

ASX Announcement

16 March 2023

PRAIRIE LITHIUM TO RECEIVE AU\$1.2 MILLION GRANT FUNDING

HIGHLIGHTS

- **Prairie Lithium Corporation, which AZL is in the process of acquiring, was awarded a grant from the Critical Mineral Research Development and Demonstration (CMRDD) program for Natural Resources in Canada (NRCan).**
- **Prairie is to receive a total of C\$1.074m (approx. A\$1.2m), which will be matched with funding from Prairie, and is to be invested into Direct Lithium Extraction (DLE) technology development.**
- **Prairie's proprietary lithium extraction process technology may have a global application, with the process currently being tested on lithium resources from other jurisdictions, including the Big Sandy Resource.**
- **In December 2022, AZL signed a definitive agreement to acquire 100% of Prairie Lithium Corporation and its proprietary lithium extraction process technology.**
- **The acquisition represents a 1,200% increase to AZL's global lithium Resource, which now stands at 4.4MT of LCE (inferred and indicated).^{1,2}**

Arizona Lithium Limited (ASX: **AZL**, **AZLOA**, OTC: **AZLAF**) ("**Arizona Lithium**", "**AZL**" or "**the Company**"), a company focused on the sustainable development of the Big Sandy Lithium Project ("**Big Sandy**", "**Project**"), is pleased to announce that Prairie Lithium Corporation ("**Prairie**" or "**Prairie Lithium**"), which AZL is acquiring, is to receive grant funding from the Critical Mineral Research Development and Demonstration (CMRDD) program for natural resources in Canada (NRCan).

Prairie is to receive a total of C\$1.074m, which will be matched with funding from Prairie, and will be invested into direct lithium extraction (DLE) technology development.

Prairie Lithium President and CEO, Zach Maurer, commented: "Securing support from NRCan is instrumental for the company's development and further demonstrates the federal government's commitment to developing key critical mineral projects across the country. The grant allows us to accelerate our DLE technology development with the goal of advancing to commercial scale lithium production as quickly as possible."

Arizona Lithium Managing Director, Paul Lloyd, commented: "We are pleased that Prairie has been awarded this grant funding, as we continue to position the Arizona Lithium group as a leader in lithium processing and development in North America. We look forward to using our joint lithium expertise to further advance the DLE technology at both AZL's Lithium Research Centre in Tempe, Arizona and Prairie's pilot plant in Emerald Park, Saskatchewan."

In December 2022, AZL signed a definitive agreement to acquire 100% of Prairie Lithium Corporation, one of Canada's most advanced lithium brine companies, and one of the most advanced Direct Lithium Extraction (DLE) projects globally. Prairie's project holds the highest quality Inferred lithium brine resource in Canada discovered to date, with 4.1MT LCE total JORC Inferred Mineral Resources at 111 mg/L Li.³

Prairie Lithium is the owner of a lithium project located in the Williston Basin of Saskatchewan, Canada, and a proprietary lithium extraction process technology. Prairie's proprietary lithium extraction process technology, called the Prairie Lithium Ion Exchange (PLIX), is an ion-exchange material that selectively

¹ Announcement Sept 26, 2019, Big Sandy Lithium Project, Maiden Mineral Resource

² Prairie Lithium – Announcement by AZL (21/12/22)

³ Prairie Lithium – Announcement by AZL (21/12/22)

extracts lithium from brine. PLIX may have a global application, with the process currently being tested on lithium resources from other jurisdictions.

Prairie's JORC Inferred Mineral Resource is 4.1 million tonnes of lithium carbonate equivalent (LCE) at 111 mg/L, the highest quality inferred lithium brine resource in Canada discovered to date. The acquisition represents a 1,200% increase to AZL's global lithium Resource, which now stands at 4.4MT of LCE (inferred and indicated).

Located in one of the world's top mining friendly jurisdictions, Prairie's projects have easy access to key infrastructure including electricity, natural gas, fresh water, paved highways and railroads.

FOR FURTHER INFORMATION PLEASE CONTACT:

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Big Sandy Lithium Project (Arizona)

The Big Sandy Project, as a very shallow, flat lying mineralised sedimentary lithium resource and with excellent available infrastructure, has the potential to be developed with a very low environmental footprint.

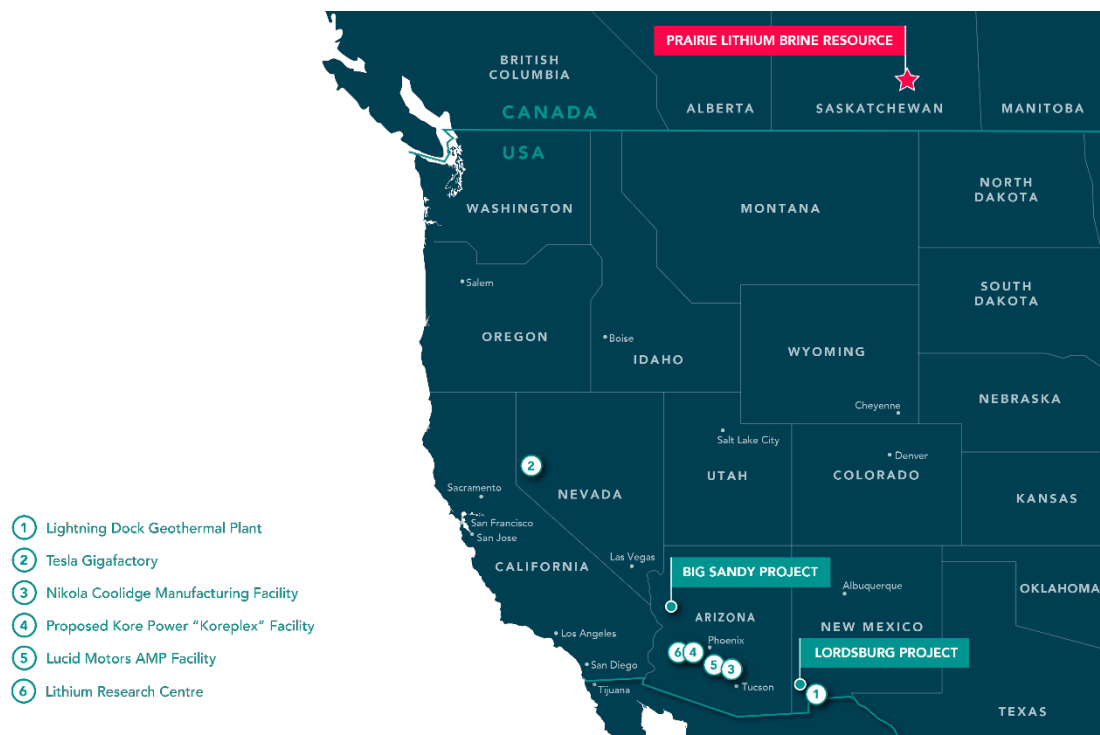


Figure 1 – Prairie Lithium's resource further diversifies AZL into Canada and brines

JORC Mineral Resource Estimate

Arizona Lithium's successful 2019 drill program at Big Sandy resulted in the estimation of a total Indicated and Inferred JORC resource of 32.5 million tonnes grading 1,850 ppm Li for 320,800 tonnes Li_2CO_3^4 .

Table 1 – Big Sandy Project Mineral Resource Statement (above 800 ppm Li cut-off)

Resource Classification	Tonnes (Mt)	Li Grade (ppm)	Contained Li Metal (t)	Contained LCE (t)
Indicated	14.6	1,940	28,400	150,900
Inferred	17.9	1,780	31,900	169,900
Total	32.5	1,850	60,300	320,800

This represents 4% of the Big Sandy Project area that contains an estimated exploration target of between 271.1Mt to 483.15Mt at 1,000 - >2,000ppm Li⁵.

Exploration Target

Exploration on the Big Sandy Lithium Project including geological mapping, drilling and surface sampling in Blocks B, C and D in the Northern Mineralised Zone (NMZ) and geological mapping and surface sampling in Blocks SMZ 1 and SMZ 2 in the Southern Mineralised Zone (SMZ), have resulted in the identification of the potential for between 271.1Mt to 483.15Mt at 1,000 - >2,000ppm Li as summarised in Table 3 below.

The Exploration Target in Blocks B, C and D in the NMZ, has been estimated using a range of thicknesses for the mineralised sedimentary material, calculated from data point elevations, drill hole data from prior Exploration Target Block A, lying between Blocks B and C, that has been converted to an inferred / indicated mineral resource and geological mapping. The grade estimates a range of values demonstrated from surface sampling.

The Exploration Target in Blocks SMZ 1 and SMZ 2 in the SMZ, has been estimated using a range of thicknesses for the mineralised sedimentary material, calculated from data point elevations, geological mapping and knowledge of the mineralisation controls and alteration witnessed in the NMZ. The grade estimates a range of values demonstrated from surface sampling.

Table 2 – Summary of Exploration Target

Zone	Resource Block	Grade Range Li ppm	Thickness Lower (m)	Thickness Upper (m)	Lower (Mt)	Upper (Mt)
North	B	1000 - >2,000	40	60	82,800,000	124,200,000
North	C	1000 - >2,000	20	35	27,000,000	47,250,000
North	D	1000 - >2,000	20	35	39,600,000	69,300,000
South	SMZ 1	1000 - >1,500	30	60	83,700,000	167,400,000
South	SMZ 2	1000 - >1,500	30	60	38,000,000	75,000,000
				TOTALS	271,100,000	483,150,000

Note that the potential quantity and grade of the estimated geological potential (Exploration Target) is conceptual in nature. There has been insufficient exploration to estimate a mineral resource and it is uncertain whether future exploration will result in the definition of a mineral resource. It has been estimated using a range of thicknesses for

⁴ Announcement Sept 26, 2019, Big Sandy Lithium Project, Maiden Mineral Resource

⁵ Announcement Nov 7, 2019, Big Sandy Lithium Project, Exploration Target Update

the mineralised sediments calculated from drill intercepts, surface sampling and geological mapping. The grade estimates a range of values demonstrated from drilling and surface sampling.

The Permit of Exploration (POE) that includes 145 exploration holes and a bulk sample at the Company's Big Sandy Lithium project in Arizona is awaiting Bureau of Land Management (BLM) approval. Community involvement is welcomed to ensure mutually beneficial outcomes for all stakeholders and the Company is very confident that drilling program can be completed without environmental impact and to the satisfaction of all stakeholders. The validity of the proposed exploration target will be tested in the next drilling program. The Company is awaiting drilling approval from the BLM as detailed above.

Competent Persons Statement

The information in this announcement that relates to the Exploration Target is based on and fairly represents information compiled by Gregory L Smith who is a Member of the Australasian Institute of Mining and Metallurgy (AusIMM) and has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity to which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr. Smith is a consultant to the Company and holds shares in the Company. Mr. Smith consents to the inclusion in this announcement of the matters based on this information in the form and context in which it appears. Information in this announcement which relates to Exploration Results relevant to the Exploration Target has been extracted from the Company's announcements released to ASX on 28 March 2019, 28 August 2019, 7 November, 2019 and 21 December 2022.

Information in this announcement that relates to Mineral Resources have been extracted from the Company's announcement released to ASX on September 26, 2019.

The announcements are 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 announcements 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 the Competent Person's findings are presented have not been materially modified from the original market announcements.

Competent Persons statement for Prairie and Registered Overseas Professional Organisation

(ROPO) and JORC Tables

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 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 21 December 2022. 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.