

LITHIUMBANK'S PARK PLACE HYDROGEOLOGICAL STUDY REPORTS LARGEST CONTIGUOUS LITHIUM-RICH BRINE PROJECT BY VOLUME IN NORTH AMERICA

Calgary, Alberta. February 27, 2023 – LithiumBank Resources Corp. (TSX-V: LBNK) (OTCQX: LBNKF) (“LithiumBank” or the “Company”) is pleased to announce the completion of the hydrogeological study at its 100% owned Park Place Lithium Brine Project (“PPLP”) located 180 km west of Edmonton, Alberta, and 50 km south of the Company’s other flagship brine project in the Boardwalk district. The hydrogeological study was completed by Matrix Solutions Inc. (“Matrix”) and is expected to be incorporated into an upcoming NI 43-101 Resource Estimate.

Highlights

- PPLP hosts a combined total of 76.3 km³ (76.3 B m³) of lithium-bearing brine, 49.8 km³ within the Leduc Formation and 26.5 km³ within the Swan Hills Formation (Table 1).
- Currently the largest reported lithium-rich brine project, by volume, in North America held by a single operator.
- Favourable average net total porosity of 11%, 12% in the north and 10% in the south (Table 1), using a 3% porosity cut-off.
- Maximum Formation thickness: Leduc 350 metres & Swan Hills 250 metres (Figure 1).
- Thicker zones (over 200m) in the Leduc Formation are correlated with higher porosity and are locations ideal for potential production hubs.
- The Leduc Formation and underlying Swan Hills Formation are hydraulically connected, representing a continuous resource volume.
- Leduc Formation brine sample, collected in December 2022 from Park Place, reported 77.2 mg/L lithium ([News Release Jan. 17, 2023](#)).

The recently completed hydrogeological study indicates that PPLP hosts the largest lithium-bearing brine, by volume, held by a single operator in North America at 76.3 km³ of brine (76.3 B m³). The entire brine is wholly contained within the 1.57 M acre Crown mineral rights-only land package that is endowed with modern infrastructure and abundant geological data from decades of oil & gas activity. LithiumBank and Matrix are now using this information and recent sampling data to produce an NI 43-101 Resource Estimate that is expected to be completed in Q2 2023.

“We are very proud to report the largest reported lithium brine project by volume in North America. Beyond validating our high value asset acquisition strategy, we believe it positions our company as one of the most attractive investments in Direct Lithium Extraction resource development opportunities globally and at a District-Scale,” commented Rob Shewchuk, CEO of LithiumBank. “76.3 km³ is an enormous volume of lithium-rich brine with favourable porosity, formation thickness, and lithium grades. We are confident that these metrics and grades will lead to a positive NI 43-101 Resource Estimate. LithiumBank will also undertake additional brine sampling and testing of multiple Direct Lithium Extraction technologies that, together with the Resource Estimate, will support an initial Preliminary Economic Assessment (“PEA”) at

PPLP. This assessment will compliment the Boardwalk Project PEA that is expected to be completed shortly.”

The Leduc Formation at Park Place is a confined aquifer, primarily composed of higher porosity dolomite except for the southern portion which is primarily limestone (Figure 1). The Swan Hills Formation consists of interbedded dolomite and limestone where both rock types, based on core analysis, are of reservoir quality and should be considered pay intervals. Although they are differing heterogeneous formations, the units are hydraulically connected and could be considered as a single hydrostratigraphic unit. Both stratigraphic units dip gently toward the southwest. The Devonian aged, Leduc Carbonate Reef complex (Woodbend Group) and the underlying Swan Hills Formation (Beaverhill Lake Group) have historically been known to host the highest grades of lithium-in-brine in Alberta, with samples that range from 76 mg/L to 130 mg/L lithium within our Park Place Metallic and Industrial Mineral (MIM) permit area. These samples are considered historic and have not been verified by a Qualified Person (QP) under the latest NI 43-101 Standards of Disclosure and cannot be relied upon. Historical samples are mentioned as a reference only until such time they have been verified.

The average net total porosity is 11% (12% in the north and 10% in the south) using a 3% porosity cut-off. Porosity at Park Place has been calculated differently than Boardwalk by using a porosity cut-off rather than an average of total porosity. At Park Place, all rock and brine within the two Formations with porosity below 3% are excluded from the volume calculations and from the average porosity calculation, therefore resulting in a higher average net total porosity. 11% porosity is promising, and Matrix expects that this should correspond favourably to permeability and reservoir continuity supportive of potential future commercial production.

The hydrogeological study used 57,437 core measurements from 675 wells within the study area from public-domain geological data from the Province of Alberta (Figure 1 & 2). 21,761 core measurements were obtained from 269 Leduc wells and 35,676 core measurements were obtained from 407 Swan Hills wells. Matrix determined that a total of 58 drill stem tests (DST) from 58 wells that were deemed representative. Of these DSTs, 22 were within the Leduc Formation and 36 were within the Swan Hills Formation. Matrix completed permeability analyses on 12 DSTs for the Leduc Formation and 18 DSTs for the Swan Hills Formation.

Estimates of lithium-bearing brine volumes presented in this disclosure are preliminary and conceptual in nature. There has been insufficient exploration at the Park Place Lithium Brine Project to define a mineral resource and it is uncertain if further exploration will result in delineation of a mineral resource at PPLP.

Further Reading

The Park Place area was the focus of a study, authored by D.R. Eccles and H. Berhane, entitled “Geological Introduction to Lithium-Rich Formation Water with Emphasis on the Fox Creek Area of West-Central Alberta (NTS 83F and 83K)” (<https://ags.aer.ca/publication/ofr-2011-10>). The report highlights significant lithium potential in three different formations, the Leduc (Woodbend), Nisku (Winterburn), and Swan Hills (Beaverhill Lake Group), and is supported by historical lithium brine samples that range from 76 mg/L to 130 mg/L lithium in these formations.

Table 1: Volume of brine of the Leduc and Swan Hills Formations at different porosity cut-offs.

Formation	Porosity Cut-off	Pore Volume (km ³)		
		Northern Reef	Southern Reef	Total Volume
Leduc Formation	3%	47.3	2.5	49.8
Leduc Formation	6%	43.1	1.9	45.0
Swan Hills Formation	3%	-		26.5
Swan Hills Formation	6%	-		23.7
			Total brine volume (km³) at 3% cut-off	76.3

Figure 1: Leduc Formation Isopach map at Park Place

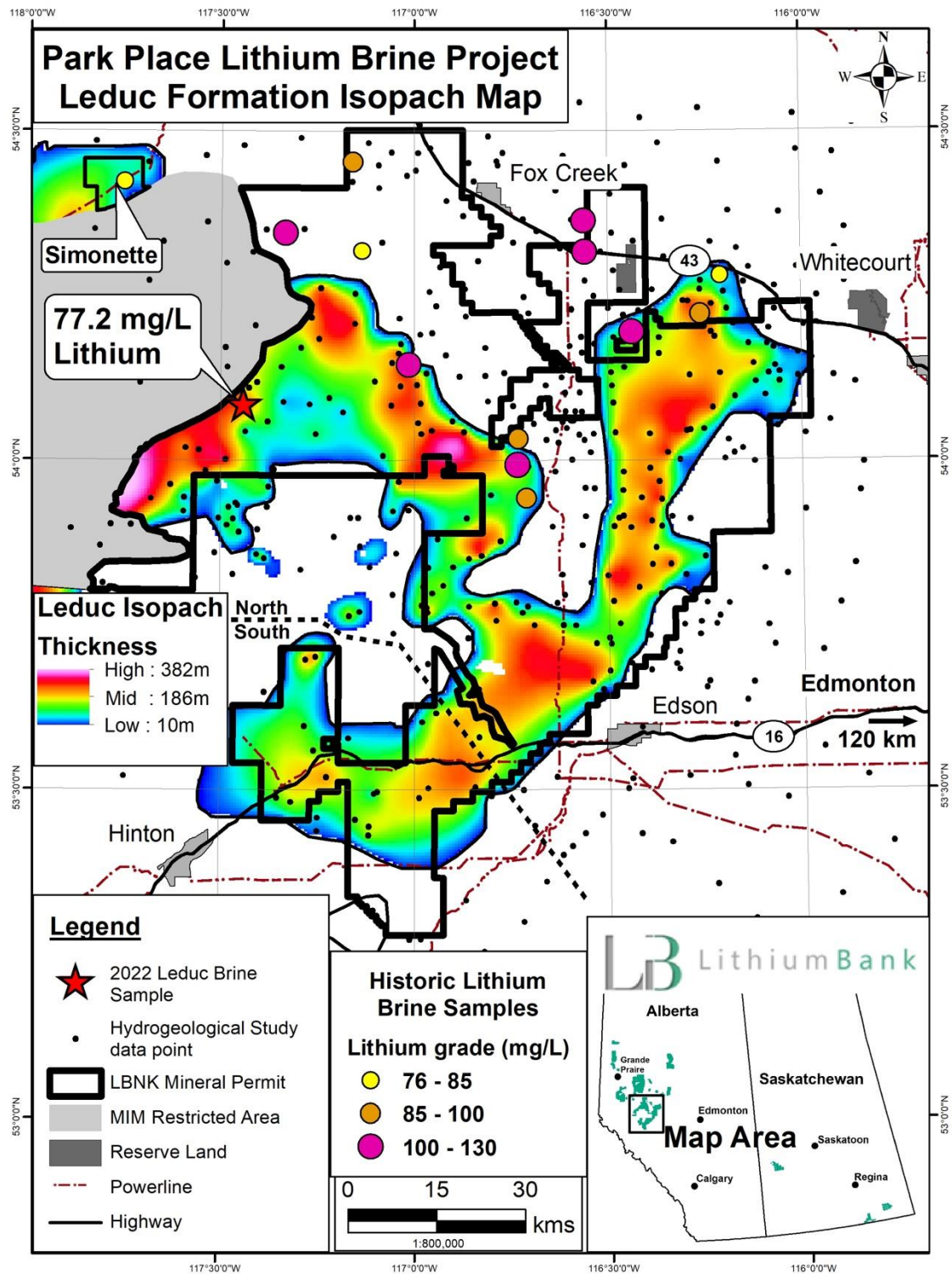
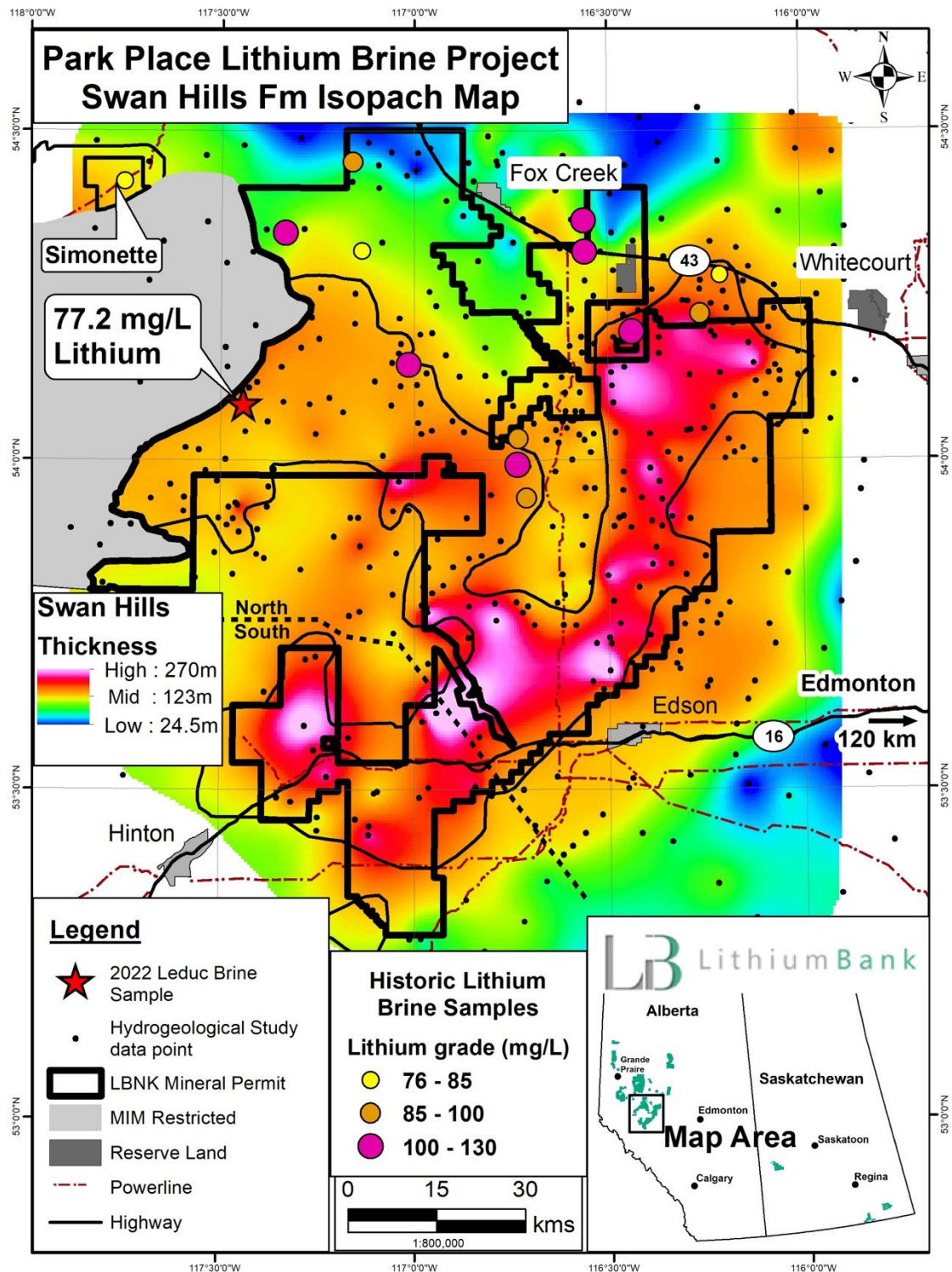


Figure 2: Swan Hills Formation Isopach map at Park Place



Qualified Person

The scientific and technical disclosure in this news release has been reviewed and approved by Mr. Kevin Pieprgrass (Chief Operations Officer, LithiumBank Resources Corp.), who is a Member of the Association of Professional Engineers and Geoscientists of the Province of

British Columbia (APEGBC) and is a Qualified Person (QP) for the purposes of National Instrument 43-101. Mr. Piepgrass consents to the inclusion of the data in the form and context in which it appears.

About LithiumBank Resources Corp.

LithiumBank Resources Corp. is a development company focused on lithium-enriched brine projects in Western Canada where low-carbon-impact, rapid DLE technology can be deployed. LithiumBank currently holds over 3.6 million acres of mineral titles, 3.33M acres in Alberta and 336k acres in Saskatchewan. LithiumBank's mineral titles are strategically positioned over known reservoirs that provide a unique combination of scale, grade and exceptional flow rates that are necessary for a large-scale direct brine lithium production. LithiumBank is advancing and de-risking several projects in parallel of the Boardwalk Lithium Brine Project.

Contact:

Rob Shewchuk
CEO & Director
rob@lithiumbank.ca
(778) 987-9767

Neither the TSX Venture Exchange nor its Regulation Services Provider (as that term is defined in the policies of the TSX Venture Exchange) accepts responsibility for the adequacy or accuracy of this release.

Cautionary Statement Regarding Forward Looking Statements

This release includes certain statements and information that may constitute forward-looking information within the meaning of applicable Canadian securities laws. All statements in this news release, other than statements of historical facts, including statements regarding future estimates, plans, objectives, timing, assumptions or expectations of future performance, including without limitation, the statement that the Company intends to complete a NI 43-101 Resource Estimate and the expected timing and results thereof, the Company's expectation that thicker zones in the Leduc Formation will be ideal locations for production hubs, the Company's plans with respect to further testing, sampling and analysis at PPLP, the Company's plans to complete an initial Preliminary Economic Assessment ("PEA") at PPLP and the expected timing and results thereof, Matrix's expectation that 11% porosity will correspond favourably to permeability and reservoir continuity and ultimately be supportive of potential future commercial production, are forward-looking statements and contain forward-looking information. Generally, forward-looking statements and information can be identified using forward-looking terminology such as "intends" or "anticipates", or variations of such words and phrases or statements that certain actions, events, or results "may", "could", "should" or "would" or occur. Forward-looking statements are based on certain material assumptions and analysis made by the Company and the opinions and estimates of management as of the date of this press release, including that further testing, sampling, and analysis at PPLP will lead to a NI 43-101 Resource Estimate and, ultimately, be supportive of an initial PEA at PPLP with positive results, or that PPLP will be suited for future commercial production. These forward-looking statements are subject to known and unknown risks, uncertainties and other factors that may cause the actual results, level of activity, performance, or achievements of the Company to be materially different from those expressed or implied by such forward-looking statements or forward-looking information. Important factors that may cause actual results to vary, include, without limitation, that the Company is not able to complete a NI 43-101

Resource Estimate as anticipated or at all, or that the results of the NI 43-101 Resource Estimate will not be as expected by management, that the Company will not be able to develop PPLP or that PPLP will not be suited to future commercial production, that further testing, sampling and analysis at PPLP will not produce positive results, or that the Company is unable to complete a PEA or that the results of the PEA will not be as expected by management. Although management of the Company has attempted to identify important factors that could cause actual results to differ materially from those contained in forward-looking statements or forward-looking information, there may be other factors that cause results not to be as anticipated, estimated, or intended. There can be no assurance that such statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. Accordingly, readers should not place undue reliance on forward-looking statements and forward-looking information. Readers are cautioned that reliance on such information may not be appropriate for other purposes. The Company does not undertake to update any forward-looking statement, forward-looking information or financial out-look that are incorporated by reference herein, except in accordance with applicable securities laws.