

Ideon Pinpoints Sulphide Mineralization for Fireweed Metals in Critical Minerals Breakthrough

Muon tomography successfully maps critical minerals and geological structures with metre-scale precision

VANCOUVER, BRITISH COLUMBIA, CANADA, July 31, 2025 /EINPresswire.com/ -- Canadian

“

The successful intersection of sulphide mineralization within targets generated from the 2024 muon tomography survey confirms the effective use of this exploration technique in the Macpass District.”

*Ian Gibbs, President and CEO,
Fireweed Metals*

subsurface intelligence leader [Ideon Technologies](#) is thrilled to share the success of validation drilling conducted by Fireweed Metals (TSXV: FWZ; OTCQX: FWEDF) on targets generated from a muon-powered imaging program completed at its Macpass Project in Yukon, Canada this year. In addition to validating geological hypothesis about the mineralization structure there, and providing great insight on continuity between existing drilling, Ideon pinpointed promising new drill targets along a 1.5 km strike extent without Fireweed needing to conduct widespread exploratory drilling. Recent drilling has now confirmed density anomalies in all targets identified by muon tomography, intersecting intervals of zinc, lead, and

silver sulphide mineralization. Fireweed Metals shares rose 3.5% [following the announcement](#).

Activated at Boundary Zone in October 2024, [the Ideon REVEAL™ for Exploration solution](#) mapped density at metre-scale resolution over hundreds of millions of cubic metres at depths down to about 600 m. The 3D subsurface model Ideon created used data acquired autonomously throughout the harsh northern winter from muon sensors placed in just 3 boreholes. Mid-program results shared in March 2025 confirmed mineralization trends and identified several new advanced drill targets in anticipation of Fireweed’s summer 2025 exploration campaign. Ideon then provided target shells to inform drilling, which aligned with massive sulphide mineralization characteristics seen elsewhere on the site.

“The successful intersection of sulphide mineralization within targets generated from the 2024 muon tomography survey confirms the effective use of this exploration technique in the Macpass District,” said Ian Gibbs, President and CEO of Fireweed Metals in a statement issued

July 30, 2025. "Our 2025 drilling confirms the density signatures generated from the survey correspond to mineralization, alteration, or denser rock types." The approach increases cost-efficiency during short summers on site, boosts the likelihood of discovery, and reduces exploration footprint.

In a remote region like Macpass, utilizing this technology offers the opportunity to dramatically reduce drilling costs associated with mineralization validation. "These results at Fireweed underscore the power of high-resolution subsurface imaging in the reduction of geological uncertainty," says Ideon CEO & Co-Founder Gary Agnew. "When working in subsurface areas where the scale, grade, and location of mineralization are uncertain

– like Macpass – we can deliver a clear understanding of deposits and structures faster, more efficiently, and with increased confidence. We've seen the REVEAL™ platform deliver similar results across a range of geological settings and stages of the mining value chain — from identifying and characterizing targets in early exploration to monitoring and optimizing extraction in complex caving environments. Our solutions can halve the time needed to fully understand and develop a site, while cutting drilling by between 40 and 90%." Ideon also integrated a site-wide gravity survey in a multi-physics program, helping Fireweed to develop a multi-faceted subsurface geological model.

Ideon harnesses the energy from supernova explosions in space to image deep beneath the Earth's surface. Using sub-atomic particles called muons, Ideon creates high-resolution 3D density models that help geologists identify, map, and characterize mineral deposits and other geological anomalies. The Ideon REVEAL™ for Exploration solution consists of an advanced suite of proprietary data-generation hardware, software, AI-powered services, and multi-physics fusion algorithms that unlock the exponential power of integrated spatial data. It allows mining companies to precisely target and delineate subsurface features, at depth, on remote greenfield sites like Macpass or in the complex operational environment of active brownfield mine sites.

www.ideon.ai/reveal



Ideon Technologies team onsite at Fireweed Metals' Macpass project, 2024.

About Ideon Technologies (www.ideon.ai)

Ideon Technologies uses the energy from supernova explosions to image deep beneath the Earth's surface. A spin-off from TRIUMF (Canada's particle physics lab), Ideon is a world pioneer in cosmic-ray muon tomography. By transforming muon data into reliable 3D density maps, Ideon helps geologists identify, map, characterize, and monitor geological features with confidence. This reduces risk and cost of traditional methods, while saving time, optimizing return, and minimizing environmental impact across the mining value chain. In turn, this is helping accelerate the world's transition to low-impact mining and transform how companies find the critical minerals required to power the global shift to clean energy – improving peoples' lives and enhancing economic prosperity.

About Fireweed Metals (www.fireweedmetals.com)

Fireweed is an exploration company focused on unlocking value in a new critical metals district located in Northern Canada. Fireweed is 100% owner of the Macpass District, a large and highly prospective 985 km² land package. The Macpass District includes the Macpass zinc-lead-silver project and the Mactung tungsten project. A Lundin Group company, Fireweed is strongly positioned to create meaningful value. Fireweed trades on the TSX Venture Exchange under the trading symbol "FWZ", on the OTCQX Best Market under the symbol "FWEDF", and on the Frankfurt Stock Exchange under the trading symbol "M0G".

Kim Lawrence

Ideon Technologies

klawrence@ideon.ai

Visit us on social media:

[LinkedIn](#)

[YouTube](#)

This press release can be viewed online at: <https://www.einpresswire.com/article/835944453>

EIN Presswire's priority is source transparency. We do not allow opaque clients, and our editors try to be careful about weeding out false and misleading content. As a user, if you see something we have missed, please do bring it to our attention. Your help is welcome. EIN Presswire, Everyone's Internet News Presswire™, tries to define some of the boundaries that are reasonable in today's world. Please see our Editorial Guidelines for more information.

© 1995-2025 Newsmatics Inc. All Right Reserved.