Boardwalk Lithium Brine Project Update on - 5,973,000 Tonnes (LCE) - Inferred Mineral Resource Estimate

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VANCOUVER, May 31, 2022 - LithiumBank Resources Corp. (“LithiumBank”) (TSX-V: LBNK) is pleased to provide a corporate update and summary to the NI 43-101 Inferred Mineral Resource Estimate of 5,973,000 tonnes of lithium carbonate equivalent (LCE) at the 100 percent owned Boardwalk Lithium Brine Project (“Boardwalk” or the “Project”), formerly known as the Sturgeon Lake Lithium Brine Project (Table 1). The Project is located in west-central Alberta, approximately 85 km east of the City of Grande Prairie and 270 km northwest of the City of Edmonton (Figure 1). The full report can be accessed on the LithiumBank website at www.lithiumbank.ca.

The Sturgeon Lake oil and gas field, where Boardwalk’s contiguous 794,509 acres land position overlays, was first discovered in 1952. Since then, various petroleum companies have developed a strong foundation of social and physical infrastructure in the area. This history of continuous hydrocarbon extraction resulted in an established well trained labor force, networks of all-weather gravel roads, drill sites that can be accessed from Provincial highways, and electrical transmission lines that run through and adjacent to the project (see Figure 1).

“The Boardwalk project represents an enormous opportunity to help fulfill North America’s EV and storage requirements by providing a significant contiguous lithium brine resource with exceptional infrastructure and tremendous jurisdictional advantages.” states Independent Director, Paul Matysek and former Executive Chairman of Lithium One and Lithium X. “Furthermore, advances in Direct Lithium Extraction methodologies continue to grow in leaps and bounds and bodes well for unlocking the full potential of this project.”

LithiumBank has used a wealth of historical oil and gas drilling and seismic data in completing a maiden NI 43-101 Inferred Mineral Resource Estimate dated May 18, 2021. Over 550 oil & gas wells have been previous drilled into the Leduc formation on the Company’s Boardwalk project by previous and current petro-operators, 65 of which have been historically sampled for Leduc formation brine between 2010-2019 (Figure 1). These historical brine sampling programs show that the lithium content in the Leduc Formation aquifer is homogeneous with respect to lithium content over the investigated reservoir portions of the ~50 km long reef complex.

A 3-D closed solid polygon wireframe of the Leduc Formation aquifer domain was used to calculate the volume of the Leduc Formation rock, or the aquifer volume. The aquifer volume underlying the Boardwalk project, summarized as the total Leduc Formation domain aquifer volume, is of 321.99 km3.

The brine volume is calculated for the Leduc Formation aquifer domain, or resource area, by multiplying the aquifer volume times the average porosity times the percentage of brine assumed within the pore space. Using an average porosity value of 5.3% and the average modal abundance of brine in the Leduc formation pore space percentage of 98%, the Leduc Formation aquifer domain brine volume is over 16,720,000,000 cubic meters (16.72 km3).

An average Leduc Formation aquifer brine lithium concentration of 67.1 mg/L Li was selected for the resource estimation calculation. This value was determined from a lithium assay database of 61 ICP-OES analyses. The Li-brine resource was estimated using a cut-off grade of 50 mg/L lithium.

The Boardwalk Leduc formation Li-brine inferred resource is globally estimated at 1,122,000 tonnes of elemental Li at an average lithium concentration of 67.1 mg/L Li in 16.7 km3 of formation brine volume (Table 1). The global (total) lithium carbonate equivalent (LCE) for the inferred mineral resource is 5,973,000 tonnes LCE at an average grade of 67.1 mg/L Li.

Mineral resources are not mineral reserves and do not have demonstrated economic viability. There is no guarantee that all or any part of the mineral resource will be converted into a mineral reserve. LithiumBank has retained Hatch Ltd. to provide expertise in reviewing and selecting a DLE technology. This review process is designed to sort through the many DLE providers and select the most effective providers to conduct DLE test work. LithiumBank is currently working with three DLE providers in parallel. Results of this test work will be implemented by Hatch into the Preliminary Economic Assessment scoping study that is

currently underway and expected be completed in Q3 2022.

Table 1 Boardwalk (Sturgeon Lake) Leduc Formation Li-brine NI 43-101 inferred resource estimate presented as a global (total) resource.

Reporting parameter	Leduc Formation Reef Domain
Aquifer volume	321.99 (km3)
Brine volume	16.72 (km3)
Average lithium concentration	67.1 (mg/L)
Average porosity	5.3 (%)
Average brine in pore space	98.0 (%)
Total elemental lithium resource	1,122,000 (tonnes)
Total lithium carbonate equivalent	5,973,000 tonnes (LCE)

Note 1: Mineral resources are not mineral reserves and do not have demonstrated economic viability. There is no guarantee that all or any part of the mineral resource will be converted into a mineral reserve. The estimate of mineral resources may be materially affected by geology, environment, permitting, legal, title, taxation, socio-political, marketing, or other relevant issues.
Note 2: The weights are reported in metric tonnes (1,000 kg or 2,204.6 lbs.).
Note 3: Tonnage numbers are rounded to the nearest 1,000 unit.
Note 4: In a 'confined' aquifer (as reported herein), porosity is a proxy for specific yield.
Note 5: The resource estimation was completed and reported using a cut-off of 50 mg/L Li.
Note 6: In order to describe the resource in terms of industry standard, a conversion factor of 5.323 is used to convert elemental Li to Li2CO3, or Lithium Carbonate Equivalent (LCE).

The Technical Reports senior author and QP is not aware of any significant issues or inconsistencies that would cause one to question the validity of the historical assay data for use in resource estimates. The method of sample collection, preparation, security, and analytical techniques of the historical brine sampling work relates to industry standards for Li-brine exploration in deep-seated confined aquifers.

The NI 43-101 compliant technical report titled: NI 43-101 Technical Report, Inferred Resource Estimate on LithiumBank Resources Corp.'s Boardwalk (Sturgeon Lake) Lithium-Brine Property in West-Central Alberta, Canada, with effective date 18 May 2021, Prepared by D. Roy Eccles M.Sc., P. Geol., Jim Touw B.Sc. P. Geol., and Charles R. Edwards M.Sc. P. Eng., can be downloaded at www.sedar.com or at www.lithiumbank.ca.

The Boardwalk Lithium Brine Project consists of 28 Alberta Metallic and Industrial Mineral ("MIM") permits. Since the effective date of the NI 43-101, LithiumBank has acquired addition MIM permits contiguous to the Boardwalk Project for exploration proposes into other, potentially favourable carbonate reef formations for a current total of 40 MIM permits covering an area of 794,509 acres.

Furthermore, LithiumBank formed a brine access agreement with the major petro-operator in control of the Sturgeon Lake South and Sturgeon Lake North oilfields on May 14, 2021. The agreement permits LithiumBank to obtain brine from the existing oil and gas infrastructure for the purpose of exploration work (i.e., assaying, and mineral processing test work).

Since the technical report, LithiumBank has collected four 20 m3 brine samples (80 m3 total) of Leduc Formation brine from selected wells in the south Sturgeon Lake oilfield (Figure 1). Brine sample results will increase the sample density within the known resource area providing greater confidence when preparing a future resource estimate. The four samples are currently undergoing a rigorous quality control and quality assurance (QA/QC) program as part of due diligence. Results will be reported as they are available. Portions of these brine samples are also being tested with various third-party Direct Lithium Extraction (DLE) companies.

LithiumBank has retained Hatch Ltd. to provide expertise in reviewing and selecting a DLE technology. This review process is designed to sort through the many DLE providers and select the most effective providers to conduct DLE test work. LithiumBank is currently working with three DLE providers in parallel. Results of this test work will be implemented by Hatch into the Preliminary Economic Assessment scoping study that is currently underway and expected be completed mid-2022.

Qualified Person

The Qualified Person responsible for the preparation of the May 18, 2021, Inferred Mineral Resource

Estimate for the Sturgeon Lake Sturgeon Lake Lithium Brine Project is Roy Eccles, P. Geol. of APEX Geoscience Ltd. Mr. Eccles is independent of LithiumBank Resources Corp. and the Boardwalk (Sturgeon Lake) Property for purposes of NI 43-101. Mr. Eccles has reviewed, and approved, the technical content in this News Release.

About LithiumBank Resources Corp.

LithiumBank Resources Corp. is an exploration and 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 3.2 million acres of mineral titles, 2.82M acres in Alberta and 326K 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 (Sturgeon Lake) Lithium Brine Project.

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Figure 1: Map of Sturgeon Lake Lithium Brine Project, West-central Alberta with historical brine samples and wells sampled by LithiumBank is available at
https://www.globenewswire.com/NewsRoom/AttachmentNg/a3784c13-7067-4191-82df-dc139c5f9539