

Element One and Mantle8 Sign Letter of Intent to Advance Natural Hydrogen Exploration in Western Canada

written by Raj Shah | September 14, 2026

Proposed collaboration combines Mantle8's proprietary hydrogen exploration platform with Element One's regional operating capabilities in British Columbia and Alberta

September 14, 2026 ([Source](#)) – Element One Hydrogen & Critical Minerals Corp. (CSE: EONE) (“Element One” or the “Company”) is pleased to announce that it has entered into a letter of intent (the “LOI”) with Mantle8 SAS (“Mantle8”), a Grenoble, France-based natural hydrogen exploration company, to evaluate and advance prospective natural hydrogen exploration opportunities in British Columbia and Alberta.

The proposed collaboration is intended to combine Mantle8's proprietary natural hydrogen exploration technology stack with Element One's regional exploration capabilities, permitting experience, field operations and stakeholder relationships. The parties plan to identify and rank prospective targets, evaluate land-acquisition opportunities and establish a framework for exploration, drilling and potential development programs under a definitive joint venture agreement.

Strategic Highlights

- **Canadian expansion:** The LOI provides a framework for Mantle8 and Element One to pursue natural hydrogen exploration opportunities in Western Canada, initially

focused on British Columbia and Alberta.

- **Proprietary technology platform:** Mantle8 is expected to deploy its advanced technologies for geological modelling, hydrogen-system assessment, prospect generation and 4D subsurface imaging.
- **Complementary Canadian capabilities:** Element One will manage regional exploration activities, permitting, tenure, field logistics and engagement with Indigenous and local communities and government agencies.
- **Project-generation mandate:** The parties intend to review geological data, identify priority regions, generate and rank targets, and assess opportunities to acquire, lease or option exploration rights.
- **Definitive joint venture contemplated:** Ownership, funding, governance, earn-in, operator and commercialization terms remain subject to negotiation and execution of a definitive agreement.

Management Commentary

“Mantle8 is the natural hydrogen industry’s most technically advanced exploration companies, and its decision to work with Element One in Canada is a significant validation of our team, our regional capabilities and the opportunity we see in Western Canada,” said Brad Kitchen, President and Chief Executive Officer of Element One. “This proposed partnership would give Element One access to an integrated technology platform designed specifically to identify natural hydrogen systems and rank the targets with the strongest potential. Together, we intend to build a disciplined pipeline of exploration opportunities, beginning in British Columbia and Alberta.”

“As we expand and diversify our exploration portfolio, Canada stands out for its combination of highly prospective geology, deep technical expertise, established resource-development

capabilities and growing hydrogen demand,” said Emmanuel Masini, CEO of Mantle8. “Canada’s increasingly clear and supportive regulatory environment further strengthens its ability to attract the long-term investment required to advance emerging resource opportunities. What makes Western Canada particularly compelling is the scale of the opportunity: we see the potential for a play-opening exploration program that could unlock multiple prospects across a vast area, providing a pathway to regional scalability.”

Mantle8 Technology and International Experience

Mantle8 applies a geology-first approach that integrates geology, geophysics and geochemistry to evaluate complete natural hydrogen systems. Its technology stack includes GeoLogix® for geological modelling, HOREX® for 4D imaging of active underground hydrogen systems and APoGeH® for hydrogen-system assessment.

In 2026, Mantle8 announced a €31 million Series A financing to support a global natural hydrogen exploration and drilling campaign, expanding from the three natural hydrogen and helium exploration permits it has secured in Western Europe.

Next Steps

The parties intend to establish a technical working group, identify priority target regions, begin preliminary data review and target generation, evaluate prospective land acquisitions, prepare budgets for land acquisition and local technology deployment, and negotiate a definitive agreement. The initial area of interest is to be determined within 30 days of execution of the LOI and will be limited to non-stimulated natural hydrogen plays.

The LOI provides for an initial 120-day exclusivity period, with

an automatic 60-day extension if the parties continue negotiating in good faith and the definitive agreement is substantially complete. It also contemplates a two-year right of first refusal relating to natural hydrogen exploration targets identified during the term of the LOI, subject to the applicable terms and conditions.

Status of the LOI

The LOI is principally a framework for continued discussions. Except for specified provisions relating to exclusivity, confidentiality, intellectual property, governing law and expenses, it is non-binding. The parties have not yet agreed on project ownership, funding commitments, exploration expenditures, governance, earn-in terms, operator designation or commercialization rights. Neither party is obligated to complete the proposed transaction unless and until a definitive agreement is executed. There can be no assurance that a definitive agreement will be completed or that the proposed collaboration will result in exploration, drilling, development or commercial production.

About Mantle8

Mantle8 is a company built by geoscientists and technologists committed to deliver the next energy frontier: natural hydrogen. The Earth makes natural hydrogen underground, where iron-rich rocks naturally react with water and release hydrogen gas. So far, no method has found commercial volume of natural hydrogen deliberately and where it makes sense. Mantle8 is designed to change that. Combining deep geoscience with purpose-built exploration technologies, Mantle8 identifies the geological systems generating hydrogen today, pinpoints where it accumulates, and estimates how much hydrogen could flow at surface – giving an early view of commerciality before major

capital is committed.

Mantle8 is backed by investors in frontier science and clean energy/technologies, including Sandwater, Breakthrough Energy Ventures, Bpifrance Green Ventures, IP Group, Wind Capital and Calderion. With their support, Mantle8 is working across a growing portfolio of projects. Once proven, the Mantle8 method will do it again and again. Cheap, reliable energy has driven every leap in how people live and work. The next leap is a clean and natural reaction between rock and water, and it is happening right now.

About Element One Hydrogen & Critical Minerals Corp.

Element One Hydrogen & Critical Minerals Corp. (CSE: EONE), through a growing portfolio of strategic resource assets, proprietary technologies and industry partnerships, is advancing the exploration, development and commercialization of natural hydrogen, magnesium and other critical minerals. Element One's projects span British Columbia, Washington State and Alaska and are supported by collaborations with world-class research institutions, including Columbia University, and strategic partnerships with industry, Indigenous communities and government. By combining resource development with innovative processing technologies, Element One is positioned to help strengthen North America's energy security, industrial resilience and critical mineral supply chains.

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On behalf of the Board of Directors

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Forward-Looking Information

This news release contains “forward-looking information” within the meaning of applicable Canadian securities laws. Forward-looking information includes statements regarding the proposed strategic relationship between Element One and Mantle8; negotiation and execution of a definitive agreement; establishment of a technical working group; identification, acquisition, evaluation and advancement of target regions, land opportunities and natural hydrogen targets; deployment and effectiveness of exploration technologies; planning and conduct of exploration, drilling and development programs; permitting, tenure acquisition and stakeholder engagement; and the potential for natural hydrogen exploration opportunities in British Columbia and Alberta. Forward-looking information is based on assumptions considered reasonable by management as of the date of this release and is subject to known and unknown risks, uncertainties and other factors that may cause actual results to differ materially, including the risk that the parties do not enter into a definitive agreement; exploration and geological risk; the early-stage nature of natural hydrogen exploration; regulatory, permitting, tenure and Indigenous consultation requirements; access to capital; technology performance; commodity and market conditions; and other risks described in the Company’s public disclosure documents. Readers should not place undue reliance on forward-looking information. The Company undertakes no obligation to update such information except as required by applicable law.

Neither the Canadian Securities Exchange nor its Regulation Services Provider accepts responsibility for the adequacy or accuracy of this release.