OWL ANNOUNCES ENGAGEMENT WITH UNIVERSITY OF BRITISH COLUMBIA AND THE UNIVERSITY OF CALIFORNIA IRVINE TO EXPAND ITS R&D TESTING TOWARDS DLCE PILOT PLANT

VANCOUVER, BC – June 4, 2026 - One World Lithium Inc. (CSE-OWLI) (the "Company" or "OWL") is pleased to announce that it has engaged the University of British Columbia ("UBC") and the University of California, Irvine ("UCI") to work alongside with Moleaer Inc. ("**Moleaer**") the global leader in nanobubble technology to continue and accelerate the Research and Development ('R & D") work on the Company's single-step Direct Lithium Carbonation Extraction ("**DLCE"**) Technology.

Moleaer is in the process of assembling two separate Nanobubble Generators for shipping to the Universities along with the additional equipment required to continue the DLCE test work with the objective of advancing the technology towards the design and construction of a containerize pilot plant for field testing of lithium in a brine. This equipment is expected to be delivered within the next 6 to 8 weeks for set up in the two labs to begin the DLCE test work.

Scope of Work

Primary Project Goals - Advancing Toward Pilot-Scale Development

A statement of work has now been completed that outlines the focus of work to be carried out by UBC & UCI. The first phase of the R&D work is on continued validation and optimization of the DLCE process, which uses a nanobubble extraction process using carbon dioxide (CO_2) to separate lithium from brines with the objective of advancing towards the design and construction of a pilot plant for field testing. The pilot system is intended to demonstrate the potential for direct production of lithium carbonate from natural brines.

In parallel with lithium carbonate production, UBC & UCI will also be evaluating the potential recovery or co-production of additional industrial carbonates from brine, including sodium, calcium, magnesium and potassium. These materials, if successfully recovered at scale, could represent incremental revenue streams and improve overall project economics.

The second phase of the laboratory work is to complete test work on lithium clay to create an effective lithium slurry to validate the DLCE technology to produce a lithium carbonate from the clay slurry under a variety of conditions. This process would enable lithium carbonate generation directly from slurries made from clays, without requiring sulfuric acids, soda ash, sorbents, and multiple concentration steps.

University of British Columbia

The UBC team will be led by Dr. Alex Tavasoli, an assistant professor in UBC's Department of Mechanical Engineering who will oversee the design and fabrication of the testing facilities for the extraction of lithium carbonate and other metals from brine using OWL's proprietary CO2 nanobubble extraction processes.

Dr. Alex Tavasoli received her BASc in Chemical Engineering and PhD in Materials Science and Engineering, both from the University of Toronto, and completed her postdoctoral training at the Massachusetts Institute of Technology in Chemical Engineering. She joined the University of British Columbia (UBC) as an Assistant Professor in 2024. Her research group, the Laboratory of Future Industry (LoFI) conducts holistic research into the design, optimization, scale-up, and commercialization of novel sustainable industrial production processes and energy systems that rely on various interfacial phenomena for their performance.

Prior to joining UBC, she held roles in New Product Introductions at Agfa, in the CleanTech practice at the MaRS Discovery District, and ran a start-up company called Solistra that aimed to scale up solar-driven chemical processes. She has received a number of Canadian CleanTech industry awards including being named a Clean50 Emerging Leader.

University California Irvine

The UCI team will be led by Dr James Earthman, a professor from the University of California, Irvine, who will also

oversee the design and fabrication of the testing facilities for the extraction of lithium carbonate and other metals from brine using OWL's proprietary CO_2 nanobubble extraction processes.

Dr. James Earthman is a Professor of Materials Science and Engineering and Biomedical Engineering at the University of California, Irvine. He received his B.S. degree in Materials Science from Rice University and his M.S. and Ph.D. degrees in Materials Science and Engineering from Stanford University. Prof. Earthman's research activities include studies of a broad range of deformation and damage mechanisms in both man-made and biological materials, the development of systems for novel quantitative diagnostics of material characteristics and integrity, and the management of materials using nanobubbles. In 2022, he was a Distinguished Summer Faculty Fellow at the Naval Research Laboratory in Washington, DC for his research on nanobubbles. He has authored and co-authored over 120 peer-reviewed research publications including two chapters on biomaterials and tissue engineering, two chapters in materials handbooks published by ASM International. He has also served as editor for three books in the fields of Materials Science and

Biomedical Engineering. He is an inventor on 16 issued US patents, several international patents and pending US patents. He is also co-founder of Perimetrics, Inc., a diagnostic device company headquarters in Seattle, WA. In 2023, he was elected Fellow of ASM International.

Doug Fulcher, President, CEO comments:

"We are extremely pleased to have such a talented team working with us in advancing OWL's DLCE technology. We believe that under the direct supervision of Dr. Earthman with his background in research and management of materials using nanobubbles and Dr. Tavasoli's back ground in chemical engineering and industrial production processing and alongside the expertise of Moleaer' s nanobubble team we are in a position to fast track our DLCE process for lithium and other critical mineral extraction from brine and complete the construction of a container size test plant in a timely manner."

Process Advantages Under Evaluation

Unlike traditional methods that typically produce lithium intermediates requiring additional downstream chemical processing to generate lithium carbonate, the Company's objective is to produce lithium carbonate directly in a single-step process.

Carbon Utilization and Environmental Considerations

By integrating carbon dioxide in the separation chemistry and minimizing chemical inputs and concentration stages, OWL expects, subject to further testing, reduced environmental impacts, lower capital and operating costs, and potential carbon credit opportunities pending pilot validation.

About One World Lithium

One World Lithium Inc. is developing proprietary lithium extraction technologies and pursuing strategic partnerships to commercialize lower-impact, scalable lithium production from brines and clay slurries. For more information, visit: https://oneworldlithium.com/.

On behalf of the Board of Directors of One World Lithium Inc.,

"Doug Fulcher"

President and Chief Executive Officer

For further information please visit www.oneworldlithium.com or email info@oneworldlithium.com or call 604-564-2017 Ext 3.

Forward-Looking Information: This press release may include forward-looking information and forward-looking statements within the meaning of applicable Canadian securities legislation. Such forward-looking information includes, without limitation, statements relating to future plans, objectives, expectations, estimates and projections. Forward-looking information is based on certain material expectations and assumptions made by management of the Company, including, but not limited to: (I) the ability of OWL to further develop its DLCE technology with UBC & UCI, including its potential applicability to lithium extraction, and (II) OWL's ability to advance toward a pilot-site and potential commercialization of its lithium extraction technologies. Although OWL believes that the expectations and assumptions on which such forward-looking information is based are reasonable, there can be no assurance that such expectations or assumptions will prove to be correct, and undue reliance should not be placed on such forward-looking information. Forward-looking information is subject to a number of risks and uncertainties that could cause actual results and future events to differ materially from those anticipated in such forward-looking information. Such risks and uncertainties include, but are not limited to: (I) the inability of OWL to commercialize its DLCE technology, (II) OWL's inability to execute its business plan or raise additional financing as required, (III) risks and market fluctuations common to the mining industry and the lithium sector in particular, and (IV) advancements in competing lithium extraction or direct lithium extraction technologies. The reader is cautioned that assumptions used in the preparation of forward-looking information may prove to be incorrect, and that events or circumstances may cause actual results to differ materially from those predicted, as a result of numerous known and unknown risks, uncertainties and other factors, many of which are beyond the control of OWL. All forward-looking information contained in this press release is made as of the date hereof, and OWL does not undertake any obligation to update or revise any forward-looking information, whether as a result of new information, future events or otherwise, except as required by applicable securities laws. The reader is cautioned not to place undue reliance on forward-looking information contained in this press release.

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