

# KOCH COMMERCIAL SCALE DLE TO BE DEPLOYED AT PRAIRIE

## HIGHLIGHTS

- AZL to deploy the first ever Koch Technology Solutions (KTS) Li-Pro commercial-scale “quad pod” unit at the Prairie Project in Saskatchewan this year. This represents the largest Direct Lithium Extraction (DLE) process ever deployed by KTS and the first commercial-scale production at Arizona Lithium’s Prairie Project.
- Koch Technology Solutions is a subsidiary of Koch, Inc., the second-largest privately held company in the United States, based in Wichita, Kansas. The company is a US-based leader in the innovation of DLE and will be a valuable partner for AZL.
- Duperow brine from Pad #1 was tested with KTS’s Li-Pro technology and highlighted exceptional results with approximately 98% lithium retention and an average 99% rejection of impurities such as Calcium (Ca), Magnesium (Mg), Potassium (K) and Sodium (Na).
- De-risking allows production to be increased by replication of additional Li-Pro units at Pad #1, followed by further deployment of commercial facilities at Pad #2 and Pad #3. Additional Pad locations are also currently being identified for imminent future development.
- The Prairie Project in Canada is well positioned to feed battery-grade lithium carbonate into the mature Asian battery market and the rapidly developing North American battery sector. Battery-grade samples produced from the Prairie Project are currently being distributed and tested in Asia.<sup>1</sup>

**Arizona Lithium Limited (ASX: AZL, AZLO, 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 Prairie Lithium Project (“**Prairie**”) and the Big Sandy Lithium Project (“**Big Sandy**”), is pleased to announce it has entered into an agreement with Koch Technology Solutions (“**KTS**”) to deploy a Li-Pro commercial-scale Direct Lithium Extraction (“**DLE**”) unit for Phase 1 production at the Prairie Project. The Company has also entered into a non-binding Memorandum of Understanding (“**MOU**”) for a commercial license to use KTS’s Li-Pro technology beyond Phase 1.

**Arizona Lithium Managing Director, Paul Lloyd, commented:** *“We are extremely pleased to have signed an agreement to deploy Koch Technology Solutions Li-Pro DLE technology at our Prairie Lithium Project. This is another significant event in derisking the project. It is a pleasure to partner with a multinational corporation of such high quality as Koch Inc. and we look forward to the arrival of DLE facilities on site in Q2 this year. It has always been AZL’s intention to be a first mover and leader in oil field lithium brines and with the commitment of AZL to the Koch technology your company will be one of the first global companies to produce at commercial scale from an oil field brine project”.*

**Koch Technology Solutions Director of Strategic Accounts, Patrick O’Hern, commented:** *“The team at Koch Technology Solutions is excited to partner with Arizona Lithium on this endeavour. This is a major milestone for the team at KTS and the lithium industry as we construct and deploy our first Li-Pro commercial scale “quad pod” unit, the largest DLE system we’ve ever built. Continuing to de-risk the Li-Pro technology at scale highlights our ability to deliver on projects and lead the way in DLE technology. We look forward to working with Arizona Lithium as we continue to progress our Li-Pro technology.”*

<sup>1</sup> ASX Announcement – “Battery Grade Lithium Carbonate Produced From Prairie” – 23 August 2024.

### Three Development Phases for Prairie Project Production

Phase 1 is a commercial scale, proof of concept, facility at Pad #1. The Prairie Project will be put into production across three phases of development. Phases 1, 2, and 3 represent the methodical steps being taken to cost-effectively bring the project into production.

Phase 1 will see the project go into production at Pad #1 using a Li-Pro commercial-scale unit supplied by KTS. The Li-Pro unit will be capable of producing 150 Tonnes Per Annum (“TPA”) Lithium Carbonate Equivalent (“LCE”). The lithium produced will be used to de-risk end market opportunities where battery-grade samples are currently being tested by interested groups in Asia and North America. Phase 1 will process brine at a rate of approximately 1,000m<sup>3</sup> per day. It is critical to process raw brine at this commercial scale to de-risk the temperature, pressure, and chemical constituents of the brine while feeding this Li-Pro commercial-scale DLE unit 24 hours per day, 7 days a week. A video rendering of Phase 1 at Pad #1 has been prepared and can be viewed here: <https://youtu.be/mUNExsUBjfo>

The Li-Pro unit is full commercial-scale, which allows production to be ramped up on Pad #1 by deploying additional units on a modular basis. The Li-Pro unit is expected to be delivered and commissioned on Pad #1 in Q4 2025.

The Li-Pro unit is being deployed to show commercial-scale brine production, DLE, and brine disposal at the Prairie Project. De-risking allows production to be increased by replication of additional units at Pad #1, followed by further deployment of Commercial facilities at Pad #2, Pad #3, and additional Pad locations that are currently being identified.

The Li-Pro unit will process approximately 1,000 m<sup>3</sup> of brine per day and produce a Lithium Chloride (“LiCl”). The lithium chloride will be further purified and concentrated onsite where it can then be converted into a battery-grade lithium carbonate.

The primary input to the Li-Pro unit operations is a lithium selective media provided by KTS, and Reverse Osmosis (“RO”) water to strip the lithium out of the media within the unit. This process water will be supplied by the company’s already drilled brackish water well at Pad #1.

This will represent one of the world’s largest known DLE facilities and provides the guidance required to scale up production cost-effectively across the Prairie Project shortly thereafter. Upon commissioning and operating at this scale, the Company will have significantly de-risked the process and proceed to Phase 2.

Phase 2 will see the immediate expansion of production on Pad #1. Phase 2 expansion will highlight the benefits of modularised scale-up as additional commercial-scale DLE units will be rapidly deployed. Additional wells will also be drilled to maximise production from Pad #1.

Phase 3 will see the replication of the wells and facility at Pad #1, applied to Pad #2, Pad #3 and additional Pads that are currently being identified.

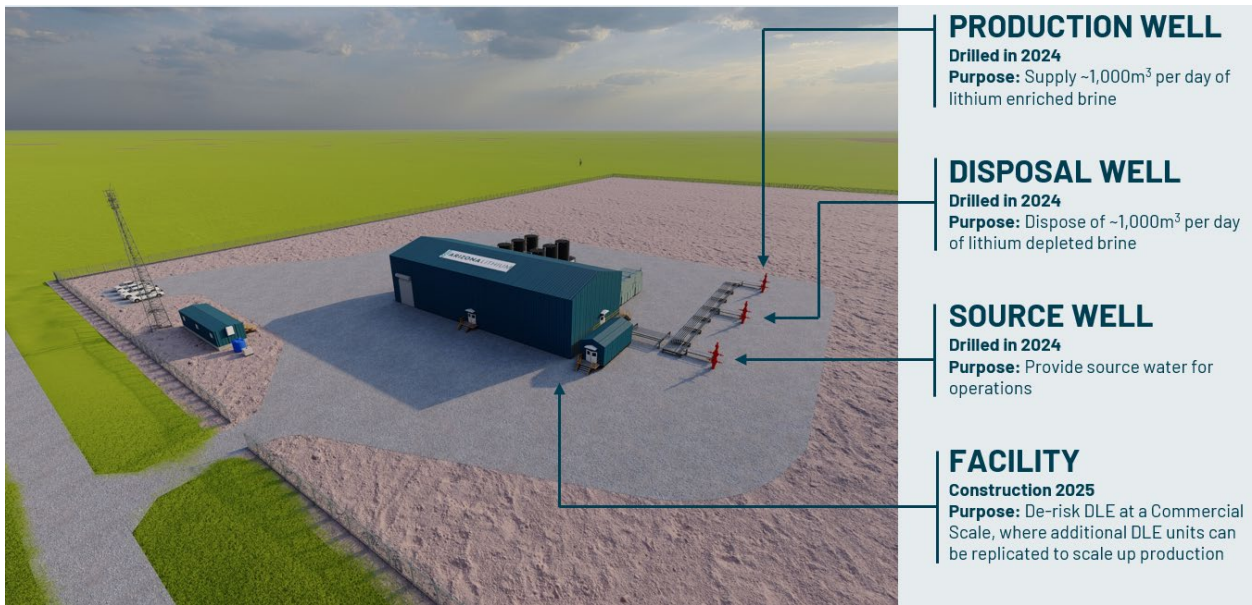


Figure 1: Rendering of site layout and facility for Phase 1 at Pad #1

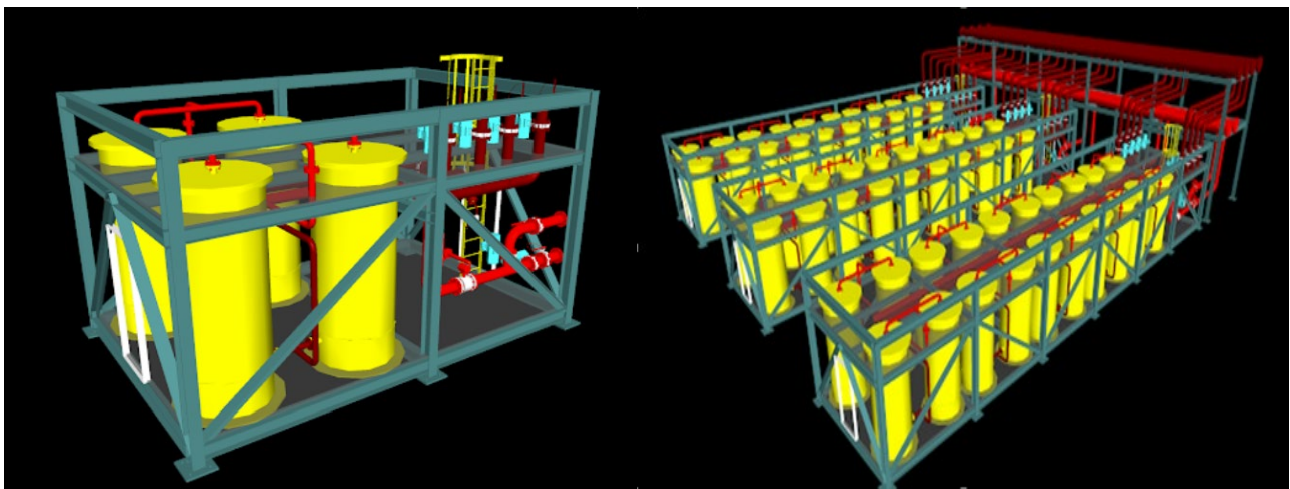


Figure 2: Rendering of KTS Li-Pro "quad pod" unit (left) and scaled up version (right)

### About the Prairie Lithium Project

AZL’s Prairie Lithium Project is located in the Williston Basin of Saskatchewan, Canada. Located in one of the world’s top mining friendly jurisdictions, the Prairie Project has easy access to key infrastructure including electricity, natural gas, fresh water, paved highways, and railroads. The Project also aims to have strong environmental credentials, with Arizona Lithium targeting to use less freshwater, land and waste, aligning with the Company’s sustainable approach to lithium development.

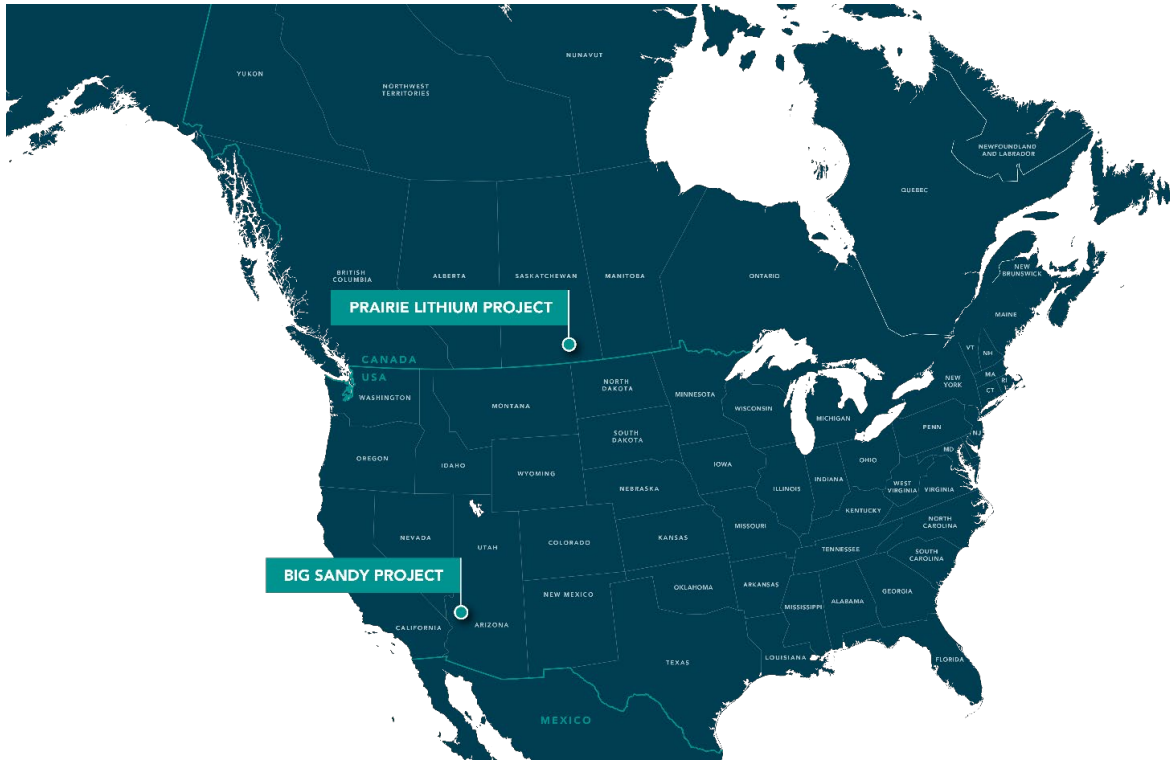


Figure 3: Location of Arizona Lithium's core projects

### About Koch Technology Solutions

Koch Technology Solutions (KTS) is a leader in technology licensing, delivering operating efficiency and capital productivity for customers deploying the technologies in our portfolio. KTS partners with companies developing chemical process technologies to create attractive licensing solutions for commercial deployment, helping to bring the next generation of process technologies to the market.

Leveraging decades of experience and hundreds of operating facilities around the world, KTS help minimize risk and maximize the return on capital investments for manufacturing owners. And as a part of Koch Industries, one of the largest private companies in the world, our robust balance sheet and unique approach provide stability and confidence, ensuring our customers have a dependable partner with a flexible approach to meet their evolving needs.

Koch has made significant investments in Lithium including:

1. Standard Lithium Partnership: In 2021, a subsidiary of Koch invested US\$100 million in Standard Lithium Ltd., a company specializing in innovative lithium extraction technologies.
2. Li-Cycle Investment: Koch also announced a US\$100 million investment in Li-Cycle, North America’s leading lithium-ion battery recycler.

3. Compass Minerals Collaboration: Koch Minerals & Trading invested US\$252 million in Compass Minerals to support the development of lithium brine resources at Utah's Great Salt Lake.

This ASX announcement is authorised for release by the Board.

**For further information, please contact:**

Mr. Paul Lloyd  
Managing Director  
Tel: +61 419 945 395  
Email: [paul@arizonalithium.com](mailto:paul@arizonalithium.com)

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

*Dean Quirk, P.Eng, President of Grey Owl Engineering Ltd., reviewed and approves the technical information within the release. He is a registered Professional Engineer in Saskatchewan, Canada, and has worked in the engineering field for 28 years. Mr. Quirk 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 which include the commodity discussed in this release. He has sufficient experience relevant to qualify as a Competent Person as defined by the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves – The JORC Code (2012). Mr Quirk 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 that relates to Mineral Resources have been extracted from the Company's announcement released to ASX on 13 December 2023.*

*The announcement is available to view on the Company's website: [www.arizonalithium.com](http://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 these Mineral Resources, 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 announcement.*



**Appendix 1 – Key Assumptions**

Criteria	Assumption
Flow-rate	<p>The 150 TPA LCE Commercial scale proof of concept production is planned at rates of 1,000 m<sup>3</sup>/day for the well (102/02-15-002-12W2). The evaluation of production rates is based on the flow test that was completed from June 20 – 25, 2024.</p> <p>Continuous downhole pressures were recorded while the well was pumped at approximately 500m<sup>3</sup> per day. Evaluation of the well performance, including an observed maximum drawdown of approximately 130m, suggests the well could produce 4,100 m<sup>3</sup> of brine per day over a 3-year period (modelled duration for the first commercial proof of concept). This is based on the following methods:</p> <ul style="list-style-type: none"> <li>• The pumping test analysis suggests the well has a skin of -0.8 and a transmissivity of 4.8 m<sup>2</sup>/day. Based on the perforated interval thickness (51 m), water pressure (2,098 m formation water hydraulic head), temperature (98 °C), and salinity (310,000 g/L), the effective permeability of the well is 52 mD.</li> <li>• The maximum rate at which a well can be pumped is dependent on the skin, transmissivity, storativity, and duration of pumping. A storativity of 1.5 x 10<sup>-4</sup> was used in the Theis analysis and in the forward modelling. For a producing interval 51 m thick, the storativity is equal to a specific storage of 3 x 10<sup>-6</sup> m<sup>-1</sup>. In order to estimate sustainable 3-year pumping rates, the Modified Moell method (Maathuis and van der Kamp, 2006) was applied.</li> <li>• Based on the measured pressure, measured transmissivity, and estimated storativity, the 02-15-002-12W2M Well is theoretically capable of being pumped at a rate of 4,100 m<sup>3</sup> /day over a 3-year period.</li> <li>• The Theis (1935) solution for the pressure response in a well due to pumping was selected for analysis of the pumping data because the Duperow Aquifer is confined, has a very large regional extent, only water was produced during the test; and the transmissivity of the aquifer was assumed to be unchanged during the test.</li> <li>• AQTESOLV software (HydroSOLVE 2007) was used to solve the Theis (1935) equation. Dougherty-Babu (1984) was selected to analyse the drawdown portion of the pressure data because of its ability to handle variable rate pumping, wellbore storage, and skin. The Theis (1935) residual drawdown/recovery method was used to analyse the recovery portion of the pressure data set because of its ability to handle variable pumping rates.</li> <li>• 4,100 m<sup>3</sup> per day multiplied by the lithium concentration of 104 mg/L observed on the pump test is equal to 156 metric tonnes of lithium or 828 metric tonnes of lithium carbonate equivalent (LCE) per year.</li> </ul> <p>An Electronic Submersible Pump (ESP) similar to the one used on the flow test will be used to produce brine at 1,000m<sup>3</sup> per day for the commercial scale proof of concept.</p>

## Appendix 1 – Key Assumptions

Capital Cost Estimating	<p>The majority of the capital costs are supported by current and accurate quotes from technology and other service providers. AZL plans to accept those quotes in the near future and issue purchase orders. These quotes have been obtained after significant testing has been performed throughout the flowsheet, including pumping, pre-conditioning, DLE, concentration, purification and conversion. The cost estimate is also composed from historical information for the site, flowsheet test work, preliminary block flow diagrams, preliminary process flow diagrams, conversations with equipment vendors, conceptual layouts for the facility and contingency to account for a first-of-a-kind process. AZL believes these quotes and cost estimates are accurate and therefore the capital expenditure estimate is accurate.</p> <table border="1"> <thead> <tr> <th>Description</th> <th>Cost (\$ USD)</th> </tr> </thead> <tbody> <tr> <td colspan="2"><b>Well Field</b></td> </tr> <tr> <td>Re-entry, Completion, Workover</td> <td>\$ 1,650,000</td> </tr> <tr> <td>Pumps</td> <td>\$ 450,000</td> </tr> <tr> <td><b>Total Well Field</b></td> <td><b>\$ 2,100,000</b></td> </tr> <tr> <td colspan="2"><b>Facility</b></td> </tr> <tr> <td>Engineering</td> <td>\$ 525,000</td> </tr> <tr> <td>Utilities &amp; Infrastructure</td> <td>\$ 605,000</td> </tr> <tr> <td>Structure, Tanks, Pipes, Pumps, Fittings, Electrical, Civil, Mechanical</td> <td>\$ 3,400,000</td> </tr> <tr> <td>Process Equipment (Reverse Osmosis, Pre-Conditioning, Direct Lithium Extraction, Purification, Concentration, Conversion)</td> <td>\$ 12,400,000</td> </tr> <tr> <td><b>Total Facility</b></td> <td><b>\$ 16,930,000</b></td> </tr> <tr> <td><b>Contingency (15%)</b></td> <td><b>\$ 2,854,500</b></td> </tr> <tr> <td><b>Project Total</b></td> <td><b>\$ 21,884,500</b></td> </tr> </tbody> </table>	Description	Cost (\$ USD)	<b>Well Field</b>		Re-entry, Completion, Workover	\$ 1,650,000	Pumps	\$ 450,000	<b>Total Well Field</b>	<b>\$ 2,100,000</b>	<b>Facility</b>		Engineering	\$ 525,000	Utilities & Infrastructure	\$ 605,000	Structure, Tanks, Pipes, Pumps, Fittings, Electrical, Civil, Mechanical	\$ 3,400,000	Process Equipment (Reverse Osmosis, Pre-Conditioning, Direct Lithium Extraction, Purification, Concentration, Conversion)	\$ 12,400,000	<b>Total Facility</b>	<b>\$ 16,930,000</b>	<b>Contingency (15%)</b>	<b>\$ 2,854,500</b>	<b>Project Total</b>	<b>\$ 21,884,500</b>
Description	Cost (\$ USD)																										
<b>Well Field</b>																											
Re-entry, Completion, Workover	\$ 1,650,000																										
Pumps	\$ 450,000																										
<b>Total Well Field</b>	<b>\$ 2,100,000</b>																										
<b>Facility</b>																											
Engineering	\$ 525,000																										
Utilities & Infrastructure	\$ 605,000																										
Structure, Tanks, Pipes, Pumps, Fittings, Electrical, Civil, Mechanical	\$ 3,400,000																										
Process Equipment (Reverse Osmosis, Pre-Conditioning, Direct Lithium Extraction, Purification, Concentration, Conversion)	\$ 12,400,000																										
<b>Total Facility</b>	<b>\$ 16,930,000</b>																										
<b>Contingency (15%)</b>	<b>\$ 2,854,500</b>																										
<b>Project Total</b>	<b>\$ 21,884,500</b>																										

### Competent Persons Statement

*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.*

## **Appendix 1 – Key Assumptions**

*MacMillan is also a Qualified Person as defined by NI 43-101 rules for mineral deposit disclosure. He has sufficient experience relevant to qualify as a Competent Person as defined by the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves – The JORC Code (2012). Mr MacMillan consents to the inclusion in this announcement of the matters based on this information in the form and context in which it appears.*

*Dean Quirk, P.Eng, President of Grey Owl Engineering Ltd., reviewed and approves the capital cost estimating within the release. He is a registered Professional Engineer in Saskatchewan, Canada, and has worked in the engineering field for 28 years. Mr. Quirk 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 which include the commodity discussed in this release. He has sufficient experience relevant to qualify as a Competent Person as defined by the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves – The JORC Code (2012). Mr Quirk consents to the inclusion in this announcement of the matters based on this information in the form and context in which it appears.*

**JORC Code Table 1 attached at Appendix 2.**



## JORC Code, 2012 Edition – Table 1

### Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Arizona Lithium’s Prairie Project (the Project) Pad #1 is located at 02-15-002-12W2 in Saskatchewan, Canada.

Criteria	JORC Code explanation	Commentary
<b>Sampling techniques</b>	<p><i>Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</i></p> <p><i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i></p> <p><i>Aspects of the determination of mineralisation that are Material to the Public Report.</i></p> <p><i>In cases where ‘industry standard’ work has been done this would be relatively simple (e.g. ‘reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay’). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.</i></p>	<p>From June 20, 2024 to June 25, 2024 a flow test was performed from a well (102/02-15-002-12W2) that was drilled and completed in the Duperow Formation at 02-15-002-12W2 (“Pad #1”). The well pumped approximately 500m3 of brine per day for 5 days.</p> <p>Brine collection procedures for the flow test are outlined as follows:</p> <ul style="list-style-type: none"> <li>• After the well was drilled, it was cased and perforated over the zones of interest. Prior to perforating the zones of interest, a Cement Bond Log (CBL) was run and analysed to ensure zonal isolation behind the casing.</li> <li>• During well flow testing, formation water was brought to the surface using an Electrical Submersible Pump (ESP).</li> <li>• Further measures taken to ensure sample representativity are discussed in ‘Drill Sample Recovery’.</li> <li>• 7 samples were taken and analysed by a third party lab throughout the flow test.</li> </ul>
<b>Drilling techniques</b>	<p><i>Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</i></p>	<p>The well was drilled using a mud rotary drilling rig. It was drilled with brine mud, and a bit size of 222 mm, which is standard for this specific type of well.</p>

Criteria	JORC Code explanation	Commentary
<p><b>Drill sample recovery</b></p>	<p><i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></p> <p><i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i></p> <p><i>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</i></p>	<p>Brine collection procedures for this well at Pad #1 are outlined here.</p> <ul style="list-style-type: none"> <li>• The procedures were designed and undertaken to obtain high quality samples of original formation fluids.</li> <li>• Prior to sampling operations, all lines and tanks were cleaned to remove any possible residual brine or hydrocarbon contamination. Samples were collected from sampling ports attached to the flow lines as close to the wellhead as possible. Prior to sampling the test intervals, representative samples of all drilling and completion fluids were taken and analysed.</li> <li>• Field determination of density, resistivity, and pH of the initial samples from the well were used to determine when the well was producing representative samples.</li> <li>• Once it was determined that the well was producing formation water, samples were collected for lithium analysis in the laboratory. At the sample point, the well was opened to a waste receptacle for five to ten seconds to remove any debris build-up in the sample lines, then the sample was collected into 1 L, 2 L, or 4 L clean plastic screw-top jugs. Field containers were immediately labelled with date, time, sample interval, and then the container was transferred to the onsite laboratory for preliminary analysis. After a visual inspection for trace hydrocarbons and debris, samples with obvious debris were pre-filtered through glass wool. The sample was then filtered through a</li> </ul>

Criteria	JORC Code explanation	Commentary
		<p>standard 0.45-micron filter to remove any particulates or oil.</p> <ul style="list-style-type: none"> <li>Once sufficient volume was filtered for analysis, samples were split into two to four containers (typically 250 ml -1 L each), labelled with particulars (date, time, interval, an 'anonymous' sample ID for each laboratory), and sealed with secure tape on the caps. Each bottle was sealed with a tamper proof seal to ensure integrity. Samples were couriered to the various laboratories using full chain-of-custody documentation.</li> </ul>
<p><b>Logging</b></p>	<p><i>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</i></p> <p><i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i></p> <p><i>The total length and percentage of the relevant intersections logged.</i></p>	<p>Cased-hole wireline logs were run to provide the information required to pick the perforation intervals.</p> <p>The cased hole wireline logs include:</p> <ul style="list-style-type: none"> <li>Gamma-ray – the determination of lithology and facies based on natural radioactivity of the formation.</li> <li>Neutron logging tool - emits gamma-rays, which detect hydrogen content of a formation and convert this to a porosity calculated curve.</li> <li>Density logging tools - emits gamma-rays to measure electron density to calculate porosity and photoelectric factor (PEF) to determine lithology. Combined with the neutron log, the density log can be used to identify fluid types, lithology, and porosity.</li> <li>Sonic logging tool - measurement of formation acoustic properties (e.g., velocity), used for lithology and porosity determination.</li> <li>Resistivity logging tool - measurement of formation conductivity (reciprocal is formation resistivity) at different</li> </ul>

Criteria	JORC Code explanation	Commentary
		<p>depths of investigation into the formation and generates shallow, medium, and deep resistivity curves that are used to estimate fluid types and quantities. Different resistivity logging tools are run depending on drilling mud chemistry (freshwater mud requires induction logging tools whereas saline mud requires laterologs).</p>
<p><b>Sub-sampling techniques and sample preparation</b></p>	<ul style="list-style-type: none"> <li>• <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></li> <li>• <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i></li> <li>• <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></li> <li>• <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></li> <li>• <i>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</i></li> <li>• <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></li> </ul>	<p>Lithium samples are collected in the form of water samples not core. Procedures taken to ensure representative brine samples were collected are discussed in 'Drill Sample Recovery'.</p> <p>To ensure precise and accurate measurements of lithium concentration, multiple laboratories were used for analyses.</p> <ul style="list-style-type: none"> <li>• As described in 'Drill Sample Recovery' samples were determined to be representative of formation water once a sufficient volume of water was removed from the sampling interval and field parameters were found to be stable. This was typically achieved after removing two to three times the volume of water in the tubing.</li> <li>• 7 Samples were collected, up to 4 L of filtered fluid was collected for laboratory analysis. Each laboratory was sent approximately 250 ml - 1 L. Each laboratory analysis takes less than 1 mL, so each lab had sufficient sample volume to run repeats, etc.</li> </ul>
<p><b>Quality of assay data and laboratory tests</b></p>	<ul style="list-style-type: none"> <li>• <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></li> <li>• <i>For geophysical tools, spectrometers,</i></li> </ul>	<p>Three laboratories were utilised for analyses of Arizona Lithium's flow test samples.</p> <p>The laboratories Include:</p>

Criteria	JORC Code explanation	Commentary
	<p><i>handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</i></p> <ul style="list-style-type: none"> <li>• <i>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</i></li> </ul>	<p>Arizona Lithium’s laboratories in Emerald Park, Saskatchewan and Tempe, Arizona - Arizona Lithium’s internal laboratory in Emerald Park provided initial rapid (&lt;12 hour) analysis of lithium and sodium concentrations of sampled brines. Due to the lack of independent status, concentrations determined by this laboratory were not used in the final lithium concentration reporting.</p> <p>Arizona Lithium’s internal laboratory in Tempe, Arizona provided analysis of lithium concentrations in samples. Due to the lack of independent status, concentrations determined by this laboratory were not used in the final lithium concentration reporting.</p> <p>Isobrine Solutions, a small commercial laboratory in Edmonton, Alberta, was selected to provide lithium analyses and comprehensive analyses of selected brine samples. Isobrine Solutions specializes in analysing saline brines, including determining lithium, bromine, and stable isotopes, along with other major and trace elements. Results from Isobrine Solutions were used for lithium concentration reporting. Isobrine Solutions uses an ICP-OES to analyse for lithium and sodium (among other elements), but in addition uses an Ion Chromatograph (IC) to measure chloride (and other elements). The independently determined sodium and chloride are used to calculate a Charge Balance Error, which is a quality control check on the lithium analysis.</p>
<p><b>Verification of sampling and assaying</b></p>	<ul style="list-style-type: none"> <li>• <i>The verification of significant intersections by either independent or alternative company personnel.</i></li> <li>• <i>The use of twinned holes.</i></li> <li>• <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></li> </ul>	<p>Arizona Lithium undertook a review of the historical sampling data to determine which samples were representative of formation water and which samples should be excluded due to QA/QC concerns. The QP verified the lithium concentration data by reviewing Arizona Lithium’s QA/QC</p>

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li>• <i>Discuss any adjustment to assay data.</i></li> </ul>	<p>program, confirming the reported lithium concentrations.</p> <p>A total of 7 samples were sent for analysis of lithium concentration during the flow testing of the well at 102/02-15-002-15W2 All 7 samples were analysed by Arizona Lithium and Isobrine Solutions.</p>
<b>Location of data points</b>	<ul style="list-style-type: none"> <li>• <i>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</i></li> <li>• <i>Specification of the grid system used.</i></li> <li>• <i>Quality and adequacy of topographic control.</i></li> </ul>	<p>For Arizona Lithium's flow test well (102/02-15-002-12W2), detailed site surveys were completed by Caltech Surveys. The surveys were carried out in accordance with Article XIII, Standards of Practice, Section 6 of the bylaws of the Saskatchewan Land Surveyors Association. These high-quality site surveys are routine for oil and gas wells drilled in Saskatchewan.</p> <p>The geographical land grid format survey is in NAD 83 and UTM Zone 13N.</p>
<b>Data spacing and distribution</b>	<ul style="list-style-type: none"> <li>• <i>Data spacing for reporting of Exploration Results.</i></li> <li>• <i>Whether the data spacing, and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</i></li> <li>• <i>Whether sample compositing has been applied.</i></li> </ul>	<p>The well was pumped at approximately 500m<sup>3</sup> per day for 5 days. 7 samples were collected and analysed during the flow test. Lithium concentrations of the samples ranged from 104-110 mg/L lithium which is consistent with the expected lithium concentration in the completed intervals in the area.</p>
<b>Orientation of data in relation to geological structure</b>	<ul style="list-style-type: none"> <li>• <i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i></li> <li>• <i>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</i></li> </ul>	<p>Duperow Formation brines have been sampled from vertical wells that have been drilled perpendicular to the Duperow Formation stratigraphy. There is no relationship between the drilling orientation and the formation water quality, so no sampling bias related to sampling orientation is present.</p>
<b>Sample security</b>	<ul style="list-style-type: none"> <li>• <i>The measures taken to ensure sample security.</i></li> </ul>	<p>Sample security procedures for Arizona Lithium's flow test well (102/02-15-002-12W2):</p> <ul style="list-style-type: none"> <li>• Samples were collected from sampling ports attached to the flow lines as close to the wellhead as possible. Samples</li> </ul>

Criteria	JORC Code explanation	Commentary
		<p>were collected into 1, 2, or 4L containers (as described above). Samples taken in the field were placed in bottles and were labelled according to the date of sample collection, name of the sampler, location of the sampling and number of the sample.</p> <ul style="list-style-type: none"> <li>• After field processing (measurement, filtration, splitting) samples were labelled, sealed, security taped (tamper proof seals), and shipped to the laboratories.</li> <li>• The samples were sent to the third-party laboratory whilst conforming to the required transport protocols. The corresponding Chain of Custody was either sent with the samples or was sent to the third party by email. The third party always confirmed the receipt of the samples by sending the chain of custody including the analyses requests, sample descriptions, client identities (IDs), third party IDs and client notes.</li> </ul>
<p><b>Audits or reviews</b></p>	<ul style="list-style-type: none"> <li>• <i>The results of any audits or reviews of sampling techniques and data.</i></li> </ul>	<p>Arizona Lithium's QP was involved throughout the testing program, including participating in the development of the testing program, planning the QA/QC for the water sampling, and has witnessed historic testing at the 101/14-33-002-12W2 well from October 19 to October 22, 2021.</p> <p>Arizona Lithium's QP was not on site during the collection of the water samples from the 102/02-15-002-12W2 well but was on site for a previous sampling program completed in 2021. The QP witnessed the sample preparation, analysis, and security measures of the reservoir testing completed in 2021 and can verify that the procedures were consistent with the description provided.</p>



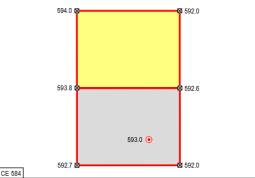
## Section 2 Reporting of Exploration Results

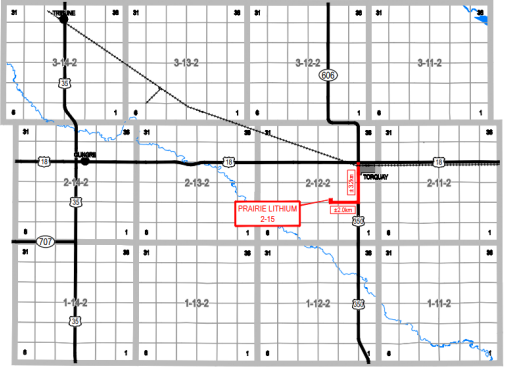
(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
<p><b><i>Mineral tenement and land tenure status</i></b></p>	<ul style="list-style-type: none"> <li>• <i>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</i></li> <li>• <i>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</i></li> </ul>	<p>Arizona Lithium leases the subsurface mineral permit for Pad #1 (02-15-002-12W2) from the government of Saskatchewan. The permit for this site is SMP082. Arizona Lithium leases the surface rights to Pad #1 directly from the private landowner.</p> <p>The provincial royalty rate on mineral leases for lithium is currently set at 3%, with a royalty free period for the first 24 months of production.</p> <p>The Ministry of Energy and Resources (MER) has indicated to Arizona Lithium that the process to license wells for injection, water source, disposal, or production of lithium will follow that of the oil and gas industry.</p> <p>Arizona Lithium is not aware at the date of this report of any known environmental issues that could materially impact their ability to extract lithium from the Project.</p>

Criteria	JORC Code explanation	Commentary
<p><b>Exploration done by other parties</b></p>	<ul style="list-style-type: none"> <li><i>Acknowledgment and appraisal of exploration by other parties.</i></li> </ul>	<p>There has been abundant drilling for oil and gas in southeastern Saskatchewan. This oil and gas exploration work has produced the high-quality geologic data (wireline logs, core, and reservoir testing) that was used in Arizona Lithium’s report.</p> <p>Other parties, including government and academic research teams, have also leveraged oil and gas wells to evaluate brine chemistry. Academic research (Iampen and Rostron, 2000; Iampen, 2001; Shouakar-Stash, 2008) and the Saskatchewan Geological Survey / University of Alberta (Rostron et al., 2002; Jensen 2011, 2012, 2015, 2016; Jensen and Rostron, 2017, 2018; Jensen et al., 2019) have published several technical reports characterizing the lithium potential of various stratigraphic intervals in southern and central Saskatchewan.</p> <p>Brine-rich formation water from oil and gas producing intervals have been tested for lithium and other elements by these researchers from University of Alberta and the Saskatchewan Geological Survey.</p> <p>Based on the results of recent drilling and testing from 2021-2024, Arizona Lithium believes there is a high degree of spatial correlation of lithium concentrations within individual Duperow Formation units and that the variation of lithium concentration between historical sampling programs may be due to the units sampled in the historical tests.</p>
<p><b>Geology</b></p>	<ul style="list-style-type: none"> <li><i>Deposit type, geological setting and style of mineralisation.</i></li> </ul>	<p>The target interval is porous carbonate rocks of the Upper Devonian (Frasnian) Duperow Formation, Saskatchewan Group (Gerhard et al., 1982; Kent and Christopher, 1994). Upper Devonian sediments were laid down in a northwest to southeast elongated Elk Point Basin that extended broadly from northwestern Alberta, through Saskatchewan, and across into North Dakota and Montana (Dunn, 1975).</p>

Criteria	JORC Code explanation	Commentary
		<p>The Duperow Formation correlates westward with the Leduc Formation, a prominent series of reefs in the open-marine Alberta Basin. Middle and Late Devonian sedimentation was characterized by cyclic carbonates and evaporites. Cyclic ordering of strata from shelf carbonates to restricted supratidal carbonates and evaporites, are identified as shallowing-upward or "brining-upward" parasequences and these cyclic intervals are recognized throughout the entire Devonian stratigraphic column in the Elk Point Basin of southern Saskatchewan (Kent and Christopher, 1994). The Duperow Formation was deposited as a shallow-marine, carbonate inner platform to supratidal sabkha or tidal flat (Cen and Salad Hersi, 2006).</p> <p>The deposit type that was flow tested by Arizona Lithium is a lithium-bearing brine hosted by the Duperow Formation. Other lithium-rich brine deposits within oilfields include the brines within the Smackover Formation of the Gulf Coast and the Leduc Formation in Alberta (Kesler et al., 2012; Bowell et al., 2020).</p> <p>Lithium brines are defined as accumulations of saline groundwater enriched in dissolved lithium (Bradley, et al., 2017) within arid climates. Lithium brines are located within closed sedimentary basins with a close association with evaporite deposits resulting from trapped evaporatively concentrated seawater (Bradley et al., 2013). Lithium brines are hosted within one or more aquifers, which have had sufficient time to concentrate a brine (Bradley et al., 2017).</p> <p>Newly acquired data from this flow test has allowed Arizona Lithium to characterize lithium content of the Duperow Formation at Pad #1. Lithium results from the flow tested well show that lithium</p>

Criteria	JORC Code explanation	Commentary																																																				
		concentrations are elevated and correlate with elevated lithium brines in the region.																																																				
<b>Drill hole Information</b>	<ul style="list-style-type: none"> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: <ul style="list-style-type: none"> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</li> </ul>	<p>The well was drilled at 102/02-15-002-12W2 at an elevation of 593.0. Specific geographic coordinates are CSRS NAD 83 49.1163722 Lat -103.5259709 Long; UTM (CSRS) Zone 13 NAD 83 5441438.6 N, 607561.1 E. This can be viewed in the figure below.</p> <p style="text-align: center;"><b>PRAIRIE LITHIUM 2-15-2-12W2</b> Surface Location In LS 2 Sec 15 Twp 2 Rge 12W2Mer RM of Cambria No 6</p> <table border="1" data-bbox="932 751 1450 814"> <thead> <tr> <th colspan="6">COORDINATES</th> </tr> <tr> <th rowspan="2">Wellbore</th> <th rowspan="2">Boundary</th> <th rowspan="2">Catenoid / Rectangular</th> <th colspan="2">Geographic (CSRS)</th> <th>UTM (CSRS) Zone 13</th> </tr> <tr> <th>NAD 83</th> <th>NAD 83</th> <th>NAD 83</th> </tr> </thead> <tbody> <tr> <td>Well Origin 2452.4292</td> <td>50.0 N 410.1 W</td> <td>Reference: South East Section 15-2-12W2</td> <td>49.0 N 410.0 W</td> <td>Corner Section 15 -103.5259709 Long</td> <td>49.1163722 Lat -103.5259709 Long</td> <td>5441438.6 N 607561.1 E</td> </tr> </tbody> </table> <table border="1" data-bbox="932 890 1450 953"> <thead> <tr> <th colspan="3">GROUND ELEVATIONS</th> <th colspan="3">AREAS</th> </tr> </thead> <tbody> <tr> <td>594.0</td> <td>592.0</td> <td>592.0</td> <td>Well Site (New)</td> <td>Location</td> <td>Area</td> </tr> <tr> <td>593.8</td> <td>592.6</td> <td>592.6</td> <td>Well Site (Existing)</td> <td>SE 15</td> <td>3.900 7.41</td> </tr> <tr> <td>592.7</td> <td>592.0</td> <td>592.0</td> <td>Total</td> <td>SE 15</td> <td>3.900 7.41</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td>6.980 14.82</td> </tr> </tbody> </table>  <p>The well was drilled to a depth of 2567 mKB. For this flow test, the completion interval was 2321 – 2389 mKB. A total of 51m of the reservoir was perforated.</p>	COORDINATES						Wellbore	Boundary	Catenoid / Rectangular	Geographic (CSRS)		UTM (CSRS) Zone 13	NAD 83	NAD 83	NAD 83	Well Origin 2452.4292	50.0 N 410.1 W	Reference: South East Section 15-2-12W2	49.0 N 410.0 W	Corner Section 15 -103.5259709 Long	49.1163722 Lat -103.5259709 Long	5441438.6 N 607561.1 E	GROUND ELEVATIONS			AREAS			594.0	592.0	592.0	Well Site (New)	Location	Area	593.8	592.6	592.6	Well Site (Existing)	SE 15	3.900 7.41	592.7	592.0	592.0	Total	SE 15	3.900 7.41						6.980 14.82
COORDINATES																																																						
Wellbore	Boundary	Catenoid / Rectangular	Geographic (CSRS)		UTM (CSRS) Zone 13																																																	
			NAD 83	NAD 83	NAD 83																																																	
Well Origin 2452.4292	50.0 N 410.1 W	Reference: South East Section 15-2-12W2	49.0 N 410.0 W	Corner Section 15 -103.5259709 Long	49.1163722 Lat -103.5259709 Long	5441438.6 N 607561.1 E																																																
GROUND ELEVATIONS			AREAS																																																			
594.0	592.0	592.0	Well Site (New)	Location	Area																																																	
593.8	592.6	592.6	Well Site (Existing)	SE 15	3.900 7.41																																																	
592.7	592.0	592.0	Total	SE 15	3.900 7.41																																																	
					6.980 14.82																																																	
<b>Data aggregation methods</b>	<ul style="list-style-type: none"> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> <li>The assumptions used for any reporting of metal equivalent values</li> </ul>	Based on the geologic setting and previous exploration programs the Duperow Aquifer is judged to be hydraulically continuous within, and beyond Pad #1. Arizona Lithium’s previous sampling programs support the interpretation of regionally consistent lithium values and suggests that some of the measured variability between previously reported lithium concentrations in the Duperow Formation may be due to the differing geologic units that were sampled.																																																				

Criteria	JORC Code explanation	Commentary
<p><b>Relationship between mineralisation widths and intercept lengths</b></p>	<p><i>should be clearly stated.</i></p> <ul style="list-style-type: none"> <li>• <i>These relationships are particularly important in the reporting of Exploration Results.</i></li> <li>• <i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i></li> <li>• <i>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. ‘down hole length, true width not known’).</i></li> </ul>	<p>Geophysical wireline logs from well were used to identify the top and base of the Duperow Formation.</p> <p>The wireline log was used to determine the completion interval within the Duperow Formation.</p> <p>The well was drilled vertical, and drilled perpendicular to the Duperow Formation stratigraphy, and therefore perpendicular to the mineralization.</p>
<p><b>Diagrams</b></p>	<ul style="list-style-type: none"> <li>• <i>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</i></li> </ul>	<p>A map of the area and location of Pad #1 (02-15-002-12W2) is below.</p> 
<p><b>Balanced reporting</b></p>	<ul style="list-style-type: none"> <li>• <i>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</i></li> </ul>	<p>Representative lithium concentrations from the 7 samples analysed from flow test ranged from 104 mg/L – 110 mg/L.</p>
<p><b>Other substantive exploration data</b></p>	<ul style="list-style-type: none"> <li>• <i>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</i></li> </ul>	<p>The brine collected from the flow test was used for third-party DLE test work from September 2024 to November 2024.</p>

Criteria	JORC Code explanation	Commentary
<b>Further work</b>	<ul style="list-style-type: none"> <li>• <i>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></li> <li>• <i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></li> </ul>	<p>Long-duration pumping of brine from a Duperow Formation well at Pad #1 (02-15-002-12W2) is planned in the next phase of the project. The next phase of the project is to pump 1,000m<sup>3</sup> per day for approximately 12 months and monitor pressure response in the surrounding area.</p> <p>A resource upgrade to understand the extent and variability of the resource for the area is currently underway, including Geologic Mapping, Lithium Grade, Permeability and Deliverability, Updated Resource Estimate and Well Field Modelling.</p>

### Section 3 Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	JORC Code explanation	Commentary
<b>Database integrity</b>	<ul style="list-style-type: none"> <li>• <i>Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.</i></li> <li>• <i>Data validation procedures used.</i></li> </ul>	<p>Each sample is tracked using a unique tracking number; thus, all laboratory and reporting procedures are tied back to that tracking number. Each laboratory has internal procedures to ensure data integrity. However, we have a final check on transcription and reporting errors from the labs, by comparing the results of each sample to each other. Reporting and transcription errors post lab analysis are mitigated by multiple levels of review by professional geoscientists.</p> <p>Arizona Lithium undertook a review of the historical sampling data to determine which samples were representative of the formation water and which samples should be excluded due to QA/QC concerns. The Mineral Resource QP verified the lithium concentration data by reviewing Arizona Lithium's program, confirming the reported</p>

Criteria	JORC Code explanation	Commentary
		well names and concentrations in the referenced data sources, reviewing the reasonableness of the dataset based on regional water quality, and reviewing the dataset for consistency within the Project.
<b>Site visits</b>	<ul style="list-style-type: none"> <li>• <i>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</i></li> <li>• <i>If no site visits have been undertaken indicate why this is the case.</i></li> </ul>	No site visit was conducted by the QP during the flow test. This is because the QP was involved throughout the testing program including participating in the development of the testing program and planning the QA/QC for the sampling. In 2021 the QP witnessed the testing at a well at 101/14-33-002-12W2 from October 19 to October 22, 2021. During the time that the QP was at the 101/14-33-002-12W2 well, four different intervals of the Duperow Formation were developed until representative samples could be collected for laboratory analysis. The QP witnessed the sample preparation, analysis and security measures of the reservoir testing and can verify that the procedures were consistent with the description provided under 'Drill Sample Recovery'.
<b>Geological interpretation</b>	<ul style="list-style-type: none"> <li>• <i>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</i></li> <li>• <i>Nature of the data used and of any assumptions made.</i></li> <li>• <i>The effect, if any, of alternative interpretations on Mineral Resource estimation.</i></li> <li>• <i>The use of geology in guiding and controlling Mineral Resource estimation.</i></li> <li>• <i>The factors affecting continuity both of grade and geology.</i></li> </ul>	The Duperow Aquifer was flow tested at the well (102/02-12-002-15W2). The pore space is filled with a lithium-rich brine with concentrations that ranged from 104-110 mg/L during the pump test.
<b>Dimensions</b>	<ul style="list-style-type: none"> <li>• <i>The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.</i></li> </ul>	A resource upgrade to understand the extent and variability of the resource for the area is currently underway, including Geologic Mapping, Lithium Grade, Permeability and Deliverability, Updated Resource Estimate and Well Field Modelling.



Criteria	JORC Code explanation	Commentary
<p><b>Estimation and modelling techniques</b></p>	<ul style="list-style-type: none"> <li>• <i>The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.</i></li> <li>• <i>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</i></li> <li>• <i>The assumptions made regarding recovery of by-products.</i></li> <li>• <i>Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).</i></li> <li>• <i>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</i></li> <li>• <i>Any assumptions behind modelling of selective mining units.</i></li> <li>• <i>Any assumptions about correlation between variables.</i></li> <li>• <i>Description of how the geological interpretation was used to control the resource estimates.</i></li> <li>• <i>Discussion of basis for using or not using grade cutting or capping.</i></li> <li>• <i>The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</i></li> </ul>	<p>Continuous downhole pressures were recorded while the well was pumped at approximately 500m<sup>3</sup> per day. Evaluation of the well performance, including an observed maximum drawdown of approximately 130m, indicates the well could produce 4,100 m<sup>3</sup> of brine per day over a 3-year period (modeled duration for the first commercial proof of concept). This is based on the following methods:</p> <ul style="list-style-type: none"> <li>• The pumping test analysis suggests the well has a skin of -0.8 and a transmissivity of 4.8 m<sup>2</sup>/day. Based on the perforated interval thickness (51 m), water pressure (2,098 m formation water hydraulic head), temperature (98 °C), and salinity (310,000 g/L), the effective permeability of the well is 52 mD.</li> <li>• The maximum rate at which a well can be pumped is dependent on the skin, transmissivity, storativity, and duration of pumping. A storativity of 1.5 x 10<sup>-4</sup> was used in the Theis analysis and in the forward modelling. For a producing interval 51 m thick, the storativity is equal to a specific storage of 3 x 10<sup>-6</sup> m<sup>-1</sup>. In order to estimate sustainable 3-year pumping rates, the Modified Moell method (Maathuis and van der Kamp, 2006) was applied.</li> <li>• Based on the measured pressure, measured transmissivity, and estimated storativity, the 102/02-15-002-12W2M Well is theoretically capable of being pumped at a rate of 4,100 m<sup>3</sup> /day over a 3-year period.</li> <li>• The Theis (1935) solution for the pressure response in a well due to pumping was selected for analysis of the pumping data because the Duperow Aquifer is: <ul style="list-style-type: none"> <li>○ confined;</li> <li>○ has a very large regional extent;</li> <li>○ only water was produced during the test; and</li> </ul> </li> </ul>

Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> <li>○ the transmissivity of the aquifer was assumed to be unchanged during the test.</li> <li>• AQTESOLV software (HydroSOLVE 2007) was used to solve the Theis (1935) equation. Dougherty-Babu (1984) was selected to analyse the drawdown portion of the pressure data because of its ability to handle variable rate pumping, wellbore storage, and skin. The Theis (1935) residual drawdown/recovery method was used to analyse the recovery portion of the pressure data set because of its ability to handle variable pumping rates.</li> <li>• 4,100 m<sup>3</sup> per day multiplied by the lithium concentration of 104 mg/L observed on the pump test is equal to 156 metric tonnes of lithium or 828 metric tonnes of lithium carbonate equivalent (LCE) per year.</li> </ul>
<b>Moisture</b>	<ul style="list-style-type: none"> <li>• <i>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</i></li> </ul>	Not applicable.
<b>Cut-off parameters</b>	<ul style="list-style-type: none"> <li>• <i>The basis of the adopted cut-off grade(s) or quality parameters applied.</i></li> </ul>	The samples are representative of the aquifer in the intersected Duperow Formation with the lowest lithium concentration during the pump test of 104 mg/L.
<b>Mining factors or assumptions</b>	<ul style="list-style-type: none"> <li>• <i>Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be</i></li> </ul>	<p>Lithium-rich brine will be mined by pumping the water from production wells similar to how the flow test was conducted.</p> <p>For the commercial scale proof of concept that requires 1,000m<sup>3</sup> of brine per day from the well is supported by the flow test that occurred from June 20-25, 2024. The well analysis suggests the well could produce 4,100 m<sup>3</sup> of brine per day over a 3-year period (modeled duration for the first</p>

Criteria	JORC Code explanation	Commentary
	<p><i>rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.</i></p>	<p>commercial proof of concept). This is based on the following methods:</p> <ul style="list-style-type: none"> <li>• The pumping test analysis suggests the well has a skin of -0.8 and a transmissivity of 4.8 m<sup>2</sup>/day. Based on the perforated interval thickness (51 m), water pressure (2,098 m formation water hydraulic head), temperature (98 °C), and salinity (310,000 g/L), the effective permeability of the well is 52 mD.</li> <li>• The maximum rate at which a well can be pumped is dependent on the skin, transmissivity, storativity, and duration of pumping. A storativity of 1.5 x 10<sup>-4</sup> was used in the Theis analysis and in the forward modelling. For a producing interval 51 m thick, the storativity is equal to a specific storage of 3 x 10<sup>-6</sup> m<sup>-1</sup>. In order to estimate sustainable 3-year pumping rates, the Modified Moell method (Maathuis and van der Kamp, 2006) was applied.</li> <li>• Based on the measured pressure, measured transmissivity, and estimated storativity, the 02-15-002-12W2M Well is theoretically capable of being pumped at a rate of 4,100 m<sup>3</sup> /day over a 3-year period.</li> <li>• The Theis (1935) solution for the pressure response in a well due to pumping was selected for analysis of the pumping data because the Duperow Aquifer is confined, has a very large regional extent, only water was produced during the test; and the transmissivity of the aquifer was assumed to be unchanged during the test.</li> <li>• AQTESOLV software (HydroSOLVE 2007) was used to solve the Theis (1935) equation. Dougherty-Babu (1984) was selected to analyse the drawdown portion of the pressure data because of its ability to handle variable rate pumping, wellbore storage, and skin. The Theis (1935) residual drawdown/recovery method was used to analyse the recovery portion of the pressure data set because of its ability to handle</li> </ul>

Criteria	JORC Code explanation	Commentary
		<p>variable pumping rates.</p> <ul style="list-style-type: none"> <li>4,100 m3 per day multiplied by the lithium concentration of 104 mg/L observed on the pump test is equal to 156 metric tonnes of lithium or 828 metric tonnes of lithium carbonate equivalent (LCE) per year.</li> </ul>
<b>Metallurgical factors or assumptions</b>	<ul style="list-style-type: none"> <li><i>The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.</i></li> </ul>	<p>Lithium will be extracted from the brine via direct lithium extraction (DLE) technology. Arizona Lithium has tested multiple different DLE technologies.</p>
<b>Environmental factors or assumptions</b>	<ul style="list-style-type: none"> <li><i>Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.</i></li> </ul>	<p>Arizona Lithium is not aware at the date of this report of any known environmental issues that could materially impact their ability to extract lithium from Pad #1.</p> <p>Arizona Lithium intends to place any required infrastructure within cultivated lands to help mitigate any adverse effects to populations of Species of Management Concern (SOMC) at the Project.</p> <p>The main waste product produced by the central processing facility will be lithium-depleted brine. All lithium depleted brine is planned to be disposed through disposal wells.</p>
<b>Bulk density</b>	<ul style="list-style-type: none"> <li><i>Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the</i></li> </ul>	<p>Wireline logs were examined to determine the lithology across the intra-Duperow Formation intervals. Density logging tools</p>

Criteria	JORC Code explanation	Commentary
	<p><i>method used, whether wet or dry, the frequency of the measurements, the nature, size, and representativeness of the samples.</i></p> <ul style="list-style-type: none"> <li><i>The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.</i></li> <li><i>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</i></li> </ul>	<p>emit gamma-rays to measure electron density of the formation. These data are used to determine lithology (Photoelectric factor (PEF)) and calculate porosity. The typical data density of the bulk density log is a measurement is taken approximately every 0.1 m vertical depth. This represents several thousand sample data points per well.</p>
<b>Classification</b>	<ul style="list-style-type: none"> <li><i>The basis for the classification of the Mineral Resources into varying confidence categories.</i></li> <li><i>Whether appropriate account has been taken of all relevant factors (i.e., relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity, and distribution of the data).</i></li> <li><i>Whether the result appropriately reflects the Competent Person's view of the deposit.</i></li> </ul>	<p>The flow testing is consistent with historic resource assessments performed across the property and in the region. A resource upgrade to understand the extent and variability of the resource for the area is currently underway, including Geologic Mapping, Lithium Grade, Permeability and Deliverability, Updated Resource Estimate and Well Field Modelling.</p>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li><i>The results of any audits or reviews of Mineral Resource estimates.</i></li> </ul>	<p>No detailed audits have been completed.</p>
<b>Discussion of relative accuracy/ confidence</b>	<ul style="list-style-type: none"> <li><i>Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.</i></li> <li><i>The statement should specify</i></li> </ul>	<p>The next phase of the project involves plans to pump the 102/02-15-002-12W2 well at a rate of 1,000 m3/day for approximately 12 months. The Competent Person considers the confidence of the planned pumping to be high for the following reasons:</p> <ul style="list-style-type: none"> <li>- The Duperow Formation is laterally continuous and has been mapped throughout the region, far beyond the project boundaries.</li> <li>- The 102/02-15-002-12W2 well testing is consistent with previous testing and characterization work completed in other areas of the Project suggesting good continuity of pressure, permeability, and grade across the Project.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<p><i>whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.</i></p> <ul style="list-style-type: none"> <li>• <i>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</i></li> </ul>	<ul style="list-style-type: none"> <li>- Well test analyses suggest the 102/02-15-002-12W2 well could be pumped at 4,300 m<sup>3</sup>/day over a 1-year period.</li> <li>- If the well is pumped for 1 year at a rate of 1,000 m<sup>3</sup>/day it is expected to only use 23% of the available pressure at the well.</li> </ul> <p>Given the available local data, the plan to pump the 102/02-15-002-12W2 well at a rate of 1,000 m<sup>3</sup>/day for approximately 12 months is assigned a high confidence by the Competent Person.</p>