

ASX Announcement 3 November 2023

## PILOT PLANT ARRIVES AT PRAIRIE

## **HIGHLIGHTS**

- AZL has received the third party Direct Lithium Extraction (DLE) pilot plant at its facility in Saskatchewan, Canada.
- Commissioning underway with brine processing to commence to produce a lithium concentrate.
- 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.

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 the third party DLE pilot plant has arrived at its facility in Saskatchewan.

The Company is working with the technology provider to commission the pilot plant as quickly as possible. The facility has been prepared, with the team ready to start processing brine and producing a lithium concentrate as soon as the pilot plant is operational. The lithium concentrate produced will be sent to the Company's Lithium Research Center (LRC) in Tempe, Arizona. 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.<sup>1</sup>

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.

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.



Figure 1: AZL's facility in Saskatchewan

<sup>&</sup>lt;sup>1</sup> HIGH GRADE LITHIUM FROM PRAIRIE – ASX Announcement (October 30, 2023)



ASX: AZL, AZLO AZLOA

**OTC: AZLAF** 



**Arizona Lithium Managing Director, Paul Lloyd, commented:** "We are very excited to have the pilot plant arrive at our facility in Saskatchewan, and even more excited to get it commissioned and into operation. I look forward to being able to share the exciting results with our shareholders".

## **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<sup>2</sup>. 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.

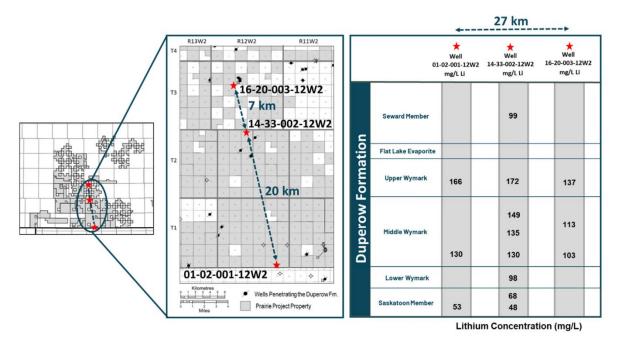


Figure 2: Location map and representative lithium concentrations from Arizona Lithium's test wells<sup>3</sup>



 $<sup>^2</sup>$  PRAIRIE PROJECT RESORUCE UPGRADED 39% - ASX Announcement (August 17, 2023)

<sup>&</sup>lt;sup>3</sup> Lithium Concentrations measured by Isobrine Solutions and confirmed by one other commercial laboratory in Edmonton, Alberta



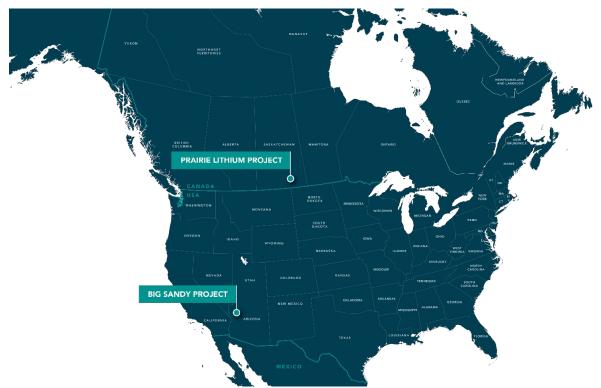


Figure 3: Location of Arizona Lithium's projects

This ASX announcement is authorised for release by the Board.

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