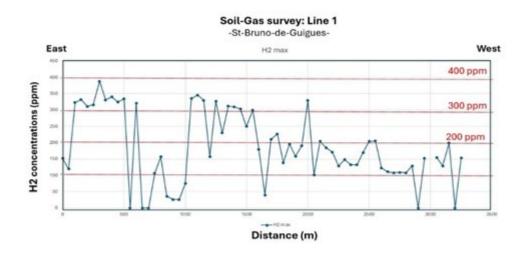
# QIMC Announces Major Milestones: Completion of Line 1 Extension to the West and Hydrogen Model

Lachute, Quebec--(Newsfile Corp. - August 15, 2024) - Quebec Innovative Materials Corp. (CSE: QIMC) (FSE: 7FJ) ("QI Materials", "QIMC" or the "Company"), is pleased to announce the successful extension of Line 1 to the west, executed in partnership with INRS (Institut National de la Recherche Scientifique) doubling Line 1's area of high hydrogen values to over 3.25 kms. Additionally, we are proud to present the comprehensive hydrogen model developed by Professor Marc Richer-Lafleche and share insights into the sources of the clean natural renewable identified in the Ville Marie project. "The potential for developing a robust hydrogen infrastructure at Ville Marie and St-Bruno-de-Guigues is crucial for meeting local community needs and supporting Quebec's broader clean emission goals.." notes John Karagiannidis, CEO of QIMC. "This initiative is expected to play a vital role in reducing Quebec's greenhouse gas emissions and fostering sustainable energy practices."

## Completion of Line 1 Extension to the West

To delineate the area of high hydrogen values observed along line 1 of the July 2024 soil-gas survey, the field crew extended line 1 westward during the first week of August 2024. The extension starts at the end of the forest trail and ends near the chemin des secondes et troisièmes rangs of St-Bruno-de-Guigues (line 7), thus doubling the length of line 1. Professor Marc Richer-Laflèche, head of the QIMC hydrogen program and INRS's scientific head of Applies Geoscience Laboratory notes: "The concentration distribution of the hydrogen soil anomalies (figure 1) emphasizes a westward delineation of the hydrogen anomaly domain. This spatial variability may reflect, among other things, the presence of contrasting geological units (arkosic sandstones, Cobalt Group conglomerates, Ordovician dolomitic limestones) and also the probable presence of the Rivière-Blanche fault, which may be present in the St-Bruno-de-Guigues area beneath the thick glacial-lacustrine sediments." "We believe that this fault is partly responsible for the emplacement of hydrogen in the St-Bruno-de-Guigues area." said John Karagiannidis, President of QIMC. "The location of this fault is a priority for QIMC and INRS and will be the subject of a high spatial resolution audiomagnetotelluric survey to be carried out in the fall of 2024."



To view an enhanced version of this graphic, please visit: <u>https://images.newsfilecorp.com/files/7968/220059\_318ac4c1543ccb8c\_001full.jpg</u>

Diagram showing the variation of soil H2 concentrations along the St-Bruno-de-Guigues section of Line 1. The new data presented in this release correspond to stations from 1700 m to 3250 m.

#### Hydrogen Model

Professor Marc Richer Laflèche observes: "In addition to bedrock lithological contrasts, local Quaternary features may explain some of the trends observed in the distribution of soil hydrogen concentrations. For example, MRNF drill data from the Line 1 sector (intersection of Route 101 and Chemin du 4e Rang) indicate the presence of a 6 m thick gravel unit above the bedrock. This is overlain by 55 m of sandy-silty sediments of glaciolacustrine origin (MacIntosh, 1973: GM 29616; SIGEOM). Thickness variations from east to west of the gravelly unit (a more permeable, porous and lenticular unit) may partially control the distribution of hydrogen along Line 1." John Karagiannidis, president of QIMC notes: "This will be further verified by a geoelectric tomography (ERT) survey in the fall of 2024 and by a series of geotechnical boreholes in the spring of 2025."

#### Sources of natural clean renewable hydrogen at St-Bruno-de-Guigues

The geological map in Figure 2 shows the local geology in the vicinity of Line 1 at St-Bruno-de-Guigues. The volcanic belt of the Baby Group, including 4 units of iron formations (with extensions of the order of 10 km), basaltic tholeiites (iron-rich amphibolites) and peridotites and komatiites (ultramagnesian rocks), is perpendicular to the graben and basins of Huronian (Cobalt Gp) and Ordovician (New-Liskeard Gp) sedimentary rocks (Richer-LaFlèche et al., 2020). "This overlap implies the presence of Fe- and Mg-rich Archean rocks beneath the Proterozoic sedimentary rocks of the graben." states Professor Marc Richer-Laflèche. "Furthermore, this interpretation is supported by MRNF aeromagnetic data (SIGEOM interactive map), which show a westward continuity of magnetic anomalies originating from the magnetic rocks of the Baby Gp. The presence of mafic and ultramafic rocks that may contain olivine relics and a high proportion of amphiboles could explain the hydrogen production." explains Professor Marc Richer-Laflèche. "Note that during the hydration process, H2O is reduced to H2 by Fe2+-rich mafic and ultramafic minerals. On the other hand, Cobalt Group arkosic sandstones, which are particularly rich in potassium and actinides, are ideal for the production of radiolytic hydrogen. The interaction of deep groundwater with these rocks could produce radiolytic hydrogen. This hydrogen could mix with hydrogen produced by mineral hydrolysis."

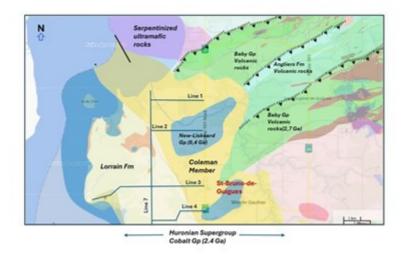


Figure 2: Simplified geological map of the St-Bruno-de-Guigues and St-Eugène de Guigues regions (Source MRNF : SIGEOM).

To view an enhanced version of this graphic, please visit: <u>https://images.newsfilecorp.com/files/7968/220059\_318ac4c1543ccb8c\_002full.jpg</u>

"Our exploration of hydrogen within the Ville Marie project continues to yield significant results and our partner at INRS has developed a comprehensive model", states John Karagiannidis, president of QIMC.

"The Ville Marie asset's geological and environmental characteristics offer a unique opportunity to establish a robust hydrogen energy network, which will play a critical role in Quebec's overall strategy to advance clean energy and support a low-carbon economy."

REF:

Richer-LaFlèche, Moorhead, J., and Gouthier, J., 2020. Geology and geochemistry of the volcanic rocks of the Baby Group and the Archean and Proterozoic sedimentary rocks of the Pontiac and Cobalt Groups in Témiscamingue. MB 2020-12, 2020. 198 pages.

## About the INRS and Pr. Marc Richer-LaFlèche, P.Geo.

The Institut National de la Recherche Scientifique ("INRS") is a high-level research and training institute. Pr. Richer-LaFlèche's team has exceptional geological, geochemical and geophysical experience specifically in the regions of QIMC's newly acquired claims. They have carried out over six years of geophysical and geochemical work and collected thousands of C1-C4 Soil-Gas analyses.

M. Richer-LaFlèche also holds an FRQNT grant, in partnership with Quebec MRN and the mining industry, to develop and optimize a Soil-Gas method for the direct detection of mineralized bodies and faults under Quaternary cover. In addition to sulphide gases, hydrogen was systematically analyzed in the numerous surveys carried out in 2023 in Abitibi, Témiscamingue and also in the Quebec Appachian. M. Richer-LaFlèche is the Qualified Person responsible for the technical information contained in this news release and has read the information contained herein.

In addition, the INRS team has several portable gas spectrometers and the sampling equipment and logistics necessary for taking gas samples and geophysical measurements on the ground or in the aquatic environment. He is a professional geologist registered with the Ordre des géologues du Québec and is the Qualified Person responsible for the technical information contained in this news release and has read the information contained herein.

For more information about Quebec Innovative Materials Corp. and its products, please visit <u>www.qimaterials.com</u>

#### About Québec Innovative Materials Corp.

Québec Innovative Materials Corp. is a mineral exploration, and development company dedicated to exploring and harnessing the potential of Canada's abundant resources. With properties in Ontario and Québec, QIMC is focused on specializing in the exploration of white (natural) hydrogen and high-grade silica deposits, QIMC is committed to sustainable practices and innovation. With a focus on environmental stewardship and cutting-edge extraction technology, we aim to unlock the full potential of these materials to drive forward clean energy solutions to power the AI and carbon-neutral economy and contribute to a more sustainable future.

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