

COMMISSIONING OF PILOT PLANT COMPLETED AT PRAIRIE

HIGHLIGHTS

- Pilot plant operations are underway processing brine and producing lithium concentrate from the Prairie Lithium Project.
- Pilot plant testing of Prairie brine material will complete the third and final phase of the evaluation of a very promising third party supplied DLE technology.
- The Company has previously produced high purity lithium using this DLE technology, and anticipates producing larger quantities of high purity lithium as a result of the pilot.
- Various operational parameters will be tested over the duration of the pilot to determine the final design of a commercial extraction facility.
- The location of the first commercial facility has been selected, and the ground prepared for the well pad, allowing the Company to rapidly advance from pilot operations to commercialization via the drilling of its initial wells H1 2024.

Arizona Lithium Limited (ASX: AZL, AZLOA, OTC: AZLAF) (“Arizona Lithium”, “AZL” or “the Company”), a company focused on the sustainable development of two large lithium development projects in North America, the Big Sandy Lithium Project (“Big Sandy”) and the Prairie Lithium Project (“Prairie”), is pleased to announce that it has commissioned the pilot plant at its Prairie project in Saskatchewan.

AZL is producing a lithium concentrate that will be sent to the Company’s Lithium Research Center (LRC) in Tempe, Arizona, for further upgrading to high purity lithium end products, including high purity lithium carbonate. The Company has previously produced high purity lithium using this DLE technology, and will produce larger quantities of high purity lithium as a result of the pilot¹. Arizona Lithium will test various operational parameters and conditions to finalize the design of a commercial extraction facility.

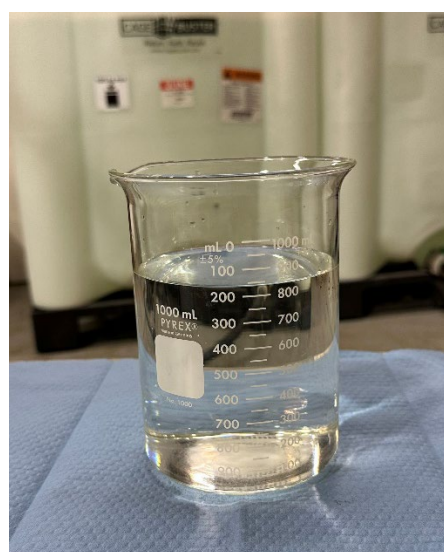


Figure 1: AZL Pilot Facility in Saskatchewan and Lithium Concentrate product.

¹ HIGH GRADE LITHIUM FROM PRAIRIE – ASX Announcement (October 30, 2023)

Arizona Lithium Managing Director, Paul Lloyd, commented: *“Having the pilot commissioned and operational is a significant milestone for our team, with brine being processed and lithium concentrate is being produced and sent to our Lithium Research Center in Arizona for further upgrading. We are very proud of our team on the ground whose work has allowed Prairie to quickly become one of the most advanced brine projects in North America. We look forward to updating the market as we rapidly move towards commercial production.”*

As announced on 3 November 2023, AZL received the third party Direct Lithium Extraction (DLE) pilot plant at its facility in Saskatchewan, Canada, with successful commissioning being completed in under 7 days. The Company has previously produced high purity lithium using this DLE technology, and anticipates producing larger quantities of high purity lithium as a result of the pilot.

As announced, AZL has been undertaking ongoing development of the Company’s Direct Lithium Extraction (DLE) technology at the LRC, with testing also ongoing for AZL’s proprietary DLE technology with third party technologies.

About the Prairie Lithium Project

AZL’s Prairie Lithium Project is located in the Williston Basin of Saskatchewan, Canada. The Prairie Project resource is 5.7 MT of LCE, composed of 4.0 MT LCE Indicated and 1.7 MT LCE Inferred². Located in one of the world’s top mining friendly jurisdictions, the projects have easy access to key infrastructure including electricity, natural gas, fresh water, paved highways and railroads. The projects also aim to have strong environmental credentials which should result in less use of freshwater, land and waste, aligning with AZL’s sustainable approach to lithium development.

Arizona Lithium also holds a proprietary lithium extraction process technology that selectively removes lithium from Brine. The Prairie Lithium Ion Exchange (“**PLIX**”) is an ion-exchange material that selectively extracts lithium from brine, using equipment which is anticipated to be readily available at commercial scale. PLIX may have a global application, with the process currently being tested on lithium resources from around the world (including encouraging results with Big Sandy). While Prairie Lithium continues to develop, scale and operate its own DLE technology, the company is also testing other DLE technologies to ensure it deploys the most cost-effective technology onto its resource.

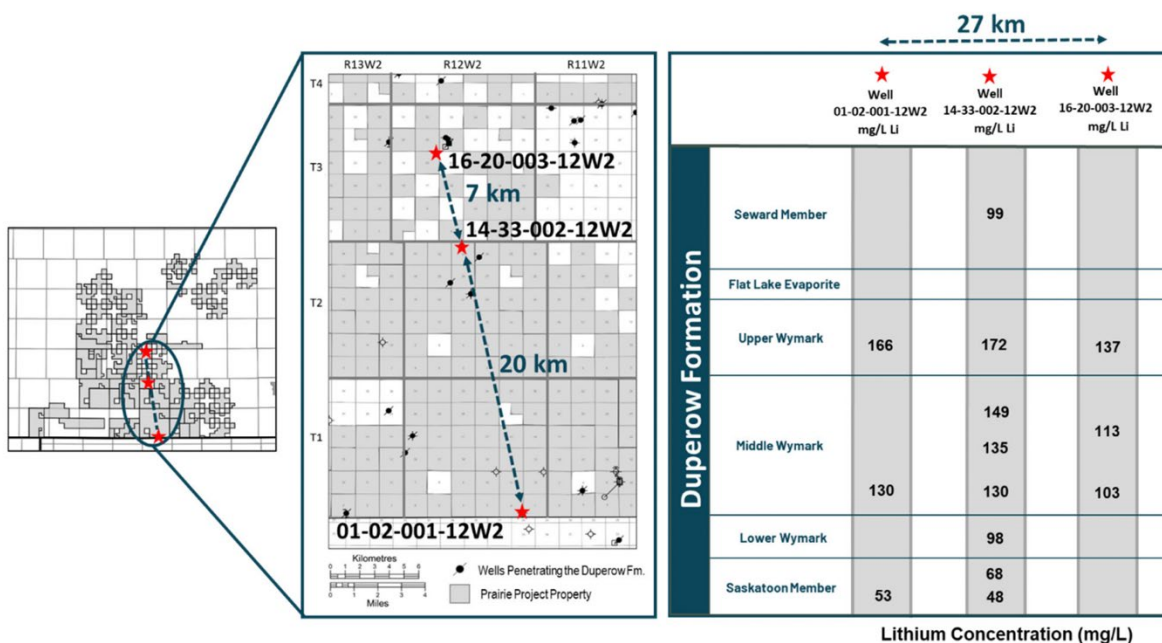


Figure 2: Location map and representative lithium concentrations from Arizona Lithium’s test wells³

² PRAIRIE PROJECT RESORUCE UPGRADED 39% - ASX Announcement (August 17, 2023)

³ Lithium Concentrations measured by Isobrine Solutions and confirmed by one other commercial laboratory in Edmonton, Alberta

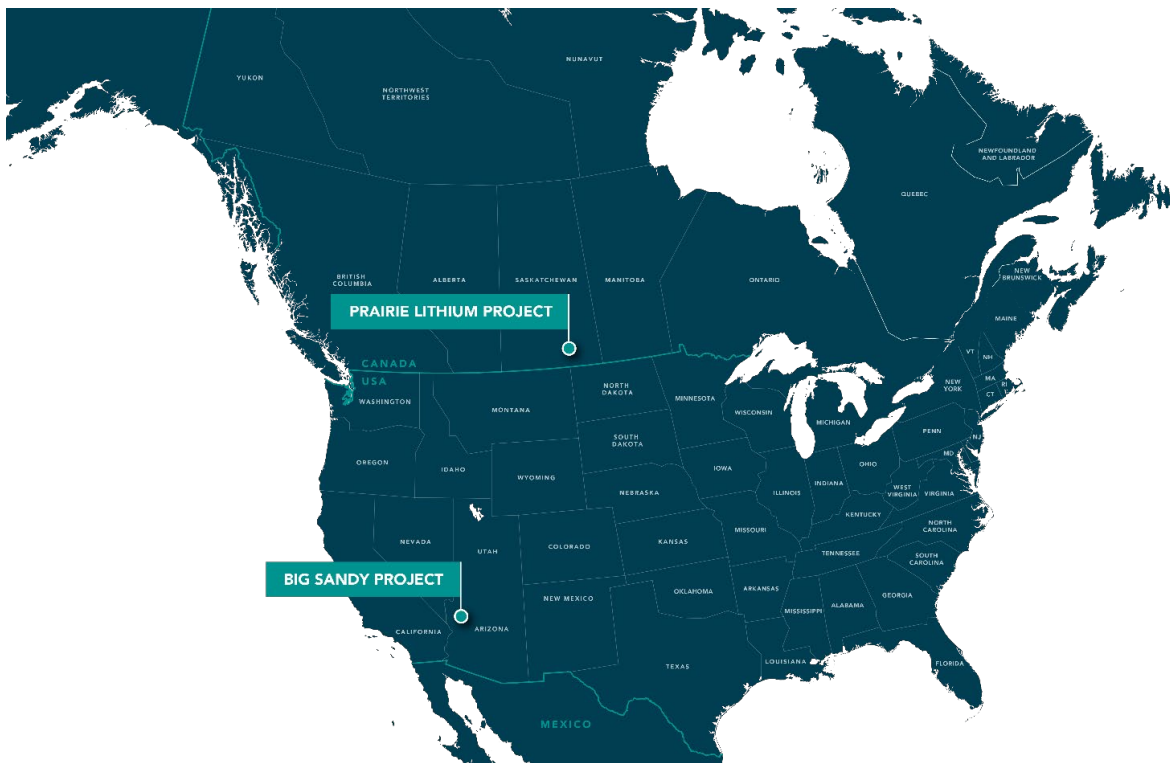


Figure 3: Location of Arizona Lithium's projects

This ASX announcement is authorised for release by the Board.

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