



NEWS RELEASE

DECEMBER 18, 2024

VOLT LITHIUM SCALES-UP U.S. FIELD OPERATIONS IN TEXAS, PAVING WAY FOR SIGNIFICANT GROWTH IN 2025

- *Generation 4 Field Unit system scaled-up capacity to 2,500 barrels per day (480,000 litres per day) of lithium-infused oilfield brine represents one of industry's largest operational direct lithium extraction ("DLE") field units to date*
- *Generation 5 Field Unit to be commissioned during January 2025 to process up to 10,000 barrels per day (1.9 million litres per day)*
- *Lithium recoveries of up to 98% achieved during field scale-up, with inlet brine concentrations as low as 25 mg/L*

Calgary, Alberta – Volt Lithium Corp. (TSXV: VLT | OTCQB: VLTLF) ("**Volt**" or the "**Company**") is pleased to announce the achievement of another pivotal milestone on the path to commercializing its proprietary and proven next-generation Direct Lithium Extraction ("DLE") technology for processing oilfield brines. The Company has scaled-up its U.S. field operations to process over 2,500 barrels per day ("bbls/d") (equivalent to 480,000 litres per day) from the Permian Basin in Texas. Additionally, Volt has completed over 200 operational runs in the field since commencing operations and achieving first lithium production in September 2024.

"The Permian Basin is globally significant, currently producing approximately 19 million barrels of lithium-infused brine per day, making it one of the largest potential sources of lithium in the United States," commented Alex Wylie, President & CEO of Volt. "With the scaling-up of our field operations, we continue to accelerate the Company's trajectory for growth to becoming a significant North American lithium producer."

"The experience gained in the field through Volt's first 200 operational runs has been invaluable," added John McEwen, CTO of Volt. "The Volt engineering and operational teams have leveraged the technical data acquired from field operations to significantly optimize Volt's next generation system ("Generation 5") that will produce up to 10,000 barrels of oilfield brine per day."

Permian Basin Field Operations Update: Continued Field Unit Optimization

Volt's U.S. Field Unit ("Field Unit") is modular, providing the flexibility for continued optimization. Since commencing field operations in September 2024, Volt has focused on accumulating technical data to continuously optimize its Field Unit. The operations team has completed over 200 runs of the Generation 3 and 4 Field Units at our Strategic Partner's site in the Permian Basin in Texas to date. The Generation 5 Field Unit will be commissioned in late January 2025 to process up to 10,000 bbls/d (1.9 million litres per day).

The technical and operational data and improvements have been critical building blocks to Volt's scale-up process in the field. The system modifications made by the operations team have been incorporated into the Generation 5 Field Unit system, include the following:

- **DLE System Optimization:** Design modifications to Volt's DLE system to enhance drainage, allowing for increased daily processing capacity; and
- **Acid Recovery Refinement:** Modifications to the acid recovery phase have successfully increased the concentration of lithium in the lithium chloride eluate, while also decreasing cycle times. Volt's technical team is dedicated to further refining the acid recovery process to maximize



lithium concentration and extraction efficiency. This ongoing optimization is expected to enhance the overall economic performance of Volt's Generation 5 Field Unit.

Through the scale-up of Volt's production capacity, the technical standards of achieving up to 98% lithium extraction have been maintained and verified by an independent third-party.

Since October 2024, Volt's proprietary DLE process has successfully built up an inventory of high-quality eluate that is being converted into a 99.5% pure battery-grade lithium carbonate. Samples of lithium carbonate have been created and verified via third-party testing for review for potential offtake partners. Volt will continue to produce lithium chloride concentrate, as well as technical-grade and battery-grade lithium carbonate in the field.

Permian Basin Brine Production

The brine production from the Permian Basin today is approximately 19 million bbls/d, representing an estimated potential of 325,000 tonnes per annum of lithium carbonate production. Assuming average economics from lithium extraction, sensitivities are as follows at potential production levels and lithium concentrations ^{1,2}.

Brine Production per day (bbls)	Lithium Carbonate Production per annum (tonnes) (31 mg/L)	Operating Cash Flow ³ per annum (31 mg/L) (\$US)	Lithium Carbonate Production per annum (tonnes) (55 mg/L)	Operating Cash Flow ³ per annum (55 mg/L) (\$US)
100,000	900	\$14,500,000	1,600	\$27,600,000
500,000	4,500	\$72,300,000	8,000	\$137,800,000
1,000,000	9,000	\$145,000,000	16,000	\$275,700,000
2,000,000	18,000	\$289,000,000	32,000	\$551,400,000

North Dakota Field Unit Update

Volt has utilized the funding from the State of North Dakota to purchase the equipment for the North Dakota field unit. The field unit is fully funded and the Company expects to deploy the North Dakota field unit during the first half of 2025. Volt and Wellspring will apply for an additional US\$2.0 million of funding for the field study from the State of North Dakota in early 2025. Volt will not require any new financing for the field unit in North Dakota.

Qualified Person's Statement

Scientific and technical information contained in this press release has been reviewed and approved by Doug Ashton, P.Eng, and Meghan Klein, P.Eng of Sproule Associates Limited, each of whom are qualified persons within the meaning of National Instrument 43-101 – Standards of Disclosure for Mineral Projects ("NI 43-101"). Mr. Ashton and Ms. Klein consent to the inclusion of the data in the form and context in which it appears.

¹ Assumes pricing of US\$20,000/tonne lithium carbonate.

² Based upon Volt's preliminary estimates processing brine at lithium concentrations from the Permian Basin.

³ Operating cash flow is calculated as revenue less operating costs and does not include taxes or royalties.



About Volt

Volt is a lithium development and technology company aiming to be one of North America's first commercial producers of lithium from oilfield brine. Our strategy is to generate value for shareholders by leveraging management's hydrocarbon experience and existing infrastructure to extract lithium deposits from existing wells, thereby reducing capital costs, lowering risks and supporting the world's clean energy transition. With four differentiating pillars, and a proprietary Direct Lithium Extraction ("DLE") technology and process, Volt's innovative approach to development is focused on allowing the highest lithium recoveries with lowest costs, positioning us well for future commercialization. We are committed to operating efficiently and with transparency across all areas of the business staying sharply focused on creating long-term, sustainable shareholder value. Investors and/or other interested parties may sign up for updates about the Company's continued progress on its website: <https://voltlithium.com/>.

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Forward Looking Statements

This news release includes certain "forward-looking statements" and "forward-looking information" within the meaning of applicable Canadian securities laws. When used in this news release, the words "anticipate", "believe", "estimate", "expect", "target", "plan", "forecast", "may", "will", "would", "could", "schedule" and similar words or expressions, identify forward-looking statements or information. Statements, other than statements of historical fact, may constitute forward-looking information and include, without limitation, information with respect to the terms of the operational milestone, Volume Scale-up. Extraction Time Improvements and Continuous Processing vs Batch Processing, the deployment of the Field Unit in the Permian Basin, the production of battery grade lithium by the Field Unit, and the commercial production of lithium from oilfield brine. With respect to the forward-looking information contained in this press release, the Company has made numerous assumptions. While the Company considers these assumptions to be reasonable, these assumptions are inherently subject to significant uncertainties and contingencies and may prove to be incorrect. Additionally, there are known and unknown risk factors which could cause the Company's actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking information contained herein including those known risk factors outlined in the Company's annual information form for the year ended June 30, 2024 and (final) short form base shelf prospectus dated July 20, 2023. All forward-looking information herein is qualified in its entirety by this cautionary statement, and the Company disclaims any obligation to revise or update any such forward-looking information or to publicly announce the result of any revisions to any of the forward-looking information contained herein to reflect future results, events or developments, except as required by law.



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