



## Vortex Energy Announces Large Scale Hydrogen Storage Estimates at the Robinsons River Salt Project

*The East and West Salt Structures have a conservatively-estimated potential combined hydrogen storage capacity of up to 800,000 tonnes within more than 60 caverns*

July 24<sup>th</sup>, 2023

**Vancouver, British Columbia** — Vortex Energy Corp. (CSE: VRTX | OTC: VTECF | FRA: AA3) ("**Vortex**" or the "**Company**") is pleased to announce the completion of a hydrogen storage capacity assessment for the East and West Salt Structures at the Robinsons River Salt Project (the "**Project**"). The work was completed by the Company's contracted consultant partner, RESPEC Consulting Inc. ("**RESPEC**"), a global leader in geology, geophysical and engineering work with direct experience in underground hydrogen storage caverns.

### Highlights

- **East Salt Structure:** Based on available geological information, the East Salt Structure can potentially hold an estimated amount of (1) 550,000 tonnes of hydrogen in more than 35 caverns, based on conservative estimates and up to (2) 900,000 tonnes of hydrogen in more than 53 caverns, using optimistic estimates. Using conservative estimates, the hydrogen storage capacity assessment for the East Salt Structure estimates that the total volume of the East Structure salt cavern field is more than 70 million m<sup>3</sup>.
- **West Salt Structure:** Based on the available geological information, the West Salt Structure can potentially hold an estimated amount of (1) 250,000 tonnes of hydrogen in more than 25 caverns, based on conservative estimates and up to (2) 350,000 tonnes of hydrogen in more than 43 caverns, using optimistic estimates. Using conservative estimates, the hydrogen storage capacity assessment for the West Salt Structure estimates that the total volume of the West Structure salt cavern field is more than 50 million m<sup>3</sup>.

### Hydrogen Storage Capacity Assessment

To conduct the hydrogen storage capacity assessment, RESPEC generated preliminary cavern layouts and performed high-level thermodynamic calculations to estimate the hydrogen storage capacity of the East and West Salt Structures based on the interpreted geology, operating pressure limits set by the Canadian Standards Association Z341, and the estimated cavern dimensions based on the Company's gravity and 2D seismic interpretation of the salt dome structure at the Project.

Because the 2D seismic interpretation results on which the hydrogen storage capacity assessment is based decrease in accuracy with increased distance from the seismic lines, RESPEC generated conservative and optimistic cavern field layouts based on the distance from the seismic lines and distance from the salt dome

core. The conservative case only considers salt caverns closer to the seismic lines and within the salt dome core whereas the optimistic case also includes caverns away from the core of the salt dome.

The placement and design of any salt caverns that are ultimately developed by the Company at the Project will be dependent on the local geology and the thickness of salt strata at the cavern well location. In generating the cavern field layout for the hydrogen storage capacity assessment, RESPEC assumed that caverns were placed at a spacing-to-diameter ratio of 4, at least 1.5 cavern diameter length away from the salt dome boundary, limited in diameter to 80 meters and located at least 200 m below the top of salt and 200 m away from the bottom of salt.

Paul Sparkes, Chief Executive Officer of Vortex commented, "These preliminary results from RESPEC are very promising. If the results of the assessment are accurate, the Project has the potential to store significant amounts of hydrogen and could end up being one of the largest salt cavern discoveries on the east coast of Canada. We believe that these results, along with our recent agreement to acquire additional land to the north of the Project, position Vortex to capitalize on the growing demand for hydrogen and other renewable energy infrastructure."

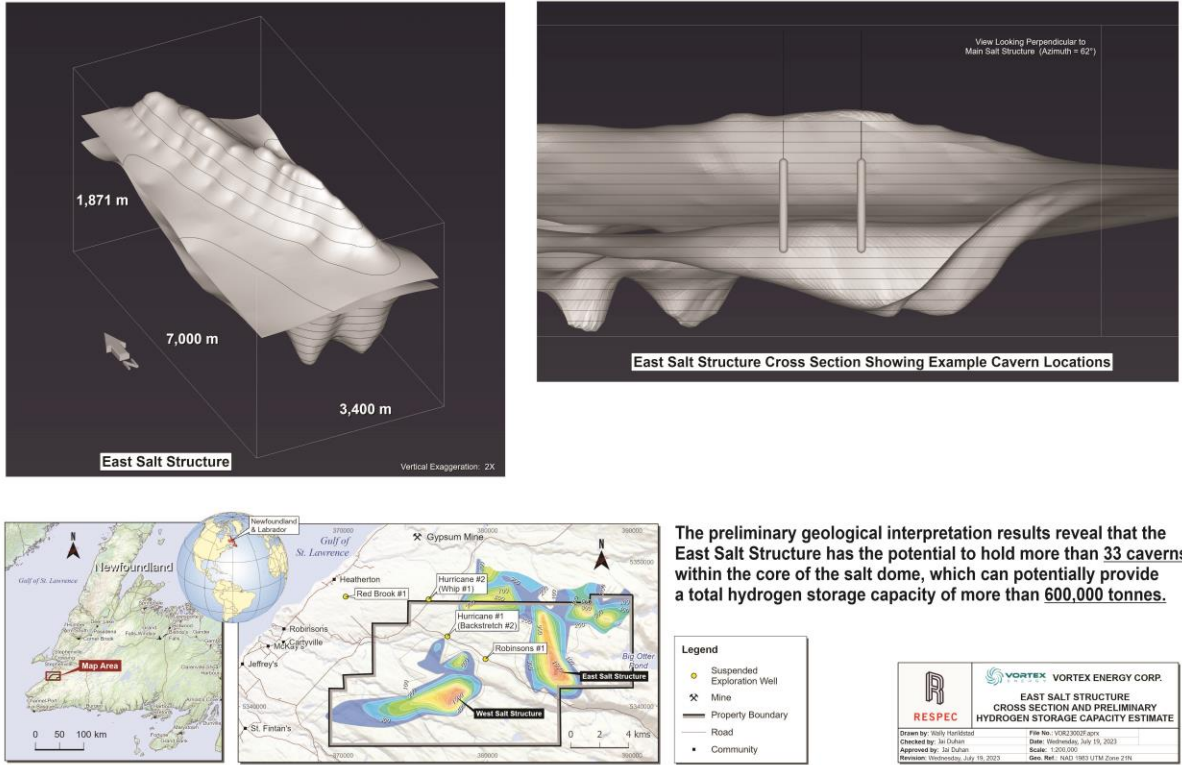


Figure 1 – East Salt Structure Cross Section and Preliminary Conservative Hydrogen Storage Capacity Estimate

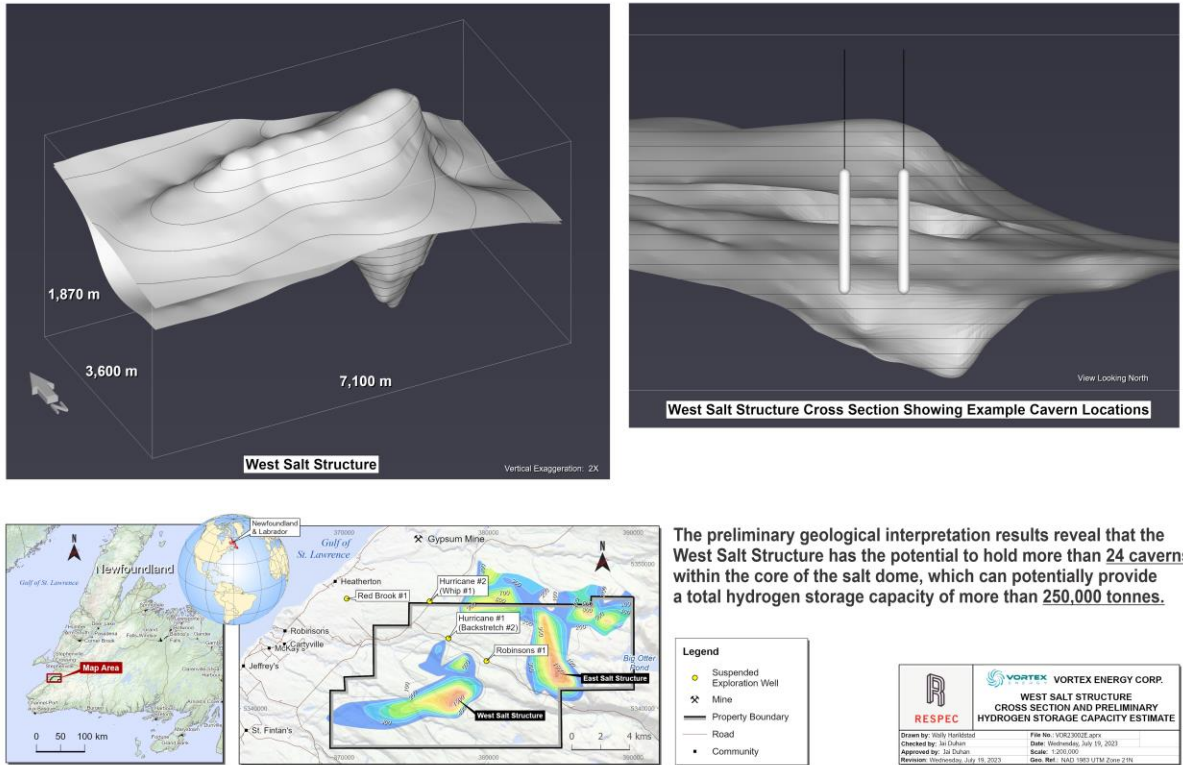


Figure 2 – West Salt Structure Cross Section and Preliminary Conservative Hydrogen Storage Capacity Estimate

### Qualified Person

The technical content of this news release has been reviewed and approved by Piotr Kulkialka, P.Geo, who is acting as a consultant to the Company and is a “Qualified Person” as defined by National Instrument 43-101.

### About RESPEC

RESPEC is a global leader in diverse technologies and draws from a wide array of expertise, products, and services to deliver world-class solutions for business, mining, energy, water, natural resources, urban development, infrastructure, and enterprise services. RESPEC’s subsurface experts have evaluated over 1,000 caverns in nearly every major cavern storage region in the world. Its over 50-year history underground has helped to pioneer in-house specialty software and rock lab testing that focuses on designing solution-mined and conventionally mined storage caverns. RESPEC also plays a similar role with the ACES Delta in Utah, the world’s largest green hydrogen project under construction.

## **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 Robinson River Salt Project located approximately 35 linear km south of the town of Stephenville in the Province of Newfoundland & Labrador covering over 17,000 hectares. Leveraging the Robinson River Salt project, the Company is also exploring the development of technologies to efficiently store green Hydrogen in Salt Caverns. Vortex also holds the Fire Eye Project, which is located in the Wollaston Domain of northern Saskatchewan, Canada.

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

Paul Sparkes

Chief Executive Officer, Director

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## **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 capacity of the salt structures at The Project to hold salt caverns and the estimated amount, storage capacity and volume of such salt caverns and Vortex’s ability to capitalize on the growing demand for hydrogen and other renewable energy infrastructure.*

*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, the assumptions set out in the news release that were used by RESPEC to estimate cavern placement at the Project; that the current regulations set by the Canadian Standards Association will remain unchanged such that the Project may be developed in accordance with such*

*regulations; the assumption that the 2D seismic interpreted dome structure accurately depicts the salt domes at the Project and that additional geological data will not change the interpretation of the size and other characteristics of the salt domes at the Project; the assumption that , based on the geology of the Project, salt caverns may be developed at the Project; and the assumption that salt caverns may be developed at the Project in accordance with the results of the 2D seismic interpreted dome structure; the assumption that future exploration activities conducted at the Project will be successful and will continue to indicate that salt caverns may be developed at the Project; and that the Company will proceed to solution mine the salt structures at the Project and develop salt caverns at the Project.*

*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 the risk that salt caverns may not ever be developed at the Project, whether as a result of the geology of the Project, applicable regulations, market conditions, a lack of financing or otherwise; risks inherent in the exploration and development of mineral projects, 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; the risk that mineral exploration may be unsuccessful or fail to achieve the results anticipated by the Company, including that the Company may fail to validate the existence solution mineable salt structures at the Project and, even if such salt structures are validated, that the Company may fail to successfully develop salt caverns at the Project; risks inherent in the development of salt caverns, including that even if salt caverns are developed by the Company at the Project such caverns may not be suitable for hydrogen or renewable energy storage; risks regarding the development of the hydrogen and renewable energy industries, including that and the risk that hydrogen and renewable fuels do not develop to the point where widespread use of salt caverns is necessary to store the hydrogen required to satisfy industry demands; and the risk that laws and regulations may be changed and developed in the future in a manner that is adverse to the Project or the Company. 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.*