Element One Completes The 2025 Exploration Program on The HY Project

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Exploration on Element One's HY Project successfully identified nickel-bearing ultramafic units that will be tested to evaluate hydrogen-stimulation and nickel-silicate extraction potential

Vancouver, December 9, 2025 - Element One Hydrogen and Critical Minerals Corp. (CSE: EONE) ("Element One" or the "Company") is pleased to report that the Company has completed its 2025 field program on the HY Project, located 15-20 km from Fort St. James, British Columbia. The project comprises nine contiguous mineral claims covering 2,757.6 hectares and was acquired due to the ultramafic rocks prospectivity for hydrogen-generating iron-rich olivine and nickel contained within silicate minerals.

Work consisted of a two day prospecting, rock-sampling, and soil-sampling program targeting exposures of the Trembleur ultramafic complex. The objectives were to;

(1) confirm the presence and extent of ultramafic lithologies,
(2) determine nickel content within these rocks, and
(3) collect samples suitable for research into hydrogen generation through stimulated oxidation of iron-bearing olivine.

Rock sampling successfully identified nickel-bearing ultramafic units (see table below), with assay results showing elevated nickel and no measurable sulfur, suggesting the nickel is hosted either within olivine or as the nickel-iron alloy awaruite. Splits of these samples will be delivered to Kemetco Research in support of an ongoing Natural Resources Canada-funded study on extraction technologies for nickel from silicates and carbon sequestration.

Additional splits of iron-rich ultramafic rocks will be provided to Dr. Greeshma Gadikota, who is conducting Element One's research into hydrogen production from stimulated oxidation reactions in iron-bearing ultramafic rocks. While initial iron content in samples was lower than ideal for hydrogen-stimulation applications, the HY Property remains a promising candidate for further evaluation due to its excellent proximity to potential hydrogen end-users.

Sample[1]	EAST[2]	NORTH[2]	Nickle PPM	Iron %	Magnesium %	Sulfur %
TJHY 2501	427234	6042700	2305	5.49	23.82	Below detection
TJHY 2502	427164	6042729	37	6.59	3.61	0.20
TJHY 2503	426814	6042354	2254	5.71	22.99	Below detection
TJHY 2504	426617	6042424	2204	5.33	22.19	Below detection
TJHY 2505	426598	6044013	2002	5.06	22.29	Below detection
TJHY 2506	419024	6045396	1793	4.22	13.87	Below detection
TJHY 2507	426801	6042369	2260	5.34	22.63	Below detection

1. Samples assayed at Bureau Veritas labs in Vancouver using 35 element ICP ES process.
2. Co-ordinates UTM Zone 10U WGS 84

The Company concludes that the HY Property remains under-explored, and that further work should prioritize:

- Sampling additional ultramafic units for iron and nickel content
- Petrographic and microprobe analyses to determine olivine composition (forsterite/fayalite ratios)
- Geophysical interpretation, including 2D magnetic inversions, to model the geometry and volume of the Trembleur ultramafic intrusion

- Continued collaboration with research partners evaluating hydrogen-stimulation and nickel-silicate extraction technologies.

Qualified Person

The scientific and technical information on this news release has been reviewed and approved by Jeremy Hanson, P. Geo., an independent geologist to the Company who is a qualified person under the meaning of National Instrument NI 43-101.

About Geologic Hydrogen

Geologic hydrogen (also referred to as natural hydrogen) is generated through natural geochemical reactions within the Earth's crust, primarily from the interaction of iron-rich ultramafic rocks and water, as well as radiolysis and other catalytic subsurface processes. Unlike manufactured hydrogen derived from hydrocarbons or electrolysis, geologic hydrogen represents a naturally occurring primary energy resource with the potential to be produced at low cost with zero emissions. The discovery and development of geologic hydrogen reservoirs is an emerging frontier in global energy exploration, analogous to the early days of the oil and gas industry.

About Element One Hydrogen & Critical Minerals Corp.

Element One Hydrogen & Critical Minerals Corp. (CSE: EONE) is a Canadian company focused on the exploration, development, and commercialization of geologic hydrogen and critical mineral resources, as well as breakthrough hydrogen-generation technologies. The company's projects include the Foggy Mountain critical minerals project as well as projects in Alaska and British Columbia that are prospective for hydrogen production through stimulation in the subsurface as well as critical and battery metals.

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On behalf of the Board of Directors:

Brad Kitchen, CEO
Element One Hydrogen & Critical Minerals Corp.
e: bkitchen@e1-h2.com
c: 604.506.7555

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