

ASX Announcement 7 August 2024

BATTERY GRADE LITHIUM CARBONATE PRODUCED FROM PRAIRIE

HIGHLIGHTS

- Battery grade lithium carbonate was produced from the Direct Lithium Extraction (DLE) eluent of the ILiad pilot that operated at the Prairie project from November 2023 - February 2024.
- The Battery grade product was produced in partnership with Saltworks Technology Inc.
- The first commercial production well has been drilled on Pad #1 at the Prairie project, with production results exceeding expectations.1
- Pad #1 has been conditionally approved for up to a \$21.6m investment incentive under the Saskatchewan Government's Oil & Gas Processing Investment Incentive Program (OGPII).²

Arizona Lithium Limited (ASX: AZL, AZLO, 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 it has produced battery grade lithium carbonate from the Prairie Project, which has been independently verified by Saltworks. The lithium carbonate was produced from the DLE eluent of the ILiad pilot that operated at the Prairie project from November 2023 - February 2024. DLE eluent was sent to Saltworks facility in Vancouver, Canada where it was converted into battery grade lithium carbonate. Figure 1 shows a sample of the battery grade Lithium Carbonate produced. Figure 2 shows the process flow diagram in order to go from brine from the Prairie Project to battery grade Lithium Carbonate. Figure 3 illustrates the Lithium Carbonate and wash equipment in Saltworks' test facility.



Figure 1: Lithium Carbonate

ASX Announcement – "Lithium Discovery at Prairie" – 15 July 2024
ASX Announcement – "\$21 Million Investment Incentive For The Prairie Project" – 18 July 2024



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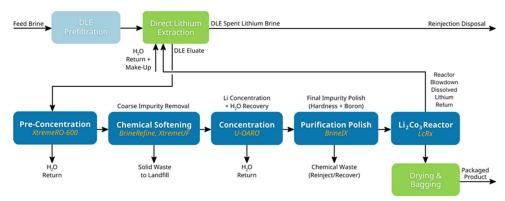


Figure 2: Lithium Carbonate Process Flow Diagram



Figure 3: Pilot Scale Lithium Carbonate and Wash Equipment

Arizona Lithium Managing Director, Paul Lloyd, commented: "Producing battery grade lithium carbonate from our flowsheet is an important step in showing the market the quality of product that we can produce. The battery grade product we produced is in sufficient quantities to go out to all the offtakers and strategic partners we are in conversation with. Our team remains focused on bringing Pad #1 at the Prairie project into production in 2025. The steps we have taken so far this year have highlighted our teams ability to execute on project plans, and I look forward to providing continued updates as we progress the project."

Big Sandy Project Update

AZL's Big Sandy Lithium Project received approval from the US Bureau of Land Management (BLM) for the Permit of Exploration (POE) on 11 July 2024. AZL's management team is looking forward to a successful exploration campaign and updating the market on a positive resource expansion at Big Sandy in the short term. The Big Sandy Lithium project remains a core focus for AZL and management sees the project as being complementary to the Prairie Project – similar to its peers in the region, Big Sandy will be a large cash generator in a medium term timeframe, whereas Prairie Lithium is expected to generate consistent cash flows in a short term timeframe, as previously indicated to the market.

Notwithstanding the BLM approval received on 11 July 2024 after an extensive process, the Company has been provided with a copy of a "complaint" by the Hualapai Tribe lodged in the United States District Court



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for the District of Arizona. The Company is not a party to the complaint and it notes that the Hualapai Tribe provided extensive submissions to the BLM as part of the approval process.

The complaint seeks (amongst other things) orders that the BLM violated the relevant legislation in issuing its approval and authorising the Big Sandy Project and is seeking to set aside and vacate the approval.

At this early stage and given the complaint has only been received, the Company is seeking advice on the effect of the complaint.

About the Prairie Lithium Project

AZL's Prairie Lithium Project is located in the Williston Basin of Saskatchewan, Canada, and holds a resource of 6.3 MT of LCE, comprised of 4.5 MT LCE Indicated and 1.8 MT LCE Inferred³. 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, with Arizona Lithium targeting to use less use freshwater, land and waste, aligning with the Company's sustainable approach to lithium development.

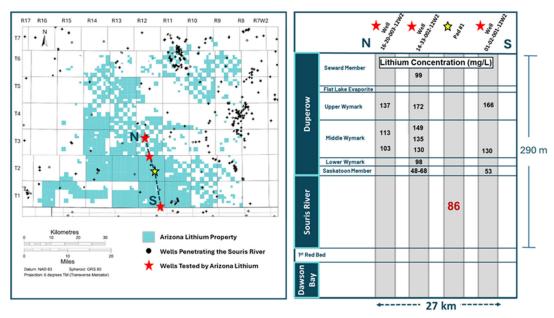


Figure 4: Location map and representative lithium concentrations from Arizona Lithium's test wells



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 $^{^3}$ ASX Announcement – "6.3 Million Tonne Lithium Resource At Prairie" – 13 December 2023





Figure 5: Location of Arizona Lithium's core projects

This ASX announcement is authorised for release by the Board.

For further information please contact:

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Competent Persons statement for Prairie and Registered Overseas Professional Organisation (ROPO) and JORC Tables

Benjamin Sparrow P.Eng, Chief Engineer for Saltworks Technology Inc., reviewed and approves the technical information pertaining to the lithium carbonate test work within the release and in the attached JORC Table 1. He is a registered Professional Engineer in British Columbia, Canada, and has worked in the engineering field for 25 years. Mr. Sparrow is a Qualified Person as defined by 17 CFR § 229.1302 - (Item 1302) and has been involved in several pilot test programs, engineering design studies, and full scale projects regarding the commodity discussed in this release.

Gordon MacMillan P.Geo., 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 pertaining to the resource within the release and in the attached JORC Table 1. 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 24 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.

