NI 43-101 TECHNICAL REPORT

on the

Lithium Brines of the Mansur Viewfield Areas of

Southern Saskatchewan, Canada

Prepared for:
EMP Metals Corp.
ROK Resources Inc.
Hub City Lithium Corp.
Vancouver British Columbia

Prepared by:
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Calgary, AB

Report Date: April 20, 2023
Effective Date: April 1, 2023

Forward Looking Information Statement

This Report contains forward-looking statements regarding EMP Metals Corp., ROK Resources Inc. and Hub City Lithium Corp. or (collectively, "the Company") for the purposes of Canadian securities laws. Generally, forward-looking statements can be identified by the use of forward-looking language such as "plans," "expects," "budgets," "schedules," "estimates," "forecasts," "intends," "anticipates," "believes," or variations of such words and phrases, and statements that certain actions, events or results "may," "could," "would," "might," "will be taken," "will occur" or "will be achieved." Forward-looking statements are based on the opinions and estimates of Hub City Lithium as of the date such statements are made.

These forward-looking statements relate to, among other things, resource estimates, grades and recoveries, development plans, mining methods and metrics, including recovery process, and mining and production expectations, including expected cash flows, capital cost estimates, and expected life of mine, operating costs, the expected payback period, receipt of government approvals and licenses, time frame for construction, financial forecasts including net present value and internal rate of return estimates, tax and royalty rates, and other expected costs.

Forward-looking information is necessarily based upon a number of estimates and assumptions that, while considered reasonable, are inherently subject to significant political, business, economic and competitive uncertainties and contingencies.

There may be factors that cause results, assumptions, performance, achievements, prospects or opportunities in future periods not to be as anticipated, estimated or intended. There can be no assurances that forward-looking information and statements will prove to be accurate, as many factors and future events, both known and unknown could cause actual results, performance or achievements to vary or differ materially from the results, performance or achievements that are or may be expressed or implied by such forward-looking statements contained herein or incorporated by reference. Accordingly, all such factors should be considered carefully when making decisions with respect to the Company's project described herein, and prospective investors should not place undue reliance on forward-looking information. Forward-looking information in this technical report is as of the issue date, April 20, 2023. The Company will not update any forward-looking statements except in accordance with requirements of applicable laws.

Certificate of Author

I, Trevor Else, P.Geol. of Calgary Alberta, as the author of this technical report entitled "NI 43-101 Technical Report on the "Lithium Brines of the Mansur Viewfield Areas of Southern Saskatchewan" prepared for EMP Metals Corp., ROK Resources Inc. and Hub City Lithium Corp., with the effective date of April 1, 2023, and with the issue date of April 20, 2023, hereby certify that:

I am currently employed as a Saskatchewan subsurface geological consultant as the principal director of Red Tree Exploration Inc.

1) I graduated with a Bachelor of Science Degree in Geology from the University of Calgary in 2002.
2) I am a Professional Geoscientist enrolled with the Association of Professional Engineers and Geoscientists of Alberta and Saskatchewan, APEGA Membership #74899, APEGS # 59566.
3) I have worked as a Geoscientist for a total of 22 years since graduating from university. My experience has included exploration and geologic evaluation of primarily Saskatchewan-based oil and gas reservoirs. I have led or been a part of several hydrodynamic studies of multiple reservoirs within the Williston Basin as related to both oil and brine fluid migration.
4) I have read the definition of "qualified person" set out in National Instrument NI 43-101 and certify that, by reason of my education, past work experience and affiliation with a professional association as defined in NI 43-101, I fulfill the requirements to be a "qualified person" for the purpose of NI 43-101.
5) I am responsible for the entirety of the NI 43-101 Technical on "Lithium Brines of the Mansur Viewfield Areas of Southern Saskatchewan" with an effective date of April 20, 2023 (the "Technical Report").
6) At the effective date of the technical report, to the best of my knowledge, information, and belief, the technical report, or part that I am responsible for, contains all scientific and technical information that is required to be disclosed to make the technical report not misleading.
7) I visited the Mansur Property on July 9th, 2021, the issuer asserts that no material changes on the property have occurred since my visit.
8) I have no personal knowledge, as of the date of this certificate, of any material change which needs to be reflected in this technical report.
9) I am independent of the issuer according to the criteria stated in Section 1.5 of the NI 43-101 instrument.
10) I have read Natural Instrument 43-101 and Form 43-101F1, and the technical report has been prepared in compliance with that instrument and form.

Dated April 20, 2023

Trevor Else, P.Geol.

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1 SUMMARY

Hub City Lithium Corp.. (HCL), a privately held lithium exploration company, has contracted Red Tree Exploration Inc. to prepare a national instrument 43-101 technical report on the lithium brine potential and preliminary resource assessment on their acquired permit blocks in southern Saskatchewan. HCL is owned by EMP Metals Corp. and ROK Resources Inc.

HCL has acquired more than 77,700 Ha of leased land across three project areas in Southeast Saskatchewan. These permits were acquired in 2021 and will be held under primary term until 2029. HCL's Mansur and Viewfield properties are in the heart of a prospective lithium fairway that comprises more than 34,800 Ha of prospective lands and are the primary focus of this report. Both areas have confirmed third-party testing of high-grade lithium concentrations sourced from multiple confined aquifers within the Devonian-aged Duperow formation. The brines tested have lithium concentrations from 43 – 148 mg/l at Mansur and from 63.9 -258.9 mg/l at Viewfield. A Detailed petrophysical evaluation of more than 300 wells in the region was carried out for eight identified regional aquifers within the Duperow Formation. From this evaluation, detailed reservoir parameters were mapped over the project areas leading to a geological model and combined with other well data, served as the basis for the resource assessment. By combining detailed reservoir mapping with lithium concentration test data across the project areas, volumetric calculations of lithium in place were calculated using stochastic simulations. Results confirm that HCL's interest in Mansur and Viewfield areas has estimated lithium in place within the brines of greater than 1.25 million Tonnes of Lithium Carbonate Equivalent (LCE) net to HCL from 8 zones, comprising more than 80 metres of reservoir within the Duperow formation.

1.1 Geology

HCL's primary target for lithium-enriched brines are the Devonian-aged carbonates of southern Saskatchewan. Within the Williston Basin, these reservoirs are stratigraphically below most of the oil development; however, there are several areas within Saskatchewan where there is exploration and development of these deeper targets, which enables the ability to map and evaluate the Duperow in this region. At Mansur and Viewfield, these regionally extensive carbonate sequences were deposited within a shallow water and commonly evaporitic environment at the end of a long succession of evaporitic deposition. This depositional history appears favorable for the leaching of lithium from aquifers as brines concentrate over time. Multiple shallowing upward sequences characterize the deposition of the Souris River and Duperow carbonates. This repeated depositional pattern separates the porous limestone and dolostone layers into several regionally extensive reservoirs. Recent production testing and water analysis support the hypothesis that they are hydrodynamically isolated. (Rostron, 2022)

1.2 Mansur Property

Mansur is the western block of HCL's two primary areas, the resource evaluation area has a total of 23,230 ha (approx. 88 sections) comprised of 14,100 Ha (approx. 56 sections) of HCL leased mineral land holdings which represents 64% of the block. In the Northern part of Mansur, there is an active oil field producing from the Ordovician-aged Red River formation. In this field, there are over 20 wells that penetrate the Duperow with modern Log coverage for evaluation. HCL has acquired the ownership of two existing wellbores that were previously producing from the Mansur oil pool and are now being utilized as test wells for lithium brine evaluation. A detailed brine sampling and production testing program was carried out by HCL in 2022 to further evaluate eight prospective zones in the Duperow formation. Confirmed results by third-party testing show three high-concentration lithium zones within the Duperow at Mansur with measured lithium concentrations of 77, 103 and 148mg/l.

1.3 Viewfield Property

Within the Viewfield property, HCL has acquired over 21,450 Ha of leased mineral rights. For the resource evaluation a 62 section (16,405 Ha) block was selected based on well data and results. As of the issue date of this report, HCL has acquired a net interest of 11,495 Ha(approx. 44.5 sections) within the Viewfield evaluation block for a 70% net interest. HCL has an additional estimated 10,000 Ha of contingent exploration leases in close proximity to the evaluation block. At Viewfield there are fewer existing well bores suitable for lithium testing. In Dec of 2022, HCL drilled an exploration well to test and further delineate the lithium potential on the Viewfield block. A total of seven zones were individually sampled multiple times for lithium concentrations, which included several extended production tests. Third-party test results show six zones have lithium concentrations over 90mg/L. The highest concentration zone is confirmed at 259mg/l, representing some of the highest concentrations recorded in Western Canada. While local evapo-concentration of the Devonian brines likely played a prominent role in the elevated lithium concentrations, geological mapping of the region suggests that fluid movements potentially influenced by the Viewfield crater may have contributed to the anomalously high lithium concentrations and increased dolomitization of the Duperow reservoirs at Viewfield.

1.4 Resource in Place

At Viewfield the 2-22-7-9W2 new drill has confirmed lithium in place of greater than 20,000 Tonnes LCE/section, while a Mansur 14-36 and 11-2 re-completions have confirmed lithium in place of more than 8,000 Tonnes LCE/section. Resource in place calculations across the defined Mansur and Viewfield project areas (figure 3), were carried out using stochastic Monte Carlo modelling using the Crystal Ball software from Oracle. At this early stage of resource evaluation, this estimation method is preferred over the use of deterministic averages for resource in place calculations, as it will better represent the geologic range of uncertainty away from control points. Reservoir parameters were determined from petrophysical analysis and mapping each zone individually for effective porosity and net reservoir thickness. All valid lithium concentration test data from the region was incorporated into the Monte Carlo simulation with the representative minimum, maximum and expected values of each zone over the two project areas. (Refer to sections 14.3.2-14.3.4). In total eight zones across two properties were mapped for net pore volumes and lithium concentrations leading to over 50 maps used in the resource evaluation.

Results of the volumetric analysis of lithium in place indicate that HCL's interest in Viewfield is 747,000 Tonnes and at Mansur HCL has 503,000 Tonnes for a total resource in place of 1,250,000 Tonnes LCE. Over 93.5% of the evaluated resource has lithium concentrations above 50mg/l. A summary of lithium resource and average lithium concentration by grade is highlighted below.

Lithium in Place Summary by Grade (HCL interest)

Li concentration grade Cutoff (mg/L)	Weighted Ave Li Conc above cutoff (mg/l)	Viewfield LCE in Place HCL interest	Mansur LCE in Place HCL interest	Total Lithium in Place (HCL interest)
		LCE (Tonnes)	LCE (Tonnes)	LCE (Tonnes)
Total all zones > 50	143.4	747,526	399,364	1,157,776
Total all zones > 75	151.4	649,970	244,854	894,823
Total all zones > 140	198.1	445,176	72,372	517,548

LCE: Lithum carbonate equivalent

1.5 Conclusions and Recommendations

The Mansur and Viewfield properties show that the Duperow formation has sufficient lithium concentrations and flow capacities to produce the volumes necessary for a future commercial lithium extraction project. Higher than average lithium concentrations will be favorable for concentrated development and reduced operating costs associated with brine production. Lithium extraction on the issuer's Permits is currently in its early stage of development. There are still risks associated with lithium concentration variations, continuity of aquifers, and whether a commercially viable level of lithium will be present across the entirety of the acquired blocks. Another essential aspect is sourcing effective lithium extraction technology and securing associated infrastructure and power requirements for commercial production. These stated risks can be mitigated or eliminated with further technical evaluation, exploration activities and consultation with operators and stakeholders in the area. Given the long history of extensive oil and gas development in the area and the strong relationships between the provincial energy regulator and the community, there should be no foreseen risks to the community or social aspects of this project.

The recommended follow-up work involves continued resource delineation across the project areas through drilling and testing to confirm resource certainty away from current data. Continued reservoir evaluation and production testing will contribute to the well design and development plans that will contribute to a Pre-Economic Assessment prior to a commercial-scale pilot project.

2 INTRODUCTION

2.1 Issuer

The Issuer of this report is Hub City Lithium Corp., located at 2200 HSBC Building, 885 West Georgia St., Vancouver, British Columbia, Canada. It is a private company where the ownership share structure is 75% by EMP Metals Corp, a publicly traded company listed as (EMPS) on the Canadian stock exchange and 25% ROK Resources Inc. (ROK) listed on the Canadian venture exchange. The report is also addressed to each of EMP and ROK.

2.2 Term of Reference

The Issuer engaged the Author's services on May 15, 2021, to write an independent NI 43-101 technical report on the lithium brine potential of properties acquired from the Ministry of Saskatchewan Resources in southern Saskatchewan as part of its ongoing disclosure. The initial report was completed in July 2021. Subsequently, the issuer engaged the Author's services again in December 2022 to update and finalize the NI-43-101 report.

2.3 Sources of Information

Information used in this report is derived from data collected and validated by HCL and reviewed by qualified persons (QPs). These include brine samples collected in the field with third party lab testing and reports, and well log and test data supplied by HCL. Other sources of information include the data collected from formation water samples as part of various published technical research papers, evaluating lithium brine potential in Saskatchewan.

The author relied on data supplied by Isobrine Solutions Inc., which HCL has used as its primary testing company for water analysis and lithium concentration data. The Author interviewed the president of Isobrine Solutions, Dr. Ben Rostron (Ph.D., PEng, P.Geol), who is considered a qualified person. Dr. Rostron has been researching the distribution and origin of lithium in saline brines for more than 25 years and has published extensively on the topic. He also has an expert-level background in water geochemistry and is involved with several lithium brine projects as president of Isobrine Solutions.

Dr. Rostron supplied a summary of testing procedures and analysis that Isobrine completed for HCL's sampling program. It is the Author's opinion that the summary and accounts provided by Dr. Ben Rostron are accurate and meet the standards set out for NI-43-101 reporting.

This report's information sources are listed within the references in section 19. These include technical papers on regional geology and hydrodynamics and stratigraphic and structural relationships within southern Saskatchewan. Also included are resources on lithium mineralization and potential sources of lithium brine concentration. The Author relied on several foundational geological studies that have been published in relation to the long history of oil and gas development and mining in Saskatchewan.

Mapping and formation evaluations on the issuer's properties were based on various well logs, cores, formation drill stem tests (DSTs), and production results carried out because of oil and gas exploration and development in the area. All data is made public by the Saskatchewan government and is available through the Saskatchewan Energy and Resources website or third-party mapping software providers such as Accumap or Geologic Systems.

2.4 Site Visit

The Author has firsthand knowledge of the permit areas and has previously visited the Mansur and Viewfield permit areas as part of past experiences working with various Energy companies in southern Saskatchewan. For this evaluation and report for HCL, the Author travelled to the Mansur permit blocks on July 9th, 2021. Since that visit, HCL has acquired two wellbores in the Mansur property for testing purposes. No material change has occurred to the area since the wellbores were already drilled and in use when HCL acquired them. At Viewfield, the Issuer drilled a well in the Fall of 2022 to test the lithium potential in the Duperow formation. Government-issued licenses and well data submitted by the Saskatchewan Ministry of Resources confirm the location coordinates and well details. The issuer has no other current infrastructure in the area. Locations were verified on-site by GPS and posted well identification (UWIs) from the various oil pumpjacks in the area.

3 RELIANCE ON OTHER EXPERTS

The Author relied on data and detailed descriptions of the sample collection procedures supplied by the field operators responsible for operations related to sample collection and delivery to the testing facility. It is the Author's opinion that field sampling procedures, sample security, and chain of custody that were reviewed by Qualified Persons have met the standards set out for NI-43-101 reporting.

The Author relied on the issuer and the Ministry of Energy and Resources of Saskatchewan for information regarding the issuer's permits and tenure of crown and freehold lease contracts.

4 PROPERTY LOCATION AND DESCRIPTION

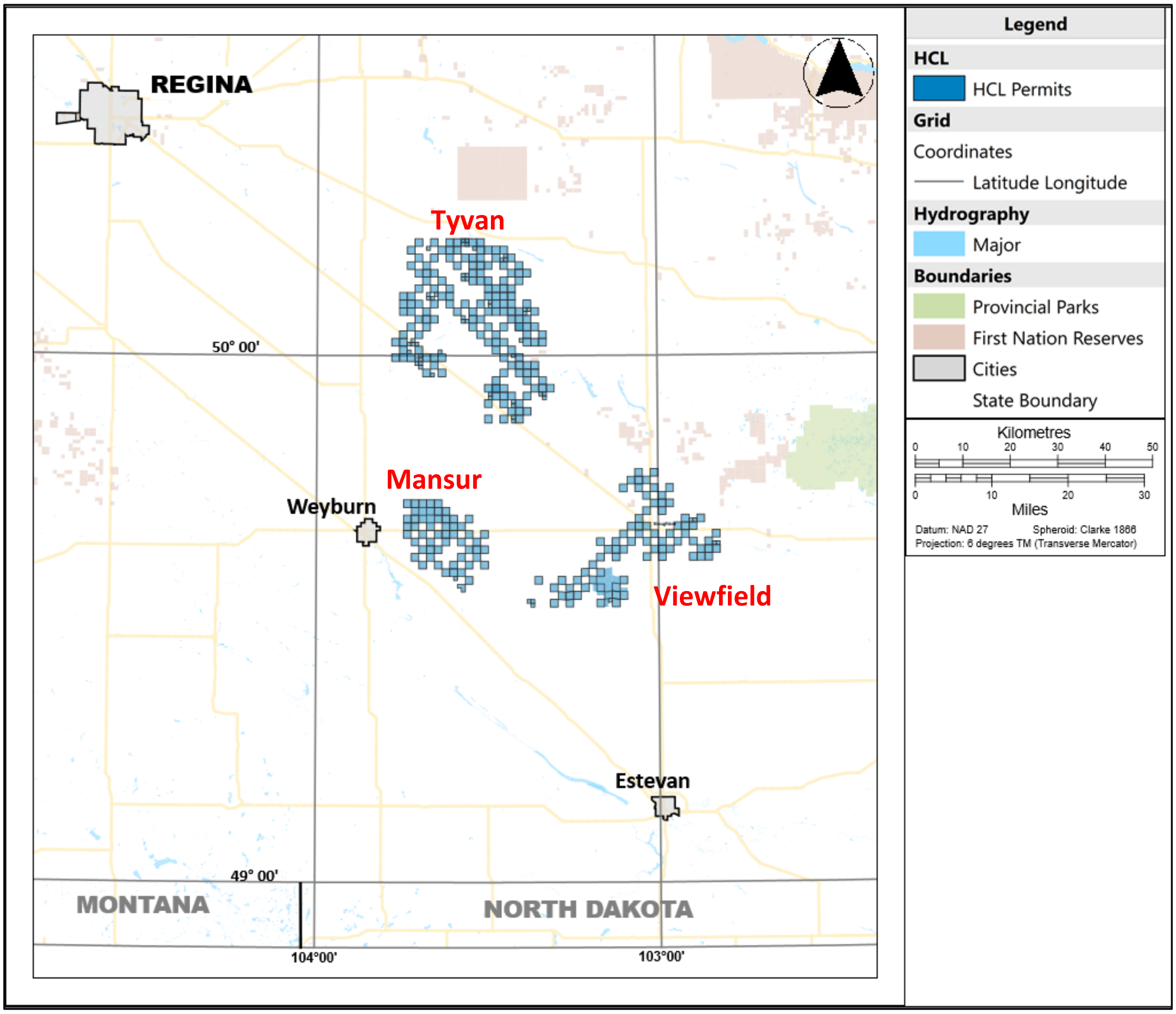


Figure 1: Location of Saskatchewan Properties

Hub City Lithium Permits

4.1 Property Description

The HCL lithium Permits are in 3 distinct geographic locations across southern Saskatchewan (Figure 1) and represent a total of 77,700 hectares of prospective lithium rights. The Tyvan, Mansur and Viewfield permit areas are located 80-120 km southeast of the city of Regina, near the town of Weyburn. All permit areas are accessible by primary and secondary roads (Figure 3), with local lease or farm roads available where previous oil field development exists. Within the Leased lands Mansur and Viewfield have been identified as 2 initial project areas (figure 2). These permits are located 5-20 km east of Weyburn in the rural municipalities of Weyburn and Griffon. This region predominantly flat farmland that is easily accessible from the town of Weyburn. Over the last 60 years there has been significant oil and gas resource development which has brought significant road and utility infrastructure to the region.

Area 1: Mansur permit Area, (Figure 1,2) Located 10 km east of the town of Weyburn, Mansur is the western block of HCL's two primary areas. The total area of the evaluation block is 23,234 ha, comprised of 14.116 Ha of HCL leased mineral land holdings . All leases in Mansur were included in the resource evaluation due to the well control and proximity to brine testing results. In the Northern part of Mansur, there is an active oil field producing from the Ordovician-aged Red River formation (figure 4). In this field, there are over 20 wells that penetrate the Duperow with modern log coverage for evaluation. HCL has acquired the ownership of two existing wellbores (14-36-9-13W2 and 11-2-9-13W2) that were previously producing from the Mansur oil pool and are now being utilized as test wells for lithium brine evaluation of the Duperow formation. As of the issue date of this report these two wellbores are the only infrastructure HCL has acquired at Mansur.

Area 2: Viewfield permit area: (Figure 1,2) Located 50 km East of Weyburn, the HCL has acquired approximately 21,450 ha of mineral rights in the Viewfield region, situated within the southwest portion of the Viewfield Bakken oilfield. For this report a project area within the Viewfield lands was identified as the initial project area due to better well control proximity to Duperow brine concentration data as well as geological considerations. Within the identified initial project area, (defined in red outline in figure 2), HCL has a net interest of 11,495 Ha of leased mineral rights representing approximately 70% of the outlined project area. Outside of the initial project HCL holds approximately 10,000 Ha of leased lands that are considered contingent at this time and may be added to the resource evaluation with further delineation and drilling.

While several wells penetrate the Duperow on the Viewfield block there are no suitable re-completion candidates for the Duperow. In Dec of 2022, HCL drilled an exploration well to test and further delineate lithium potential on the Viewfield block.

Area 3: Tyvan permit area: (figure 1) The northernmost permit area, HCL has acquired approximately 108,000 hectares of mineral leases. Within the Tyvan permit, several producing Red River oil fields provide well control and data for mapping the Duperow formation. This area is outside of the current focus of this report. Future resource evaluation and data gathering will be completed at a later date for this property.

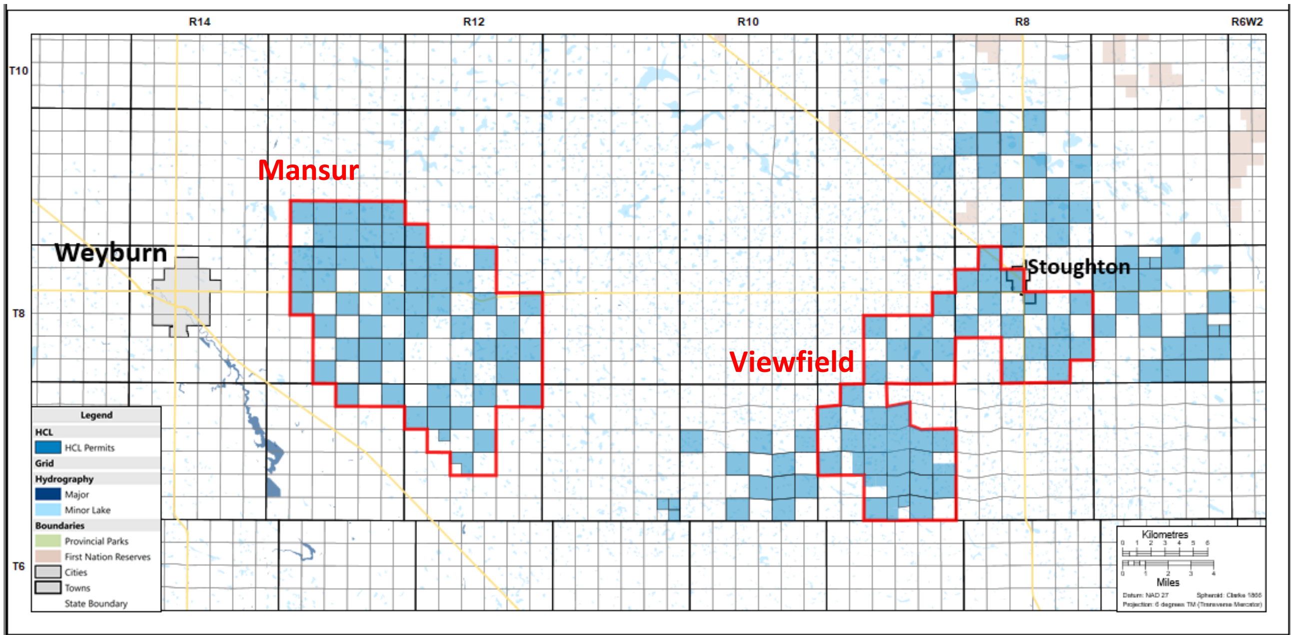


Figure 2: Mansur Viewfield Project Areas

4.2 Ownership/Tenure

HCL permits were acquired through two processes. Over 80% of the acreage was acquired through the public bidding process provided by the government of Saskatchewan crown disposition, while the remaining 20% was acquired through freehold leasing of mineral rights from individual freehold owners. A complete list of HCL land acquisitions is listed in Appendix B. Permits issued by the Crown are subject to *The Subsurface Mineral Tenure Regulations*. The subsurface mineral rights granted apply to all minerals within the subsurface strata, excluding oil and gas. The boundaries of mineral dispositions are defined by the cadastral parcel mapping system.

Permits issued by the government of Saskatchewan grant the permit holder the exclusive right to explore for and develop any subsurface minerals that are within the permit lands. The permits enable the holder to extract or remove subsurface minerals or brines from the permit lands to analyze and test for mineralogical or scientific studies.

The permit holder will have an initial 8-year term with a minimum work commitment and lease rentals required. The amount required for the work commitment is variable and is based on the size of the permit block. The permit must be converted to a lease to produce any minerals on the permit lands. If continuation conditions are met, the issuer will get an additional 21-year term. Further continuation of the leases is based on work completed and production timeframe. All HCL crown permits were acquired in 2021 and will be held under primary term until 2029, at which time an application for continuation can be submitted . Freehold leases have variable expiries and continuation parameters based on the individual lease agreements.

4.3 Issuer's Interest

Hub City Lithium Corp. ("HCL") is the registered lessee of 33 permits in the Mansur Viewfield and Tyvan areas that were acquired at the Subsurface Mineral Public Offering in April, August and December 2021 (Appendix B). By way of background, the permits were initially acquired under the corporate entity ROK Resources Inc. ("ROK") given its status as an approved bidding entity. Subsequent to the Public Offering, the permits were transferred to HCL and in return, ROK received a 25% interest in HCL. HCL will manage all exploration and development activities on the dispositions. The 100% owned mineral permits will be subject to a Crown royalty. The Crown royalty for lithium production will be determined on a disposition basis. As of the issuance of this report there is no specified Crown royalties for lithium, but provisions will be incorporated into *the Subsurface Mineral Royalty Regulations, 2017.*

4.4 Environmental Liabilities

No other known environmental liabilities or restrictions in association with the properties are known at this time. All HCL permits are situated on prairie pasture or cultivated farmland with numerous existing oil and gas leases and infrastructure throughout the region, managed and maintained by energy companies operating in the Area.

4.5 Permitting

Exploration for subsurface minerals in Saskatchewan involves drilling exploratory or delineation wells, for the purposes of brine sampling or production testing of multiple zones of interest in the subsurface. Drilling permits are required for such activities and are easily applied for through the Government of Saskatchewan Energy and Resources. Licensing is governed by the Oil and Gas conservation act and must include a valid surface survey, acquisition of surface lease agreements, and 3rd party notification to offset surface owners.

HCL has successfully acquired permits to drill one exploration well at Viewfield and two re-completions of existing wells at Mansur. HCL does not see any barriers preventing further delineation of the resource through permit acquisition to carry out exploration activities.

4.6 Social or Community Impacts

Most, if not all the HCL's permits are in agricultural areas that have worked closely with energy companies and energy regulators over the last 60 years. There is generally a strong relationship of respect and cooperation between the farming community and the energy companies that operate in the region. Much of the economy in the surrounding towns and region is built off local energy and resource development. While aspects such as environmental impacts, and effects on the ecosystem must be addressed, the strong relationship between industry, government and community has a strong track record of working together to mitigate and address concerns from the community.

5 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

5.1 Accessibility

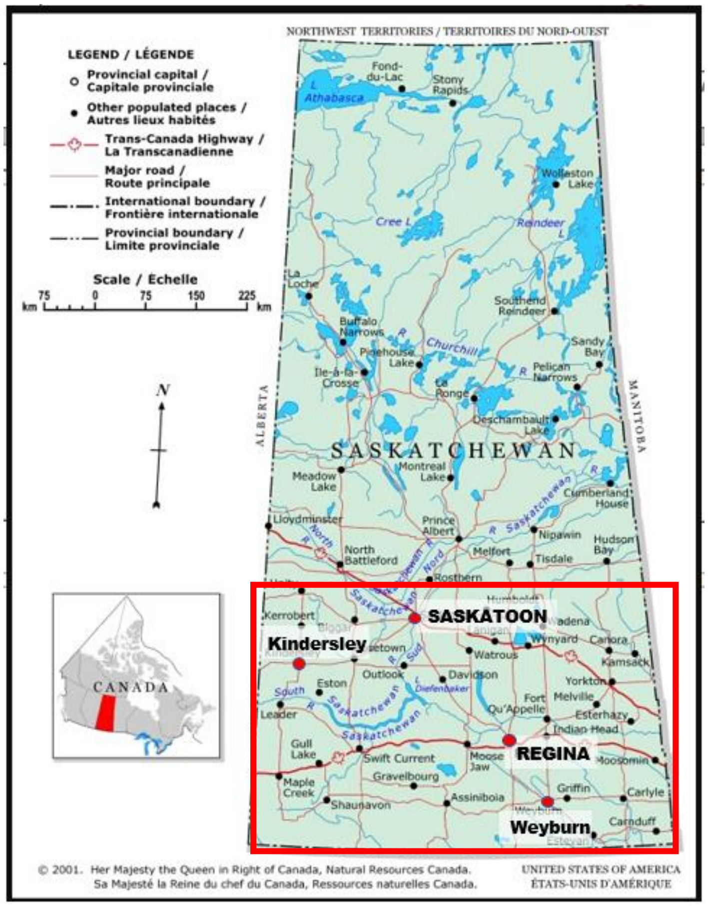


Figure 3: Major Roads Southern Saskatchewan

All three permit areas are accessible from several directions using primary and secondary highways. The Tyvan, Mansur, and Viewfield prospects are 10-50 km East to Northeast of the town of Weyburn. The closest commercial airport to the Mansur and Viewfield region is in the City of Regina (figure 1,3). Regina Airport is serviced primarily by Westjet. When travelling from Regina, travel south on the CanAm highway for 60km, then continue south on SK-39S to the town of Weyburn, for a total distance of 116km. From Weyburn Highway 13 East extends right through the middle of the Mansur permit Area. Continuing along Highway 13 the North end of the Viewfield permit area is located 50km east of Weyburn. There are multiple primary and secondary roads laid out in a grid pattern that will lead to different parts of the permit areas. As most of the Permits coincide with oilfield development, there are established secondary and local lease roads for access to existing leases.

5.2 Climate and Vegetation

In the Region of HCL's permits, the land is within the Prairie Moist Grassland, with over 80% of the land being cultivated. Natural vegetation is primarily mid-grasses and short grasses. Winters are cold, dry and windy, where the lowest average daily minimum temperature is -20.5°C in January. Summers can be warm, with the highest average daily maximum of 26.1°C in July. With sporadic summer storms, lightning strikes are not unusual in the prairies and have been known to hit towers and infrastructure in the area. Annual precipitation is 418.8mm, with 76% as rain and the remainder as snow. During Spring "break Up," roads and land can be very wet, and drilling operations are usually not allowed between mid-March to late May or June, depending on snow melt and the amount of rainfall in the Spring. The growing season for farmers is from approximately mid-May to mid-September.

5.3 Local Resources and Infrastructure

The long history of oil and gas development in southern Saskatchewan has created a vast infrastructure network, including pipelines, roads, and power grids that provide infrastructure to the permit areas.

Weyburn is home to many experienced oil field labours and oil field service companies specializing in field operations. Existing oilfield facilities are present in all three permit areas, many of the facilities will include water disposal and infrastructure for the processing and handling of formation waters that could be utilized in lithium brine production.

5.4 Physiography

The Viewfield Mansur permit areas are within the agricultural regions of southern Saskatchewan. Most of the region is predominantly flat farmland and wild prairie, with some rolling hills and low-lying creeks, ponds and river valleys in some areas. Elevation ranges from 610-630m above sea level in the Mansur Viewfield region.

6 HISTORY

HCL's Saskatchewan permits were acquired for their Li-Brine potential, specifically targeting Devonian, Silurian and Ordovician-aged aquifers that range in depth from 1100-2500m below the surface. Recently, a few wells have been drilled in SE Saskatchewan specifically for lithium exploration and testing. There have also been several re-completions of existing wellbores for the purposes of brine testing specifically for Lithium potential. In 2022 HCL drilled one new well and re-completed two more wells within the Viewfield Mansur areas, there has also been extensive historical oil well drilling and development in the region. Current infrastructure includes vertical and horizontal wellbores, pipelines and facilities built and operated by various Saskatchewan energy companies.(figure 4) Since the 1950's energy companies targeted the porous limestones and dolostones of the Mississippian aged reservoirs including the Midale and Frobisher formations (figure 6). As horizontal drilling technology advanced, other tighter reservoirs, such as the Bakken and Torquay formations, were developed. With the advancement of 2D and 3D seismic, deeper targets, including Winnipegosis reefs and Red River structures, were explored. These deeper targets were expensive to drill and came with a high risk of failure (dry hole), and as a result, far fewer wells have been drilled to the deeper formations of the Devonian and Ordovician aged formations.

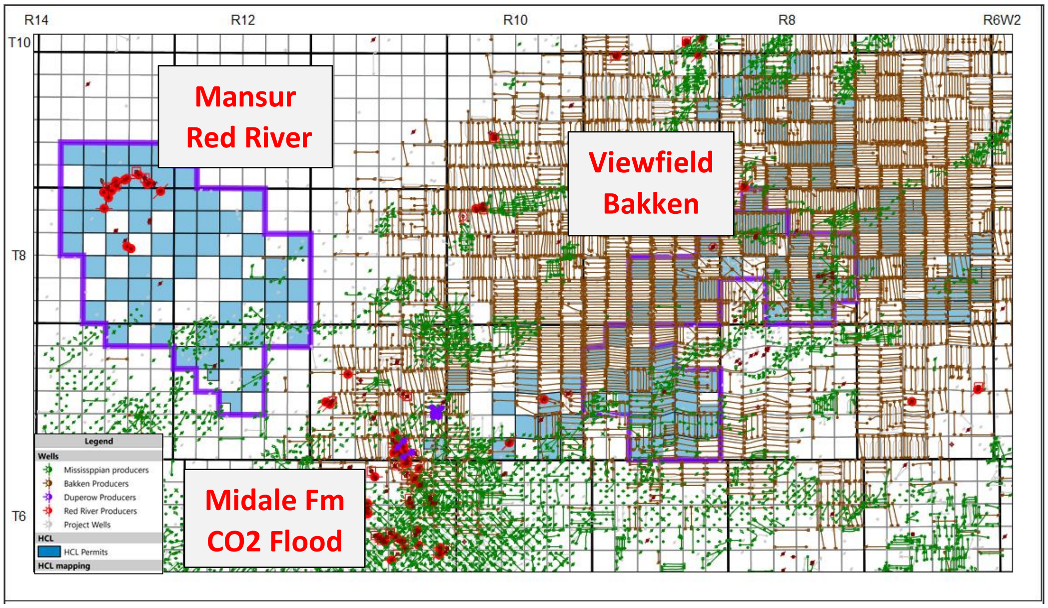


Figure 4: Mansur area oilfield development all zones

Accessing the deep wells available, recent testing of the Devonian and Ordovician formation waters in the area have shown the potential for Li-rich brines, specifically from the Duperow and Red River formations. While most of the oil development is from younger (shallower) formations, there are several wells on each of HCL's permit areas that either were drilled through the Devonian and Ordovician strata or are currently producing from the Duperow or Red River formations. Each deep well will usually have a suite of well logs and sometimes cores or DSTs that provide critical information for mapping potential Li-rich aquifers' thickness, extent, and reservoir properties.

Historically lithium concentrations in formation brines were of little interest to the energy companies developing southern Saskatchewan's oil and gas resources. As a result, limited data is available to evaluate specific zones for Li-rich Brines. Starting approximately 20 years ago, various research studies backed by multiple universities and the Saskatchewan Ministry of Energy and Resources began collecting and evaluating the mineral potential of brines in Southern Saskatchewan. (Rostron et al.2002). Since that time, hundreds of verified and published mineral Brine tests in several different formations have been tested regionally across southern Saskatchewan (table 1). (Jensen et al.2012,2017,2018,2020) It is this data, along with a regional understanding of geology and aquifer hydrodynamics, that HCL has used to evaluate and acquire their permit areas for prospective lithium-rich brines (table 1).

Historical Data

Well ID	Property Region	Formation	Formation Submember	Sample Interval (m)	Sample Date	Lithium	TDS	pH	Source
141/14-12-007-11W2/00	Midale/Viewfield	Duperow	Wymark F	1856-1863	2013	130	291 000	6.75	Jensen GKS 2015
141/14-12-007-11W2/00	Midale/Viewfield	Duperow	Wymark F	1856-1863	2013	190	307,000	6.04	Jensen GKS 2015
131/08-18-007-11W2/00	Midale/Viewfield	Duperow	Wymark F	1873-1879	1998	56.3	--	--	Rostron et al 2002
131/08-18-007-11W2/00	Midale/Viewfield	Duperow	Wymark F	1987.5-1991	1998	55.1	--	--	Rostron et al 2002
191/04-02-007-11W2/00	Midale/Viewfield	Duperow	Wymark F	1884-1891 TVD	2001	56.8	299788	--	Rostron et al 2002
141/13-02-007-11W2	Midale/Viewfield	Duperow	Wymark B	1923-1928	--	104	--	--	Rostron et al 2022
121/09-03-007-11W2	Midale/Viewfield	Duperow	Wymark D		--	146	--	--	Rostron et al 2022
101/07-27-007-06W2	Kisby	Duperow	Seward	1646.5-1716.5	--	88	--	--	Rostron et al 2022
101/04-19-004-08W2	Macoun	Duperow	Wymark B	2098-2102	--	108	306831	--	Jensen GKS 2015
121/10-03-008-05W2	Clarilaw	Duperow	Wymark A	2310-2321	--	84	--	--	Jensen GKS 2015
191/01-03-007-11W2/00	Midale/Viewfield	Red River		1967	2011	44.9	305 600	6.22	Jensen GKS 2015
191/09-20-006-11W2/00	Midale/Viewfield	Red River		2586	2011	43.2	314 100	6.29	Jensen GKS 2015
191/03-32-008-10W2/00	Mansur	Red River		2394	2011	43.2	312 700	6.46	Jensen GKS 2015
131/02-32-008-10W2/00	Mansur	Red River		2391-2404	2011	49.1	291 500	6.5	Jensen GKS 2015
141/04-35-007-05W2/00	Clarilaw	Red River		2328-2348	2011	54.5	282 600	6.39	Jensen GKS 2015
141/08-22-008-13W2/00	Mansur	Red River		2463-2475	2011	40.7	298 500	6.4	Jensen GKS 2015
121/05-23-008-13W2/00	Mansur	Red River		2459-2477	2011	37.2	269 600	6.5	Jensen GKS 2015
111/01-33-008-13W2/00	Mansur	Red River		2435-2438	2011	41.2	267 100	6.64	Jensen GKS 2015

Table 1: Li concentrations of the Duperow and Red River Near Permit Areas

Modified from various sources:
Rostron 2002 & Jenson ,2015, 2016,2017,2018

7 GEOLOGICAL SETTING AND BRINE MINERALIZATION

7.1 Regional Stratigraphy

The Williston Basin of southern Saskatchewan represents the easternmost extent of the Western Canadian Sedimentary Basin that formed as a result of several cycles of basin subsidence and uplift during the Paleozoic and Mesozoic eras (Kent 92). Deposition of the Paleozoic strata lies unconformably on top of Pre-Cambrian basement rocks and can be divided into three distinct stratigraphic sequences bounded by unconformities (figure 5). The first sequence is the transgressive sands of the Cambrian Deadwood (Sauk sequence) that were deposited on the low-relief pre-Cambrian surface. During Silurian to Ordovician time, the Winnipeg sands and shales unconformably cut down onto the Deadwood formation. They were later conformably overlain by the carbonates of the Red River to Interlake formations (Tippecanoe sequence). The Third cycle within the Paleozoic is the carbonate and evaporite deposits of the Devonian to Mississippian (Kaskaskia sequence), where the Elk Point Basin was formed and controlled deposition of the Devonian strata across Alberta and southern Saskatchewan.

Throughout the Paleozoic, numerous unconformities with periods of erosion and non-deposition gave rise to several primary and secondary dissolution instances. Deposition was marked by multiple cycles of salt (halite) and anhydrite beds and there are many examples of secondary dolomitization of limestone deposits through fluid movements throughout the Paleozoic (Anna et al.2010). Post-Paleozoic deposition is predominately clastic sedimentation of the Mesozoic and Cenozoic eras, characterized by mud, sand, silt, and coal deposits.

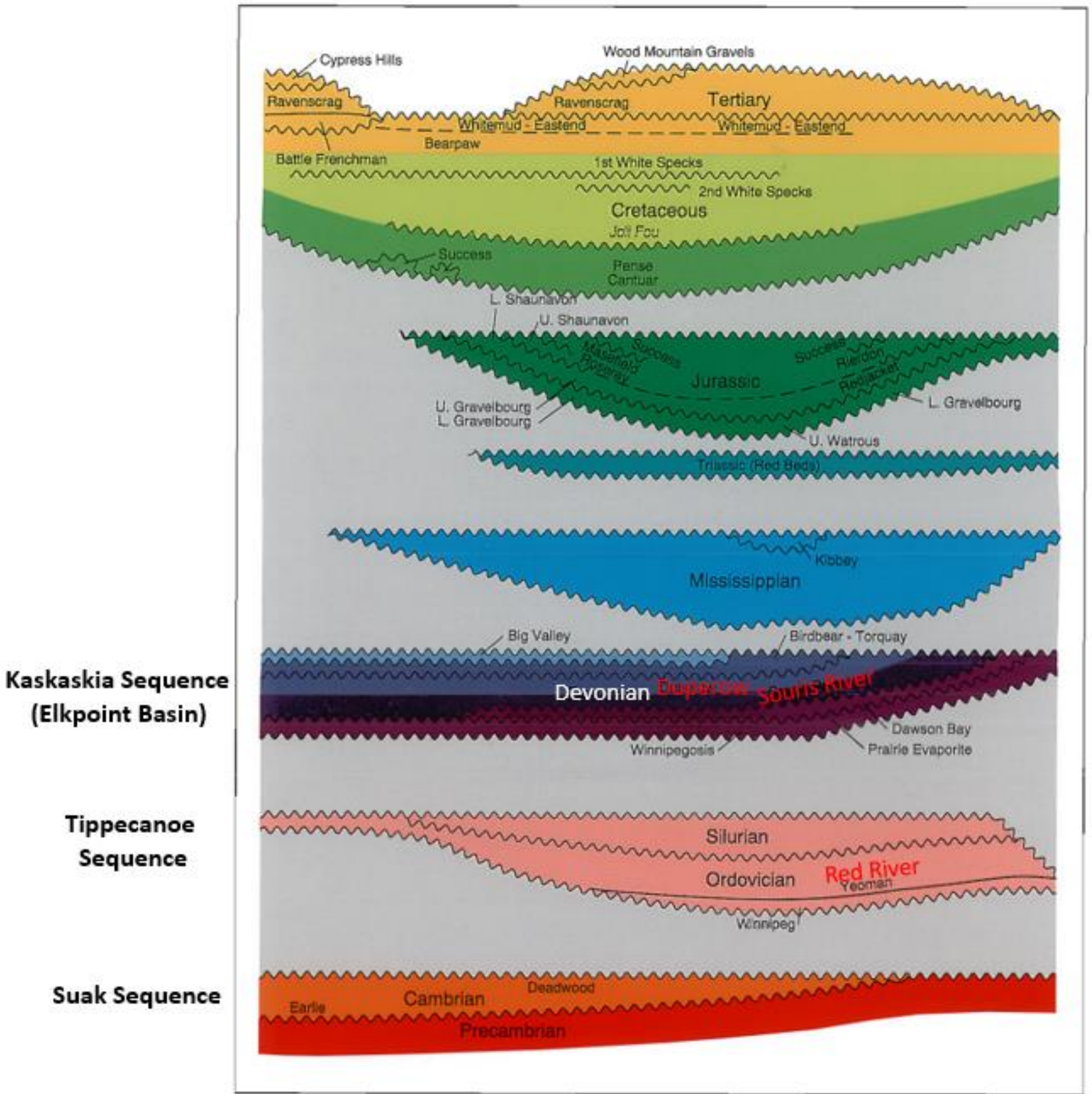


Figure 5**: Williston Basin deposition with representative unconformities and thickness (modified from Kent 92)**

7.2 Basement and Cambrian

The Willison basin is situated primarily over three tectonic provinces of Proterozoic basement rocks composed of igneous and metamorphic complexes. The early Proterozoic Churchill Trans-Hudson Orogen trends roughly North-south through the Williston Basin, Flanked to the east by Archean Superior Craton and west, southwest by the Archean Wyoming/Hearne Craton (Gibson, 1995; Kreis et al., 2000, Potter 2006). Many structural elements, lineaments and fault features within the Pre-Cambrian basement have influenced the deposition of phanerozoic strata as faults and uplifts are re-activated over time. Directly overlying the weathered basement rocks is Cambrian-aged Deadwood formation, composed of the sands and shales, representing the basal member of Paleozoic deposition.

7.3 Silurian-Ordovician Interval

The Silurian-Ordovician interval marks the start of the second transgression-regression cycle of deposition (Anna 2010). Initially filling the eroded surface of the Deadwood Formation are the Winnipeg sands and shales. Conformably deposited on top of the Winnipeg, is the Red River formation, which in Saskatchewan is further divided into the Yeoman and Herald members. The Red River formation is characterized by multiple sequences of shallow water restricted carbonate limestones, dolostones and evaporitic anhydrites. The aquifers that form in the limestone and dolomite reservoirs have been identified as potential targets for lithium-rich brines. Three distinct shallowing upward marine carbonates are identified within the Yeoman and Herald members, each is capped by a thin 2-8m evaporite bed (Potter 91). Each unit may be hydrodynamically isolated by the evaporite intervals, which makes the limestone and dolostone successions targets for oil reservoirs in Southern Saskatchewan and North Dakota. In the Yeoman, the lower unit is typically limestone-dominated, while the upper “burrowed” unit is variably dolomitized and later capped by low-energy laminated limestones and dolostones of the Herald Formation. While the Yeoman is considered to be low energy, deeper water conditions with intermittent storm deposits and local shoaling, the Herald represents a progressive shallowing, leading to restricted deposition and the eventual deposition of the Lake Alama anhydrite (Kent 2000).

During Ordovician times there are several well-documented examples where basement highs have been re-activated during Red River deposition, resulting in thinning of the Red River sediments and subsequent shoaling and higher energy environments being deposited within the Red River. Two examples at Minton and Hartaven (potter 2006), show the relationship of Deadwood onlapping against basement paleo-topographic highs and the later drape of the Winnipeg and Red River formations. In some areas like Tyvan and Chapleau Lake, which are both located on the issuers’ permits, the Red River formation has increased permeability and porosity, postulated to be a result of the higher energy deposition because of the basement uplift and the resulting structural high at time of deposition.

Conformably overlying the Red River are the Stony Mountain, Stonewall, and Interlake formations, characterized by continued cyclic deposition of subtidal limestones, intertidal limestones and dolostones and peritidal or restricted anhydrite. (Kent 2000). A major regression and resulting unconformity are present at the top of the Interlake, and much of the upper Interlake formation is eroded away in some areas.

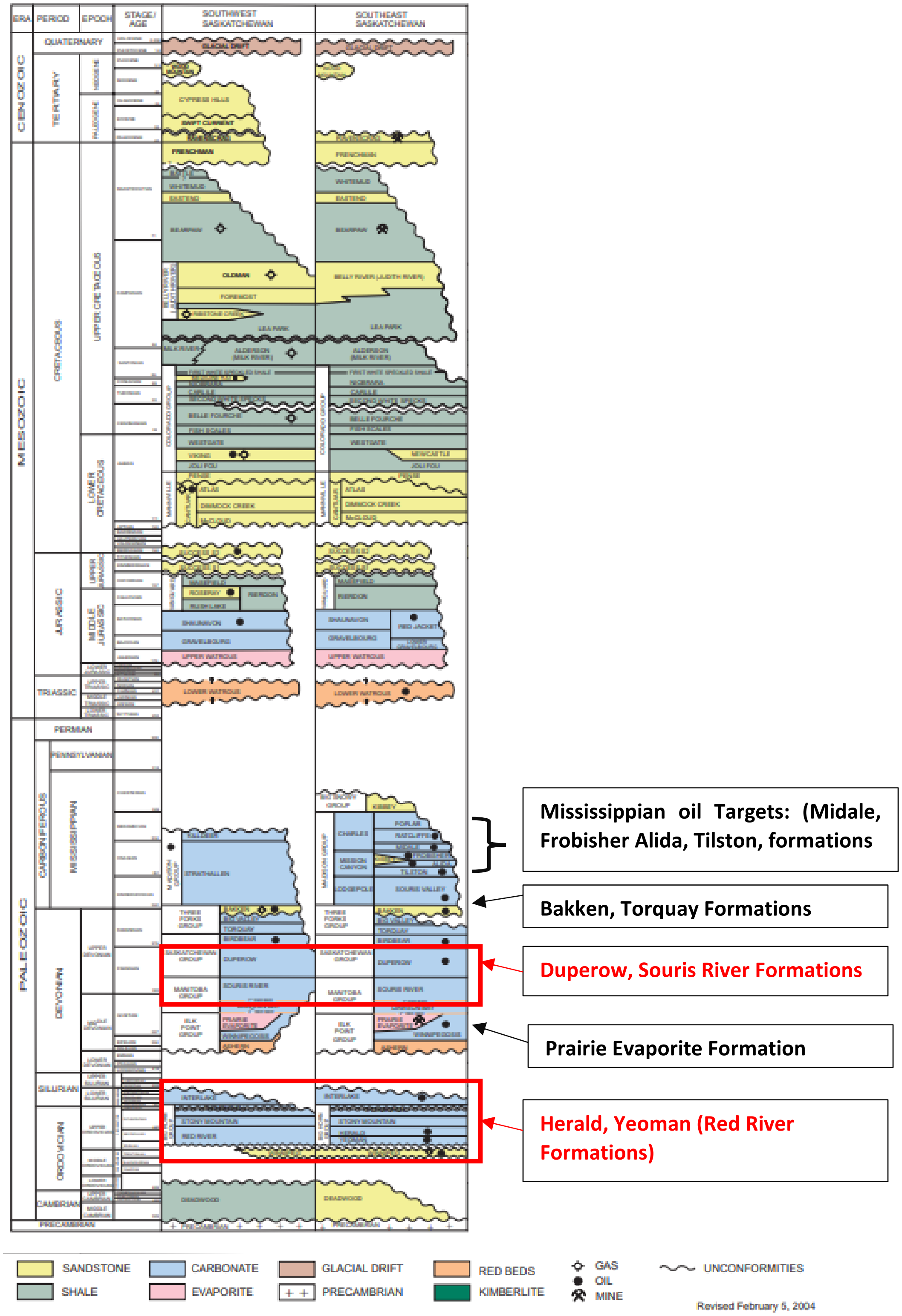


Figure 6: Full Stratigraphic chart of Saskatchewan (modified from Saskatchewan industry and resources)

7.4 Devonian-Mississippian Interval

Early Devonian deposition is marked by a marine transgression over the North American continent and the formation of the Elkpoint Basin, a south-east orientated shallow marine embayment extending from Alberta to Southeast Saskatchewan and Manitoba, as well as southwards to North Dakota and Montana (Yang 2006). Initial sedimentation of the Elk Point basin in Saskatchewan was from open water deposits of the Ashern and Winnipegosis formations with common deeper water reef buildups. These deposits eventually gave way to a long regressive period where the eastern margin of the Elk Point basin was isolated from open waters in the West by the Presqu'ile Barrier Reef complex. (Kent 2000.) This led to the Evaporitic deposition of the Prairie Evaporative Formation. In Saskatchewan, the Prairie Evaporite consists of several cycles of Halite and anhydrite deposition with a total thickness of up to 220m. Because of the extensive halite dissolution, brines in Saskatchewan were highly concentrated in Potassium, and several intervals of potash-rich beds were deposited, interlaying halite and clay-rich seams. These potash deposits constitute a significant source of the world's potash supply used in fertilizer around the world. Following the Prairie Evaporite, there was another marine transgression which re-established normal marine conditions and the deposition of the shallow water carbonates of the Dawson Bay formation. As restricted conditions returned during the Late Devonian the Souris River, Duperow and Birdbear formations were deposited.

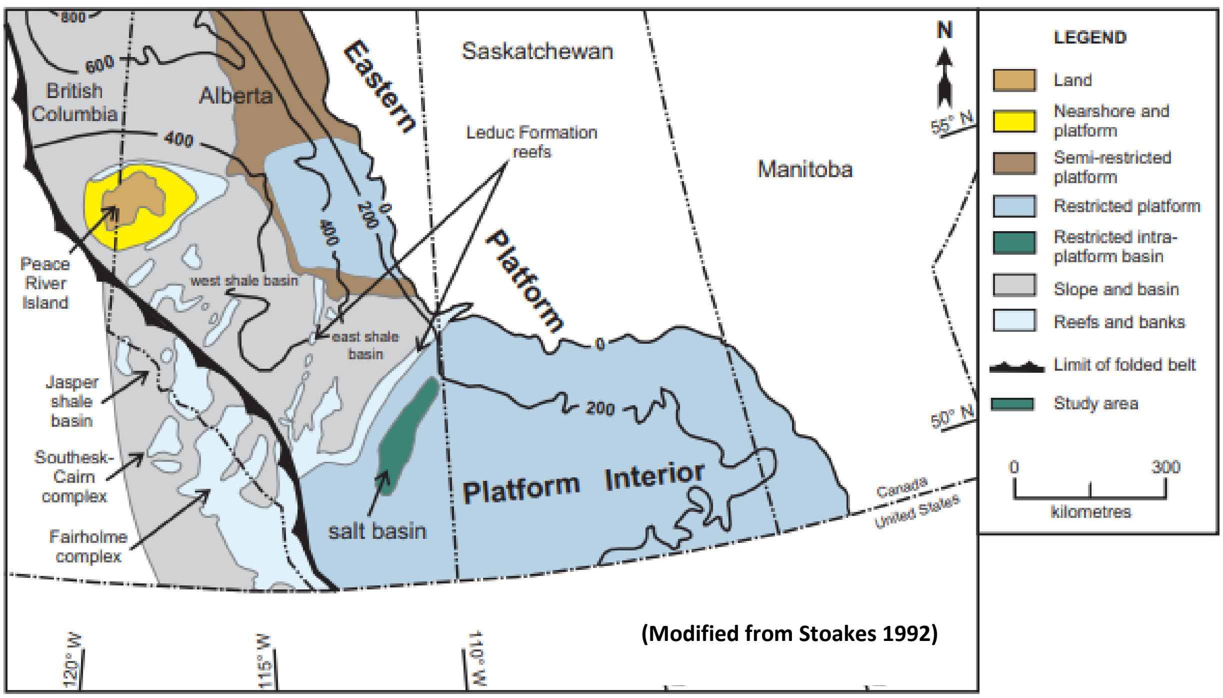
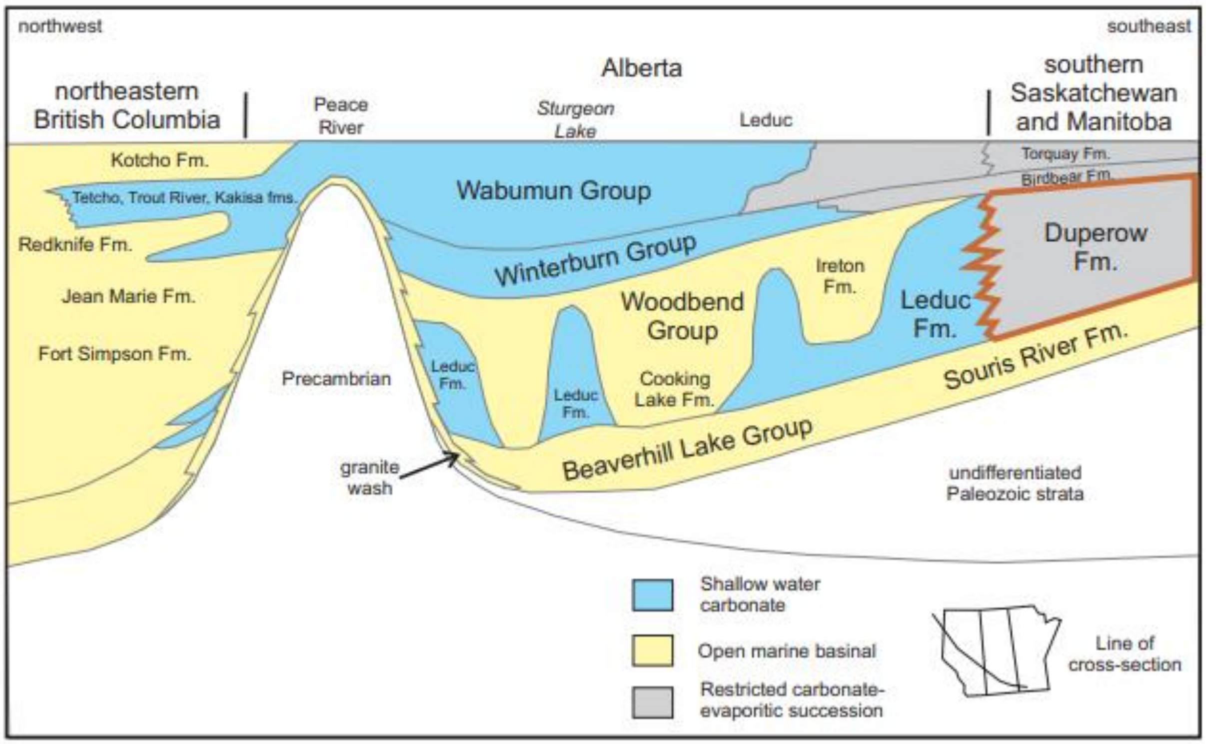


Figure 7: Devonian Stratigraphy across Western Canada

7.5 Duperow Formation

The Souris River and Duperow carbonate sequences were deposited as part of the shallow water sabkha environment of the interior platform of the Elk Point Basin (Figure 7). While the Duperow formation of Saskatchewan was commonly evaporitic, it was laterally equivalent to the carbonate-dominated reef build-ups of the Leduc formation within the Woodbend Group of the Alberta Basin(figure 8) (Stoakes 1992). The eastern platform that extended over Saskatchewan to Manitoba was variably restricted due to the distance from the open ocean and the obstruction from the Leduc Formation Reefs (Chow 2012).



(Modified from Moore 1998)

Figure 8: Paleogeography of the Elk Point Basin

In southern Saskatchewan, where the issuers' permits are located, the Duperow Formation is up to 190m thick, conformably deposited on top of the Souris River Formation, and is conformably overlain by the Birdbear Formation. Within the prospect areas, the Duperow is typically divided into three members, which in ascending order are Saskatoon, Wymark and Seward members (Figure 9). Each member can be identified by prominent marker beds on geophysical well logs and correlated to cores (Wilson 67; Cen and Salad Hersi 2006 Eggie 2012). The Wymark and Saskatoon members can be further subdivided into informal carbonate reservoirs labelled Wymark A-F and Saskatoon A, B, which are laterally correlatable over long distances, with each sub-member having its own depositional sequences and trends. The Author has identified eight separate carbonate reservoirs within the Duperow that represent both a regional and local potential for Li-rich Aquifers. Additional carbonate packages within the underlying Souris River have also been identified and show potential for both Li enrichment and the lateral extent of the aquifer.

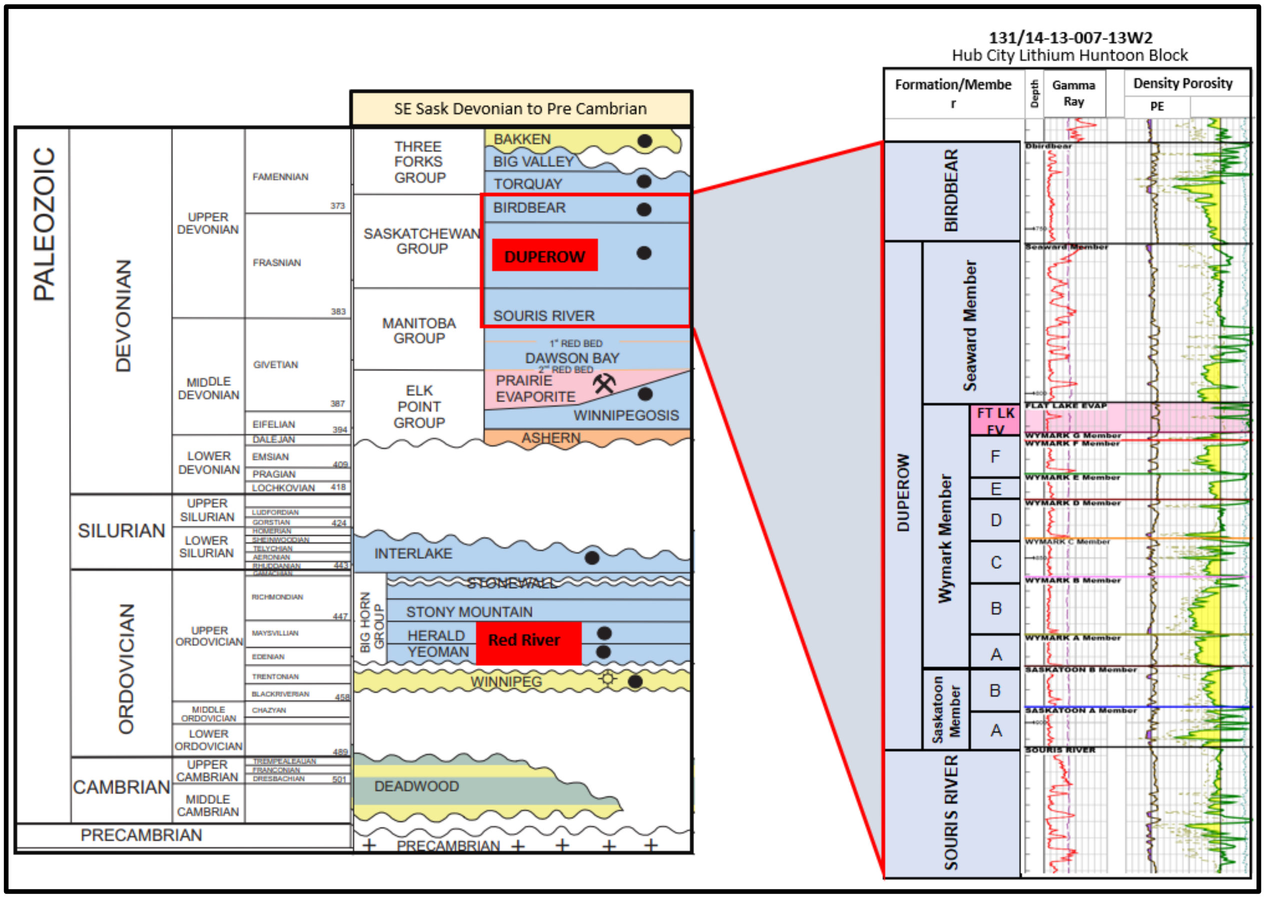


Figure 9: Duperow Formation type log and Stratigraphy

Aquifers in the Duperow are contained within predominantly limestone or dolomite packages. They are periodically separated by evaporitic sequences that deposit argillaceous dolomite and anhydrite beds, forming effective seals between reservoir units. Where dolomite is present the limestone (CaCO3) has undergone a chemical process where calcium carbonate is converted to magnesium rich dolostone (CaMg(C03)2). Since dolomite crystals are smaller than limestone, this chemical process will typically enhance porosity and permeability of the rock, so long as secondary cementation has not occluded porosity. The dolomitization process may further enhance the brines' lithium concentration by the absorption of magnesium ions and the expulsion of lithium ions from the rock into the brines. To date, this is speculative as no formal investigation or reports are known to the author in relation to the Devonian reservoirs.

Within the issuer permits, there are several dolomitized intervals within the Duperow formation where permeability and porosity have been enhanced. Specific examples include Viewfield at 131/15-15-007-09W2 and 101/02-22-007-09W2 and within the Mansur block at 101/14-36-8-13W2 and 131/1-29-7-12W2 which all show nearly complete dolomitization of the entire Duperow formation determined from the (photo electric) PE curve as well as enhanced porosity on the Density porosity logs (figure 14). While no formal link between dolomitization and lithium concentration has been proven, the test results in Viewfield and Mansur both show increased lithium concentrations in highly dolomitized intervals.

7.6 Dolomitization

While the process and timing of dolomitization within the Duperow is poorly understood, there are a few hypotheses that seem most likely. The first theory is that deeper formation waters which are mg rich have migrated up through fractures and are in hydraulic communication. These Mg rich fluids interact with the limestone host rock and are responsible for dolomitization of the reservoir. (In a presentation from G. Michael Grammar et al., using Graham Davies model for Hydrothermal dolomite in the Devonian strata of Western Canada (figure 10) shows that dolomitization of the reservoir could expand out several miles from the fracture locations across the reservoir in facies controlled fluid migration.

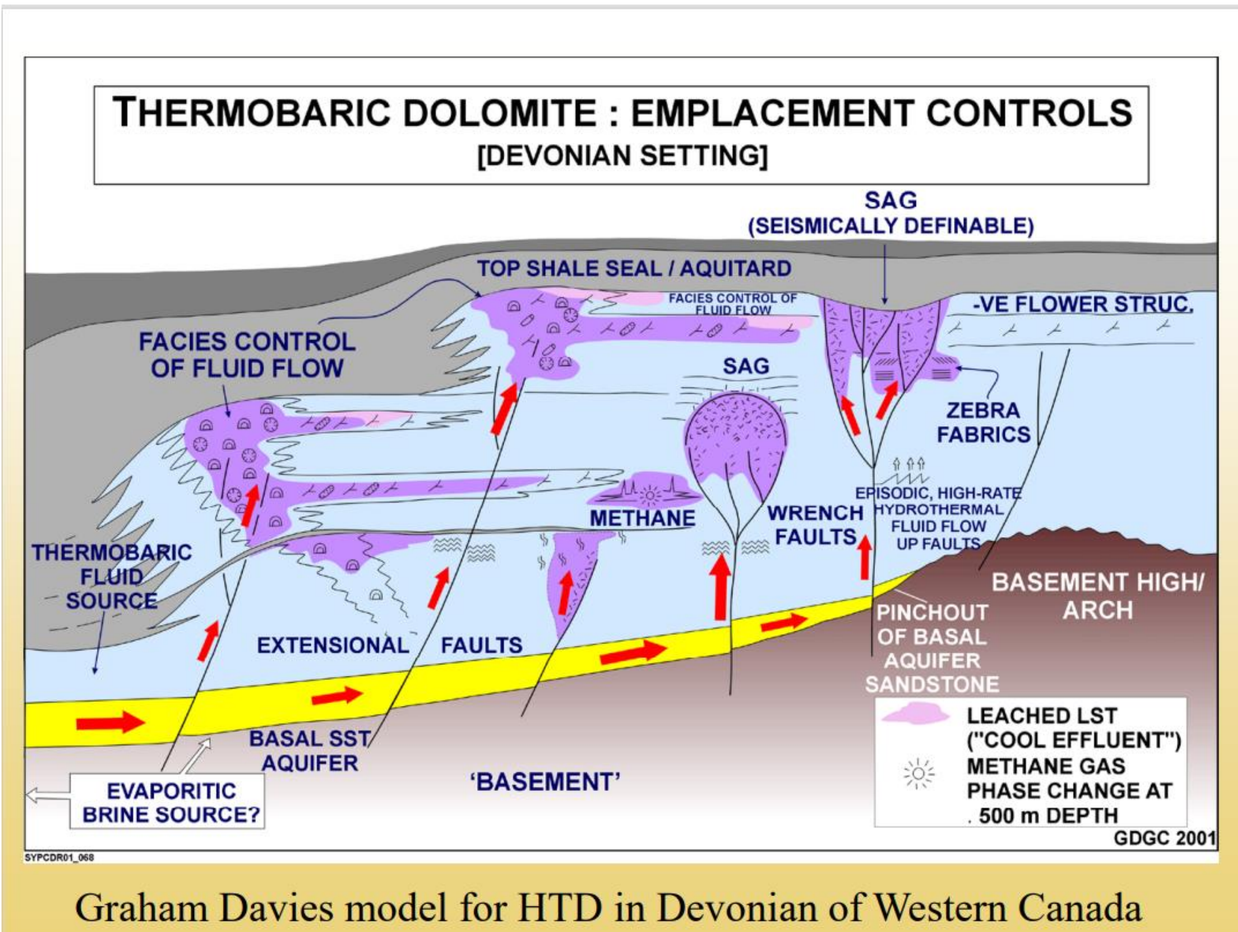


Figure 10: Model for hydrothermal dolomite in Devonian of Western Canada

A second theory postulates a syndepositional dolomitization process of near-shore tidal flats deposition from repeated exposure of normal to hypersaline seawaters (Lake 2015), this process has been observed in modern analogs (Quin, 2001) as well as the Mississippian carbonates of the Williston Basin. The distribution of dolomitization can be quite widespread over large areas within the tidal flat setting. Further study is needed to understand the extent of dolomitization present over regional and local occurrences within the Duperow formation.

7.7 Structural History

While the Williston Basin is far from the mountain building and terrain collisions to the West, many instances of basin subsidence and uplift affected deposition over time. Re-activation of basement faults has been shown to create structures in the overlaying strata. The Red River formation is often draped over top of re-activated basement structures which has been a successful target for many oil discoveries as seen in the Mansur permit area. In Contrast, Devonian deposition is less affected by basement structures but may be influenced by localized salt solution of the Prairie Evaporite in some areas. In the area of issuers permits, there are known salt solution events identified on 3D seismic. The Viewfield Crater was also a major geologic event that may have contributed to fluid movements and the potential re-activation of Basement faults. Differential compaction and variable erosion during regional unconformities in underlying Silurian and Lower Devonian strata may have also influenced the deposition of the Duperow by creating paleo-topographic highs and lows. Post-Devonian deposition has shown continued re-activation of Basement structures, dissolution of salt zones and differential compaction, which have all played a factor in the current structures prevalent in the subsurface today.

7.8 Viewfield Crater

Discovered while exploring oil fields in the 1960s and 70s, there lies a bowl-shaped impact crater, confirmed by wells and seismic, that measures 2.4km in diameter in the Northwest corner of Twp 6 Range 8W2. (Figure 11) The crater impacted in early Jurassic time, and well logs within the crater show Jurassic infill and disruption all the way into the top of the Duperow formation with a total crater depth of over 100m from the rim to the bottom of the Crater. (Sawatzky 1972). Sawatzky noted that Post impact salt solution of the Prairie Evaporate may have also contributed to the Jurassic infill into the Devonian strata. Associated fracturing of the sounding strata from the impact may have re-activated basement faults or enhanced fluid movements through fractures.

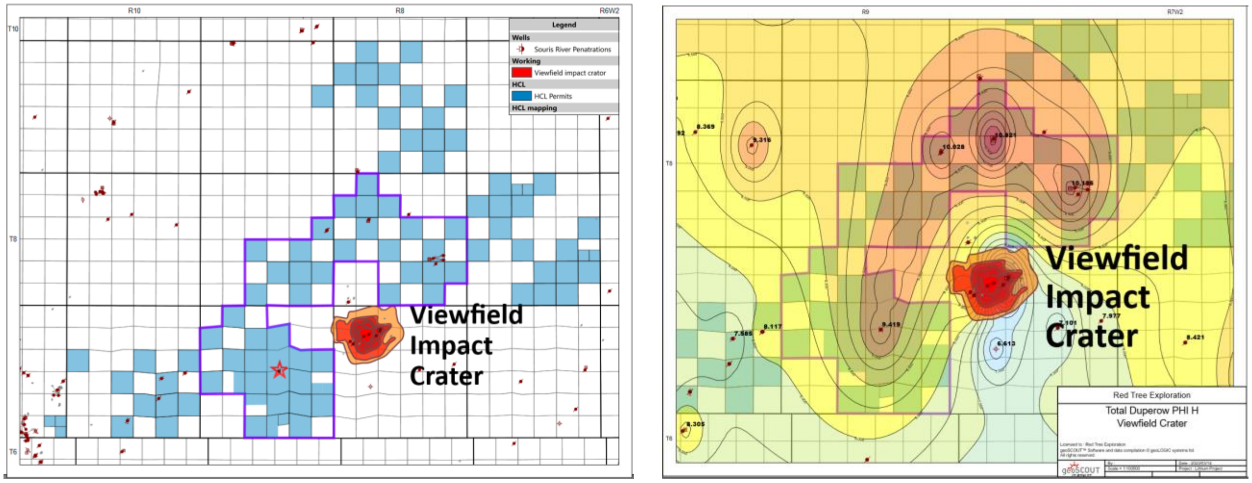


Figure 11: Viewfield impact crater and Duperow Pore Volume Map

A recent paper by S James et al.(2021), documents several examples of mineral enhancements from crater impacts around the globe. Figure 12 conceptualizes A possible scenario of fluid migration due to a crater impact, which may have similarities to what occurred as a result of the Viewfield crater. While empirical evidence of fluid migration has not been confirmed, dolomitization and porosity enhancement within the Duperow intervals are evident within the HCL Viewfield permit area surrounding the crater impact site. (Figure 11). Available evidence suggests there may be a link between the lithium concentration in Viewfield and the occurrence of the View Crater. Still, more data and research are required to confirm such a link.

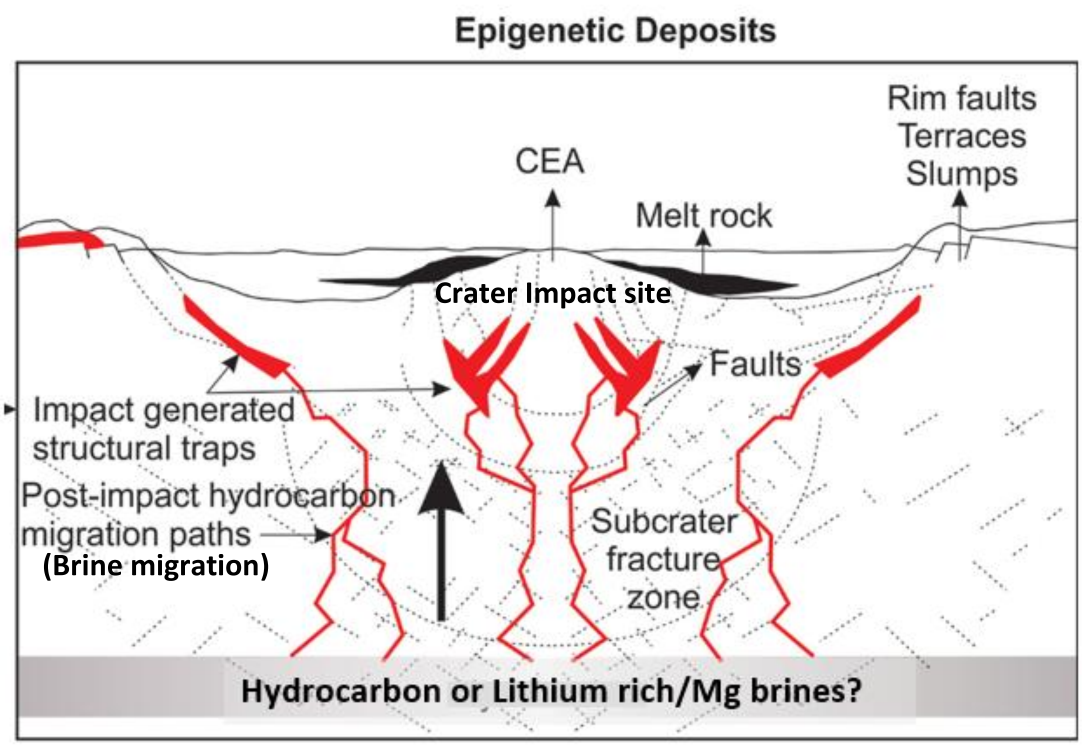


Figure 12**: Example of Crater impact fluid migration pathways**

Modified from S. James (2021)

7.9 Local Property Geology

7.9.1 Mansur Block

The Mansur Project area is 23,234 Ha in total area, extending from the Mansur Red River pool in the NW (Twp 9 Range 13W2) to the Hume Midale pool in the south (Twp 7-12W2). (figure 13). HCL's acreage totals 14,021 Ha within the permit area. At Mansur, there are several Red River oil pools with deep well control, including Mansur, Midale, and Huntoon fields. Before HCL's completion program in 2022, there were three critical lithium concentration tests in the Duperow Formation in the region (Jensen 2017); the concentrations ranged from 56mg/L up to 190mg/L at 14-12-7-11W2 (figure 14) which was sampled from the Wymark F member.

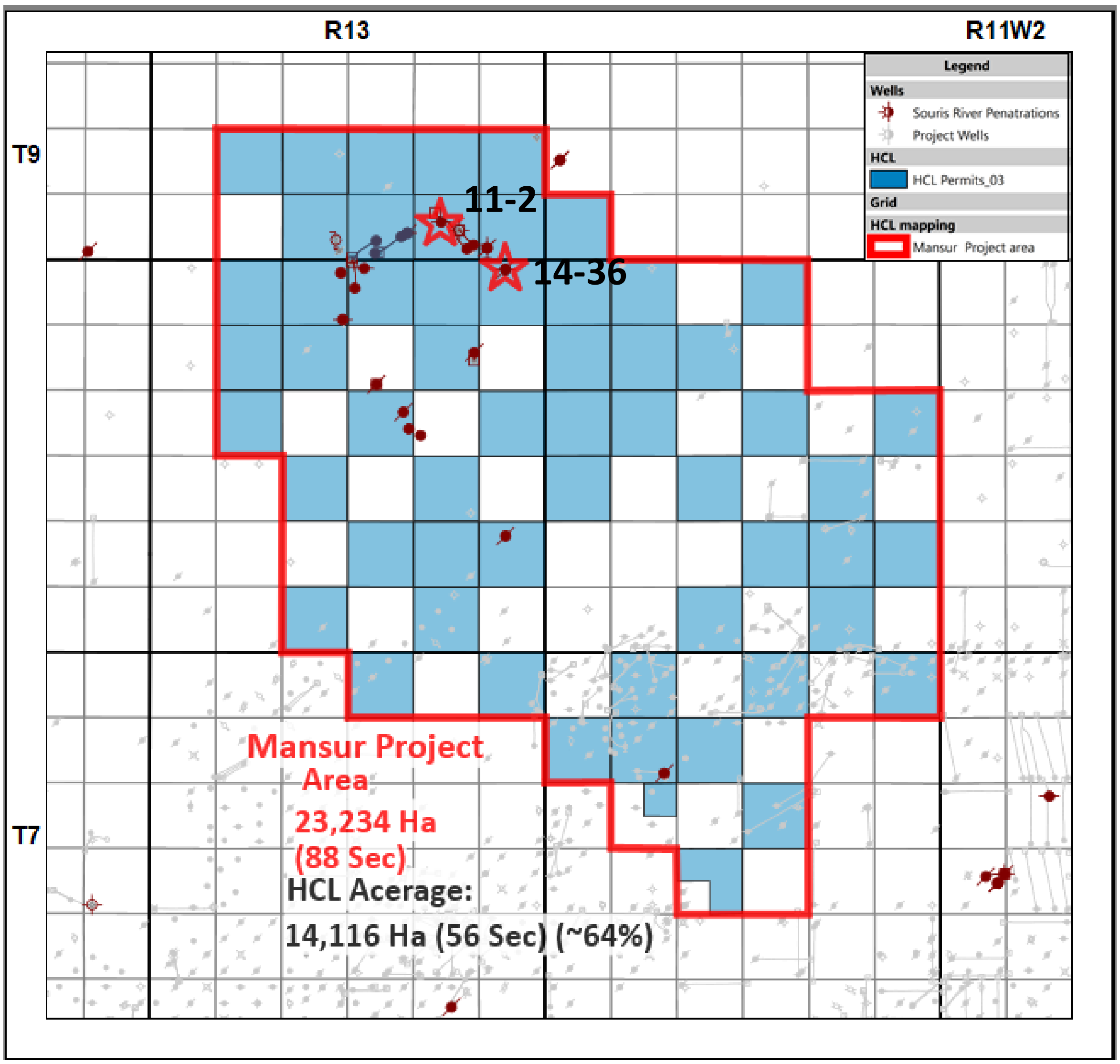


Figure 13: Mansur Project Area

The Duperow formation at Mansur is characterized by several regional depositional cycles of limestone and dolomites capped by evaporitic deposits, separating zones into multiple distinct aquifers (figure 14), each with their own depositional characteristics. Cross section A-A' (figure 14) displays the correlative nature of the Wymark and Saskatoon zones with varying degrees of dolomitization across the project area. Both the Mansur and Viewfield Areas show a high amount of dolomitization throughout the Duperow succession. Further evaluation will be required to see if lithium concentrations will be positively affected by the dolomitization of the reservoir.

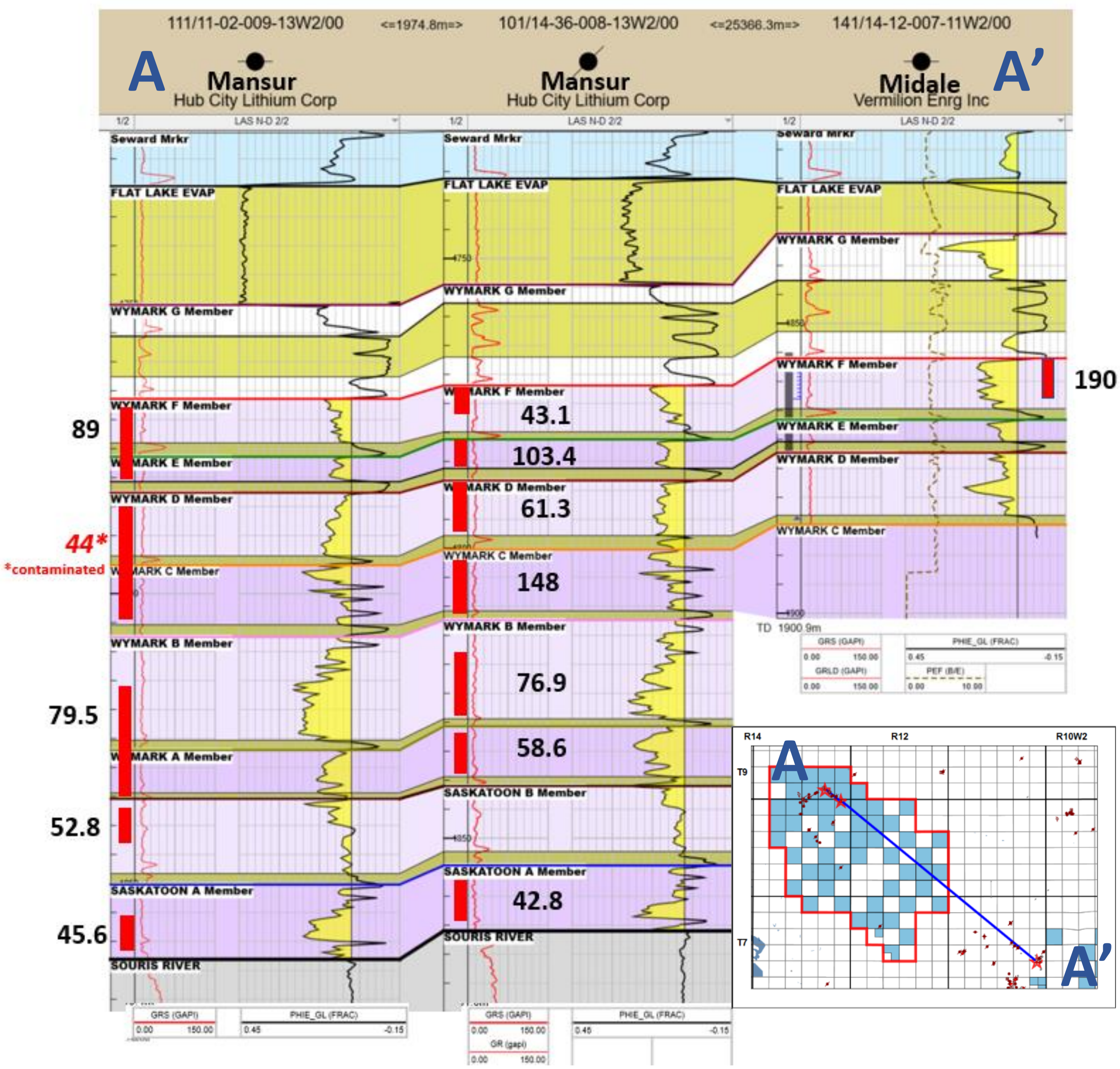


Figure 14: Regional cross-section of Duperow at Mansur with correlation to offset Lithium test.

In total, 28 wells were used in the petrophysical evaluation of the Mansur property, well control is concentrated at the North end over the Mansur Red River field (figure 13). Detailed petrophysical log evaluation determined the average and effective porosities for each Duperow zone at Mansur using all available wells with porosity data. Using a 3% porosity cut-off, the net reservoir isopachs were also calculated from digital logs. Both effective porosity and Net Reservoir thickness were mapped across the Mansur block for each zone. Refer to Table 2 which summarizes reservoir parameters within the Mansur permit area. Effective porosities in all zones varied from 8.1% in the Wymark D to 13.6% in the Wymark B, averaging 10.0% for the total Wymark and Saskatoon members. Net reservoir thickness occurred within a narrow range of the average for each zone. Isopaches varied from 6-17m thickness for each zone within the Wymark and Saskatoon members. The total isopach of all brine reservoirs summed to 79.5m for the Mansur Property.

Lithium concentration data at Mansur was based on 14-36-8-13W2 and 11-2-9-13W2 wells within the Mansur block and were part of the extensive testing completed by HCL (Table 2). Other relevant data outside Mansur (figure 17 and table 1) was also considered when determining the min and max concentrations in the geological model.

Table 2: Mansur reservoir properties and lithium concentrations by zone

Summary Mansur Permit Area

Formation	Measured Li Conc (mg/l)		Porosity Evaluation			Net Reservoir Isopach (m)		
	14-36	11-2	Ave total por %	Effective Por %	Std Diviation	Min	Likely	Max
Wymark F	43	96	10.90%	10.0%	1.359%	7.26	8.23	9.0
Wymark E	103	96	10.60%	7.80%	2.222%	3.49	4.3	4.98
Wymark D	61	44*	8.80%	8.10%	1.070%	9.3	10.18	11.01
Wymark C	148	44*	10.30%	9.60%	1.662%	8.61	9.5	10.3
Wymark B	77	86	14.60%	13.60%	3.647%	15.2	16.3	17.3
Wymark A	59	53	12.90%	12.20%	1.345%	8.5	9.3	10.1
Saskatoon B		52.4	9.00%	8.30%	0.970%	11.23	12.64	13.98
Saskatoon A	44	46	11.20%	10.50%	0.468%	6.9	9	10.98
Totals			Ave 11.04%	Ave 10.01%		70.49	79.45	87.65

** possibly contaminated sample*

Table 2: Mansur reservoir properties and lithium concentrations by zone

A net porosity isopach map of the Wymark and Saskatoon members shows the regional extent of the porous Duperow in the Mansur area (figure 15). Combining Effective porosity with Net thickness the total pore volume is shown in (figure 16), which shows the local effects of dolomitic porosity.

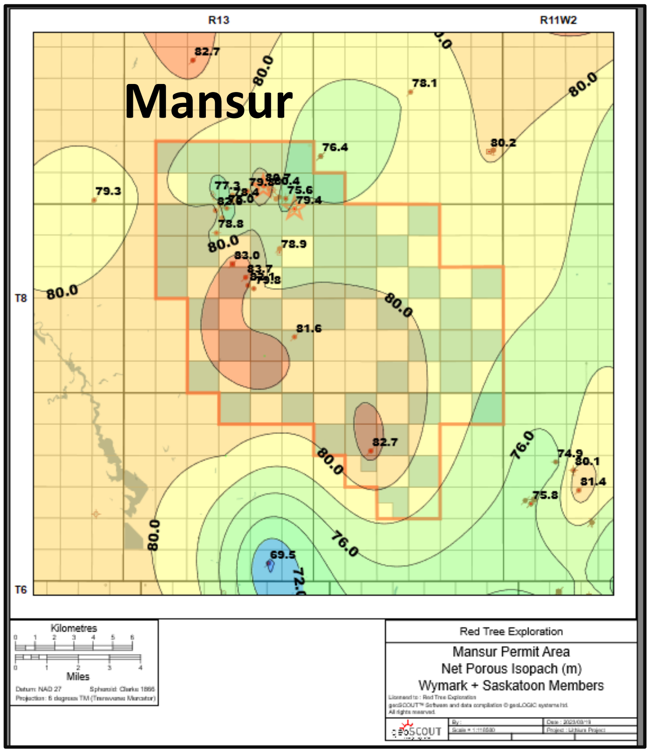


Figure 15: Total Pore Volume (Phi H) of Duperow fm (Wymark and Saskatoon intervals).

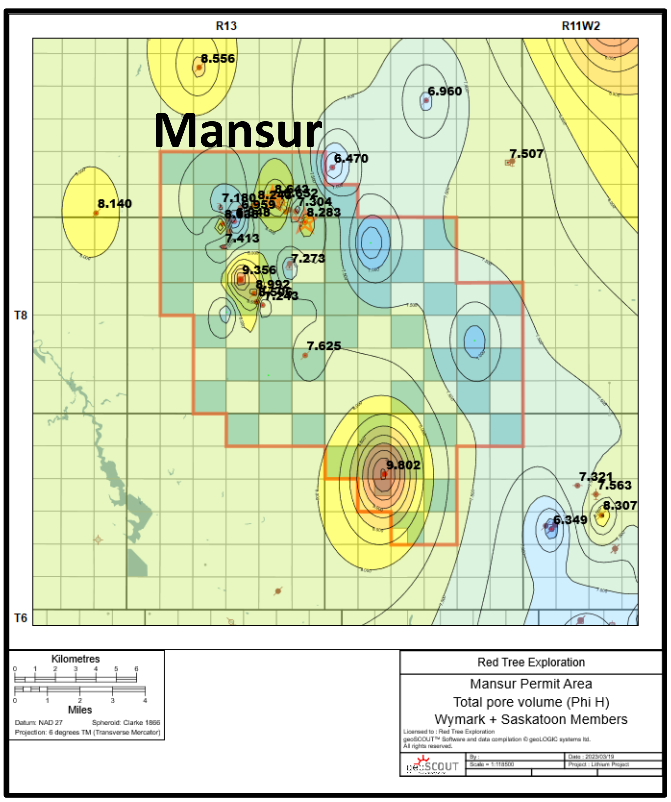


Figure 16: Total Pore Volume (Phi H) of Duperow fm (Wymark and Saskatoon intervals).

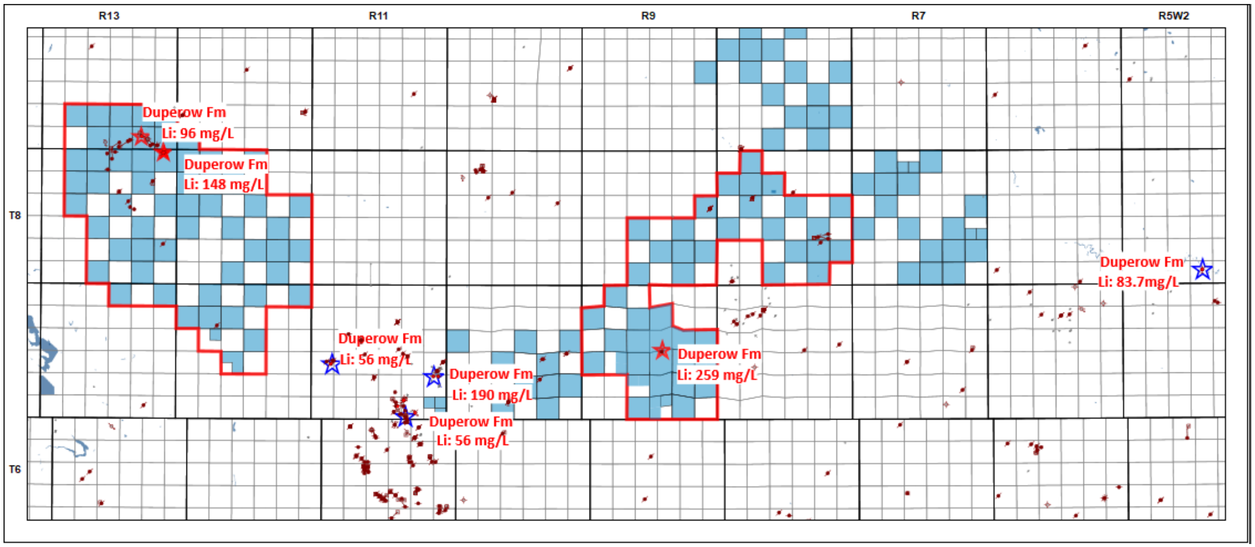


Figure 17: Mansur Area Duperow Li Tests

7.9.2 Viewfield Block

HCL's Viewfield initial block has a defined project area of 16,405 Ha, with HCL's acreage within the project area of 11,495 Ha or approximately 70% of the mineral interest. (figure 18) HCL does have offsetting acreage that could expand the project area as further testing and data support economic lithium concentrations over a larger area. Petrophysical evaluation of the Duperow at Viewfield was carried out utilizing 22 wells within and surrounding the Viewfield project area. Most deep wells in the region have been drilled since 1990 and have modern well data with digital logs. As discussed in section 7.7, several wells in the NW of twp 7 Range 8W2 penetrate the Viewfield crater, which the HCL property encircles to the North and West.

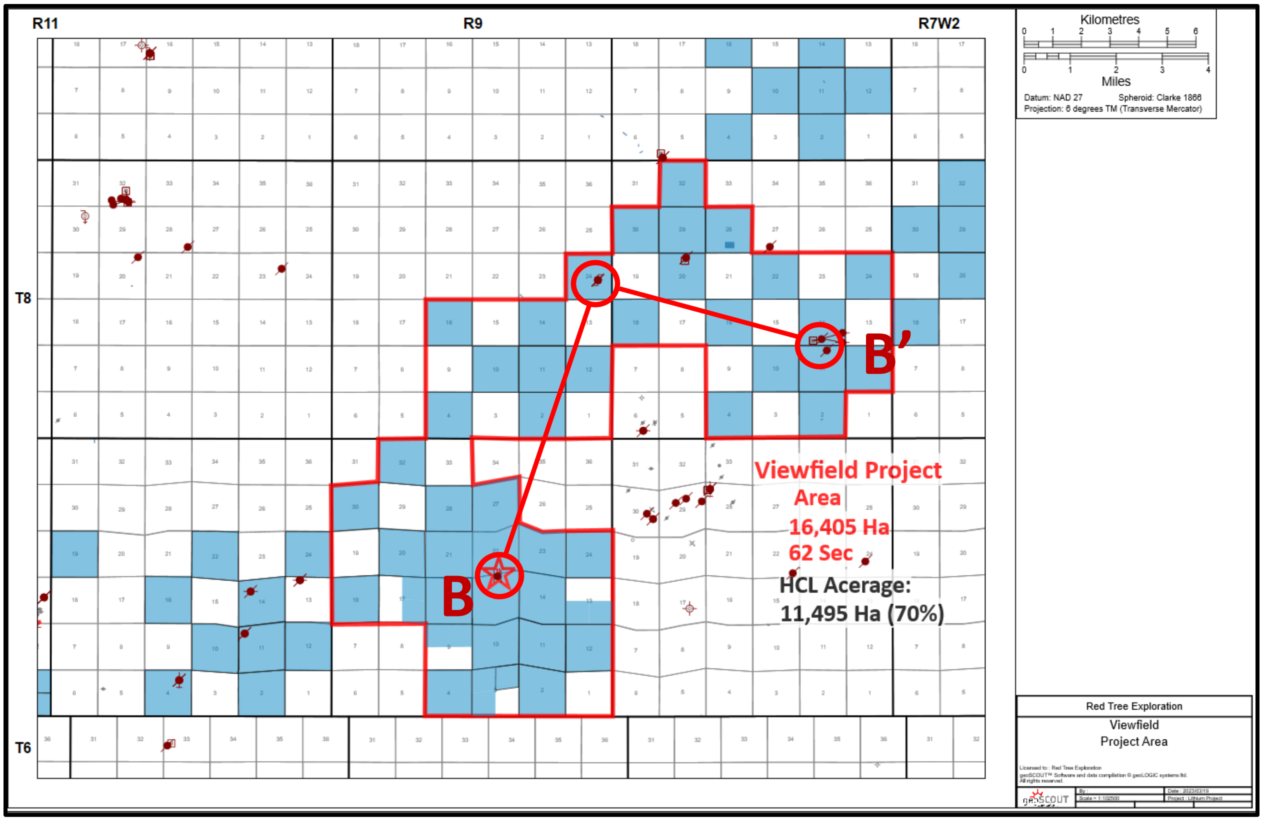


Figure 18: Viewfield Project Area

Petrophysical evaluation of all wells in the region confirms the high amount of dolomitization that is prevalent within all zones of the Wymark and Saskatoon members. Cross-section B-B’ shows the continuity of the Wymark Saskatoon members across the permit block (figure 19). 101/2-22-7-9W2 is an evaluation well drilled by HCL in 2022, that has undergone extensive brine sampling to test lithium concentrations, Lithium concentrations in Viewfield were weighted towards the results of the Brine testing program results are summarized in (Table 3). In total seven separate zones were extensively sampled in addition to two production flow tests were carried out and is discussed in detail in section 14.6.3. The multi-zone production tests confirm the high deliverability of the Duperow reservoirs, initial brine production flowed at greater than 450m3/d with all zones open. (table 11).

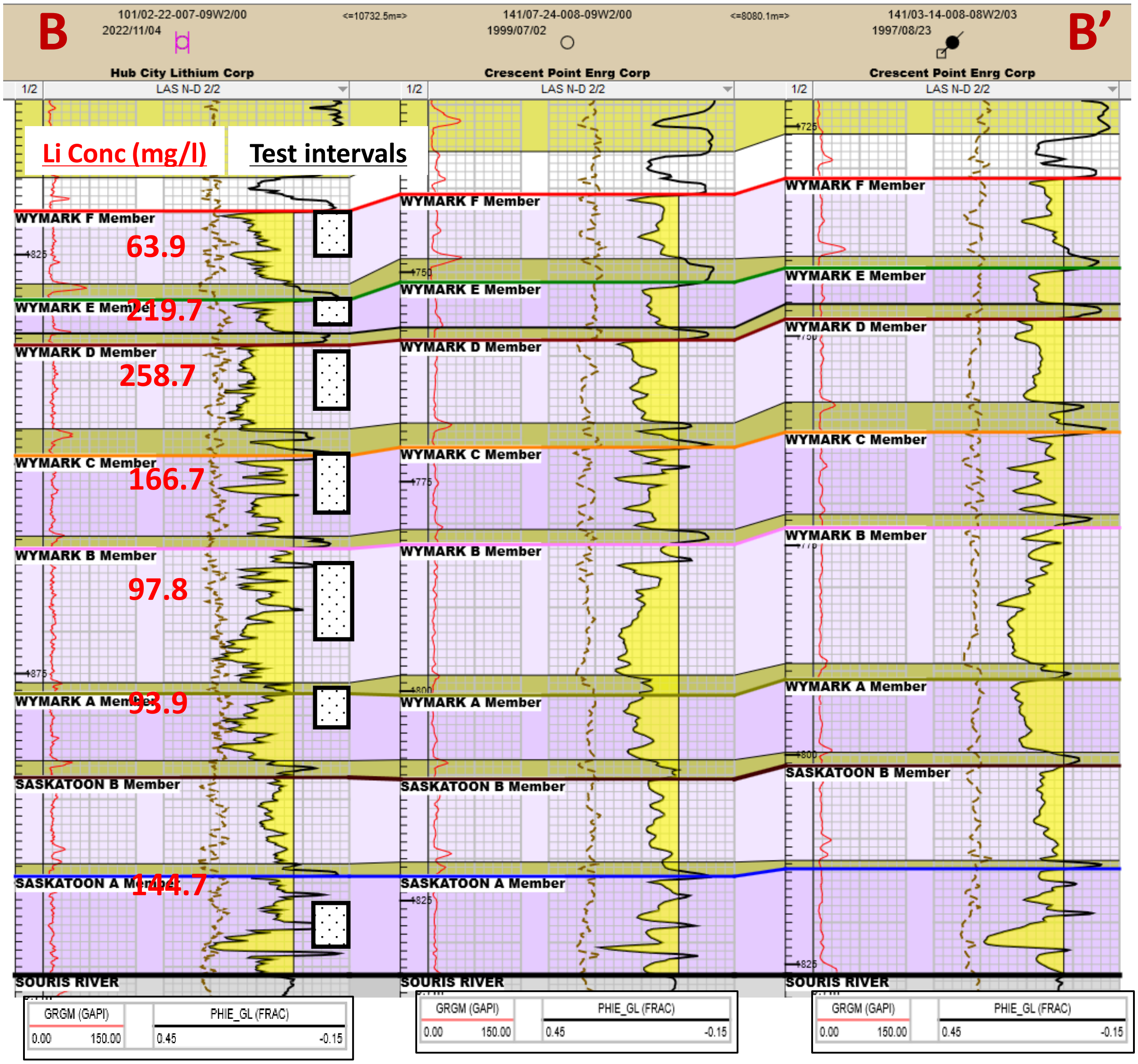


Figure 19: Viewfield cross-section B-B’

The spatial distribution of the higher porosity and net reservoir isopachs is concentrated in a semi-circular pattern surrounding the Viewfield Crater. (Figure 19). Effective porosity values for all zones averaged 10.8 to 15%, with a combined total isopach for all zones averaging 81m. Refer to (Table 3) for a summary of reservoir parameters for the Viewfield block. Total net isopach is similar to Mansur (figure 20), but total brine volume per section is higher at Viewfield due to the increased porosity in most zones. Expected permeability is also likely higher due to the increased porosity and dolomitization of the reservoir. More test wells will be required to better understand the extent of reservoir enhancements outside the initial project area.

Summary Viewfield Permit Area

Formation	Li Concentration	Porosity Evaluation			Net Reservoir Isopach (m)		
	measured (2-22)	Ave total por %	Effective Por%	Std Diviation	Min	Likely	Max
Wymark F	63.9	12.30%	10.8%	1.00%	6.7	8.53	9.2
Wymark E	220	13.10%	11.8%	2.20%	3.4	4.16	5.5
Wymark D	258.9	17.70%	15.0%	2.80%	10	11.5	11.1
Wymark C	166	13.00%	11.7%	1.50%	9.3	9.98	10.7
Wymark B	97.3	15.60%	14.5%	2.10%	15.5	16.1	17.8
Wymark A	93.9	15.30%	14.5%	1.75%	9.2	9.4	9.7
Saskatoon B		11.00%	10.2%	1.87%	10.5	11.4	12.4
Saskatoon A	144.7	13.80%	13.2%	1.70%	8.8	9.9	11.5
Total		Ave 14.0%	Ave 12.8%		73.4	81.0	87.9

Table 3: Viewfield reservoir characteristics and lithium concentrations by zone

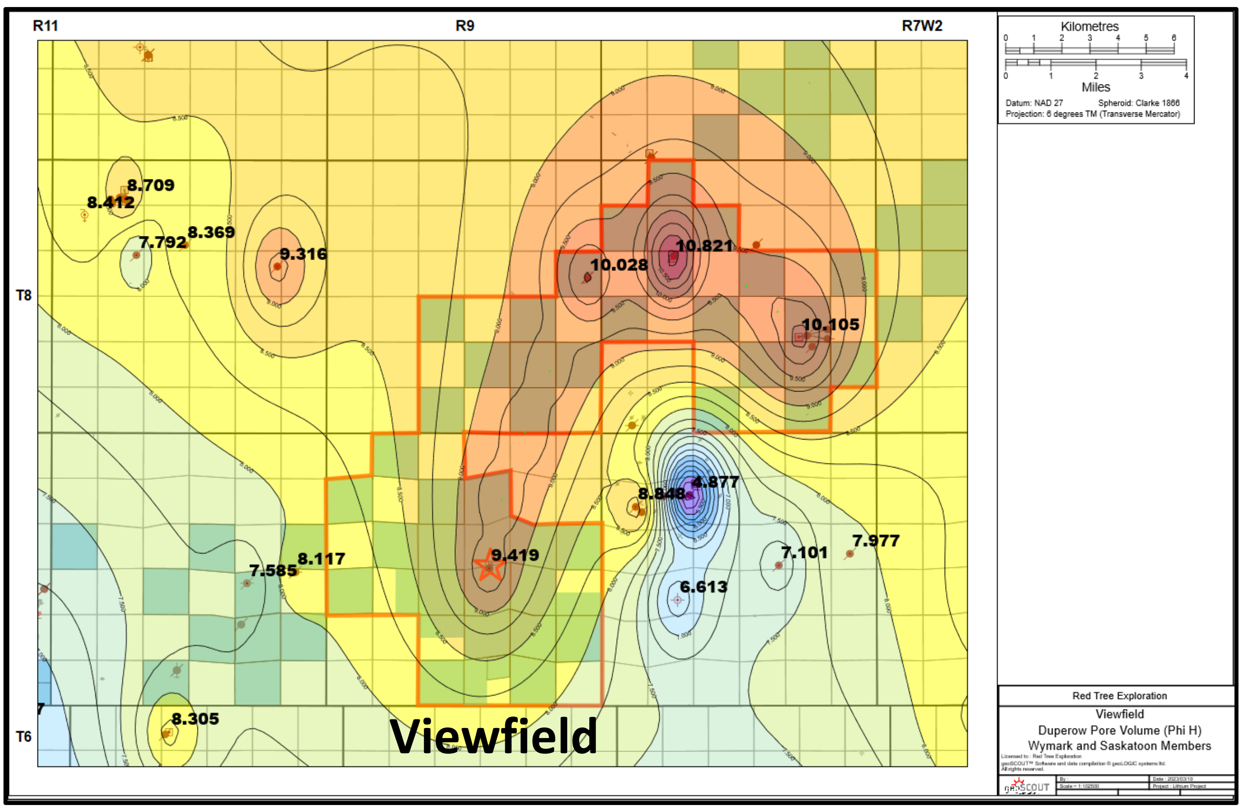


Figure 20: Viewfield Duperow Pore Volume (Wymark and Saskatoon members)

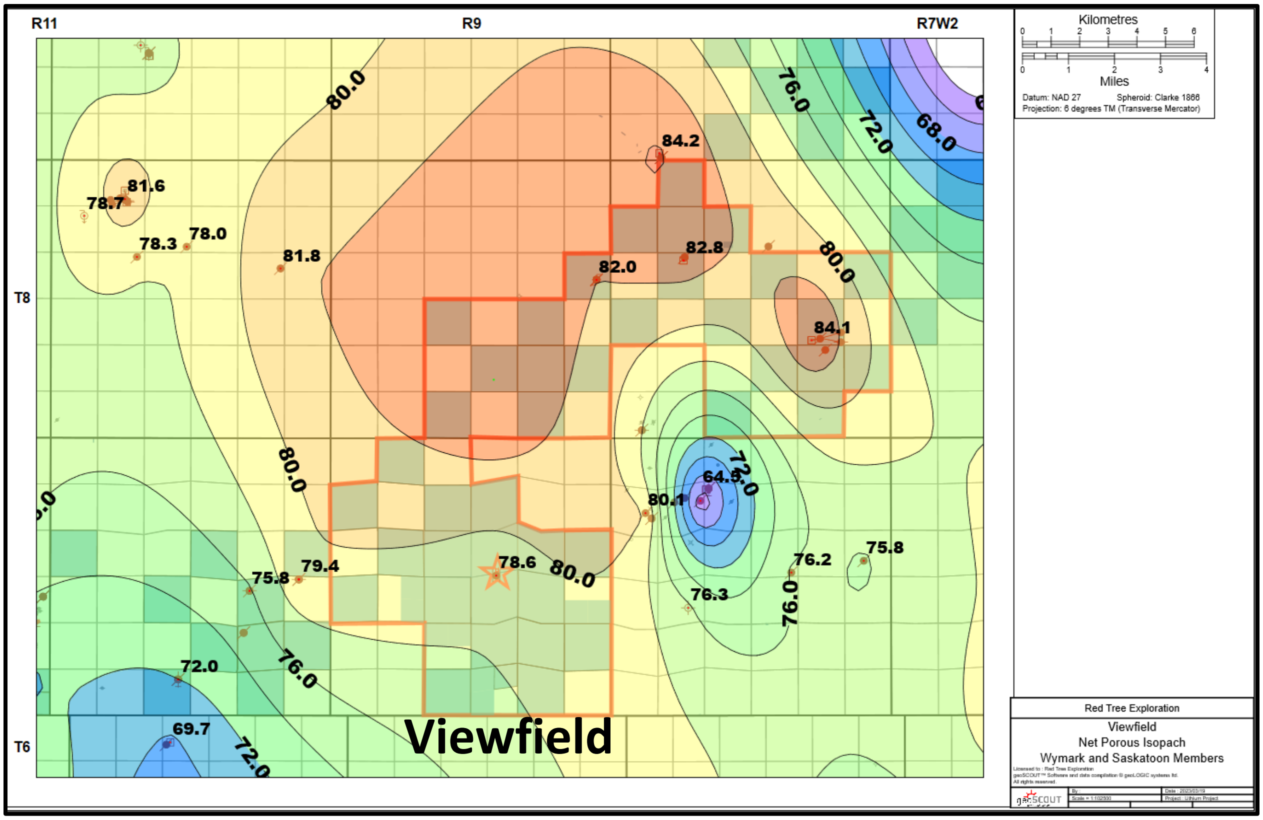


Figure 21: Viewfield Net Porous Isopach (Wymark and Saskatoon Members)

7.10 Brine Mineralization

The source of the lithium-rich brines is still poorly understood; however, a comprehensive study of Li-rich oil-field brines in Israel by Chan et al. (2002) suggested that these Li-rich brines evolved from of seawater and diagenetic reactions between the brine and the basin sediments. This process involves mineral reactions, evaporation, and dilution. In southern Saskatchewan, it is believed that the long period of evaporitic conditions resulted in highly concentrated lithium brines within the Souris River and Duperow formations. Rostron et al. (2022) has extensively researched the brine chemistries of the Devonian and by using the ratio of Chlorine to Bromine versus Sodium to Bromine ratios from Devonian brines that supports the theory that brines are not just the result of dissolved evaporites. The water chemistries of the Duperow suggest that the long history of evapo-concentrated Devonian Sea water may be partially or fully responsible for the high lithium concentrations occurring in the Duperow formation of Southern Saskatchewan.

Post-depositional rock fluid interactions are also believed to play a crucial role in controlling lithium presence (Jensen et al. 2020). Lithium concentration within the brines may have been further enhanced by the dolomitization process, which could have involved the absorption of magnesium ions and the expulsion of lithium ions from the rock into the brine during the dolomitization process. Recent testing results by Rostron et al.(2022), combined with HCL's brine testing results, suggest that each zone will have individual lithium concentrations based on fluid movements and interactions within each reservoir.

8 DEPOSIT TYPES

There are four main types of economically recoverable lithium deposits. The first is mining of pegmatite rocks that are rich in lithium, sourced from magmatic fluids, the biggest of this type of mine being the Wodgina Lithium Mine in Western Australia. The second type of deposit is Continental saline brines, which currently account for three-fourths of the current world production (U.S. geological survey 2017), and occur in South America, including Chile, Argentina and Bolivia. This type of deposit is formed in salt pans or salars in enclosed basins, with lithium enrichment from thermal springs. The third type of lithium deposit is hydrothermally altered saline lacustrine clays (smectite), found in Nevada and Mexico. These clays absorb lithium from the lithium rich brines. The fourth type of deposit is Geothermal and basinal brines. In this deposit type the lithium is extracted from the lithium rich brines from the subsurface through a chemical process. These subsurface brines are the targeted deposit type in Alberta and southern Saskatchewan.

9 EXPLORATION

Hub City Lithium's exploration activities have been focused on collecting lithium concentration data from multiple aquifers within the Duperow Formation. To date, two wells have been acquired from operators at Mansur to evaluate the Duperow reservoirs, including flow testing productivity and sample collection for lithium concentration data. At Viewfield, A new well was drilled for the purposes of Duperow testing (described in section 10). In total, over 50 water samples have been collected, testing eight separate zones within the Duperow. A summary of results is described in sections 9.1.1 and 9.1.2.

9.1 Field testing

In 2022, HCL conducted several sampling programs from individual wells in the Mansur and Viewfield properties, to collect water samples and complete production tests on multiple zones of interest within the Duperow formation. At Mansur, two standing wellbores (111/11-02-009-13W2) and (101/14-36-008-13W2) were acquired from an existing oilfield operator and were subsequently re-completed by HCL to test the Duperow formation. In Viewfield a new well (101/2-22-007-09W2) was licenced, drilled and cased by HCL for the purpose of sample collection and flow testing. The same collection procedures were followed for all three wells as described in sections 9.1.1 and 9.1.2

9.1.1 Sample collection

The methods and procedures for sample collection were kept the same for all zones. The process was to set packers with a service rig to isolate each zone, where each zone would be evaluated separately. Once the zone was isolated, the well was set up for swab evaluation. Procedure to swab evaluate is to run wireline in with a "swab cup" on end, run into fluid far enough to pull approx. 1m3 fluid per run. Tubing volume was calculated to ensure tubing volume was produced out. Salinities and weight of water samples were monitored and recorded until confirming formation fluid recovery with no drilling contamination.

Sample collection was carried out by floor hand (tester) at the wellhead while pulling out swab, when fluid hits surface the tester takes a steady sample in a clean container from the start of fluid coming out until swab cup is out. Samples were mixed up and put into 1-litre sample bottles, sealed and labelled with the date, time of day, swab number and location. Salinity and weight were checked every swab, and then 1-litre samples were taken approximately every 2 hrs, sealed and stored. In addition to 1-litre samples, there were 1m3 totes for each zone tested, set up on a trailer. Tote was labelled and filled over the course of the test with confirmed formation fluid from random swabs from the same test interval, at which point totes were sealed. Each set of samples was labelled, packaged and sealed and sent by courier to Isobrine Solutions Inc. in Edmonton, Alberta.

The following tables (4,5) contain the consolidated test results of all Swab tests for the 2-22-7-9W2 and 14-36-8-13W2. Both evaluations tested each zone separately for water sampling and lithium concentration tests. The consolidated swab report for 11-2 is found in (Appendix C) most swab tests at 11-2 had multizone test results of 2 or more zones at once.

Table 4: 2-22 Viewfield 2-22 Consolidated swab test results

Hub City et al Huntoon 2-22-7-9W2
Consolidated Lithium Test Results
Swab tests listed chronologically

WATER ANALYSIS RESULTS

ISOBRINE solutions
9330 60 Avenue NW
Edmonton, AB
Canada, T6E 0C1
www.isobrine.com

Isobrine ID	Client Sample ID	File No:	Report date:	Well Name	Time sampled	Date Sampled	Date Received	Lithium ICP-OES 0.1	Ave Li (mg/l)	Duperow zone
IB-23-0397	Wymark F Swab#13	ISOBR-23071/23074	November 25, 2022	Hub City Huntoon N 2-22-7-9W2	17:10	2022-11-16	2022-11-23	63.7	63.9	Wymark F
IB-23-0398	Wymark F Swab#30	ISOBR-23071/23074	November 25, 2022	Hub City Huntoon N 2-22-7-9W2	12:40	2022-11-17	2022-11-23	64.2		
IB-23-0399	Wymark F Swab #46	ISOBR-23071/23074	November 25, 2022	Hub City Huntoon N 2-22-7-9W2	17:05	2022-11-17	2022-11-23	63.7		
IB-23-0431	Wymark E Swab#11	ISOBR-23078/23079	December 1, 2022	Hub City Huntoon N 2-22-7-9W2	16:45	2022-11-18	2022-11-30	217.7	219.7	Wymark E
IB-23-0432	Wymark E Swab #28	ISOBR-23078/23079	December 1, 2022	Hub City Huntoon N 2-22-7-9W2	12:35	2022-11-19	2022-11-30	221.9		
IB-23-0433	Wymark E Swab #36	ISOBR-23078/23079	December 1, 2022	Hub City Huntoon N 2-22-7-9W2	15:45	2022-11-19	2022-11-30	219.5		
IB-23-0434	Wymark D Swab #48	ISOBR-23078/23079	December 1, 2022	Hub City Huntoon N 2-22-7-9W2	17:15	2022-11-21	2022-11-30	259.4	258.6	Wymark D
IB-23-0435	Wymark D Swab #76	ISOBR-23078/23079	December 1, 2022	Hub City Huntoon N 2-22-7-9W2	13:05	2022-11-22	2022-11-30	258.3		
IB-23-0436	Wymark D Swab #86	ISOBR-23078/23079	December 1, 2022	Hub City Huntoon N 2-22-7-9W2	15:00	2022-11-22	2022-11-30	258.3		
IB-23-0485	Wymark C swab 18	ISOBR-23081/23082	December 2, 2022	Hub City Huntoon N 2-22-7-9W2	17:15	2022-11-23	2022-12-01	166.9	166.7	Wymark C
IB-23-0486	Wymark C swab 32	ISOBR-23081/23082	December 2, 2022	Hub City Huntoon N 2-22-7-9W2	13:00	2022-11-24	2022-12-01	165.5		
IB-23-0487	Wymark C swab 44	ISOBR-23081/23082	December 2, 2022	Hub City Huntoon N 2-22-7-9W2	17:15	2022-11-24	2022-12-01	168.3		
IB-23-0488	Wymark C swab 59	ISOBR-23081/23082	December 2, 2022	Hub City Huntoon N 2-22-7-9W2	12:55	2022-11-24	2022-12-01	166.5		
IB-23-0489	Wymark C swab 69	ISOBR-23081/23082	December 2, 2022	Hub City Huntoon N 2-22-7-9W2	16:30	2022-11-24	2022-12-01	166.2		
IB-23-0482	Wymark B swab 10	ISOBR-23081/23082	December 2, 2022	Hub City Huntoon N 2-22-7-9W2	17:15	2022-11-26	2022-12-01	99.2	97.7	Wymark B
IB-23-0483	Wymark B swab 29	ISOBR-23081/23082	December 2, 2022	Hub City Huntoon N 2-22-7-9W2	12:25	2022-11-27	2022-12-01	96.3		
IB-23-0484	Wymark B swab 38	ISOBR-23081/23082	December 2, 2022	Hub City Huntoon N 2-22-7-9W2	15:10	2022-11-27	2022-12-01	96.3		
IB-23-0534	Wymark B Swab #66	ISOBR-23092/23093	December 14, 2022	Hub City Huntoon N 2-22-7-9W2	15:00	2022-11-28	2022-12-13	99.2		
IB-23-0535	Wymark A Swab #20	ISOBR-23092/23093	December 14, 2022	Hub City Huntoon N 2-22-7-9W2	12:35	2022-12-01	2022-12-13	94.2	93.9	Wymark A
IB-23-0536	Wymark A Swab #32	ISOBR-23092/23093	December 14, 2022	Hub City Huntoon N 2-22-7-9W2	17:10	2022-12-01	2022-12-13	94.6		
IB-23-0537	Wymark A Swab #43	ISOBR-23092/23093	December 14, 2022	Hub City Huntoon N 2-22-7-9W2	12:05	2022-12-02	2022-12-13	92.8		
IB-23-0538	Saskatoon A Swab #21	ISOBR-23092/23093	December 14, 2022	Hub City Huntoon N 2-22-7-9W2	17:00	2022-12-06	2022-12-13	84.0	144.7	Saskatoon A
IB-23-0539	Saskatoon A Swab #40	ISOBR-23092/23093	December 14, 2022	Hub City Huntoon N 2-22-7-9W2	12:40	2022-12-08	2022-12-13	152.4		
IB-23-0540	Saskatoon A Swab #55	ISOBR-23092/23093	December 14, 2022	Hub City Huntoon N 2-22-7-9W2	16:55	2022-12-08	2022-12-13	136.9		

Lithium is measured on a Spectro Genesis ICP-OES system. Method USEPA 200.7. Analytical precision is approximately ±5%. Units are all in mg/L

Table 5: Mansur 14-36 Consolidated swab report

Hub City et al Hume 14-36-8-13W2
Consolidated Lithium Test Results
Swab tests listed chronologically

WATER ANALYSIS RESULTS

ISOBRINE solution
9330 60 Avenue NW
Edmonton, AB
Canada, T6E 0C1
www.isobrine.com

Isobrine ID	Client Sample ID	File No:	Report date:	Well Name	Time sampled	Date Sampled	Date Received	Lithium ICP-OES 0.1	Lithium Ave Li (mg/l)	Duperow zone
IB-23-0392	Wymark F Swab #1	ISOBR-23071/23074	November 25, 2022	Hub city et al hume 14-36-8-13W2	8:30	2022-11-10	2022-11-17	43.3	43.1	Wymark F
IB-23-0391	Wymark F swab #11	ISOBR-23071/23074	November 25, 2022	Hub city et al hume 14-36-8-13W2	11:45	2022-11-03	2022-11-17	42.9		
IB-23-0393	Wymark E Swab #8	ISOBR-23071/23074	November 25, 2022	Hub city et al hume 14-36-8-13W2	10:15	2022-11-12	2022-11-17	100.9	103.4	Wymark E
IB-23-0394	Wymark E Swab #26	ISOBR-23071/23074	November 25, 2022	Hub city et al hume 14-36-8-13W2	16:55	2022-11-12	2022-11-17	105.8		
IB-23-0402	Wymark B Swab#26	ISOBR-23071/23074	November 25, 2022	Hub City et al Hume 14-36-8-13W2	12:01	2022-11-16	2022-11-23	76.7	76.9	Wymark B
IB-23-0400	Wymark B Swab #51	ISOBR-23071/23074	November 25, 2022	Hub City et al Hume 14-36-8-13W2	17:10	2022-11-15	2022-11-23	76.9		
IB-23-0401	Wymark B Swab #59	ISOBR-23071/23074	November 25, 2022	Hub City et al Hume 14-36-8-13W2	16:40	2022-11-16	2022-11-23	77.0		
IB-23-0437	Wymark C Swab #14	ISOBR-23078/23079	December 1, 2022	Hub City et al Hume 14-36-8-13W2	12:37	2022-11-18	2022-11-30	146.8	148.0	Wymark C
IB-23-0439	Wymark C Swab #15	ISOBR-23078/23079	December 1, 2022	Hub City et al Hume 14-36-8-13W2	12:03	2022-11-19	2022-11-30	148.6		
IB-23-0438	Wymark C Swab #28	ISOBR-23078/23079	December 1, 2022	Hub City et al Hume 14-36-8-13W2	16:49	2022-11-18	2022-11-30	148.2		
IB-23-0440	Wymark C Swab #29	ISOBR-23078/23079	December 1, 2022	Hub City et al Hume 14-36-8-13W2	4:52	2022-11-19	2022-11-30	148.6		
IB-23-0442	Wymark D Swab #30	ISOBR-23078/23079	December 1, 2022	Hub City et al Hume 14-36-8-13W2	12:10	2022-11-22	2022-11-30	63.2	61.3	Wymark D
IB-23-0441	Wymark D Swab #48	ISOBR-23078/23079	December 1, 2022	Hub City et al Hume 14-36-8-13W2	16:48	2022-11-21	2022-11-30	63.2		
IB-23-0443	Wymark D Swab #60	ISOBR-23078/23079	December 1, 2022	Hub City et al Hume 14-36-8-13W2	16:40	2022-11-22	2022-11-30	57.5		
IB-23-0542	Saskatoon A Swab #16	ISOBR-23092/23093	December 14, 2022	Hub City et al Hume 14-36-8-13W2	12:04	2022-11-28	2022-12-13	40.8	42.8	Saskatoon A
IB-23-0476	Saskatoon A swab 17	ISOBR-23081/23082	December 2, 2022	Hub City et al Hume 14-36-8-13W2	12:14	2022-11-27	2022-12-01	44.1		
IB-23-0477	Saskatoon A swab 20	ISOBR-23081/23082	December 2, 2022	Hub City et al Hume 14-36-8-13W2	16:40	2022-11-26	2022-12-01	43.0		
IB-23-0543	Saskatoon A Swab #25	ISOBR-23092/23093	December 14, 2022	Hub City et al Hume 14-36-8-13W2	14:18	2022-11-28	2022-12-13	41.9		
IB-23-0541	Saskatoon A Swab #28	ISOBR-23092/23093	December 14, 2022	Hub City et al Hume 14-36-8-13W2	14:56	2022-11-27	2022-12-13	44.1		
IB-23-0478	Saskatoon B swab 25	ISOBR-23081/23082	December 2, 2022	Hub City et al Hume 14-36-8-13W2	12:10	2022-11-24	2022-12-01	58.9	58.6	Wymark A
IB-23-0480	Saskatoon B swab 26	ISOBR-23081/23082	December 2, 2022	Hub City et al Hume 14-36-8-13W2	12:00	2022-11-25	2022-12-01	58.6		
IB-23-0481	Saskatoon B swab 38	ISOBR-23081/23082	December 2, 2022	Hub City et al Hume 14-36-8-13W2	13:50	2022-11-25	2022-12-01	58.2		
IB-23-0479	Saskatoon B swab 54	ISOBR-23081/23082	December 2, 2022	Hub City et al Hume 14-36-8-13W2	16:52	2022-11-24	2022-12-01	58.6		

Note the Wymark A has been incorrectly labelled as Saskatoon B

Lithium is measured on a Spectro Genesis ICP-OES system. Method USEPA 200.7. Analytical precision is approximately ±5%. Units are all in mg/L

In addition to the lithium test results, five water samples from each well were sent to Isobrine for complete water analysis (refer to Appendix E for complete water analysis results). The initial interpretations were completed by QP Dr. Ben Rostron(Ph.D., PEng, P.Geol), from Isobrine Solutions. Summarizing Dr. Rostron's interpretations, the samples were considered high quality in 2-22 well. They showed that individual zones within the Duperow have distinct water chemistry fingerprints, as evidenced by multiple dissolved element tracers. This supports the interpretation that the zones within the Duperow are isolated and will have their own mixing, concentrations and hydrodynamic controls. In the 14-36 well, there appears a likelihood of some contamination in the Wymark D, C and E, which could mean that the lithium test results could be underrepresented of the in-situ concentrations.

9.1.2 Production testing

Following swab evaluations, each well underwent production testing with an electric submersible pump (ESP). Post swab evaluation of each wellbore there were 6 to 7 zones were now perforated in the wellbore. A bridge plug was set to isolate the desired intervals and the ESP was set up to produce to a tank farm that was set up on location. Samples were taken directly from the wellhead every 2 hours, recording salinities and weights, then labelled with time stamps, intervals tested and then sealed for delivery. 11-2 was tested with the Wymark, B, C, D, E and F were open the well flowed at 528m/d. 2-22 tested all zones together and had a flow rate of 600m3/d and had an average flowing concentration of 210mg/l from all seven tests taken over the production time.

10 DRILLING

HCL has drilled one new vertical well 101/02-22-007-09W2 in the Viewfield Permit Area. The well was licensed through the Saskatchewan government as a water source well and was spud on 2022/11/04. The well was drilled to a total depth of 1940.7m and penetrated the entire Duperow section with TD 30m into the Souris River formation. Open hole logs were run with Neutron-Density, Sonic, Gamma Ray and Resistivity logs. From Surface casing to TD. 7in Production casing was cemented in the hole so that further production testing could be carried out. A complete summary of the production testing and Lithium concentration results are described in section (14.4 Lithium brine concentrations.)

11 SAMPLE PREPARATION, ANALYSIS AND SECURITY

A description of brine sampling sources and methods collected as part of the government brine sampling project is described in the initial brine sampling paper by Rostron et al.(2002)

11.1 Laboratory Analysis of Samples

<u>Laboratory Description</u>

Isobrine Solutions Inc is a small commercial laboratory in Edmonton, Alberta. For almost 20 years, Isobrine Solutions has specialized in analyzing saline brines: determining lithium, bromine, and stable isotope ratios of oxygen and hydrogen, along with other major and trace elements in formation water. The President of Isobrine Solutions, Ben Rostron (Ph.D.D, PEng, P.Geol) has researched the distribution and origin of lithium in saline brines for more than 25 years and has published extensively on the topic.

11.2 Equipment and Analytical Methods

Lithium and major dissolved metals (Na, Ca, Mg, K, Ba, B, Sr, Mn and Si: reported in mg/L) are measured by Inductively Coupled Plasma Optical Emission Spectrometry (ICP-OES) on a Spectro Genesis FES27 ICP-OES connected to a Teledyne Cetac Technologies ASX-280 autosampler, following a modified version of method APHA 3125B/US Environmental Protection Agency Method 200.8 (USEPA, 2015). Each sample for lithium is run in triplicate (at least) with three separate dilutions of each.

Chloride, bromide, and sulfate (SO_4) (reported in mg/L) are analyzed on a Dionex ICS-2010 Ion.

Chromatograph (IC) equipped with IonPack AS19 column, an AS19 guard column and an AS-DV autosampler. Reproducibility for dissolved Cl, Br, and SO_4 is better or equal to ± 5% (±1σ).

Where complete analyses of each brine sample are conducted, the independently determined sodium and chloride are used to calculate a charge balance error (CBE) for each analysis. Very low CBE's (target: 5% or less) are one measure of accuracy of the complete analysis.

11.3 Additional quality control is provided by:

1) Each day, the ICP-OES instrument is calibrated against a set of internal standards.

2) For lithium concentration measurements, an artificially prepared formation-brine 'standard' sample is included in each run to ensure repeatability of determinations. This minimizes variation in results.

3) Every 18-24 months, Isobrine Solutions undertakes a blind inter-laboratory comparison using multiple commercial labs. A sample set consisting of an artificially prepared formation-brine 'standard'; a 1/2 dilution of the artificially prepared formation-brine; a 1/3 dilution of the artificially prepared formation-brine; and at least two other natural formation-brines (previously analyzed by Isobrine Solutions). This set of samples is submitted to external laboratories and the results are compared to internal analyses to ensure precise and accurate measurements.

11.4 Sample Security

Samples are received at Isobrine Solutions as submitted by the client. Chain of custody provided by the client is followed. Upon reception, samples are assigned an internal tracking number ('IB'#) and all subsequent reporting is related back to that number. Samples are then photographed in the containers they were received. After photography, they are moved to the laboratory for analysis. After reviewing photos and reporting documents, it is the Authors opinion that sample security protocols carried out by Isobrine Solutions are consistent with industry standards and meets the requirements necessary for NI-43-101 reporting.

11.5 Reference

United States Environmental Protection Agency, 2015. Environmental Monitoring Systems Laboratory Office of Research and Development, United States Environmental Protection Agency, Cincinnati, Ohio, USA, 45268, EPA Method 200.8: Determination of Trace Elements in Waters and Wastes by Inductively Coupled Plasma Mass-Spectrometry.

12 DATA VERIFICATION

The Author has completed a detailed review of all technical data and information provided in this report. Key aspects include verification of sample analysis, well-completion and production information, mineral ownership, and geologic data. The verification process involved reviewing all 3rd party reports and where possible, independently confirming data supplied by HCL as valid. Interviews with testing companies, field staff and HCL employees were conducted as part of the review process.

Geological aspects of the report, including reservoir mapping, Tops picking, and volumetric calculations, were all completed by the author, which included a detailed review of over 300 wells in the Viewfield Mansur Area, utilizing publicly available industry data in combination with data supplied by the client to confirm reservoir geometry and extent.

A critical aspect of this report is the accuracy of the lithium concentrations determined from exploration activities carried out by HCL. It is the opinion of the Author that proper procedures were followed in the collection, security and chain of custody to ensure samples from each zone were collected and tested correctly. To confirm the precision and accuracy of concentration data, Isobrine sent several duplicate samples as well as samples of known concentrations to different labs to confirm results. By collecting multiple samples of each zone and verifying concentrations with analyses, it is the Author’s opinion that the concentration data presented in this report is accurate and representative of each tested zone in the Duperow, except in cases where contamination of formation fluid was noted in the analysis.

It is the opinion of the Author that the technical information contained in this report complies with the minimum standards for validation of the NI-43-101 report.

13 MINERAL PROCESSING AND METALLURGICAL TESTING

To Date, no mineral processing of metallurgical testing has been conducted by HCL. HCL is currently in the process of selecting a 3rd party vendor to utilize direct lithium extraction technology explicitly tailored to HCL's Duperow brines. As of the date of writing, several public and private companies have commenced lab testing and implementing small-scale pilots on direct lithium extraction with Saskatchewan sourced Duperow brines. Elemental lithium once recovered can be converted to battery-grade lithium hydroxide or lithium carbonate, HCL will continue to evaluate mineral processing options for future development.

14 MINERAL RESOURCE ESTIMATES

Hub City Lithium's Mansur and Viewfield lithium brine projects are still in the early stages of exploration. The lithium resource under evaluation is contained in the subsurface, confined to the Devonian aged Duperow aquifers underlying the permit areas. Detailed geological mapping of the Duperow reservoirs across the project areas was carried out by the author, leveraging a high level of knowledge of the Saskatchewan subsurface and hydrodynamic concepts gained while working the region over the last 20 years. Volumetric calculations were determined by accessing all available formation data from downhole wireline logs, DST's, production tests, core and lithium concentration data. This data was merged with geological concepts and depositional trends within the Duperow to generate Effective Porosity, Net thickness, Structure and Pore Volume maps for each of the eight identified aquifers within the Duperow formation (Wymark A-F and Saskatoon A-B). In total over 60 reservoir parameter maps were generated and used in the resource evaluation of each of the eight zones over the two properties in this report.

Public data related to well logs, DST's and Core were accessed through Geologic's Geoscout software program or through the Saskatchewan government Integrated Resource Information System (IRIS). Gridding and contouring were completed using Golden software's Surfer mapping package. The resultant maps and data of each Duperow interval were combined with lithium concentration data implemented into a Monty Carlo model, using Oracle Crystal ball software, to calculate resource estimates of the HCL project areas. A Calculated HCL working interest was then applied to the project areas to obtain the HCL net interest of Lithium in-place resource.

The author applied the CIM guidelines of Estimation of Mineral Resources and Mineral Reserves (2019) in accordance with NI-43-101 standards of disclosure for mineral projects with additional reference to; CIM Best Practice Guidelines for Reporting Lithium Brine Resource and Reserves (2011) for Lithium resource and reserve estimation for lithium brine. The Author used professional judgment in applying the guidelines to a contained subsurface aquifer. Established, methods from the oil and gas industry were used for volumetric evaluation of the subsurface aquifer, as the CIM guidelines are predominantly focused on near surface Salars, which are hydrodynamically much different from the deep confined Carbonate reservoirs of the Duperow.

14.1 Resource Areas

The Mansur and Viewfield Permit areas are the two main resource areas evaluated in this report, as defined in section 4. (figure 2). The Mansur Block has a total area of 23,234 Ha and at the time of writing HCL owns mineral rights for 14,116 Ha within the Block for a net Working interest of 64%. In Viewfield, the total project Area is 16,405 ha, with HCL holding mineral rights for 11,495 Ha for a working interest of 83.7%. Volumetric calculations for the blocks were considered for the entire continuous area within the block. Once a total Brine volume and Lithium in place were determined, A final working interest was applied to the calculated volumes for a net resource owned by HCL.

14.2 Geological Data

In the Mansur and Viewfield Region, there are over 300 Duperow well penetrations within and surrounding the permit blocks. There is sufficient log data available from the public database to map out zonal isopach's, structure, porosity, and reservoir geometries of the individual aquifers. Well density within the two resource areas is variable across the Permit block. Some of the highest density drilling is located at the North end of the Mansur block, which resulted from oil and gas development of deeper reservoirs in the area. Log data was used to pick tops, dividing the Duperow into the Seward, Wymark and Saskatoon intervals as previously defined by (Yang 2015). The Duperow members were then further subdivided into eight distinct aquifers, Wymark A-F and Saskatoon A- B, separated by tight confining beds. (see section 7.5).

Petrophysical analysis was run using Geologx and GeologxPro software packages, which are integrated into the Geoscout software program. Each log in the evaluation was inspected and quality controlled (QC) with proper calibration to known anhydrite and shale beds. Digital log data was then compared and calibrated to the available core data to correct for proper grain and fluid densities from the Duperow cores and test data (discussed in detail in section 14.4.3). Once the QC logs were calibrated, log determinations of effective porosity and net reservoir thickness were carried out as described in the following sections to calculate Brine pore volumes and lithium in-place estimates for each Duperow aquifer.

14.3 Statistical Analysis:

All available Petrophysical data for each of the 8 identified Duperow aquifers were used as inputs to generate a Monte Carlo simulation model for the Mansur and Viewfield Areas. Monte Carlo simulation is a modelling technique used to predict outcomes of uncertain events and can be used as an effective geomodelling technique when data is limited. It indicates a set of outcomes based on a range of values that can be modelled as a probability distribution. For this model of the Duperow aquifers, effective porosity, net thickness, and lithium concentrations were given probability distributions to represent variability observed in the reservoir across the project areas. By determining the maximum and minimum values expected in the Project areas, the model accounts for the spread of data seen in log and test data. Other factors with more certainty, such as Area and Shrinkage are added to the model with tighter uncertainty ranges. The Monte Carlo simulation runs 1000's scenarios and a calculated P50 (expected) brine volume and lithium in place numbers are determined for each prospect area. This stochastic (probabilistic) approach will yield a more realistic prediction of volumes, which considers the reservoir's potential variability and concentration characteristics rather than taking an average number for each variable.

14.4 Reservoir Characterization

Geologic mapping from the available logs and empirical test data suggests that the Duperow formation comprises eight separate aquifers within the Wymark and Saskatoon members. (figure 9). Each aquifer was delineated separately for the resource evaluation with its own reservoir parameters. Empirical log calculations and geologic mapping were used to determine total and effective porosity as well as net thickness and brine pore volume by zone across each permit area.

In the greater Mansur Viewfield area, each aquifer zone can be correlated continuously across the region. The only exception is the Viewfield creator zone, where the upper Wymark and Seward have been replaced by Jurassic infill because of the creator impact located outside of the HCL permits. All eight aquifer zones are hosted within dolomitic carbonates, separated by 2-4m of tight argillaceous dolomites and anhydrite beds. (Refer to section 6.6). As several factors determine the amount of dolomitization within each zone, including fluid migration patterns and diagenesis of the rock, there is expected to be variability of porosity and permeability from zone to zone and across the permit areas.

14.4.1 Structure and Thickness

Regional and local structure of the Duperow formation was carried out from the evaluation of 300 available wells across the Mansur Viewfield areas. Regionally the Duperow dips up from SW to NE at approximately 1.5 degrees, Both the Mansur and Viewfield permit areas are positioned along strike to each other and occur at similar subsea elevations. (figure 23). Many deeper sedimentary structures occur in the Permit areas including basement uplifts, Winnipegosis reefs buildups and Prairie salt dissolution. However, subsequent Devonian sedimentation including Dawson Bay and Souris River formations, has muted many of these structural elements at Duperow time. Mansur is one example within the permit area where well control has identified structural ridges within the Duperow that are remnant structural features from the Red River and Basement uplift. These were the target oil pools for previous drilling in the Northern portion of the Mansur Block. While there are also known occurrences of complete salt collapse of the entire Devonian and even higher into the Mississippian sediments, related to the late-stage dissolution of the Prairie Evaporate, these rare occurrences are usually restricted small features that can be identified with 3D seismic. No wells in the region have been drilled in a salt collapse feature, and no such collapses have yet been identified on the HCL permit blocks.

The Viewfield crater discussed in (section 7.8) has caused a local structural low in the Duperow associated with the 4.3 km2 area affected by the crater impact. The Duperow resumes the regional structure trend outside the disturbed crater zone.

Net reservoir isopach of the Duperow Wymark and Saskatoon members is calculated by adding the Net thickness of the eight separate aquifers within the succession (Figure 24) (tables 7, 8). Data was derived from 180 individual wells that had a valid suite of logs for effective porosity and net thickness across all eight identified aquifers. When combined, the net thickness averages 81m across both project areas. Each of the zones has been calculated and mapped separately. Across both Mansur and Viewfield, the overall net thickness of each aquifer varies less than 10% from the average, which implies excellent continuity over large distances for each confined aquifer.

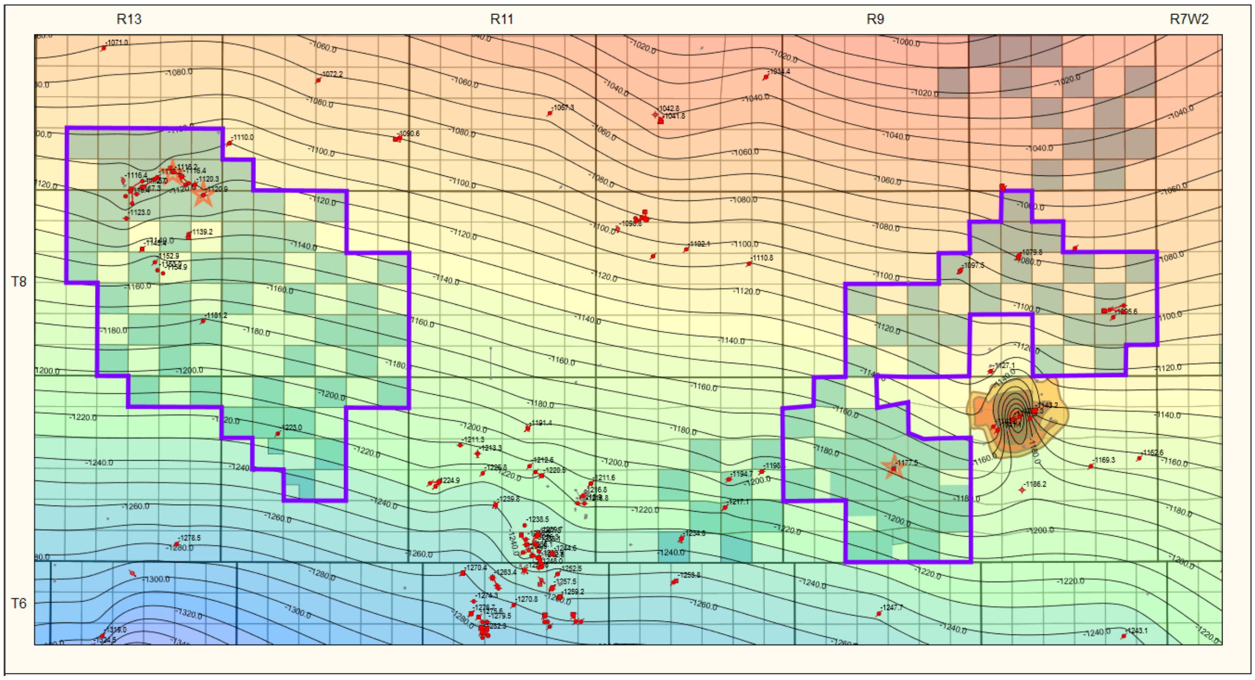


Figure 22: Top of Wymark Structure Map

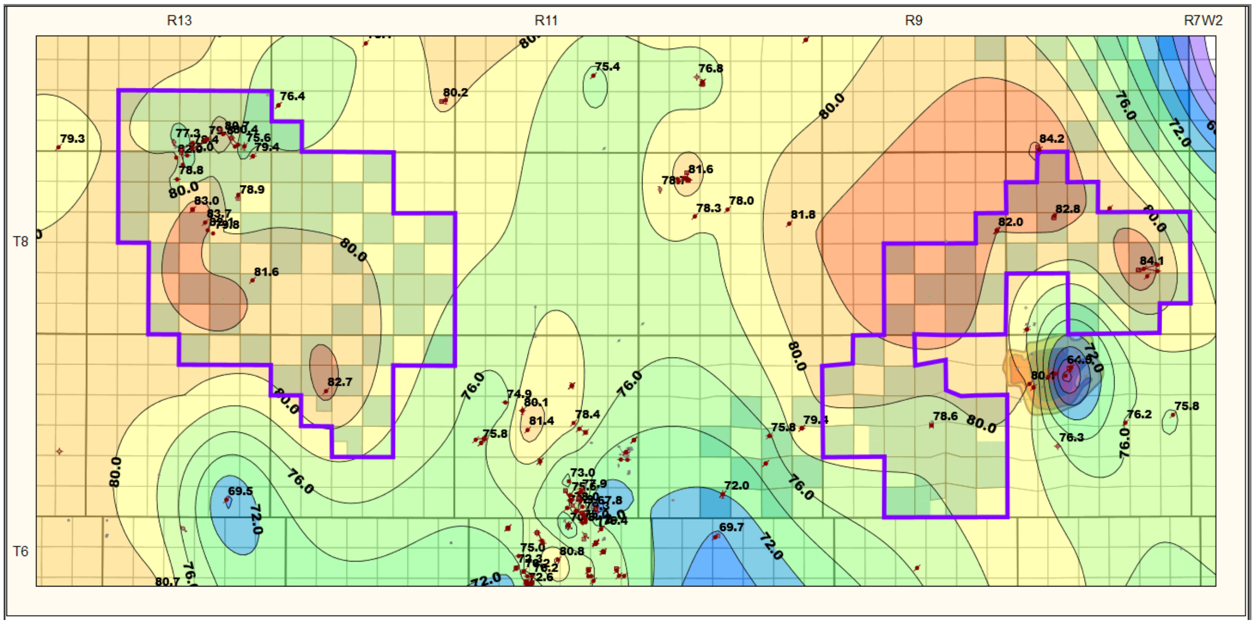


Figure 23: Wymark + Saskatoon total Net Reservoir Isopach

14.4.2 Porosity

Porosity occurrence within carbonate reservoirs is a complex combination of lithofacies, diagenetic processes, fluid migration and compaction events. Within the Duperow, reservoir quality intervals are typically composed of intercrystalline, interpartical and micro vuggy porosity types. Multiple core studies done on the Duperow (Eggi 2012, Chen 2009) suggest that reservoir grade porosity development is not lithofacies specific but is somewhat influenced more by the extent of dolomitization of the carbonate lithofacies (Eggie et al.2012). As magnesium replaces calcite in the dolomitization process, porosity will increase until such a point that dolomite, calcite and other cements start to form along crystal edges. These late-stage cements could partially or wholly occlude porosity. Anhydrite and gypsum cements are also common within the Wymark and Saskatoon members and will partially reduce porosity. Core studies of the Wymark noted that some cores show porosity reduction of 5-25% due to Calcite, anhydrite and gypsum cements. (Eggie et al.2012).

To accurately predict the porosity within the Duperow reservoirs, log data was compared to available core porosities as calculated in the lab from core plugs using Boles law for porosity determination. Overall, the core porosities were always reading lower than the log porosity, as core porosity is a better representation of effective porosity, while logs typically represent total porosity. Total porosity in logs will include non-effective porosity of shales or vugs not connected to the reservoir. Log data calculations were performed using Geoscout digital log module in combination with Geologx software to measure effective porosity. This analysis was completed on 180 wells in the Mansur Viewfield areas. Initially, density porosity curves were calibrated to match the grain densities and fluid densities in the reservoir based on core and water analysis data. Typically, the grain density in the Duperow ranged from 2790-2810 Kg/m3. The fluid densities of the highly saline water were measured at 1200kg/m3. These values were used to generate a representative density porosity curve for total porosity. Effective Porosity of the formation was determined using Vshale analysis which estimates the amount of ineffective porosity (shale content) from the gamma-ray curve. The calculated effective porosity curves were validated by the data closely matching available core porosity values. Overall, there was an average of 9.5% reduction in total Ave porosity to effective porosity calculations, which equated to a decrease of 0.7% to 1.2% in porosity values in all 8 of the examined reservoirs. Table 6 summarizes each aquifer's calculated porosities, with the standard deviation representing the spread or variability of the calculated values, which was a narrow range for most reservoirs. The average effective porosity for all zones in the Mansur area is 10.1%, while the average effective porosity of all zones at Viewfield is slightly higher at 12.8%.

Table 6: Mansur and Viewfield average and effective porosity table

Summary Mansur Permit Area

Formation	Porosity Evaluation		
	Ave total por %	Effective Por %	Std Diviation
Wymark F	10.90%	10.0%	1.359%
Wymark E	10.60%	7.80%	2.222%
Wymark D	8.80%	8.10%	1.070%
Wymark C	10.30%	9.60%	1.662%
Wymark B	14.60%	13.60%	3.647%
Wymark A	12.90%	12.20%	1.345%
Saskatoon B	9.00%	8.30%	0.970%
Saskatoon A	11.20%	10.50%	0.468%
Totals	Ave 11.04%	Ave 10.01%	

Summary Viewfield Permit Area

Formation	Porosity Evaluation		
	Ave total por %	Effective Por%	Std Diviation
Wymark F	12.30%	10.8%	1.00%
Wymark E	13.10%	11.8%	2.20%
Wymark D	17.70%	15.0%	2.80%
Wymark C	13.00%	11.7%	1.50%
Wymark B	15.60%	14.5%	2.10%
Wymark A	15.30%	14.5%	1.75%
Saskatoon B	11.00%	10.2%	1.87%
Saskatoon A	13.80%	13.2%	1.70%
Total	Ave 14.0%	Ave 12.8%	

For the resource calculation, a further 2% reduction in volume was used to account for irreducible water saturation. This is within the effective porous intervals that will stay attached to the rock surfaces and will not contribute to the flow. The result of using effective porosity and irreducible water is proposed for this resource evaluation as a proxy to specific yield, as it is more aligned and measurable for contained subsurface brines under pressure where reservoir conditions will not significantly change over time. The use of Specific yield as set out by CIM guidelines is more applicable in unconfined aquifers with brines at or near the surface, as seen in the salars of South America.

Porosity values within the different aquifers depend on the amount of dolomitization within the reservoir, with the more dolomitized intervals having higher average porosities. The spread of average porosities across the two project areas generally occurs within a narrow range, as most of the Duperow was moderately dolomitized in all eight zones across the project areas. Net Effective porosity maps for 8 zones in both Mansur and Viewfield were incorporated into the Resource calculations.

To determine the Net Reservoir thickness of each zone, a 3% porosity cut-off was used on the calculated effective porosity curve. Below 3% porosity, the rock is unlikely to contribute to the production of the reservoir. Core work done by the author by comparing Porosity and Permeability relationships shows that below 3% porosity, there were no examples where the rock was >1md of permeability, which is considered a minimum cut-off to produce saline brine from non-stimulated rock. (figure 25).

A summary of net porous interval by zone is summarized in (Tables 7 and 8). Of the 180 wells with valid curves that were evaluated, the spread of net porous reservoir is relatively narrow for all aquifers. The combined overall Net Porous Interval of the Wymark and Saskatoon members only has a max variance of 10% from the average expected thickness. This narrow range shows the continuity of the reservoirs over long distances in the project areas.

Table 7: Mansur Net Reservoir isopaches

Summary Mansur Permit Area				
Formation	Av Effective	Net Reservoir Isopach (m)		
	Porosity (%)	Min	Likely	Max
Wymark F	10	7.64	8.24	8.76
Wymark E	7.8	3.49	4.12	4.74
Wymark D	8.1	9.43	10.05	10.68
Wymark C	9.6	8.61	9.28	10.1
Wymark B	13.6	15.7	16.6	17.3
Wymark A	12.2	8.64	9.24	9.77
Saskatoon B	8.3	12.41	13.3	14.19
Saskatoon A	10.5	6.8	8.69	10.3
Totals	Ave 10.01%	72.72	79.52	85.84

Table 8: Viewfield Net Reservoir Isopach

Summary Viewfield Permit Area				
Formation	Ave Effective	Net Reservoir Isopach (m)		
	Por (%)	Min	Likely	Max
Wymark F	10.8%	6.7	8.53	9.2
Wymark E	11.8%	3.4	4.16	5.5
Wymark D	15.0%	10	11.5	11.1
Wymark C	11.7%	9.3	9.98	10.7
Wymark B	14.5%	15.5	16.1	17.8
Wymark A	14.5%	9.2	9.4	9.7
Saskatoon B	10.2%	10.5	11.4	12.4
Saskatoon A	13.2%	8.8	9.9	11.5
Totals	Ave 12.7%	73.4	81.0	87.9

14.4.3 Permeability

Measurements of permeability estimation in the Duperow are limited due to only limited available core data, coupled with the fact that formation evaluation data is concentrated mainly on the Upper Wymark, which is most prospective for oil but often has much lower permeability than what's typically seen in the rest of the Duperow section. Using the available core data, significant correlations of porosity to permeability are evaluated using cross-plots to predict reservoir cut-offs and estimate permeability from porosity measurements (figure 25). The porosity permeability cross-plot shows that above 3% porosity the Duperow averages 1-100's of milidarcys of perm, which is sufficient for vertical or horizontal production.

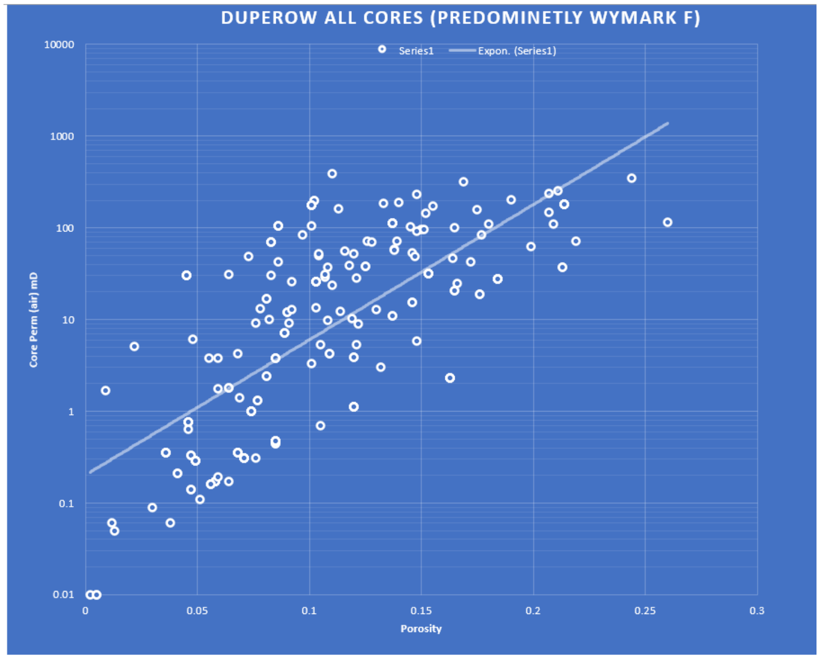


Figure 24: Wymark core data: porosity permeability cross-plot

Another estimation of permeability is from production testing. In both Mansur and Viewfield, individual flow tests were performed over multiple days testing productivity. Inflow potential was first tested through swab evaluation (tables 9,10) and then later by ESP pumping on a multi-zone test of several individual aquifers. (Table 11) shows the flow results by zone. Preliminary results suggest moderate to high permeability within the zones tested. To enhance flow capabilities further, HCL is considering horizontal development for producing specific zones at higher rates.

Table 9: Swab report summary 2-22-6-9W2

Swab and Flow Report Summary 2-22-06-09W2

Formation	Perf Top	Perf Bottom	Interval	Start Date	End Date	CUM Swab m3	Swab Rate m3/hour	Swab Rate (calc.) m3/d	Salinity ppm	Density kg/m3	TDS (calc.) mg/L	[C] Li mg/L
Wymark F	1820	1826	6.0	16-Nov-22	17-Nov-22	42	2.5	60	239,000	1210	289,190	63.9
Wymark E	1831	1834	3.0	18-Nov-22	19-Nov-22	26	2.4	57.6	247,000	1200	296,400	219.7
Wymark D	1838	1844	6.0	20-Nov-22	22-Nov-22	151.9	7.5	180.0	237,000	1200	284,400	258.7
Wymark C	1849.5	1855.5	6.0	23-Nov-22	25-Nov-22	79	4.4	105.6	247,000	1200	296,400	166.7
Wymark B	1863	1873.5	10.5	26-Nov-22	28-Nov-22	83.8	5.5	132	247,000	1200	296,400	97.8
Wymark A	1880.5	1884.5	4.0	30-Nov-22	2-Dec-22	31.4		0	247,000	1210	298,870	93.9
Saskatoon B												
Saskatoon A	1905	1911	6.0	5-Dec-22	8-Dec-22	72	5	120	247,000	1200	296,400	124.4

Table 10: Swab result summary 101/14-36-8-13W2

Swab and Flow Report Summary: Mansur 101/14-36-008-13W2												
Formation	Perf Top	Perf Bottom	Interval	Start Date	End Date	CUM Swab m3	Swab Rate m3/hour	Swab Rate (calc.) m3/d	Salinity ppm	Density kg/m3	TDS (calc.) mg/L	[C] Li avg. mg/L
Wymark F	1772	1777	5.0	2-Nov-22	10-Nov-22	38.2		0	247,000	1234	304,798	43.1
Wymark E	1782	1786	4.0	11-Nov-22	13-Nov-22	43.8		0	222,000	1198	265,956	103.4
Wymark D	1789	1798	9.0	20-Nov-22	22-Nov-22	93.7	8	192.0	142,000	1138	161,596	61.3
Wymark C	1801	1805.5	4.5	17-Nov-22	19-Nov-22	50.3	2.69	64.6	177,000	1162	205,674	148.1
Wymark B	1820	1829	9.0	15-Nov-22	16-Nov-22	59.6	8	192	218,000	1198	261,164	76.9
Wymark A	1832	1839	7.0	23-Nov-22	25-Nov-22	73	6	144	241,000	1210	291,610	58.6
Saskatoon B												
Saskatoon A	1861.5	1864	2.5	26-Nov-22	28-Nov-22	15.6	2	48	227,000	1198	271,946	43.0

14.4.4 Other Reservoir Factors

Typically, in estimating reservoir volumes, a formation volume factor (shrinkage) must be considered to account for changes in pressure and temperature as the brine is produced at surface. Water has a low compressibility, however, there are still dissolved gasses that will affect brine volume. At the Duperow depth in the project area the reduction in volume is estimated to be a maximum of 2%. For the Monty Carlo simulation, Formation volume factor(Bw) of the brines had a distribution from a minimum of 1% to a maximum of 2% reduction in volume.

14.5 Markets and Pricing

The global lithium market is primarily driven by battery industry demand, accounting for nearly 60% of all lithium consumption. Other lithium sectors include glass and ceramics, lubricants, and pharmaceuticals. Over the last few years, the price of lithium has skyrocketed, with lithium reaching its highest peak in Nov 2022 of $82,000 per tonne (LCE) but as volatility in demand expectations arises the price of lithium has fallen. Recently the spot price for lithium carbonate equivalent (LCE) in China decreased by nearly 45% from the November peak with March pricing closer to $46,400 USD. While supply and demand expectations will continue to shift in the coming years there are several other factors that will influence the global markets including:

Battery Supply Chain: More than ever, there is more push to secure supply chains in the EV market. Most battery manufacturing is currently produced in China; companies like Tesla and many other EV manufacturers have announced plans for North American plants and will favor local sources of lithium if available.

DLE technology: direct lithium extraction from brines is still in the early stages of commercial development. The cost to extract lithium from lower concentration brines at a commercial scale still needs to be well defined and will have implications on which projects will be viable to compete globally with other DLE projects.

Technology advancements: As battery technology continues to evolve, the demand for lithium and other metals may shift, leading to changes in demand.

Government Policies: These can have an impact on the lithium market, especially in areas such as environmental regulations, trade policies, and subsidies for renewable energy and electric vehicles.

As the demand for EVs and batteries continues to grow, the demand for lithium is expected to remain strong. There are, however, several factors which can make the market volatile and will influence shifts in future pricing.

14.6 Reasonable Prospects

There are critical factors that can affect the economic extraction of lithium from the brines of the Devonian aged Duperow formation in southeast Saskatchewan. These factors include reservoir variability, brine concentration, ownership and environmental factors as well as economics and extraction technology. Each of these factors is discussed below with comments from the Author.

14.6.1 Aquifer Extent and Variability

The Duperow Formation is defined by stratigraphic correlations of over 300 wells within the project Area. There are 180 wells with sufficient log coverage in the region and 50 wells that penetrate the complete Duperow interval within the Mansur and Viewfield areas. Reservoir intervals within the Duperow can be correlated easily throughout the entire area, and reservoir thickness and porosity development occur within a consistently narrow range across the two permit areas. It is the author's opinion that by utilizing Monte Carlo simulations to represent the variability of the reservoir, the resulting brine volumes and lithium in place calculations are suitable for resource estimations that are cited in this technical report.

14.6.2 Brine Composition

In 2022 HCL completed a comprehensive brine testing program on three separate wells, two were located in Mansur, and a third well was drilled and tested in the Viewfield permit block. Each well tested multiple zones with multiple samples tested and re-tested at different labs. In total, 6 of the eight zones in Viewfield tested lithium concentrations from 90-259 mg/L, with the remaining zones between 40-64mg/L. At Mansur, three zones tested at 75-148mg/L or above and the remaining zones tested between 40-60mg/L. It is the author's opinion that combining HCL analytical test results with offset industry test data, that the Duperow at Mansur and Viewfield will have economically viable lithium concentrations across the project areas and that the tested concentration data is representative of the Duperow aquifers under the Mansur and Viewfield project areas. Testing is underway on the Brine chemistry to understand if any other components of the brine will require additional screening before lithium extraction.

14.6.3 Aquifer Flow Capacity

In 2022 HCL completed extended flow tests on three wells, two located in Mansur and one in Viewfield. (Table 11) Each well showed high flow capability from multi-zone completions. The Duperow in the Project area is pressure supported with hydrodynamically separate regionally extensive aquifers where DST testing has confirmed reservoir pressures of approximately 20,000Kpa in each reservoir. DST's tests in the region have also confirmed high permeability zones in multiple reservoir intervals within the Duperow. The author is of the opinion that the HCL flow tests combined with offset core and DST data support the high flow capacity that is required for economic extraction of lithium from brine production.

Table 11: Hub City Lithium wells consolidated flow tests.

HCL Consolidated Flow Tests

<table>
<tr><th>Area
Location</th><th>Mansur
11-2</th><th>Mansur
11-2</th><th colspan="2">Viewfield
2-22</th></tr>
<tr><th>Flow Test</th><th>Flow test #1</th><th>Flow test #2</th><th>Flow Test #1</th><th>Flow test #2</th></tr>
<tr><td>Wymark F</td><td rowspan="5">528 m3/d</td><td rowspan="4">240 m3/d</td><td rowspan="3">315m3/d</td><td rowspan="8">600 m3/d</td></tr>
<tr><td>Wymark E</td></tr>
<tr><td>Wymark D</td></tr>
<tr><td>Wymark C</td><td></td></tr>
<tr><td>Wymark B</td><td></td><td></td></tr>
<tr><td>Wymark A</td><td></td><td></td><td></td></tr>
<tr><td>Saskatoon B</td><td></td><td></td><td></td></tr>
<tr><td>Saskatoon A</td><td></td><td></td><td></td></tr>
</table>

14.6.4 Mineral Ownership Non-Contiguous Lands

Within the Mansur and Viewfield project areas, HCL has leased out over 66% of the lands between the two project areas. In each area, HCL has multiple contiguous blocks of 5-10 sections, which will facilitate concentrated developments across the two project areas. Volumetric calculations of Brine in place on per-section basis support large volumes of recoverable brine necessary for economic lithium mining. HCL intends to examine open-hole horizontal wells as a potential development scheme, drilling 1-2 horizontals per zone per section to exploit Brine volumes under permitted lands. Under current regulations, no pooling of mineral interest will be necessary on sections wholly owned by HCL. Further lease acquisitions and partnerships will continue to increase HCL's interest in the Permit blocks.

14.6.5 Economic Factors

Southern Saskatchewan is an attractive area for development of lithium from subsurface brines. There is a strong, established history of oil and gas development in the area. Because of this activity, there is supportive and robust industry and community relations regarding resource development. The use of existing infrastructure in the field will help reduce costs for delineation and potential production costs. HCL has had success acquiring existing well bores to test the Duperow formation and will continue to evaluate infrastructure partnerships and acquisition potential.

The Duperow formation in the HCL permit areas has been shown to have high deliverability potential, with no associated H2S, combined with 259 mg/L in the best zones, and well over 90mg/L in 6 of the 8 Duperow aquifers, they offer an attractive target for concentrated development. These elevated concentrations are a critical factor for economic development, as higher concentrations mean less water production per tonne of lithium, which will significantly lower the operating costs of production. In terms of government regulation, It has yet to be established if there will be increased regulations or costs associated with water usage, production or disposal specific to lithium brine production at this time.

14.6.6 Recovery Extraction Technology

There are several local and international companies currently in the evaluation of mode of DLE (direct lithium extraction) technologies specific to Western Canadian lithium brines. HCL is currently evaluating its specific brine with a number of lithium extraction companies to establish reasonable efficiency of Lithium extraction from Duperow Brines. Recently multiple operators have press leased successful pilot projects of lithium extraction from similar Duperow brine compositions (refer to Prairie lithium website on Plix technology). Preliminary water testing by multiple companies has not shown any contaminants or chemicals within the Duperow brine that are flagged as barriers to production.

14.6.7 Environmental

Traditional lithium extraction methods are typically highly energy intensive, with extensive environmental footprints and often take years or decades to come online. In traditional hard rock mining and production from continental brines (salars), large volumes of fresh water are required for resource extraction. Other environmental concerns include potential pollution of local water sources, land degradation and destruction of animal habitats. Operators who can implement sustainable production strategies to mitigate these environmental impacts will be favored by the regulators, the public and the investment community.

Development of Western Canadian lithium brines by sustainable means may not only help lessen the environmental impact of lithium production but be the preferred lower cost, lower carbon method of global lithium supply. The Canadian resource sector has a robust regulatory regime to manage resource development in a safe and environmentally sensitive manner.

14.7 Mineral Resource Estimate

14.7.1 Inferred and indicated Resource Classification

The Mansur and Viewfield lithium brine resource, as of the date of this report, are determined to be at an “Inferred Resource” classification stage, as defined by the Canadian Institute of Mining’s (CIM) Estimation of Mineral Resource and Mineral Reserve Best Practice Guidelines (2019). It is the Authors’ qualified opinion that both Mansur and Viewfield permit blocks have sufficient log coverage and concentration data that has been independently tested and verified to imply geological grade and continuity. If there is continued exploration and testing, much of the inferred resource could potentially be converted to “Indicated Mineral Resource.”

14.7.2 In-Place Resource Estimate

Resource In Place calculations across the Mansur and Viewfield project areas were carried out using stochastic Monte Carlo modelling using the Crystal Ball software from Oracle. At this early stage of resource evaluation, this method of estimation is preferred over the use of deterministic averages for resource in place calculations, as it will better represent the geologic range of uncertainty of the data. Petrophysical properties from all available well logs were used to map the data across the region. Raw data and geologic mapping were used in the determination of minimum, maximum and expected values for net porous interval and average effective porosities. All valid lithium concentration test data from the region was incorporated into the Monte Carlo simulation with representative minimum, maximum and expected values of each aquifer in each project area. (Refer to sections 14.3.2-14.3.4).

The formula for calculating Lithium in Place is similar to the oil and gas industry standard formula for calculating Oil in Place where:

Lithium in-Place = $A \times T \times \varphi \times (1-SW) \times C$

A = Area of the aquifer
T = net porous thickness of the Aquifer
Φ = effective porosity
Sw = irreducible water saturation
C = lithium concentration in Brine

Criteria for determining each parameter were based on the following:

Area – Total area within the defined boundaries of the Mansur and Viewfield projects was used in the calculations. As HCL holds most of the mineral leases spread over the entire permit blocks, the lease polygons owned by HCL were summed and the net interest was applied to the total acreage to determine a net interest to HCL of lithium in place. The area was held fixed in the Monte Carlo simulation.
Thickness – Net porous thickness was calculated from digital well logs for each of the eight aquifers using a 3% porosity cut-off, which was applied to the matrix-corrected effective porosity curves for each well. In the Monty Carlo simulation, a triangle distribution was used to represent the range of thicknesses within each aquifer.
Effective Porosity – Determined using the effective porosity curve of each well tabulated for each aquifer, as discussed in section 14.3.2. For the Monty Carlo simulation, a normal distribution was used by inputting an average effective porosity and a calculated standard deviation from the spread of the data.
Irreducible water- In this formula effective porosity is used in conjunction with SW (irreducible water) to be representative of Specific yield. Since this is a large, confined reservoir under subsurface pressure and temperature conditions this reservoir will not dewater, and Specific yield does not apply. For a 100% brine-filled reservoir where effective porosities were calculated and a cut off 3% porosity was implemented, the volume of the permeable reservoir is expected to have a low irreducible water saturation. For the Monte Carlo simulation 0 to 2% SWir was used as the minimum and maximum SWirr.
Lithium Concentration – Using the lithium concentrations that were sampled and analyzed for each Duperow zone on the HCL permits, along with applicable offsetting data, a defined range of probable concentrations was determined for each zone and a normal distribution of values was implemented into the Monte Carlo simulation. (Refer to Table 12)

Table 12: consolidated summary of lithium concentration data

Project Area	Viewfield			Mansur			
Formation	Mesaured Li	Modelled Li Conc (mg/L)		Measured Li		Modelled Li conc (mg/L)	
	2-22	Min	Max	14-36	11-2	Min	Max
Wymark F	63.9	43	190	43	96	43	190
Wymark E	220	103	240	103	96	90	110
Wymark D	258.9	140	280	61	44	40	150
Wymark C	166	132	180	148	44	45	165
Wymark B	97.3	75	130	77	86	75	105
Wymark A	93.9	40	98	59	53	40	85
Saskatoon B		50	75		52.4	40	60
Saskatoon A	144.7	42	152	44	46	40	50

The Monte Carlo model determines a range of outcomes for lithium in place by running thousands of scenarios using statistical distributions of each parameter. The resulting forecast creates a distribution of total brine volume, which is multiplied by lithium concentrations to obtain lithium in place, in which P90, P50, and P10 values can be determined. (refer to Appendix D). For this resource evaluation, the Monte Carlo ran 10,000 scenarios for each aquifer and the resultant P50 value was used for estimating brine volume and lithium in Place. The results are summarized in Table 13 below and each calculated volume by zone is referenced from Appendix D.

Cut-off grades of 50mg/L, 75mg/l and 140mg/l were used to determine recoverable grades of lithium resource. (table 14). The basis for the cut-off values is determined by technology, price and industry activity. Current extraction technology companies, both public and private, are focused on 50-75mg/L from several different brines across Western Canada and the United States. Consensus in the industry is that 50mg/l is the baseline economic case; however, that can change as the technology improves and the price of lithium continues to go up. As there will be high lifting costs to move the high volume of brine, using a 140mg/l cut-off shows the amount of resource that can be produced by cutting the brine volume (and lifting costs) in half to obtain the same amount of lithium as 70mg/l.

The Calculated elemental lithium volume (Li) is converted to Li2O3 lithium carbonate equivalent (LCE) using an industry-standard conversion factor of 5.323. HCL's net working interest is applied to the total LCE that is calculated in Mansur and Viewfield project outlines, in order to determine the total inferred lithium in place on HCL lands.

Table 13: Consolidated Brine Vol and Lithium in Place by Zone

	Viewfield (11,495 Ha net to HCL)						Mansur (13,355 Ha net to HCL)						Total	
Formation (zone)	Lithium conc. (mg/l)	Calculated Brine Volume (m3)	Elemental Lithium in Place (Tonnes)	Total LCE (Tonnes)	Li in Place HCL interest (Tonnes) *W.I. 70%*	HCL interest LCE (Tonnes) *W.I. 70%*	Lithium Conc (mg/l)	Calculated Brine Volume (m3)	Elemental Lithium in Place (Tonnes)	Total LCE (Tonnes)	Li in place HCL interest (Tonnes) *W.I. 64.3%*	HCL interest LCE (Tonnes) *W.I. 64.3%*	HCL elemental Li in Place (Tonnes)	HCL LCE in Place (Tonnes)
Wymark F	63.9	136,867,000	16,498	87,819	**11,549**	61,473	43.1	182,632,000	20,864	111,059	**13,422**	71,444	24,970	**132,917**
Wymark E	219.7	81,178,000	13,604	72,414	**9,523**	50,690	103.4	69,878,000	6,946	36,974	**4,468**	23,785	13,991	**74,475**
Wymark D	258.6	256,021,000	52,839	281,262	**36,987**	196,883	61.3	185,043,000	17,522	93,270	**11,272**	60,000	48,259	**256,884**
Wymark C	166.7	183,671,000	28,568	152,067	**19,998**	106,447	148.0	202,823,000	21,135	112,502	**13,596**	72,372	33,594	**178,820**
Wymark B	97.7	377,109,000	38,233	203,514	**26,763**	142,460	76.9	483,640,000	43,424	231,146	**27,935**	148,696	54,698	**291,156**
Wymark A	93.9	217,003,000	16,729	89,048	**11,710**	62,334	58.6	255,671,000	15,851	84,375	**10,197**	54,278	21,907	**116,612**
Saskatoon B	*52.8*	184,252,000	9,684	51,548	**6,779**	36,084	52.8	236,024,000	11,749	62,540	**7,558**	40,232	14,337	**76,315**
Saskatoon A	144.7	210,032,000	24,464	130,222	**17,125**	91,155	42.8	213,263,000	9,536	50,760	**6,135**	32,654	23,259	**123,809**
Total All zones		**1,646,133,000**	**200,619**	**1,067,895**	**140,433**	**747,526**		**1,828,974,000**	**147,027**	**782,625**	**94,582**	**503,462**	**235,016**	**1,250,989**

Table 14: Summary of Lithium in Place by Grade

Lithium in Place Summary by Grade (HCL interest)

Li concentration grade Cutoff (mg/L)	Weighted Ave Lithium Conc above cutoff (mg/l)	Viewfield Li in Place (HCL interst)		Mansur Li in Place (HCL interest)		Total Lithium in Place (HCL interest)	
		Li (T)	LCE (T)	Li (T)	LCE (T)	Li (T)	LCE (T)
Total all zones > 50	143.4	142,478	747,526	75,026	399,364	217,504	1,146,890
Total all zones > 75	151.4	122,106	649,970	45,999	244,854	168,105	894,823
Total all zones > 140	198.1	83,633	445,176	13,596	72,372	97,229	517,548

Li: Elememtal lithium in brine   LCE: Lithum carbonate equivalent

14.8 Resource Statement

As of the effective date of this report, the inferred mineral resource estimates summarized in tables 13 and 14 are in accordance with the NI 43-101 and uphold the standards of CIM guidelines (2012,2019) for mineral resource evaluation. Key findings in this report are the confirmation of high-grade lithium brines that range up to 148mg/l with six Duperow zones above 50mg/l at Mansur. HCL's net lithium in place at Mansur is estimated at 94,582 Tonnes Li or (503,462 LCE). At Viewfield high-grade lithium brines range up to 259mg/l, with 6 Duperow zones above 90mg/L. HCL's net lithium in place at Viewfield is estimated at 14,433 Li or (747,526 LCE). The total in place Lithium on the HCL permit blocks combined is 235,991 Tonnes which equates to 1,256,000 LCE.

15 ADJACENT PROPERTIES

The Government of Saskatchewan Energy and Resources' first subsurface mineral land sale commenced in Dec 2018. Since that time, there have been two public offerings per year to post and acquire subsurface mineral rights. To date, there have been more than 500,000 Ha (~2,000 sections) of rights that have been acquired within southeastern Saskatchewan. (Figure 26) shows the public Crown leases that have been acquired adjacent to the HCL land blocks. While the Author is unaware of any active lithium brine extraction or other mineralogical mining operations currently operating in the region, oil and gas development is prevalent throughout southeast Saskatchewan. In terms of future development, Prairie Lithium has announced future plans for a pilot project within their main project area.

While the aquifers within the Duperow are regionally extensive, horizontal and vertical development will share similarities to oil and gas development in terms of drainage effects on adjacent properties. There are expected large volumes of brine that will be present in each section of land. As such, 100m offsets from diverse ownership boundaries should be sufficient to minimize draining neighbouring properties.

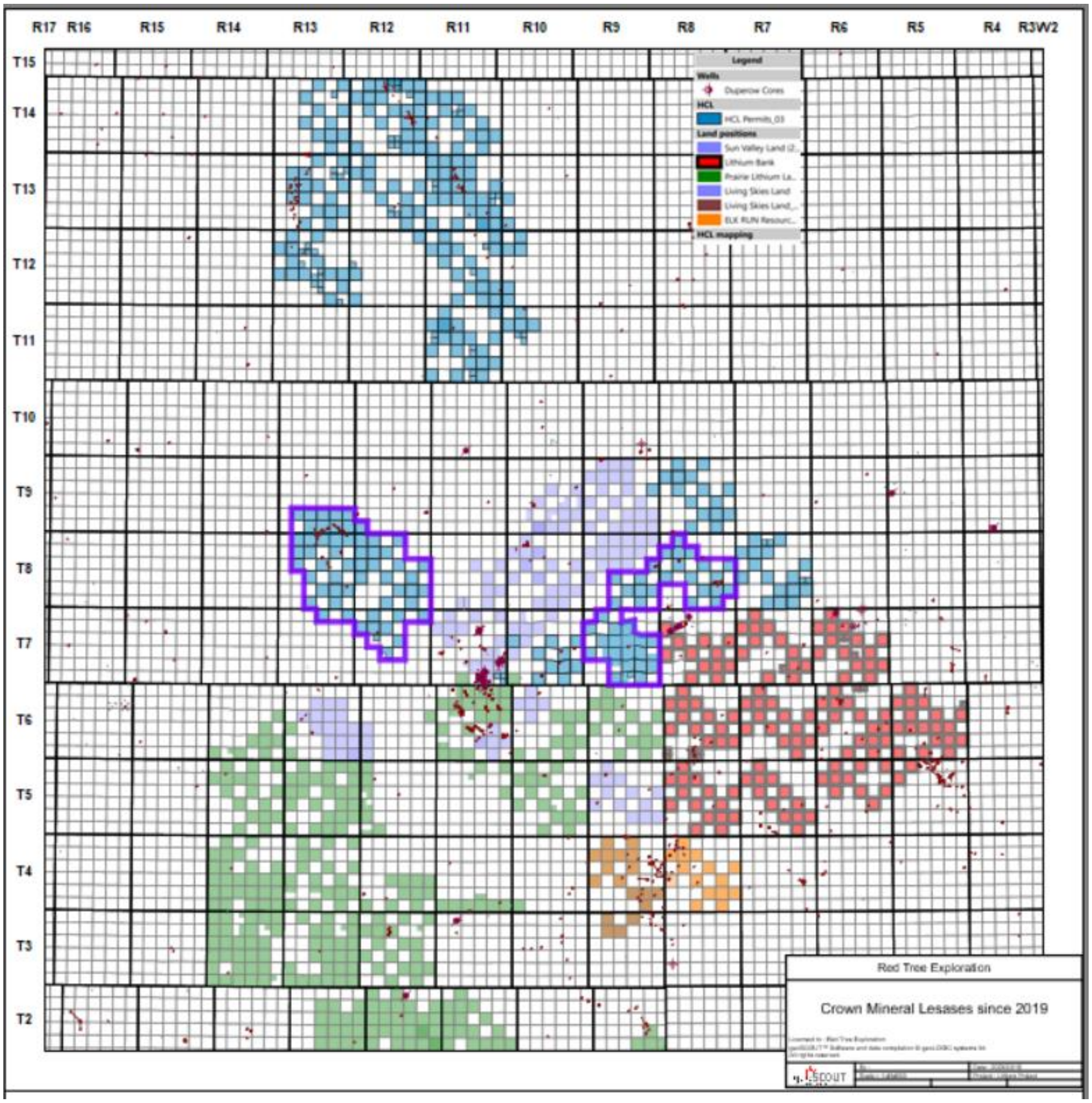


Figure 25: Subsurface Mineral Rights offsetting HCL permits

16 OTHER RELEVANT DATA AND INFORMATION

No other additional data or material information is known to the author as of the issue date of this report.

17 INTERPRETATION AND CONCLUSTIONS

17.1 Qualified Person Statement on Reasonable Prospects

Both the Mansur and Viewfield project areas have third party confirmed high grade lithium concentrations from multiple zones tested within the project areas. There is sufficient well control in the region to reasonably map the extents and quality of the prospective reservoirs within the Duperow Formation. Data collected and mapped across the project areas appears sufficient to support the calculated large in place brine volumes associated with high concentration lithium brines. It is the Authors opinion that given the elevated lithium concentrations and large brine volumes present within the targeted sequences, the Mansur and Viewfield brines show significant potential for commercial lithium extraction, provided the extraction technology and economic conditions support resource development.

17.2 Resource estimation Conclusions

HCL's total inferred resource has been estimated using available data in a representative stochastic reservoir model that takes into account the variability of the reservoir properties. This method of evaluation is in accordance with NI-43-101 standards for resource evaluation. Total HCL net interest of lithium in place is 235,000 Li equivalent to (1,250,000 LCE) sourced from more than 3.48 Billion m3 of Duperow brines from 8 separate reservoirs. Across the Mansur and Viewfield project areas. Highlights of each property include:

Mansur:

- 14-36-8-13W2 and 11-2-009-13W2 have confirmed estimated lithium in place of greater than **8,000 Tonnes LCE/section**
- Total inferred resource net to HCL is 94,625 Tonnes of elemental lithium or **(503,450 LCE)**
- Mansur concentrations ranged from 43mg/l to 148mg/l across 8 Duperow zones
- **Wymark B: 76.9mg/l, Wymark C**: **148.0mg/l, Wymark E: 103.4mg/l,** have concentrations above 75mg/l with a blended weighted average concentration of 110.5 mg/l and a combined lithium in place of 46,000 Tonnes Li or (244,850 LCE)

Viewfield:

- 2-22-007-09W2 has confirmed estimated lithium in place of **20,032 Tonnes LCE/section**
- Total inferred resource net to HCL is 140,433 Li **(747,500 LCE)**
- **Wymark D had the highest lithium concentration to date at 258.6mg/l**
- Viewfield concentrations ranged from 52.8 mg/l to 258.6 mg/l across 8 Duperow zones
- **6 zones have concentrations above 90 mg/L representing more than 80% of lithium in place**
- Weighted average of 6 zones blended concentration is 152.7mg/l with a combined lithium in place of 122,106 Tonnes Li or **(650,000 LCE)**

Production flow tests and rock evaluation of the Duperow indicate that the Duperow reservoirs have sufficient permeability and pressure for significant brine production. Potential can be further de-risked by focused technical, geological, geophysical, reservoir and Production engineering work.

Inferred Resource in not considered mineral Reserves at this time, and economic viability has not been established. Further testing of well bores should be done to establish lithium concentrations and reservoir continuity and consistency across the permit blocks, which may contribute to the conversion of inferred resources to indicated mineral resource.

18 RISKS

The HCL permit areas are an early-stage project with respect to lithium at this time. There is a risk that future development may not identify adequate lithium concentrations to justify economic development. The risks include the presence of economically feasible grades of lithium in the brine away from current control, the continuity of reservoirs of sufficient size and production capabilities. Feasibility of the project is also dependent on accessing or developing the technical processing methods to produce a marketable product from the specific chemistry of these brines.

Other risks can include access to existing wells, well-water re-injection, and processing, permits for surface rights, access to adequate power and other infrastructure requirements for commercial development. However, these risks are considered low within the prospect area of SE Saskatchewan.

19 RECOMMENDATIONS

The author recommends continued delineation of the permit blocks through a multi-phase testing and drilling program, before commencing a pilot demonstration project. Acquiring further test results within the project areas, away from current data points, will be vital to understanding the continuity of lithium concentrations and reservoir quality across the permit blocks. Further brine testing with extraction technologies will also be required to support a PEA resource estimate. Successful results, as supported in the PEA, would lead to Phase 2 development and a successful pilot plant demonstration and will support a NI 43-101 Prefeasibility Study.

Continued Phase 1 activities: (estimated cost $5-6 MM)

- Further delineation of the resource with a minimum 4 well drilling program and continued testing to increase certainty and promote inferred resource to indicated reserves.
- Integrating new data into geological model and reservoir simulation to maximize development plan for enhanced recovery .
- Reservoir study of flow rate potential to support well design and development plan
- Engineering design of facilities and operational cost estimates for phase 2 pilot plant.
- Engaging third party extraction technology provider to work with specific HCL brines to confirm extraction process and support PEA
- Engage third party to complete NI 43-101 Pre Economic Assessment (PEA)

Proposed Phase 2 development will involve the scale-up of the lithium direct-extraction process as well as engaging stakeholders and undertaking environmental assessment.

Phase 2 activities: (estimated cost $8-12 MM)

- Drilling or acquisition of 4-6 Commercial Pilot Well Bores
- Commercial scale Pilot Plant equipment & tests
- Stakeholder consult and environmental assessment
- Pre-Feasibility Study

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21 APPENDIX A: UNITS OF ABBREVIATION

units of measurement in this report are quoted in the metric system. Other acronyms and abbreviations are listed below in Table 2.

Table 2: *Units of abbreviation*

Bbl/d	Barrels per day
°C	degrees Celsius
DSTs	Drill Stem Test
Fm	Formation
G and A	General and Administrative costs
Km	kilometer = 0.6214 miles
Li	Lithium
m	meter = 3.2808 feet. (1000m = 1 kilometer (km))
mg/L	milligrams/liter
MD	Measured Depth
mD	Milli Darcy's (measure of Permeability)
PE	Photoelectric factor (3 is dolomite 5 is limestone)
PEA	Preliminary Economic Assessment
PFS	Pre Feasibility Study
pH	Acidity
Ha	Hectares = 2.471 acres
HCL	Hub City Lithium Corp.
ROK	ROK Resources Inc.
TDS	Total Dissolved Solids (measured in parts per million)
TVD	True Vertical Depth
UWI	Unique Well Identifier

22 APPENDIX B: MINERAL LEASE SUMMARY

Hub City Lithium is the 100% owner of the permits listed below.

Lease File No./ Permit No. Reference	Type	Expiry	Leased Lands	Interest	Net Acres	Leased Substance	Leased Formation
M58424	Freehold	31-Jan-26	TWP 7 RGE 9W2 NE 15	Undivided 100%	165.896	Lithium	Duperow
M58423	Freehold	31-Jan-26	TWP 7 RGE 9W2 SE 15	Undivided 100%	171.449	Lithium	Duperow
M58422	Freehold	31-Jan-26	TWP 7 RGE 9W2 NW 15	Undivided 100%	162.585	Lithium	Duperow
M58421	Freehold	31-Jan-26	TWP 7 RGE 9W2 SW 15	Undivided 100%	171.809	Lithium	Duperow
M58420	Freehold	31-Jan-26	TWP 9 RGE 13W2 SE 3	Undivided 25%	39.887	Lithium	Duperow
M58419	Freehold	31-Jan-26	TWP 9 RGE 13W2 SW 3	Undivided 25%	40.028	Lithium	Duperow
M58418	Freehold	31-Jan-26	TWP 9 RGE 13W2 NW 3	Undivided 25%	39.912	Lithium	Duperow
M58417	Freehold	31-Jan-26	TWP 8 RGE 13W2 NW 35	Undivided 25%	39.947	Lithium	Duperow
M58416	Freehold	31-Jan-26	TWP 9 RGE 13W2 SW 1	Undivided 25%	39.969	Lithium	Duperow
M-0402	Freehold	04-Aug-27	TWP 8 RGE 13W2 SE 35	Undivided 3.33%	5.27	All Subsurface Minerals	All
M-0402	Freehold	20-Jul-27	TWP 8 RGE 13W2 SE 35	Undivided 10%	15.82	All Subsurface Minerals	All
M-0402	Freehold	24-Jul-27	TWP 8 RGE 13W2 NW 35	Undivided 5.55%	8.88	All Subsurface Minerals	All
M-0402	Freehold	02-Aug-27	TWP 14 RGE 11W2 SE 7	Undivided 100%	159.93	All Subsurface Minerals	All
M-0402	Freehold	11-Aug-27	TWP 9 RGE 13W2 SE 3	Unidivided 25%	39.89	All Subsurface Minerals	All
M-0402	Freehold	25-Aug-27	TWP 8 RGE 13W2 SE 35	Unidivided 10%	15.9	All Subsurface Minerals	All
M-0402	Freehold	08-Aug-27	TWP 8 RGE 13W2 NW 35	Unidivided 5.55%	8.88	All Subsurface Minerals	All
M-0402	Freehold	02-Aug-27	TWP 8 RGE 13W2 NW 35	Unidivided 5.55%	8.88	All Subsurface Minerals	All
M-0402	Freehold	29-Aug-27	TWP 8 RGE13W2 NE 35	Undivided 100%	159.76	All Subsurface Minerals	All
SMP171 - S010-Blk 7	Crown	13-Dec-29	refer to Sask mineral sale results	100%	1,275.79	Lithium	Top Madison Group to Precambrian
SMP172 - S010-Blk 8	Crown	13-Dec-29	refer to Sask mineral sale results	80%	513.51	Lithium	Top Madison Group to Precambrian
SMP173 - S010-Blk 9	Crown	13-Dec-29	refer to Sask mineral sale results	100%	7,059.93	Lithium	Top Madison Group to Precambrian
SMP174 - S010-Blk 10	Crown	13-Dec-29	refer to Sask mineral sale results	100%	10,323.89	Lithium	Top Madison Group to Precambrian
SMP175 - S010-Blk 11	Crown	13-Dec-29	refer to Sask mineral sale results	67%	320.17	Lithium	Top Madison Group to Precambrian
SMP176 - S010-Blk 15	Crown	13-Dec-29	refer to Sask mineral sale results	100%	11,934.76	Lithium	Top Madison Group to Precambrian
SMP177 - S010-Blk 17	Crown	13-Dec-29	refer to Sask mineral sale results	100%	4,484.01	Lithium	Top Madison Group to top Winnipeg Formation
SMP178 - S010-Blk 18	Crown	13-Dec-29	refer to Sask mineral sale results	100%	7,551.67	Lithium	Top Madison Group to top Winnipeg Formation
SMP179 - S010-Blk-19	Crown	13-Dec-29	refer to Sask mineral sale results	100%	3,822.02	Lithium	Top Madison Group to top Winnipeg Formation
SMP180 - S010-Blk-20	Crown	13-Dec-29	refer to Sask mineral sale results	100%	7,268.86	Lithium	Top Madison Group to top Winnipeg Formation
SMP181 - S010-Blk-21	Crown	13-Dec-29	refer to Sask mineral sale results	100%	11,495.11	Lithium	Top Madison Group to Precambrian; except SW 19-12-12 W2, 20-12-13 W2, SW 21-12-13 W2, S/2 22-12-13 W2, SW 27-12-13 W2, S/2 28-12-13 W2, NE 28-12-13 W2, 30-12-13 W2 & 32-12-13 W2 top Winnipeg Formation to Precambrian
SMP182 - S010-Blk-22	Crown	13-Dec-29	refer to Sask mineral sale results	100%	4,794.04	Lithium	Top Madison Group to top Winnipeg Formation
SMP183 - S010-Blk-23	Crown	13-Dec-29	refer to Sask mineral sale results	100%	12,953.92	Lithium	Prairie Evaporite Formation
SMP184 - S010-Blk-25	Crown	13-Dec-29	refer to Sask mineral sale results	100%	3,195.10	Lithium	Top Madison Group to top Winnipeg Formation
SMP186 - S010-Blk-30	Crown	13-Dec-29	refer to Sask mineral sale results	100%	5,115.52	Lithium	Top Madison Group to top Winnipeg Formation
SMP187 - S010-Blk-31	Crown	13-Dec-29	TWP 13 RGE 13W2 NE 21 (94%) TWP 13 RGE 13W2 NE 22 (100%) TWP 13 RGE 13W2 NW 22 (100%) TWP 13 RGE 13W2 SE 22 (100%) TWP 13 RGE 13W2 SW 22 (100%)	100%	788.09	Lithium	Prairie Evaporite Formation
SMP - S009-Blk-11	Crown	13-Dec-29	refer to Sask mineral sale results	100%	5,761.03	Lithium	Top Madison Group to top Winnipeg Formation
SMP - S009-Blk-12	Crown	13-Dec-29	refer to Sask mineral sale results	100%	5,602.44	Lithium	Top Madison Group to Precambrian
SMP - S009-Blk-17	Crown	13-Dec-29	refer to Sask mineral sale results	100%	9,606.88	Lithium	Top Madison Group to Precambrian
SMP - S009-Blk-18	Crown	13-Dec-29	refer to Sask mineral sale results	100%	10,222.71	Lithium	Top Madison Group to Precambrian
SMP - S009-Blk-20	Crown	13-Dec-29	refer to Sask mineral sale results	100%	5,131.47	Lithium	Top Madison Group to Precambrian
SMP - S009-Blk-36	Crown	13-Dec-29	refer to Sask mineral sale results	100%	7,058.16	Lithium	Top Madison Group to Precambrian
SMP - S009-Blk-37	Crown	13-Dec-29	refer to Sask mineral sale results	100%	5,765.14	Lithium	Top Madison Group to Precambrian
SMP - S009-Blk-38	Crown	13-Dec-29	refer to Sask mineral sale results	100%	1,278.00	Lithium	Top Madison Group to Precambrian
SMP024 - S008-Blk-1	Crown	13-Dec-29	refer to Sask mineral sale results	100%	637.42	Lithium	Top Madison Group to Precambrian
SMP045 - S008-Blk-30	Crown	13-Dec-29	refer to Sask mineral sale results	100%	9,594.75	Lithium	Top Madison Group to Precambrian
SMP060 - S008-Blk-45	Crown	13-Dec-29	refer to Sask mineral sale results	100%	5,785.96	Lithium	Top Madison Group to Precambrian
SMP062 - S008-Blk-47	Crown	13-Dec-29	refer to Sask mineral sale results	100%	2,556.46	Lithium	Top Madison Group to top Winnipeg Formation
SMP081 - S008-Blk-68	Crown	13-Dec-29	refer to Sask mineral sale results	100%	4,716.95	Lithium	Top Madison Group to top Winnipeg Formation
SMP095 - S008-Blk-82	Crown	13-Dec-29	refer to Sask mineral sale results	100%	3,850.81	Lithium	Top Madison Group to Precambrian
SMP097 - S008-Blk-84	Crown	13-Dec-29	refer to Sask mineral sale results	100%	14,404.63	Lithium	Top Madison Group to Precambrian
SMP098 - S008-Blk-85	Crown	13-Dec-29	refer to Sask mineral sale results	100%	4,023.02	Lithium	Top Madison Group to top Winnipeg Formation
SMP113 - S008-Blk-101	Crown	13-Dec-29	refer to Sask mineral sale results	100%	2,747.71	Lithium	Top Madison Group to top Winnipeg Formation

Sask mineral sales results available at: https://www.saskatchewan.ca/business/agriculture-natural-resources-and-industry/oil-and-gas/crown-land-sales-dispositions-and-tenure/public-offerings

23 APPENDIX C: 11-2 SWAB AND FLOW TEST SUMMARY REPORT

Mansur Li Test Results 11-2-9-13W2

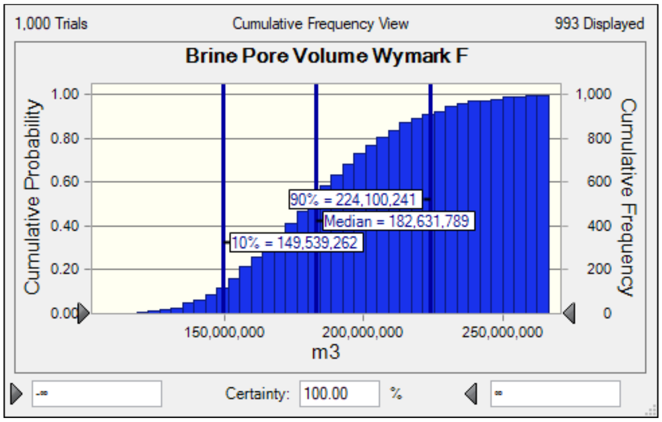
Location	Date Sampled	Formation	Zone #	Zone Name(s)	Depth		Concentration (mg/L)			Flow Rate	Comments
						Total (h)	Isobrine	AGAT	Salinity	(m3/day)	
11-2-9-13 W2M	16-Aug-21	Duperow	1	Saskatoon A	1855-1860	5	45.6	41.4	258,000	90.0	High Volume/Low Concentration Zone- Not prospective
SWABBING	17-Aug-21	Duperow	1	Saskatoon A	1855-1860	5	45.9	41.5	258,000	90.0	High Volume/Low Concentration Zone- Not prospective
SWABBING	17-Aug-21	Duperow	2	Saskatoon B	1831-1835	4	52.8	39.6	260,000	18.0	Low Volume/Low Concentration Zone- Not prospective
SWABBING	17-Aug-21	Duperow	2	Saskatoon B	1831-1835	4	50.4	38.6	260,000	18.0	Low Volume/Low Concentration Zone- Not prospective
SWABBING	27-Aug-21	Duperow	3	Wymark A/B	1815-1821	6	**79.5**	84.6	250,000		High Volume/High Concentration Zone
SWABBING	30-Aug-21	Duperow	3	Wymark A/B	1815-1821	6	**85.8**	85.0	250,000		High Volume/High Concentration Zone
SWABBING	26-Aug-21	Duperow	4/5	Wymark C/D	1795-1801, 1788-1793	11	33.6	43.5	168,000		
SWABBING	27-Aug-21	Duperow	4/5	Wymark C/D	1795-1801, 1788-1793	11	33.9	44.4	168,000		*Potential contamination salinities low to regional
SWABBING	27-Aug-21	Duperow	4/5	Wymark C/D	1795-1801, 1788-1793	11	41.3	-	168,000		
SWABBING	27-Aug-21	Duperow	4/5	Wymark C/D	1795-1801, 1788-1793	11	44.3	-	168,000		
SWABBING	18-Aug-21	Duperow	6/7	Wymark E/F	1777-1780, 1767-1773	9	**83.4**	77.4	262,000	**27.0**	Low Volume/High Concntration Zone
SWABBING	19-Aug-21	Duperow	6/7	Wymark E/F	1777-1780, 1767-1773	9	**89.7**	-	262,000	**27.0**	Low Volume/High Concntration Zone
SWABBING	21-Aug-21	Duperow	6/7	Wymark E/F	1777-1780, 1767-1773	9	**94.8**	89.0	262,000	**27.0**	Low Volume/High Concntration Zone
SWABBING	21-Aug-21	Duperow	6/7	Wymark E/F	1777-1780, 1767-1773	9	**82.2**		262,000	**27.0**	Low Volume/High Concntration Zone
SWABBING	22-Aug-21	Duperow	6/7	Wymark E/F	1777-1780, 1767-1773	9	**96.3**	81.5	262,000	**27.0**	Low Volume/High Concntration Zone
SWABBING	22-Aug-21	Duperow	6/7	Wymark E/F	1777-1780, 1767-1773	9	**82.5**		262,000	**27.0**	Low Volume/High Concntration Zone
SWABBING	22-Aug-21	Duperow	6/7	Wymark E/F	1777-1780, 1767-1773	9	**95.4**	87.6	262,000	**27.0**	Low Volume/High Concntration Zone
FLOW TESTING	25-Nov-21	Duperow	3-7	Wymark ABCDEF	1767-1773, 1777-1780, 1788-1793, 1795-1801, 1815-1821	26	73.5	-	228,000	288.0	
FLOW TESTING	25-Nov-21	Duperow	3-7	Wymark ABCDEF	1767-1773, 1777-1780, 1788-1793, 1795-1801, 1815-1821	26	67.3	-	232,000	288.0	
FLOW TESTING	26-Nov-21	Duperow	3-7	Wymark ABCDEF	1767-1773, 1777-1780, 1788-1793, 1795-1801, 1815-1821	26	69.4	-	228,000	312.0	
FLOW TESTING	26-Nov-21	Duperow	3-7	Wymark ABCDEF	1767-1773, 1777-1780, 1788-1793, 1795-1801, 1815-1821	26	66.0	-	230,000	312.0	
FLOW TESTING	27-Nov-21	Duperow	3-7	Wymark ABCDEF	1767-1773, 1777-1780, 1788-1793, 1795-1801, 1815-1821	26	69.1	-	228,000	324.0	
FLOW TESTING	27-Nov-21	Duperow	3-7	Wymark ABCDEF	1767-1773, 1777-1780, 1788-1793, 1795-1801, 1815-1821	26	64.8	-	228,000	324.0	
FLOW TESTING	28-Nov-21	Duperow	3-7	Wymark ABCDEF	1767-1773, 1777-1780, 1788-1793, 1795-1801, 1815-1821	26	69.6	-	228,000	**372.0**	
FLOW TESTING	28-Nov-21	Duperow	3-7	Wymark ABCDEF	1767-1773, 1777-1780, 1788-1793, 1795-1801, 1815-1821	26	63.9	-	230,000	372.0	
FLOW TESTING	29-Nov-21	Duperow	3-7	Wymark ABCDEF	1767-1773, 1777-1780, 1788-1793, 1795-1801, 1815-1821	26	69.1	-	228,000	384.0	
FLOW TESTING	29-Nov-21	Duperow	3-7	Wymark ABCDEF	1767-1773, 1777-1780, 1788-1793, 1795-1801, 1815-1821	26	65.4	-	230,000	384.0	
FLOW TESTING	30-Nov-21	Duperow	3-7	Wymark ABCDEF	1767-1773, 1777-1780, 1788-1793, 1795-1801, 1815-1821	26	65.4	-	228,000	408.0	
FLOW TESTING	03-Dec-21	Duperow	3-7	Wymark ABCDEF	1767-1773, 1777-1780, 1788-1793, 1795-1801, 1815-1821	26	66.6	-	230,000	480.0	
FLOW TESTING	04-Dec-21	Duperow	3-7	Wymark ABCDEF	1767-1773, 1777-1780, 1788-1793, 1795-1801, 1815-1821	26	65.7	-	230,000	480.0	
FLOW TESTING	05-Dec-21	Duperow	3-7	Wymark ABCDEF	1767-1773, 1777-1780, 1788-1793, 1795-1801, 1815-1821	26	64.7	-	232,000	504.0	
FLOW TESTING	06-Dec-21	Duperow	3-7	Wymark ABCDEF	1767-1773, 1777-1780, 1788-1793, 1795-1801, 1815-1821	26	66.2	-	230,000	**528.0**	Achieved 528 m3/day rate, with room to increase
FLOW TESTING	14-Dec-21	Duperow	4-7	Wymark CDEF	1767-1773, 1777-1780, 1788-1793, 1795-1801	20	44.6	-	182,000	240.0	High Volume/Low Concentration Zone- Not prospective
FLOW TESTING	15-Dec-21	Duperow	4-7	Wymark CDEF	1767-1773, 1777-1780, 1788-1793, 1795-1801	20	44.3	-	182,000	240.0	High Volume/Low Concentration Zone- Not prospective

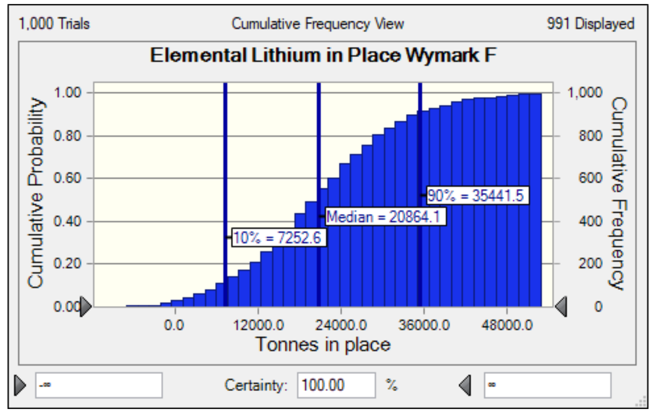
24 APPENDIX D: MAPPING AND STOCHASTIC OUTPUTS MANSUR

The following are the model inputs and results used to calculate Lithium in-place volumes. Inputs are based on the raw data and integrated geologic mapping of each of the 8 separate Duperow zones identified in the 2 project areas. The resultant outputs are determined from the Monte Carlo simulation and are tabulated in the tables below. Each graph represents the output distribution of Brine volumes and Lithium in place calculations. For the purposes of calculating estimated resource the resulting median value was used as a representative value for brine volume and lithium in place. Stochastic outputs shown below may differ slightly from simulation to simulation but will generally fall within a few percent difference, this reflects the fact that these volumes are an estimation and not an exact number due reservoir and concentration variability. Outputs from the tables below are for the entire resource block. A net interest was than applied to each block to calculate HCL's lithium in place volumes.

Mansur: Wymark F

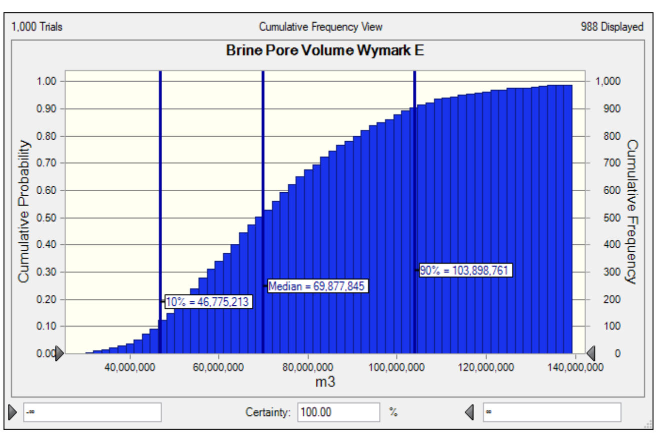
Inputs: Wymark F	Greater Mansur stochastic inputs						stochastic outputs				
	Distribution	Min	Likely	Max	Mean	Diviation	Mean	Median	10%	90%	
Area (hectares)	Uniform distr.	23230		23310							
Thickness (meters)	Triangle	7.26	8.23	9							
Effective Porosity (%)	Normal				0.1	0.014					
Irreducable water sat (%)	Uniform distr.	0		0.02							
FVF (Bo) (Rm3/m3)	Normal	1.01		1.02			Mean	Median	10%	90%	
Brine Pore Volume Wymark F							184,573,389	182,631,789	149,539,262	224,100,241	m3
Li Concentration (mg/L)	Normal	43		190	43.1	10	Mean	Median	10%	90%	
Elemental Lithium in Place Wymark F							21407.6	20864.1	7252.6	35441.5	Tonnes

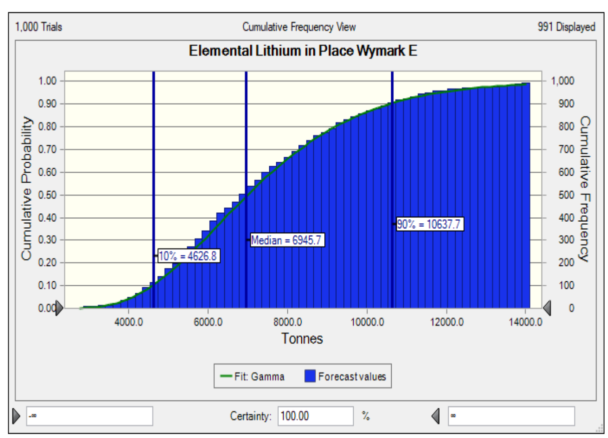




Mansur: Wymark E

Inputs: Wymark E	Greater Mansur stochastic inputs						stochastic outputs				
	Distribution	Min	Likely	Max	Mean	Diviation	Mean	Median	10%	90%	
Area (hectares)	Uniform distr.	23230		23310							
Thickness (meters)	Triangle	3.49	4.3	4.98							
Effective Porosity (%)	Normal				0.078	0.022					
Irreducable water sat (%)	Uniform distr.	0		0.02							
FVF (Bo) (Rm3/m3)	Normal	1.01		1.02			Mean	Median	10%	90%	
Brine Pore Volume Wymark E							73,436,543	69,877,845	46,775,213	103,898,761	m3
Li Concentration (mg/L)	Normal	90	103.4	110	103.4	10	Mean	Median	10%	90%	
Elemental Lithium in Place Wymark E							7345.0	6945.7	4626.8	10637.7	Tonnes

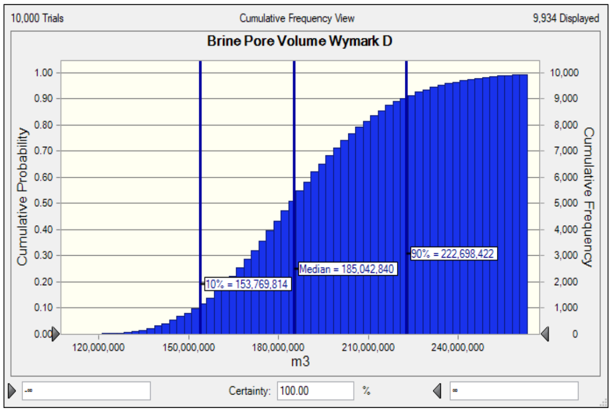


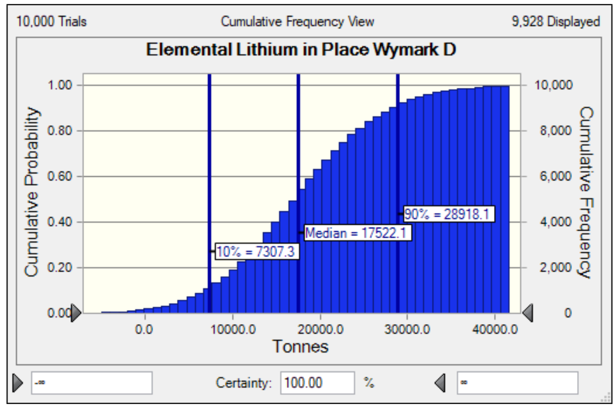


Mansur: Wymark D

Inputs: Wymark D

	Greater Mansur stochastic inputs						stochastic outputs				
	Distribution	Min	Likely	Max	Mean	Diviation	Mean	Median	10%	90%	
Area (hectares)	Uniform distr.	23230		23310							
Thickness (meters)	Triangle	9.3	10.18	11.01							
Effective Porosity (%)	Normal				0.081	0.01					
Irreducable water sat (%)	Uniform distr.	0		0.02							
FVF (Bo) (Rm3/m3)	Normal	1.01		1.02			Mean	Median	10%	90%	
Brine Pore Volume Wymark D							**187,038,662**	**185,042,840**	**153,769,814**	**222,698,422**	m3
Li Concentration (mg/L)	Normal	40	61	150	61.3	10	Mean	Median	10%	90%	
Elemental Lithium in Place Wymark D							**17859.0**	**17522.1**	**7307.3**	**28918.1**	Tonnes

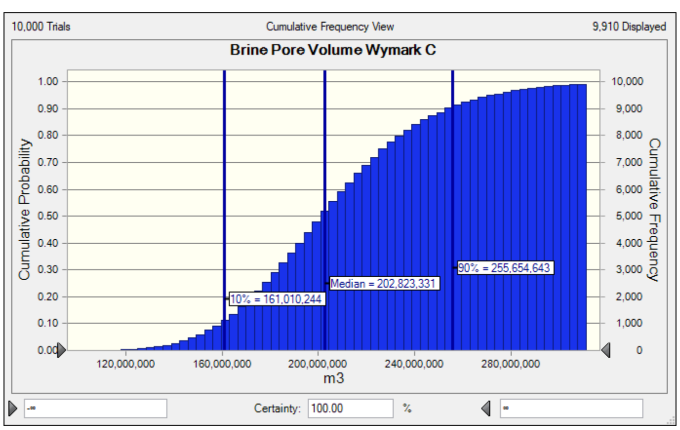


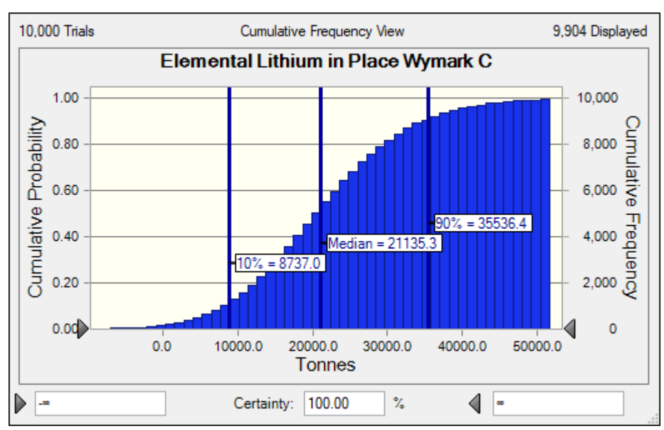


Mansur: Wymark C

Inputs: Wymark C

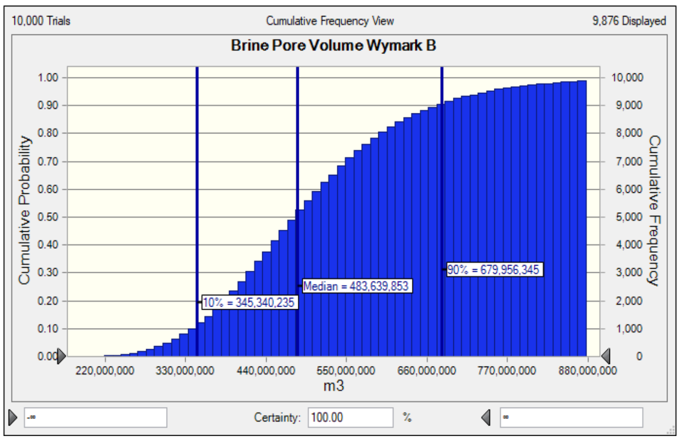
	Greater Mansur stochastic inputs						stochastic outputs				
	Distribution	Min	Likely	Max	Mean	Diviation	Mean	Median	10%	90%	
Area (hectares)	Uniform distr.	23230		23310							
Thickness (meters)	Triangle	8.61	9.5	10.3							
Effective Porosity (%)	Normal				0.096	0.017					
Irreducable water sat (%)	Uniform distr.	0		0.02							
FVF (Bo) (Rm3/m3)	Normal	1.01		1.02			Mean	Median	10%	90%	
Brine Pore Volume Wymark C							**206,132,024**	**202,823,331**	**161,010,244**	**255,654,643**	m3
Li Concentration (mg/L)	Normal	45	148	166	148	10	Mean	Median	10%	90%	
Elemental Lithium in Place Wymark C							**21725.3**	**21135.3**	**8737.0**	**35536.4**	Tonnes

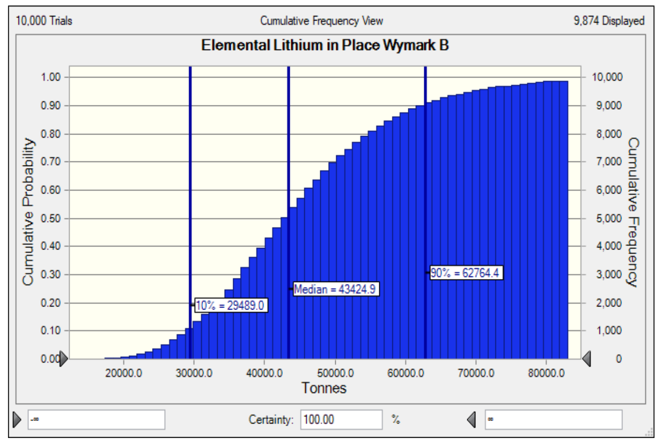




Mansur: Wymark B

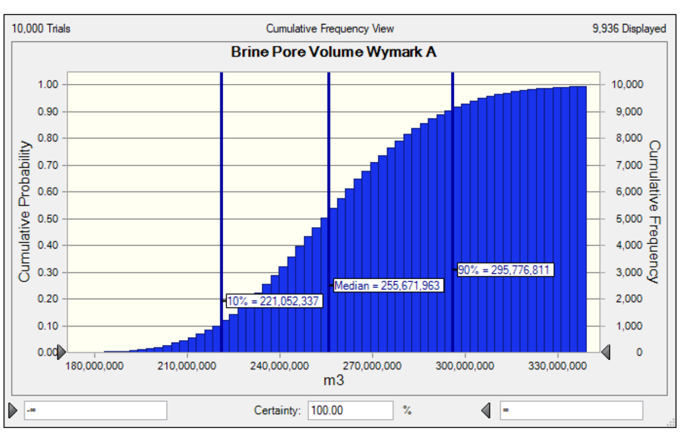
Inputs: Wymark B	Greater Mansur stochastic inputs						stochastic outputs				
	Distribution	Min	Likely	Max	Mean	Diviation	Mean	Median	10%	90%	
Area (hectares)	Uniform distr.	23230		23310							
Thickness (meters)	Triangle	15.2	16.3	17.3							
Effective Porosity (%)	Normal				0.136	0.036					
Irreducable water sat (%)	Uniform distr.	0		0.02							
FVF (Bo) (Rm3/m3)	Normal	1.01		1.02			Mean	Median	10%	90%	
Brine Pore Volume Wymark B							501,292,531	483,639,853	345,340,235	679,956,345	
Li Concentration (mg/L)	Normal	75	86	105	76.9	10	Mean	Median	10%	90%	
Elemental Lithium in Place Wymark B							45115.0	43424.9	29489.0	62764.4	Tonnes

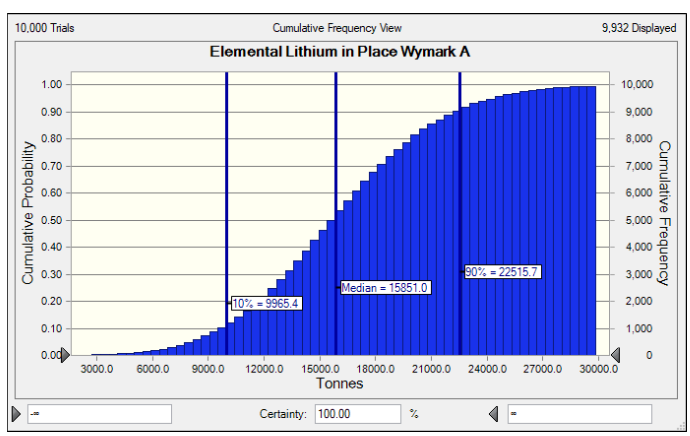




Mansur: Wymark A

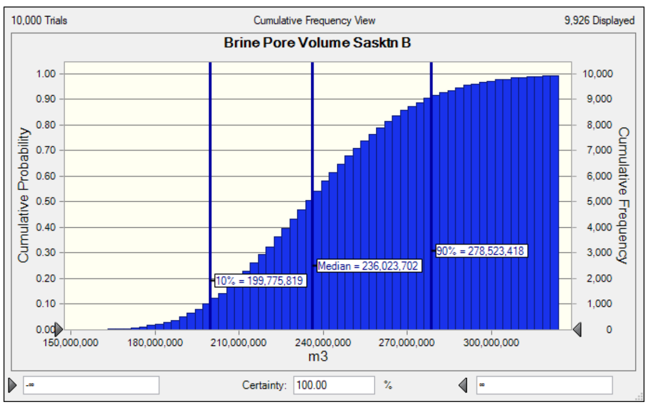
Inputs: Wymark A	Greater Mansur stochastic inputs						stochastic outputs				
	Distribution	Min	Likely	Max	Mean	Diviation	Mean	Median	10%	90%	
Area (hectares)	Uniform distr.	23230		23310							
Thickness (meters)	Triangle	8.5	9.3	10.1							
Effective Porosity (%)	Normal				0.122	0.013					
Irreducable water sat (%)	Uniform distr.	0		0.02							
FVF (Bo) (Rm3/m3)	Normal	1.01		1.02			Mean	Median	10%	90%	
Brine Pore Volume Wymark A							257,186,332	255,671,963	221,052,337	295,776,811	m3
Li Concentration (mg/L)	Normal	40	58.6	85	58.6	10	Mean	Median	10%	90%	
Elemental Lithium in Place Wymark A							16073.1	15851.0	9965.4	22515.7	Tonnes

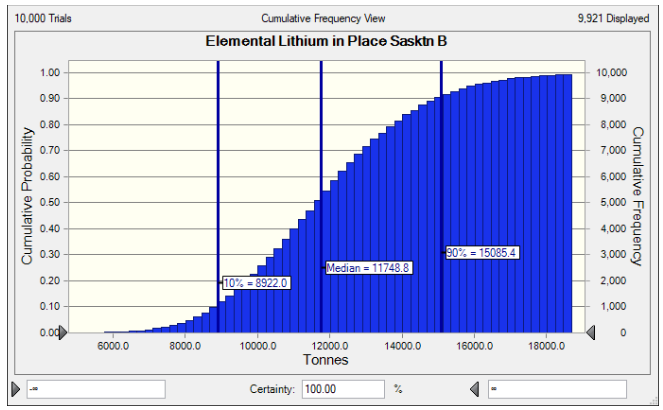




Mansur: Saskatoon B

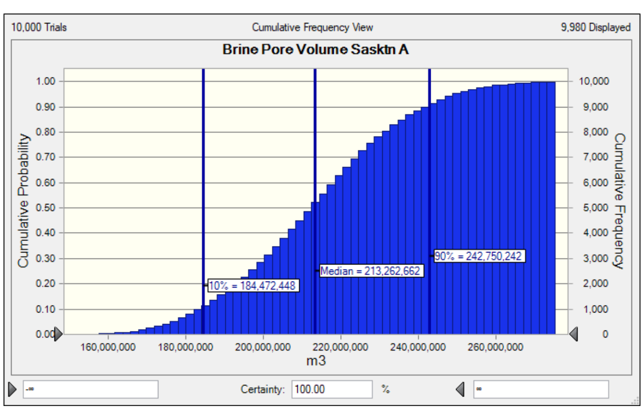
Inputs: Saskatoon B	Greater Mansur stochastic inputs						stochastic outputs				
	Distribution	Min	Likely	Max	Mean	Diviation	Mean	Median	10%	90%	
Area (hectares)	Uniform distr.	23230		23310							
Thickness (meters)	Triangle	11.23	12.64	13.98							
Effective Porosity (%)	Normal				0.083	0.01					
Irreducable water sat (%)	Uniform distr.	0		0.02							
FVF (Bo) (Rm3/m3)	Normal	1.01		1.02			Mean	Median	10%	90%	
Brine Pore Volume Sasktn B							237,937,637	236,023,702	199,775,819	278,523,418	m3
Li Concentration (mg/L)	Normal	40		60	52	10	Mean	Median	10%	90%	
Elemental Lithium in Place Sasktn B							11904.6	11748.8	8922.0	15085.4	Tonnes

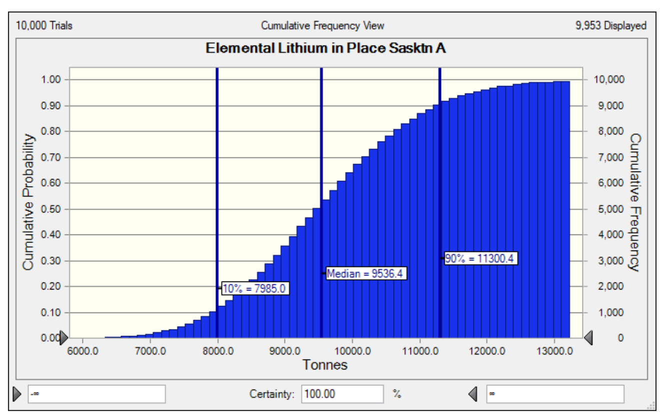




Mansur: Saskatoon A

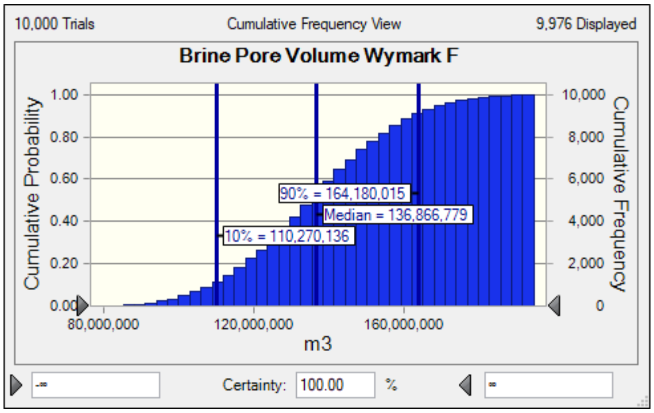
Inputs: Saskatoon A	Greater Mansur stochastic inputs						stochastic outputs				
	Distribution	Min	Likely	Max	Mean	Diviation	Mean	Median	10%	90%	
Area (hectares)	Uniform distr.	23230		23310							
Thickness (meters)	Triangle	6.9	9	10.98							
Effective Porosity (%)	Normal				0.105	0.005					
Irreducable water sat (%)	Uniform distr.	0		0.02							
FVF (Bo) (Rm3/m3)	Normal	1.01		1.02			Mean	Median	10%	90%	
Brine Pore Volume Sasktn A							213,453,414	213,262,662	184,472,448	242,750,242	m3
Li Concentration (mg/L)	Normal	40		50	42.8	10	Mean	Median	10%	90%	
Elemental Lithium in Place Sasktn A							9600.5	9536.4	7985.0	11300.4	Tonnes

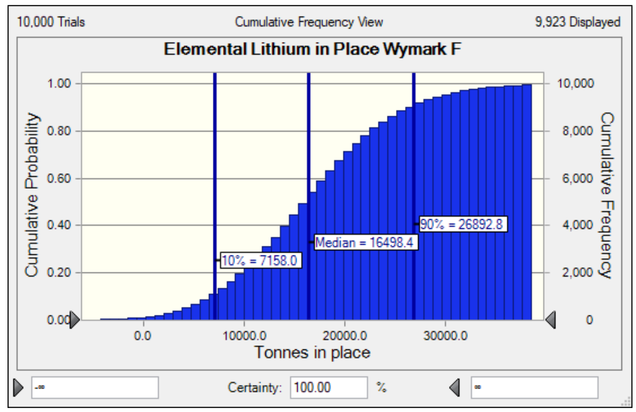




Viewfield: Wymark F

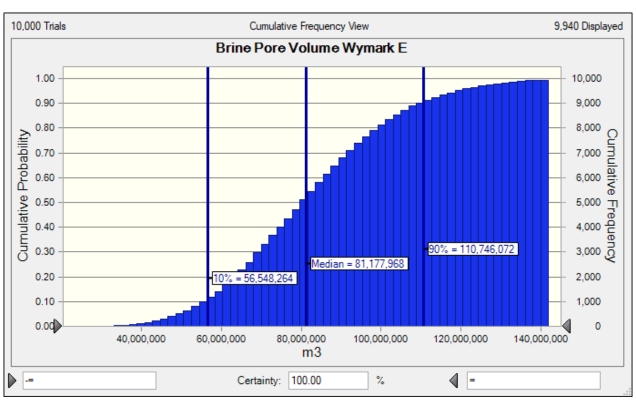
Inputs: Wymark F	Viewfield Greater Area Stocatic inputs						Stocastic outputs				
	Distribution	Min	Likely	Max	Mean	Diviation	Mean	Median	10%	90%	
Area (hectares)	Uniform distr.	16058		16405							
Thickness (meters)	Triangle	6.7	8.53	9.2							
Effective Porosity (%)	Normal				0.108	0.01					
Irreducable water sat (%)	Uniform distr.	0		0.02							
FVF (Bo) (Rm3/m3)	Normal	1.01		1.02			Mean	Median	10%	90%	
Brine Pore Volume Wymark F							137,121,846	136,866,779	110,270,136	164,180,015	m3
Li Concentration (mg/L)	Normal	55	63.9	190			Mean	Median	10%	90%	
Elemental Lithium in Place Wymark F							16784.4	16498.4	7158.0	26892.8	Tonnes

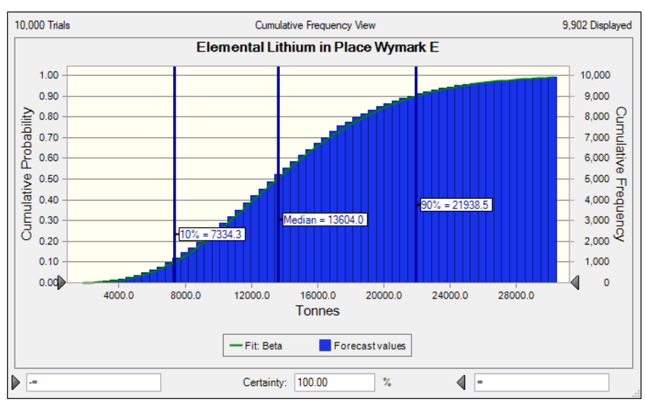




Viewfield: Wymark E

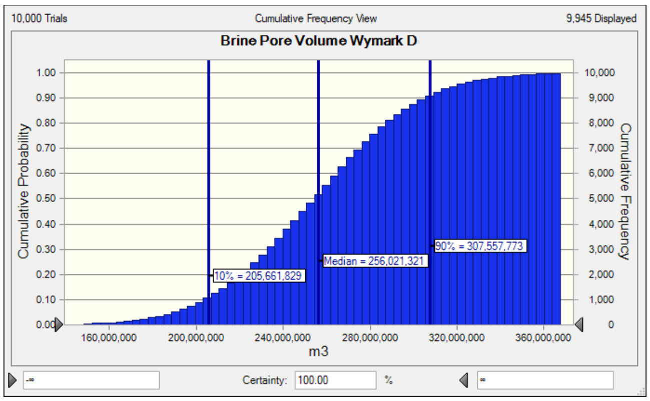
Inputs: Wymark E	Viewfield Greater Area Stocatic inputs						Stocastic outputs				
	Distribution	Min	Likely	Max	Mean	Diviation	Mean	Median	10%	90%	
Area (hectares)	Uniform distr.	16058		16405							
Thickness (meters)	Triangle	3.4	4.16	5.5							
Effective Porosity (%)	Normal				0.118	0.022					
Irreducable water sat (%)	Uniform distr.	0		0.02							
FVF (Bo) (Rm3/m3)	Normal	1.01		1.02			Mean	Median	10%	90%	
Brine Pore Volume Wymark E							82,610,192	81,177,968	56,548,264	110,746,072	m3
Li Concentration (mg/L)	Normal	103	220	240			Mean	Median	10%	90%	
Elemental Lithium in Place Wymark E							14223.3	13604.0	7334.3	21938.5	Tonnes

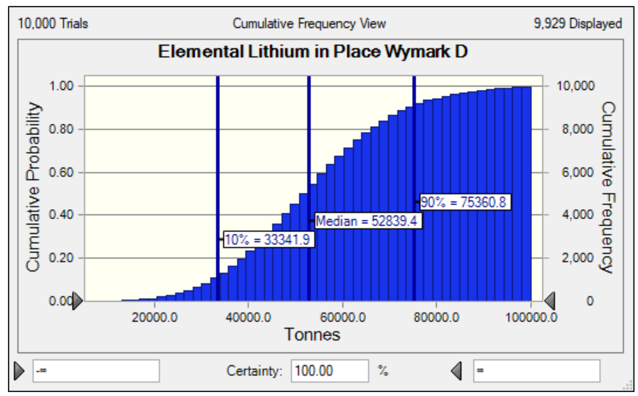




Viewfield: Wymark D

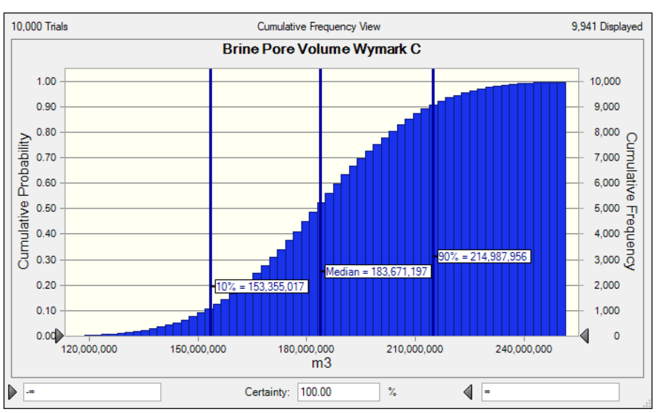
Inputs: Wymark D	Viewfield Greater Area Stocatic inputs						Stocastic outputs				
	Distribution	Min	Likely	Max	Mean	Diviation	Mean	Median	10%	90%	
Area (hectares)	Uniform distr.	16058		16405							
Thickness (meters)	Triangle	10	10.84	11.5							
Effective Porosity (%)	Normal				0.15	0.0228					
Irreducable water sat (%)	Uniform distr.	0		0.02							
FVF (Bo) (Rm3/m3)	Normal	1.01		1.02			Mean	Median	10%	90%	
Brine Pore Volume Wymark D							**256,231,157**	**256,021,321**	**205,661,829**	**307,557,773**	m3
Li Concentration (mg/L)	Normal	140	258	280			Mean	Median	10%	90%	
Elemental Lithium in Place Wymark D							**53729.4**	**52839.4**	**33341.9**	**75360.8**	Tonnes

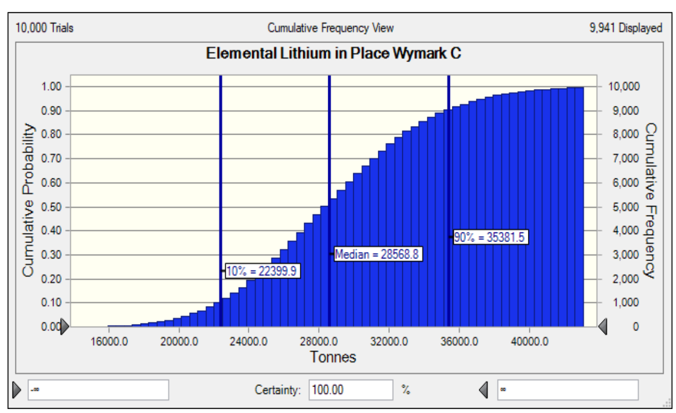




Viewfield: Wymark C

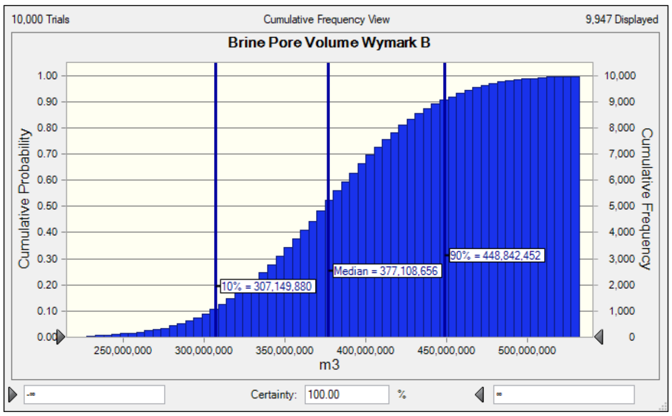
Inputs: Wymark C	Viewfield Greater Area Stocatic inputs						Stocastic outputs				
	Distribution	Min	Likely	Max	Mean	Diviation	Mean	Median	10%	90%	
Area (hectares)	Uniform distr.	16058		16405							
Thickness (meters)	Triangle	9.3	9.98	10.7							
Effective Porosity (%)	Normal				0.117	0.015					
Irreducable water sat (%)	Uniform distr.	0		0.02							
FVF (Bo) (Rm3/m3)	Normal	1.01		1.02			Mean	Median	10%	90%	
Brine Pore Volume Wymark C							**184,047,508**	**183,671,197**	**153,355,017**	**214,987,956**	m3
Li Concentration (mg/L)	Normal	133	166	180			Mean	Median	10%	90%	
Elemental Lithium in Place Wymark C							**28812.8**	**28568.8**	**22399.9**	**35381.5**	Tonnes

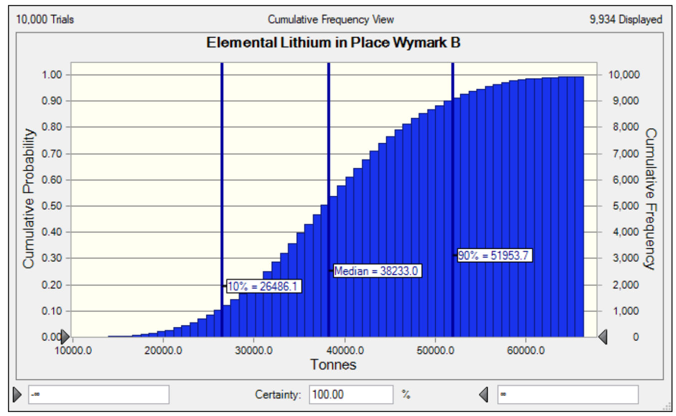




Viewfield: Wymark B

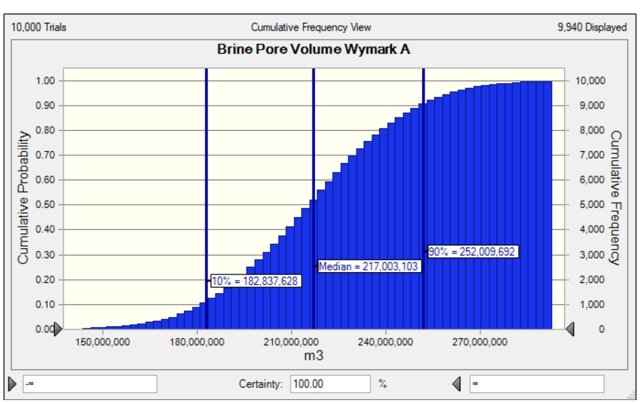
Inputs: Wymark B	Viewfield Greater Area Stocatic inputs						Stocastic outputs				
	Distribution	Min	Likely	Max	Mean	Diviation	Mean	Median	10%	90%	
Area (hectares)	Uniform distr.	16058		16405							
Thickness (meters)	Triangle	15.5	16.1	17.8							
Effective Porosity (%)	Normal				0.145	0.021					
Irreducable water sat (%)	Uniform distr.	0		0.02							
FVF (Bo) (Rm3/m3)	Normal	1.01		1.02			Mean	Median	10%	90%	
Brine Pore Volume Wymark B							377,504,396	377,108,656	307,149,880	448,842,452	m3
Li Concentration (mg/L)	Normal	75	96	130			Mean	Median	10%	90%	
Elemental Lithium in Place Wymark B							38768.6	38233.0	26486.1	51953.7	Tonnes

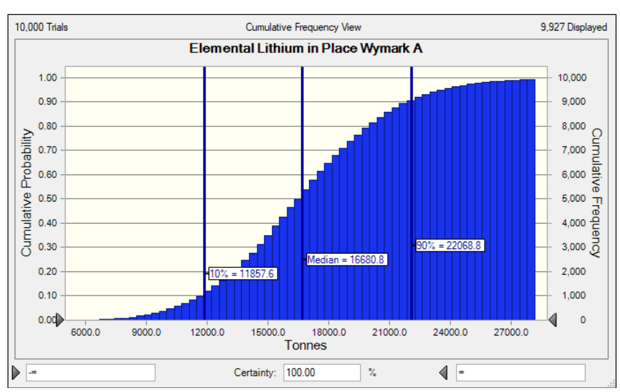




Viewfield: Wymark A

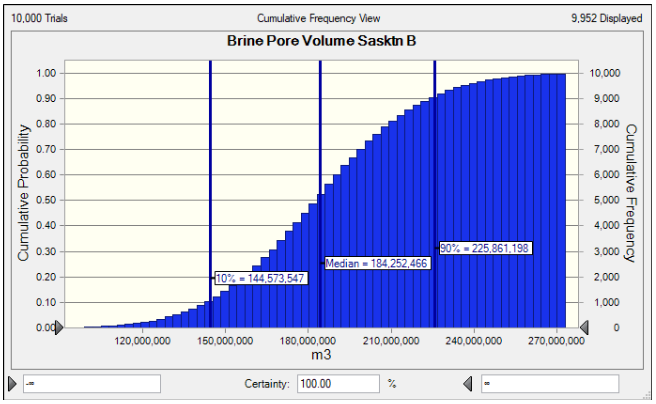
Inputs: Wymark A	Viewfield Greater Area Stocatic inputs						Stocastic outputs				
	Distribution	Min	Likely	Max	Mean	Diviation	Mean	Median	10%	90%	
Area (hectares)	Uniform distr.	16058		16405							
Thickness (meters)	Triangle	9.2	9.4	9.7							
Effective Porosity (%)	Normal				0.145	0.018					
Irreducable water sat (%)	Uniform distr.	0		0.02							
FVF (Bo) (Rm3/m3)	Normal	1.01		1.02			Mean	Median	10%	90%	
Brine Pore Volume Wymark A							217,028,893	217,003,103	182,837,628	252,009,692	m3
Li Concentration (mg/L)	Normal	58		98			Mean	Median	10%	90%	
Elemental Lithium in Place Wymark A							16926.1	16729.3	11846.0	22267.7	Tonnes

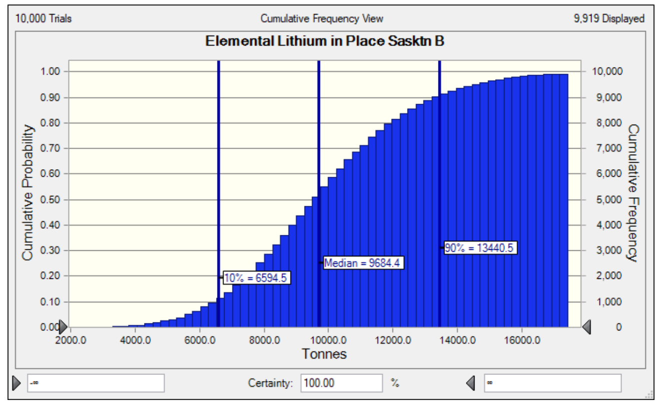




Viewfield: Saskatoon B

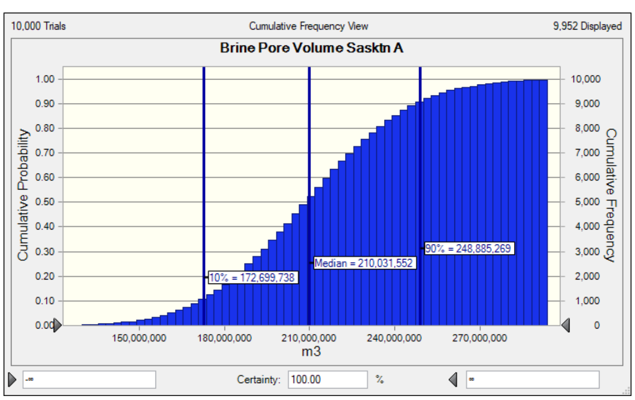
Inputs: Saskatoon B	Viewfield Greater Area Stocatic inputs						Stocastic outputs				
	Distribution	Min	Likely	Max	Mean	Diviation	Mean	Median	10%	90%	
Area (hectares)	Uniform distr.	16058		16405							
Thickness (meters)	Triangle	10.5	11.4	12.4							
Effective Porosity (%)	Normal				0.102	0.017					
Irreducable water sat (%)	Uniform distr.	0		0.02							
FVF (Bo) (Rm3/m3)	Normal	1.01		1.02			Mean	Median	10%	90%	
Brine Pore Volume Sasktn B							184,645,120	184,252,466	144,573,547	225,861,198	m3
Li Concentration (mg/L)	Normal	38.6	52	68			Mean	Median	10%	90%	
Elemental Lithium in Place Sasktn B							9870.9	9684.4	6594.5	13440.5	Tonnes

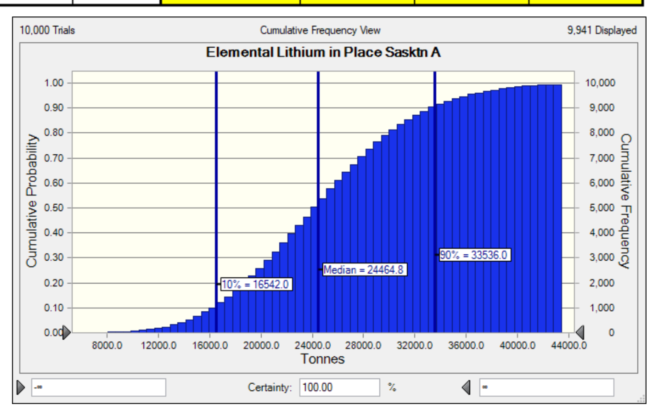




Viewfield: Saskatoon A

Inputs: Saskatoon A	Viewfield Greater Area Stocatic inputs						Stocastic outputs				
	Distribution	Min	Likely	Max	Mean	Diviation	Mean	Median	10%	90%	
Area (hectares)	Uniform distr.	16058		16405							
Thickness (meters)	Triangle	8.8	9.9	11.5							
Effective Porosity (%)	Normal				0.132	0.017					
Irreducable water sat (%)	Uniform distr.	0		0.02							
FVF (Bo) (Rm3/m3)	Normal	1.01		1.02			Mean	Median	10%	90%	
Brine Pore Volume Sasktn A							210,554,737	210,031,552	172,699,738	248,885,269	m3
Li Concentration (mg/L)	Normal	84		152			Mean	Median	10%	90%	
Elemental Lithium in Place Sasktn A							24817.2	24464.8	16542.0	33536.0	Tonnes





25 APENDIX E: DETAILED WATER ANALYSIS

Viewfield 2-22: Wymark B

ISOBRINE solutions

WATER ANALYSIS RESULTS

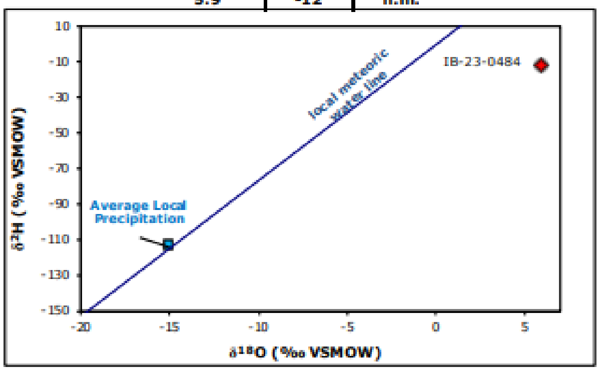
IB-23-0484	Wymark B swab 38	01/02-22-007-09W2/00	Hub City Lithium Corp
Isobrine Sample ID	*Client Sample ID / Well UWI*	*Well LSD (top hole location)*	*Client*
Hub City Huntoon N 2-22-7-9W2		not available	19.7 / 5.82
Well Name		*Sample Point*	*Temp. (°C)* / *pH*
not available	Duperow, Wymark B	not available	247300 / 0.0404
Field	*Production Formation or Zone*	*Depth from KB or Interval (m)*	*Conductivity (uS/cm)* / *Resistivity (ohm-m)*
27-Nov-22 @ 15:10	December 1, 2022	December 23, 2022	318823 / n.m.
Date/Time Sampled	*Date Received*	*Date Reported*	*TDS (mg/l)* / *Density*

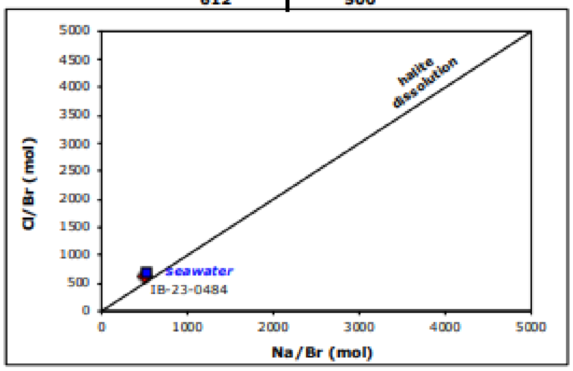
ISOTOPE COMPOSITIONS

$\delta^{18}O$ (‰)	$\delta^{2}H$ (‰)	other
5.9	-12	n.m.

HALOGEN ELEMENT RATIOS

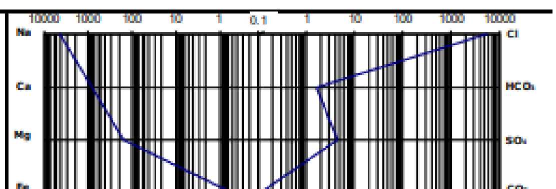
Cl/Br (mol)	Na/Br (mol)
612	500





MAJOR ION COMPOSITIONS

CATION	mg/l	meq/l	ANION	mg/l	meq/l
Na	101835	4430	Cl	192130	5419
K	4940	126	SO_4	214	4.45
Ca	15737	785	HCO_3	100.0	1.64
Mg	1920	158	CO_3	<6	
Fe	12.3	0.44	OH	<5	
Ba	7.02	0.10	NO_3	bdl	
B	195	54.1	Br	708	8.86
Li	96.3	13.9	F	3.89	0.20
Sr	727	16.6	P-Alkalinity	<5	
			T-Alkalinity	82.0	
TOTAL		5584			5434



318823 — TDS - calculated (mg/l)

1.4% — Charge Balance

TRACE ELEMENT COMPOSITIONS

	mg/l		mg/l		mg/l		mg/l		mg/l		mg/l
Ag	bdl	Bi	n.m.	Cu	bdl	Pb	n.m.	Sn	n.m.	V	bdl
Al	bdl	Cd	bdl	Mn	1.20	Sb	n.m.	Ti	n.m.	Zn	bdl
As	n.m.	Co	bdl	Mo	n.m.	Se	bdl	Tl	n.m.		
Be	bdl	Cr	bdl	Ni	bdl	Si	bdl	U	n.m.		

DATA INTERPRETATION

This appears to be a representative sample of the 'Wymark B' zone within the Duperow Formation at this location. Although it has similar stable isotope ratios and bulk TDS as other Duperow samples, this zone has distinct (higher) Ca, Mg, and Sr, yet lower B, Li, and SO4 concentrations than the zone above. These indicate a clear separation between this zone and the one above.

NOTES

Analytical methods: pH - Electrometric; Alkalinity - Titration; Major Ion and Trace Element Compositions (Dissolved) - ICP-OES; Oxygen and hydrogen stable isotope compositions - TCEA-CF-IRMS or MPM-CRDS; F, Cl, Br, NO3 and SO4 (Dissolved) - Ion Chromatography. The abbreviations "n.m.", "n.a." and "bdl" denote "not measured", "not applicable", and "below detection limit", respectively. LEGAL NOTE: The information in this reporting form is intended for use by client staff only. Dissemination to a third party without the prior written consent of Isobrine Solutions Inc. constitutes a breach of confidentiality and may result in legal action against persons involved.

Viewfield 2-22: Wymark C

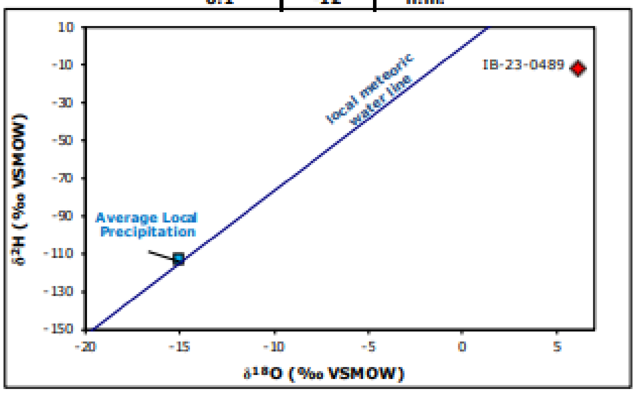
ISOBRINE solutions

WATER ANALYSIS RESULTS

IB-23-0489	**Wymark C swab 69**	**01/02-22-007-09W2/00**	**Hub City Lithium Corp**
Isobrine Sample ID	*Client Sample ID / Well UWI*	*Well LSD (top hole location)*	*Client*
Hub City Huntoon N 2-22-7-9W2		**not available**	**19.8** / **5.91**
Well Name		*Sample Point*	*Temp. (°C)* / *pH*
not available	**Duperow, Wymark C**	**not available**	**249800** / **0.0400**
Field	*Production Formation or Zone*	*Depth from KB or Interval (m)*	*Conductivity (uS/cm)* / *Resistivity (ohm-m)*
24-Nov-22 @ 16:30	**December 1, 2022**	**December 23, 2022**	**318257** / **n.m.**
Date/Time Sampled	*Date Received*	*Date Reported*	*TDS (mg/l)* / *Density*

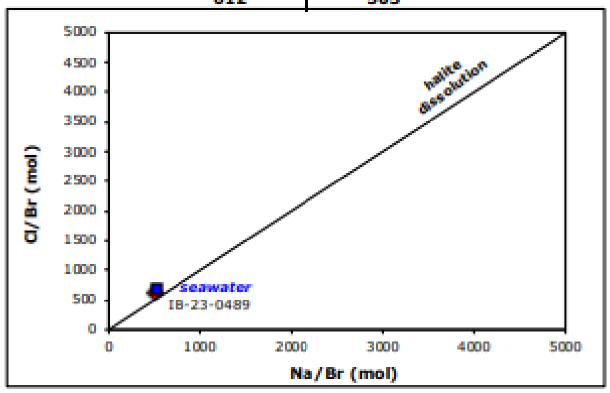
ISOTOPE COMPOSITIONS

$\delta^{18}O$ (‰)	$\delta^{2}H$ (‰)	other
6.1	-12	n.m.



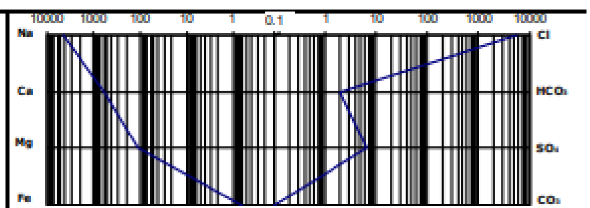
HALOGEN ELEMENT RATIOS

Cl/Br (mol)	Na/Br (mol)
612	503



MAJOR ION COMPOSITIONS

CATION	mg/l	meq/l	ANION	mg/l	meq/l
Na	103846	4517	Cl	194772	5494
K	4869	125	SO_4	308	6.42
Ca	11115	555	HCO_3	116	1.90
Mg	1330	109	CO_3	<6	
Fe	17.3	0.62	OH	<5	
Ba	2.74	0.04	NO_3	bdl	
B	246	68.2	Br	718	8.98
Li	166	23.9	F	3.17	0.17
Sr	543	12.4	P-Alkalinity	<5	
			T-Alkalinity	95.0	
TOTAL		5411			5511



318257 — *TDS - calculated (mg/l)*

-0.9% — *Charge Balance*

TRACE ELEMENT COMPOSITIONS

	mg/l		mg/l		mg/l		mg/l		mg/l		mg/l
Ag	bdl	Bi	n.m.	Cu	bdl	Pb	n.m.	Sn	n.m.	V	bdl
Al	bdl	Cd	bdl	Mn	1.68	Sb	n.m.	Ti	n.m.	Zn	bdl
As	n.m.	Co	bdl	Mo	n.m.	Se	bdl	Tl	n.m.		
Be	bdl	Cr	bdl	Ni	bdl	Si	bdl	U	n.m.		

DATA INTERPRETATION

This appears to be a representative sample of the 'Wymark C' zone within the Duperow Formation at this location. Although it has similar stable isotope ratios and bulk TDS as other Duperow samples, this zone has distinct Ca, Mg, Sr, Br, Li, and B concentrations compared to the zones above and below. These indicate a clear separation between the zones above and below it.

NOTES

Analytical methods: pH - Electrometric; Alkalinity - Titration; Major Ion and Trace Element Compositions (Dissolved) - ICP-OES; Oxygen and hydrogen stable isotope compositions - TCEA-CF-IRMS or MPM-CRDS; F, Cl, Br, NO3 and SO4 (Dissolved) - Ion Chromatography. The abbreviations "n.m.", "n.a." and "bdl" denote "not measured", "not applicable", and "below detection limit", respectively. LEGAL NOTE: The information in this reporting form is intended for use by client staff only. Dissemination to a third party without the prior written consent of Isobrine Solutions Inc. constitutes a breach of confidentiality and may result in legal action against persons involved.

Viewfield 2-22: Wymark D

ISOBRINE solutions

WATER ANALYSIS RESULTS

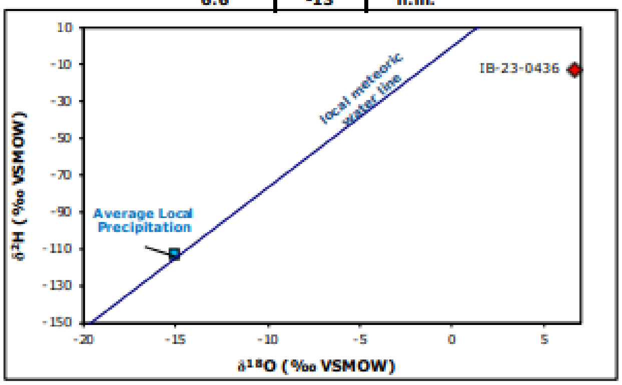
IB-23-0436	Wymark D Swab #86	01/02-22-007-09W2/00	Hub City Lithium Corp
Isobrine Sample ID	*Client Sample ID / Well UWI*	*Well LSD (top hole location)*	*Client*
Hub City Huntoon N 2-22-7-9W2		not available	19.6 / 5.92
Well Name		*Sample Point*	*Temp. (°C)* / *pH*
not available	Duperow, Wymark D	not available	252600 / 0.0396
Field	*Production Formation or Zone*	*Depth from KB or Interval (m)*	*Conductivity (uS/cm)* / *Resistivity (ohm-m)*
22-Nov-22 @ 15:00	November 30, 2022	December 23, 2022	314214 / n.m.
Date/Time Sampled	*Date Received*	*Date Reported*	*TDS (mg/l)* / *Density*

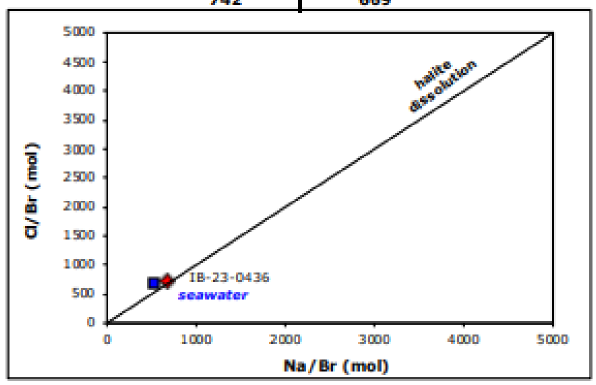
ISOTOPE COMPOSITIONS

$\delta^{18}O$ (‰)	δ^2H (‰)	other
6.6	-13	n.m.

HALOGEN ELEMENT RATIOS

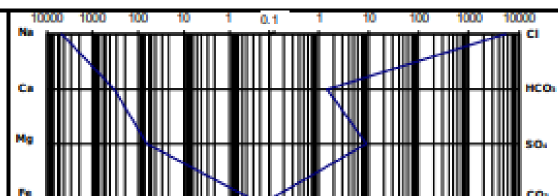
Cl/Br (mol)	Na/Br (mol)
742	669





MAJOR ION COMPOSITIONS

CATION	mg/l	meq/l	ANION	mg/l	meq/l
Na	110515	4807	Cl	189063	5333
K	4799	123	SO_4	412	8.58
Ca	6951	347	HCO_3	86.0	1.41
Mg	797	65.6	CO_3	<6	
Fe	8.01	0.29	OH	<5	
Ba	0.17	0.003	NO_3	bdl	
B	213	59.1	Br	574	7.19
Li	258	37.2	F	2.49	0.13
Sr	345	7.89	P-Alkalinity	<5	
			T-Alkalinity	71.0	
TOTAL		5447			5350



314214	0.9%
TDS - calculated (mg/l)	Charge Balance

TRACE ELEMENT COMPOSITIONS

	mg/l		mg/l		mg/l		mg/l		mg/l		mg/l
Ag	bdl	Bi	n.m.	Cu	bdl	Pb	n.m.	Sn	n.m.	V	bdl
Al	bdl	Cd	bdl	Mn	0.59	Sb	n.m.	Ti	n.m.	Zn	bdl
As	n.m.	Co	bdl	Mo	n.m.	Se	bdl	Tl	n.m.		
Be	bdl	Cr	bdl	Ni	bdl	Si	bdl	U	n.m.		

DATA INTERPRETATION

This appears to be a representative sample of the 'Wymark D' zone within the Duperow Formation at this location. Although it has similar stable isotope ratios and bulk TDS as other Duperow samples, this zone has distinct (lower, almost one half) Ca, Mg, and Sr, concentrations than the zones above and below. It also has distinct Br, Li, and B concentrations from the zones above and below it. These indicate a clear separation between the zones above and below it.

NOTES

Analytical methods: pH - Electrometric; Alkalinity - Titration; Major Ion and Trace Element Compositions (Dissolved) - ICP-OES; Oxygen and hydrogen stable isotope compositions - TCEA-CF-IRMS or MPM-CRDS; F, Cl, Br, NO3 and SO4 (Dissolved) - Ion Chromatography. The abbreviations "n.m.", "n.a." and "bdl" denote "not measured", "not applicable", and "below detection limit", respectively. LEGAL NOTE: The information in this reporting form is intended for use by client staff only. Dissemination to a third party without the prior written consent of Isobrine Solutions Inc. constitutes a breach of confidentiality and may result in legal action against persons involved.

Viewfield 2-22: Wymark E

ISOBRINE solutions

WATER ANALYSIS RESULTS

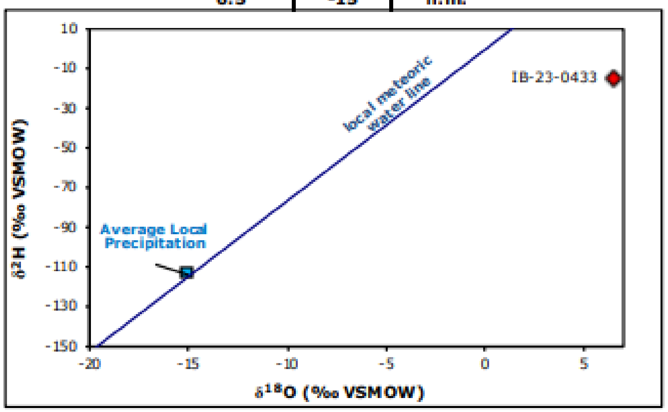
IB-23-0433	Wymark E Swab #36	01/02-22-007-09W2/00	Hub City Lithium Corp
Isobrine Sample ID	*Client Sample ID / Well UWI*	*Well LSD (top hole location)*	*Client*
Hub City Huntoon N 2-22-7-9W2		not available	19.7 / 5.94
Well Name		*Sample Point*	*Temp. (°C)* / *pH*
not available	Duperow, Wymark E	not available	247100 / 0.0405
Field	*Production Formation or Zone*	*Depth from KB or Interval (m)*	*Conductivity (uS/cm)* / *Resistivity (ohm-m)*
19-Nov-22 @ 15:45	November 30, 2022	December 23, 2022	323565 / n.m.
Date/Time Sampled	*Date Received*	*Date Reported*	*TDS (mg/l)* / *Density*

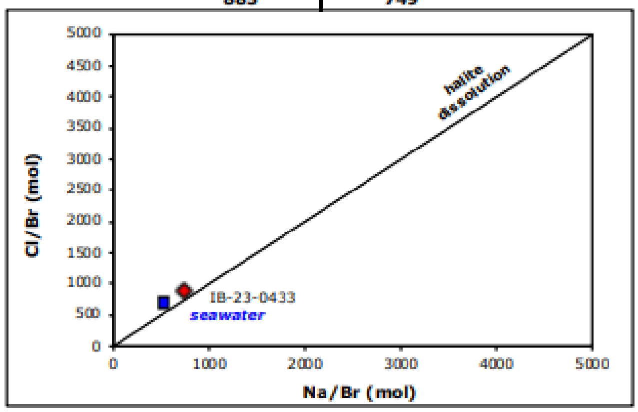
ISOTOPE COMPOSITIONS

$\delta^{18}O$ (‰)	δ^2H (‰)	other
6.5	-15	n.m.

HALOGEN ELEMENT RATIOS

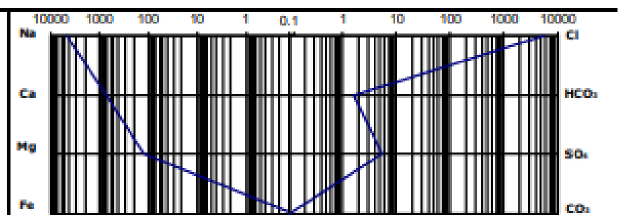
Cl/Br (mol)	Na/Br (mol)
883	749





MAJOR ION COMPOSITIONS

CATION	mg/l	meq/l	ANION	mg/l	meq/l
Na	106845	4648	Cl	194445	5485
K	4199	107	SO_4	257	5.34
Ca	14467	722	HCO_3	93.0	1.52
Mg	1433	118	CO_3	<6	
Fe	bdl		OH	<5	
Ba	5.68	0.08	NO_3	bdl	
B	190	52.7	Br	496	6.21
Li	219	31.6	F	3.28	0.17
Sr	706	16.1	P-Alkalinity	<5	
			T-Alkalinity	76.0	
TOTAL		5695			5498



323565 — *TDS - calculated (mg/l)*

1.8% — Charge Balance

TRACE ELEMENT COMPOSITIONS

	mg/l		mg/l		mg/l		mg/l		mg/l		mg/l
Ag	bdl	Bi	n.m.	Cu	bdl	Pb	n.m.	Sn	n.m.	V	bdl
Al	bdl	Cd	bdl	Mn	3.60	Sb	n.m.	Ti	n.m.	Zn	bdl
As	n.m.	Co	bdl	Mo	n.m.	Se	bdl	Tl	n.m.		
Be	bdl	Cr	bdl	Ni	bdl	Si	bdl	U	n.m.		

DATA INTERPRETATION

This appears to be a representative sample of the 'Wymark E' zone within the Duperow Formation at this location. Although it has similar stable isotope ratios and bulk TDS as other Duperow samples, this zone has distinct (higher, almost double) Ca, Mg, and Sr, concentrations than the zones above and below. This indicates a clear separation between the zones above and below it.

Viewfield 2-22: Wymark F

ISOBRINE solutions

WATER ANALYSIS RESULTS

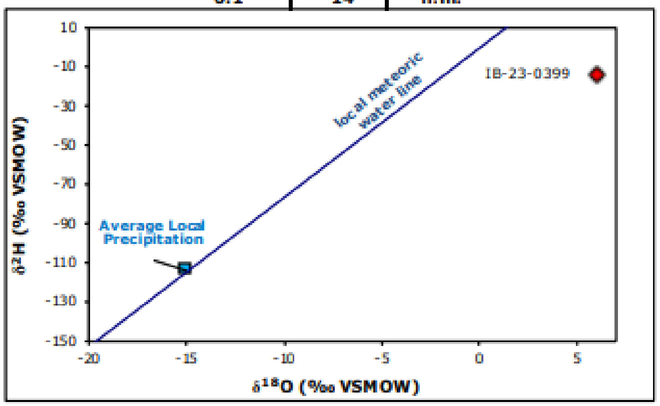
IB-23-0399	**Wymark F Swab #46**	**01/02-22-007-09W2/00**	**Hub City Lithium Corp**
Isobrine Sample ID	*Client Sample ID / Well UWI*	*Well LSD (top hole location)*	*Client*
Hub City Huntoon N 2-22-7-9W2		**not available**	**20.2** / **5.96**
Well Name		*Sample Point*	*Temp. (°C)* / *pH*
not available	**Duperow, Wymark F**	**not available**	**251500** / **0.0398**
Field	*Production Formation or Zone*	*Depth from KB or Interval (m)*	*Conductivity (uS/cm)* / *Resistivity (ohm-m)*
17-Nov-22 @ 17:05	**November 23, 2022**	**December 23, 2022**	**315419** / **n.m.**
Date/Time Sampled	*Date Received*	*Date Reported*	*TDS (mg/l)* / *Density*

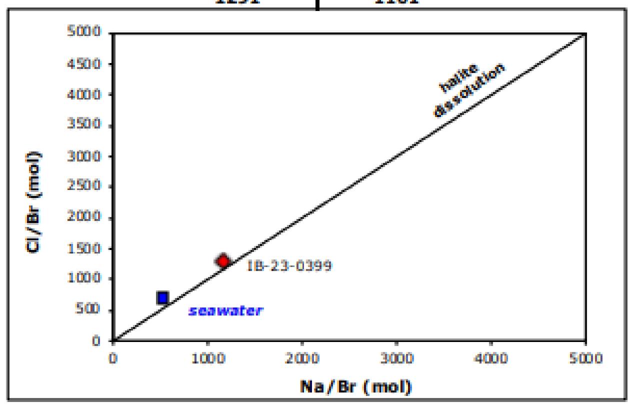
ISOTOPE COMPOSITIONS

$\delta^{18}O$ (‰)	$\delta^{2}H$ (‰)	other
6.1	-14	n.m.

HALOGEN ELEMENT RATIOS

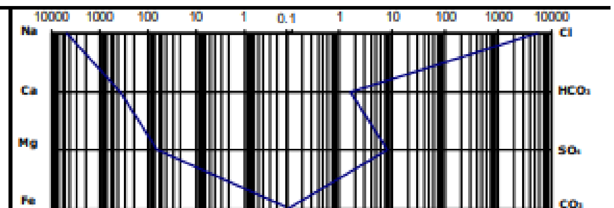
Cl/Br (mol)	Na/Br (mol)
1291	1161





MAJOR ION COMPOSITIONS

CATION	mg/l	meq/l	ANION	mg/l	meq/l
Na	111573	4853	Cl	191239	5394
K	3121	79.8	SO_4	369	7.69
Ca	7154	357	HCO_3	95.0	1.56
Mg	740	60.9	CO_3	<6	
Fe	bdl		OH	<5	
Ba	1.96	0.03	NO_3	bdl	
B	136	37.8	Br	334	4.18
Li	63.7	9.18	F	2.21	0.12
Sr	401	9.16	P-Alkalinity	<5	
			T-Alkalinity	78.0	
TOTAL		5407			5408



315419 — *TDS - calculated (mg/l)*

0.0% — *Charge Balance*

TRACE ELEMENT COMPOSITIONS

	mg/l		mg/l		mg/l		mg/l		mg/l		mg/l
Ag	bdl	Bi	n.m.	Cu	bdl	Pb	n.m.	Sn	n.m.	V	bdl
Al	bdl	Cd	bdl	Mn	1.23	Sb	n.m.	Ti	n.m.	Zn	bdl
As	n.m.	Co	bdl	Mo	n.m.	Se	bdl	Tl	n.m.		
Be	bdl	Cr	bdl	Ni	bdl	Si	bdl	U	n.m.		

DATA INTERPRETATION

This appears to be a representative sample of the 'Wymark F' zone within the Duperow Formation at this location. Although it has similar stable isotope ratios and bulk TDS as other Duperow samples, this zone has distinct (generally lower) Br, Ca, Mg, B, Li, Sr concentrations than all other tested zones. This indicates a clear separation from the zones below.

Mansur 14-36: Wymark B

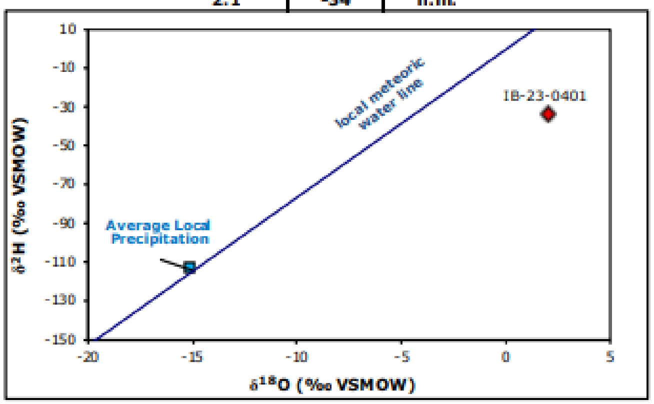
ISOBRINE solutions

WATER ANALYSIS RESULTS

IB-23-0401	Wymark B Swab #59	01/14-36-008-13W2/00	Hub City Lithium Corp	
Isobrine Sample ID	*Client Sample ID / Well UWI*	*Well LSD (top hole location)*	*Client*	
Hub City et al Hume 14-36-8-13W2		not available	19.9	5.89
Well Name		*Sample Point*	*Temp. (°C)*	*pH*
not available	Duperow, Wymark B	not available	243200	0.0411
Field	*Production Formation or Zone*	*Depth from KB or Interval (m)*	*Conductivity (uS/cm)*	*Resistivity (ohm-m)*
16-Nov-22 @ 16:40	November 23, 2022	December 23, 2022	278866	n.m.
Date/Time Sampled	*Date Received*	*Date Reported*	*TDS (mg/l)*	*Density*

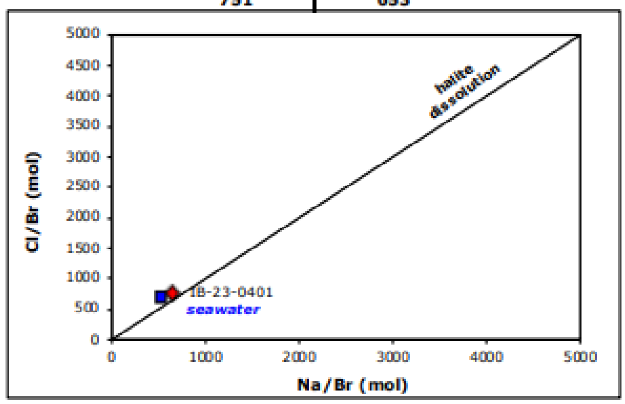
ISOTOPE COMPOSITIONS

$\delta^{18}O$ (‰)	$\delta^{2}H$ (‰)	other
2.1	-34	n.m.



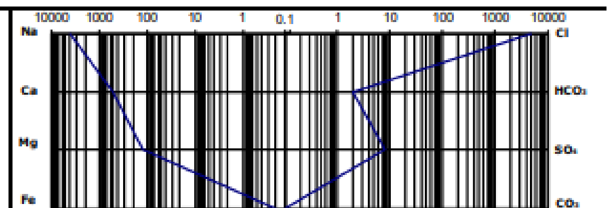
HALOGEN ELEMENT RATIOS

Cl/Br (mol)	Na/Br (mol)
751	653



MAJOR ION COMPOSITIONS

CATION	mg/l	meq/l	ANION	mg/l	meq/l
Na	94203	4098	Cl	167076	4713
K	4034	103	SO_4	372	7.75
Ca	10206	509	HCO_3	117	1.92
Mg	1450	119	CO_3	<6	
Fe	5.65	0.20	OH	<5	
Ba	3.82	0.06	NO_3	bdl	
B	172	47.7	Br	501	6.27
Li	77.0	11.1	F	3.35	0.18
Sr	490	11.2	P-Alkalinity	<5	
			T-Alkalinity	96.0	
TOTAL		4900			4729



278866	1.8%
TDS - calculated (mg/l)	Charge Balance

TRACE ELEMENT COMPOSITIONS

	mg/l		mg/l		mg/l		mg/l		mg/l		mg/l
Ag	bdl	Bi	n.m.	Cu	bdl	Pb	n.m.	Sn	n.m.	V	bdl
Al	bdl	Cd	bdl	Mn	bdl	Sb	n.m.	Ti	n.m.	Zn	bdl
As	n.m.	Co	bdl	Mo	n.m.	Se	bdl	Tl	n.m.		
Be	bdl	Cr	bdl	Ni	bdl	Si	bdl	U	n.m.		

DATA INTERPRETATION

This appears to be a representative sample of the 'Wymark B' zone within the Duperow Formation at this location. Although it has similar stable isotope ratios and bulk TDS as other Duperow samples, this zone has distinct (higher) Ca, Mg, and Sr, yet lower Li and SO4 concentrations than those above. These indicates a clear separation between this zone and those above. The overall concentrations are lower than the 2-22-7-9W2 well, but the chemical fingerprint matches the 'Wymark B' from that well.

Mansur 14-36: Wymark C

ISOBRINE solutions

WATER ANALYSIS RESULTS

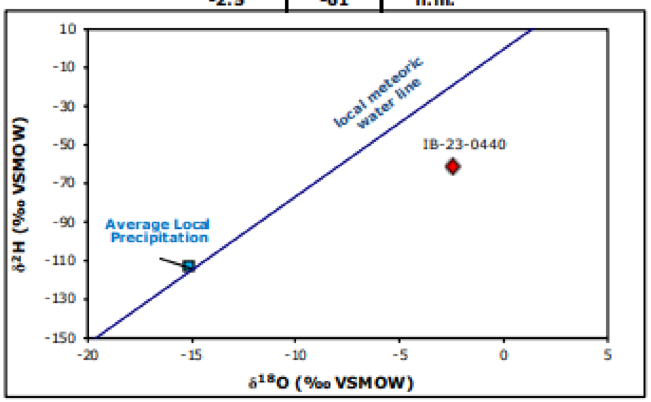
IB-23-0440 *Isobrine Sample ID*	**Wymark C Swab #29** *Client Sample ID / Well UWI*	**01/14-36-0008-13W2/00** *Well LSD (top hole location)*	**Hub City Lithium Corp** *Client*
Hub City et al Hume 14-36-8-13W2 *Well Name*		**not available** *Sample Point*	**19.6** *Temp. (°C)* / **6.03** *pH*
not available *Field*	**Duperow, Wymark C** *Production Formation or Zone*	**not available** *Depth from KB or Interval (m)*	**230300** *Conductivity (uS/cm)* / **0.0434** *Resistivity (ohm-m)*
19-Nov-22 @ 04:52 *Date/Time Sampled*	**November 30, 2022** *Date Received*	**December 23, 2022** *Date Reported*	**227798** *TDS (mg/l)* / **n.m.** *Density*

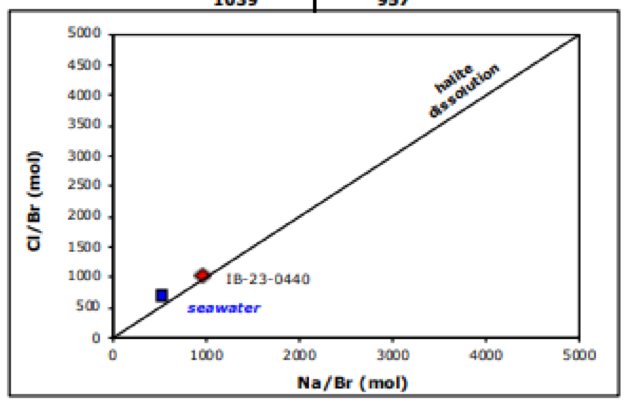
ISOTOPE COMPOSITIONS

$\delta^{18}O$ (‰)	$\delta^{2}H$ (‰)	other
-2.5	-61	n.m.

HALOGEN ELEMENT RATIOS

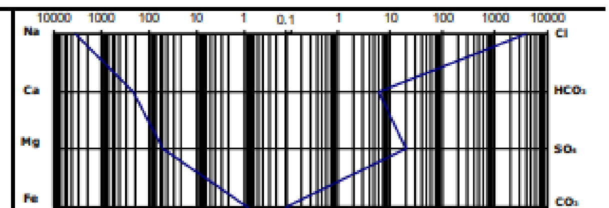
Cl/Br (mol)	Na/Br (mol)
1039	957





MAJOR ION COMPOSITIONS

CATION	mg/l	meq/l	ANION	mg/l	meq/l
Na	81157	3530	Cl	135843	3832
K	3776	96.6	SO_4	966	20.1
Ca	4128	206	HCO_3	357	5.85
Mg	649	53.4	CO_3	<6	
Fe	23.1	0.83	OH	<5	
Ba	0.61	0.009	NO_3	bdl	
B	138	38.3	Br	295	3.69
Li	149	21.4	F	2.77	0.15
Sr	185	4.21	P-Alkalinity	<5	
			T-Alkalinity	293	
TOTAL		3951			3861



227798 — *TDS - calculated (mg/l)*

1.1% — *Charge Balance*

TRACE ELEMENT COMPOSITIONS

	mg/l		mg/l		mg/l		mg/l		mg/l		mg/l
Ag	bdl	Bi	n.m.	Cu	bdl	Pb	n.m.	Sn	n.m.	V	bdl
Al	bdl	Cd	bdl	Mn	0.52	Sb	n.m.	Ti	n.m.	Zn	bdl
As	n.m.	Co	bdl	Mo	n.m.	Se	bdl	Tl	n.m.		
Be	bdl	Cr	bdl	Ni	bdl	Si	bdl	U	n.m.		

DATA INTERPRETATION

This appears to be a mixture of the 'Wymark C' zone and drilling/completion fluid, based on the stable isotope ratios and dissolved element concentrations. The amount of external fluid is estimated to be approximately 30%. Given the significant amount of external fluid in this sample, it is possible the Li is not representative of the 'Wymark C' zone in this well.

Mansur 14-36: Wymark D

ISOBRINE solutions — **WATER ANALYSIS RESULTS**

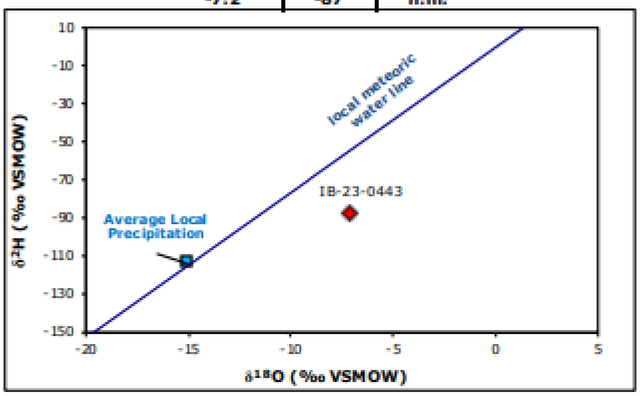
IB-23-0443	**Wymark D Swab #60**	**01/14-36-0008-13W2/00**	**Hub City Lithium Corp**
Isobrine Sample ID	*Client Sample ID / Well UWI*	*Well LSD (top hole location)*	*Client*
Hub City et al Hume 14-36-8-13W2		**not available**	**19.6** / **6.55**
Well Name		*Sample Point*	*Temp. (°C)* / *pH*
not available	**Duperow, Wymark D**	**not available**	**210000** / **0.0476**
Field	*Production Formation or Zone*	*Depth from KB or Interval (m)*	*Conductivity (uS/cm)* / *Resistivity (ohm-m)*
22-Nov-22 @ 16:40	**November 30, 2022**	**December 23, 2022**	**189245** / **n.m.**
Date/Time Sampled	*Date Received*	*Date Reported*	*TDS (mg/l)* / *Density*

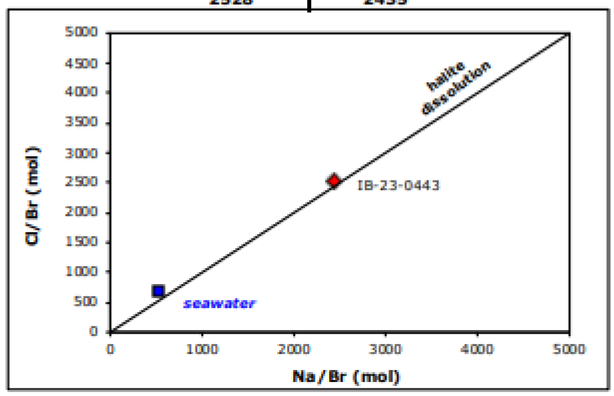
ISOTOPE COMPOSITIONS

$\delta^{18}O$ (‰)	$\delta^{2}H$ (‰)	other
-7.2	-87	n.m.

HALOGEN ELEMENT RATIOS

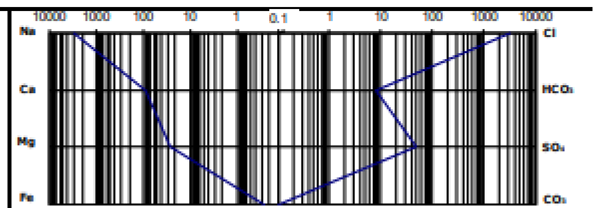
Cl/Br (mol)	Na/Br (mol)
2528	2435





MAJOR ION COMPOSITIONS

CATION	mg/l	meq/l	ANION	mg/l	meq/l
Na	69795	3036	Cl	111725	3151
K	2329	59.6	SO_4	2346	48.8
Ca	1845	92.1	HCO_3	476	7.80
Mg	305	25.1	CO_3	<6	
Fe	7.09	0.25	OH	<5	
Ba	0.16	0.002	NO_3	bdl	
B	61.0	16.9	Br	99.6	1.25
Li	57.5	8.29	F	3.01	0.16
Sr	78.0	1.78	P-Alkalinity	<5	
			T-Alkalinity	391	
TOTAL		3240			3209



189245	0.5%
TDS - calculated (mg/l)	Charge Balance

TRACE ELEMENT COMPOSITIONS

	mg/l		mg/l		mg/l		mg/l		mg/l		mg/l
Ag	bdl	Bi	n.m.	Cu	bdl	Pb	n.m.	Sn	n.m.	V	bdl
Al	bdl	Cd	bdl	Mn	0.30	Sb	n.m.	Ti	n.m.	Zn	bdl
As	n.m.	Co	bdl	Mo	n.m.	Se	bdl	Tl	n.m.		
Be	bdl	Cr	bdl	Ni	bdl	Si	bdl	U	n.m.		

DATA INTERPRETATION

This appears to be a mixture of the 'Wymark D' zone and a significant amount of drilling/completion fluid, based on the stable isotope ratios and dissolved element concentrations. The amount of external fluid is estimated to be at least 50%, likely more. Given the large amount of out of zone fluid in this sample, it is unlikely the Li concentration is representative of the zone.

Mansur 14-36: Wymark E

ISOBRINE solutions

WATER ANALYSIS RESULTS

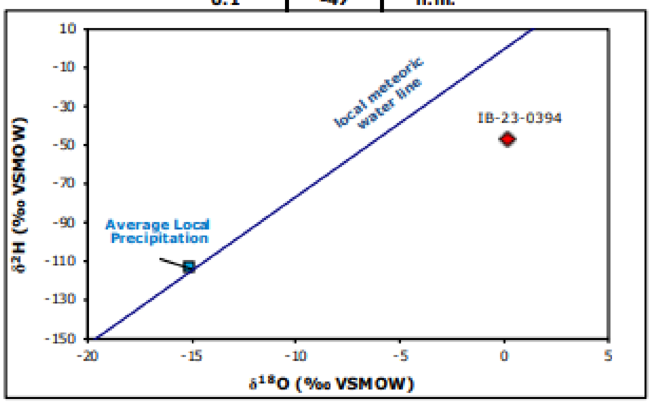
IB-23-0394 *Isobrine Sample ID*	**Wymark E Swab #26** *Client Sample ID / Well UWI*	**01/14-36-008-13W2/00** *Well LSD (top hole location)*	**Hub City Lithium Corp** *Client*
Hub city et al hume 14-36-8-13W2 *Well Name*		**not available** *Sample Point*	**20.1** *Temp. (°C)* / **6.31** *pH*
not available *Field*	**Duperow, Wymark E** *Production Formation or Zone*	**not available** *Depth from KB or Interval (m)*	**244000** *Conductivity (uS/cm)* / **0.0410** *Resistivity (ohm-m)*
12-Nov-22 @ 16:55 *Date/Time Sampled*	**November 17, 2022** *Date Received*	**December 23, 2022** *Date Reported*	**285757** *TDS (mg/l)* / **n.m.** *Density*

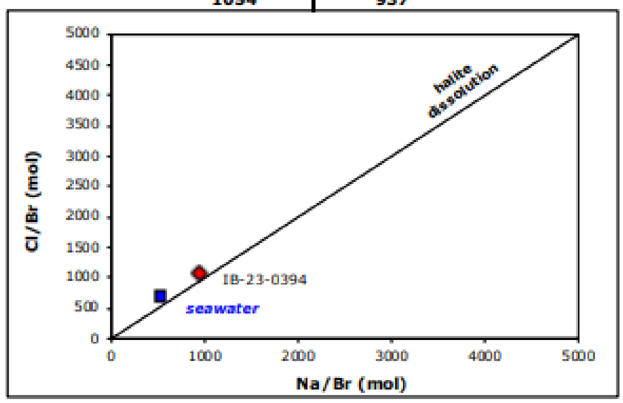
ISOTOPE COMPOSITIONS

$\delta^{18}O$ (‰)	$\delta^{2}H$ (‰)	other
0.1	-47	n.m.

HALOGEN ELEMENT RATIOS

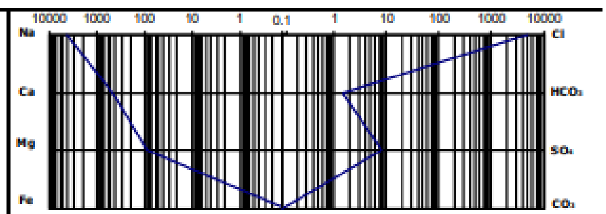
Cl/Br (mol)	Na/Br (mol)
1054	937





MAJOR ION COMPOSITIONS

CATION	mg/l	meq/l	ANION	mg/l	meq/l
Na	98784	4297	Cl	171344	4833
K	3033	77.6	SO_4	392	8.16
Ca	9702	484	HCO_3	86.0	1.41
Mg	1132	93.1	CO_3	<6	
Fe	1.78	0.06	OH	<5	
Ba	2.36	0.03	NO_3	bdl	
B	153	42.6	Br	366	4.59
Li	106	15.2	F	2.79	0.15
Sr	484	11.1	P-Alkalinity	<5	
			T-Alkalinity	70.0	
TOTAL		5021			4847



285757 — *TDS - calculated (mg/l)*

1.8% — *Charge Balance*

TRACE ELEMENT COMPOSITIONS

	mg/l		mg/l		mg/l		mg/l		mg/l		mg/l
Ag	bdl	Bi	n.m.	Cu	bdl	Pb	n.m.	Sn	n.m.	V	bdl
Al	bdl	Cd	bdl	Mn	1.18	Sb	n.m.	Ti	n.m.	Zn	1.54
As	n.m.	Co	bdl	Mo	n.m.	Se	bdl	Tl	n.m.		
Be	bdl	Cr	bdl	Ni	bdl	Si	bdl	U	n.m.		

DATA INTERPRETATION

This appears to be a mixture of the 'Wymark E' zone and a small amount of drilling/completion fluid, based on the stable isotope ratios and dissolved element concentrations. The amount of external fluid is estimated to be 10%. Other than the Li concentration, the (diluted) chemical fingerprint of the 'Wymark E' in this well matches quite closely the 'Wymark E' in the 2-22-7-9W2 well.

Mansur 14-36: Wymark F

WATER ANALYSIS RESULTS

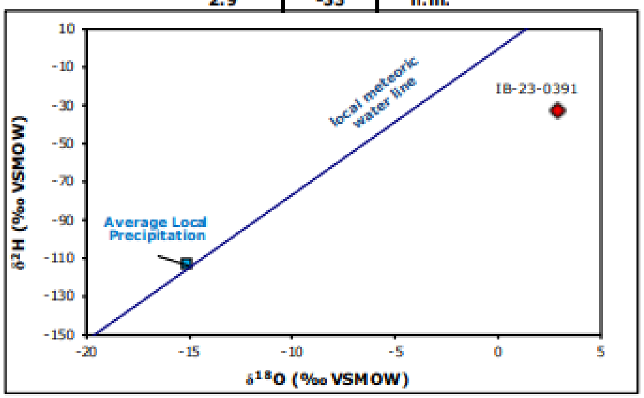
IB-23-0391	Wymark F swab #11	01/14-36-008-13W2/00	Hub City Lithium Corp
Isobrine Sample ID	*Client Sample ID / Well UWI*	*Well LSD (top hole location)*	*Client*
Hub city et al hume 14-36-8-13W2		not available	20.3 / 4.91
Well Name		*Sample Point*	*Temp. (°C)* / *pH*
not available	Duperow, Wymark F	not available	252400 / 0.0396
Field	*Production Formation or Zone*	*Depth from KB or Interval (m)*	*Conductivity (uS/cm)* / *Resistivity (ohm-m)*
3-Nov-22 @ 11:45	November 17, 2022	December 23, 2022	318790 / n.m.
Date/Time Sampled	*Date Received*	*Date Reported*	*TDS (mg/l)* / *Density*

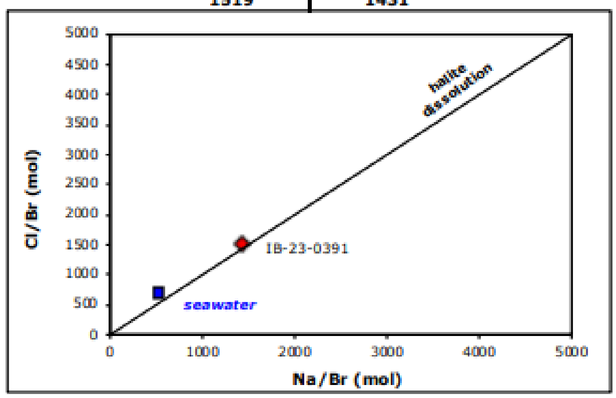
ISOTOPE COMPOSITIONS

$\delta^{18}O$ (‰)	$\delta^{2}H$ (‰)	other
2.9	-33	n.m.

HALOGEN ELEMENT RATIOS

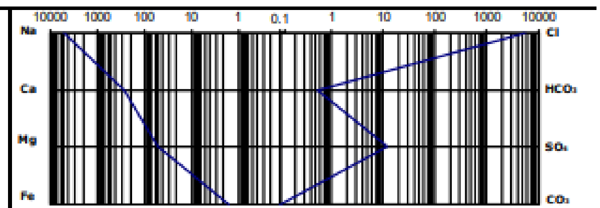
Cl/Br (mol)	Na/Br (mol)
1519	1431





MAJOR ION COMPOSITIONS

CATION	mg/l	meq/l	ANION	mg/l	meq/l
Na	116620	5073	Cl	190891	5384
K	3450	88.2	SO_4	549	11.4
Ca	5635	281	HCO_3	32.0	0.52
Mg	617	50.8	CO_3	<6	
Fe	43.5	1.56	OH	<5	
Ba	1.67	0.02	NO_3	bdl	
B	104	28.8	Br	283	3.54
Li	42.9	6.18	F	1.48	0.08
Sr	317	7.24	P-Alkalinity	<5	
			T-Alkalinity	26.0	
TOTAL		5537			5400



318790	1.3%
TDS - calculated (mg/l)	*Charge Balance*

TRACE ELEMENT COMPOSITIONS

	mg/l		mg/l		mg/l		mg/l		mg/l		mg/l
Ag	bdl	Bi	n.m.	Cu	bdl	Pb	n.m.	Sn	n.m.	V	bdl
Al	bdl	Cd	bdl	Mn	5.00	Sb	n.m.	Ti	n.m.	Zn	bdl
As	n.m.	Co	bdl	Mo	n.m.	Se	bdl	Tl	n.m.		
Be	bdl	Cr	bdl	Ni	bdl	Si	bdl	U	n.m.		

DATA INTERPRETATION

This appears to be a representative sample of the 'Wymark F' zone within the Duperow Formation at this location. Although it has similar stable isotope ratios and bulk TDS as other Duperow samples, this zone has distinct (generally lower) Br, Ca, Mg, B, Li, Sr concentrations than all other tested zones. This indicates a clear separation from the zones below. The overall concentrations are lower than the 2-22-7-9W2 well, but the chemical fingerprint matches the 'Wymark F' from that well.