Palladium One Confirms a New Chonolith at Tyko I Ni - Cu Project in Ontario

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Toronto, December 19, 2023 - Palladium One Mining Inc. (TSXV: PDM) (OTCQB: NKORF) (FSE: 7N11) (the "Company" or "Palladium One") is pleased to report soil sampling has identified up to 0.43% copper in soil from a new chonolith ("magma conduit"), newly named Blaze, thought to represent part of the plumbing system that fed the large Bulldozer mafic-ultramafic intrusion located along the northern portion of the Tyko I Property, which forms part of the larger Tyko Nickel - Copper Project in Ontario, Canada. (Figure 1 and 2).

Highlights

- The Company's geologic model has again been confirmed with a previously 'interpreted' chonolith target having been confirmed. The newly named Blaze chonolith is interpreted to be part of the feeder ("magma conduit") system that emplaced the Bulldozer mafic-ultramafic intrusion at Tyko I.
  - Up to 0.43% copper in soil was discovered. Four samples contain greater than 0.1% Cu and 24 samples are greater than 0.01% copper.
  - As a frame of reference, any soil samples with greater than 0.005% copper are considering highly anomalous and merit follow up.
- Sampling on the Cupa Lake target has expanded the previously discovered copper and nickel soil anomaly to a one kilometer of strike length.
- In Q4 2023, 3,023 meters were drilled in 22 diamond drill holes on the Tyko projects.

"Confirmation of the Blaze chonolith is highly encouraging as it provides a significant target for the discovery of a copper deposit. The Bulldozer intrusion hosts abundant anomalous copper mineralization thereby suggesting that this chonolith may be a magma conduit thereby making it is a compelling drilling target. Following receipt of an exploration drill permit we plan to initiate a drilling program to test the target," stated Derrick Weyrauch, President and CEO.

The 2023 drill program is complete with a total of 22 holes totalling 3,023 meters drilled on both the Tyko I and Tyko II properties. The program focused on the West Pickle Zone of Tyko I (see news release October 30, 2023) as well the newly acquired Feries-Moshkinabi mafic-ultramafic complex in the Tyko II property (see news releases September 11 and September 28, 2023). Drilling at the West Pickle Zone was designed to be shallow and to test for near surface mineralization proximal to the soil anomalies previously reported. Deeper drill testing of the recently announced MagnetoTelluric ("MT") geophysical anomaly (see news release October 30, 2023) that could connect West Pickle to the RJ Zone, 4 to 5 kilometers to the east, and the Gionet Zone on Tyko II (see news release November 21, 2023) will require additional drill permits.

The 2023 ground truthing field program collected a total of 7,355 soil samples while additional work included prospecting and mapping extensive portions of Tyko for the first time. A total of 3,741 soil samples covering the central and western portion of the Tyko I property comprise this release. These areas included the McGill Lake zone, Blaze chonolith, Greenback, Ember Zone, and Cupa Lake targets (Figure 1). The geological mapping undertaken this year is highly valuable as it has provided the Company with a much greater understanding of the Tyko Project geology for target generation.

The Blaze chonolith appears as an S-shape leading toward the Bulldozer mafic-ultramafic intrusion and appears to come to surface in both the north and south extremities where the associated magnetic anomaly is strongest and dives under cover in the central portion (Figure 2). This pattern is further supported by soil samples with the strongest anomalies in the north and south extremities. The soil samples returned some extremely high copper in soil anomalies, with strongly elevated cobalt, and with lower nickel, platinum and palladium. This is meaningful as these metal ratios are very similar to those observed in the nearby Bulldozer mafic-ultramafic intrusion (see news release November 30, 2021). The Bulldozer mafic-ultramafic intrusion hosts significant anomalous disseminated copper mineralization, with the Bulldozer Showing returning up to 3.34% Cu, 0.12% Ni, 0.24% Co, 0.38 g/t Pd, 0.08 g/t Pt in remobilized shear hosted sulphide (see Ontario Mineral Deposit Index MDI000000001901).

First identified in 2021, the Cupa Lake target has a multiline Versatile Time Domain Electromagnetic ("VTEM") airborne anomaly (see news release, October 28, 2021) coincident with strong copper and nickel in soils (see news release November 30, 2021) having samples up to 512 parts per million ("ppm") or 0.05% copper and 139 ppm or 0.01% nickel. In 2023, the Company extended this soil anomaly to over one kilometer of strike length by discovering up to 280 ppm or 0.03% Cu and 101 ppm or 0.01% Ni (Figure 2) in a strong magnetic high, thereby indicating in addition to potential for significant disseminated to blebby nickel-copper sulphides, potential for semi-massive to massive sulphide further supported by a VTEM anomaly. The Ember Zone lies along an interpreted chonolith / feeder structure which extends toward the Cupa Lake target. Mapping indicates a high degree of preservation of mafic and sedimentary rocks within the tonalite. Soil sampling along the trend returned several moderate nickel and chrome anomalies indicating an ultramafic component, thereby suggesting mafic-ultramafic rocks intruded this volcano-sedimentary package of greenstone-belt type rocks.

The Greenback area located just to the southwest of the Blaze chonolith appears to be a remnant sliver of greenstone rocks, and has returned several Cu anomalies, and locally anomalous gold, this area may represent a volcanogenic sulphide ("VMS") target.

The McGill Lake area also saw discovery success with several anomalous copper samples up to 1,100 ppm or 0.11% Cu (Figure 1), that warrant additional investigation. Geological mapping has indicated abundant mafic volcanics and gabbroic clasts within the tonalite suggesting a high degree of preservation of the original greenstone belt-type rock, and potentially the mafic ultramafic rocks which intruded them. The significance of which is that there is a high degree of probability of Ni-Cu mineralization occurring in this area, ground geophysical surveys including Induced Polarization ("IP") and MT are proposed to guide further targeting before drill testing.

Figure 1. High resolution airborne mag (total field) with 2021 and 2023 soil sampling (all values in PPM) in the central and western parts of the Tyko I Property.

To view an enhanced version of this graphic, please visit:
https://images.newsfilecorp.com/files/6502/191557_355f386094a81923_001full.jpg

Figure 2. New S shaped (as indicated by dashed black line) Blaze chonolith, as well as the Greenback area, showing very high copper in soil. Both 2021 (circles) and 2023 (squares) soil samples are shown, all highlighted values soil values are in %. The Cupa Lake target, (inset in lower right) shows both strong nickel and copper in soil anomalies, and is likely related to the nearby Ember Zone which has returned up to 6.9 meters grading 1.1% Ni, 0.3% Cu in hole TK22-104 (see news release March 27, 2023).

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About Tyko Nickel - Copper - Cobalt Project
The Tyko Nickel - Copper - Cobalt Project, is located approximately 65 kilometers northeast of Marathon Ontario, Canada. Tyko is an early stage, high sulphide tenor, nickel - copper (2:1 ratio) project and with multiple mineralized zones spanning over a 20-kilometer strike length and demonstrating the potential for a new greenfield nickel district.

Qualified Person
The technical information in this release has been reviewed and verified by Neil Pettigrew, M.Sc., P. Geo., Vice President of Exploration and a director of the Company and the Qualified Person as defined by National Instrument 43-101.

About Palladium One
Palladium One Mining Inc. (TSXV: PDM) is focused on discovering environmentally and socially conscious Critical Green Transportation Metals. A Canadian mineral exploration and development company, Palladium

One is targeting district scale, nickel - copper sulphide and platinum-group-element (PGE) deposits in Canada and Finland. The Läntinen Koillismaa (LK) Project in north-central Finland, is a PGE-copper-nickel project that has existing NI43-101 Mineral Resources, while both the Tyko and Canalask high-grade nickel-copper projects are located in Ontario and the Yukon, Canada, respectively. Follow Palladium One on LinkedIn, Twitter, and at www.palladiumoneinc.com.

ON BEHALF OF THE BOARD

"Derrick Weyrauch"
President & CEO, Director

For further information contact:
Derrick Weyrauch, President & CEO
Email: info@palladiumoneinc.com

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