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Petro-Lithium: The Evolution of Energy in Alberta

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Summary

Lithium has many applications, but the largest growth sector for lithium in the next 5 years is expected to be electric vehicle batteries and energy storage devices. E3 Metals Corp, a new company in the emerging Petro-Lithium space, has demonstrated Alberta's significant lithium resources by completing Canada's largest NI 43-101 compliant mineral resource for Petro-Lithium to date. The Inferred resource indicates 2.83 Million tonnes of lithium carbonate equivalent (LCE) is present on just 16% of E3's total land position. While lithium concentrations found in Petro-Lithium projects are generally at the lower end of the current lithium industry production grade curve, at around 80 mg/L, these grades are opportunely held within the prolific Leduc reservoir. This reservoir is estimated to contain tens of billions of liters of lithium-bearing brines and has demonstrated substantial flow rates over the last 6 decades. High brine flow rates combined with new direct lithium extraction technologies currently under development have the potential to make Petro-Lithium a game changer for the lithium industry. E3 has brought together an experienced team that has secured the lithium, and other mineral, rights to over 570,000 hectares (~1.4 million acres) in Alberta covering this world class reservoir.

Importantly, this project's execution will be highly leveraged off existing Albertan talent and infrastructure. This includes technical professionals such as geologists and geophysicists, many of whom already have a deep understanding of Devonian carbonates. Further geophysical characterization of the Leduc will support E3 Metals in the progression of an Inferred Resource towards Measured and Indicated. As oil and gas pools mature in the Leduc, many of E3's key areas are facing massive liability issues related to infrastructure retirement. Petro-Lithium operations can address this issue by selectively revitalizing oil field infrastructure to produce lithium instead of oil. Doing so not only lessens the burden of liability on the province, but also has the potential to extend oil and gas production life through strategic injection and pressure support, and can provide employment to an underutilized workforce. In addition, the reduction in exploration costs and development risks as a result of oilfield repurposing are substantial compared to conventional lithium exploration. Moving towards commercialization, E3 also plans to reduce costs and improve sustainability by leveraging geothermal heat contained within brines during lithium processing. E3's focus for 2018 is to develop a pilot to commercialize a series of direct lithium extraction technologies currently under development by industry leaders. We believe lithium can revitalize Alberta's energy landscape, fuel global electrification, and bring wealth and prosperity all Canadians.