ASX Announcement **23 November 2023**

PILOT PLANT UPDATE AT PRAIRIE

HIGHLIGHTS

- **Pilot plant testing of brine material from the Prairie Lithium Project will complete the third and final phase of the evaluating the third party DLE technology.**
- **The first two shipments of approximately 2,500 L lithium concentrate have been sent to the Lithium Research Center (LRC) where they will undergo further conversion to high purity lithium end products.**
- **The location of the first commercial facility has been selected, the ground has been prepared for the well pad, and the first well licence has been approved, allowing the Company to rapidly advance from pilot operations to commercialization via the drilling of its initial wells.**
- **To view a video of the Prairie Pilot Plant processing brine, please click the link below:** https://www.youtube.com/watch?v=plkX0vqIYYE

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 provide an update on its pilot plant at its Prairie project in Saskatchewan, Canada.

The Company has processed over 42,000 L of raw brine from its well to date, resulting in the production of approximately 2,500 L of lithium concentrate. The first two shipment of that concentrate have been sent to the Company's LRC in Tempe, Arizona, for further upgrading to high purity lithium end products, including high purity lithium carbonate. Over the coming months, the Company will continue to test various operational parameters and conditions to finalize the design of a commercial extraction facility.

Arizona Lithium Managing Director, Paul Lloyd, commented: *"Having recently visited the pilot plant operations in Saskatchewan, I am confident in our team's ability to continue to execute the required operations over the coming months. Everyone is working very hard to ensure that we can quickly translate that information into commercial design as we continue to push towards commercial production in 2025."*

Arizona Lithium Chief Technology Officer, Brett Rabe, commented: *"This pilot plant testing campaign is the final step before purchasing long-lead items for the inaugural well pads. We are executing our project development plan quickly and efficiently with commencement of well pad civil works, well license approval, and completion of the PFS taking place before the end of 2023. Saskatchewan is truly an outstanding jurisdiction for lithium project development and we are excited to share pilot plant DLE performance details in the coming weeks. We also look forward to updating the market with our project execution plan for what may be the first new producing lithium project in North America in a very long time."*

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 Inferred[1]. 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.

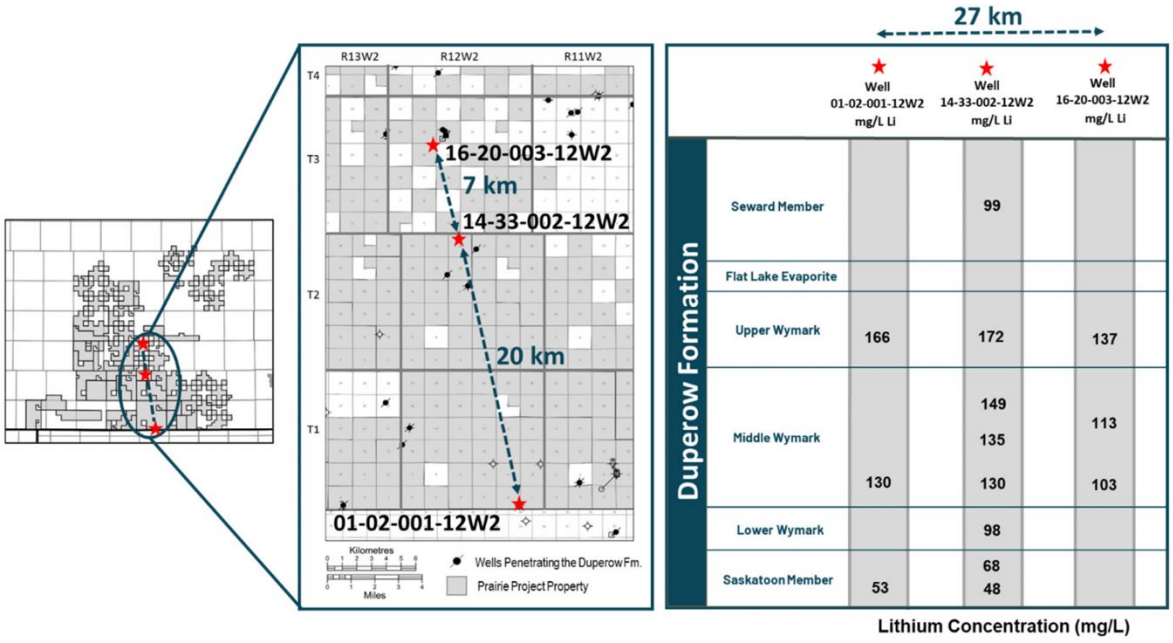

Figure 1: Location map and representative lithium concentrations from Arizona Lithium's test wells[2]

[1] PRAIRIE PROJECT RESORUCE UPGRADED 39% - ASX Announcement (August 17, 2023)
[2] Lithium Concentrations measured by Isobrine Solutions and confirmed by one other commercial laboratory in Edmonton, Alberta

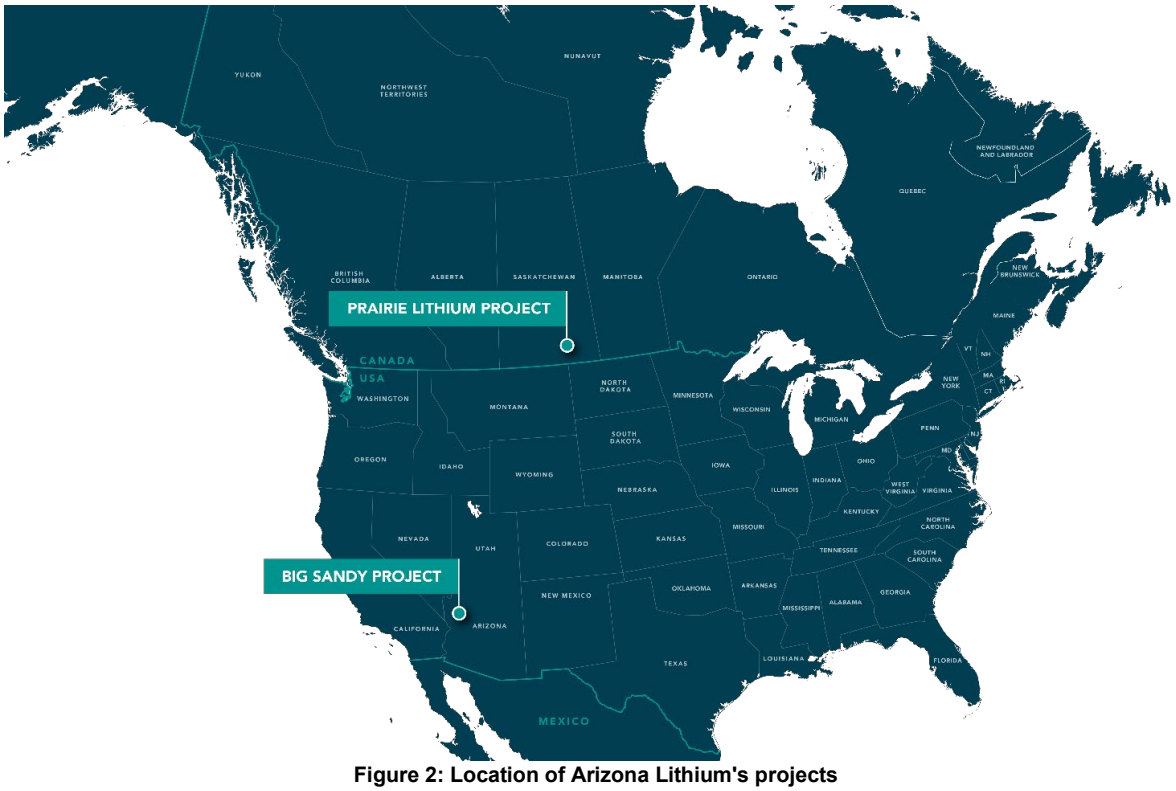

Figure 2: Location of Arizona Lithium's projects

This ASX announcement is authorised for release by the Board.

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Competent Persons statement

Gordon MacMillan P.Geol., Principal Hydrogeologist of Fluid Domains, who is an independent consulting geologist of a number of brine mineral exploration companies and oil and gas development companies, reviewed and approves the technical information provided in the release. Mr. MacMillan is a member of the Association of Professional Engineers and Geoscientists of Alberta (APEGA), which is ROPO accepted for the purpose of reporting in accordance with the ASX listing rules. Mr. MacMillan has been practising as a professional in hydrogeology since 2000 and has 22 years of experience in mining, water supply, water injection, and the construction and calibration of numerical models of subsurface flow and solute migration. Mr. MacMillan is also a Qualified Person as defined by NI 43-101 rules for mineral deposit disclosure.

Information in this announcement that relates Exploration Results or to Mineral Resources have been extracted from the Company's announcement released to ASX on 14 August 2023. The announcement is available to view on the Company's website: www.arizonalithium.com. The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and, in the case of estimates of Mineral Resources or Ore Reserves, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. The Company confirms that the form and context in which Mr MacMillan's findings are presented have not been materially modified from the original market announcement.