

DISCOVERY OF ANOTHER LITHIUM RICH FORMATION AT PRAIRIE

HIGHLIGHTS

- Well #2 was drilled as an exploration well into the Dawson Bay Formation at Pad #1. Lithium-enriched samples of 60 mg/L Li have been discovered in the Dawson Bay Formation at Pad #1 of the Prairie project.
- The Dawson Bay Formation lies directly below the Souris River Formation across the entire project area and has never previously been tested for lithium (Figure 1).
- Arizona Lithium have now successfully drilled a production well and a disposal well, a key step in project construction and a significant derisking event.
- Production and Disposal Wells have now both been tested at Pad #1, and results from both have exceeded expectations and previously modelled rates from the company’s PFS. Detailed studies are underway for both production and disposal and will be reported upon the completion of the analysis.
- With the first production and disposal wells installed and tested, the company can now finalise its facility design and look to construction in H1 2025 and look to produce lithium onsite at a commercial scale thereafter in 2025.
- Additional exploration into the Souris River and Dawson Bay Formations across additional Pad locations will continue in the coming months.

Arizona Lithium Limited (ASX: AZL, AZLO, OTC: AZLAF) (“Arizona Lithium”, “AZL” or “the Company”), a company focused on the sustainable development of two large lithium development projects in North America, the Prairie Lithium Project (“**Prairie**”) and the Big Sandy Lithium Project (“**Big Sandy**”), is pleased to announce it discovered another new lithium enriched formation at its Prairie project and has installed its first disposal well on Pad #1. Well #2 on Pad #1 was drilled into the Dawson Bay Formation and then converted into a disposal well. The Dawson Bay directly underlies the Souris River Formation across the entire project area. Samples of brine from the Dawson Bay indicate a lithium concentration of 60 mg/L Li.

After exploration testing the Dawson Bay Formation, the well was converted into a disposal well. Four separate zones were identified in Mississippian stratigraphy and tested for disposal capacity. Duperow brine from the production well drilled on Pad #1 was disposed of into the individual zones within the disposal well. All four zones were individually capable of maintaining disposal rates between 500-700m³ per day each. Each zone was tested individually with 6-12 metres of open perforations. Disposal testing has exceeded expectations and previously modelled rates as is evidenced by the low wellhead pressure (Table 1) during the high volume testing.

Disposal Zone	Open Perforations (m)	Disposal Rate (m ³ /day)	Wellhead Pressure (kPa)
Zone 1	6	500	8,393
Zone 2	12	700	5,895
Zone 3	6	700	5,271
Zone 4	12	700	621

Table 1: Summary of Disposal Test

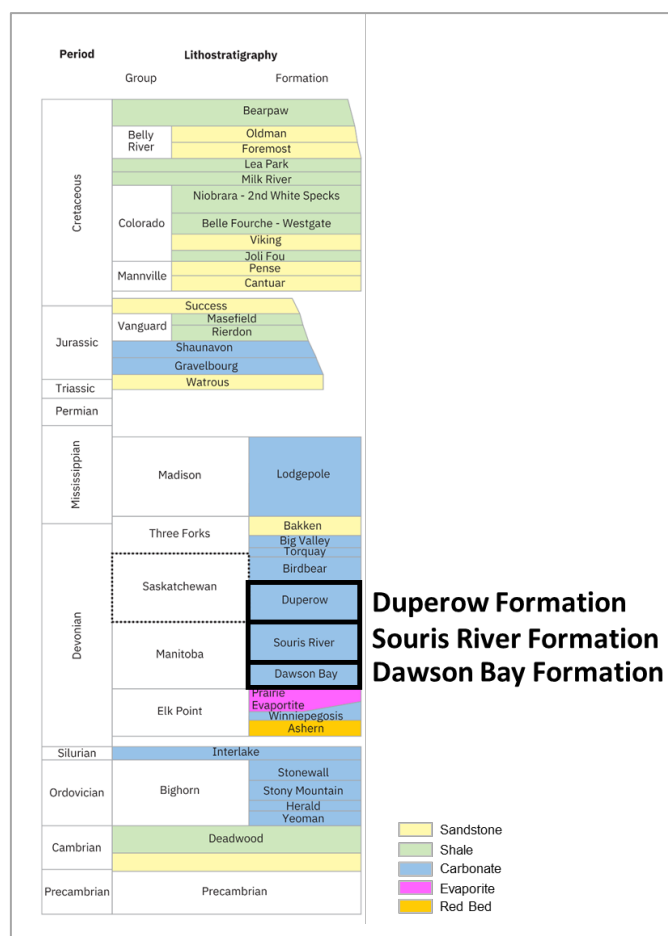


Figure 1: Simplified Stratigraphic Chart

Arizona Lithium Managing Director, Paul Lloyd, commented: “Having the first production and disposal wells installed and tested at Pad#1 is a significant milestone towards putting our project into production. As described in our PFS that we released in December 2023, we require production wells, disposal wells and surface equipment. So far we have tested a production well successfully, we have tested a disposal well successfully and we have run a pilot plant to optimize processing at surface. Having all these milestones complete allows us to finalize the design of our facility as we look to construct our facility infrastructure in H1 2025 and produce lithium on Pad #1 in H2 2025.”

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 Inferred¹ (Table 2). 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.

Table 2 – Prairie Lithium Mineral Resources Statement

Producing Formations	Representative Lithium Concentration (mg/L)		Li Mass (tonnes)		LCE Mass (tonnes)		
	Inferred	Indicated	Inferred	Indicated	Inferred	Indicated	Total
Total	101	106	340,000	850,000	1,800,000	4,500,000	6,300,000

¹ ASX Announcement – “6.3 Million Tonne Lithium Resource At Prairie” – 13 December 2023

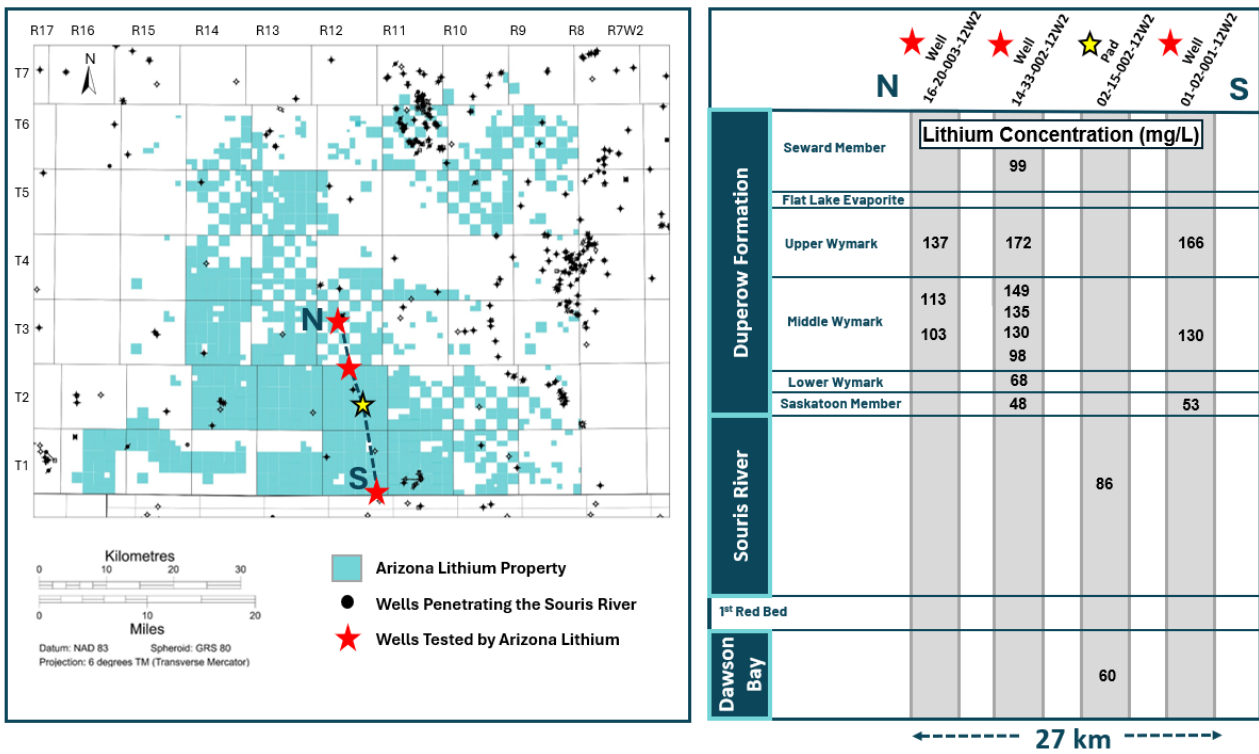


Figure 2: Location map and representative lithium concentrations from Arizona Lithium's test wells

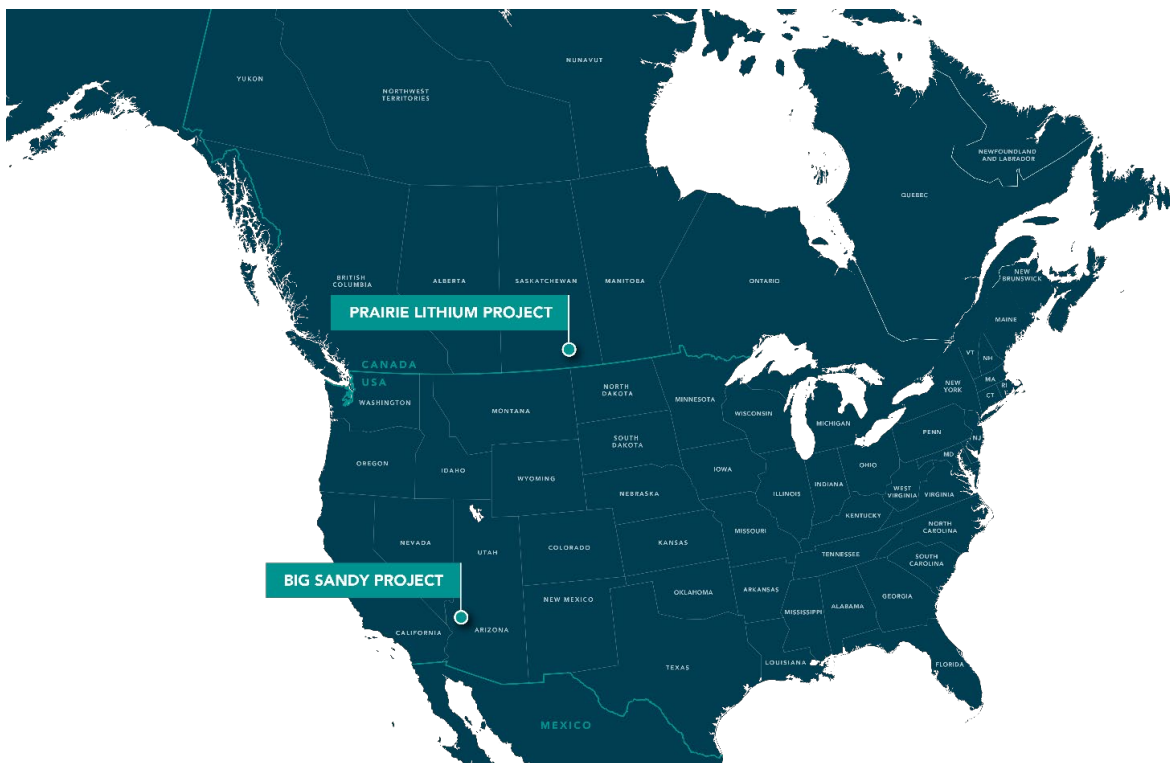


Figure 3: Location of Arizona Lithium's core projects

This ASX announcement is authorised for release by the Board.

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

Gordon MacMillan P.Geol., Principal Hydrogeologist of Fluid Domains, 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 in the attached JORC Table 1. Mr. MacMillan is a member of the Association of Professional Engineers and Geoscientists of Alberta (APEGA), which is ROPO accepted for the purpose of reporting in accordance with the ASX listing rules. Mr. MacMillan has been practising as a professional in hydrogeology since 2000 and has 24 years of experience in mining, water supply, water injection, and the construction and calibration of numerical models of subsurface flow and solute migration. Mr. MacMillan is also a Qualified Person as defined by NI 43-101 rules for mineral deposit disclosure. He has sufficient experience relevant to qualify as a Competent Person as defined by the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves – The JORC Code (2012). Mr MacMillan consents to the inclusion in this announcement of the matters based on this information in the form and context in which it appears.

Information in this announcement that relates to Mineral Resources have been extracted from the Company's announcement released to ASX on 13 December 2023.

The announcement is available to view on the Company's website: www.arizonalithium.com. The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and, in the case of estimates of these Mineral Resources, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.

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	<p><i>Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</i></p> <p><i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i></p> <p><i>Aspects of the determination of mineralisation that are Material to the Public Report.</i></p> <p><i>In cases where ‘industry standard’ work has been done this would be relatively simple (e.g. ‘reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay’). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information</i></p>	<p>The brine collection procedure for well 101/02-15-002-12W2/00 is outlined as follows:</p> <ul style="list-style-type: none"> • After the well was drilled, it was cased and perforated over the Dawson Bay. Prior to perforating the Dawson Bay, a Cement Bond Log (CBL) was run and analysed to ensure zonal isolation behind the casing. • During well testing, formation water was brought to surface by swabbing fluid from the well. The total volume swabbed was 9.41 m³. • Further measures taken to ensure sample representivity are discussed in ‘Drill Sample Recovery’.
Drilling techniques	<p><i>Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other</i></p>	<p>Well 101/02-15-002-12W2/00 was drilled using mud rotary drilling with brine mud and a bit size of 222 mm, which is standard for these types of wells.</p>

Criteria	JORC Code explanation	Commentary
	<i>type, whether core is oriented and if so, by what method, etc).</i>	
Drill sample recovery	<p><i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></p> <p><i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i></p> <p><i>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</i></p>	<p>The brine collection procedure for well 101/02-15-002-12W2/00 is outlined as follows:</p> <ul style="list-style-type: none"> • The procedure was 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. • 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 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. • Samples were pre-filtered through glass wool. The sample was then filtered through a nalgene filter to remove any particulates. • Field determination of specific gravity, conductivity, 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. • 250 mL of filtered brine from

Criteria	JORC Code explanation	Commentary
		<p>representative intervals was sent to the Arizona Lithium Laboratory in Emerald Park, Saskatchewan.</p> <ul style="list-style-type: none"> • 250 mL of filtered brine from representative intervals was sent to Isobrine Solutions in Edmonton, Alberta. • 250 mL of unfiltered brine from representative intervals was sent to Arizona Lithium's Lithium Research Center in Tempe, Arizona. • All sample bottles were labelled with an 'anonymous' sample ID and sealed with secure tape on the caps to ensure integrity. • Samples were couriered to the various laboratories using full chain-of-custody documentation.
Logging	<p><i>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</i></p> <p><i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i></p> <p><i>The total length and percentage of the relevant intersections logged.</i></p>	<p>Open-hole and cased-hole wireline logs provide the most widely available information to understand the porosity and water volume of the formation.</p> <p>Open-hole wireline logs typically include a gamma-ray, compensated neutron, litho-density, sonic, spontaneous potential, and resistivity standard suite. These tools are used to measure different rock and fluid properties.</p> <p>Open hole wireline logs were obtained at well 101/02-15-002-12W2 from 2554.4 mKB to 1716.4 mKB. A cased-hole wireline log measuring gamma ray and neutron porosity was obtained from 1716.4 mKB to the base of surface casing.</p> <ul style="list-style-type: none"> •
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> • <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i> • <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i> • <i>For all sample types, the nature, quality</i> 	<p>Lithium samples are collected in the form of water samples not core. Procedures taken to ensure representative brine samples were collected are discussed in 'Drill Sample Recovery'.</p>

Criteria	JORC Code explanation	Commentary
	<p><i>and appropriateness of the sample preparation technique.</i></p> <ul style="list-style-type: none"> • <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i> • <i>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</i> • <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i> 	<p>To ensure precise and accurate measurements of lithium concentration, multiple laboratories were used for analyses for well 101/02-15-002-12W2/00.</p> <ul style="list-style-type: none"> • 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. • For each zone tested, 4 L of fluid was collected for laboratory analysis. Each laboratory was sent approximately 250 mL. Each laboratory analysis takes less than 1 mL, so each lab had sufficient sample volume to run repeats, etc.
<p>Quality of assay data and laboratory tests</p>	<ul style="list-style-type: none"> • <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i> • <i>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.</i> • <i>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</i> 	<p>Three laboratories were utilised for analyses for well 101/02-15-002-12W2/00. The laboratories Include:</p> <p>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 determined by this laboratory were used qualitatively and for additional confirmation of the results from the other laboratories.</p> <p>Lithium Research Center (Tempe, Arizona) – Arizona Lithium's internal laboratory provided a comprehensive analysis of selected brine samples. These analyses were used to confirm the collected samples were unchanging overtime and to validate the concentrations at the other labs.</p> <p>Isobrine Solutions, a small commercial laboratory in Edmonton, Alberta, was</p>

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		<p>selected to provide 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 disclosure, but only after they were compared to concentrations measured by the other two participating laboratories. 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. Based on Arizona Lithium's previous sampling programs, Isobrine Solutions is considered to provide accurate and reliable lithium concentrations.</p>
<p>Verification of sampling and assaying</p>	<ul style="list-style-type: none"> • <i>The verification of significant intersections by either independent or alternative company personnel.</i> • <i>The use of twinned holes.</i> • <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i> • <i>Discuss any adjustment to assay data.</i> 	<p>A total of 3 samples were sent for analysis of lithium concentration during testing of the 101/02-15-002-12W2/00 well. 3 samples were analysed at the Arizona Lithium Laboratory in Emerald Park for rapid analysis. Three (3) samples were sent to the Lithium Research Center and 2 samples were analysed at Isobrine Solutions.</p> <p>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.</p> <p>Based on field analysis, all samples were considered to be representative of formation water. As such, there were approximately 3 samples used to confirm lithium concentrations were not changing over time as water was continuing to be removed from the well.</p> <p>Two (2) samples were sent to Isobrine Solutions and analyzed in order to</p>

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		<p>determine a representative value for lithium concentration disclosure.</p> <p>The disclosed lithium concentration was determined based on 2 samples analysed by Isobrine. This far exceeds the 5% to 10% duplicate sample standard.</p>
Location of data points	<ul style="list-style-type: none"> • <i>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</i> • <i>Specification of the grid system used.</i> • <i>Quality and adequacy of topographic control.</i> 	<p>Arizona Lithium's well 101/02-15-002-12W2/00 had a detailed site survey completed by Caltech Surveys. The survey was carried out in accordance with Article XIII, Standards of Practice, Section 6 of the bylaws of the Saskatchewan Land Surveyors Association. These high-quality site surveys are routine for oil and gas wells drilled in Saskatchewan.</p> <p>The geographical land grid format survey is in NAD 83 and UTM Zone 13N.</p>
Data spacing and distribution	<ul style="list-style-type: none"> • <i>Data spacing for reporting of Exploration Results.</i> • <i>Whether the data spacing, and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</i> • <i>Whether sample compositing has been applied.</i> 	<p>Well 101/02-15-002-12W2/00 is the first well in the project area that has been perforated across the Dawson Bay Formation and targeted specifically to obtain representative brine samples from the Dawson Bay.</p>
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> • <i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i> • <i>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</i> 	<p>The Dawson Bay Formation has been sampled from a vertical well that has been drilled perpendicular to the Dawson Bay Formation stratigraphy. There is no relationship between the drilling orientation and the formation water quality, so no sampling bias related to sampling orientation is present.</p>
Sample security	<ul style="list-style-type: none"> • <i>The measures taken to ensure sample security.</i> 	<p>Sample security procedures for Arizona Lithium's test well 101/02-15-002-12W2/00.</p> <ul style="list-style-type: none"> • Samples were collected directly from the wellhead into 4L containers (as described above). Samples taken in the field were placed in bottles and were

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		<p>labelled according to the number of the sample.</p> <ul style="list-style-type: none"> • After field processing (measurement, filtration, splitting) samples were labelled with anonymous tracking numbers, sealed, security taped and shipped to the laboratories. • 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.
<p>Audits or reviews</p>	<ul style="list-style-type: none"> • <i>The results of any audits or reviews of sampling techniques and data.</i> 	<p>Arizona Lithium's QP reviewed:</p> <ul style="list-style-type: none"> • The sampling collection and distribution procedures taken in the field. • The field log for all of the samples collected, including the field measurements of conductivity, pH and density. • The corresponding Chain of Custody documentation sent to Isobrine Solutions. • The brine assay results from Isobrine Solutions. <p>Arizona Lithium's QP has witnessed previous sampling programs at Arizona Lithium's 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.</p>

Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
<p>Mineral tenement and land tenure status</p>	<ul style="list-style-type: none"> • <i>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</i> • <i>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</i> 	<p>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.</p> <p>Petroleum and Natural Gas (PNG) permits also exist across Arizona Lithium’s Property and are leased to oil and gas producers.</p> <p>All crown permits and stratigraphic intervals are held 100% by Arizona Lithium or sub-leased 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.</p> <p>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.</p> <p>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 acquired on April 19, 2021, which expire in April 2029; and a total of 16 permits were</p>

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		<p>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.</p> <p>The provincial royalty rate on mineral leases for lithium is currently set at 3%, with a royalty free period for the first 24 months of production.</p> <p>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.</p> <p>The lease out date for these leases is November 15, 2023.</p> <p>The Ministry of Energy and Resources (MER) has indicated to Arizona Lithium that the process to license wells for injection, water source, disposal, or production of lithium will follow that of the oil and gas industry.</p> <p>Arizona Lithium is not aware at the date of this report of any known environmental issues that could materially impact their ability to extract lithium from the Project.</p> <p>Appendix 1: Summary of Arizona Lithium's subsurface mineral permits and leases.</p>

Criteria	JORC Code explanation	Commentary
<i>Exploration done by other parties</i>	<ul style="list-style-type: none"> <li data-bbox="407 254 894 317">• <i>Acknowledgment and appraisal of exploration by other parties.</i> 	<p data-bbox="917 254 1433 464">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 can be used to evaluate the Dawson Bay Formation.</p> <p data-bbox="917 478 1433 726">To Arizona Lithium’s knowledge, well 101/02-15-002-12W2/00 is the first well in the project area that has been perforated across the Dawson Bay Formation and targeted specifically to obtain representative brine samples from the Dawson Bay.</p>
<i>Geology</i>	<ul style="list-style-type: none"> <li data-bbox="407 743 894 806">• <i>Deposit type, geological setting and style of mineralisation.</i> 	<p data-bbox="917 743 1433 1094">The target interval of this Project is porous carbonate rocks of the Middle Devonian Dawson Bay Formation, Manitoba Group (Gerhard et al., 1982; Kent and Christopher, 1994). Devonian sediments were laid down in a northwest to southeast elongated Elk Point Basin that extended broadly from northwestern Alberta, through Saskatchewan, and across into North Dakota and Montana (Dunn, 1975).</p> <p data-bbox="917 1108 1433 1241">The deposit type being explored by Arizona Lithium is a lithium-bearing brine hosted by the Dawson Bay Formation which lies below the Souris River Formation..</p> <p data-bbox="917 1255 1433 1682">Lithium brines are defined as accumulations of saline groundwater enriched in dissolved lithium (Bradley, et al., 2017) within arid climates. Lithium brines are located within closed sedimentary basins with a close association with evaporite deposits resulting from trapped evaporatively concentrated seawater (Bradley et al., 2013). Lithium brines are hosted within one or more aquifers, which have had sufficient time to concentrate a brine (Bradley et al., 2017).</p> <p data-bbox="917 1696 1433 1860">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</p>

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		<p>Duperow Formation. Newly acquired geochemical data has allowed Arizona Lithium to characterize 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 within the Duperow Formation are elevated and laterally continuous across the Property.</p> <p>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; Howell et al., 2020).</p>
<p>Drill hole Information</p>	<ul style="list-style-type: none"> • <i>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:</i> <ul style="list-style-type: none"> ○ <i>easting and northing of the drill hole collar</i> ○ <i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i> ○ <i>dip and azimuth of the hole</i> ○ <i>down hole length and interception depth</i> ○ <i>hole length.</i> • <i>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.</i> 	<p>To Arizona Lithium’s knowledge, well 101/02-15-002-12W2/00 is the first well in the project area that has been perforated across the Dawson Bay Formation and targeted specifically to obtain representative brine samples from the Dawson Bay.</p> <p>Well ID: 101/02-15-002-12W2/00 Surface Location: 02-15-002-12W2 Reference Elevation / Kelly Bushing: 598.3m Well Type: Vertical Measured Depth: 2568m True Vertical Depth: 2567m Easting (NAD 83): 607560.7 Northing (NAD 83): 5441458.6</p> <p>A number of historical wells drilled for oil and gas exploration have been drilled through the Dawson Bay Formation in the project area and can be used to evaluate the size of the lithium resource in the future.</p>
<p>Data aggregation methods</p>	<ul style="list-style-type: none"> • <i>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.</i> • <i>Where aggregate intercepts incorporate short lengths of high</i> 	<p>To Arizona Lithium’s knowledge, well 101/02-15-002-12W2/00 is the first well in the project area that has been perforated across the Dawson Bay Formation and targeted specifically to obtain representative brine samples from the Dawson Bay.</p>

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	<p><i>grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</i></p> <ul style="list-style-type: none"> <i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i> 	<p>The sample determined to be representative of the Dawson Bay Formation was analysed by Isobrine Solutions. A representative lithium concentration of 60 mg/L was determined to be representative of the formation.</p>
<p>Relationship between mineralisation widths and intercept lengths</p>	<ul style="list-style-type: none"> <i>These relationships are particularly important in the reporting of Exploration Results.</i> <i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i> <i>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').</i> 	<p>Well 101/02-15-002-12W2/00 is a vertical well and drilled perpendicular to the Dawson Bay Formation stratigraphy, and therefore perpendicular to the mineralization.</p>
<p>Diagrams</p>	<ul style="list-style-type: none"> <i>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</i> 	<p>Appropriate maps and cross sections include:</p> <ul style="list-style-type: none"> Figure 1: Simplified Stratigraphic Chart Figure 2: Location map and representative lithium concentrations from Arizona Lithium's test wells
<p>Balanced reporting</p>	<ul style="list-style-type: none"> <i>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</i> 	<p>Appendix 2: Brine assay results including representative lithium concentrations from Isobrine Solutions, a 3rd party laboratory.</p>
<p>Other substantive exploration data</p>	<ul style="list-style-type: none"> <i>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</i> 	<p>No additional information to be reported at this time.</p>

Criteria	JORC Code explanation	Commentary
Further work	<ul style="list-style-type: none"> • <i>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</i> • <i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i> 	Arizona Lithium is planning to drill and sample lithium concentrations at two additional locations within the project area by the end of Q4, 2024.

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 Interval	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	1292.16	1292.16	12/17/2019	2,584.32	485,000	PNG	Top Madison Group to Top Precambrian	PLi / Out
SMP008	258.38	258.38	4/20/2020	516.76	97,000			DEEP / In
SMP021	1742.94	1656.78	4/20/2020	3,313.55	654,000		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
SMP022	257.95	257.95	4/20/2020	515.90	97,000			
SMP023	1547.57	1547.57	4/20/2020	3,095.13	581,000			
SMP010	9295.42	8842.41	4/20/2020	17,684.82	3,485,000			
SMP011	1293.55	1293.55	4/20/2020	2,587.10	485,000			
SMP044	3872.15	3807.55	4/19/2021	7,615.10	1,475,000	3KM, PNG	Top Madison Group to Precambrian	PLi / Out
SMP046	128.76	128.76	4/19/2021	257.51	50,000			
SMP047	258.21	258.21	4/19/2021	516.43	99,000			
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	258.38	258.38	4/19/2021	516.75	99,000			
SMP050	2252.20	2252.20	4/19/2021	4,504.40	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			
SMP063	1738.78	1738.78	4/19/2021	3,477.55	663,000			
SMP064	1809.08	1809.08	4/19/2021	3,618.16	689,000			
SMP065	1810.75	1810.75	4/19/2021	3,621.49	690,000			
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			
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			
SMP079	1410.74	1410.74	4/19/2021	2,821.47	538,000		Top Madison Group to Precambrian	PLi / Out
SMP082	2834.84	2834.84	4/19/2021	5,669.68	1,080,000			
SMP083	2319.43	2319.43	4/19/2021	4,638.86	884,000		Top Madison Group to top Winnipeg 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		
SML002	1223.27	1221.99	4/19/2021	12,232.70	466,000		Top Madison Group to Precambrian	
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	3KM, PNG	Top Madison Group to top Winnipeg Formation	PLi / In
SMP100	1874.77	1874.77	4/19/2021	3,749.53	714,000		Top Madison Group to top Winnipeg Formation; except NE-5-1-13 W2 top Madison Group to Precambrian	
SMP101	516.70	516.70	4/19/2021	1,033.40	197,000	PNG	Top Madison Group to Precambrian	DEEP / In
SMP102	1806.44	1806.44	4/19/2021	3,612.88	688,000		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	
SMP103	2391.56	2391.56	4/19/2021	4,783.11	911,000	CA, PNG, 3KM	Top Madison Group to top Winnipeg Formation	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, PNG	Top Madison Group to Precambrian	PLi / In
SMP108	2392.85	2392.85	4/19/2021	4,785.70	912,000			
SMP109	2203.46	2203.46	4/19/2021	4,406.91	840,000			
SMP110	2523.42	2523.42	4/19/2021	5,046.84	961,000			
SMP111	3049.83	3049.83	4/19/2021	6,099.66	1,162,000			
SMP112	4544.02	4544.02	4/19/2021	9,088.04	1,731,000			
SMP114	4394.98	4394.98	4/19/2021	8,789.95	1,674,000	PNG		DEEP / In
SMP115	4109.14	4109.14	4/19/2021	8,218.29	1,565,000	CA, PNG	Top Madison Group to Precambrian	DEEP / In
SMP116	4576.26	4576.26	4/19/2021	9,152.52	1,743,000			
SMP117	1604.93	1604.93	4/19/2021	3,209.86	612,000			
SMP118	2308.58	2308.58	4/19/2021	4,617.16	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	3380.74	3380.74	4/19/2021	6,761.48	1,288,000			
SMP121	4585.77	4388.70	4/19/2021	8,777.40	1,747,000			
SMP145	517.46	517.46	8/23/2021	1,034.92	199,000	PNG, 3KM, CA	Top Madison Group to Precambrian	PLi / In
SMP150	1291.87	1259.65	8/23/2021	2,519.30	497,000			
SMP151	1811.02	1811.02	8/23/2021	3,622.05	697,000			
SMP152	516.90	516.90	8/23/2021	1,033.79	199,000	PNG	Top Madison Group to Precambrian	PLi / Out
SMP153	516.17	516.17	8/23/2021	1,032.34	199,000			
SMP154	1226.31	1157.61	8/23/2021	2,315.23	472,000	PNG, 3KM	Top Madison Group to Precambrian	PLi / Out
SMP156	258.80	258.80	8/23/2021	517.60	100,000			PLi / In
SMP160	194.65	194.65	8/23/2021	389.30	75,000	PNG	Top Madison Group to Precambrian	PLi / In
SMP162	2393.70	2393.70	8/23/2021	4,787.39	921,000			

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: Brine Assay Results – Isobrine Solutions

Sample #1		UWI: 101/02-15-002-12W2/00			
GENERAL INFORMATION		MAJOR COMPOSITIONS			
Formation:	Dawson Bay	CATION	mg/l	ANION	mg/l
Isobrine Sample ID:	IB-25-0061	Na	17097	Cl	275944
Date Sampled:	17-Aug-24	K	32677	SO₄	175
Date Received:	22-Aug-24		11853		
		Ca	1	HCO₃	445
Lab Temperature (°C):	21.4	Mg	5125	CO₃	<6
Lab pH:	5.64	Fe	81.4	OH	<5
Lab Conductivity (µS/cm):	171100	Ba	103	NO₃	29.1
TDS Calculated (mg/L):	452691	B	134	Br	973
		Li	60.3	F	27.42
		Sr	1345	P-Alkalinity	<5
				T-Alkalinity	365

Sample #2		UWI: 101/02-15-002-12W2/00			
GENERAL INFORMATION		MAJOR COMPOSITIONS			
Formation:	Dawson Bay	CATION	mg/l	ANION	mg/l
Isobrine Sample ID:	IB-25-0063	Na	18130	Cl	277767
Date Sampled:	17-Aug-24	K	33026	SO₄	170
Date Received:	22-Aug-24		11921		
		Ca	7	HCO₃	280
Lab Temperature (°C):	21.5	Mg	5194	CO₃	<6
Lab pH:	5.57	Fe	129	OH	<5
Lab Conductivity (µS/cm):	187200	Ba	96	NO₃	18.7
TDS Calculated (mg/L):	456452	B	112	Br	972
		Li	59.8	F	31.53
		Sr	1318	P-Alkalinity	<5
				T-Alkalinity	230