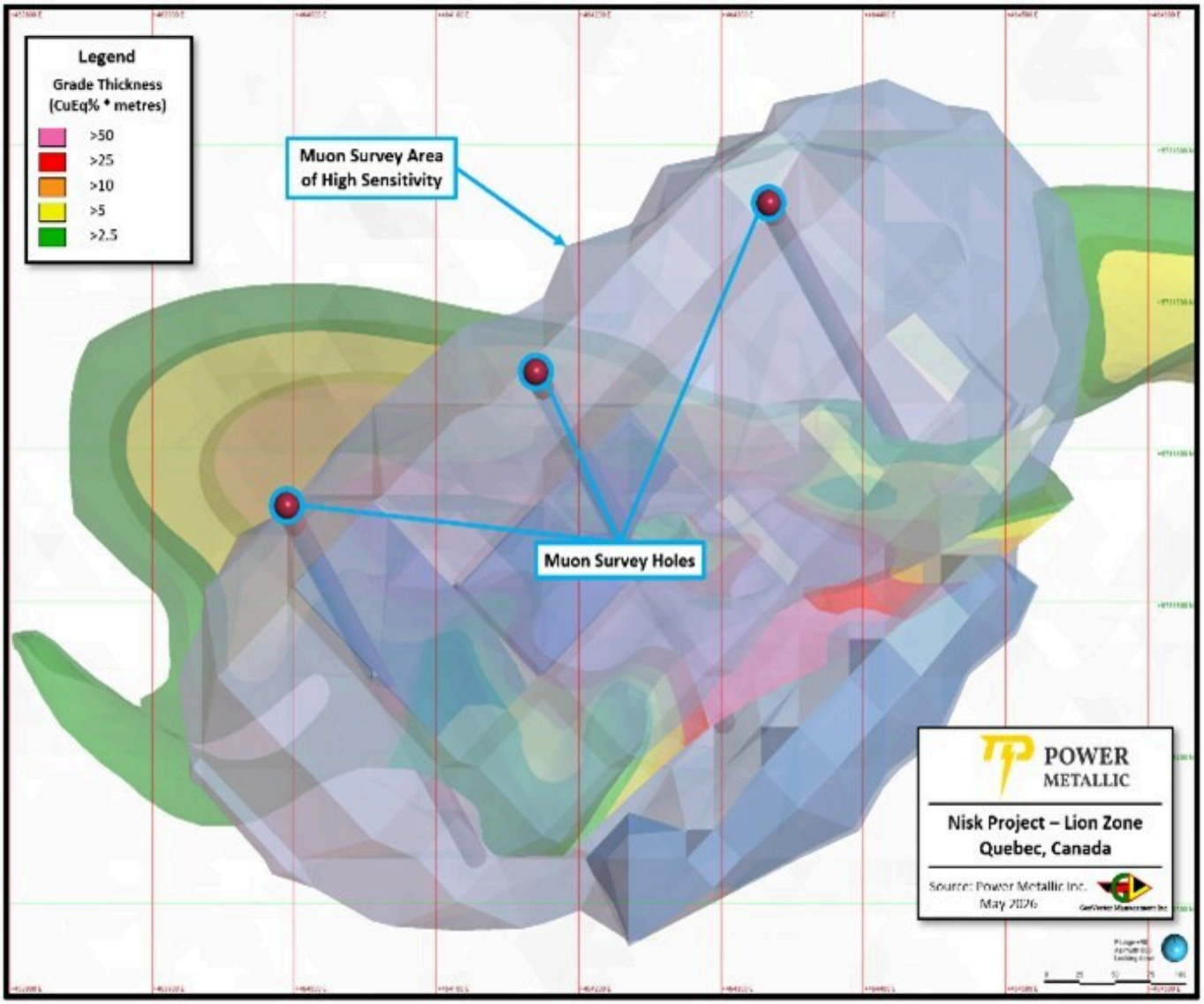

Figure 1 – Plan view of muon survey overlain Lion (CNW Group/Power Metallic Mines Inc.)

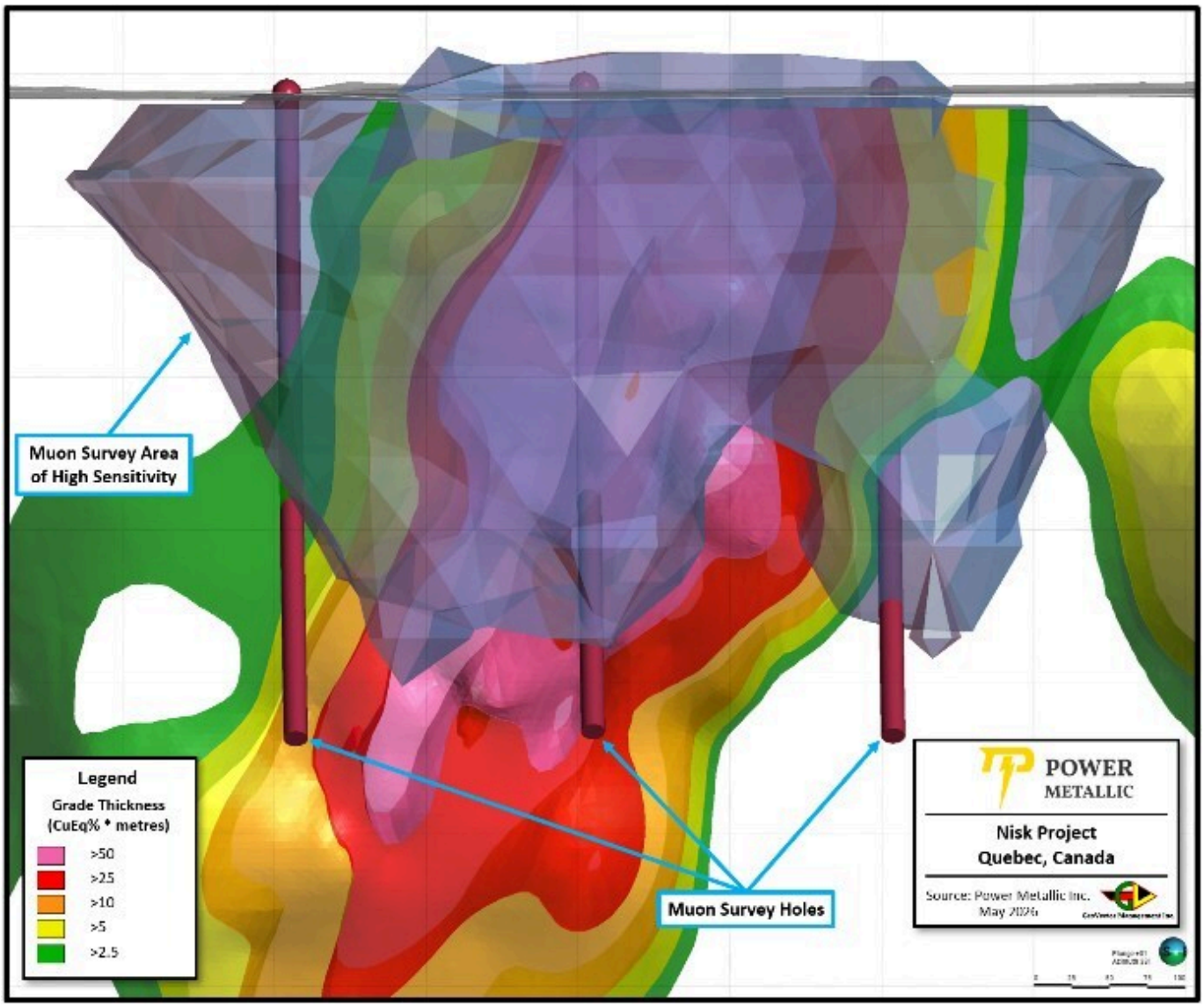

Figure 2: Long section of muon survey overlain Lion (CNW Group/Power Metallic Mines Inc.)

In total the survey will map the density of over 55,000,000 m^3 of rock volume. The imaging program is planned to run for 6 months in duration, with the option to extend to 8 months if needed to optimize resolution and establish the Lion Zone ore signature.

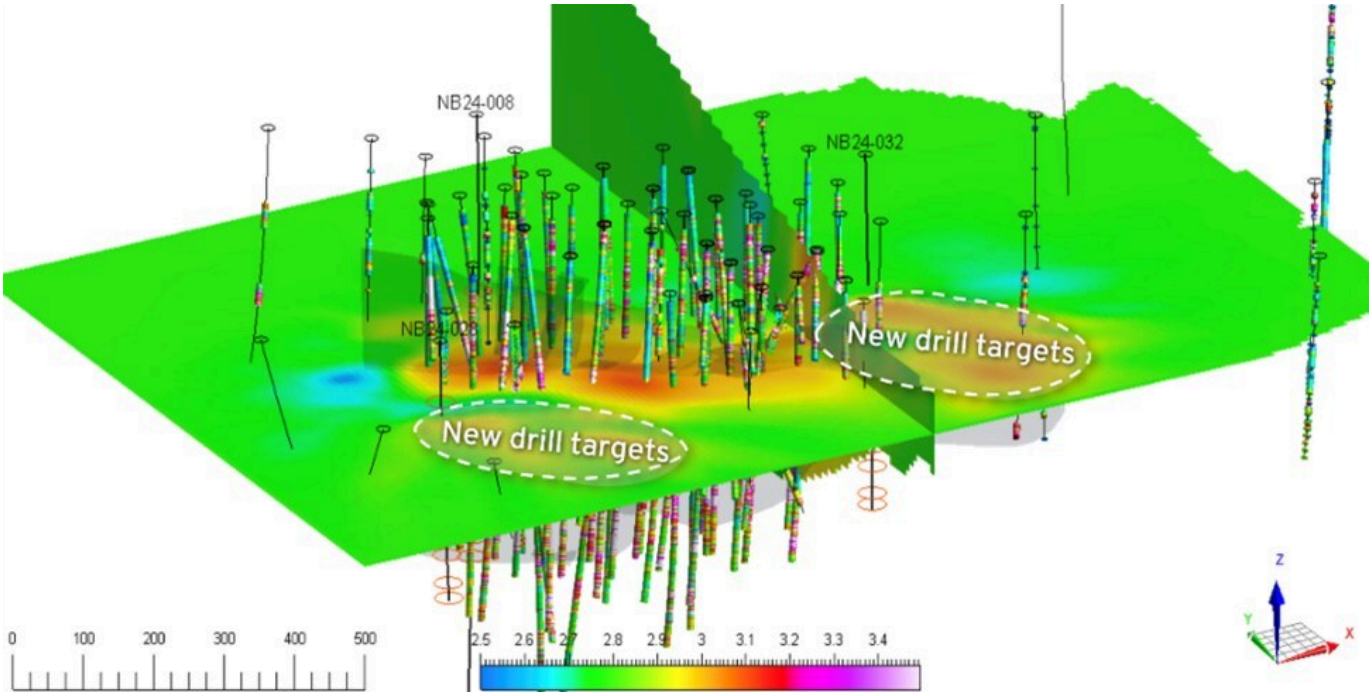

Figure 3 – An example of a density model showing alignment with historic drilling and illumination of new exploration targets, from a muon program conducted at Fireweed Metals' Macmillan Pass District, Yukon Territory. https://ideon.ai/results/fireweed-metals-macpass/ (CNW Group/Power Metallic Mines Inc.)

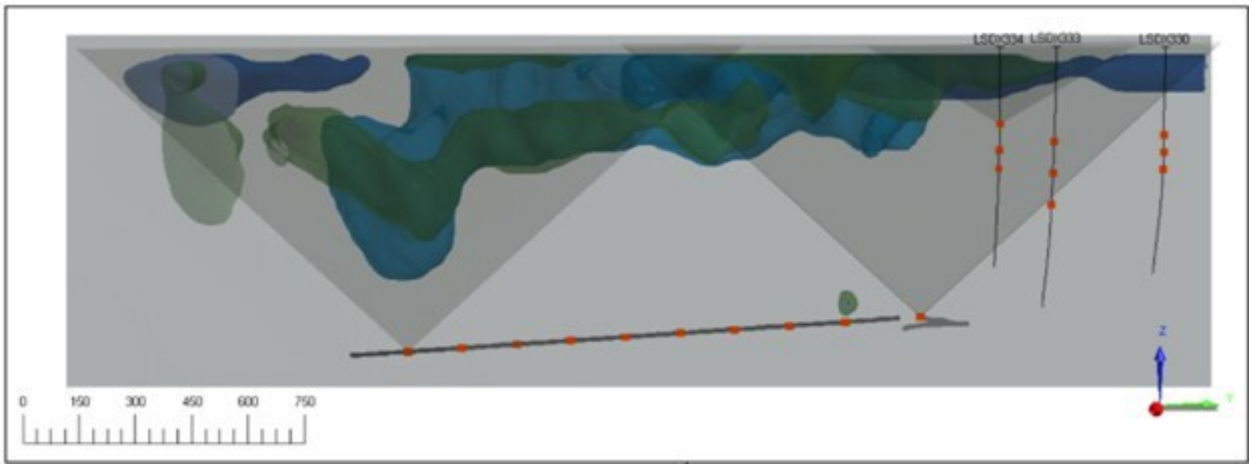

Figure 4: High-density iso-surfaces of BHP's Nickel West from muon tomography data (blue) are identified within the survey region of interest. The joint inversion of airborne, ground gravity and muon tomography (green) is also shown. The main N-S trending structure is clearly aligned with a mafic intrusion, as described earlier. The massive sulphide structure to the East is seen in the muon tomography inversion, but is not apparent in the gravity inversions – though there is some slight density

variation seen in the airborne data. The joint inversion is very compatible with the presence of the massive sulphide. https://ideon.ai/results/bhp-leinster-mine/ (CNW Group/Power Metallic Mines Inc.)
The Lion imaging program is designed as a validation exercise. Power Metallic holds an extensive drill dataset at Lion built from more than 100 holes across multiple campaigns. By producing an unconstrained muon inversion and then comparing it directly against the known resource model, the Company will establish the geophysical fingerprint of a Lion-style polymetallic massive sulfide system. Once the density signature of Lion mineralization is confirmed to match the tomographic model, that calibrated signature will become the search template for the broader Nisk project district.

District Scale: Opening a New Search Space

The most transformative potential of this program lies beyond Lion itself.

Power Metallic's Nisk project encompasses ~330 km² of land including approximately 20 km of strike on the northern basin margin and 30 km on the southern basin margin – a contiguous belt hosting the Nisk Main deposit, the Lion discovery, and numerous additional untested geophysical anomalies. To date, surface and near-surface exploration methods including airborne magnetics, ground gravity, and Airborne EM have provided effective screening tools for targets shallower than approximately 200 m depth. Below that threshold, surface-based techniques are unable to detect deposit-scale targets.

"One of the challenges in exploring any deposit is false positives. Borehole EM continues to be the gold standard, but increasingly we are looking to combine it with other techniques that can image thicker mineralization. We are excited to integrate our current best practice workflow with muon

tomography, a technique that's demonstrated it can discover thicker intersections of sulfides. By incorporating an additional physical property beyond BHEM, we aim to improve our probability of target success and better discriminate high-quality conductors. We are always striving to discover better ore, not just more ore." commented Steve Beresford, Director.

Muon tomography will be used to target a search space below 200 meters. Ideon muon sensors can image key geological features in the deep subsurface extending the effective targeting depth range where the next Lion-scale discovery may be hiding.

The geological rationale for deep exploration at Nisk is compelling. The Tiger Zone, located approximately 700 m east of Lion, has already returned Lion-style polymetallic mineralization, confirming the mineralizing system is not confined to Lion alone. The 5.5-km corridor between Lion and Nisk Main remains largely untested at depth. Company geologists have interpreted an easterly plunging structural control on high-grade Lion mineralization that acts as a vector toward a potential source body at greater depth. Regional structural analysis has identified a fold-hinge zone on newly acquired ground that covers an extension of the Lion mineralizing system previously outside the property boundary.

Once a validated muon signature of Lion mineralization is in hand, Power Metallic intends to conduct phased muon surveys across priority targets within this district, applying the calibrated density fingerprint of its known deposit type to rank and test anomalies that otherwise would have to be evaluated with blind drilling.

Learn more about how muon tomography works at this link.

"We have been excited about Nisk's geological potential for many years and of course with the amazing success of the Lion Zone

Discovery we entered a new frontier. With the guidance of our technical director Steve Beresford and the Geovector team led by our VP of Exploration Joe Campbell we have continuously pushed the targeting envelope to discover thicker massive Cu-PGE sulfides. Historically we know the polymetallic discoveries around the world are some of the largest and most profitable mines ever discovered. These discoveries are an order of magnitude bigger than what we have currently discovered. Even the smallest polymetallic discovery is more than 50% larger. What that means in practical terms is we have probably only scratched the surface at Nisk. Even as we are planning to publish our inaugural MRE (Mineral Resource Estinate) this summer to demonstrate that the current discoveries have exciting commercial potential, we remain focused on uncovering Nisk's full potential. Our team believes that muon tomography is the next tool that can accelerate our discovery process and everything I have seen makes me confident that they have once again chosen wisely." commented Terry Lynch, CEO & Director.

Qualified Person

Joseph Campbell, P. Geo, VP Exploration at Power Metallic, is the qualified person who has reviewed and approved the technical disclosure contained in this news release.

About Power Metallic Mines Inc.

Power Metallic is a Canadian exploration company focused on advancing the Nisk Project Area (Nisk–Lion–Tiger)–a high–grade Copper–PGE, Nickel, gold and silver system–toward Canada's next polymetallic mine.

On 1 February 2021, Power Metallic (then Chilean Metals) secured an option to earn up to 80% of the Nisk project from Critical Elements Lithium Corp. (TSX–V: CRE). Following the June 2025 purchase of 313 adjoining claims (~167 km²) from Li–FT Power,

the Company now controls ~330 km² and roughly 50 km of prospective basin margins.

Power Metallic is expanding mineralization at the Nisk and Lion discovery zones, evaluating the Tiger target, and exploring the enlarged land package through successive drill programs. Beyond the Nisk Project Area, Power Metallic indirectly has an interest in significant land packages in British Columbia and Chile, by its 50% share ownership position in Chilean Metals Inc., which were spun out from Power Metallic via a plan of arrangement on February 3, 2025.

It also owns 100% of Power Metallic Arabia which owns 100% interest in the Jabul Baudan exploration license in The Kingdon of Saudi Arabia's Jabal Said Belt. The property encompasses over 200 square kilometres in an area recognized for its high prospectivity for copper gold and zinc mineralization. The region is known for its massive volcanic sulfide (VMS) deposits, including the world-class Jabal Sayid mine and the promising Umm and Damad deposit.

For further information, readers are encouraged to contact:
Power Metallic Mines Inc.
The Canadian Venture Building
82 Richmond St East, Suite 202
Toronto, ON

QAQC and Sampling
GeoVector Management Inc ("GeoVector") is the Consulting company retained to perform the actual drilling program, which includes core logging and sampling of the drill core.

All core in this news release is either HQ or NQ sized core. Drill core is re-fitted and measured. Geotech on core includes photographs (wet & dry), rock quality index, magnetic susceptibility, conductivity, and recovery estimates. Core is logged for lithology, mineralogy, and structural features, and sample intervals are delineated and tagged.

Sampled core is mechanically sawn, and half-core is retained for future reference. GeoVector's QAQC program includes regular insertion of CRM standards, duplicates, and blanks into the sample stream with a stringent review of all results. QAQC and data validation was performed, and no material errors were observed.

All samples were submitted to and analyzed at Activation Laboratories Ltd ("Actlabs"), a commercial laboratory independent of Power Metallic with no interest in the Project. Actlabs is an ISO 9001 and 17025 certified and accredited laboratories. Samples submitted through Actlabs are run through standard preparation methods and analysed using RX-1 (Dry, crush (< 7 kg) up to 80% passing 2 mm, riffle split (250 g) and pulverize (mild steel) to 95% passing 105 µm) preparation methods, and using 1F2 (ICP-OES) and 1C-OES – 4-Acid near total digestion + Gold-Platinum-Palladium analysis and 8-Peroxide ICP-OES, for regular and over detection limit analysis. Pegmatite samples are analyzed using UT7 – Li up to 5%, Rb up to 2% method. Actlabs also undertake their own internal coarse and pulp duplicate analysis to ensure proper sample preparation and equipment calibration.

Cautionary Note Regarding Forward-Looking Statements

This message contains certain statements that may be deemed "forward-looking statements" concerning the Company within the meaning of applicable securities laws. Forward-looking

statements are statements that are not historical facts and are generally, but not always, identified by the words “expects,” “plans,” “anticipates,” “believes,” “intends,” “estimates,” “projects,” “potential,” “indicates,” “opportunity,” “possible” and similar expressions, or that events or conditions “will,” “would,” “may,” “could” or “should” occur. Although the Company believes the expectations expressed in such forward-looking statements are based on reasonable assumptions, such statements are not guarantees of future performance, are subject to risks and uncertainties, and actual results or realities may differ materially from those in the forward-looking statements. Such material risks and uncertainties include, but are not limited to, among others; the timing for various drilling plans; the ability to raise sufficient capital to fund its obligations under its property agreements going forward and conduct drilling and exploration; to maintain its mineral tenures and concessions in good standing; to explore and develop its projects; changes in economic conditions or financial markets; the inherent hazards associates with mineral exploration and mining operations; future prices of nickel and other metals; changes in general economic conditions; accuracy of mineral resource and reserve estimates; the potential for new discoveries; the ability of the Company to obtain the necessary permits and consents required to explore, drill and develop the projects and if accepted, to obtain such licenses and approvals in a timely fashion relative to the Company’s plans and business objectives for the applicable project; the general ability of the Company to monetize its mineral resources; and changes in environmental and other laws or regulations that could have an impact on the Company’s operations, compliance with environmental laws and regulations, dependence on key management personnel and general competition in the mining industry.

SOURCE Power Metallic Mines Inc.

For further information on Power Metallic Mines Inc., please contact: Duncan Roy, VP Investor Relations, 416-580-3862, duncan@powermetallic.com