

E3 Lithium Outlines the Performance of Its DLE Pilot Against KPIs

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CALGARY, Alberta--(BUSINESS WIRE)-- E3 LITHIUM LTD. (TSXV: ETL) (FSE: OW3) (OTCQX: EEMMF), "E3 Lithium" or the "Company", Alberta's leading lithium developer and extraction technology innovator, is pleased to report it has completed field testing of its proprietary Direct Lithium Extraction (DLE) technology at its pilot plant. E3 Lithium provides an overview of the results below, which have met and exceeded its **Key Performance Indicators (KPIs)**.

E3 Lithium's DLE Test Results

The table below outlines a summary of E3 Lithium's DLE full results.

Success Criteria	Key Performance Indicator (KPI)	Description	E3 Lithium Test Results*
Lithium recovery	≥ 80%	Mass of lithium recovered from the mass of lithium in the feed	>90%
Lithium grade in the lithium product stream	≥ 25%	Concentration of lithium relative to other impurities (Na+K+Ca+Mg+Mn+Sr+B)	25.3%
	≥ 600 mg/L	Concentration of lithium in the lithium product stream	722 mg/L
Flow rate ratio	≥ 3	Brine flow rate divided by the system volumetric capacity	15.6

*These results were produced via multiple tests using various operating parameters throughout the operation of E3 Lithium's field pilot plant. These results do not represent the performance of a single test run and outline the performance of individual runs for each result.

Results Discussion

E3 Lithium's DLE system has demonstrated to achieve a high lithium recovery at much higher flow rate ratios. A higher flow rate ratio can have a significant positive economic impact on the design of a commercial facility for a given recovery. The concentration of lithium and that of the impurities varied throughout the testing based on what the system was testing for, represented here with some indicative results from the testing. However, the relative impurities generally have a smaller impact on the potential costs. The information gathered enables E3 Lithium to continue to optimize to refine the quality of E3 Lithium's DLE concentrate, and it is anticipated the team will improve the purity of the concentrate.

"In addition to the third-party results we've outlined previously, E3 Lithium's proprietary DLE's performance surpassed our expectations," said Chris Doornbos, President & CEO of E3 Lithium. "The field pilot plant has operated exactly as intended since its commissioning in August. Total testing has consumed more than 500 m3 of brine produced from the well at the pilot location, providing us with the data needed for the commercial design and a deep understanding of the performance of various DLE technologies on our brine resource."

Next Steps

The Company plans to continue testing an additional third-party technology through the remainder of 2023 and likely into early 2024. E3 Lithium is reviewing the results from the two DLE systems already tested and will compare them with the results of the third system once complete to determine the cost implications of integrating them into the full process flow sheet.

With the positive results from these two systems now complete, the Company has paused site operations and will continue testing the third system off-site to realize the cost savings associated with avoiding winter operations. Given the learnings and success from the field pilot plant thus far, the Company can execute an off-site pilot with similar operating conditions and quality of data with the additional benefit of cost savings.

Based on the results of testing, commercial readiness of the systems and a fulsome understanding of the associated economics, the Company will decide which technology to pursue for its first commercial facility. The Company continues to work through the full process design for its Pre-Feasibility Study (PFS). The fulsome project economics will be outlined within the PFS, taking into account the DLE results and other process factors to produce a final battery quality lithium hydroxide.

ON BEHALF OF THE BOARD OF DIRECTORS

Chris Doornbos, President & CEO
E3 Lithium Ltd.

About E3 Lithium

E3 Lithium is a development company with a total of 16.0 million tonnes of lithium carbonate equivalent (LCE) Measured and Indicated and 0.9 million tonnes LCE Inferred mineral resources¹ in Alberta. As outlined in E3's Preliminary Economic Assessment, the Clearwater Lithium Project has an NPV8% of USD 1.1 Billion with a 32% IRR pre-tax and USD 820 Million with a 27% IRR after-tax¹. E3 Lithium's goal is to produce high purity, battery grade lithium products to power the growing electrical revolution. With a significant lithium resource and innovative technology solutions, E3 Lithium has the potential to deliver lithium to market from one of the best jurisdictions in the world.

1: The Preliminary Economic Assessment (PEA) for the Clearwater Lithium Project NI 43-101 technical report is amended Sept 17, 2021. Gordon MacMillan, P.Geol, QP, Fluid Domains Inc. and Grahame Binks, MAusIMM, QP (Metallurgy), formerly of Sedgman Canada Limited (Report Date: June 15, 2018, Effective Date: June 4, 2018 Amended Date: September 17, 2021). The mineral resource NI 43-101 Technical Report for the North Rocky Property, effective October 27, 2017, identified 0.9Mt LCE (inferred). The mineral resource NI 43-101 Technical Report for the Bashaw District Project, effective March 21, 2023, identified 16.0Mt LCE (measured & indicated). All reports are available on the E3 Lithium's website (e3lithium.ca/technical-reports) and SEDAR+ (www.sedarplus.ca).

Forward-Looking and Cautionary Statements

This news release includes certain forward-looking statements as well as management's objectives, strategies, beliefs and intentions. Forward looking statements are frequently identified by such words as "may", "will", "plan", "expect", "anticipate", "estimate", "intend" and similar words referring to future events and results. Forward-looking statements are based on the current opinions and expectations of management. All forward-looking information is inherently uncertain and subject to a variety of assumptions, risks and uncertainties, including the speculative nature of mineral exploration and development, fluctuating commodity prices, the effectiveness and feasibility of emerging lithium extraction technologies which have not yet been tested or proven on a commercial scale or on the Company's brine, competitive risks and the availability of financing, as described in more detail in our recent securities filings available at www.sedarplus.ca. Actual events or results may differ materially from those projected in the forward-looking statements and we caution against placing undue reliance thereon. We assume no obligation to revise or update these forward-looking statements except as required by applicable law.

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E3 Lithium - Investor and Media Relations

Greg Foofat

Manager, Investor Relations

investor@e3lithium.ca

587-324-2775

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