Panther Metals PLC – Dotted Lake: Uncovering Discovery of Gold & VMS Near Hemlo

written by Raj Shah | December 30, 2024

December 30, 2024 (Source) – Panther Metals PLC (LSE:PALM) the company focused on mineral exploration in Canada, is pleased to announce that drill core assay results confirm a 1.2km long open-ended gold trend and the intersection of high grade zinc/gold VMS style[1] mineralisation at the Dotted Lake Project ("Dotted Lake" or the "Project"), the 100% owned exploration property situated on the north limb of the Schreiber-Hemlo Greenstone Belt in Ontario, Canada.

The first batch of assay results from the Phase 1 Diamond Drilling Programme comprise downhole intersections from drillhole DL24-001 which has returned highly anomalous gold, silver, zinc and base metal assays at Target D on the southern shore of Lampson Lake (Figure 1, Table 1). Drill core assay results are by ALS Laboratories methods ME-MS61r (4 acid multielement package) and PGM-ICP23 (Pt, Pd and Au by fire assay and ICP-AES finish)[2]. Interpretation is currently ongoing with the findings outlined below.

Darren Hazelwood, CEO, commented:

"*Below the overburden of Dotted Lake, a large mineralised system has, until now, remained largely undisturbed, only providing small glimpses of its potential at surface. The assay results from the first of five drill holes, have confirmed our greatest hopes and theories: gold over a widening area, and a VMS system containing high grade zinc and gold optimally located between*

the Geco VMS mine to the north and Barrick's Hemlo gold mine to the south.

We are systematically building our understanding of the Project and at every turn our confidence grows. Our visuals of the core were encouraging, resulting in the drill rig being left on site, and this first batch of assay results has already confirmed that our confidence wasn't misplaced. Discussions are underway with our Project partners and we look forward to providing further updates regarding plans to utilise the frozen ground of winter and the drill rig on site as we accelerate this Project."

Results and Analysis – Uncovering a Discovery of Major Gold Trend and VMS System

- Multielement analysis of drill hole assay results show strong correlation between gold, silver, copper, lead, zinc and barium indicating the mineralisation is linked to a volcanic-associated submarine hydrothermal system as associated with a metamorphosed volcanogenic massive sulphide ("VMS") style of mineralisation (see Figure 2 and Figure 3).
- Significant downhole gold intersections:
    - 0.5m @ 1.15 g/t Au from 11.8m;
    - **4.5m @ 0.64g/t Au** from 156.3m, including
        - **0.9m @ 1.55g/t Au, 1.4g/t Ag & 2.08% Zn** from 156.3m (Figure 2); and
    - 1.0m @ 0.53 g/t Au & 1.24 g/t Ag from 105.0m.
- Significant downhole zinc intersections:
    - **5.5m @ 1.21 % Zn** from 155.3m including
        - **2.7m @ 2.42% Zn** from 155.3m and
        - **1.0m @ 3.8% Zn** from 155.3m (Figure 2)

- Zinc intersections in DL24-001 are located 1.2km south-west of the Fairservice Zinc Showing (Figure 1) where high-grade zinc (12% Zn with 2.2 g/t Au) is considered to represent remobilised and metamorphosed VMS mineralisation. Zinc and gold are closely associated together in DL24-001 and also correlate well with conventional magnetic inversion domain boundaries in the magnetic susceptibility model (Figure 4).
- The large metamorphosed VMS-style Geco deposit, located 30km north of Dotted Lake near Manitouwadge, was mined by Noranda from 1954 to 1995 and produced 49.4 Mt of ore grading 1.86% Cu, 3.78% Zn, 50.04 g/t Ag.
- Gold trend now extends for 1.2km and is open in both directions. Intersections in DL24-001 correlate with an open-ended 750m long gold in-soil anomaly, offset from the western end of the 1.2km gold in soil anomaly which extends westwards from the Panther 2021 drill hole which intersected over 9 separate gold intervals grading up to 2.57g/t Au[3], and from trench Tr-10-4 which returned gold samples up to 18.9g/t Au.
- DL24-001 intersected predominantly seafloor volcano-sedimentary derived metavolcanic packages. Ultramafic intrusions were not intersected, with these bodies interpreted from the magnetisation vector inversion ("MVI") Magnetic Susceptibility Model to be possibly located at a greater depth below Lampson Lake (see Figure 5).
- The current programme is subject to a pause as further assay results are awaited. The drill rig is remaining on site to allow for a speedy mobilisation to site in early 2025 on the back of positive results, in keeping with Panther Metals stated intention to accelerate our fieldwork.

Table 1: Diamond Drillhole DL24-001 Details

DrillholeID	Easting	Northing	Elevation (m)	Azimuth (degrees)	Dip (degrees)	Depth(m)
DL24-001	589455	5416139	397	330	45	329

Notes: Coordinates projection: UTM Zone 16N NAD83 Datum.

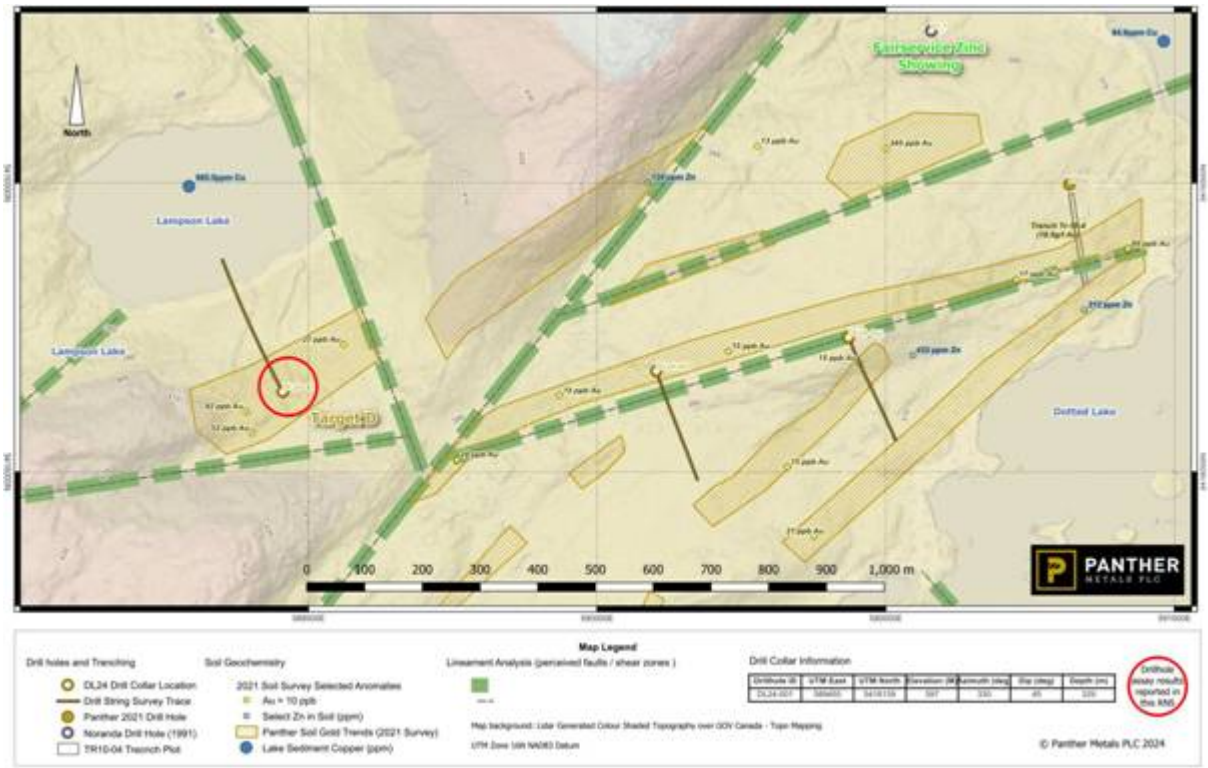
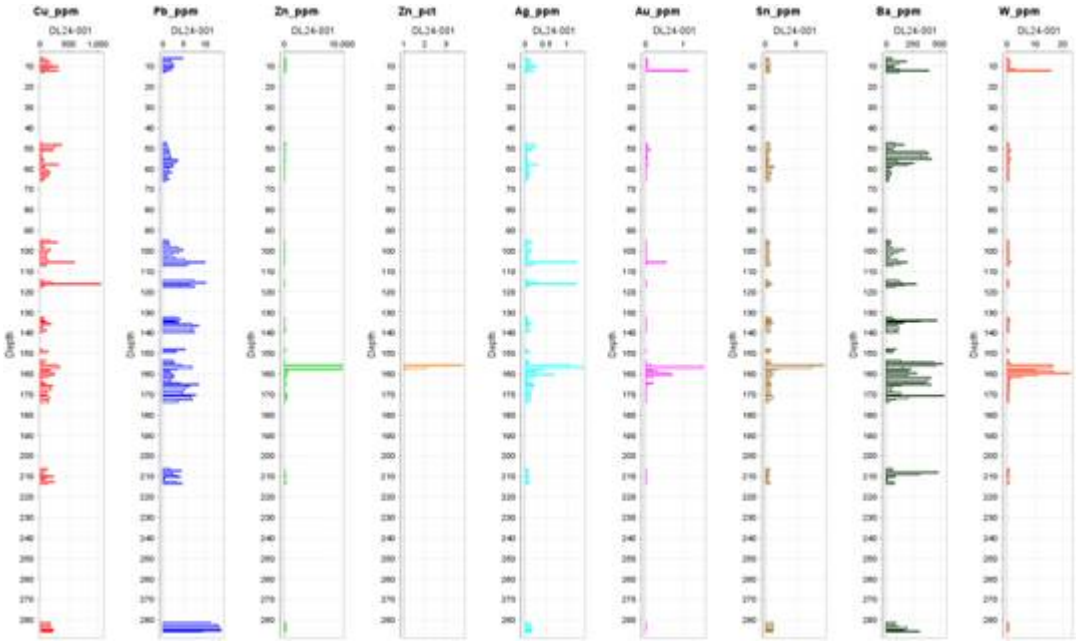


Figure 1: DL24-001 Drill Hole Location with Surface Gold and Zinc Anomalies / Trends and Lineaments

Figure 2: Photography of DL24-001 Drill Core over the interval from 155.3m to 160.8m downhole depth which returned 4.5m @ 0.64g/t Au from 156.3m and 5.5m @ 1.21 % Zn from 155.3m. Photograph markup shows additional high grade intervals such as 1.0m @ 3.80 % Zn & 1.06 g/t Ag from 155.3m, 0.9m @ 1.55 g/t Au. 1.40 g/t Ag & 2.08 % Zn from 156.3m, 0.8m @ 1.07 % Zn from 157.2m and 1.5m @ 0.66 g/t Au from 159.3m.



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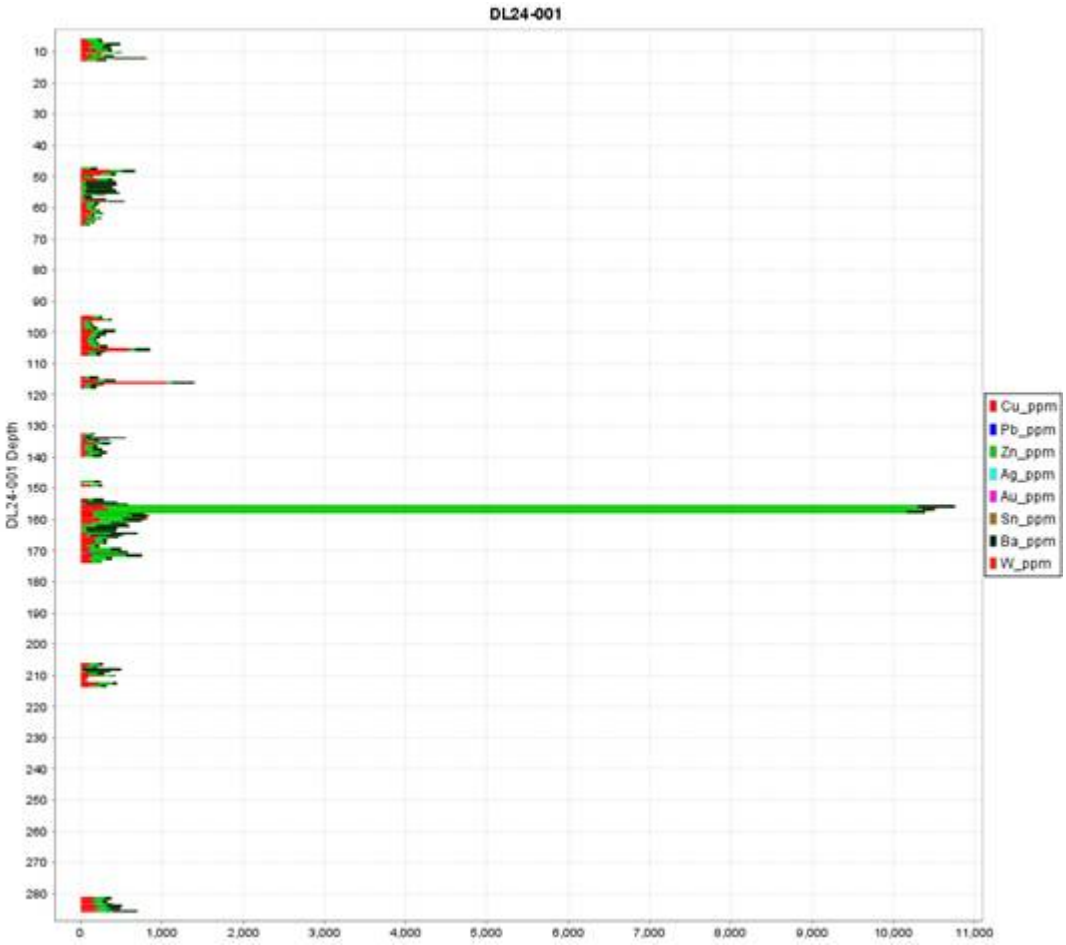

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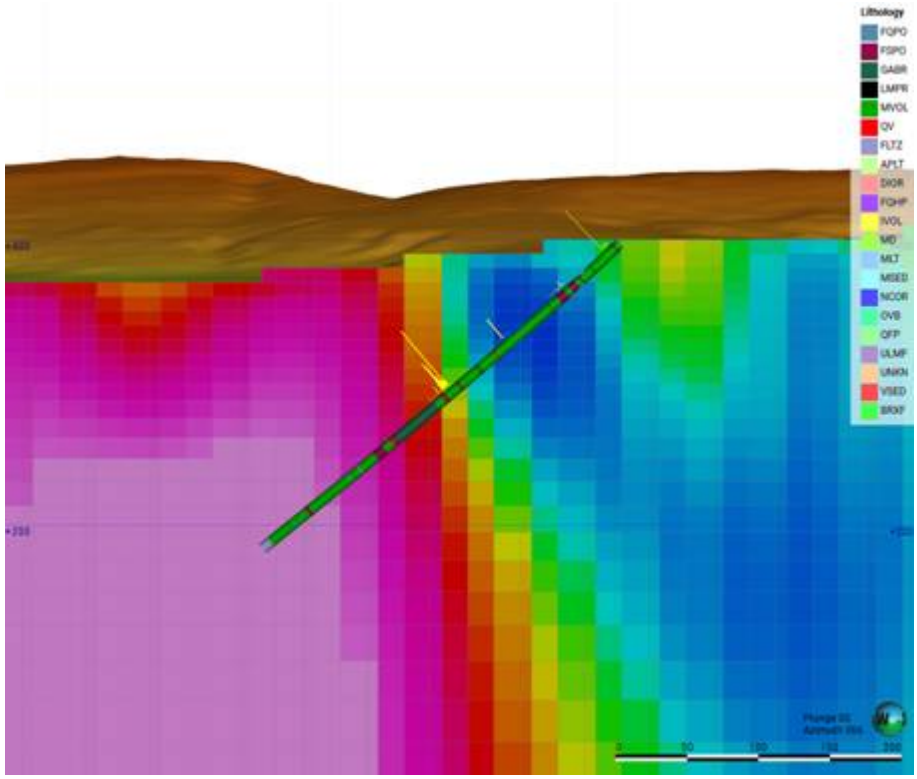
Figure 3: Diamond Drill Hole DL24-001 Multielement Correlations (A & B) Supports VMS Style Mineralisation Source. Note: For illustration purposes zinc concentration is capped at 10,000 ppm in figure 2 B; actual zinc concentrations exceed 38,000 ppm Zn.



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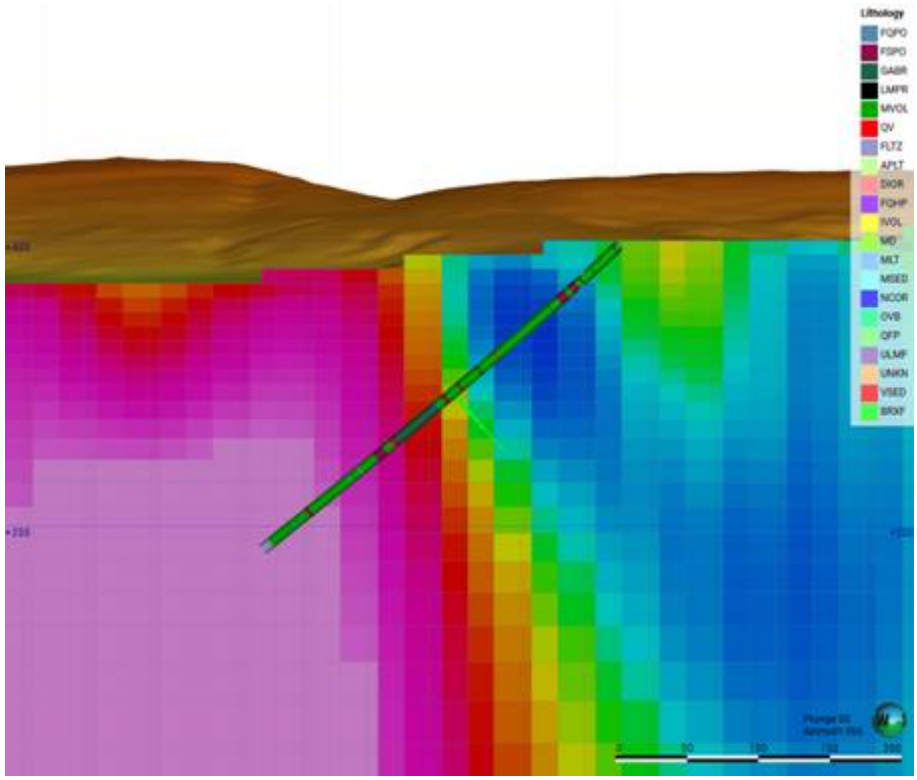

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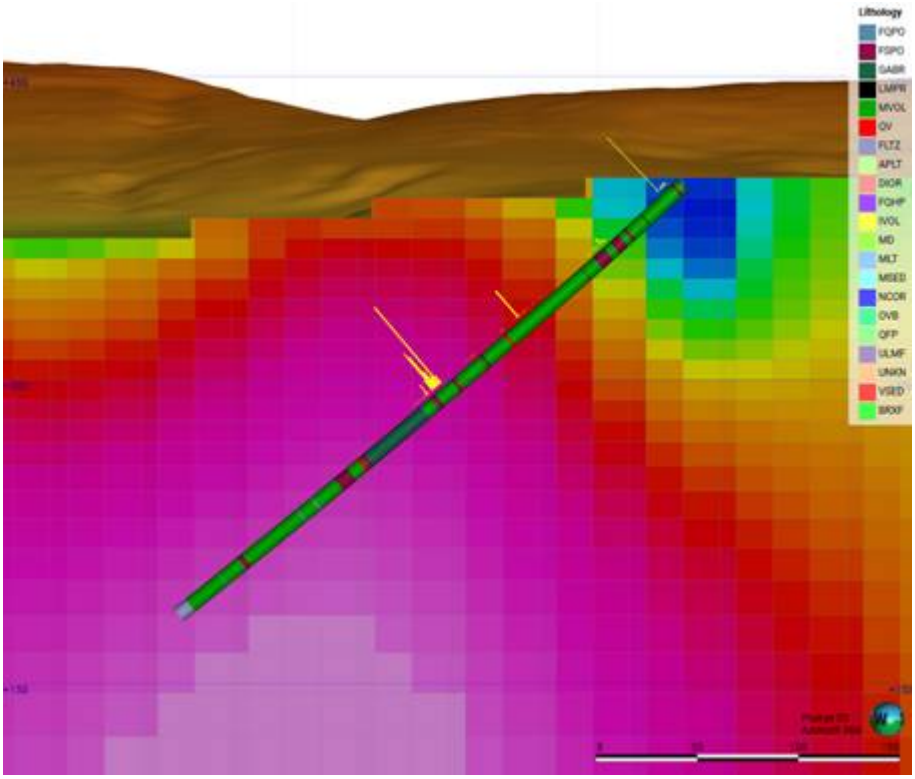
Figure 4: DL24-001 Drill Hole Lithology[4] over Conventional Magnetic Inversion Magnetic Susceptibility Model, with: (A) Gold Intersections; (B) Zinc Assay Traces. Gold and zinc

mineralisation display good correlation with conventional magnetic inversion domain boundaries.



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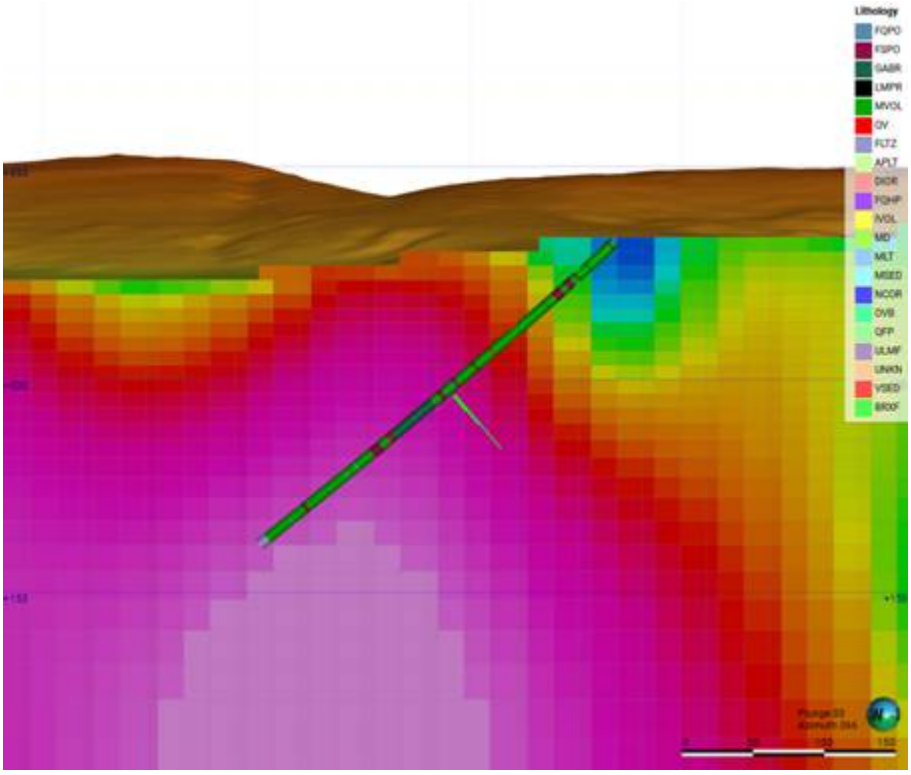

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Figure 5: DL24-001 Drill Hole Lithology[4] over Magnetisation Vector Inversion (MVI) Magnetic Susceptibility Model, with: (A) Gold Intersections; (B) Zinc Assay Traces. Gold and zinc mineralisation does not display strong correlation with MVI domain boundaries. The lightest pink in the MVI model may be correlates with underlying ultramafic intrusive.

Reference Notes

1. 'VMS style' relates to metamorphosed volcanogenic massive sulphide ("VMS") style of mineralisation associated with a volcanic-associated submarine hydrothermal system.
2. Four-acid digestion paired with Inductively Coupled Plasma Mass Spectrometry (ICP-MS) and Inductively Coupled Plasma Atomic Emission Spectrometry (ICP-AES) with rare earth element (REE) analytes included. Four-acid multi-element analysis is an effective tool in mineral exploration because of its ability to provide a full pathfinder element suite as well as a cost-effective proxy for mineralogy. A four-acid digestion utilises a combination of nitric, perchloric, and hydrofluoric acids with a final dissolution stage using hydrochloric acid. This digestion breaks down most silicate and oxide minerals allowing for the "near-total" recovery of most minerals and analytes.
3. Diamond drill hole PAN21_DL_001, which was drilled directly below Tr-10-4, returned over five intersections grading up to 2.57g/t Au, with 11 intersections greater than 0.5g/t Au (announced 22 January 2022) and with 19 intersections greater than 0.2g/t Au between 14m and 341m downhole depth. PAN21_DL_001 downhole gold intersections:
    - Five intersections > 1g/t Au:
        - **0.9m @ 1.73 g/t Au from 47.3m**
        - **1.0m @ 1.05 g/t Au from 122.2m**
        - **1.0m @ 1.59 g/t Au from 136.2m**

        - **1.0m @ 1.04t Au from 158.2m**
        - **1.1m @ 1.4 g/t Au from 228.3m (inc. 0.5m @ 2.57 g/t Au from 228.3m)**

    - Eleven Intersections >0.5g/t Au, including two 2m wide composites:
        - **2m @ 0.87 g/t Au from 122.2m (inc. 1m @ 1.05 g/t Au from 122.2m)**
        - **2m @ 0.96 g/t Au from 158.2m (inc. 1m @ 1.04 g/t Au from 158.2m)**

4. Lithology codes shown in figures 2 & 3:

APLT	Aplite
BRXF	Breccia Fault
DIOR	Diorite
FLTZ	Fault Zone
FQHP	F-spar Quartz Hornblende Porphyry
FQPO	F-spar Quartz Porphyry
FSPO	Feldspar Porphyry
GABR	Gabbro
IVOL	Intermediate Metavolcanic
LMPR	Lamprophyre
MDST	Mudstone
MSED	Metasediment
MVOL	Mafic Metavolcanic
NCOR	No Core
OVB	Overburden

QV	Quartz-Vein
ULMF	Ultramafic
UNKN	Unknown (TBC)

For further information please contact:

Panther Metals PLC:

Darren Hazelwood, Chief Executive Officer: +44(0) 1462 429 743

+44(0) 7971 957 685

Brokers:

Tavira Financial Limited

Christopher James Kipling +44(0) 203 833 3743

SI Capital Limited

Nick Emerson
+44(0) 1438 416 500

Axis Capital Markets Limited

Ben Tadd

Lewis Jones
+44 (0)20 3026 0449

Notes to Editors

Panther Metals PLC is an exploration company listed on the main market of the London Stock Exchange. Panther is focussed on the discovery of commercially viable mineral deposits. The Company's operational focus is on established mining jurisdictions with

the capacity for project scalability. Drill targets are assessed rapidly utilising a combination of advanced technologies and extensive geological data to decipher potential commercial viability and act accordingly. Panther's current geological portfolio comprises of three highly prospective properties in Ontario, Canada.

Obonga Project

Panther Metals acquired the Obonga Greenstone Belt in July 2021 and have already identified five prospective primary targets: Wishbone, Awkward, Survey, Ottertooth and Silver Rim. A successful Phase 1 drilling campaign at Wishbone in Autumn 2021 revealed the presence of significant VMS-style mineralised systems on the property – the first such discovery across the entire greenstone belt. Intercepts include 27.3m of massive sulphide in hole one, and 51m of sulphide-dominated mineralisation in hole two. Both drill holes contained multiple lenses. Anomalous high-grade copper in lake sediment close to the target area has also been identified, increasing confidence in the prospectivity of the location.

Awkward is a highly anomalous magnetic target, interpreted to be a layered mafic intrusion and magmatic conduit based on mapped geology and airborne geophysics. Historic sampling in the area returned anomalous platinum and palladium (Pt, Pd) values, while historic drilling on the periphery of the target intersected non-assayed massive sulphide and copper (assumed to be chalcopyrite), non-assayed disseminated pyrite and chalcopyrite in coarse gabbro, and non-assayed 'marble cake' gabbro (matching the description of the Lac des Iles Mine varitexture gabbro ore zone).

Two additional named targets, Survey and Ottertooth, both displays further coincident magnetic and electromagnetic

anomalies and are adjacent to the contact between intrusive and extrusive mafic rocks. Historic drilling at Survey intersected several meters of massive sulphides in multiple intersections (main parts of the anomaly remain untested) while Ottertooth remains untested in its entirety.

Dotted Lake Project

Panther Metals acquired the Dotted Lake Project in July 2020, it is situated approximately 16km from Barrick Gold's renowned Hemlo Gold Mine. An extensive soil programme conducted in 2021 identified numerous gold and base metal targets, all within the same geological footprint. Following the installation of a new trail providing direct access to the target location, an initial drilling programme in Autumn 2021 confirmed the presence of gold mineralisation within this system with anomalous gold continuing along strike and present within the surrounding area.

Fulcrum Metals Plc

Fulcrum Metals PLC (LON: FMET) is an AIM listed exploration company which finances and manages exploration projects focused on Canada, widely recognised as a top mining jurisdiction.

Fulcrum's strategy is to focus on discovery and commercialisation of its Projects through targeted exploration programmes. The primary focus is to make an economic discovery on the flagship Schreiber-Hemlo Properties and establishing the prospectivity of its wider Ontario and Saskatchewan portfolio with a view to securing potential joint venture and/or acquisition interest.

Panther Metals Plc own 12.38% of the issued share capital of Fulcrum Metals Plc and a 2% NSR on the Big Bear project.

Conclusion

Panther Metals understand that the commercial realities of building an exploration company requires expertise in geology, finance, and the markets within which they operate. The Company's extensive network of industry leaders allows it to meet these objectives. Ultimately however, drilling success is the only route to discovery: the fundamental objective of any exploration company. Once Panther's world-class geological team identify the anomalies, they work hard to get drilling. The drill hole is the only place where substantial and sustained capital growth originates and it's with that operational focus Panther Metals will continue to advance.