E3 Lithium Completes Initial Field Pilot Plant Tests and Shares Results Against KPIs

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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 the series of three optimized tests at its Direct Lithium Extraction (DLE) Field Pilot Plant with results surpassing Key Performance Indicators (KPIs). The pilot continues to operate with the selected optimized test, outlined below, to confirm the results, while also producing lithium concentrate for further lithium production testing.

Initial Results

As shown in the table below, all three tests have exceeded the KPIs.

Success Criteria	Key Performance Indicator (KPI)	Description
Lithium recovery	? 80%	Mass of lithium recovered from the mass o
Lithium grade in the lithium product stream	? 25%	Concentration of lithium relative to other im
	? 600 mg/L	Concentration of lithium in the lithium produ
Flow rate ratio	? 3	Brine flow rate divided by the system volun

* Verification testing was completed on all preliminary data as a matter of course. The updated data outlines minor cha than previously reported.

The differences between each test included changes in the operating conditions to optimize the cycle time (the amount of time the sorbent was exposed to the brine), flow rate ratio and the duration of each cycle.

While the conditions of Test 1 resulted in the best product quality (higher lithium concentration and lower impurities), Test 2 was able to achieve the highest flow rate ratio and optimized cycle duration. While the product quality of Test 2 was lower, it is still significantly greater than the KPI success criteria and a preferable trade-off from a commercial design perspective, outlined below. The average main impurities in the Test 2 product stream include: Na: 76.5 mg/L, K: 11.2 mg/L, Ca: 59.2 mg/L, Mg: 10.1 mg/L, Mn:0.2 mg/L mg/L, Sr: 1.5 mg/L and B 68.8mg/L.

Given the results of the three tests, E3 Lithium is running the conditions for Test 2 for an extended operating period that is currently underway. E3 Lithium will continue to monitor and verify the results of the extended operating period.

Results Discussion

The details below provide context on the results and how they impact the overall design of E3 Lithium's commercial facility. Being able to extract lithium from the Leduc brines in Alberta efficiently and effectively at this scale has a significant positive impact on the project and advances the Company forward.

Lithium Recovery: The mass of lithium recovered from raw brine was calculated based on the lithium concentration measured in the brine before and after the lithium was extracted using the DLE system. The average lithium recovery over the duration of each test is reported above.

Concentration of lithium relative to other impurities: The average lithium grade is reported as the

concentration of lithium relative to the total concentration of the impurities. Samples were pulled every four hours throughout the duration of each test.

Concentration of lithium in the lithium product stream: The concentration of lithium in the product stream is reported as an average. Samples were pulled every four hours throughout the duration of each test.

Flow Rate Ratio: The flow rate ratio is calculated from the brine flow rate relative to the volume of sorbent used. A higher number represents more brine flowing across the same amount of sorbent.

The main KPI that is impacted by increasing the flow rate ratio is lithium recovery. The goal of the initial three tests was to maximize the flow rate ratio while maintaining lithium recovery and the purity of the product stream. Various parameters in each of the three tests were modified to increase the flow rate ratio while aiming to ensure recovery was maintained, along with achieving high levels of purity and high lithium concentration.

Flow rate ratio is the focus for the testing due to its ability to directly impact the relative capital and operating costs of the brine treatment system. The quality of the product stream, quantified by lithium concentration and purity, has a direct impact on the relative size and complexity of the post DLE lithium refining process. Put simply, the more concentrated the lithium, combined with a lower concentration of impurities, the less energy is required to produce a battery grade product. The flow rate ratio has a larger impact on costs relative to the minor increase in impurities across the tests outlined above and is the determining factor for choosing Test 2 for our continued operations.

All results achieved from pilot testing have exceeded E3 Lithium's expectations as well as all KPIs that have an impact on the design, and therefore, the cost of extracting lithium from E3 Lithium's brines.

"These results have exceeded our expectations and are extremely encouraging," said Chris Doornbos, President & CEO of E3 Lithium. "The team is working through the impact of these positive results as we progress the engineering of the facility via our Pre-Feasibility Study. The team continues to operate the pilot to confirm these results and working safely is the highest priority."

Next Steps

As E3 Lithium has previously outlined it is testing its own DLE technology along with two third-party technologies. The table of results above represent one of the third-party systems. The Company continues to test the E3 Lithium system and is progressing the testing of the second third party system this fall.

Upon completion of the longer operating period currently underway, E3 Lithium is likely to have the data required for its Prefeasibility Study (PFS), Definitive Feasibility Study (DFS) and the detailed engineering and design for its first commercial facility. This longer operation will also produce lithium concentrate for further downstream processing of battery-grade Lithium Hydroxide Monohydrate (LHM).

E3 Lithium will provide details of the DLE system and the downstream equipment vendor selected for its PFS once all data from the pilot operations are compiled and confirmed.

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 resources[1] 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-tax[1]. 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.

Neither the TSX Venture Exchange nor its Regulation Services Provider (as that term is defined in the policies of the TSX Venture Exchange) accepts responsibility for the adequacy or accuracy of this release.

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