

ASX Announcement 29 December 2023

PRAIRIE LITHIUM PFS CONFIRMS EXTREMELY LOW OPERATING COSTS OF \$2,819 USD PER TONNE

HIGHLIGHTS

- Preliminary Feasibility Study (PFS) is based on Phase One production of 6,000 tonnes per annum (tpa) of Lithium Carbonate Equivalent (LCE) and confirms excellent economics for the Prairie Lithium Project in the Williston Basin of Saskatchewan, Canada.
- Average annual operating costs of US\$2,819/t over the operating life of the project make the Prairie Project one of the lowest cost global projects.
- Base case pre-tax Net Present Value (NPV) of US\$448 million and IRR of 23.9% indicate exceptional
 economics for the project assuming a discount rate of 8% and a conservative long-term price of
 US\$21,000/t based on comprehensive analysis provided by Global Lithium LLC (Mr. Joe Lowry).
- Recent resource upgrades¹ means the modelled 20-year commercial operating life is less than 3% of the Indicated Resource of 4.5 million tonnes of LCE.
- Capital expenditures of US\$290 million (plus contingency) to construct and commission the first phase of the project will lead to production of 6,000tpa of LCE.
- Total Installed Cost (TIC) for each additional well-pad is estimated at US\$70 million and each additional well-pad is expected to add production of 2,000tpa of LCE on similar economics.
- Direct Lithium Extraction (DLE) test work completed during the Pilot Plant phase has added value to the economics of the Prairie PFS.
- The robust PFS economics for a 6,000tpa module are able to be replicated and AZL plans to bring initial production online in H1 2025 and then additional modules to build production up to 20,000-25,000tpa in Phase Two and multiples of that in Phase Three.

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 the results of a positive PFS for the 100% owned Prairie Lithium Project. Global engineering group Samuel Engineering was the lead consultant for the PFS and was responsible for the estimates in the study. All financial inputs were provided to Samuel Engineering by appropriate parties and pricing data was supplied by Global Lithium LLC, the preeminent Lithium pricing provider.

Key financial highlights of the PFS are presented in Table 1 below, showing robust economics in all scenarios:





ASX: AZL, AZLO AZLOA

OTC: AZLAF





Pre-Tax Net Present Value (NPV), US\$Millions, 8% Discount Rate Base Case NPV = US\$448 million



Table 1: Prairie Lithium Project PFS Key Financial Highlights

Arizona Lithium Managing Director, Paul Lloyd, commented: "We are delighted to be able to present the market with the PFS for our 100% owned Prairie Lithium project. We have a world class Lithium resource that will produce a quality product at an extremely low operating cost of USD \$2,819 per tonne. The PFS applies a realistic discount rate of 8% and a conservative lithium price of USD 21,000 per tonne. This PFS will stand up to any evaluation by shareholders and industry participants and I am very proud of the team's confidence and professional integrity to put these realistic and robust numbers out into the public domain. Our initial production target is 6,000tpa for our first module, which is just the beginning. We believe we will be able to replicate this, with even lower costs. After we have delivered the first module, the Company aims to sanction further modules at the same or better economics to the first module. We are now ready to begin drilling the production and disposal wells and ordering equipment for production starting in 2025".

Summary of Key PFS Parameters and Outcomes

Key outcomes and parameters of the PFS are presented in Table 2 below:

	Units	PFS Result
Production Rate	Years	20
Production Commencement	Tonnes per annum	6,000
Indicated Mineral Resource - Lithium Carbonate	Contained ('000t)	4,500
Recovery - Direct Lithium Extraction	%	90
Key Financial Parameters	Units	PFS Result
Capital Cost (excluding contingency)	\$US Million	290
C1 Operating Costs	US\$/t LCE	2,819
Price - Lithium Carbonate	\$US/tonne	21,000
Payback Period	\$US Million	2.2
IRR - pre-tax	%	23.9
IRR - after-tax	%	20.4
NPV8 pre-tax	\$US Million	448
NPV8 after-tax	\$US Million	312

Table 2: Prairie Lithium Project PFS Key Parameters and Outcomes





Arizona Lithium Chief Technology Officer, Brett Rabe, commented: "I am extremely proud of the whole team who helped bring this PFS to fruition. From a technology standpoint we are very comfortable with bringing this project into production. From an economics standpoint the PFS proves the exceptional potential of the greater Prairie Project. Our team has worked hard on the Pilot Plant and showed the possibility of limiting impurities while maximising Lithium concentration. Now we will look to replicate and improve on these results for our commercial modules".

Relevant Information regarding PFS Preparation

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

Gordon MacMillan P.Geol., Principal Hydrogeologist of Fluid Domains, who is an independent consulting geologist of a number of brine mineral exploration companies and oil and gas development companies, reviewed and approves the technical information pertaining to the resource provided in the release and JORC Code – Table 1 attached to this 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 23 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.

Kyle Gramly PE, Sr. Process Engineer for Samuel Engineering, reviewed and approves the technical information pertaining to DLE test work and processing provided in the release and JORC Code – Table 1 attached to this release. He is a registered Professional Engineer (Chemical) with the Colorado Department of Regulatory Agencies (No. 0058009) since 2020 and has worked in the engineering field on a variety of mining projects for 15 years since graduating from Colorado School of Mines. Mr. Gramly is a Qualified Person as defined by 17 CFR § 229.1302 - (Item 1302) and has been involved in several pilot test programs and engineering design studies regarding the commodity discussed in this release.

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 Inferred². 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.



² ASX Announcement 13 Dec 2023 – "6.3 Million Tonne Lithium Resource at Prairie"



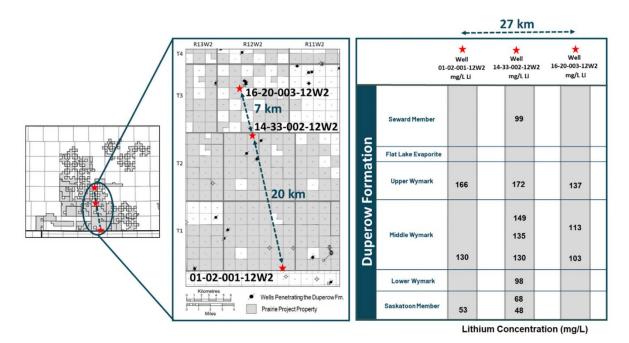


Figure 2: Location map and representative lithium concentrations from Arizona Lithium's test wells³

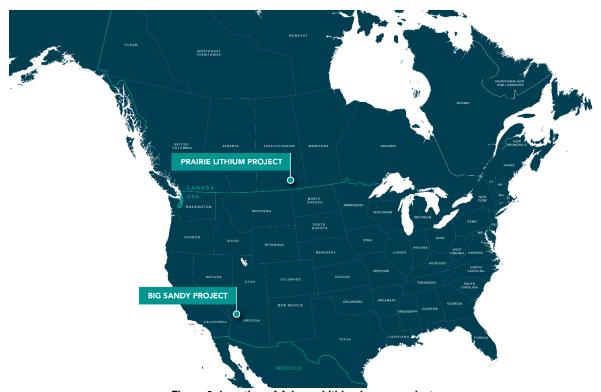


Figure 3: Location of Arizona Lithium's core projects



³ Lithium Concentrations measured by Isobrine Solutions and confirmed by one other commercial laboratory in Edmonton, Alberta



This ASX announcement is authorised for release by the Board.

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PFS JORC COMPLIANT REPORT FOR



PREPARED BY Samuel Engineering, Inc.

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SE Project No. 23314-01, Rev 1

December 30th, 2023



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Executive Summary

Summary of Key PFS Parameters and Outcomes

Arizona Lithium Limited ("Arizona Lithium" or "AZL") is evaluating the development of lithium bearing resources for their Prairie Lithium Project (Project) located in southeast Saskatchewan near the cities of Weyburn and Estevan. Subsurface brine will be pumped to the surface from deep wells and refined into lithium carbonate. A Preliminary Feasibility Study (PFS) was performed by Samuel Engineering (SE) to produce a Class 4 estimate along with a JORC compliant report. The Project consists of three individual well pads with a processing plant situated at each, consisting of a Direct Lithium Extraction (DLE) module, followed by lithium chloride concentration, lithium carbonate formation and subsequent dewatering and drying. Significant testing has occurred in regard to the wellfield brine composition and the brine has been tested using the DLE and concentration processes considered in this report. The capital cost estimate and financial outputs indicate an economically desirable project that should continue to be developed via further design, engineering, and testwork.

Highlights:

- The Prairie Project Preliminary Feasibility Study delivers a Canadian brine resource of 6.3 Million Tonnes (MT) Lithium Carbonate Equivalent (LCE) with 4.5 MT LCE as Indicated and 1.8 MT LCE as Inferred
- First production planned for 2025 with the inaugural 3 well pads, each producing approximately 2,000 tpa LCE for a total of 6,000 tpa LCE
- Installed Cost for each well pad estimated at US\$70M for a Total Installed Cost (TIC) \$210M
- Total CAPEX before 15% contingency estimated at US\$290M produces a post-tax NPV_{8%} of US\$312M and IRR of 20.4% with a 2.2-year payback period
- Financial highlights based on a conservative lithium carbonate sales price of US\$21,000 per tonne
- Among the lowest OPEX projects in the world at US\$2,819 per tonne LCE
- Construction of the first well pad commenced November 2023

1.0 Mineral Resource Estimate

Arizona Lithium is exploring and developing lithium-rich brines in southeastern Saskatchewan. Historical and newly acquired brine analysis data indicate that the Property is located in an area of elevated lithium concentrations measured up to 258 mg/L within the Duperow Formation (Figure 1). Newly acquired geochemical data has allowed Arizona Lithium to characterize the lithium content of the Duperow Formation within much of the Property. Lithium results from wells located across the Property and beyond indicate that lithium concentrations are elevated and laterally continuous across the Property.

The Mineral Resource estimation has been performed according to the requirements of the CIM Best Practice Guidelines for Resource and Reserve Estimation for Lithium Brines (2012). Approximately 71% of the Mineral Resource estimate is classified as Indicated because the lithium grade, brine volume, and transmissivity have been estimated with sufficient confidence to allow the application of modifying factors in support of mine planning and evaluation of economic viability (Table 1). It is expected that with continued exploration, all areas of the resource can be upgraded to Indicated or Measured classifications.

Table 1: Representative lithium concentrations within the Inferred and Indicated Resource areas based on the mass volume and brine volume estimates.

	Lithium Co	entative oncentration g/L)	Li Mass	(tonnes)	LCE Mass (tonnes)		
Producing Formations	Inferred	Indicated	Inferred	Indicated	Inferred	Indicated	Total
Seward	98	98	23,887	65,872	127,151	350,637	477,787
Flat Lake	95	95	2,131	5,789	11,343	30,815	42,158
Upper Wymark	142	159	46,366	113,482	246,806	604,065	850,871
Middle Wymark	120	127	181,550	457,630	966,391	2,435,964	3,402,355
Lower Wymark	93	96	37,188	102,663	197,952	546,475	744,427
Saskatoon	55	56	44,358	111,562	236,118	593,845	829,962
Total	101	106	340,000	850,000	1,800,000	4,500,000	6,300,000

Notes:

- No cut-off grade is applied to the Mineral Resource Estimate as lithium production assays meet expected economic concentrations.
- **2.** The conversion for LCE = Li \times 5.3228.
- 3. Arizona Lithium's Indicated Resource Statement was announced on December 13, 2023.
- 4. There may be minor discrepancies in the above table due to rounding.

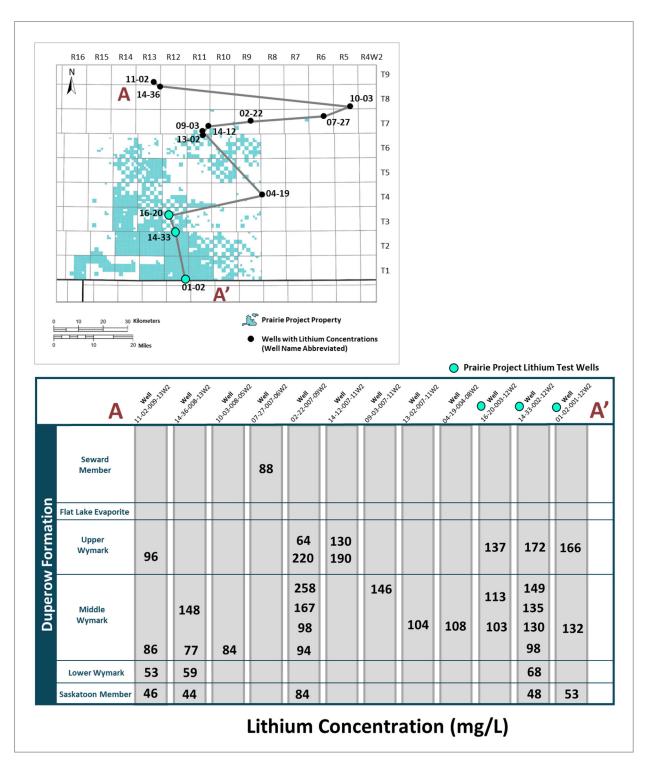


Figure 1: Simplified Cross section of wells in Saskatchewan with lithium concentrations within and adjacent to Arizona Lithium's Property

2.0 Cut-off Grade

Lithium-rich Duperow Formation brine is widely distributed in the vicinity of the Project. The use of a cutoff grade would be based on the economics of the production costs, value of the recovered lithium, and DLE recovery. Based on Arizona Lithium's initial cost estimate work and testing, the Project would be considered economical as long as the produced brine had a concentration greater than 65 mg/L. Based on the currently available data, a fully penetrating Duperow well drilled anywhere in the Project would have a blended lithium concentration greater than 65 mg/L. As such, the lithium grade is higher than the cutoff grade throughout the Project.

3.0 Estimation Methodology

Geological understanding of the Duperow Formation was foundational to the resource estimate. Arizona Lithium completed geological mapping, and interpolated structure surfaces for the intra-Duperow Formation stratigraphy were provided to Fluid Domains Inc. for the construction of a three-dimensional geologic model in FEFLOW™. Wells used in the structure and thickness mapping span from Range 30W1M to Range 25W2M and include the northern six townships in North Dakota and Township 1 to 17 in Saskatchewan.

Geophysical wireline logs from wells drilled through the Duperow Formation were used to identify the top and base of the formation. A total of 570 wells were used to determine the top of the Duperow Formation, and 548 wells were used to determine the base of the Duperow Formation (Figure 2).

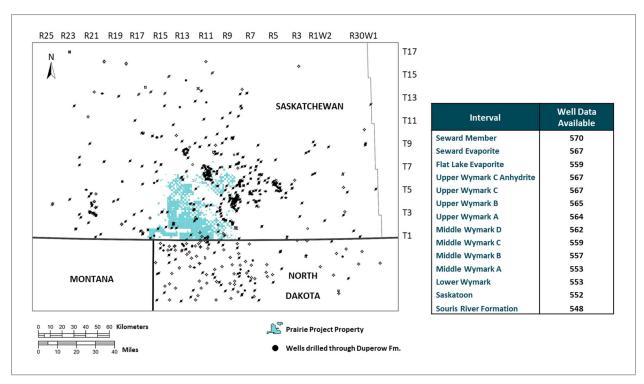


Figure 2: Wells drilled through the Duperow Formation used to construct the geological surfaces and model

The Duperow Formation has an average thickness of 155 meters over the Project area, and the intra-Duperow Formation stratigraphy mapped by Arizona Lithium has been modelled after Yang's (2015) stratigraphic subdivisions (Figure 3).

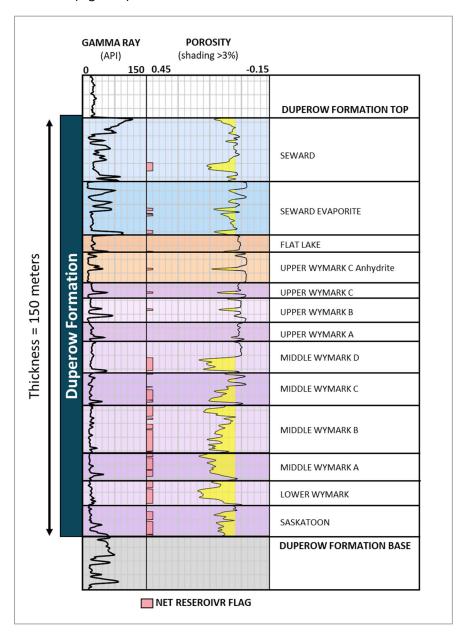


Figure 3: Duperow Formation Stratigraphy modelled after Yang (2015), Well 101/14-33-002-12W2/00

Structure maps for the Duperow Formation were created in GeoSCOUT™ using the minimum curvature gridding algorithm. Across the Project, the top of the Duperow Formation varies in depth from 1,700 m true vertical depth (TVD) in the northeast to 2,500 m TVD in the southwest. No Duperow Formation-aged faults have been identified. The true vertical depth (TVD) map for the top of the Duperow Formation is shown in Figure 4.

Thickness maps for the Duperow Formation were created in GeoSCOUT™ using the kriging gridding algorithm. The isopach maps were constructed to understand and assess thickness trends within the intra-

Duperow Formation stratigraphy. The total (gross) thickness of the Duperow Formation increases from southeast to northwest with a gross thickness range of 150 m to 170 m and a gross thickness average of 155 m (Figure 5).

The structure maps of surfaces were exported from GeoSCOUT™ and imported into FEFLOW™ to determine the gross rock volume. Additionally, effective porosity maps, net reservoir maps, and lithium concentration maps for each intra-Duperow interval were imported into FEFLOW™ to calculate the net brine volume of the Duperow Aquifer.

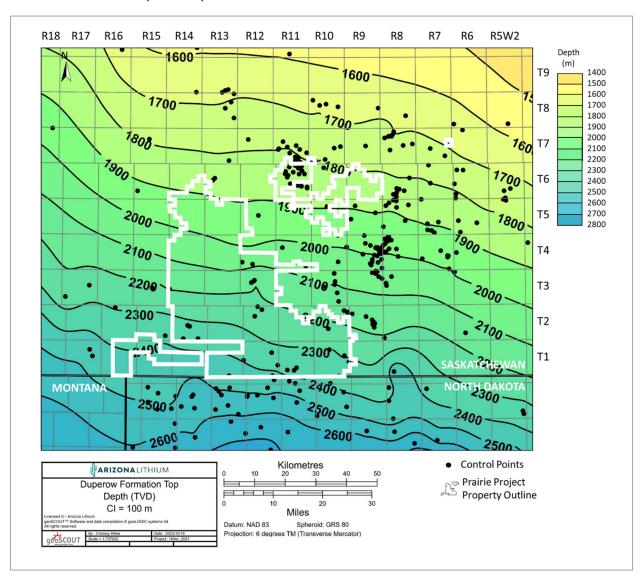


Figure 4: Depth Map from Ground Surface to the Top of the Duperow Formation

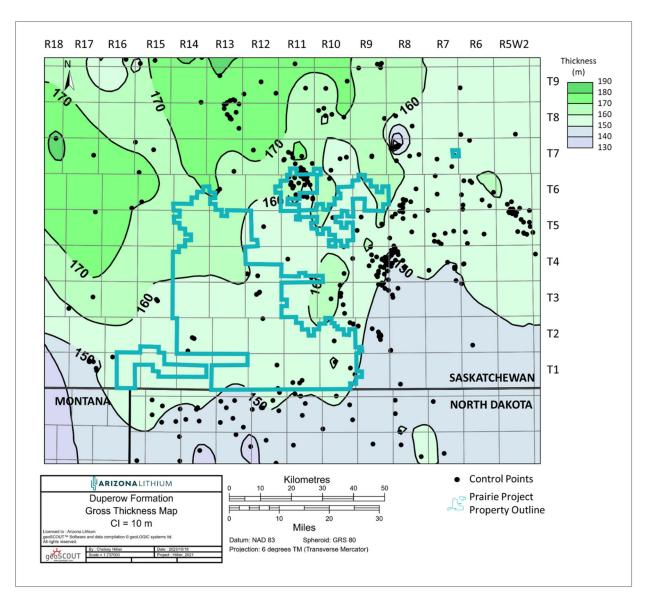


Figure 5: Duperow Formation to Souris River Formation Gross Thickness Map

A comprehensive petrophysical model was completed for 279 wells with wireline logs over the Duperow Formation that were calibrated to core, temperature, water chemistry, and production test data. Commercially available well log analysis software from Geoactive Limited (Interactive Petrophysics™) was used to complete the petrophysical evaluations. Calibrated petrophysical models provide the best estimates for porosity, water saturation, and mineralogy that can be mapped to understand the reservoir quality of the formation (Figure 6).

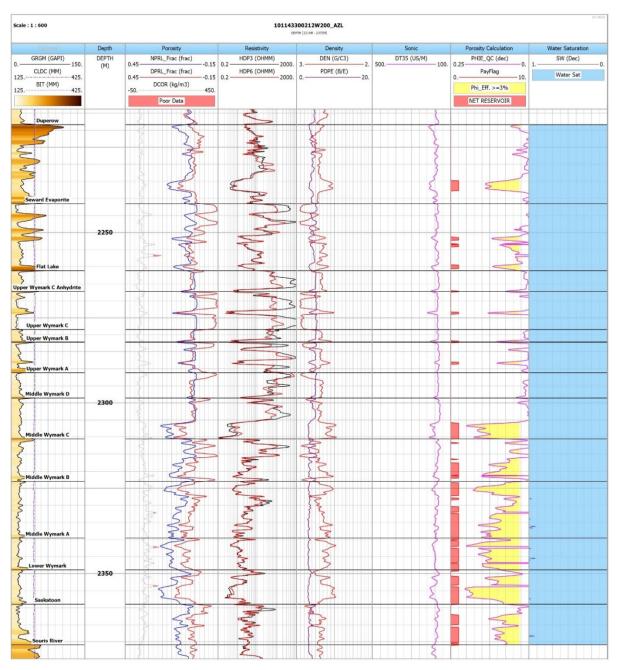


Figure 6: Wireline logs and petrophysical evaluation of the Duperow Formation shown from Well 101/14-33-002-12W2/00. Net reservoir is calculated using a porosity cutoff value of 3% and a Vshale correction. Water saturation is calculated to be 100% for all zones which is consistent with production test information from Well 101/14-33-002-12W2/00.

Net Reservoir maps for the Duperow Formation were created in GeoSCOUT™ using the kriging gridding algorithm (Figure 7). The Duperow Formation net reservoir increases from the south to the north with a thickness range of 50 m to 90 m across the Property.

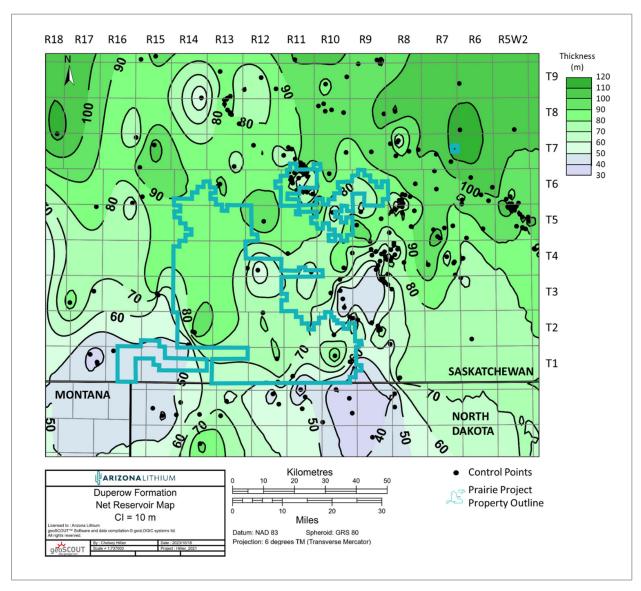


Figure 7: Duperow Formation to Souris River Formation Net Reservoir Map

4.0 Geological Setting

Arizona Lithium's Prairie Project is located on the northeastern flank of the Williston Basin (Figure 8). The Williston Basin is an elliptically shaped, 560 km diameter intracratonic sedimentary basin on the western shelf of the North American craton centered in North Dakota. (Kent and Christopher, 1994)

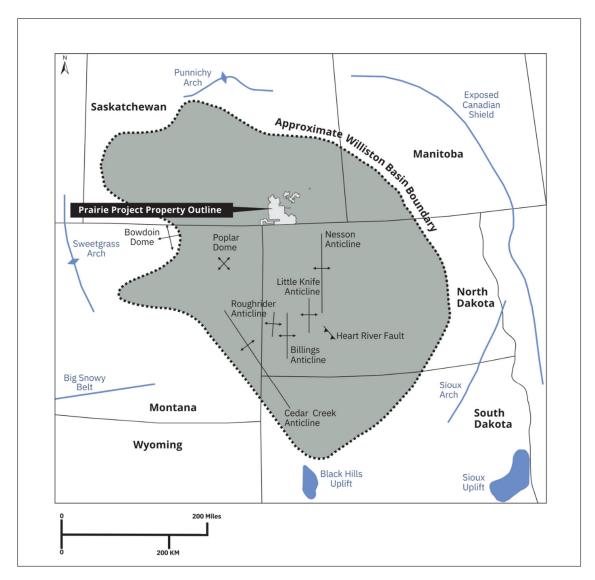


Figure 8: Extent of the Duperow Formation and Tectonic Elements Delimiting the Williston Basin Edges (Source: After Kent and Christopher, 1994)

The target interval of this Project is porous carbonate rocks of the Upper Devonian (Frasnian) Duperow Formation, Saskatchewan Group (Gerhard et al., 1982; Kent & 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; Figure 9).

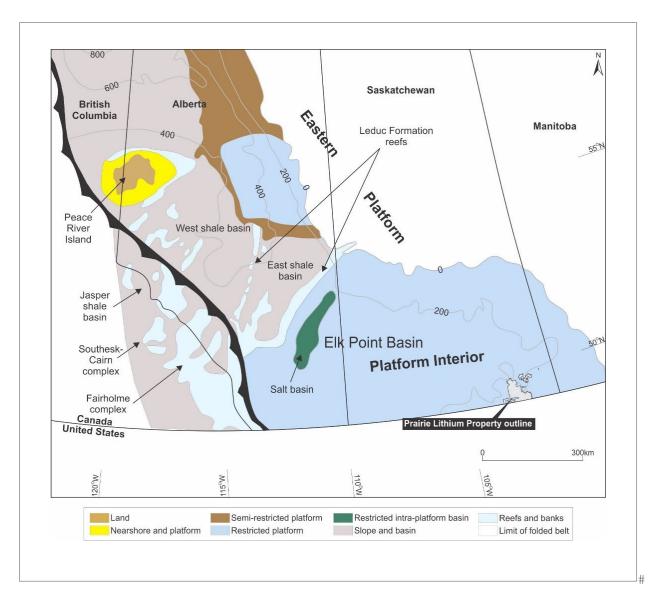


Figure 9: Palaeogeographical Reconstruction of the Devonian Elk Point Bain of Saskatchewan and Alberta. (Source: After Moore, 1988) (Eggie, et al., 2012)

The lithology consists of layered limestone, dolomite, and evaporites. Repeated shallowing-up or "brining-up" successions occur within each member consisting of marine limestone and dolomite at the base and passing gradually upwards into dominantly restricted evaporitic intervals of anhydrite and halite (Dunn, 1975). Carbonates (particularly dolomite) form laterally continuous units or aquifers of higher reservoir quality, whereas evaporites form intervals of poor reservoir quality and may contribute as vertical permeability baffles or aquitards. Dolomite occurrence and thickness decreases upwards within the Duperow Formation and generally increases in thickness northeastward at the Project.

5.0 Hydrogeological Setting

The hydrogeology of the Williston Basin has been widely studied. Examples include work on the Canadian side of the basin (Hannon, 1987; Bachu & Hitchon, 1996; Palombi & Rostron, 2013; Jensen et al., 2015) and American portions (Downey, 1986; Downey et al., 1987; Downey & Dinwiddie, 1988; Busby et al., 1995), and on a basin-wide scale (Benn & Rostron, 1998; Figure 10).

The groundwater flow system in the Williston Basin is one of the best examples of a large-scale confined aquifer system in the world. Recharge is thought to occur in the west to southwestern portions of the basin via a series of Tertiary-aged intrusive uplifts and arches such as the Black Hills and Bighorn Mountains. Discharge of the flow systems occurs approximately 1,000 km to the northeast, along the lowlands at the margin of the basin in Manitoba. Elevation differences between the recharge and discharge areas of more than 1,000 m provide the driving force for fluid flow.

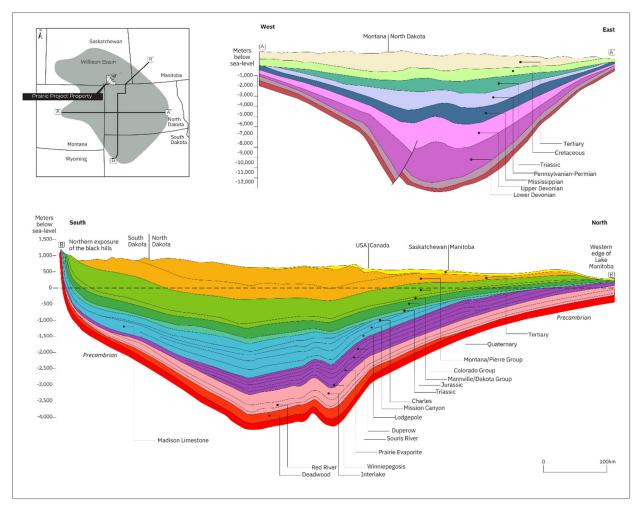


Figure 10: Regional Structural Cross-Section through the Williston Basin Exhibiting the Geometric Relationships of the Infilling Strata. (Source: Modified after Benn and Rostron, 1998)

Several major hydrostratigraphic intervals exist across the Williston Basin. These key hydrostratigraphic intervals form three main aquifer groups comprising the Paleozoic, Mississippian, and Mesozoic intervals (Palombi & Rostron, 2006; Figure 11).

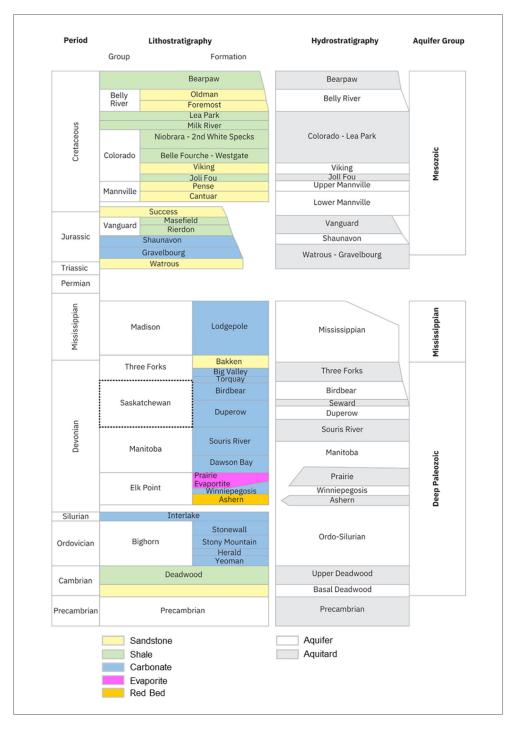


Figure 11: Lithostratigraphic and Hydrostratigraphic Column for the Williston Basin. (Source: After Melnik, 2012, Wittaker et al., 2004)

6.0 Drilling & Brine Sample Recovery

Historical well data from oil and gas exploration and newly collected data from wells drilled or recompleted specifically to test lithium concentrations and brine productivity were used to evaluate the lithium Mineral Resource (Figure 12).

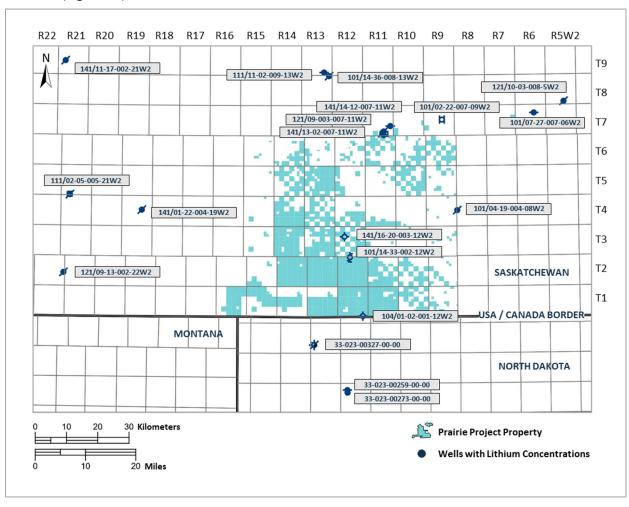


Figure 12: Wells with Lithium Concentration Data surrounding Arizona Lithium's Prairie Project

In 2021 and 2022, six wells were drilled and/or recompleted in the Duperow Formation in the Project area: Wells drilled and/or recompleted by Arizona Lithium:

- 101/14-33-002-12W2 (Year 2021)
- 104/01-02-001-12W2 (Year 2021)
- 141/16-20-003-12W2 (Year 2022)

Wells drilled and/or recompleted by Hub City Lithium in partnership with ROK Resources:

- 111/11-02-009-13W2 (Year 2022)
- 101/14-36-008-13W2 (Year 2022)
- 101/02-22-007-09W2 (Year 2022)

Brine collection procedures for Arizona Lithium's tests wells (101/14-33-002-12W2, 104/01-02-001-12W2, 141/16-20-003-12W2) are summarized by the following:

- The procedures were designed and undertaken to obtain the highest quality samples of original formation fluids.
- After the wells were drilled, they were cased and then 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 casing.
- During well testing, formation water was brought to the surface using an Electrical Submersible Pump (ESP) and by swabbing small volumes of fluid. During swabbing operations, packers were placed between each zone swabbed. The packers were pressure tested to ensure zonal isolation during the swabbing operations.
- Prior to sampling operations, all lines and tanks were cleaned to remove any possible residual brine or hydrocarbon contamination. Samples were collected directly at the wellhead or from sampling ports attached to 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.
- 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.
- 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 5 to 10 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, and 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 standard 0.45-micron filter to remove any particulates or oil.
- Once sufficient volume was filtered for analysis, samples were split into two to four containers (typically 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 then sealed with tamper-proof seals to ensure integrity. Samples were couriered to the various laboratories using full chain-of-custody documentation.

Similar sample collection procedures used for Hub City Lithium's test wells (111/11-02-009-13W2, 101/14-36-008-13W2, 101/02-22-007-09W2) are documented in their NI 43-101 Technical Report (April, 2023).

7.0 Sample Analysis Methods

The Mineral Resource assessment was based on two types of lithium data: historical data collected from oil and gas infrastructure in the Project and reservoir testing completed by Arizona Lithium and Hub City Lithium in 2021 and 2022.

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 Quality Assurance Quality Control (QA/QC) concerns. The QP verified the lithium concentration data by reviewing Arizona Lithium's QA/QC program, confirming the reported 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.

To ensure the most precise and accurate measurements of lithium concentration, multiple laboratories were used for analyses of Arizona Lithium's test wells (101/14-33-002-12W2, 104/01-02-001-12W2, 141/16-20-003-12W2).

Each laboratory selected for use was required to pass a qualification test prior to their inclusion in the Project. The qualification test consisted of analysing a set of three samples for lithium concentration on an artificially prepared saline brine solution created by Salman Safarimohsenabad (University of Alberta/Recion Technologies Inc.). Each laboratory was evaluated for accuracy and precision prior to their selection. This prepared sample was repeatedly run as part of major sample batches for QA/QC.

For each zone tested, up to 4 litres of filtered fluid was collected for laboratory analysis. Each laboratory was sent approximately 1 L. Each laboratory analysis takes less than 1 mL, so each lab had sufficient sample volume to run repeats, etc.

Similar sample measurement procedures used for Hub City Lithium's test wells (111/11-02-009-13W2, 101/14-36-008-13W2,101/02-22-007-09W2) are documented in their NI 43-101 Technical Report (April, 2023).

A total of 72 samples were sent for analysis of lithium concentration during testing of the 101/14-33-002-12W2 and 104/01-02-001-12W2 wells. All 72 samples were analysed by Arizona Lithium and Isobrine Solutions. A subset of 29 of those 72 samples were sent to Element, and of those 29 samples, 26 were sent for analysis to AGAT. Samples sent to three/four laboratories were the last two samples collected in a time series from each of the 14 zones investigated in the sampling program (three combined flow tests, eight zones in 101/14-33-002-12W2M, and three zones in 104/01-02-001-12W2).

A total of 75 samples were sent for analysis of lithium concentration during testing of the 141/16-20-003-12W2 well. Thirty-two samples were analysed by Isobrine Solutions, 21 samples were analysed by Element, and 22 samples were analysed by Arizona Lithium.

Hub City Lithium has tested over 50 water samples from three wells since 2021 (NI 43-101 Technical Report, April, 2023).

8.0 Mining Factors and Assumptions

8.1 Summary of Pad Layouts:

A well network designed to support a nominal total lithium production rate of 6,000 TPA LCE for 20 years was designed for the PFS. The well network will consist of a total of 13 production wells, 15 injection wells and three brackish water source wells (required for DLE desorption) divided between three well pad locations (Figure 13, Figure 14, Table 2).

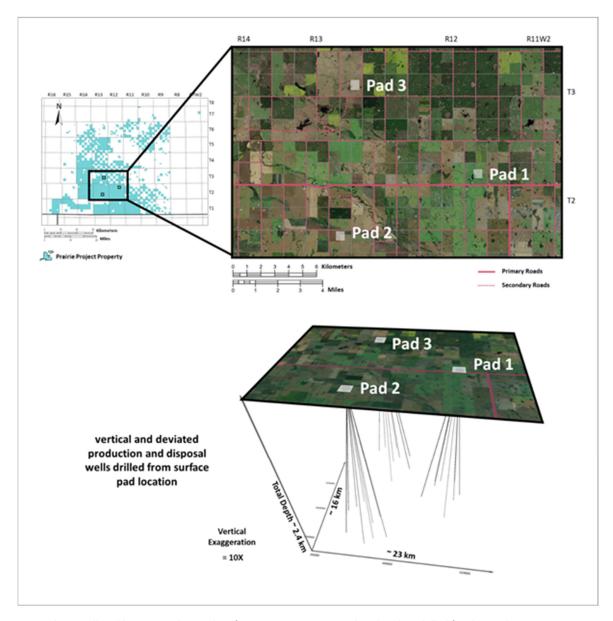


Figure 13: Three well pad locations where subsurface properties were analysed and modelled for the production zones, injection zones, and brackish water source zones, including a 3D rendering.

Table 2: Summary of wells, brine production and injection rates, and lithium production modelled at each pad location.

Well Pad	Well Pad Easting (NAD 83)	Well Pad Northing (NAD 83)	No. Production Wells	No. Disposal Wells	No. Brackish Water Source Wells	Daily Total Production and Disposal Rates Per Pad (m³/day)	Lithium Production Per Pad (TPA LCE)
1	598335	5451537	4	5	1	12,067	1,989
2	597403	5440878	5	5	1	10,535	1,930
3	607100	5445400	4	5	1	11,230	2,081

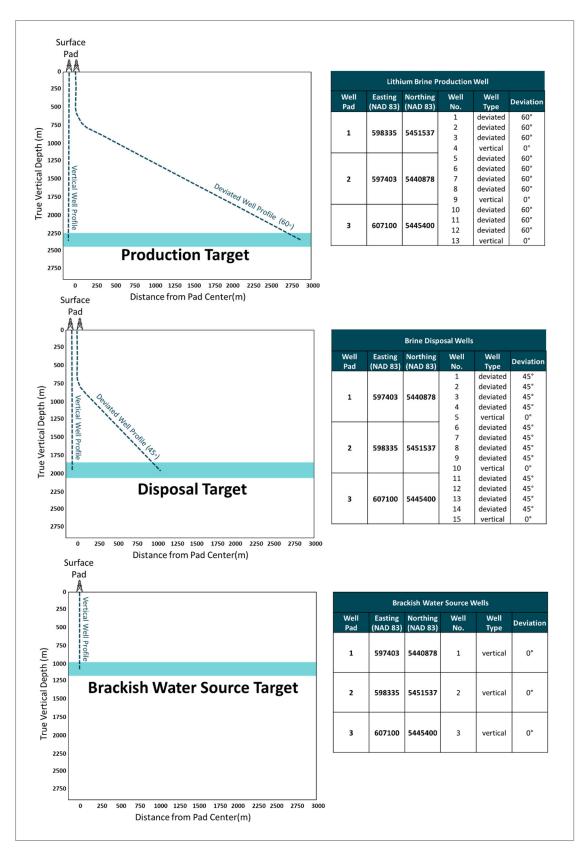


Figure 14: Well Profiles and approximate depths for the Lithium Brine Production Wells, Disposal Wells, and Brackish Water Source Wells.

8.2 Lithium-Rich Brine Production Well Network

The Production Well Network considers the spatial variability of lithium concentrations and transmissivities within a portion of Arizona Lithium's recently delineated Indicated Resource area. The optimized well network was determined using the finite element numerical modelling software FEFLOW (DHI 2022).

The optimized production well network has 13 wells drilled from three well pads. The southwest well pad (Pad 1) has one vertical well at the center and four deviated wells. The northern (Pad 3) and eastern (Pad 2) well pads have one vertical well drilled at the center and three deviated wells. The well locations (mid point completion interval), rates, and predicted drawdown at each well are summarized in (Table 3). The total brine production rate of 33,832 m³/day was distributed between each well pad. A process efficiency of 77% was used when determining the required brine production rate to meet the lithium production rate; the process efficiency includes a reservoir-related safety factor of 90% (Rabe, 2023).

Table 3: Summary of pad locations, simulated pumping rates and predicted results

Lithium Brine Production Well					Expected Lithium	Optimized Pumping Rate (m³/day)		Lithium Production TPA LCE		
Well Pad	Easting (NAD 83)	Northing (NAD 83)	Well No.	Well Type	Concentration (mg/L)	Per Well	Per Pad	Per Well	Per	Pad
			1	deviated	111	3160		524		
1	598335	5451537	2	deviated	106	3100	12,067	489	1,989	1 000
1	336333	3431337	3	deviated	114	3050	12,067	518	1,565	
			4	vertical	111	2757		458		
		5440878	5	deviated	125	2125		296		
			6	deviated	119	2400		425	1,930	
2	597403		7	deviated	120	2275	10,535	408		
			8	vertical	127	2075		394		
			9	deviated	123	1660		306		
			10	deviated	125	2850		532		
3	607100	5445400	11	deviated	123	3070	11,230	564	2,081	
3 60/100	007100		12	deviated	124	2840	11,230	525		
			13	vertical	125	2470		460		

Key Assumptions:

- The average lithium concentration does not vary over the 20-year period of production.
- Deviated wells are drilled at an angle of 60° from vertical, and the middle of the completion interval is 2,774 m away from the well pad.
- The allowable drawdown is 1,974 m of formation water head at each well.
- Wells are completed within Arizona Lithium's current permit areas and the Indicated Resource area.

Key Outcomes:

- The production of lithium at each well pad is approximately equal (+/- 4%).
- The production of brine at each well pad is approximately equal (+/- 6%).
- The average brine production rate of deviated wells is 1.17 times greater than the vertical wells; this production factor for the deviated wells is in general agreement with the productivity index ratios of horizontal and vertical wells reported by Joshi (1988).
- Should the well or aquifer performance be worse than the model predictions, the recommended well placements allow for the drilling of additional wells at each pad.

8.3 Lithium-Depleted Brine Disposal Well Network

Following lithium extraction of lithium-rich brine in process facilities located at each pad, lithium-depleted brine will be re-injected into the subsurface. The lithium-depleted brine produced at each pad will require on-pad disposal at rates of 10,500 m³/day to 12,000 m³/day (Table 4). Arizona Lithium has identified five geologic units in the Madison Group that have the thickness and permeability to handle the required water injection rates. Several of these units have been used historically by the oil industry for water disposal and as zones for secondary water flooding.

The disposal well network design for the Project is based on several attributes: geologic mapping completed by Arizona Lithium, historical studies completed by Beliveau (1989), permeabilities compiled by Lavoie (2006), historical average and maximum injection rates, permeability estimates from core, and permeability estimates based on short-term injection tests.

Geologic mapping and historical injection rates suggest the Madison Group has good potential for injection; however, the hydraulic properties of the Madison Group remain uncertain. While further investigations are required before a disposal well network should be drilled, there is sufficient information to design a disposal well network suitable for the Project's PFS.

Table 4: Summary of pad locations, disposal formations, and assumed disposal rates

	Bri	ne Disposal V	Vell		Disposal	Assumed Disposal Rate (m3/day)		
Well	Easting	Northing	Well	Well	Formation	Per	Per	
Pad	(NAD 83)	(NAD 83)	No.	Type		Well	Pad	
			1	deviated	Midale & Frobisher	1791		
			2	deviated	Midale & Frobisher	1791		
1	597403	5440878	3	deviated	Kisbey & Alida	2318	10,535	
			4	deviated	Kisbey & Alida	2318		
			5	vertical	Kisbey & Alida	2318		
			6	deviated	Midale & Frobisher	2051		
			7	deviated	Midale & Frobisher	2051		
2	598335	5451537	8	deviated	Kisbey & Alida	2655	12,067	
			9	deviated	Kisbey & Alida	2655		
			10	vertical	Kisbey & Alida	2655		
			11	deviated	Midale & Frobisher	1909		
			12	deviated	Midale & Frobisher	1909		
3	607100	5445400	13	deviated	Kisbey & Alida	2471	11,230	
			14	deviated	Kisbey & Alida	2471		
			15	vertical	Kisbey & Alida	2471		

8.4 Brackish Water Source Well Network

Water required for operations and utilities will be produced by processing water from brackish source wells (Table 5) via reverse osmosis. The net brackish water consumption will range between 133 gpm and 200 gpm (727 m³/day to 1,090 m³/day). Startup or upset conditions that require large surges of water will be addressed by a drawdown of inventory from the Reverse Osmosis Permeate Storage Tank. The tank will be sized to accommodate a net drawdown of at least 100 gpm of RO Permeate for 8 consecutive hours. Prior to use in DLE, the water will be heated to at least 75°C (167°F) by transferring heat from depleted brine and steam.

The Newcastle Formation and Mannville Group sandstone reservoirs have been identified as reservoirs that can supply the required brackish water rates for DLE desorption. These reservoirs have historically been targeted for water source production used by the oil industry at rates well above Arizona Lithium's requirements.

Table 5: Summary of pad locations, brackish water source formations and required production rates

	Brackish	ı Water Sour	Brackish Water Source	Assumed Production Rate (m3/day)			
Well Pad	Easting (NAD 83)	Northing (NAD 83)	Well No.	Well Type	Formation	Per Well	Per Pad
1	597403	5440878	1	vertical	Newcastle Formation	320	320
2	598335	5451537	2	vertical	Newcastle Formation	320	320
3	607100	5445400	3	vertical	Newcastle Formation	320	320

9.0 Metallurgical Testwork and Processing

9.1 Processing-Plant Design

The following metallurgical process description is for a single well pad but describes the identical process occurring at each of the three well pads.

The process begins with a network of well pumps delivering brine to the processing facility, where it is filtered to remove suspended solids before being pumped to the Direct Lithium Extraction (DLE) system that concentrates lithium while rejecting other impurities, such as calcium, sodium, magnesium, and potassium. The DLE system considered for this prefeasibility study is technology developed by ILiAD Technologies, LLC, a subsidiary of Energy Source Minerals (ESM).

The DLE system functions as a counter-current adsorption/desorption process that operates cyclically with 30 fixed columns around an automated, multi-port valve with concentric channels. The columns are loaded with lithium from fresh feed brine in a control strategy that promotes the accumulation of lithium until optimal loading is achieved.

Depleted lithium brine is used to preheat the DLE strip solution prior to reinjection via a disposal well system dedicated to each well pad.

DLE product brine is then forwarded to a softening and concentration package designed and manufactured by Gradiant for the purpose of this study. A series of typical water treatment reagents, including ferric chloride (dosed upstream of the tank), lime, and magnesium chloride, are dosed to the softening tank to facilitate impurity removal reactions.

The resulting effluent from the softening reaction tank is clarified and filtered to remove the precipitated solids from the brine. A final softening step occurs in a weak acid cation ion exchange (WAC IX) skid, with the resulting brine sent to the Gradient Reverse Osmosis Infinity (ROI) system. Lithium chloride desalination and concentration (~16 times feed concentration) occur in the ROI system.

The resulting lithium chloride brine is heated, sent to a lithium carbonate crystallization reactor, and contacted with soda ash solution. A reaction takes place in the crystallizer to precipitate lithium carbonate (Li2CO3), which is subsequently dewatered and dried to produce a saleable 99 wt.%+ lithium carbonate product.

9.2 DLE Pilot Testing Report

Arizona Lithium has tested numerous DLE technologies since 2022 and has selected two different DLE technologies for extensive pilot testing. Both DLE technologies, one of which was Arizona Lithium's PLIX adsorbent, produced average lithium recoveries over 90%.

The second DLE technology tested, and the basis for the prefeasibility study, is technology developed by ILiAD Technologies, LLC, a subsidiary of Energy Source Minerals (ESM). The ILiAD DLE testing was conducted by ILiAD Technologies at their testing facility in California in March 2023, while the downstream post-processing testing was conducted by Gradiant at their testing facility in Massachusetts in June 2023.

The ILiAD pilot test was conducted to optimize and then exhibit performance parameters used as the basis of design for the prefeasibility study in addition to the corresponding CAPEX and OPEX associated with the ILiAD portion of the flowsheet.

During the ILiAD trial, the ILiAD team completed 19 total cycles of runtime with operational setpoints set to an original feed Li concentration of 96 mg/kg at 72°C. Due to heat losses, the average feed temperature was approximately 66°C for the entire trial.

This testing was conducted in two phases, the first being the tuning phase. In this phase, lithium recovery averaged 90% with excellent adsorbent impurity rejection. It also proved that lithium in the feed brine is capable of being concentrated 13x while maintaining a high impurity rejection rate. During the tuning phase, it was noted that an increase to the feed rate impacted recovery at the cost of additional loading capacity. Consequently, in the following phase of testing, throughput was reduced in an effort to optimize recovery and the second phase of testing produced an average recovery of 93%.

Ultimately, the ILiAD pilot testing demonstrated that brine fed at 66°C can be processed producing a lithium recovery of 93% with a product lithium concentration of approximately 1,234 mg/kg. It also demonstrated that ILiAD produces a high purity LiCl product stream with a high rate of rejection for impurities. Overall results for the pilot testing can be observed in Table 6 in addition to the results to each of the phases of testing.

In an effort to provide an appropriate safety margin while leaving considerable upside for improvement in subsequent testing and design development, the overall lithium recovery used in the basis of design for this study was 90%.

Table 6: Prairie Lithium DLE Pilot Trial

Prairie Lithium Pilot Trial									
		Overall	Tuning	High Recovery					
Start	time	1/23/23 8:30	1/23/23 13:47	1/25/23 22:00					
End	time	1/28/23 2:00	1/25/23 22:00	1/28/23 2:00					
Total Time	hr	113.5	56.2	52.0					
Run Time	hr	108.2	56.2	52.0					
Ramp up Time	hr	5.3	0	0					
Down Time	hr	0	0	0					
Total Brine	gal	5,729	2,977	2,473					
Run Time Brine	gal	5,450	2,977	2,473					
Total Product (from flow log)	gal	438	232	206					
Average Product Rate	mL/min	255	260	250					
Overall Volume Yield (% feed)	%	8%	8%	8%					
Overall, Li wt% Recovery	%	92%	90%	93%					
Average Product Li FP	mg/kg	1,353	1,375	1,335					
Average Product Li ICP	mg/kg	1,223	1,216	1,234					
Average Product B ICP	mg/kg	77	74	79					
Average Product Ba ICP	mg/kg	35	37	33					
Average Product Ca ICP	mg/kg	190	193	187					
Average Product Mg ICP	mg/kg	28	30	27					
Average Product K ICP	mg/kg	20	26	13					
Average Product Na ICP	mg/kg	141	183	93					
Average Product Sr ICP	mg/kg	11	12	11					
Average Li in Depleted Brine	mg/kg	7	11	5					
B Rejection	%	99.80%	99.81%	99.79%					
Ca Rejection	%	99.94%	99.94%	99.94%					
Mg Rejection	%	99.92%	99.92%	99.93%					
K Rejection	%	99.97%	99.97%	99.98%					
Na Rejection	%	99.99%	99.98%	99.99%					
Sr Rejection	%	99.92%	99.92%	99.93%					

9.3 Counter-Flow Reverse Osmosis Study

The Gradiant pilot test was conducted to test an integrated water treatment solution to concentrate lithium brine from the DLE process while simultaneously producing low salinity permeate. The testing was comprised of two main treatment steps: Softening and Reverse Osmosis Infinity (ROI) Treatment, with the ROI step further breaking down into desalination and brine concentration. The brine concentration step is also referred to as counter-flow reverse osmosis (CFRO).

In the softening treatment step, a significant removal of Ca, Mg, Mn, Fe, and SiO2 was observed – achieving the sufficient removal of these target components to prevent scaling in the downstream ROI process. The extent of removal achieved by precipitation is seen in Table 7, where ND is "not detected."

Table 7: Ion Removal via Precipitation Softening Treatment

Sample	Mg+2 (mg/L)	Ca+2 (mg/L)	Fe+3 (mg/L)	Mn+4 (mg/L)	SiO2 (mg/L)
Raw Feed	26	185	3	3	55
Treated Water	12.5	19	ND	0.02	2.9
% Removal	53%	90%	N/A	99%	95%

Desalination was performed with varying pressure to prevent over-fluxing of the membrane and control flux. With increasing salinity of water in the feed tank, osmotic pressure of water also increased. The tests yielded successful results as seen in Table 8. The RO Permeate stream proved adequate for re-use in the iLiAD DLE process.

Table 8: Details of RO Desalination Streams

Stream	TDS (mg/L)	Li (mg/L)	pH @ 25°C
Pretreated Water	9,790	1,100	8.22
RO Brine	58,740	6,530	7.78
RO Permeate	143	5.25	7.12

The brine concentration (CFRO) process generated a concentrated brine stream with 168,000 mg/L TDS and a dilute brine stream with 32,580 mg/L TDS. In a continuous process, the dilute brine stream would be recycled back to the RO desalination step. The lithium content in the concentrated brine stream was 19,750 mg/L, corresponding with an overall lithium concentration factor of 16. Results for brine concentration are tabulated in Table 9. Ultimately, the testing conducted by Gradiant validated the effectiveness of the ROI process for concentrating lithium while producing a stream of water that could be utilized by the iLiAD process, thereby reducing the overall demand for fresh water.

Table 9: Details of CFRO Brine Concentration Streams

Stream	TDS (mg/L)	Li (mg/L)	pH @ 25°C
CFRO Feed (NF Permeate)	53,950	6,210	7.82
CFRO Brine	168,000	19,750	8.29
CFRO Dilute Brine	32,580	3,850	7.87

Following production of the CFRO concentrate, without further purification or rinsing taking place, the CFRO concentrate was contacted with soda ash solution in a single reaction step and filtered to produce lithium carbonate. The testing took place at Arizona Lithium's research center in Tempe, AZ. The lithium carbonate produced exceeded 99 wt.% Li2CO3 as determined by Covalent Metrology in Sunnyvale, CA. The analytical results are summarized in Table 10. In a continuous process, the filtrate mother liquor is recycled to upstream processes for recovery of the lithium and the carbonate is used in the treatment step prior to desalination. In a commercial flowsheet, the lithium carbonate is dried to specification prior to transport for further purification or conversion to other lithium chemicals.

Table 10: Lithium Carbonate Analysis

Component	Concentration
Li2CO3	>99 wt.%
Magnesium	1,510 mg/kg
Chloride	1,293 mg/L
Sodium	1,110 mg/kg
Calcium	689 mg/kg
Strontium	361 mg/kg
Sulfur	237 mg/kg
Potassium	158 mg/kg
Phosphate	95.4 mg/L
Nitrate	91.3 mg/L
Barium	30.1 mg/kg

10.0 Infrastructure Considerations

The Project is covered by a dense infrastructure of roads, railways and transmission lines (Figure 15 and 16). Prairie Lithium's facilities are 40 km west of the city of Estevan and 60 km south of Weyburn; each city hosts a population of ~11,000. Skilled labor, oil and gas services and equipment are available in these cities. The Project is located close to the year-round, accessible Canada-USA border crossing with access to the North American road and rail network.

Highways 18, 35 and 39 run through the Project. Secondary and primary roads are well maintained given the heavy traffic associated with the agriculture and oil industries. There is a grid of north-south secondary roads every mile and east-west secondary roads every two miles. Seasonal weight bans are implemented on secondary roads in the spring months. Prairie Lithium's facility will have year-round access.

Access to Estevan is by ground or air transportation. Estevan airport is at an elevation of 572 m above mean sea-level (amsl). Regina is approximately 200 km northwest of the Project and hosts an international airport.

A former Canadian Pacific Railway traverses the Project (east-west) and runs through the towns of Torquay and Estevan, along which there is a loading terminal at Bromhead at 14-08-003-13W2 which is approximately 60 km west of Estevan, with a capacity for 80 railcars in a spur line called Long Creek Railroad. The railroad is now locally owned and hosts grain and fracking sand for the petroleum activity. The main loading terminal for Prairie Lithium will be located at Estevan. The main line Canadian Pacific Weyburn railroad runs through the towns of Weyburn and Estevan. There is also a Canadian National railroad located just east of Estevan.

Numerous oil wells have been drilled within and surrounding the Project resulting in an expansive network of pipelines, fluid processing facilities and a dense infrastructure access coverage. A network of oil, gas and water handling facilities occur throughout the region. Access has been acquired to a pre-existing wellbore in October 2021 (well 104/01-02-001-12W2) for testing of the lithium content and deliverability.

Power will be supplied by SaskPower transmission and/or distribution lines which run across the Project in proximity to the facility and well pads.

Natural gas will be supplied by SaskEnergy which infrastructure runs across the Project in proximity to the facility and well pads.

The project will have a central headquarters located in Estevan or Weyburn for bulk storage of reagents to be dispatched to individual well pad operations as well as additional operating and maintenance support personnel. Each well pad will have truck access for unloading reagents as well as loading product to be shipped to customers.

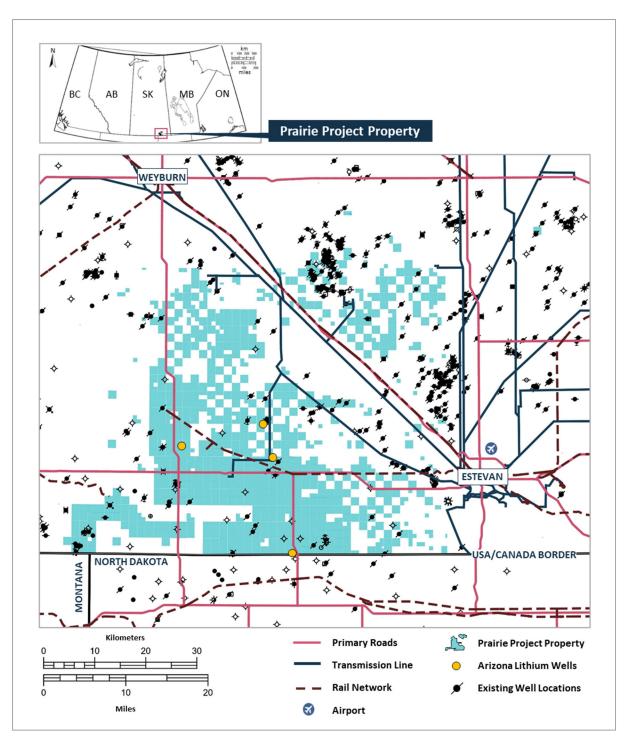


Figure 15: Location map of Arizona Lithium's Prairie Project Property illustrating major infrastructure (primary roads, rail, highline power transmission lines)

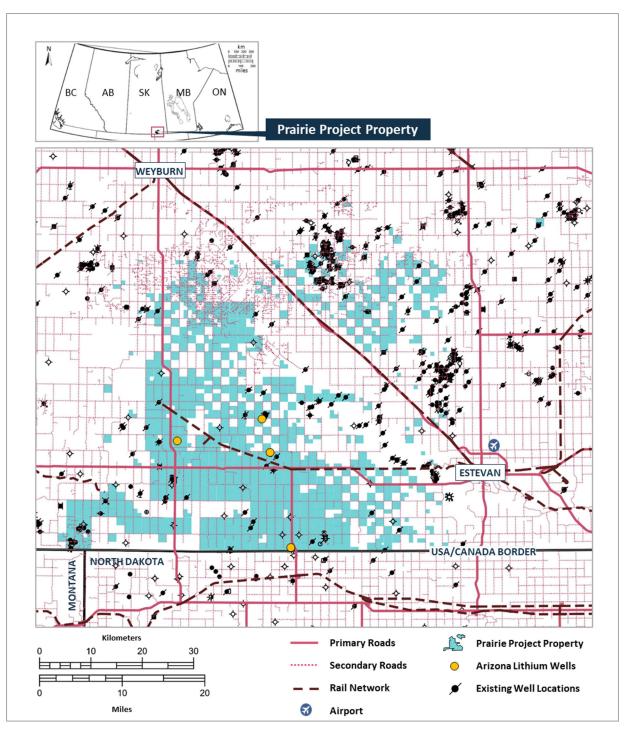


Figure 16: Location map of Arizona Lithium's Prairie Project Property including secondary roads

11.0 Market Assessment and Pricing

Lithium is in a period of transformation from a small niche market to a critical metal at the heart of the energy transition.

In 2010, global demand for lithium chemicals was less than 100K metric tons (MT) of lithium carbonate equivalents (LCEs) with sales spread across multiple market segments including: glass, grease, pharmaceuticals, synthetic rubber, and lithium-ion batteries primarily used in mobile phones and other portable electronics.

By 2020, demand had grown to over 300K MT LCE, with battery-related use approximately 60% of the market, primarily due to growing demand for electric transportation (EVs, buses, etc).

By 2030, demand may exceed 3,000K MT with over 90% of use related to lithium-ion batteries in both electric transportation and energy storage. Demand for traditional non battery applications will continue to grow at low single digit rates. Based on the time it takes greenfield lithium projects to be developed and come into production, it is doubtful that the supply response will be equal to demand growth for the remainder of the decade.

The consulting company McKinsey forecasts lithium-ion battery cell demand will grow from 700 gigawatt hours (GWH) in 2022 to 4,700 GWH in 2030 as shown in Figure 17. Each terawatt hour (1,000 GWH) requires a minimum of 800K MT of LCE.

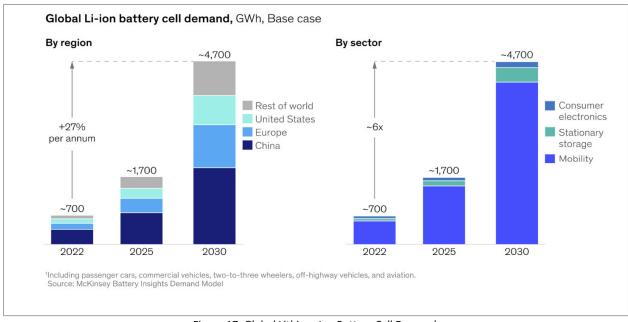


Figure 17: Global Lithium-Ion Battery Cell Demand

The consultancy Rho Motion forecasts 2023 global EV sales of 13.8 million units up 31% from 2022 and 2024 sales up an additional 30% to 18.0 million units. By 2030, Rho Motion forecasts approximately 3,200 GWH of battery demand for just the EV segment (Figure 18).

The world's largest lithium producer, Albemarle, also forecasts a robust demand pattern for LCE shown in Figure 18. Note the lithium use aligns well with the GWH forecast in Figure 17.

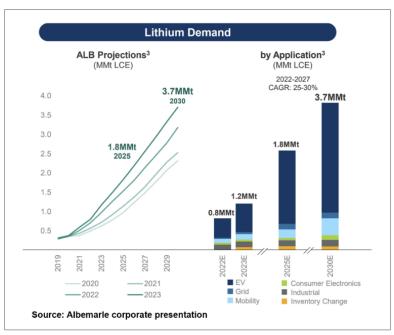


Figure 18: Lithium Demand

Asia will remain the largest market for lithium chemicals for the remainder of the decade. China currently has 70% of lithium-ion battery cell production capacity and will remain the largest single market for EVs into the next decade. Korea and Japan are also significant battery producers.

North America is expected to become the second-largest market for lithium chemicals over the next decade. US President Joe Biden has taken several steps to support growth of the domestic EV market.

- The American Jobs Plan proposed \$174 billion of investment to support development of the US EV market.
- Providing tax credits for EVs worth up to \$7,500 for a new EV and \$3,750 for a used EV.
- Expanding access to charging stations with a goal of installing 500,000 new EV chargers by 2030.
- Setting an ambitious goal of 50% of 2030 US auto sales being EVs by 2030.

The European Union (EU) is supporting the growth of lithium-ion batteries through their "Green Deal" with programs similar to those in the US and a stated objective of making Europe the first carbon neutral continent by 2050.

Lithium-ion batteries will play a central role in the global energy transition. Ensuring adequate supply of lithium chemicals to support the growth of battery demand is becoming a global concern.

11.1 Lithium Supply and Demand

The supply of lithium chemicals is expected to be tight for the remainder of the decade and possibly longer by most experienced analysts. Due to a long and complex supply chain and rapidly growing demand, shortages of lithium chemicals can occur when the industry is operating above 90-95% of capacity. Demand is likely to exceed total supply more often than not over the next decade.

Quality requirements present another challenge as most EV batteries have rigorous raw material qualification requirements. Lithium for use in batteries remains a specialty chemical rather than a commodity.

Advisory firm Global Lithium's supply and demand forecast is shown in Figure 19. Although the supply line appears in relative balance with demand in some years, the complexity of the supply chain will mean a portion of consumers may have difficulty sourcing qualified product in adequate volumes on a timely basis creating upward price pressure.

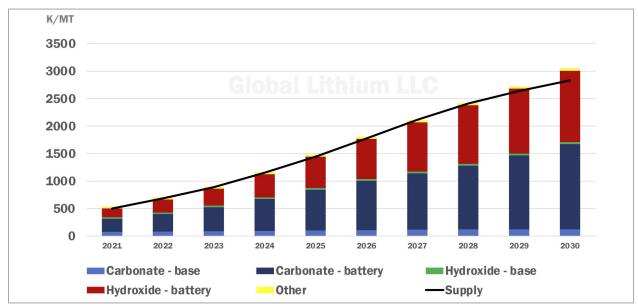


Figure 19: Lithium Supply and Demand 2021 to 2030

The two fastest growing lithium chemicals will be battery quality hydroxide and carbonate through the remainder of this decade. These chemicals are produced primarily from two types of resources: hard rock (spodumene) and brines although there will be production from sedimentary assets (also referred to as clay) later in this decade. Lithium chemical supply from recycling is not expected to be even 10% of supply until sometime in the 2030s.

Lithium hydroxide is primarily used in longer range EV batteries requiring high nickel content while carbonate is favored in lower capacity, less expensive EV batteries, electric buses, and energy storage systems. Although it is difficult to accurately forecast the exact future mix of cathode materials and whether carbonate or hydroxide will be required; the diversity of the battery market will likely result in a continued tight market for both forms of lithium chemicals into the next decade. Figure 19 shows a relatively even balance of carbonate and hydroxide demand in 2030.

Lithium carbonate produced from brine sources is almost universally lower cost than the output from hard rock assets, giving brine-based sources a competitive advantage should market conditions move to an oversupply situation in the future.

Currently Western Australia is the largest global source of lithium values and is on track to supply over 40% of the total global LCEs in 2023 mostly in the form of spodumene concentrate converted in China to lithium chemicals. Over the next several years, Australia will convert increasingly significant volumes of their spodumene into lithium chemicals forcing China to seek feedstock elsewhere.

Chile is the second largest lithium producer supplying approximately 30% of LCEs globally. While China is the largest producer of lithium chemicals globally, most of their output is from imported feedstock. China is currently the third largest producer of LCEs from low quality domestic brine and hardrock resources. Argentina is the fourth largest producer of lithium values globally.

In the next five years, Argentina may move from the fourth largest producer to third position and possibly second position behind Australia by 2030 based on the number of brine projects in development. Brazil, Africa, Canada, and the US are also expected to become significant LCE producers by 2030.

Lithium chemicals are supplied in a variety of package types and sizes; however, most volumes are shipped in FIBC (flexible intermediate bulk containers) known as the "super sacks." The most used size is one metric ton; however, many battery customers request a custom volume tied to their specific batch size. Other common packages are: 500 kg super sacks, 20 or 25 kg small bags, or 100 kg fiber drums with a polyethylene liner.

11.2 Lithium Carbonate Price

Over the past few years, the price of lithium has been volatile. In 2017 the price of lithium carbonate peaked at almost \$30/kg before several hard rock mines in Western Australia came online during 2018 and 2019 leading to a temporary oversupply situation where price fell below \$5/kg in China and to as low as \$8/kg for battery quality carbonate in Korea. In late 2020, EV growth in China and Europe moved the market back to a shortage situation. Lithium carbonate pricing from 2016 to December 2023 is shown below in Figure 20. The China spot market saw lithium carbonate price exceed \$80/kg briefly before moderating. Spot pricing in China was very volatile in late 2022 through Q4 2023. Contract prices outside China have trended lower but as of Q4 2023 are often still double the China spot price.

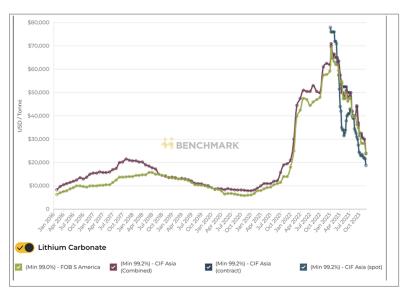


Figure 20: Carbonate Pricing from January 2016 to December 2023

Global Lithium LLC estimates that large contract pricing will trade well above the cost curve in a range from the high \$20s/kg to \$40/kg through 2030 based on the assumption that, on average, demand will exceed supply until at least the early 2030s. The price scenarios in Figure 21 include an average of the price forecasts of three major investment banks plus the high and low. Also included is the high end of the cost

curve, Global Lithium's estimate of ex China contract pricing and the Global Lithium price recommendation for PEA economics.

Over the past several years, the high end of the cost curve has been independent Chinese lithium chemical converters that source spodumene concentrate from offshore — mostly Australia but also to a limited extent from other countries. When spodumene prices are over \$2,500/MT the converter cost curve will be over \$25,000/MT. Recently spodumene prices have declined from the 2022 highs making vertically integrated lepidolite production in China the high end of the cost curve.

For purposes of estimating new project future cash flows, Global Lithium recommends a conservative approach using a price below the forecast high end of the cost curve leaving room for significant upside. Although Global Lithium forecasts global average prices well above the green line in Figure 21, using a conservative price is recommended in case of unforeseen market circumstances.

Most forecasters do not predict prices beyond 2030. Global Lithium recommends using a price of \$21,000 from 2031 to 2038.

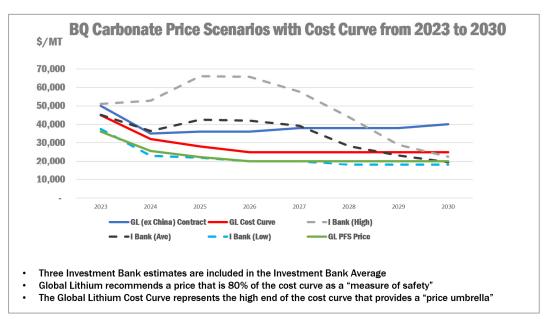


Figure 21: BQ Carbonate Price Scenarios with Cost Curve from 2023 to 2030

11.3 Discount for Downstream Conversion to Battery Quality Lithium Chemicals

At this stage in the development of the Prairie Project, Arizona Lithium does not intend to make battery quality lithium chemicals at the well pad. The operating strategy at each well pad facility is to produce the highest quality lithium chemical at the lowest environmental impact and cost. The high quality of the Prairie Project brine, combined with the latest advances in DLE and CFRO technology, results in the production of a near battery quality product; however, additional purification is necessary to achieve the specification required by most cathode and battery manufacturers. As a result of this strategy, a discount to the pricing scenarios described in Figure 21 is required to represent the value that must be added to the well pad lithium product by others further down the supply chain. In this regard, South American advisory firm iLi Markets assisted by Ad-Infinitum, examined the Prairie Project well pad product and

provided a formula for determining an appropriate discount. Using a conventional lithium carbonate flowsheet with bicarbonation, ion exchange, and crystallization it was determined that a base conversion charge of \$2,606 per tonne LCE was appropriate given the following assumptions:

- Regional pricing for electricity and reagents
- The converter is the end-user (no profit margin included for 3rd party converter)
- No transportation cost included from conversion facility to battery producer
- Brownfield or existing conversion facility

Using the Global Lithium conservative price of \$21,000 per tonne, the netback price for the lithium product produced at each well pad is \$18,394 per tonne.

12.0 Costs, Revenue Factors, and Economics

12.1 Capital Cost Estimating

The Capital Cost is expressed in fourth-quarter 2023 United States dollars. No provision has been included to offset future escalation. Costs for wells, reagents, and some equipment were provided in Canadian Dollars. A conversion rate of 1USD=1.36CA has been used in the estimate.

The Capital Cost is based on historical information for the site, preliminary testwork, preliminary block flow diagrams and flowsheets, and conceptual layouts for the plants. For the capital cost of the processing facilities, a "distributed percentage factoring" technique has been employed to develop an estimate at this preliminary stage where there is a lack of design data and specific requirements from which to base costs. The supply cost of the mechanical equipment for the facilities is used as the basis for calculating the overall cost of the facility. Various percentages of the equipment costs are then applied to obtain values for each of the prime commodity accounts, which include earthwork, concrete, structural steel, mechanical, piping, electrical and instrumentation.

The basis of mechanical equipment costs used in this estimate include budgetary equipment pricing from vendors, in-house historical data, and costs from other databases. Costs for the DLE equipment was provided by Energy Source Minerals (ESM). Costs for the lithium production plant was provided by Gradiant Corporation (Gradiant). In addition to process facility costs derived by distributed percentage factoring, other costs, including well (producer, injection, and water) drilling and pumping costs and Owner's costs are provided by Arizona Lithium.

The order of magnitude capital cost has been developed to a level sufficient to assess/evaluate the project concept and overall viability. The estimate can be classified as an AACE Class 4 estimate and after inclusion of the contingency, the estimate is thought be in the accuracy range of minus 30% to plus 30%. Contingency of 15% was used due to the packaged equipment and wellfield equipment that comprise the majority of the costs being firm quotations. Table 11 summarizes the estimated cost of the Project.

Table 11: Capital Cost Summary

Description	Total Cost (USD)
Direct Costs	
Wells	55,055,936
Civil	984,608
Concrete and Foundations	4,050,000
Structural Steel	3,305,150
Buildings	3,938,433
Mechanical	107,433,161
Piping	14,593,459
Electrical	8,184,516
Instrumentation	4,135,355
Subtotal Direct Costs	201,690,617
Indirect Costs	
Construction Indirects	5,653,265
Construction Equipment	2,261,306
Third Party QA/QC	678,392
Engineering & Procurement Services	13,291,849
Construction Management Services	9,968,886
Pre-Operational Testing & Start-Up Services	904,522
Vendor Reps	2,461,521
Spare Parts	1,476,912
Initial Fills	200,000
ILiAD™ LSA First Fill (DLE Sorbent)	35,000,000
Freight	6,878,756
Owners Cost	10,000,000
Taxes (excluded)	-
Subtotal Indirect Costs	88,775,408
Contingency (15%)	43,569,904
Total Project Cost	334,035,929

12.2 Operating Costs

Operating costs have been derived from a combination of factors and quotations. All reagents have been quoted by local suppliers with consumptions based on pilot testing and vendor mass balances, while natural gas and electricity were derived from local utility pricing and estimated consumption based on mass balances and equipment data. Waste handling and leasing costs have been provided by Arizona Lithium from quotations with labor costs via internal forecasting. Allowances for Selling, General, and Administrative (SG&A) costs, maintenance and operating supply costs are assumed as a factor of operating cost subtotal. Annual operating costs for the project with three well pads operational at nominal production rates is \$2,819 per tonne of well pad product and is detailed in Table 12. Total All-In Sustaining Cost including Crown Royalty, DLE licensing fee, and sustaining CAPEX is \$5,121 per tonne of well pad product.

Table 12: Operating Cost Breakdown (any inconsistency to final number due to rounding)

Description / Activity	Annual Cost (USD)	US\$ / tonne LC product
Utilities	7,586,182	1,183
Reagents	5,455,099	851
Direct Labor	3,009,500	469
SG&A	860,948	134
Maintenance Supplies	778,030	121
Disposal of Water Treatment Filter Cake	279,043	44
Operating Supplies	77,803	12
Land Leasing	33,300	5
Total O&M Costs	18,079,903	2,819

12.3 Revenue Factors and Economics

12.3.1 Financial Analysis

An economic analysis of the Project was conducted to determine its financial viability. Capital and operational expenditures presented in previous sections have been used in this model. Prices for lithium carbonate and deductions for actual product produced were based on market studies carried out by independent third parties.

The project pro forma is 100% equity based. The economic analysis, using a conservatively low price of \$21,000 tonne lithium carbonate, indicates a pre-tax NPV, discounted at 8%, of approximately \$448 million and a pre-tax Internal Rate of Return ("IRR") of approximately 23.9%. Post-tax results are \$312 million and 20.4% respectively.

To determine the influence of different input parameters on projected results, a sensitivity analysis has also been carried out. Parameters considered in this analysis were CAPEX, selling prices, overall lithium recovery, and OPEX. Results obtained include Net Present Values (NPV) for a range of discount rates, and Internal Rate of Return (IRR).

Evaluation criteria and tax assumptions used in developing the cash flow model are detailed in the corresponding section. The model assumes the current charges for royalties, licenses, taxes, and all obligations. AZL corporate costs and management fees have been excluded.

12.3.2 Economic Evaluation Results

The economic evaluation results for four sensitivity cases are presented in Table 13 - Table 16. The sensitivity cases are combined in tornado charts for pre-tax and post-tax formats in Figure 22 and Figure 23.

Table 13: Sensitivity Analysis to Price Variation (8% Discount Rate)

Parameter	Low Price Case (-25%) 15,750 \$/tonne	Base Price Case 21,000 \$/tonne	High Price Case (+25%) 26,250 \$/tonne
NPV Pre-Tax (\$ millions)	205	448	691
NPV Post-Tax (\$ millions)	133	312	491
IRR Pre-Tax (%)	15.8	23.9	31.4
IRR Post-Tax (%)	13.7	20.4	26.4

Table 14: Sensitivity Analysis to Initial CAPEX Variation (8% Discount Rate)

Parameter	Low CAPEX Case (-25%) \$251M	Base CAPEX Case \$334M	High CAPEX Case (+25%) \$418M
NPV Pre-Tax (\$ millions)	526	448	369
NPV Post-Tax (\$ millions)	390	312	234
IRR Pre-Tax (%)	31.8	23.9	18.9
IRR Post-Tax (%)	28.0	20.4	15.7

Table 15: Sensitivity Analysis to OPEX Variation (8% Discount Rate)

Parameter	Low OPEX Case (-25%) \$264M	Base OPEX Case \$353M	High OPEX Case (+25%) \$441M
NPV Pre-Tax (\$ millions)	488	448	407
NPV Post-Tax (\$ millions)	342	312	283
IRR Pre-Tax (%)	25.2	23.9	22.6
IRR Post-Tax (%)	21.5	20.4	19.4

Table 16: Sensitivity Analysis to Variation in Overall Lithium Recovery (8% Discount Rate)

Parameter	Low Recovery Case 86%	Base Recovery Case 90%	High Recovery Case 94%
NPV Pre-Tax (\$ millions)	405	448	491
NPV Post-Tax (\$ millions)	280	312	344
IRR Pre-Tax (%)	22.5	23.9	25.3
IRR Post-Tax (%)	19.3	20.4	21.5

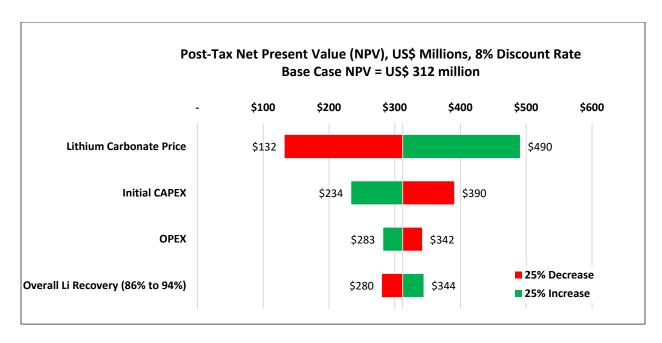


Figure 22: Net present value tornado chart for lithium carbonate price, initial CAPEX, OPEX, and overall Li recovery.

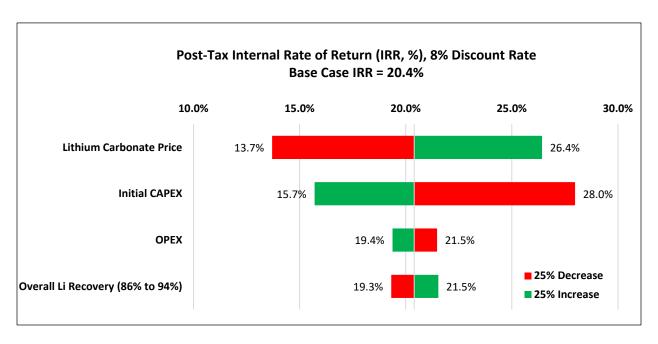


Figure 23: Internal rate of return tornado chart for lithium carbonate price, initial CAPEX, OPEX, and overall Li recovery.

13.0 Recommendations and Future Considerations

In addition to continuing exploration and overall pre-construction design development of the project, the study has produced the following recommendations and considerations:

- Incorporate new iLiAD pilot testing, performed Nov 2023 Feb 2024, into the basis of design and begin procurement activities for long-lead process equipment.
- The financial sensitivity analysis indicates that initial CAPEX is a major factor in determining internal rate of return. Design development during the study revealed significant potential for reducing initial CAPEX, particularly related to the general arrangement between tanks and process equipment. Begin the next stage of design development with a focus on CAPEX reduction and reducing overall material take-offs and construction indirect cost.
- No financial benefits associated with tax credits or other financial incentives have been included
 in the study. To the extent available to the jurisdiction, pursue opportunities for tax credits and
 financial incentives to further ease the financial burden of constructing the inaugural three well
 pads.
- Well drilling, procurement, and construction activities required to bring on new production only take approximately one year for each new well pad producing approximately 2,000 MTPY LCE. The ability to fast-track production in this manner will likely compel a rapid expansion following completion of the inaugural three well pads. Consider beginning work now on a master plan for the resource laying out locations for at least twenty new pads including necessary resource modeling for the brine disposal well network in the Madison Group area of the formation.
- Continue testing and design development with Gradiant at AZL's research center to optimize
 performance of the counter-flow reverse osmosis technology, including the water treatment steps
 that precede CFRO.
- Continue pilot-scale testing and production of lithium products at AZL's research center. Consider
 working with offtake partners and third-party converters to develop a universal specification for
 the well pad lithium product that can be used to produce a variety of battery quality lithium
 chemicals in downstream purification processes.

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) is approximately 200 km southeast of the city of Regina between the towns of Estevan and Weyburn. The centre of the property has a latitude 49.21363°N and a longitude 103.63518°W. The southern limit of the property is on the border with the states of North Dakota and Montana, United States. The subsurface permits of the property itself encompass parts of Townships 1 to 7 and Ranges 7 to 16 West of the 2nd Meridian.

Criteria	JORC Code explanation	Commentary
Sampling techniques	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. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report. 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.	Historical well data from oil and gas exploration and newly collected data from wells drilled or recompleted specifically to test lithium concentrations and brine productivity were used to evaluate the lithium Mineral Resource. In 2021 and 2022, six wells have been drilled and/or recompleted in the Duperow Formation in the Project area: Wells drilled and/or recompleted by Arizona Lithium: • 101/14-33-002-12W2 (Year 2021) • 104/01-02-001-12W2 (Year 2021) • 141/16-20-003-12W2 (Year 2022) Wells drilled and/or recompleted by Hub City Lithium in partnership with ROK Resources: • 111/11-02-009-13W2 (Year 2022) • 101/14-36-008-13W2 (Year 2022) • 101/02-22-007-09W2 (Year 2022) Brine collection procedures for the wells tested since 2021 are outlined as follows: • After the wells were drilled, they were 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. • During well testing, formation water

Criteria	JORC Code explanation	Commentary
Criteria	JORC Code explanation	was brought to surface using an Electrical Submersible Pump (ESP) and by swabbing small volumes of fluid. During swabbing operations, packers were placed between each individual swabbed zone. The packers were pressure tested to ensure zonal isolation during the swabbing operations. • Further measures taken to ensure sample representativity are discussed in 'Drill Sample Recovery'. Legacy field sampling for lithium occurred between 1996 and 2019 as part of a basin wide characterization and mapping program. Seventeen samples considered representative of the Duperow Formation were analysed for lithium within, and immediately adjacent to, the Project. The samples were taken from Drill stem tests (DSTs), swab samples, and directly from well-heads of producing Duperow Formation oil wells as part of brine sampling programs by the Saskatchewan Geological Survey and University of Alberta. Multiple steps were taken to acquire representative brine samples. Procedures are outlined below, with excerpts taken from the Rostron et al. (2002) and Jensen (2015) publications. • Drill stem test samples were voluntarily collected by operators and placed into sample kits for analysis. Sample kits consisted of three empty 250 ml bottles
		Drill stem test samples were voluntarily collected by operators and placed into sample kits for analysis. Sample kits
		formation fluid and the third container was filled with drilling fluid. Bottles were labelled "A", "B", and "Drilling Fluid". All three samples were shipped to the Saskatchewan Industry and

Criteria	JORC Code explanation	Commentary
		sealed for shipment and analysis. Sample containers were sealed with tamper-proof tape at the wellsite.
Drilling techniques	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).	Brine samples were collected from historical producing Duperow Formation wells, along with six wells drilled and/or recompleted in the Project area since 2021. Wells drilled specifically to test the Duperow Formation in this area use reverse circulation drilling, are drilled with brine mud, and are drilled with a bit size of 222 mm, which is standard for the specific types of wells. The shallowest sample used in the lithium Mineral Estimate was collected northeast of
		the Property at a depth of 1,700 mKB (121/10-03-008-05W2). The deepest sample was collected southeast of the Property from a depth of 3,087 mKB (API# 33-105-01468-00-00)
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. 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.	Brine collection procedures for Arizona Lithium's tests wells (101/14-33-002-12W2, 104/01-02-001-12W2,141/16-20-003-12W2) are outlined here. • The procedures were designed and undertaken to obtain the highest quality samples of original formation fluids. • Prior to sampling operations, all lines and tanks were cleaned to remove any possible residual brine or hydrocarbon contamination. Samples were collected directly at the wellhead, or from sampling ports attached to 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. • Field determination of density, resistivity, and pH of the initial

Criteria	JORC Code explanation	Commentary
Criteria	JORC Code explanation	samples from the well were used to determine when the well was producing representative samples. 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 prefiltered through glass wool. The sample was then filtered through a standard 0.45-micron filter to remove any particulates or oil. Once sufficient volume was filtered for analysis, samples were split into two to four containers (typically 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

Criteria	JORC Code explanation	Commentary
		their NI 43-101 Technical Report (April, 2023).
Logging	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. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. The total length and percentage of the relevant intersections logged.	their NI 43-101 Technical Report (April, 2023). Open-hole wireline logs provide the most widely available information to determine the porosity and water volume used in the Mineral Resource estimate. A petrophysical evaluation from open-hole
		 formation acoustic properties (e.g., velocity), used for lithology and porosity determination. Resistivity logging tool - measurement
		of formation conductivity (reciprocal is

Criteria	JORC Code explanation	Commentary
		formation resistivity) at different 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).
		 Quality Control and Construction of Arizona Lithium's Petrophysical Models Includes: Geological formations tops are used to assign petrophysical parameters to each zone. Cores are depth shifted to match wireline logs and core samples are assigned to geological intervals. Porosity and permeability crossplotting determines the relationship between the matrix porosity and matrix permeability. Grain Density histograms determine the appropriate mineral density for the porosity calculation. Temperature data is collected from bottom hole gauges. Temperature data is tabulated from all available data from any geological formation to determine the overall geothermal gradient in the area. This is used for water saturation calculations and salinity estimates from wireline logs. Water chemistry data is used for water saturation determination, salinity estimation and water compatibility studies.

Sub-sampling techniques and sample techniques and sample preparation **If core, whether cut or sawn and whether quarter, half or all core taken.* **If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* **For all sample types, the nature, quality and appropriateness of the sample preparation technique.* **Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* **Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampled.* **Whether sample sizes are appropriate to the grain size of the material being sampled.* **Whether sample sizes are appropriate to the grain size of the material being sampled.* **Whether sample sizes are appropriate to the grain size of the material being sampled.* **The qualification test consisted of analysing a set of three samples for lithium concentration on an artificially prepared saline brine solution, created by Salman Safarimohaabad (University of Alberta/Recion Technologies Inc.). The original stock solution contained 116 mg/L lithium and was diluted 1:1 and 1:2 to create the sample set. Each laboratory was evaluated for accuracy (i.e., how close the three samples were to each other), prior to selection. This prepared sample was repeatedly run as part of major sample batches for Quality Assurance Quality Control (QA/QC). **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	Criteria	JORC Code explanation	Commentary
and was diluted 1:1 and 1:2 to create the sample set. Each laboratory was evaluated for accuracy (i.e., how close to 116 mg/L) and precision (i.e., how close the three samples were to each other), prior to selection. This prepared sample was repeatedly run as part of major sample batches for Quality Assurance Quality Control (QA/QC). • 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	Sub- sampling techniques and sample	 If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. For all sample types, the nature, quality and appropriateness of the sample preparation technique. Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. 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. Whether sample sizes are appropriate to the grain size of the material being 	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'. To ensure precise and accurate measurements of lithium concentration, multiple laboratories were used for analyses for Arizona Lithium's test wells (101/14-33-002-12W2, 104/01-02-001-12W2, 141/16-20-003-12W2). • Each laboratory selected for use was required to pass a qualification test prior to their inclusion in the Project. The qualification test consisted of analysing a set of three samples for lithium concentration on an artificially prepared saline brine solution, created by Salman Safarimohsenabad (University of Alberta/Recion
removing two to three times the			Technologies Inc.). The original stock solution contained 116 mg/L lithium and was diluted 1:1 and 1:2 to create the sample set. Each laboratory was evaluated for accuracy (i.e., how close to 116 mg/L) and precision (i.e., how close the three samples were to each other), prior to selection. This prepared sample was repeatedly run as part of major sample batches for Quality Assurance Quality Control (QA/QC). • 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

Criteria	JORC Code explanation	Commentary
		filtered fluid was collected for laboratory analysis. Each laboratory was sent approximately 1 L. Each laboratory analysis takes less than 1 mL, so each lab had sufficient sample volume to run repeats, etc.
		Similar sample measurement procedures used for Hub City Lithium's test wells (111/11-02-009-13W2, 101/14-36-008-13W2, 101/02-22-007-09W2) are documented in their NI 43-101 Technical Report (April, 2023).
		Sample measurement procedures for legacy field sampling for lithium that occurred between 1996 and 2019 include:
		 Samples were analysed for many dissolved chemical species and various isotopes. Several different laboratories were used, depending on the constituent being analysed. Overall, the analytical techniques used in these studies produced high quality saline brine analyses, with routinely charge balance errors of less than 5%.
Quality of assay data and laboratory tests	 The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. For geophysical tools, spectrometers, 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. 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. 	Up to four laboratories of different affiliations (e.g., large commercial, small commercial, internal, and academic) were utilised for analyses for Arizona Lithium's test wells. Hub City Lithium used Isobrine Solutions to analyse the lithium samples from their wells. The laboratories Include: Arizona Lithium laboratory (Emerald Park, Saskatchewan) - Arizona Lithium's internal laboratory provided initial rapid (<12 hour) analysis of lithium and sodium concentrations of sampled brines. Results from this laboratory were used for selecting samples for further/confirmation analyses at the other two laboratories. Due to the lack of independent status, concentrations

Criteria	JORC Code explanation	Commentary
		determined by this laboratory were not used in the final lithium concentration mapping but were used qualitatively and for additional confirmation of the results from the other laboratories.
		Isobrine Solutions, a small commercial laboratory in Edmonton, Alberta, and was affiliated with Arizona Lithium, was selected to provide rapid (one-to-two-day turnaround) 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 mapping, but only after they were confirmed by the other two participating laboratories, thereby mitigating the question of independence from Arizona Lithium. 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.
		Element Materials Technology (Element) is a large commercial laboratory in Edmonton, Alberta. Element was used for lithium and alkalinity analysis of selected samples, as they have been used for over 20 years as part of the University of Alberta/Isobrine/Saskatchewan Geological Survey sampling programs, and consequently brings continuity of the laboratory analysis. Element Materials Technology is accredited by A2LA to ISO/IEC 17025:2017. All the lithium analyses conducted by Element were done on an ICP-MS. AGAT Laboratories (AGAT) is a large
		commercial laboratory in Edmonton,

Criteria	JORC Code explanation	Commentary
		Alberta, and was used to confirm lithium analysis of selected samples of the other three laboratories. They are considered the most 'arm's length' to the Project. AGAT is accredited by CALA to ISO/IEC 17025:2017. AGAT conducted analyses for lithium using both ICP/MS, and ICP/OES, and after extensive testing it was determined that their ICP/OES using a constant 100 x dilution of samples provided accurate and precise results.
Verification of sampling and assaying	 The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data. 	The Mineral Resource assessment was based on two types of lithium data: historical data collected from oil and gas infrastructure in the Project; and reservoir testing completed by Arizona Lithium and Hub City Lithium in 2021 and 2022. 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 program, confirming the reported 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. A total of 72 samples were sent for analysis of lithium concentration during testing of the 101/14-33-002-12W2 and 104/01-02-001-12W2 wells. All 72 samples were analysed by Arizona Lithium and Isobrine Solutions. A subset of 29 of those 72 samples were sent to Element and of those 29 samples, 26 were sent for analysis to AGAT. Samples sent to three/four laboratories were the last two samples collected in a time series from each of the 14 zones investigated in the sampling program (three combined flow tests, eight zones in 101/14-33-002-12W2M, and three zones in 104/01-02-001-12W2).

Criteria	JORC Code explanation	Commentary
		A total of 75 samples were sent for analysis of lithium concentration during testing of the 141/16-20-003-12W2 well. 32 samples were analysed by Isobrine Solutions, 21 samples were analysed by Element and 22 samples were analysed by Arizona Lithium. In a typical hydrochemical sampling program, the QA/QC measures would include 5% to 10% blind duplicate samples to test the precision of the analyses. A total of 32 samples were analysed at Isobrine Solutions and independently analysed by at least one other laboratory (Element, or Arizona Lithium). This far exceeds the 5% to 10% duplicate sample standard. As part of the QA/QC process, the prepared laboratory standard (S. Safarimohsenabad, Recion Technologies Inc.) was included in batches to ensure continued accuracy of the laboratory analysis. Any time the laboratory obtained a lithium value outside the 110 mg/L to 120 mg/L range, repeat analyses of the entire sample batches were conducted. Hub City Lithium has tested over 50 water samples from three wells since 2021 (NI 43-101 Technical Report, April, 2023)
Location of data points	 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. Specification of the grid system used. Quality and adequacy of topographic control. 	For Arizona Lithium's test wells (101/14-33-002-12W2 and 141/16-20-003-12W2), 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. The geographical land grid format survey is in NAD 83 and UTM Zone 13N.
Data spacing and distribution	 Data spacing for reporting of Exploration Results. Whether the data spacing, and distribution is sufficient to establish the degree of geological and grade 	Lithium concentration samples from Duperow Formation brines have been collected all around Arizona Lithium's Property.

Criteria	JORC Code explanation	Commentary
	continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. • Whether sample compositing has been applied.	The range in spacing between wells with lithium concentration measurements varies from 610 m between the most closely spaced wells to over 68,000 m between the most widely spaced wells. The Duperow Aquifer is judged to be hydraulically continuous within, and far beyond, the Arizona Lithium resource area. The DST-measured lithium concentrations in the Duperow Formation suggest that lithium concentrations are continuous across the Project. This is based on regional hydrochemical mapping conducted over 25 years demonstrating systematic patterns of water chemistry across the project area. The Saskatchewan Phanerozoic Fluids and Petroleum Systems Project (Jensen et al., 2015) was based on hundreds of water samples collected and submitted to the Government of Saskatchewan. The reason there are not an equivalent number of lithium analyses, is simply because the operators were not required to analyse for lithium. Arizona Lithium's sampling program supports the interpretation of regionally consistent lithium values. Furthermore, sampling program results suggest some of the variability between previously reported lithium concentrations in the Duperow Formation may be due to the differing geologic units that were sampled.
Orientation of data in relation to geological structure	 Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. 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. 	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.
Sample security	The measures taken to ensure sample security.	Sample security procedures for Arizona Lithium's test wells (101/14-33-002-12W2,

Criteria	JORC Code explanation	Commentary
		104/01-02-001-12W2, 141/16-20-003- 12W2):
		 Samples were collected directly from the wellhead 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. After field processing (measurement, filtration, splitting) samples were labelled with anonymous tracking numbers, sealed, security taped (tamper proof seals), and shipped to the laboratories. The samples were later double checked and sent to the third-party laboratories by Purolator shipping services 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. Similar sample security procedures used for Hub City Lithium's test wells (111/11-02-009-13W2, 101/14-36-008-13W2,101/02-22-007-09W2) are documented in their NI 43-101 Technical Report (April,2023).
		Sample security procedures for legacy field sampling for lithium that occurred between 1996 and 2019:
		Samples were transported to the University of Alberta, where they were relabelled, transferred, and split into "anonymous" sample containers. This was conducted to maintain confidentiality of the operator, date, well name, location, interval, and fluid

Criteria	JORC Code explanation	Commentary
		recovery. The samples were then sent to various laboratories for analysis.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	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 witnessing the testing at the 101/14-33-002-12W2 well 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. Arizona Lithium's QP was not on site during the collection of the water samples from the 141/16-20-003-12W2 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. The Author of Hub City Lithium's NI 43-101 Technical Report (April, 2023) has completed a detailed review of all technical data and information provided in the report. Key aspects include verification of sample analysis, well-completion and production information, mineral ownership, and geologic data. The verification process involved reviewing all third-party reports and where possible, independently confirming data supplied by Hub City Lithium as valid. Interviews with testing companies, field staff and Hub City
		Lithium's employees were conducted as part of the review process.

Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	 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. 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. 	Arizona Lithium rents and leases subsurface mineral permits in Saskatchewan close to the United States border. The crown subsurface minerals are rented or leased from the Saskatchewan Provincial Government and cover 354,920 acres. Petroleum and Natural Gas (PNG) permits also exist across Arizona Lithium's Property and are leased to oil and gas producers. All crown permits and stratigraphic intervals are held 100% by Arizona Lithium or subleased from a geothermal company Deep Earth Energy Production Corp. (DEEP). Arizona Lithium entered into a binding legal Subsurface Mineral Permit Acquisition Agreement (SMPAA) with DEEP on October 20, 2021. The SMPAA covers an Area of Mutual Interest (AMI) over Townships 1 to 4 and Ranges 7 to 16 West of the 2nd Meridian. Any pre-existing or recently purchased subsurface mineral permits within the AMI now possess a stratified stratigraphic arrangement. Arizona Lithium holds 100% working interest in mineral rights from Top Madison Group to Top Red River Formation, and DEEP holds 100% working interest in mineral rights from Top Red River Formation to Precambrian. No back-in rights, payments, or other agreements and encumbrances are applicable. The subsurface mineral permits are rented from the Saskatchewan Provincial Government, and the Subsurface Mineral Leases are leased. There has been no prior ownership of the subsurface mineral permits across the Project for lithium. Two mineral permits were awarded on December 17, 2019, which will expire in December 2027; three permits were acquired on April 20, 2020, which expire in April 2028; a total of 34 permits were

Criteria	JORC Code explanation	Commentary
		acquired on April 19, 2021, which expire in April 2029; and a total of 16 permits were acquired on August 23, 2021, which expire in August 2029. On September 8th, 2022, two permits were converted into 21-year mineral leases and expire on April 11th, 2043. An additional 18 permits have been sub-leased from DEEP.
		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.
		Within the project area, Arizona Lithium leases varied % interest in mineral rights from Canpar Holdings Ltd. and Freehold Royalties Ltd. for a total of 26,445 net acres from Canpar Holdings Ltd. and 12,968 net acres from Freehold Royalties Ltd.
		The lease out date for these leases is November 15, 2023.
		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.
		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.
		Appendix 1: Summary of Arizona Lithium's subsurface mineral permits and leases.

Exploration done by other parties

 Acknowledgment and appraisal of exploration by other parties.

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.

Other parties, including government and academic research teams, have also leveraged oil and gas wells to evaluate brine chemistry. Academic research (lampen and Rostron, 2000; lampen, 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 southern and in central Saskatchewan.

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.

Historical brine samples from 15 wells in and adjacent to Arizona Lithium's Project have been analysed for lithium concentrations and are interpreted to be representative of the Duperow Formation brine (lampen and Rostron, 2000; lampen, 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). Two of the wells (121/09- 13-002-22W2 and 141/14-12-007-11W2) were sampled twice, resulting in a total of 17 representative lithium concentrations.

A total of 13 of the lithium samples were published in the referenced reports. Four samples (101/07-27-007-06W2/03, 121/09-03-007-11W2, 141/13-02-007-11W2, and 141/01-22-004-19W2/00) were sourced from an unpublished database. These

Criteria	JORC Code explanation	Commentary
		additional data points were collected and analysed by researchers at the University of Alberta between 1996 and 2004 and obtained under agreement from Isobrine Solutions Incorporated (Isobrine Solutions), a University of Alberta spin-off company. Isobrine Solutions holds a Permit to Practice from APEGA, along with a Certificate of Authorization from APEGS to practice in Saskatchewan. The data was provided to Arizona Lithium for their lithium exploration project in good faith.
		Based on the results of more recent drilling and testing in 2021 and 2022 (below), 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.
		 Wells drilled and tested by Arizona Lithium: 101/14-33-002-12W2 (Year 2021) 104/01-02-001-12W2 (Year 2021) 141/16-20-003-12W2 (Year 2022) Wells drilled and tested by Hub City Lithium in partnership with ROK Resources:
		 111/11-02-009-13W2 (Year 2022) 101/14-36-008-13W2 (Year 2022) 101/02-22-007-09W2 (Year 2022)
Geology	Deposit type, geological setting and style of mineralisation.	The target interval of this Project 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).
		The Duperow Formation correlates westward with the Leduc Formation, a prominent series of reefs in the open-

Criteria	JORC Code explanation	Commentary
		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 shallowmarine, carbonate inner platform to supratidal sabkha or tidal flat (Cen and Salad Hersi, 2006).
		The deposit type being explored 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).
		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).
		Historical and newly acquired brine analysis data indicates that the Property is located within an area of extremely elevated TDS brine above 300,000 mg/L and with lithium concentrations of up to 258 mg/L within the Duperow Formation. Newly acquired geochemical data has allowed Arizona Lithium to characterize lithium content of the Duperow Formation within much of the

Criteria	JORC Code explanation	Commentary
		Property. Lithium results from wells located across the Property and beyond indicate that lithium concentrations are elevated and laterally continuous across the Property. The northern limit of elevated lithium concentrations in the Duperow Formation occurs beyond the northern limits of the Property. Elevated lithium trends extend through the Property and south into North Dakota. Lithium values indicate low lithium concentrations from R18W2 and beyond to the west.
Drill hole Information	 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: easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole length and interception depth hole length. 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. 	See Appendix 2: Summary Table of Drill Holes • 279 wells with wireline logs to determine the average porosity over the net pay interval. • 19 wells with brine samples analysed for lithium concentration.
Data aggregation methods	 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. Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used 	Based on the geologic setting, the Duperow Aquifer is judged to be hydraulically continuous within, and far beyond, the Arizona Lithium resource area. The DST-measured lithium concentrations in the Duperow Formation suggest that lithium concentrations are continuous across the Project. Arizona Lithium's and Hub City Lithium's sampling programs (2021-2022) support

Criteria	JORC Code explanation	Commentary
	for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. • The assumptions used for any reporting of metal equivalent values should be clearly stated.	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.
Relationship between mineralisation widths and intercept lengths	 These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. 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'). 	Geophysical wireline logs from wells drilled through the Duperow Formation were used to identify the top and base of the formation. A total of 570 wells were used to determine the top of the Duperow Formation and 548 wells were used to determine the base of the Duperow Formation. 279 wells with wireline logs to determine the average porosity over the net pay interval and 19 wells with brine samples were analysed for lithium concentration. The majority of the wells are vertical and drilled perpendicular to the Duperow Formation stratigraphy, and therefore perpendicular to the mineralization.
Diagrams	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.	Appropriate maps and cross sections include: • Figure A-1: Wells drilled through the Duperow Formation with Petrophysical Evaluations completed for the Resource Assessment (279 wells) • Figure A-2: Cross section of wells in Saskatchewan with lithium concentrations within and adjacent to Arizona Lithium's Property • Figure A-3: West to East Cross Section Across the Property • Figure A-4: North to South Cross Section Across the Property
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should	Table A-1: Representative lithium concentrations within the Indicated Resource area based on the mass volume and brine volume estimates.

Criteria	JORC Code explanation	Commentary
	be practiced to avoid misleading reporting of Exploration Results.	
Other substantive exploration data	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.	The concentrate produced from CFRO was converted to 99%+ lithium carbonate at AZL's Lithium Research Center in Tempe, Arizona and validated by a 3rd party laboratory, Covalent Metrology in Sunnyvale, California. DLE pilot plant test work taking place from November 2023 to February 2024 took place in Emerald Park, SK, Canada using technology provided by iLiAD Technologies, LLC. The lithium recovery and extraction calculations were based on grab samples collected every 4 hours. Samples were analyzed by three different laboratories using ICP, NMR, and flame spectroscopy instrumentation.
Further work	 The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. 	Further well drilling is planned to test pumping and injection rates. The additional wells should further demonstrate resource grade and productivity.

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
Database integrity	 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. Data validation procedures used. 	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. 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 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.
Site visits	 Comment on any site visits undertaken by the Competent Person and the outcome of those visits. If no site visits have been undertaken indicate why this is the case. 	The 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 witnessing the testing at the 101/14-33-002-12W2 well 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'.

Criteria	JORC Code explanation	Commentary
Geological interpretation	 Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit. Nature of the data used and of any assumptions made. The effect, if any, of alternative interpretations on Mineral Resource estimation. The use of geology in guiding and controlling Mineral Resource estimation. 	The Duperow Aquifer is laterally extensive with high correlation across the resource area. Based on Arizona Lithium's sampling program and historical sampling programs, the pore space is filled with a lithium-rich brine across the Project. Historical data compiled by the oil and gas industry and testing completed by Arizona Lithium, suggests it is possible to withdrawal commercial quantities of brine
	The factors affecting continuity both of grade and geology.	from the Duperow Formation. The Mineral Resource estimate is based on the total volume of water in the net pay and the interpolated lithium concentration within the resource area.
		Approximately 71% of the Mineral Resource estimate is classified as Indicated because the lithium grade, brine volume, and transmissivity have been estimated with sufficient confidence to allow the application of modifying factors in support of mine planning and evaluation of economic viability.
		In some areas, the resource estimate is classified as Inferred due to the uncertainty in the lithium grade or the uncertainty in the formation transmissivity were considered too large to support evaluation of economic viability.
		It is expected that with continued exploration, all areas of the resource can be upgraded to Indicated or Measured classifications.
Dimensions	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.	Arizona Lithium rents and leases subsurface mineral permits in Saskatchewan close to the United States border. The crown subsurface minerals are rented or leased from the Saskatchewan Provincial Government and cover 354,920 acres. Within the project area, Arizona Lithium leases varied % interest in mineral rights from Canpar Holdings Ltd. and Freehold Royalties Ltd. for a total of 26,445 net acres

Criteria	JORC Code explanation	Commentary
		from Canpar Holdings Ltd. and 12,968 net acres from Freehold Royalties Ltd. Across the Project, the top of the Duperow Formation varies in depth from 1,700 m true vertical depth (TVD) the northeast to 2,500 m TVD in the southwest. Structure elevation maps between the top of the Duperow (Seward member) and the bottom of the Duperow Formation (top of Souris River Formation) were prepared in the resource area. Between 548 wells (top Souris River Formation) and 570 wells (top Duperow Formation) were used in the interpolation of each surface. Based on the high quality of the wireline logs and the nature of the high correlation of the Duperow, the dimensions of the Mineral Resource are well constrained. Based on the geologic setting, regional hydraulic head mapping, and regional geochemical characterizations, the Duperow Aquifer is judged to be hydraulically continuous within, and far beyond, the Arizona Lithium resource area. The historical, and recently measured lithium concentrations in the Duperow Formation, also suggest that lithium concentrations are continuous across the Resource Area.
Estimation and modelling techniques	 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. The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data. 	Geological understanding of the Duperow Formation was foundational to the resource estimate. Geological mapping was completed by Arizona Lithium and interpolated structure surfaces for the intra-Duperow Formation stratigraphy were provided to Fluid Domains Inc. for construction of a three-dimensional geologic model in FEFLOW™. The geological data set used to construct the surfaces and the model are summarized in the following table.

Criteria	JORC Code explanation	Commentary	
	The assumptions made regarding recovery of by-products.	Geological data set used to of surfaces and model.	construct the
	Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur)	Interval	Number of Control Points
	for acid mine drainage characterisation).	Seward Member (top Duperow Formation)	570
	• In the case of block model interpolation, the block size in	Seward Evaporite	567
	relation to the average sample	Flat Lake Evaporite	559
	spacing and the search employed.Any assumptions behind modelling of	Upper Wymark C Anhydrite	567
	selective mining units.	Upper Wymark C	567
	Any assumptions about correlation between variables.	Upper Wymark B	565
	 Description of how the geological 	Upper Wymark A	564
	interpretation was used to control the	Middle Wymark D	562
	resource estimates.Discussion of basis for using or not	Middle Wymark C	559
	using grade cutting or capping.	Middle Wymark B	557
	• The process of validation, the	Middle Wymark A	553
	checking process used, the comparison of model data to drill hole	Lower Wymark	553
	data, and use of reconciliation data if	Saskatoon	552
	available.	Souris River Formation (base Duperow Formation)	548
		structure and thickness of t Formation. No Duperow For faults have been identified. Isopach maps were created in using the kriging gridding al	/1M to Range northern six d Township 1 lies identified nd corrected polation. The present the he Duperow mation-aged GeoSCOUT™ gorithm. The structed to kness trends Formation

Criteria	JORC Code explanation	Commentary
		were addressed by quality checking stratigraphic tops in the wells and shifting them accordingly.
		The structure maps of surfaces were exported from GeoSCOUT™ and imported into FEFLOW™ to determine the gross rock volume. Additionally, effective porosity maps, net pay maps, and lithium concentration maps for each intra-Duperow interval were imported into FEFLOW™ to calculate the net brine volume of the Duperow Aquifer.
		Validation of the FEFLOW generated isopach maps was achieved by comparing to the isopach maps generated in GeoSCOUT™.
Moisture	Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	Not applicable.
Cut-off parameters	The basis of the adopted cut-off grade(s) or quality parameters applied. The basis of the adopted cut-off grade(s) or quality parameters applied.	The samples are representative of the aquifer in the intersected Duperow Formation with the analysis representing an average intersected grade for that interval. The cut-off grade is then and economic decision on whether to proceed with the drilling of a production well given the recovery factors and the Lithium price at the time. Lithium-rich Duperow Formation brine is widely distributed in the vicinity of the Project. The use of a cut-off grade would be based on economics of the production costs, value of the recovered lithium, and DLE efficiency. Based on this report and capital estimate, the Project would likely be economic as long as the produced brine had a concentration greater than 65 mg/L. Based on the currently available data, a fully penetrating Duperow well drilled anywhere in the Project, would have a blended lithium concentration greater than 65 mg/L. As such, the lithium grade is higher than the cutoff grade throughout the Project.

Criteria	JORC Code explanation	Commentary
Mining factors or assumptions	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 rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.	Lithium-rich brine will be mined by pumping the water from production wells. Commercial-scale production will likely require water production rates greater than 10,000 m³/day, and as such, water well networks will be required to meet the production targets. The evaluation of potential production rates is dependent on the geologic continuity, hydraulic heads, and transmissivity of the Duperow Formation. Relatively large datasets of geologic surfaces (selected from 270 wells) and hydraulic heads (measured in published studies and onsite wells) provide a high degree of confidence in the geologic continuity and hydraulic heads of the Duperow Formation. The transmissivity of the Formation is spatially variable and has been measured at: three Arizona Lithium wells (101/14-33-002-12W2, 104/01-02-001-12W2, 141/16-20-003-12W2), three Hub City Lithium wells (111/11-02-009-12W2 13W2, and 101/02-22-007-12W2 09W2), and in 11 drill stem tests (DSTs). Analysis of the well tests was completed using Theis (1935), Driscol (1986), and Dougherty-Babu (1984). The prospects for eventual economic extraction were evaluated by considering the potential deliverability from a single water supply well and the potential deliverability from a single water supply well and the potential deliverability from a single water well was analysed using the Modified Moell method (Maathuis and van der Kamp, 2006). Potential deliverability from a well network was evaluated using Theis (1935) with superposition and an extended solution to MacMillan (2009). Evaluations of deliverability considered the geologic setting, linear well loss, and pressure interference between wells.

Criteria	JORC Code explanation	Commentary
		A range of transmissivity values were used in the evaluation of potential deliverability from the well networks. Based on this exploration of uncertainty in the aquifer transmissivity it is believed that the finding that the Resource has a reasonable prospect for eventual economic extraction is rigorous.
Metallurgical factors or assumptions	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.	Lithium will be extracted from the brine via direct lithium extraction (DLE) technology. Arizona Lithium has pilot tested two different DLE technologies, and both have produced average lithium recoveries of over 90%. Arizona Lithium has developed an ion exchange material called Plix that has been shown to recover an average of 92% of lithium from brine. This claim is based on a third-party verification report prepared in April 2021 by Coanda Research and Development. Plix is manufactured by Arizona Lithium using proprietary raw materials and reaction conditions. Testing for lithium extraction was performed at the Arizona Lithium laboratory under the supervision of Coanda Research and Development. Schlumberger Limited (SLB) commissioned a proprietary full system solution including third party DLE optimized to operate with other flow sheet components and achieved 93% recovery.
Environmental factors or assumptions	• 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	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 planned Project area. 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. Once the location of facilities is finalized, Arizona Lithium will complete the required detailed environmental surveys. Arizona Lithium aims to minimize surface environmental footprints by having

Criteria	JORC Code explanation	Commentary
	should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.	multiple production wells drilled from a common surface pad, using existing surface infrastructure to minimize disturbance, such as using existing roads to access well pads, amongst other activities. Based on the Hunting, Angling, and Biodiversity Information of Saskatchewan (HABISask) search, it is not believed that the Project is likely to cause any impacts to SOMC that cannot be mitigated through proper planning.
		The main waste product produced by the central processing facility will be lithium-depleted brine. It is not currently foreseen that the Project will produce any surface tailings or process waste, and all lithium depleted brine is planned to be disposed through disposal wells into underlying stratigraphy.
Bulk density	 Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size, and representativeness of the samples. 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. Discuss assumptions for bulk density estimates used in the evaluation process of the different materials. 	Wireline logs were examined to determine the lithology across the intra-Duperow Formation intervals. Density logging tools 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, that throughout the area equates to several hundred thousand sample data points. The bulk density of each interval was one source of data used to interpret the average porosity over each interval. This exercise was completed for 279 wells.
Classification	 The basis for the classification of the Mineral Resources into varying confidence categories. 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, 	The Mineral Resource estimation is based on geological surfaces and Duperow Formation Aquifer quality data provided by Arizona Lithium. Historical and current lithium concentrations and geological data were incorporated into the lithium mass estimates.

Criteria	JORC Code explanation	Commentary
	 and distribution of the data). Whether the result appropriately reflects the Competent Person's view of the deposit. 	Approximately 71% of the Mineral Resource estimate is classified as Indicated because the lithium grade, brine volume, and transmissivity have been estimated with sufficient confidence to allow the application of modifying factors in support of mine planning and evaluation of economic viability.
		In some areas, the resource estimate is classified as Inferred because the uncertainty in the lithium grade or the uncertainty in the formation transmissivity were considered too large to support evaluation of economic viability. It is expected that with continued exploration, all areas of the resource can be upgraded to Indicated or Measured classifications.
Audits or reviews	The results of any audits or reviews of Mineral Resource estimates.	No detailed audits have been completed.
Discussion of relative accuracy/ confidence	 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. The statement should specify 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. These statements of relative accuracy and confidence of the estimate 	The Mineral Resource estimation has been performed according to the requirements of the CIM Best Practice Guidelines for Resource and Reserve Estimation for Lithium Brines (2012), CIM Definitions Standard (2014), Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines (2019), the CIM NI 43-101F1 (2011), and the Australian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (2012). Additional data and modelling will be required to further characterize the Mineral Resource. The Mineral Resource values have been rounded to reflect that they are estimates. There has been sufficient exploration to define most of the Resource as an Indicated Mineral Resource. The estimate of Mineral Resource may be materially affected by environmental, permitting, legal, title, taxation, sociopolitical, marketing, or other relevant issues, but at present there are none known

Criteria	JORC Code explanation	Commentary
		which could adversely affect the Mineral Resources estimated above.

Section 4 Estimation and Reporting of Ore Reserves

(Criteria listed in section 1, and where relevant in sections 2 and 3, also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral Resource estimate for conversion to Ore Reserves	 Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve. Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves. 	The Mineral Resource estimate summarized in Table 1 is divided into two parts that are additional to each other. The Inferred Resource is 340,000 tonnes of elemental lithium and the Indicated Resource is 850,000 tonnes of elemental lithium. Modifying factors were applied to the entire Indicated Resource of 850,000 tonnes so that the 850,000 tonnes of Probable Reserve include the Indicated Resource mass.
Site visits	 Comment on any site visits undertaken by the Competent Person and the outcome of those visits. If no site visits have been undertaken indicate why this is the case. 	Brine Sampling Site Visits: The 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 witnessing the testing at the 101/14-33-002-12W2 well 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'.
Study status	 The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves. The Code requires that a study to at least Pre-Feasibility Study level has 	To date, a Prefeasibility Study (PFS) has been completed by Samuel Engineering with support from Sproule and Arizona Lithium, in order to produce this report. Exploration, geology, resources, and reserve work was performed by Fluid

Criteria	JORC Code explanation	Commentary
	been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.	Domains with input from Sproule and Arizona Lithium. Processing, estimating and economical analysis was performed by Samuel Engineering. This study included an AACE Class 4 capital estimate based on budgetary quotations, site plan, mechanical and electrical equipment lists, flowsheets and mass balance. The proposed process, as described in detail in the relevant section below, has been determined to be viable for production a saleable lithium carbonate product. Wellfield composition has been tested extensively and found to be consistent in composition with the DLE and further concentration test work proving the feasibility of the proposed process.
		The project is considered economically viable with the conservative approach taken and the PFS economics and costs are included in the relevant sections of this report.
Cut-off parameters	The basis of the cut-off grade(s) or quality parameters applied.	The samples are representative of the aquifer in the intersected Duperow Formation with the analysis representing an average intersected grade for that interval. The cut-off grade is then and economic decision on whether to proceed with the drilling of a production well given the recovery factors and the Lithium price at the time. Lithium-rich Duperow Formation brine is widely distributed in the vicinity of the Project. The use of a cut-off grade would be based on economics of the production costs and the value of the recovered lithium. Based on Arizona Lithium's initial cost estimate work, the Project would likely be economic as long as the produced brine had a concentration greater than 65 mg/L. Based on the currently available data, a fully penetrating Duperow well drilled anywhere in the Project, would have a blended lithium concentration greater than 65 mg/L. As such, the lithium grade is higher than the cutoff grade throughout the Project.

Criteria	JORC Code explanation	Commentary
Mining factors or assumptions	 The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design). The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc. The assumptions made regarding geotechnical parameters (e.g. pit slopes, stope sizes, etc), grade control and pre-production drilling. The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate). The mining dilution factors used. The mining widths used. The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion. The infrastructure requirements of the selected mining methods. 	Across Arizona Lithium's permits, Lithium rich brines are present 1700m to 2600m below ground surface. Because of the depth, the lithium rich brine will be mined by pumping the water from production wells rather than excavation. Commercial scale production is planned for water production rates greater than 10,000 m³/day at each pad and as such, water well networks will be required at each pad to meet the production targets. The evaluation of potential production rates is dependent on the geologic continuity, hydraulic heads, and transmissivity of the Duperow Formation. Relatively large datasets of geologic surfaces (selected from 270 wells) and hydraulic heads (measured in published studies and onsite wells), provide a high degree of confidence in the geologic continuity and hydraulic heads of the Duperow Formation. The transmissivity of the Formation is spatially variable has been measured at: three Arizona Lithium wells (101/14-33-002-12W2, 104/01-02-001-12W2, and 141/16-20-003-12W2); three Hub City Lithium wells (111/11-02-009-12W2 13W2, 101/14-36-008-12W2 13W2, and 101/02-22-007-12W2 09W2); and in 11 drill stem tests (DSTs). Analysis of the well tests was completed using Theis (1935), Driscol (1986), and Dougherty-Babu (1984).
		Evaluation of the potential deliverability from a well network was evaluated using FEFLOW (DHI 2022) a finite element numerical model of groundwater flow. Evaluations of deliverability considered the geologic setting, linear well loss, and pressure interference between wells. Since elevated concentrations of lithium
		extend well beyond the production pads, no dilution factor was considered in the production planning.
		A recovery factor of 77% was used on the when calculating the brine water demand.

Criteria	JORC Code explanation	Commentary
		In other words, the PFS was designed to produce 130% of the lithium-rich brine that is required for a 6,000 tonnes LCE per year project.
		Areas of Inferred Mineral Resources do not affect the mining factors used in the PFS.
		The selected well network requires a total of 13 supply wells drilled across the full thickness of the Duperow Formation and associated infrastructure including: 13 ESPs, three well pads, water piping, and electrical infrastructure to supply power to the ESPs.
Metallurgical factors or assumptions	 The metallurgical process proposed and the appropriateness of that process to the style of mineralisation. Whether the metallurgical process is well-tested technology or novel in nature. The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied. Any assumptions or allowances made for deleterious elements. The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole. For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications? 	The process proposed consists of pumping feed brine from producer wells to the processing facility where brine is first filtered and subsequently processed through the Direct Lithium Extraction (DLE) system to concentrate lithium while rejecting impurities. Concentrated brine is forwarded to softening while depleted brine is sent to reinjection after a heat capture exchanger. The concentrated brine is further concentrated and purified in via softening, clarification, and ion exchange to achieve a concentrated lithium chloride brine is heated and reacted with a soda ash solution in order to precipitate a lithium carbonate solution which is then dewatered and dried to produce a saleable 99 wt.%+ lithium carbonate product. The process is a novel configuration of proven technologies. The DLE process has been used commercially in South America and China; however, has not yet been commercially implemented in North America. The technology has been pilot tested extensively across a range of brine and surface pond applications with a wide range of lithium and salt ion concentrations and proven to be viable across many sources of brine. RO and CFRO are proven technologies both for water processing as well as lithium concentration. The lithium carbonate reaction, as well as dewatering,

Criteria	JORC Code explanation	Commentary
		drying and loading of lithium carbonate are all commercially proven processes and carry minimal risk.
		The only known deleterious elements are generally salt ions present in the brine discovered in testing that will be mostly rejected by DLE with the remainder subsequently removed in the softening and IX process. Brine testing to date has not shown any other deleterious elements, but each well pad processing plant will also have media filters at the feed to the plant to account for any suspended solids material that could be present. Arizona Lithium has pilot tested two different DLE technologies and both have produced average lithium recoveries of over 90%. The second DLE technology tested, and the basis for the prefeasibility study, is technology developed by ILiAD Technologies, LLC, a subsidiary of Energy Source Minerals (ESM). The ILiAD DLE testing was conducted by ILiAD Technologies at their testing facility in California in March 2023, while the downstream post-processing testing was conducted by Gradiant at their Massachusetts testing facility in June 2023. The approach utilized a proprietary full system solution, including DLE and counterflow reverse osmosis (CFRO), optimized to operate with other flow sheet components, and achieved 93% recovery for DLE. The concentrate produced from CFRO was converted to 99%+ lithium carbonate at AZL's Lithium Research Center in Tempe, Arizona and validated by a 3rd party laboratory, Covalent Metrology in Sunnyvale, California. The overall lithium recovery used as the basis of design for the prefeasibility study is 90% which provides a conservative safety margin compared to the measured overall recovery of 93% during pilot testing.

Criteria	JORC Code explanation	Commentary
Environmental	The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.	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 planned Project area. 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.
		Once the well pad locations are finalized, Arizona Lithium will complete the required detailed environmental surveys. Arizona Lithium aims to minimize surface environmental footprints by having
		environmental footprints by having multiple production wells drilled from a common surface pad, using existing surface infrastructure to minimize disturbance, such as using existing roads to access well pads, amongst other activities.
		Based on the Hunting, Angling and Biodiversity Information of Saskatchewan (HABISask) search, it is not believed that the Project is likely to cause any impacts to SOMC that cannot be mitigated through proper planning.
		The main waste product produced by the processing facilities will be lithium depleted brine. It is not foreseen that the Project will produce any surface tailings or process waste, and all lithium depleted brine is planned to be disposed through disposal wells into the Madison Group.
Infrastructure	The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed.	The Project is covered by a dense infrastructure of roads, railways and transmission lines. Prairie Lithium's facilities are 40 km west of the city of Estevan and 60 km south of Weyburn; each city hosts a population of ~11,000. Skilled labor, oil and gas services and equipment are available in these cities. The Project is located close to the year-round, accessible Canada-USA border crossing with access to the North American road and rail network.

Criteria	JORC Code explanation	Commentary
		Highways 18, 35 and 39 run through the Project. Secondary and primary roads are well maintained given the heavy traffic associated with the agriculture and oil industries. There is a grid of north-south secondary roads every mile and east-west secondary roads every two miles. Seasonal weight bans are implemented on secondary roads in the spring months. Prairie Lithium's CPF will have year-round access.
		Access to Estevan is by ground or air transportation. Estevan airport is at an elevation of 572 m above mean sea-level (amsl). Regina is approximately 200 km northwest of the Project and hosts an international airport.
		A former Canadian Pacific Railway traverses the Project (east-west) and runs through the towns of Torquay and Estevan, along which there is a loading terminal at Bromhead at 14-08-003-13W2 which is approximately 60 km west of Estevan, with a capacity for 80 railcars in a spur line called Long Creek Railroad. The railroad is now locally owned and hosts grain and fracking sand for the petroleum activity. The main loading terminal for Prairie Lithium will be located at Estevan. The main line Canadian Pacific Weyburn railroad runs through the towns of Weyburn and Estevan. There is also a Canadian National railroad located just east of Estevan.
		Numerous oil wells have been drilled within and surrounding the Project resulting in an expansive network of pipelines, fluid processing facilities and a dense infrastructure access coverage. A network of oil, gas and water handling facilities occur throughout the region. Access has been acquired to a pre-existing wellbore in October 2021 (well 104/01-02-001-12W2) for testing of the lithium content and deliverability.
Costs	• The derivation of, or assumpti	ions The capital cost estimate is based on historical information for the site,

Criteria	JORC Code explanation	Commentary
	 made, regarding projected capital costs in the study. The methodology used to estimate operating costs. 	preliminary testwork, preliminary block flow diagrams and flowsheets, budgetary equipment quotations, and conceptual layouts for the plants.
	 Allowances made for the content of deleterious elements. The source of exchange rates used in the study. Derivation of transportation charges. The basis for forecasting or source of treatment and refining charges, 	For the capital cost of the processing facilities, a "distributed percentage factoring" technique has been employed to develop an estimate at this preliminary stage where there is a lack of design data and specific requirements from which to base costs.
	 penalties for failure to meet specification, etc. The allowances made for royalties payable, both Government and private. 	In factored estimates, the supply cost of the mechanical equipment for the facilities is used as the basis for calculating the overall cost of the facility. Various percentages of the equipment costs are then applied to obtain values for each of the prime commodity accounts, which include earthwork, concrete, structural steel, mechanical, piping, electrical and instrumentation.
		The basis of mechanical equipment costs used in this estimate include budgetary equipment pricing from vendors, in-house historical data, and costs from other databases. Costs for the DLE equipment was provided by Energy Source Minerals (ESM). Costs for the lithium concentration plant was provided by Gradiant Corporation (Gradiant).
		The distributive percentage factoring is applied to both the labor for installation as well as for the cost of materials within each prime commodity account.
		All mechanical equipment is assumed to be procured by either the Engineer or the Owner and provided "free issue" to the construction contractor for installation; thereby avoiding any third-party markup.
		Costs assume that equipment and materials will be purchased on a competitive basis, and installation contracts will be awarded in well-defined packages.

Criteria	JORC Code explanation	Commentary
		In addition to process facility costs derived by distributed percentage factoring, other costs, including well (producer, injection, and water) drilling and pumping costs and Owner's cost are provided by Arizona Lithium.
		Operating costs have been derived from factors and quotations. All reagents have been quoted by local suppliers, while natural gas and electricity were derived from local utility pricing and estimated consumption based on mass balances. Waste handling and leasing costs have been provided by Arizona Lithium from quotations with labor costs via internal forecasting. Allowances for Selling, General, and Administrative (SG&A) costs, maintenance and operating supply costs are assumed as a factor of operating cost subtotal. Operating costs for the project with three well pads operational at nominal production rates is \$2,819 per tonne of well pad product. Total All-In Sustaining Cost including Crown Royalty, DLE licensing fee, and sustaining CAPEX is \$5,121 per tonne of well pad product.
		Significant well brine testing has been performed suggesting there will be no deleterious elements outside of the already accounted for impurities. These will be removed as part of processing and the comments have been approved for acceptance at a local landfill with costs accounted for in operational expenses.
		Costs are reported in United States Dollars (USD) and were used wherever possible while getting quotations. Where Canadian dollars were provided on quotations for equipment and utilities, a conversion rate of 0.74 USD to 1 CAD.
		Transportation charges for waste sludge to landfill have been accounted for by quotation with material/equipment freight accounted for as a factor of material and

Criteria	JORC Code explanation	Commentary
		equipment costs.
		iLiMarkets was engaged to provide a report to account for the costs what will be incurred by offtakers to convert the product to battery grade lithium carbonate and this charge has been accounted for in the sale price of the product for financial modeling. As there will be further conversion necessary, there is no defined specification for the product until offtake agreements have been signed.
		Two allowances for royalties have been accounted for in the financial model cash flow analysis. The Crown Royalty, paid pursuant to The Crown Minerals Act, accounts for 3% of gross revenue. Secondly, a DLE licensing royalty is accounted for as a discretionary percentage of gross revenue.
Revenue factors	 The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc. The derivation of assumptions made 	As the lithium carbonate product being produced is not considered battery grade by generally accepted criteria, iLiMarkets was engaged to provide the economic value of the intermediate product by providing costs, and subsequent reduction of sale price, to produce battery grade lithium hydroxide.
	of metal or commodity price(s), for the principal metals, minerals and co- products.	The lithium carbonate composition was provided to iLi Markets and used as the basis for feed to a downstream lithium carbonate refinery. Prices per tonne for water, carbon dioxide, natural gas (to produce steam for crystallization), reagents, power, labor and maintenance were calculated based on typical refining processes and yield to produce battery grade lithium carbonate. The sale price was provided by Global Lithium LLC.
Market	The demand, supply and stock it is the second stock	Market assessment was provided by Global
assessment	situation for the particular commodity, consumption trends and	Lithium LLC.
	factors likely to affect supply and	The supply of lithium chemicals is expected
	demand into the future.A customer and competitor analysis	to be tight for the remainder of the decade and likely longer. Demand is expected to
	along with the identification of likely	exceed total supply more often than not in

Criteria	JORC Code explanation	Commentary
	market windows for the product. • Price and volume forecasts and the basis for these forecasts. • For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.	this time period as well. The fastest growing lithium chemicals will be battery grade quality hydroxide and carbonate that are primarily produced by hard rock and brine sources, with sedimentary asset production expected later this decade, although battery manufacturer's rigorous and individual demands for product make technical products viable for offtakers with purification plants. Lithium supply from recycling is not expected to be even 10% of supply until later in the 2030s. Battery related use makes up approximately 60% of the market, primarily due to growing demand for electric transportation. By 2030, it is expected that 90% of demand will be related to lithium-ion batteries in electric transportation and energy storage. Asia will remain the largest market for lithium chemicals for the remainder of the decade with North America expected to become the second largest market as government continues to take steps to support growth of the domestic electric vehicle (EV) market. The two fastest growing lithium chemicals will be battery quality hydroxide and carbonate through the remainder of this decade. Lithium hydroxide is primary used in longer range EV batteries requiring high nickel content while carbonate is favored in lower capacity, less expensive EV batteries, electric buses, and energy storage systems. Although it is difficult to accurately forecast the exact future mix of cathode materials and whether carbonate or hydroxide will be required; the diversity of the battery market will likely result in a continued tight market for both forms of lithium chemicals as well as technical grade products that can be refined by offtakers well into the next decade. Currently Western Australia is the largest
		global source of lithium values and is on track to supply over 40% of the total global

Criteria	JORC Code explanation	Commentary
		LCEs in 2023 mostly in the form of spodumene concentrate converted in China to lithium chemicals. Over the next several years, Australia will convert increasingly significant volumes of their spodumene into lithium chemicals forcing China to seek feedstock elsewhere.
		Chile is the second largest lithium producer supplying approximately 30% of LCEs globally. While China is the largest producer of lithium chemicals globally, most of their output is from imported feedstock. China is currently the third largest producer of LCEs from low quality domestic brine and hardrock resources. Argentina is the fourth largest producer of lithium values globally.
		In the next five years, Argentina may move from the fourth largest producer to third position and possibly second position behind Australia by 2030 based on the number of brine projects in development. Brazil, Africa, Canada, and the US are also expected to become significant LCE producers by 2030.
		In recent years, the lithium price has been volatile, as low as \$8/kg in 2018 to China spot process at \$80/kg. It is expected that large contract pricing will trade well above current cost curves in a range from high \$20s/kg to \$40/kg through 2030 as demand is assumed to continue to exceed supply. For purposes of estimating new projects, Global Lithium recommends a conservative approach using a price below the forecast high end of cost curves leading room for significant upside, with a final recommendation of \$21,000 per tonne.
		At this stage in the development of the Prairie Project, Arizona Lithium does not intend to make battery quality lithium chemicals at the well pad. The operating strategy at each well pad facility is to

Criteria	JORC Code explanation	Commentary
		produce the highest quality lithium chemical at the lowest environmental impact and cost. The high quality of the Prairie Project brine, combined with the latest advances in DLE and CFRO technology, results in the production of a near battery quality product; however, additional purification is necessary to achieve the specification required by most cathode and battery manufacturers. As a result of this strategy, a discount to the pricing is required to represent the value that must be added to the well pad lithium product by others further down the supply chain. In this regard, South American advisory firm iLi Markets assisted by Ad-Infinitum, examined the Prairie Project well pad product and provided a formula for determining an appropriate discount. Using a conventional lithium carbonate flowsheet with bicarbonation, ion exchange, and crystallization it was determined that a base conversion charge of \$2,606 per tonne LCE was appropriate given the following assumptions: Regional pricing for electricity and reagents The converter is the end-user (no profit margin included for 3rd party converter) No transportation cost included from conversion facility to battery producer Brownfield or existing conversion facility Using the Global Lithium conservative price of \$21,000 per tonne, the netback price for the lithium product produced at each well pad is \$18,394 per tonne.
Economic	 The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc. NPV ranges and sensitivity to variations in the significant 	The economic results presented in this report are based on a 100% equity basis and non-inflated costs (4 th Quarter 2023). SE developed the operating and capital costs of the facility in US dollars with an accuracy of +/- 30%. The estimate is built on a factored basis with over 90% of the equipment bid within the quarter and

Criteria	JORC Code explanation	Commentary
	assumptions and inputs.	consists with a 15% contingency allowance. Base case economic numbers utilize a discount rate of 8%. See NPV Ranges and Sensitivity to Variations in Table A-2 in Appendix 3.
Social	The status of agreements with key stakeholders and matters leading to social licence to operate.	Arizona Lithium has surface leases in place with landowners at 5 locations. The surface lease allows Arizona Lithium access to their wells. Arizona Lithium held a townhall in Estevan, Saskatchewan on April 4 th , 2023. The public was invited to come and ask questions to learn more about Arizona Lithium's lithium project in the region. There were no community concerns raised at the event.
Other	 To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves: Any identified material naturally occurring risks. The status of material legal agreements and marketing arrangements. The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Prefeasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent. 	No material naturally occurring risks have been identified. Climate conditions have not affected oil and gas development in the past in the area. Current legal agreements include: • DEEP agreement, which is summarized in Section 2 of this table and found in Appendix 1 • Canpar/Freehold Agreement, which is summarized in Section 2 of this table and found in Appendix 1 There are reasonable grounds to expect that all necessary Government approvals will be received within the expected timeframe, as evidenced by: • History of decades of oil and gas production (similar Mining Methods to producing lithium-rich brines) • Regulations for well approvals and lithium brine project approvals are established. • Arizona Lithium has received approvals to produce lithium from 4 wells to date: □ 14-33-002-12W2 (2021) □ 01-02-001-12W2 (2021)

Criteria	JORC Code explanation	Commentary
		 16-20-003-12W2 (2022) 01-15-002-12W2 (2023) – well to be drilled
		There are currently no unresolved matters that are dependent on a third party on which extraction of the reserve is contingent.
		Government approvals follow that under the Saskatchewan Mineral Tenure Regulations. Well Licence approval can be granted through the Saskatchewan Integrated Resource Information System (IRIS). The Ministry of Energy and Resource (MER) has indicated that lithium extraction operations will be administered via a project application. After finalizing the review, MER will issue a minister's order and approval letter, then generate a project authorization in IRIS
Classification	 The basis for the classification of the Ore Reserves into varying confidence categories. Whether the result appropriately reflects the Competent Person's view of the deposit. The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any). 	The Mineral Resource estimation is based on geological surfaces and Duperow Formation Aquifer data provided by Arizona Lithium and historical data. Approximately 71% of the Mineral Resource estimate is classified as Indicated because the lithium grade, brine volume, and transmissivity have been estimated with sufficient confidence to allow the application of modifying factors in support of mine planning and evaluation of economic viability at a PFS level. In some areas, the resource estimate is classified as Inferred because the uncertainty in the lithium grade or the uncertainty in the formation transmissivity were considered too large to support the evaluation of economic viability. It is expected that with continued exploration all areas of the resource can be upgraded to Indicated or Measured classifications. There is a high confidence in the aquifer properties in the vicinity of the 101/14-33-002-12W2 and 101/16-20-003-12W2 wells,

Criteria	JORC Code explanation	Commentary
		however, since the performance of the production well networks extend beyond the area directly measured by the 101/14-33-002-12W2 and 101/16-20-003-12W2 wells, the only a Probable Reserve classification was applied to the Indicated Resource.
		The Probable Reserve classification appropriately reflects the Competent Person's view of the deposit.
		None of the Probable Ore Reserves were derived from Measured Mineral Resources.
Audits or reviews	The results of any audits or reviews of Ore Reserve estimates.	No detailed audits have been completed.
Discussion of relative accuracy/ confidence	 Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve 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 reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate. The statement should specify 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. Accuracy and confidence discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage. 	The Mineral Resource estimation has been performed according to the requirements of the CIM Best Practice Guidelines for Resource and Reserve Estimation for Lithium Brines (2012), CIM Definitions Standard (2014), Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines (2019), the CIM NI 43-101F1 (2011), and the Australian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (2012). The confidence of the Ore Reserve estimate is sensitive to the uncertainty of the aquifer transmissivity and lithium grade. While the geologic and hydrogeologic properties of the Resource are sufficiently understood to allow for the interpolation between control points, there are two areas of the model domain where the gradient of lithium concentrations, or the gradient of lithium concentrations, or the gradient in measured transmissivities, is known to be steep and is relatively uncertain. These areas were not upgraded to Indicated Resource and were not converted to a Probable Reserve. The lithium grade and transmissivity of the Duperow Formation varies laterally across the Indicated Resource area. A range of lithium concentrations and aquifer

Criteria	JORC Code explanation	Commentary
	It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	for prospects of eventual economic extraction. This evaluation process tested multiple values of transmissivity and lithium grade with analytical solutions (Theis 1935,

Appendix 1: Subsurface Mineral Permits

Summary of Arizona Lithium's subsurface mineral permits and leases.

Permit / Lease / File No.	Surface Area (Ha)	Disposition Area (Ha)	Offering Date	Annual Cost (CAD \$)	MWR (CAD \$)	Restrictions	Stratigraphic	Lessor / AMI (In / Out)
SMP002	1553.82	1553.82	4/23/2019	3,107.64	577,000	LS	Base Three Forks Group to top Precambrian	DEEP / In
SMP003	1299.29	1299.29	12/17/2019	12,538.00	488,000	PNG	Base Three Forks Group to top Precambrian	PLi / Out
SMP007 SMP008	1292.16 258.38	1292.16 258.38	12/17/2019 4/20/2020	2,584.32 516.76	485,000 97,000		Top Madison Group to Top	PLi / Out
SMP021 SMP022	1742.94 257.95	1656.78 257.95	4/20/2020 4/20/2020	3,313.55 515.90	654,000 97,000		Precambrian	DEEP / In
SMP023 SMP010	1547.57 9295.42	1547.57 8842.41	4/20/2020 4/20/2020	3,095.13 17,684.82	581,000 3,485,000	PNG	Top Madison Group to Top Winnipeg Formation	
SMP011	1293.55	1293.55	4/20/2020	2,587.10	485,000		Top Madison Group to Top Precambrian - except E/2 28-3- 12W2, 29-3-12W2 and 32-3-12W2 Top Madison Group to Top Winnipeg Formation	PLi / In
SMP044	3872.15	3807.55	4/19/2021	7,615.10	1,475,000			PLi / Out
SMP046 SMP047	128.76 258.21	128.76 258.21	4/19/2021 4/19/2021	257.51 516.43	50,000 99,000		Top Madison Group to Precambrian	
SMP048	1227.21	1173.33	4/19/2021	2,346.67	468,000		Top Madison Group to Precambrian; except W/2 and NE-6-2-10 W2 top Madison Group to base Three Forks Group	DEEP / In
SMP049 SMP050	258.38 2252.20	258.38 2252.20	4/19/2021 4/19/2021	516.75 4,504.40	99,000 858,000		Top Madison Group to Precambrian	
SMP056	2266.02	2265.84	4/19/2021	4,531.68	863,000		Top Madison Group to Precambrian; except NW-6-4-11 W2, S/2-10-4-11 W2, NE-26-3-12 W2 and 36-3-12 W2 top Madison Group to top Winnipeg Formation	PLi / In
SMP058	1876.44	1876.44	4/19/2021	3,752.87	715,000		Top Madison Group to Precambrian	PLi / Out
SMP059	2643.97	2539.88	4/19/2021	5,079.76	1,007,000		Top Madison Group to Precambrian; except 23-6-10 W2 top Madison Group to Top Winnipeg Formation	PLi / Out
SMP061	512.46	512.46	4/19/2021	1,024.92	196,000		Top Madison Group to Precambrian	
SMP063 SMP064	1738.78 1809.08	1738.78 1809.08	4/19/2021 4/19/2021	3,477.55 3,618.16	663,000 689,000	3KM, PNG	Ton Madigan Crown to Winnings	
SMP065	1810.75	1810.75	4/19/2021	3,621.49	690,000	FNG	Top Madison Group to Winnipeg Formation	
SMP066	1879.20	1815.16	4/19/2021	3,630.32	716,000			
SMP067	2581.51	2581.51	4/19/2021	5,163.02	984,000		Top Madison Group to top Winnipeg Formation; except 14-2-12 W2 top Madison Group to Precambrian	
SMP068	2828.16	2828.13	4/19/2021	5,656.26	1,078,000		Top Madison Group to top Winnipeg Formation; except 22-2-11 W2, 28- 2-11 W2, 29-2-11 W2, 30-2-11 W2 and 32-2-11 W2 top Madison Group to Precambrian	PLi / In
SMP070	2388.55	2018.87	4/19/2021	4,037.73	910,000		Top Madison Group to Precambrian; except 22-3-12 W2, 23-3-12 W2 and SE -24-3-12 W2 top Madison Group to top Winnipeg Formation	
SMP078	3157.57	1803.83	4/19/2021	3,607.66	1,203,000		Top Madison Group to Precambrian	PLi / Out
SMP079 SMP082	1410.74 2834.84	1410.74 2834.84	4/19/2021 4/19/2021	2,821.47 5,669.68	538,000 1,080,000		Top Madison Group to top Winnipeg	
SMP083	2319.43	2319.43	4/19/2021	4,638.86	884,000		Formation	
SMP084	2106.95	2106.95	4/19/2021	4,213.91	803,000	PNG, T	Top Madison Group to top Winnipeg Formation; except 25-2-12 W2, NE- 26-2-12 W2, 27-2-12 W2, 34-2-12 W2, 35-2-12W2 and 36-2-12 W2 top Madison Group to Precambrian	PLi / In
SML001	1526.19	1526.19	4/19/2021	15,261.90	582,000	PNG	Top Madison Group to Precambrian	
SML002	1223.27	1221.99	4/19/2021	12,232.70	466,000	21/14	· ·	
SMP087	2599.37	2599.06	4/19/2021	5,198.11	990,000	3KM, PNG	Top Madison Group to top Precambrian; except 34-3-12 W2, 2- 4-12 W2, 12-4-12 W2 and 13-4-12	

Permit / Lease / File No.	Surface Area (Ha)	Disposition Area (Ha)	Offering Date	Annual Cost (CAD \$)	MWR (CAD \$)	Restrictions	Stratigraphic Interval	Lessor / AMI (In / Out)
							W2 top Madison Group to top Winnipeg Formation	
SMP090	1546.80	1482.47	4/19/2021	2,964.95	590,000	PNG, CA, 3KM	Top Madison Group to Precambrian	PLi / Out
SMP099	1550.44	1550.44	4/19/2021	3,100.88	591,000	21/14	Top Madison Group to top Winnipeg Formation	
SMP100	1874.77	1874.77	4/19/2021	3,749.53	714,000	3KM, PNG	Top Madison Group to top Winnipeg Formation; except NE-5-1-13 W2 top Madison Group to Precambrian	PLi / In
SMP101	516.70	516.70	4/19/2021	1,033.40	197,000		Top Madison Group to Precambrian	
SMP102	1806.44	1806.44	4/19/2021	3,612.88	688,000	PNG	Top Madison Group to Precambrian; except 16-1-13 W2, 21-1-13 W2 and 22-1-13 W2 top Madison Group to top Winnipeg Formation	DEEP / In
SMP103	2391.56	2391.56	4/19/2021	4,783.11	911,000	CA, PNG, 3KM	Top Madison Group to top Winnipeg	PLi / In
SMP104	2074.75	2074.75	4/19/2021	4,149.50	791,000	PNG, 3KM		
SMP105	2316.88	2316.88	4/19/2021	4,633.77	883,000	PNG	Top Madison Group to top Precambrian; except 4-2-13 W2 and SE-9-2-13 W2 and W/2-9-2-13 W2 top Madison Group to top Winnipeg Formation; NE-9-2-13 W2 top Madison Group to top Duperow Formation and base Souris River Formation to top Winnipeg Formation.	DEEP / In
SMP106	2017.84	1956.18	4/19/2021	3,912.37	769,000	PNG	Top Madison Group to top Precambrian; except 33-2-13 W2, 34-2-13 W2, W/2-35-2-13 W2, SE- 35-2-13 W2 and 36-2-13 W2 top Madison Group to top Winnipeg Formation	
SMP107	1548.07	1510.04	4/19/2021	3,020.09	590,000	3KM,		
SMP108	2392.85	2392.85	4/19/2021	4,785.70	912,000	PNG		
SMP109 SMP110	2203.46 2523.42	2203.46 2523.42	4/19/2021 4/19/2021	4,406.91 5,046.84	961,000	PNG 3KM,	Top Madison Group to Precambrian	PLi / In
SMP111	3049.83	3049.83	4/19/2021	6,099.66	1,162,000	PNG		
SMP112	4544.02	4544.02	4/19/2021	9,088.04	1,731,000	PNG		
SMP114 SMP115	4394.98 4109.14	4394.98 4109.14	4/19/2021 4/19/2021	8,789.95 8,218.29	1,674,000 1,565,000	CA,		DEEP / In
SMP116	4576.26	4576.26	4/19/2021	9,152.52	1,743,000	PNG	Top Madison Group to Precambrian	DEEP / In
SMP117 SMP118	1604.93 2308.58	1604.93 2308.58	4/19/2021 4/19/2021	3,209.86 4,617.16	612,000 880,000	PNG	Top Madison Group to top Precambrian; except SE-4-3-14 W2, E/2-5-3-14 W2, E/2-7-3-14 W2, 18- 3-14 W2 and 19-3-14 W2 top Madison Group to top Winnipeg Formation	PLi / In
SMP119	3447.80	3447.80	4/19/2021	6,895.61	1,314,000		Top Madison Group to top Precambrian; except 17-3-14 W2 top Madison Group to top Winnipeg Formation	
SMP120 SMP121	3380.74 4585.77	3380.74 4388.70	4/19/2021 4/19/2021	6,761.48 8,777.40	1,288,000 1,747,000			DEEP / In
SMP121 SMP145	517.46	517.46	8/23/2021	1,034.92	199,000		Top Madison Group to Precambrian	
SMP150	1291.87	1259.65	8/23/2021	2,519.30	497,000	PNG, 3KM, CA	Top riddison Group to Freeding Hall	PLi / In
SMP151	1811.02	1811.02	8/23/2021	3,622.05	697,000		Ton Madison Crown to Pro	DL: / Oct
SMP152 SMP153	516.90 516.17	516.90 516.17	8/23/2021 8/23/2021	1,033.79 1,032.34	199,000 199,000	PNG	Top Madison Group to Precambrian	PLi / Out
SMP154	1226.31	1157.61	8/23/2021	2,315.23	472,000	PNG,	Top Madison Group to Precambrian	PLi / Out
SMP156 SMP160	258.80 194.65	258.80 194.65	8/23/2021 8/23/2021	517.60 389.30	100,000 75,000	3KM		PLi / In
SMP162	2393.70	2393.70	8/23/2021	4,787.39	921,000	PNG	Top Madison Group to Precambrian	PLi / In

Permit / Lease / File No.	Surface Area (Ha)	Disposition Area (Ha)	Offering Date	Annual Cost (CAD \$)	MWR (CAD \$)	Restrictions	Stratigraphic Interval	Lessor / AMI (In / Out)
SMP143	3359.85	3359.85	8/23/2021	6,719.71	1,292,000	PNG, 3KM, CA	Top Madison Group to Precambrian	PLi / Out
SMP164	2327.11	2327.11	8/23/2021	4,654.22	895,000	PNG, 3KM	Top Madison Group to Precambrian	PLi / Out
AMP165	515.00	515.00	8/23/2021	1,030.01	198,000	PNG	Top Madison Group to Precambrian	PLi / Out
SMP167	261.40	245.07	8/23/2021	490.13	101,000		Top Madison Group to Precambrian	PLi / In
SMP168	130.07	130.07	8/23/2021	260.13	50,000		Top Madison Group to Precambrian	PLi / In
SMP169	2329.79	2329.79	8/23/2021	4,659.58	896,000	PNG	Top Madison Group to Precambrian	PLi / Out
SMP170	2192.98	2192.98	8/23/2021	4,385.97	843,000	PNG, 3KM	Top Madison Group to Precambrian	PLi / Out
M043397	1156.53	1156.53	11/15/2023	2,313.06	N/A	N/A	Top Madison Group to Top Red River	Canpar / In
M043398	3030.75	3030.75	11/15/2023	6,061.50	N/A	N/A	Top Madison Group to Top Red River	Canpar / In
M043399	2657.18	2657.18	11/15/2023	5,314.35	N/A	N/A	Top Madison Group to Top Red River	Canpar / In
M043400	1513.73	1513.73	11/15/2023	3,027.47	N/A	N/A	Top Madison Group to Top Red River	Canpar / In
M043401	2307.53	2307.53	11/15/2023	4,615.06	N/A	N/A	Top Madison Group to Top Red River	Canpar / In
M043402	979.60	979.60	11/15/2023	1,959.21	N/A	N/A	Top Madison Group to Top Red River	Freehold / In
M043403	2333.42	2333.42	11/15/2023	4,666.85	N/A	N/A	Top Madison Group to Top Red River	Freehold / In
M043404	674.78	674.78	11/15/2023	1,349.55	N/A	N/A	Top Madison Group to Top Red River	Freehold / In
M043405	1263.11	1263.11	11/15/2023	2,526.21	N/A	N/A	Top Madison Group to Top Red River	Freehold / In

Appendix 2: Drill Hole Data

Summary Table of Drill Holes:

• 279 wells with wireline logs to determine the average porosity over the net pay interval.

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	ence Elevation or Bushing (m)	Œ	Depth	Vertical or Deviated Well	Ę	Surface Hole Easting (NAD83)	Surface Hole Northing (NAD83)	Bottom Hole Easting (NAD83)	Bottom Hole Northing (NAD83)
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Q.	lev ing	ep	<u> </u>	De l	g	83)) X (S	33)	33)
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111/15-05-001-08W2/00	583.4	2850.5	2850.5	vertical	15-05-001-08W2	643156	5430584	643156	5430584
131/08-13-001-10W2/00	584.2	2814.2	2814.2	vertical	08-13-001-10W2	630707	5432981	630707	5432981
121/12-24-001-10W2/00	581.3	2810.9	2810.9	vertical	12-24-001-10W2	629438	5434660	629438	5434660
121/10-28-001-10W2/00	587.0	3165.0	3165.0	vertical	10-28-001-10W2	625275	5436213	625275	5436213
102/14-04-001-11W2/00	590.9	3839.5	3496.2	deviated	12-10-001-11W2	616345	5431028	615352	5429979
141/03-08-001-11W2/00	602.0	3394.9	3394.9	vertical	03-08-001-11W2	613844	5430406	613844	5430406
103/01-02-001-12W2/00	618.6	3731.0	3731.0	vertical	01-02-001-12W2	609801	5428760	609801	5428760
131/16-12-001-12W2/00	603.7	2463.0	2462.8	vertical	16-12-001-12W2	611189	5431660	611185	5431658
121/13-18-001-12W2/00	631.9	2480.0	2480.0	vertical	13-18-001-12W2	601765	5432827	601765	5432827
101/01-26-001-12W2/00	596.7	3442.8	3442.2	vertical	01-26-001-12W2	609425	5435055	609430	5435066
101/02-03-001-13W2/00	668.9	2556.0	2555.7	vertical	02-03-001-13W2	597856	5428473	597856	5428509
141/15-31-001-15W2/00	710.0	2550.0	2550.0	vertical	15-31-001-15W2	573383	5437486	573383	5437486
101/15-04-001-16W2/00	678.4	2490.0	2490.0	vertical	15-04-001-16W2	566902	5429286	566902	5429286
101/02-14-001-16W2/00	703.8	2514.9	2514.9	vertical	02-14-001-16W2 03-32-001-16W2	570124	5431430	570124	5431430
131/03-32-001-16W2/00 141/15-14-001-17W2/00	695.3 688.1	3224.0 3205.0	3224.0 3205.0	vertical	15-14-001-16W2	564658 560374	5436326 5432589	564658 560374	5436326 5432589
121/07-23-001-17W2/00	680.6	3194.0	3194.0	vertical vertical	07-23-001-17W2	560224	5432369	560224	5432369
101/11-27-001-17W2/00	703.8	3198.8	3198.8	vertical	11-27-001-17W2	558309	5435227	558309	5435227
121/01-08-002-06W2/00	578.8	2725.0	2681.7	deviated	01-08-002-06W2	662588	5441580	662591	5441375
141/05-06-002-08W2/00	575.0	3406.3	3406.3	vertical	05-06-002-08W2	640344	5439709	640344	5439709
131/14-14-002-09W2/00	572.0	2686.0	2686.0	vertical	14-14-002-09W2	637598	5443567	637598	5443567
111/16-15-002-09W2/00	574.3	2683.5	2683.5	vertical	16-15-002-09W2	637043	5443389	637043	5443389
111/08-22-002-09W2/00	570.2	2611.3	2611.1	vertical	08-22-002-09W2	637026	5444232	637022	5444248
121/09-22-002-09W2/00	570.1	2665.0	2664.4	vertical	09-22-002-09W2	636858	5444592	636850	5444611
111/04-23-002-09W2/00	570.3	2659.0	2659.0	vertical	04-23-002-09W2	637472	5443854	637472	5443854
131/01-28-002-09W2/00	569.5	2665.0	2654.2	vertical	01-28-002-09W2	635172	5445453	635157	5445457
111/11-30-002-09W2/00	572.2	2675.0	2675.0	vertical	11-30-002-09W2	631326	5446122	631329	5446121
113/11-30-002-09W2/00	571.5	2645.0	2640.9	deviated	11-30-002-09W2	631343	5446029	631346	5446023
101/03-16-002-10W2/00	584.6	3292.1	3292.1	vertical	03-16-002-10W2	624875	5441931	624875	5441931
131/15-25-002-10W2/00	571.1	2665.0	2662.6	deviated	15-25-002-10W2	629979	5446659	629989	5446528
131/04-36-002-10W2/00	571.4	2676.0	2675.7	vertical	04-36-002-10W2	629089	5446969	629076	5446968
141/01-29-002-12W2/00	598.3	2400.0	2400.0	vertical	01-29-002-12W2	604596	5444923	604596	5444923
101/14-33-002-12W2/00	598.0 595.5	2421.0	2421.0	vertical	14-33-002-12W2	605333	5447568	605333	5447568
111/05-34-002-12W2/00 101/06-02-002-14W2/00	681.6	2368.5 2510.0	2368.5 2510.0	vertical vertical	05-34-002-12W2 06-02-002-14W2	606519 589142	5446768 5438478	606519 589142	5446768 5438478
101/08-05-002-14W2/00 101/08-05-002-14W2/00	680.0	3262.0	3262.0	vertical	08-05-002-14W2	585087	5438402	585087	5438402
141/08-16-002-14W2/00	647.1	3189.1	3189.1	vertical	08-16-002-14W2	586734	5441789	586734	5441789
101/10-16-002-14W2/00	647.1	3101.2	3101.2	vertical	10-16-002-14W2	586232	5442040	586232	5442040
121/16-02-002-15W2/00	696.3	2521.0	2521.0	vertical	16-02-002-15W2	580121	5439085	580121	5439085
121/11-33-002-16W2/00	718.9	2420.0	2420.0	vertical	11-33-002-16W2	566245	5446566	566245	5446566
131/12-31-003-06W2/00	586.5	2514.0	2514.0	vertical	12-31-003-06W2	659249	5458185	659249	5458185
121/15-19-003-08W2/00	584.3	2577.0	2577.0	vertical	15-19-003-08W2	640462	5454730	640462	5454730
101/09-25-003-09W2/00	582.3	2557.0	2557.0	vertical	09-25-003-09W2	639369	5455949	639369	5455949
131/14-25-003-09W2/00	581.9	2491.0	2489.3	vertical	14-25-003-09W2	638408	5456447	638403	5456446
131/08-35-003-09W2/00	579.7	2497.0	2497.0	vertical	08-35-003-09W2	637593	5457265	637593	5457265
121/16-35-003-09W2/00	580.3	2552.0	2552.0	vertical	16-35-003-09W2	637547	5457941	637547	5457941
121/13-36-003-09W2/00	583.5	2565.0	2564.1	deviated	13-36-003-09W2	637982	5457835	637990	5457863
121/15-02-003-10W2/00	569.0	2650.0	2649.6	vertical	15-02-003-10W2	627577	5449460	627550	5449474
131/03-14-003-10W2/00 131/03-21-003-10W2/00	570.6	2620.0	2620.0	vertical vertical	03-14-003-10W2	627102	5451804	627102 623777	5451804
101/09-22-003-10W2/00	565.7 578.5	2921.0 2618.0	2921.0 2618.0	vertical	03-21-003-10W2 09-22-003-10W2	623777 626359	5453340 5454028	623777	5453340 5454028
101/09-22-003-10W2/00 121/09-34-003-10W2/00	577.0	2584.0	2584.0	vertical	09-22-003-10W2 09-34-003-10W2	626173	5457083	626173	5457083
111/14-15-003-15W2/00	655.1	3039.0	3039.0	vertical	14-15-003-15W2	576578	5451808	576578	5451808
111/11 13 003 13442/00	555.1	5055.0	3033.0	ver dear	1. 13 003 13**2	3,3370	3 131000	3,3370	3.31000

111/04-22-003-15W2/00	653.7	3073.0	3006.3	vertical	04-22-003-15W2	576243	5452199	576242	5452191
101/07-07-003-17W2/00	706.5	2697.0	2697.0	vertical	07-07-003-17W2	552461	5449260	552461	5449260
101/07-23-003-17W2/00	741.3	3100.1	3100.1	vertical	07-23-003-17W2	558967	5452502	558967	5452502
101/01-10-003-21W2/00	771.0	2944.5	2944.5	vertical	01-10-003-21W2	518615	5448588	518615	5448588
141/06-30-004-04W2/00	591.3	2336.0	2336.0	vertical	06-30-004-04W2	679181	5466615	679181	5466615
141/14-18-004-06W2/00	593.5	2475.0	2475.0	vertical	14-18-004-06W2	659635	5463505	659635	5463505
132/15-18-004-06W2/00	594.5	2475.0	2472.6	vertical	15-18-004-06W2	659803	5463576	659794	5463578
141/04-01-004-07W2/00	588.6	2513.0	2513.0	vertical	04-01-004-07W2	657712	5458983	657712	5458983
141/15-07-004-07W2/00	589.1	2518.3	2518.1	vertical	15-07-004-07W2	650286	5461602	650282	5461607
121/05-13-004-07W2/00	593.7	2441.0	2441.0	vertical	05-13-004-07W2	657436	5462550	657436	5462550
191/10-14-004-07W2/00	592.5	3420.0	2712.1	vertical	01-14-004-07W2	657213	5462228	656698	5462734
121/08-22-004-07W2/00	594.2	2905.0	2905.0	vertical	08-22-004-07W2	655297	5463913	655297	5463913
121/07-16-004-08W2/00	590.7	2523.0	2523.0	vertical	07-16-004-08W2	643626	5462094	643626	5462094
101/11-18-004-08W2/00	588.1	2526.0	2523.6	vertical	11-18-004-08W2	639966	5462507	639969	5462494
131/02-19-004-08W2/00	589.6	2510.0	2509.2	vertical	02-19-004-08W2	640300	5463333	640297	5463342
131/12-20-004-08W2/00	591.5	2502.0	2502.0	vertical	12-20-004-08W2	641119	5464171	641119	5464171
121/10-29-004-08W2/00	594.4	2473.0	2473.0	vertical	10-29-004-08W2	641821	5465666	641821	5465666
141/06-30-004-08W2/00	591.6	2485.0	2485.0	vertical	06-30-004-08W2	639977	5465485	639977	5465485
141/01-31-004-08W2/00	593.7	2471.0	2470.8	vertical	01-31-004-08W2	640767	5466734	640767	5466742
141/09-31-004-08W2/00	597.7	3000.1	3000.1	vertical	09-31-004-08W2	640762	5467421	640762	5467421
101/08-01-004-09W2/00	586.4	2560.0	2560.0	vertical	08-01-004-09W2	639274	5458821	639274	5458821
141/01-10-004-09W2/00	581.6	2527.0	2527.0	vertical	01-10-004-09W2	636025	5459995	636025	5459995
111/13-11-004-09W2/00	583.9	2507.0	2507.0	vertical	13-11-004-09W2	636573	5461125	636573	5461125
121/16-13-004-09W2/00	586.3	2500.0	2500.0	vertical	16-13-004-09W2	638978	5462785	638978	5462785
121/10-14-004-09W2/00	585.0	2495.0	2495.0	vertical	10-14-004-09W2	637065	5462322	637065	5462322
111/12-22-004-09W2/00	588.4	2490.0	2489.5	vertical	12-22-004-09W2	634832	5463900	634832	5463900
121/16-23-004-09W2/00	588.3	2495.1	2494.6	vertical	16-23-004-09W2	637411	5464280	637413	5464280
111/06-24-004-09W2/00	590.1	2506.7	2506.3	vertical	06-24-004-09W2	638472	5463630	638489	5463646
131/03-25-004-09W2/00	588.5	2489.0	2488.1	vertical	03-25-004-09W2	638262	5464923	638259	5464904
141/01-27-004-09W2/00	589.9	2481.0	2480.9	vertical	01-27-004-09W2	635950	5464949	635950	5464950
121/12-27-004-09W2/00	590.2	2478.0	2477.8	vertical	12-27-004-09W2	634560	5465503	634562	5465492
191/13-34-004-09W2/00	593.8	2895.6	2563.6	deviated	16-33-004-09W2	634211	5467616	634634	5467713
141/06-11-004-10W2/00	585.0	2545.0	2545.0	vertical	06-11-004-10W2	627189	5460277	627189	5460277
141/16-24-004-10W2/00	585.6	2495.0	2494.7	vertical	16-24-004-10W2	629449	5464372	629447	5464374
141/14-35-004-10W2/00	587.4	2488.0	2378.8	deviated	14-35-004-10W2	626928	5467500	626946	5467517
121/13-01-004-11W2/00	571.5	2875.5	2875.5	vertical	13-01-004-11W2	618313	5458968	618313	5458968
121/01-04-004-11W2/00	568.2	2243.0	2243.0	vertical	01-04-004-11W2	614637	5457747	614637	5457747
131/13-20-004-11W2/00	572.4	2928.2	2928.2	vertical	13-20-004-11W2	611794	5463859	611794	5463859
131/06-07-004-12W2/00	590.8	2879.0	2878.8	vertical	06-07-004-12W2	600825	5459615	600826	5459649
121/04-09-004-12W2/00	589.1	2886.0	2885.3		04-09-004-12W2	603690	5459187	603698	5459172
				vertical					
141/01-22-004-19W2/00	755.6	3075.0	3075.0	vertical	01-22-004-19W2	538243	5461757	538243	5461757
121/09-36-005-04W2/00	594.3	2510.7	2510.4	vertical	09-36-005-04W2	687394	5478319	687397	5478301
141/15-11-005-05W2/00	593.4	2290.0	2290.0	vertical	15-11-005-05W2	675975	5472145	675975	5472145
121/13-12-005-05W2/00	593.1	2282.0	2281.8	vertical	13-12-005-05W2	676719	5471927	676722	5471928
121/02-14-005-05W2/00	595.4	2780.0	2780.0	vertical	02-14-005-05W2	675851	5472325	675851	5472325
121/07-15-005-05W2/00	593.4	2287.0	2287.0	vertical	07-15-005-05W2	674231	5472607	674231	5472607
121/15-23-005-05W2/00	596.6	2247.0	2247.0	vertical	15-23-005-05W2	675772	5475183	675772	5475183
111/02-24-005-05W2/00	594.8	2246.0	2246.0	vertical	02-24-005-05W2	677606	5474047	677606	5474047
121/15-24-005-05W2/00	599.2	2244.0	2236.9	deviated	15-24-005-05W2	677352	5475185	677321	5475145
111/05-26-005-05W2/00	595.2	2240.0	2238.2	vertical	05-26-005-05W2	675090	5475886	675089	5475911
131/14-27-005-05W2/00	594.8	2230.0	2230.0	vertical	14-27-005-05W2	673602	5476955	673602	5476955
141/05-33-005-05W2/00	595.6	2268.0	2263.5	deviated	05-33-005-05W2	671845	5477660	671907	5477658
111/07-33-005-05W2/00	596.2	2246.0	2246.0	vertical	07-33-005-05W2	672671	5477412	672671	5477412
101/09-33-005-05W2/00	601.7	2278.0	2277.4	vertical	09-33-005-05W2	672925	5478025	672937	5478056
121/12-33-005-05W2/00	594.0	2242.1	2242.1	vertical	12-33-005-05W2	671694	5477895	671694	5477895
111/14-33-005-05W2/00	597.2	2235.0	2235.0	vertical	14-33-005-05W2	672208	5478298	672208	5478298
141/05-34-005-05W2/00	599.3	2269.8	2269.8	vertical	05-34-005-05W2	673398	5477688	673398	5477688
191/11-34-005-05W2/00	596.4	2260.5	2250.2	deviated	06-34-005-05W2	673813	5477768	673807	5477853
191/15-34-005-05W2/00	596.5	2445.0	2184.4	vertical	10-34-005-05W2	674099	5477708	674084	5478435
191/15-34-003-03W2/00 101/05-05-005-06W2/00	599.7	2445.0	2415.0	vertical	05-05-005-06W2	660608	5469123	660608	5469123
	595.7								5469123
141/16-10-005-06W2/00 111/07-04-005-07W2/00		2361.0	2361.0	vertical	16-10-005-06W2	665070	5471745	665070	54/1/45 5468832
	598.6	2850.0	2850.0	vertical	07-04-005-07W2	653461	5468832	653461	
112/07-04-005-07W2/00	598.2	2423.1	2423.1	vertical	07-04-005-07W2	653373	5468835	653373	5468835
131/11-04-005-07W2/00	598.3	2450.0	2450.0	vertical	11-04-005-07W2	652690	5469368	652690	5469368
121/15-08-005-07W2/00	599.8	2851.5	2850.8	vertical	15-08-005-07W2	651501	5471204	651512	5471216
131/08-14-005-07W2/00	596.0	2388.2	2388.2	vertical	08-14-005-07W2	656794	5472372	656794	5472372
111/03-15-005-07W2/00	600.0	2416.0	2415.5	vertical	03-15-005-07W2	654492	5471708	654501	5471733
101/05-07-005-08W2/00	600.8	2448.0	2448.0	vertical	05-07-005-08W2	639422	5470147	639422	5470147
131/08-15-005-08W2/00	601.5	2467.0	2467.0	vertical	08-15-005-08W2	645375	5471935	645375	5471935
141/11-28-005-08W2/00	601.3	2422.7	2375.3	deviated	11-28-005-08W2	642918	5475481	642977	5475696
131/15-30-005-08W2/00	598.3	2396.0	2396.0	vertical	15-30-005-08W2	639979	5475925	639977	5475915
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101/05-32-005-08W2/00	602.4	2389.0	2389.0	vertical	05-32-005-08W2	640820	5476698	640820	5476698
121/16-32-005-08W2/00	602.0	2350.0	2350.0	vertical	16-32-005-08W2	641986	5477474	641986	5477474
131/11-33-005-08W2/00	601.7	2370.0	2370.0	vertical	11-33-005-08W2	642836	5477257	642836	5477257
121/03-35-005-08W2/00	600.2	2417.0	2398.2	deviated	03-35-005-08W2	646163	5476259	646079	5476310
141/10-18-005-09W2/00	596.1	2431.0	2430.9	vertical	10-18-005-09W2	630492	5472022	630506	5472031
131/09-23-005-09W2/00	601.8	2432.0	2432.0	vertical	09-23-005-09W2	637148	5473904	637148	5473904
131/14-29-005-09W2/00	600.2	2861.0	2861.0	vertical	14-29-005-09W2	631524	5475679	631524	5475679
191/14-28-005-10W2/00	593.7	2775.0	2701.3	deviated	15-28-005-10W2	623782	5475357	623566	5475391
121/05-22-005-12W2/00	577.4	2440.0	2439.9	vertical	05-22-005-12W2	605030	5472525	605031	5472523
101/09-35-005-17W2/00	630.0	2835.2	2835.2	vertical	09-35-005-17W2	559158	5475576	559158	5475576
101/11-08-006-03W2/00	595.9	2631.6	2631.6	vertical	11-08-006-03W2	689946	5481808	689946	5481808
141/01-03-006-05W2/00	598.1	2257.0	2257.0	vertical	01-03-006-05W2	674631	5478963	674631	5478963
101/01-04-006-05W2/00	599.3	2236.0	2236.0	vertical	01-04-006-05W2	672780	5478725	672780	5478725
111/03-04-006-05W2/00	598.8	2230.0	2230.0		03-04-006-05W2	672140	5478704	672140	5478704
				vertical	16-05-006-05W2		5479963		
101/16-05-006-05W2/00	600.4	2250.0	2250.0	vertical		671246		671246	5479963
192/02-09-006-05W2/00	599.2	2669.0	2657.5	deviated	07-09-006-05W2	672347	5480667	672350	5480561
101/09-02-006-06W2/00	600.1	2590.0	2590.0	vertical	09-02-006-06W2	666432	5479438	666432	5479438
101/03-06-006-06W2/00	600.6	2885.5	2885.5	vertical	03-06-006-06W2	659134	5478365	659134	5478365
111/14-06-006-06W2/00	599.3	2722.1	2722.1	vertical	14-06-006-06W2	659192	5479516	659192	5479516
101/10-10-006-06W2/00	602.5	2065.2	2065.2	vertical	10-10-006-06W2	664341	5480994	664341	5480994
131/15-13-006-06W2/00	599.3	2227.0	2227.0	vertical	15-13-006-06W2	667410	5483127	667410	5483127
111/09-29-006-06W2/00	603.9	2655.0	2654.7	vertical	09-29-006-06W2	661415	5485660	661431	5485661
141/12-16-006-07W2/00	601.0	2309.0	2307.1	deviated	12-16-006-07W2	652112	5482311	652103	5482308
131/09-32-006-07W2/00	609.0	2282.0	2282.0	vertical	09-32-006-07W2	651454	5487250	651454	5487250
131/06-04-006-08W2/00	601.8	2376.0	2376.0	vertical	06-04-006-08W2	642831	5478417	642831	5478417
	600.2	2369.0	2368.8		14-04-006-08W2		5479236	642681	5479244
131/14-04-006-08W2/00				vertical		642684			
121/16-05-006-08W2/00	601.0	2384.0	2384.0	vertical	16-05-006-08W2	641963	5479045	641963	5479045
131/09-09-006-08W2/00	599.6	2356.0	2356.0	vertical	09-09-006-08W2	643584	5480495	643584	5480495
111/14-09-006-08W2/00	600.6	2367.0	2367.0	vertical	14-09-006-08W2	642842	5480690	642842	5480690
141/07-10-006-08W2/00	600.9	2368.0	2366.7	deviated	07-10-006-08W2	644946	5480100	644957	5480116
121/10-23-006-08W2/00	600.5	2311.0	2311.0	vertical	10-23-006-08W2	646300	5483626	646300	5483626
122/05-33-006-10W2/00	606.1	2036.0	2011.0	deviated	05-33-006-10W2	622821	5485998	622682	5485915
101/09-01-006-11W2/00	596.5	2750.0	2750.0	vertical	09-01-006-11W2	619290	5478212	619290	5478212
131/14-12-006-11W2/00	605.7	2763.0	2761.3	vertical	14-12-006-11W2	618260	5480260	618263	5480260
131/03-14-006-11W2/00	601.3	2729.0	2728.3	vertical	03-14-006-11W2	616695	5480741	616703	5480725
191/14-14-006-11W2/00	600.6	2835.0	2774.6	deviated	12-14-006-11W2	616484	5481453	616576	5481648
131/07-15-006-11W2/00	597.3	2855.0	2801.0	deviated	07-15-006-11W2	615686	5480941	615499	5481034
192/11-15-006-11W2/00	596.1	3029.0	2615.5	vertical	13-15-006-11W2	614656	5481571	615063	5481250
131/12-15-006-11W2/00	595.6	2695.0	2695.0	vertical	12-15-006-11W2	614657	5481501	614657	5481501
131/08-16-006-11W2/00	596.1	2738.0	2738.0	vertical	08-16-006-11W2	614169	5480981	614169	5480981
192/08-16-006-11W2/00	594.6	2905.0	2606.7	vertical	09-16-006-11W2	614412	5481250	614264	5480930
121/10-16-006-11W2/00	595.6	2748.0	2747.0	deviated	10-16-006-11W2	613891	5481171	613890	5481217
111/16-20-006-11W2/00	600.7	2719.0	2719.0	vertical	16-20-006-11W2	612727	5483128	612727	5483128
111/14-26-006-11W2/00	608.8	2711.0	2711.0	vertical	14-26-006-11W2	616758	5485008	616758	5485008
111/09-28-006-11W2/00	608.7	2923.3	2923.3	vertical	09-28-006-11W2	614347	5484541	614347	5484541
131/01-29-006-11W2/00	605.0	2752.0	2752.0	vertical	01-29-006-11W2	612528	5483870	612528	5483870
121/07-29-006-11W2/00	604.6	2809.0	2809.0	vertical	07-29-006-11W2	612126	5484061	612126	5484061
141/10-29-006-11W2/00	605.7	2820.0	2820.0	vertical	10-29-006-11W2	612254	5484689	612254	5484689
132/11-32-006-11W2/00	607.6	2845.0	2838.5	deviated	11-32-006-11W2	611647	5486146	611642	5486175
111/12-33-006-11W2/00	612.6	2748.0	2748.0	vertical	12-33-006-11W2	613205	5485946	613205	5485946
131/08-34-006-11W2/00	610.4	2788.0	2735.0		08-34-006-11W2	615699	5485661	615770	5485883
,				deviated			1		
131/11-34-006-11W2/00	614.7	2841.0	2841.0	vertical	11-34-006-11W2	614870	5486372	614870	5486372
141/13-34-006-11W2/00	614.0	1950.0	1950.0	vertical	13-34-006-11W2	614647	5486616	614647	5486616
191/16-34-006-11W2/00	614.7	3027.5	2576.0	vertical	04-02-007-11W2	615596	5487053	615773	5486564
141/04-35-006-11W2/00	609.2	2750.4	2750.4	vertical	04-35-006-11W2	616339	5485499	616339	5485499
131/11-35-006-11W2/00	609.2	2743.0	2743.0	vertical	11-35-006-11W2	616611	5486220	616611	5486220
121/06-20-006-13W2/00	582.7	2918.0	2918.0	vertical	06-20-006-13W2	592333	5481903	592333	5481903
111/10-20-006-13W2/00	580.0	2375.3	2375.3	vertical	10-20-006-13W2	592863	5482449	592863	5482449
101/07-07-006-15W2/00	623.9	2435.0	2284.9	vertical	07-07-006-15W2	571719	5478560	571710	5478559
111/08-02-006-16W2/00	626.1	2849.9	2849.6	vertical	08-02-006-16W2	569035	5476791	569034	5476806
121/13-06-006-18W2/00	674.7	2084.0	2083.0	deviated	13-06-006-18W2	541645	5477367	541675	5477335
121/08-11-007-07W2/00	604.3	2232.0	2232.0	vertical	08-11-007-07W2	655918	5489875	655918	5489875
111/11-16-007-07W2/00	610.5	2636.0	2636.0	vertical	11-16-007-07W2	651835	5491807	651835	5491807
							1		
121/03-24-007-07W2/00	607.8	2635.0	2610.0	deviated	03-24-007-07W2	656587	5492964	656527	5492771
111/07-17-007-08W2/00	612.0	2286.0	2286.0	vertical	07-17-007-08W2	640809	5491149	640809	5491149
111/01-22-007-08W2/00	611.5	2263.3	2263.3	vertical	01-22-007-08W2	644383	5492473	644383	5492473
111/06-24-007-08W2/00	612.5	2257.0	2257.0	vertical	06-24-007-08W2	646906	5492946	646906	5492946
121/13-28-007-08W2/00	614.5	2485.0	2478.0	deviated	13-28-007-08W2	641333	5495303	641418	5495336
101/09-29-007-08W2/00	613.3	2518.0	2509.6	vertical	09-29-007-08W2	641131	5494909	641143	5494902
142/07-30-007-08W2/00	616.3	2279.8	2275.6	vertical	07-30-007-08W2	639239	5494383	639235	5494424
121/06-33-007-08W2/00	615.7	1825.0	1825.0	vertical	06-33-007-08W2	641723	5496170	641723	5496170
===, :: :: :: :: :: :: :: :: :: :: :: :: ::									

									1
131/15-15-007-09W2/00	613.6	2708.1	2708.1	vertical	15-15-007-09W2	634070	5492110	634070	5492110
121/12-05-007-10W2/00	606.1	1919.0	1919.0	vertical	12-05-007-10W2	620386	5487817	620394	5487836
131/14-13-007-10W2/00	604.3	2552.5	2551.5	vertical	14-13-007-10W2	627187	5491812	627173	5491805
121/07-02-007-11W2/00	609.4	2821.0	2821.0	vertical	07-02-007-11W2	616310	5487278	616310	5487278
101/12-02-007-11W2/00	612.2	2752.4	2752.4	vertical	12-02-007-11W2	615482	5487731	615482	5487731
141/13-02-007-11W2/00	610.9	2000.0	2000.0	vertical	13-02-007-11W2	615470	5488153	615470	5488153
142/13-02-007-11W2/00	611.1	2711.0	2698.9	deviated	13-02-007-11W2	615566	5488234	615506	5488311
111/07-03-007-11W2/00	611.5	2744.0	2744.0	vertical	07-03-007-11W2	614773	5487300	614773	5487300
101/08-03-007-11W2/00	614.5	2815.0	2815.0	vertical	08-03-007-11W2	615073	5487432	615073	5487432
121/16-03-007-11W2/00	615.8	2709.0	2709.0	vertical	16-03-007-11W2	614915	5487995	614915	5487995
121/16-09-007-11W2/00	613.7	2880.0	2880.0	vertical	16-09-007-11W2	613284	5489749	613284	5489749
141/02-10-007-11W2/00	609.5	2744.0	2744.0	vertical	02-10-007-11W2	614829	5488723	614829	5488723
121/03-11-007-11W2/00	610.3	1935.0	1935.0	vertical	03-11-007-11W2	615725	5488532	615725	5488532
131/11-12-007-11W2/00	607.1	1895.0	1895.0	vertical	11-12-007-11W2	617463	5489625	617463	5489625
141/06-14-007-11W2/00	609.0	1903.1	1903.1	vertical	06-14-007-11W2	615991	5490790	615991	5490790
131/08-18-007-11W2/00	617.6	2627.0	2627.0	vertical	08-18-007-11W2	610124	5490662	610124	5490662
111/15-20-007-11W2/00	615.2	2757.0	2757.0	vertical	15-20-007-11W2	611365	5492838	611365	5492838
111/12-21-007-11W2/00	614.5	2703.0	2703.0	vertical	12-21-007-11W2	612282	5492421	612282	5492421
131/01-29-007-12W2/00	603.4	2662.0	2662.0	vertical	01-29-007-12W2	601809	5493231	601809	5493231
	578.9	2330.0	2330.0		10-02-007-13W2		5487344	596640	5487344
121/10-02-007-13W2/00				vertical		596640			
121/08-06-007-15W2/00	594.5	2714.3	2714.3	vertical	08-06-007-15W2	570839	5486537	570839	5486537
111/04-27-007-15W2/00	583.3	2344.6	2302.4	deviated	04-27-007-15W2	574629	5492802	574666	5492583
101/05-31-007-15W2/00	584.0	2599.9	2599.9	vertical	05-31-007-15W2	569667	5494708	569667	5494708
101/16-35-007-18W2/00	659.5	2245.0	2245.0	vertical	16-35-007-18W2	548015	5495270	548015	5495270
121/10-03-008-05W2/00	603.9	2475.0	2475.0	vertical	10-03-008-05W2	673057	5499015	673057	5499015
141/11-06-008-06W2/00	618.2	2166.2	2166.2	vertical	11-06-008-06W2	658186	5498609	658186	5498609
131/15-20-008-08W2/00	621.7	2602.0	2589.1	deviated	15-20-008-08W2	640344	5503292	640379	5503400
141/07-24-008-09W2/00	617.0	2578.0	2578.0	vertical	07-24-008-09W2	637320	5502540	637320	5502540
131/16-20-008-10W2/00	614.5	2575.0	2575.0	vertical	16-20-008-10W2	621234	5502942	621234	5502942
141/09-23-008-10W2/00	615.2	2585.0	2584.8	vertical	09-23-008-10W2	626268	5502673	626265	5502664
101/01-28-008-10W2/00	615.9	2600.0	2600.0		01-28-008-10W2	622965	5503342	622965	5503342
				vertical					
111/15-30-008-10W2/00	613.9	2578.0	2577.7	vertical	15-30-008-10W2	619356	5504351	619356	5504333
131/02-32-008-10W2/00	615.2	2588.0	2588.0	vertical	02-32-008-10W2	620767	5504954	620767	5504954
111/14-12-008-13W2/00	608.8	2252.0	2252.0	vertical	14-12-008-13W2	597769	5499034	597769	5499034
141/08-22-008-13W2/00	605.1	2475.0	2475.0	vertical	08-22-008-13W2	595319	5501632	595324	5501640
131/09-22-008-13W2/00	603.1	2240.0	2240.0	vertical	09-22-008-13W2	595182	5502053	595182	5502053
121/05-23-008-13W2/00	603.3	2620.0	2620.0	vertical	05-23-008-13W2	595618	5501485	595618	5501485
111/03-27-008-13W2/00	602.5	2515.3	2514.9	deviated	03-27-008-13W2	594500	5502733	594501	5502725
111/01-33-008-13W2/00	602.8	2557.0	2553.4	vertical	01-33-008-13W2	593642	5504294	593637	5504315
111/16-33-008-13W2/00	603.6	2580.0	2580.0	vertical	16-33-008-13W2	593571	5505471	593571	5505471
141/13-34-008-13W2/00	604.4	2490.0	2490.0	vertical	13-34-008-13W2	594145	5505596	594145	5505596
	653.9	1994.3	1994.3		06-02-008-19W2	537418	5496012	537418	5496012
101/06-02-008-19W2/00				vertical					
131/06-18-009-06W2/00	626.8	2442.5	2442.5	vertical	06-18-009-06W2	657745	5511268	657745	5511268
141/14-32-009-09W2/00	633.6	2532.2	2519.5	deviated	14-32-009-09W2	629988	5516069	630131	5516102
132/13-36-009-09W2/00	625.8	2462.0	2461.2	vertical	13-36-009-09W2	635972	5516280	635967	5516287
141/08-17-009-10W2/00	616.2	2551.5	2551.5	vertical	08-17-009-10W2	621183	5510349	621183	5510349
142/11-24-009-10W2/00	615.2	2608.0	2608.0	vertical	11-24-009-10W2	626937	5512445	626937	5512445
111/12-07-009-12W2/00	618.0	2195.0	2195.0	vertical	12-07-009-12W2	598948	5508363	598948	5508363
141/10-12-009-12W2/00	610.6	2542.0	2469.7	deviated	10-12-009-12W2	607623	5508760	607843	5508834
121/12-22-009-12W2/00	609.8	2455.0	2455.0	vertical	12-22-009-12W2	603525	5511760	603525	5511760
111/03-03-009-13W2/00	605.7	2485.0	2485.0	vertical	03-03-009-13W2	594405	5505971	594405	5505971
141/08-03-009-13W2/00	611.0	2558.0	2558.0	vertical	08-03-009-13W2	595202	5506489	595202	5506489
111/12-28-009-13W2/00	618.3	2195.0	2195.0	vertical	12-28-009-13W2	592262	5513188	592262	5513188
121/04-01-009-14W2/00	594.1	2242.0	2242.0	vertical	04-01-009-14W2	587292	5505885	587292	5505885
141/12-01-010-09W2/00	626.3	2438.6	2438.6	vertical	12-01-010-09W2	636189	5517446	636189	5517446
191/07-02-010-09W2/00	625.3	2462.0	2448.9	deviated	10-02-010-09W2	635079	5517236	635081	5517129
131/08-16-010-10W2/00	620.5	2075.0	2075.0	vertical	08-16-010-10W2	622403	5520063	622403	5520063
121/09-04-010-11W2/00	616.0	2557.3	2557.3	vertical	09-04-010-11W2	612652	5516840	612652	5516840
191/08-06-010-15W2/00	574.9	2545.0	2474.4	deviated	09-06-010-15W2	570550	5516037	570548	5515829
121/03-10-010-15W2/00	580.8	2495.0	2495.0	vertical	03-10-010-15W2	574539	5516983	574539	5516981
101/16-14-010-17W2/00	584.2	2445.7	2445.7	vertical	16-14-010-17W2	557544	5519664	557544	5519664
121/05-11-011-14W2/00	604.5	2436.0	2435.7	vertical	05-11-011-14W2	584418	5527230	584427	5527220
33-023-00171-00-00	584.6	3608.8	3608.8	vertical	SESW 18-163-95	641916	5422554	641916	5422554
33-023-00171-00-00	592.5	3444.2	3444.2	vertical	SWSW 24-163-97	630330	5420659	630330	5420659
	660.5								
33-023-00189-00-00		3505.2	3505.2	vertical	NWNW 22-162-101	588887	5411477	588887	5411477
33-023-00216-00-00	666.0	3389.4	3389.4	vertical	NWNW 20-163-102	575736	5420874	575736	5420874
33-023-00221-00-00	604.4	3459.5	3459.5	vertical	NWNW 10-163-98	617352	5424808	617352	5424808
33-023-00223-00-00	648.3	3365.6	3365.6	vertical	NWNE 21-163-98	616612	5421571	616612	5421571
33-023-00224-00-00	603.5	3504.0	3224.0	vertical	SESW 33-164-98	616093	5426792	616388	5426991
33-023-00233-00-00	589.8	3293.4	3293.4	vertical	SWNE 11-163-97	629440	5424680	629440	5424680
33-023-00234-00-00	590.7	3305.6	3305.6	vertical	SESW 33-164-97	625756	5427002	625756	5427002
	·								,

33-023-00251-00-00	643.1	2697.5	2697.5	vertical	SWNE 14-163-99	610193	5422696	610193	5422696
33-023-00253-00-00	629.4	3332.1	3332.1	vertical	NWSE 3-163-99	608530	5425440	608530	5425440
33-023-00261-00-00	647.7	3316.5	3316.5	vertical	SENE 28-163-102	578369	5418919	578369	5418919
33-023-00307-00-00	676.4	3374.1	3374.1	vertical	NWNW 27-163-101	588558	5419445	588558	5419445
33-023-00313-00-00	644.7	3316.2	3316.2	vertical	NWNW 25-163-102	582211	5419210	582211	5419210
33-023-00317-00-00	654.4	3291.8	3291.8	vertical	NENE 13-163-102	583322	5422618	583322	5422618
33-023-00327-00-00	683.4	3384.2	3384.2	vertical	SWNE 30-163-100	594340	5419196	594340	5419196
33-023-00340-00-00	611.4	3017.8	3017.8	vertical	SWNW 31-163-97	622283	5418011	622283	5418011
33-023-00387-00-00	580.6	2874.3	2874.3	vertical	NESW 6-163-95	641813	5426187	641813	5426187
33-023-00445-00-00	630.6	3435.7	3435.7	vertical	SWSE 9-162-96	636000	5414183	636000	5414183
33-023-00459-00-00	662.6	2612.1	2612.1	vertical	NENW 8-163-100	595143	5424212	595143	5424212
33-023-00460-00-00	645.6	2651.8	2651.8	vertical	SWSW 7-163-99	603052	5423456	603052	5423456
33-023-00741-00-00	670.0	2682.2	2682.2	vertical	SWSE 8-163-100	595875	5423211	595875	5423211

• 19 wells with brine samples analysed for lithium concentration in the project area.

	Well ID	Reference Elevation - Kelly Bushing (m)	Measured Depth (m)	True Vertical Depth (m)	Vertical or Deviated Well	Surface Location	Surface Hole Easting (NAD83)	Surface Hole Northing (NAD83)	Bottom Hole Easting (NAD83)	Bottom Hole Northing (NAD83)
	103/01-02-001-12W2/00	618.6	3731	3731	vertical	01-02-001-12W2	609801.4	5428760	609801.4	5428760
	101/14-33-002-12W2/00	598	2421	2421	vertical	14-33-002-12W2	605332.5	5447568	605332.5	5447568
	121/09-13-002-22W2/00	761.3	3270.1	3270.1	vertical	09-13-002-22W2	513400.5	5441333	513400.5	5441333
ſ	141/16-20-003-12W2/00	593.3	2374	2374	vertical	16-20-003-12W2	603468.3	5454117	603463.2	5454116
ſ	101/04-19-004-08W2/00	587.2	2476	2476	vertical	04-19-004-08W2	639532.5	5463307	639532.5	5463307
ſ	141/01-22-004-19W2/00	755.6	3075	3075	vertical	01-22-004-19W2	538242.9	5461757	538242.9	5461757
ſ	111/02-05-005-21W2/00	754.6	2879	2862.8	deviated	02-05-005-21W2	514973.6	5466460	515093.8	5466344
ſ	101/07-27-007-06W2/03	612	1732.5	1732.5	vertical	07-27-007-06W2	663558.7	5495102	663558.7	5495102
ſ	101/02-22-007-09W2/00	614.9	1941	1940.7	vertical	02-22-007-09W2	634094.7	5492296	634094.6	5492301
l	141/13-02-007-11W2/00	610.9	2000	2000	vertical	13-02-007-11W2	615469.8	5488153	615469.8	5488153
l	121/09-03-007-11W2/00	614.5	1932	1932	vertical	09-03-007-11W2	615059.5	5487701	615059.5	5487701
ĺ	141/14-12-007-11W2/00	606.8	1902	1900.9	vertical	14-12-007-11W2	617572.5	5489933	617576.8	5489935
l	121/10-03-008-05W2/00	603.9	2475	2475	vertical	10-03-008-05W2	673057	5499015	673057	5499015
l	101/14-36-008-13W2/00	615.3	2581	2581	vertical	14-36-008-13W2	597644.8	5505630	597644.8	5505630
l	111/11-02-009-13W2/00	613.5	2593	2590.4	vertical	11-02-009-13W2	596055	5506763	596033.9	5506773
ı	141/11-17-009-21W2/00	764.5	2624	2624	vertical	11-17-009-21W2	513002.8	5509358	513002.8	5509358
ı	33-023-00259-00-00	704.4	3587.8	3587.8	vertical	SESW 8-161-99	605305	5404070	605305	5404070
ı	33-023-00273-00-00	698.6	2910.8	2910.8	vertical	SENW 8-161-99	605239.6	5404887	605239.6	5404887
İ	33-023-00327-00-00	683.4	3384.2	3384.2	vertical	SWNE 30-163-100	594340.3	5419196	594340.3	5419196

Appendix 3: Figures and Tables within the JORC

Figure A-1:Wells drilled through the Duperow Formation with Petrophysical Evaluations completed for the Resource Assessment (279 wells)

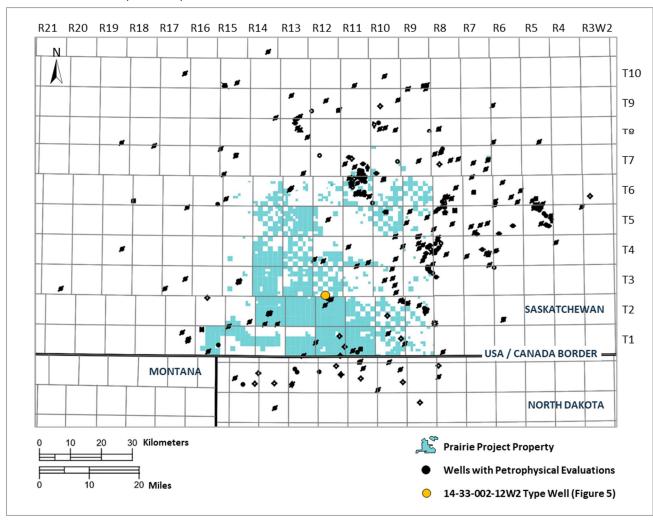


Figure A-2: Stratigraphic Cross section of wells in Saskatchewan with lithium concentrations within and adjacent to Arizona Lithium's Property A' 14-12-007-11W2 09-03-007-11W2 13-02-007-11W2 04-19-004-08W2 16-20-003-12W2 14-33-002-12W2 01-02-001-12W2 11-02-009-13W2 14-36-008-13W2 10-03-008-05W2 07-27-007-06W2 02-22-007-09W2 150 meters 99 **Duperow Formation** -88 Stratigraphic Datum 130,190 64 137 172 166 II 220 Thickness 258 146 149 -113 148 167 135 132 130 86 77 104 108 103 98 59 94 98 84 68 53 11-02 48 44 A 14-36 10-03 T8 07-27 **Prairie Project Lithium Test Wells** Lithium Concentrations (mg/L) (owned by Arizona Lithium) Т3 T2 Wells with Lithium Concentratio (Well Name Abbreviated)

Figure A-3: West to East Cross Section Across the Property

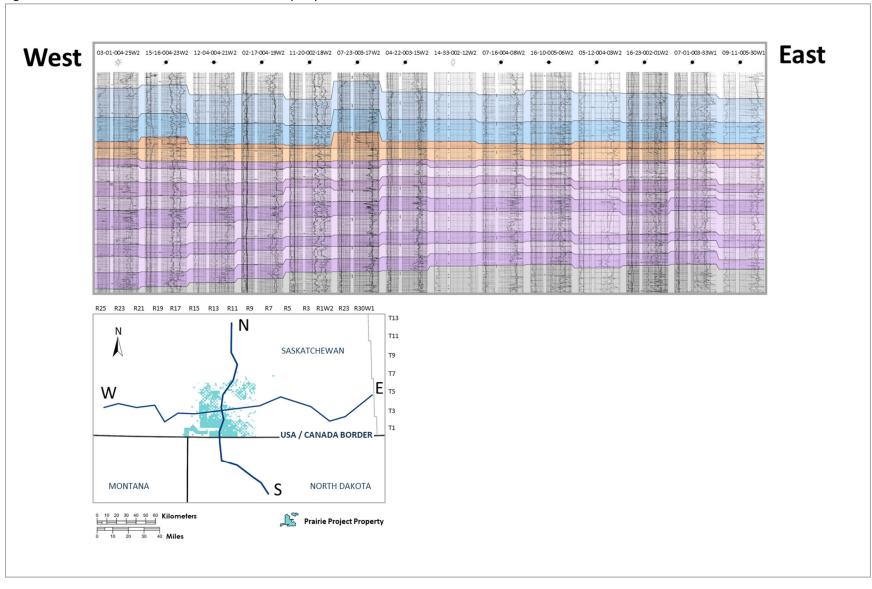


Figure A-4: North to South Cross Section Across the Property

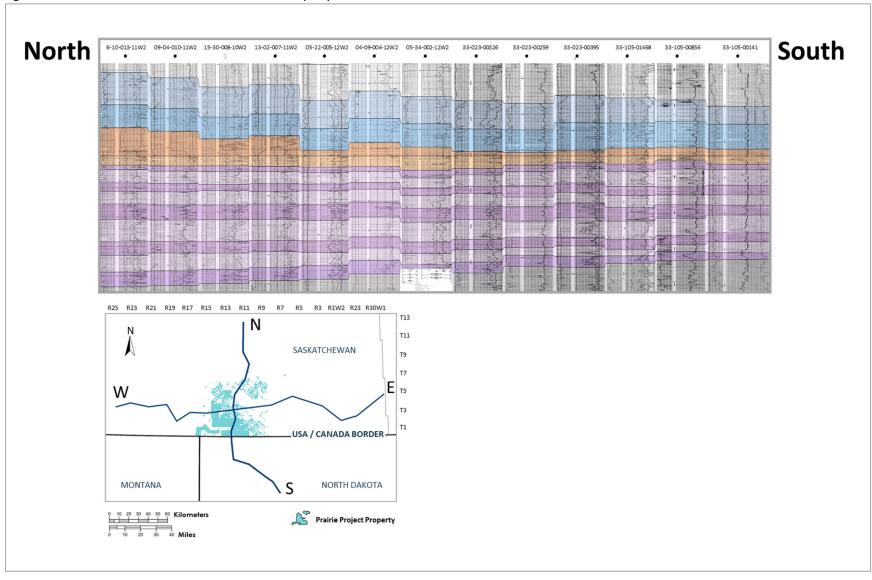


Table A-1: Representative lithium concentrations within the Indicated Resource area based on the mass volume and brine volume estimates.

	Representative Lithium Concentration (mg/L)		Li Mass (tonnes)		LCE Mass (tonnes)		
Producing Formations	Inferred	Indicated	Inferred	Indicated	Inferred	Indicated	Total
Seward	98	98	23,887	65,872	127,151	350,637	477,787
Flat Lake	95	95	2,131	5,789	11,343	30,815	42,158
Upper Wymark	142	159	46,366	113,482	246,806	604,065	850,871
Middle Wymark	120	127	181,550	457,630	966,391	2,435,964	3,402,355
Lower Wymark	93	96	37,188	102,663	197,952	546,475	744,427
Saskatoon	55	56	44,358	111,562	236,118	593,845	829,962
Total	101	106	340,000	850,000	1,800,000	4,500,000	6,300,000

Table A-2: Sensitivity Analysis to Price Variation (8% Discount Rate)

Parameter	Low Price Case (-25%) 15,750 \$/tonne	Base Price Case 21,000 \$/tonne	High Price Case (+25%) 26,250 \$/tonne	
NPV Pre-Tax (\$ millions)	205	448	691	
NPV Post-Tax (\$ millions)	133	312	491	
IRR Pre-Tax (%)	15.8	23.9	31.4	
IRR Post-Tax (%)	13.7	20.4	26.4	

Table A-3: Sensitivity Analysis to Initial CAPEX Variation (8% Discount Rate)

Parameter	Low CAPEX Case (-25%) \$251M	Base CAPEX Case \$334M	High CAPEX Case (+25%) \$418M
NPV Pre-Tax (\$ millions)	526	448	369
NPV Post-Tax (\$ millions)	390	312	234
IRR Pre-Tax (%)	31.8	23.9	18.9
IRR Post-Tax (%)	28.0	20.4	15.7

Table A-4: Sensitivity Analysis to OPEX Variation (8% Discount Rate)

Parameter	Low OPEX Case (-25%) \$264M	Base OPEX Case \$353M	High OPEX Case (+25%) \$441M	
NPV Pre-Tax (\$ millions)	488	448	407	
NPV Post-Tax (\$ millions)	342	312	283	
IRR Pre-Tax (%)	25.2	23.9	22.6	
IRR Post-Tax (%)	21.5	20.4	19.4	

Table A-5: Sensitivity Analysis to Variation in Overall Lithium Recovery (8% Discount Rate)

Parameter	Low Recovery Case 86%	Base Recovery Case 90%	High Recovery Case 94%	
NPV Pre-Tax (\$ millions)	405	448	491	
NPV Post-Tax (\$ millions)	280	312	344	
IRR Pre-Tax (%)	22.5	23.9	25.3	
IRR Post-Tax (%)	19.3	20.4	21.5	

Figure A-5: Net present value tornado chart for lithium carbonate price, initial CAPEX, OPEX, and overall Li recovery.

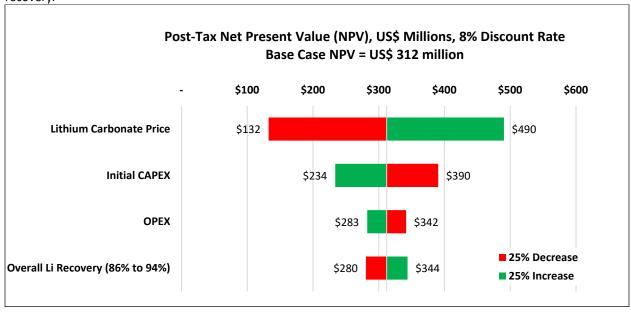
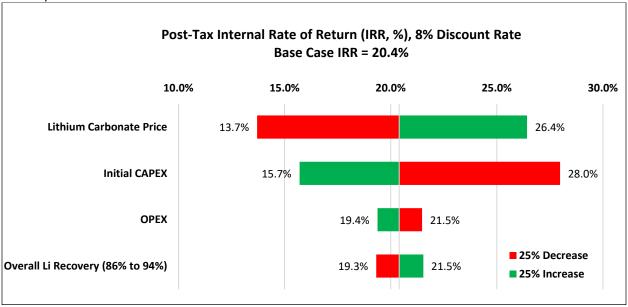


Figure A-6: Internal rate of return tornado chart for lithium carbonate price, initial CAPEX, OPEX, and overall Li recovery.



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

Gordon MacMillan P. Geol., Principal Hydrogeologist of Fluid Domains, who is an independent consulting geologist for a number of brine mineral exploration companies and oil and gas development companies, reviewed and approves the technical information pertaining to the resource provided in the release and JORC Code – Table 1 attached to this 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 23 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.

Kyle Gramly PE, Sr. Process Engineer for Samuel Engineering, reviewed and approves the technical information pertaining to testwork and processing provided in the release and JORC Code — Table 1 attached to this release. He is a registered Professional Engineer (Chemical) with the Colorado Department of Regulatory Agencies (No. 0058009) since 2020 and has worked in the engineering field on a variety of mining projects for 15 years since graduating from Colorado School of Mines. Mr. Gramly is a Qualified Person as defined by 17 CFR § 229.1302 - (Item 1302) and has been involved in several pilot test programs and engineering design studies regarding the commodity discussed in this release.

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