



## Vortex Energy Announces Key Insights from Core Logging and Analysis at Robinsons River Salt Project

*Core Analysis Highlights Key Geological Features Supporting Hydrogen Storage Potential at Robinsons River Salt Project*

**Vancouver, B.C.**, December 16, 2024 – Vortex Energy Corp. (CSE: **VRTX** | OTC: **VTECF** | FRA: **AA3**) (“**Vortex**” or the “**Company**”) is pleased to announce the completion of core logging and preliminary analysis of samples from Well VW231, part of the Robinsons River Salt Project (“**The Project**”) in Newfoundland. This study was conducted in collaboration with Dr. Hassan Dehghanpour and his research team at the University of Alberta under an NSERC Alliance research partnership, the findings highlight the geological suitability of the site for underground hydrogen storage (UHS).

The primary objective of the study was to evaluate the feasibility and safety of using the salt dome within the Robinsons River Formation for hydrogen storage. This involved assessing the structural integrity of the dome, the sealing capacity of the overlying rock layers, and the potential geochemical interactions between the salt formation and stored hydrogen. Samples were collected from Well VW231, which was drilled to a depth of 608 meters, terminating in the salt rock layer before encountering the pure halite reservoir. The samples were analyzed using advanced techniques, including:

- Thin Section Microscopy: Provided detailed insights into mineral grain morphology and depositional history.
- X-Ray Diffraction (XRD): Identified the mineral composition and confirmed halite as the dominant phase.
- Raman Spectroscopy: Differentiated between key minerals such as gypsum and anhydrite and detected organic material, including bitumen.
- Scanning Electron Microscopy (SEM): Analyzed microstructures, revealing impurities such as potash and carbonates within the halite matrix.
- Insoluble Mineral Testing: Quantified impurity levels, showing an average of 20% insoluble material in the halite layers.

The analysis revealed that the overlying gypsum and mixed mudstone layers, composed primarily of insoluble minerals, exhibit excellent sealing capabilities essential for hydrogen containment. Core samples showed no vertical or horizontal fractures, affirming the structural integrity of the caprock and its ability to prevent gas leakage. Additionally, rare minerals such as clinoatacamite and antarcticite were identified, shedding light on the site's complex geochemical evolution. The presence of bitumen within the halite layers further indicates a rich depositional history and potential for hydrocarbon preservation.

"The preliminary results provide valuable insights into the geological suitability of the Project for underground hydrogen storage," said Paul Sparkes, CEO of Vortex Energy Corp. "These findings

represent an important step in assessing the site's potential and addressing the technical requirements for safe and efficient storage."

### **Next Steps**

Vortex Energy is preparing for advanced testing, including fluid inclusion analysis and experiments to evaluate the interaction of hydrogen with minerals under varying temperature and pressure conditions. These efforts aim to refine the geological model and confirm the site's safety and effectiveness for UHS. The Project is an essential part of Vortex Energy's commitment to advancing innovative, sustainable energy solutions. Collaborations with academic partners, such as the University of Alberta, ensure that cutting-edge research drives the project forward.

The scientific and technical content of this news release has been reviewed, verified, and approved by Jared Suchan, Ph.D., P.Geo., Technical Advisor to the Company, and a "Qualified Person" as defined by National Instrument 43-101. Verification included reviewing the detailed report, attending a presentation on the findings, and addressing any questions directly with the report author to ensure accuracy and reliability.

### **About Vortex Energy Corp.**

Vortex Energy Corp. is an exploration stage company engaged principally in the acquisition, exploration, and development of mineral properties in North America. The Company is currently advancing its Robinsons River Salt Project comprised of a total of 942 claims covering 23,500 hectares located approximately 35 linear kms south of the town of Stephenville in the Province of Newfoundland & Labrador. The Robinsons River Salt Project is prospective for both salt and hydrogen salt cavern storage. The Company is also evaluating technologies to efficiently store hydrogen or energy in salt caverns. The Company is also currently advancing its Fire Eye Uranium Property in the Athabasca Basin, a region globally renowned for its uranium deposits.

For further information, investors are encouraged to review the Company's filings available at [www.sedar.com](http://www.sedar.com).

### **On Behalf of the Board of Directors**

Paul Sparkes  
CEO, Vortex Energy Corp.  
+1 (778) 819-0164  
[info@vortexenergycorp.com](mailto:info@vortexenergycorp.com)

### **Cautionary Note Regarding Forward-Looking Statements**

*Certain statements contained in this press release constitute forward-looking information. These statements relate to future events or future performance. The use of any of the words “could”, “intend”, “expect”, “believe”, “will”, “projected”, “estimated” and similar expressions and statements relating to matters that are not historical facts are intended to identify forward-looking information and are based on the Company’s current beliefs or assumptions as to the outcome and timing of such future events. In particular, this press release contains forward-looking information relating to, among other things, the Company’s exploration plans at the Project.*

*Various assumptions or factors are typically applied in drawing conclusions or making the forecasts or projections set out in forward-looking information, including, in respect of the forward-looking information included in this press release, assumptions regarding the Company’s ability to execute on its exploration plans, including that it will be successful in carrying out the planned drilling and that such drilling will yield the expected information and the desired outcomes.*

*Although forward-looking information is based on the reasonable assumptions of the Company’s management, there can be no assurance that any forward-looking information will prove to be accurate. Forward-looking information involves known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking information. Such factors include, among other things, the risk that exploration at the Project does not proceed in the manner and on the timeline currently contemplated, or at all; risks inherent in the exploration and development of mineral deposits, including risks relating to receiving requisite permits and approvals, changes in project parameters or delays as plans continue to be redefined, that mineral exploration is inherently uncertain and that the results of mineral exploration may not be indicative of the actual geology or mineralization of a project; and that mineral exploration may be unsuccessful or fail to achieve the results anticipated by the Company, including as a result of factors beyond the Company’s control, such as geological conditions. The forward-looking information contained in this release is made as of the date hereof, and the Company not obligated to update or revise any forward-looking information, whether as a result of new information, future events or otherwise, except as required by applicable securities laws. Because of the risks, uncertainties and assumptions contained herein, investors should not place undue reliance on forward-looking information. The foregoing statements expressly qualify any forward-looking information contained herein.*

*The Canadian Securities Exchange (CSE) has not reviewed, approved, or disapproved the contents of this press release.*

