

Critical One Energy Geophysical Interpretation Identifies Significant Extension Potential to Howells Lake Antimony-Gold Mineralization

02.12.2025 | [Newsfile](#)

[Critical One Energy Inc.](#) (CSE: CRTL) (OTCQB: MMTLF) (FSE: 4EF0) (formerly Madison Metals Inc.) ("Critical One" or the "Company"), a leading Canadian mining exploration company focused on critical metals and minerals, is pleased to announce that advanced geophysical and geological modelling of a recently completed VTEM airborne magnetic and electromagnetic (EM) geophysical survey has identified significant potential expansions to the mineralization at its Howells Lake Antimony-Gold Project ("Howells Lake Project"). The new interpretive results confirm the potential for discovering additional areas of mineralization containing both antimony and gold along highly altered and sulphide-bearing stratigraphic contacts that extend laterally westward for at least two kilometres (km). Modelled EM conductors also reside at depth below historic drilling and along strike of a magnetic low structural corridor. The new interpretive work indicates that the favourable stratigraphy is steeply dipping and extends to a depth of more than 300 metres (m). The Howells Lake Project is located approximately 120 km west of the Ring of Fire road corridor in the Thunder Bay North Mining Division of Ontario, Canada.

Analysis of the recent VTEM geophysical survey, combined with detailed geological modelling, identified characteristics of the antimony-gold mineralization and related altered host rocks that extend west, northeast, and at depth from the antimony-gold mineralization discovered in 1979. The analysis reveals:

- Previous drilling at the historical Howells Lake West Zone intersected up to 4.7% antimony and 25.5 g/t gold over 1.43 metres in discovery drill hole W-79-2
- Previous drilling at Howells Lake East Zone intersected up to 75% antimony within an interval of 5.37% antimony over 8.35 metres in drill hole MC-V3-79-22 and 1.18% antimony over 5.8 metres in drill hole MC-V3-79-11
- Alteration mapping, data reconstruction, and geophysical interpretation show the West antimony-gold zone to be a west-striking, north-dipping, silicified, and strongly altered and mineralized zone containing stibnite (antimony sulphide), pyrite, and pyrrhotite as well as brecciated graphite with stibnite
- Modelling of the newly defined EM anomalies associated with the mineralized zone shows an extension of airborne electromagnetic responses or clusters of anomalies extending from the drilled area for at least 2 km to the west (Figure 1)
- EM anomalies also extend northeast and at depth (>300 m) along a magnetically low structural corridor previously known to span over 8 km of the current claims (Figures 1, 2)
- Newly modelled EM conductors reside below the historic east and west zones indicating lateral extension to previously intersected antimony-gold mineralization (Figure 2)
- Antimony-gold mineralization is interpreted to be controlled by a late west-striking, north-dipping altered stratigraphy and fault zones on the margins of a feldspar porphyry
- EM anomalies to the west indicate favourable stratigraphy outside of the historic V-3 deposit, while the northeast-southwest striking magnetic low may host additional porphyries that mark conduits to ore-forming fluids
- Additional modelling helped to confirm and categorize other similar antimony-gold targets, some associated with strong antimony in lake sediment geochemical anomalies, along the 30 km strike length of favourable geology on the Company's 25,000-hectare property
- Howells Lake is the only significant new antimony-gold project in Ontario. The only advanced project to contain significant reserves of antimony-gold in North America is Perpetua Resources' Stibnite Gold Project, which contains total proven and probable reserves of 4.8 million oz of gold grading 1.43 g/t, and 74,000 tons of antimony grading 0.064%. Current North American production is limited to [Americas Gold and Silver Corp.](#)'s Galena Complex that has recently produced 224 tons of antimony in Q1-Q3 of 2025

"As we work our way through the new geophysical data and integrate that information into our public and private dataset, we are consolidating our ideas on how we will execute our initial, fully funded drill program to evaluate the significant antimony and gold potential at Howells Lake," said Duane Parnham, Founder, Executive Chairman and CEO of Critical One. "These interpretive results validate our understanding of the potential of Howells Lake to be a cornerstone asset with exceptional antimony and gold exploration and

development potential."

Geological and geophysical data review and analysis are ongoing. Critical One is also advancing its exploration program plans for follow-up drilling to delineate and expand the antimony-gold deposits (see the press releases dated August 28, 2025 and September 4, 2025, respectively).

Figure 1: Plan View of the latest geophysical results at the Howells Lake Antimony-Gold Project. AEM anomalies and modelled "Deep EM" Maxwell plates overlay airborne magnetic intensity (FVD).

To view an enhanced version of this graphic, please visit:

https://images.newsfilecorp.com/files/12034/276540_8eae952784eb3bb6_002full.jpg

Figure 2: North-looking cross section of Howells Lake antimony-gold zones. Modelled EM conductors show potential for lateral extension of mineralized zones below historic drilling.

To view an enhanced version of this graphic, please visit:

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The Howells Lake Project hosts a historical resource of 1.7 million tons at a grade of 1.4% antimony with associated gold mineralization. The resource is not National Instrument (NI) 43-101 compliant and therefore readers should not rely on the information. The resource estimate does not include categories as required under NI 43-101 and the report predates NI 43-101 by decades. Given the work was completed more than 40 years ago, all work will need to be redone as the historic work cannot be used in a NI 43-101 compliant report. Geological mapping as well as significant drilling will be required to establish a NI 43-101 resource estimate for the known antimony mineralization. The resource presented in the report does not provide the parameters used in the preparation of the resource estimate (tonnage estimate). Historical Report Reference: Themistocleous, S.G., Idziszek, C., 1980. Miminiska Lake Project Northwestern Ontario Geological Report, New Jersey Zinc Exploration Company (Canada) Ltd. (*Also see historical information disclosure below.)

*Note: All geological and assay information contained in this document is historical in nature and the Qualified Person ("QP") responsible for the technical disclosure in this release is unable to determine if any of that data would meet current NI 43-101 regulations regarding disclosure of scientific and technical information. Additionally, the QP has not done sufficient work to make the resource current. Drill intersections are reported as downhole intervals. No true width could be determined at this time. The information in the data recovered is considered of value and relevant to the Company's project. However, the Issuer is not treating the estimate as current.

References:

1. Themistocleous, S.G., 1980. Miminiska Lake Project, Northwestern Ontario, Geological Report, New Jersey Zinc Exploration Company (Canada) Ltd.

Qualified Person

Matthew Trenkler, P.Geo. and Chief Geological Officer, Critical One Energy Inc., a Qualified Person ("QP") under NI 43-101, has reviewed and approved the scientific and technical content of this news release. All technical information in this release pertaining to geology and assays is based on historical data that cannot be verified by the QP.

About Critical One Energy Inc.

Critical One Energy Inc. (formerly Madison Metals Inc.) is a forward-focused critical minerals and upstream energy company, powering the future of clean energy and advanced technologies. The Howells Lake Antimony-Gold Project focuses the Company's exposure on antimony, one of the most in-demand critical minerals, as well as gold, which is known to occur at numerous locations on the Howells Lake Project.

Backed by seasoned management expertise and prime resource assets, Critical One is strategically positioned to meet the rising global demand for critical minerals and metals. Its mine exploration portfolio is led by antimony-gold exploration potential in Canada and uranium investment interests in Namibia, Africa. By leveraging its technical, managerial, and financial expertise, the Company upgrades and creates high-value projects, thereby driving growth and delivering value to its shareholders.

Additional information about Critical One Energy Inc. can be found at criticaloneenergy.com and on the Company's SEDAR+ profile at www.sedarplus.ca.

For further information, please contact:

Duane Parnham
Executive Chairman & CEO
Critical One Energy Inc.
+1 (416) 489-0092
ir@criticaloneenergy.com

Media inquiries:

Adam Bello
Manager, Media & Analyst Relations
Primoris Group Inc.
+1 (416) 489-0092
media@primorisgroup.com

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This news release contains "forward-looking information" within the meaning of applicable securities laws. All statements contained herein that are not clearly historical in nature may constitute forward-looking information. In some cases, forward-looking information can be identified by words or phrases such as "may", "will", "expect", "likely", "should", "would", "plan", "anticipate", "intend", "potential", "proposed", "estimate", "believe" or the negative of these terms, or other similar words, expressions, and grammatical variations thereof, or statements that certain events or conditions "may" or "will" happen, or by discussions of strategy. Forward-looking information contained in this press release includes, but is not limited to, statements relating to the Company's business strategy and objectives.

Where the Company expresses or implies an expectation or belief as to future events or results, such expectation or belief is based on assumptions made in good faith and believed to have a reasonable basis. Such assumptions include, without limitation, that: the Company will have the resources required in order to conduct its business as currently operated.

However, forward-looking statements are subject to risks, uncertainties, and other factors, which could cause actual results to differ materially from future results expressed, projected, or implied by such forward-looking statements. Such risks include, but are not limited to, risks relating to the mining industry in general, and other risks as described in the Company's continuous disclosure record on SEDAR+.

Accordingly, undue reliance should not be placed on forward-looking statements and the forward-looking statements contained in this press release are expressly qualified in their entirety by this cautionary statement. The forward-looking statements contained herein are made as at the date hereof and are based on the beliefs, estimates, expectations, and opinions of management on such date. The Company does not undertake any obligation to update publicly or revise any such forward-looking statements or any forward-looking statements contained in any other documents whether as a result of new information, future events or otherwise or to explain any material difference between subsequent actual events and such forward-looking information, except as required under applicable securities law. Readers are cautioned to consider these and other factors, uncertainties, and potential events carefully and not to put undue reliance

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