



## **Management's Discussion and Analysis**

**FOR THE YEAR ENDED JUNE 30, 2022**

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# STANDARD LITHIUM LTD.

## Management's Discussion and Analysis

For the Year Ended June 30, 2022

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### INTRODUCTION

The following management's discussion and analysis ("MD&A") for Standard Lithium Ltd. was prepared by management based on information available as of September 19, 2022 and it should be reviewed in conjunction with the audited consolidated financial statements and related notes thereto of the Company for the year ended June 30, 2022. The financial statements have been prepared in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board ("IASB"). All dollar figures are expressed in Canadian dollars unless otherwise stated. These documents and additional information on the Company are available on SEDAR at [www.sedar.com](http://www.sedar.com).

References in this MD&A to "Standard Lithium", "Standard", "SLI" and "the Company" mean Standard Lithium Ltd., unless the context clearly requires otherwise.

Additional information related to the Company, including the Company's AIF (as defined below), is available under the Company's SEDAR profile at [www.sedar.com](http://www.sedar.com).

### FORWARD-LOOKING INFORMATION

Except for statements of historical fact, this MD&A contains certain "forward-looking information" within the meaning of applicable Canadian securities legislation and "forward-looking statements" within the meaning of the United States Private Securities Litigation Reform Act of 1995 (collectively referred to herein as "forward-looking information"). The statements relate to future events or the Company's future performance. All statements, other than statements of historical fact, may be forward-looking information. Information concerning mineral resource and mineral reserve estimates also may be deemed to be forward-looking information in that it reflects a prediction of mineralization that would be encountered if a mineral deposit were developed and mined. Forward-looking information generally can be identified by the use of words such as "seek", "anticipate", "plan", "continue", "estimate", "expect", "may", "will", "project", "predict", "propose", "potential", "target", "intend", "could", "might", "should", "believe", "scheduled", "implement" and similar words or expressions. These statements involve known and unknown risks, uncertainties and other factors that may cause actual results or events to differ materially from those anticipated in such forward-looking information.

In particular, this MD&A contains forward-looking information, including, without limitation, with respect to the following matters or the Company's expectations relating to such matters: the Company's planned exploration and development programs (including, but not limited to, plans and expectations regarding advancement, testing and operation of the lithium extraction pilot plant); commercial opportunities for lithium products; delivery of studies; filing of technical reports; expected results of exploration; accuracy of mineral or resource exploration activity; accuracy of mineral reserves or mineral resources estimates, including the ability to develop and realize on such estimates; whether mineral resources will ever be developed into mineral reserves, and information and underlying assumptions related thereto; budget estimates and expected expenditures by the Company on its properties; regulatory or government requirements or approvals; the reliability of third party information; continued access to mineral properties or infrastructure; payments and share issuances pursuant to property agreements; fluctuations in the market for lithium and its derivatives; expected timing of the expenditures; performance of the Company's business and operations; changes in exploration costs and government regulation in Canada and the United States; competition for, among other things, capital, acquisitions, undeveloped lands and skilled personnel; changes in commodity prices and exchange rates; currency and interest rate fluctuations; the Company's funding requirements and ability to raise capital; geopolitical instability; war (such as Russia's invasion of Ukraine); the continued impact of the COVID-19 outbreak, including with regard to the health and safety of the Company's workforce; COVID-19 protocols and their efficacy and impacts on timelines and budgets; and other factors or information.

Forward-looking information does not take into account the effect of transactions or other items announced or occurring after the statements are made. Forward-looking information is based upon a number of expectations and assumptions and is subject to a number of risks and uncertainties, many of which are beyond the Company's control, that could cause

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actual results to differ materially from those that are disclosed in or implied by such forward-looking information. With respect to forward-looking information listed above, the Company has made assumptions regarding, among other things: current technological trends; ability to fund, advance and develop the Company's properties; the Company's ability to operate in a safe and effective manner; uncertainties with respect to receiving, and maintaining, mining, exploration, environmental and other permits; pricing and demand for lithium, including that such demand is supported by growth in the electric vehicle market; impact of increasing competition; commodity prices, currency rates, interest rates and general economic conditions; the legislative, regulatory and community environments in the jurisdictions where the Company operates; impact of unknown financial contingencies; market prices for lithium products; budgets and estimates of capital and operating costs; estimates of mineral resources and mineral reserves; reliability of technical data; anticipated timing and results of operation and development; inflation; war (such as Russia's invasion of Ukraine); and the impact of COVID-19 on the Company and its business. Although the Company believes that the assumptions and expectations reflected in such forward-looking information are reasonable, the Company can give no assurance that these assumptions and expectations will prove to be correct. Since forward-looking information inherently involves risks and uncertainties, undue reliance should not be placed on such information.

Forward-looking information involves known and unknown risks, uncertainties and other factors that may cause the actual results, performance or achievements of the Company to be materially different from any future results, performance or achievements expressed or implied by the forward-looking information. Such factors include, but are not limited to: general economic conditions in Canada, the United States and globally; industry conditions, including the state of the electric vehicle market; governmental regulation of the mining industry, including environmental regulation; geological, technical and drilling problems; unanticipated operating events; competition for and/or inability to retain drilling rigs and other services and to obtain capital, undeveloped lands, skilled personnel, equipment and inputs; the availability of capital on acceptable terms; the need to obtain required approvals from regulatory authorities; uncertainties associated with estimating mineral resources and mineral reserves, including uncertainties relating to the assumptions underlying mineral resource and mineral reserve estimates; whether mineral resources will ever be converted into mineral reserves; uncertainties in estimating capital and operating costs, cash flows and other project economics; liabilities and risks, including environmental liabilities and risks inherent in mineral extraction operations; health and safety risks; risks related to unknown financial contingencies, including litigation costs, on the Company's operations; unanticipated results of exploration activities; unpredictable weather conditions; unanticipated delays in preparing technical studies; inability to generate profitable operations; restrictive covenants in debt instruments; lack of availability of additional financing on terms acceptable to the Company; intellectual property ("IP") risk; stock market volatility; volatility in market prices for commodities; liabilities inherent in the mining industry; inflation risks; risks related to war (such as Russia's invasion of Ukraine); the development of the COVID-19 global pandemic; changes in tax laws and incentive programs relating to the mining industry; other risks pertaining to the mining industry; conflicts of interest; dependency on key personnel; and fluctuations in currency and interest rates, as well as those factors discussed in the section entitled "Risk Factors" in the Company's annual information form for the year ended June 30, 2022 (the "AIF").

Although the Company has attempted to identify important factors that could cause actual actions, events or results to differ materially from those described in forward-looking information, there may be other factors that cause actions, events or results to differ from those anticipated, estimated or intended.

Readers are cautioned that the foregoing lists of factors are not exhaustive. All forward-looking information in this MD&A speaks as of the date of this MD&A. The Company 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 law. All forward-looking information contained in this MD&A is expressly qualified in its entirety by this cautionary statement. Additional information about these assumptions and risks and uncertainties is contained in the Company's filings with securities regulators, including the Company's most recent AIF, which are available on SEDAR at [www.sedar.com](http://www.sedar.com) and EDGAR at [www.sec.gov](http://www.sec.gov).

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### CAUTIONARY NOTES TO U.S. INVESTORS CONCERNING RESOURCE ESTIMATES

This MD&A has been prepared in accordance with the requirements of the securities laws in effect in Canada, which differ from the requirements of the U.S. securities laws. In particular, and without limiting the generality of the foregoing, the terms "mineral reserve", "proven mineral reserve", "probable mineral reserve", "inferred mineral resources," "indicated mineral resources," "measured mineral resources" and "mineral resources" used or referenced in this MD&A are Canadian mineral disclosure terms as defined in accordance with National Instrument 43-101 – *Standards of Disclosure for Mineral Projects* ("**NI 43-101**") under the guidelines set out in the 2014 Canadian Institute of Mining, Metallurgy and Petroleum Standards for Mineral Resources and Mineral Reserves, Definitions and Guidelines, May 2014 (the "**CIM Standards**"). The CIM Standards differ significantly from the mineral property disclosure requirements of the U.S. Securities and Exchange Commission (the "**SEC**") in Regulation S-K Subpart 1300 (the "**SEC Modernization Rules**") under the U.S. Securities Act of 1933, as amended (the "**Securities Act**").

As a foreign private issuer that is eligible to file reports with the SEC pursuant to the multi-jurisdictional disclosure system, the Company is not required to provide disclosure on its mineral properties under the SEC Modernization Rules and will continue to provide disclosure under NI 43-101 and the CIM Standards. Accordingly, the Company's disclosure of mineralization and other technical information may differ significantly from the information that would be disclosed had the Company prepared the information under the standards adopted under the SEC Modernization Rules.

### SUMMARY OF STANDARD LITHIUM'S BUSINESS

Standard is an innovative technology and lithium development company focused on the sustainable development of a portfolio of lithium-brine bearing properties in the United States utilizing proprietary Direct Lithium Extraction ("**DLE**") and purification technologies.

The Company's flagship project is located in southern Arkansas, where it is engaged in the testing and proving of commercial viability of lithium extraction from over 150,000 acres of permitted brine operations (the "**LANXESS Property**") in an effort to bring the first new U.S. based lithium project in six decades into commercial production. The Company operates its first-of-a-kind industrial-scale DLE demonstration plant (the "**Demonstration Plant**") at global specialty chemicals company, Lanxess Corporation's ("**LANXESS**") south plant facility in southern Arkansas (collectively, the "**LANXESS Property Project**"). The Demonstration Plant utilizes the Company's proprietary LiSTR technology to selectively extract lithium from brine that is a byproduct of existing bromine production facilities run by LANXESS. The Demonstration Plant is being used for proof-of-concept and commercial feasibility studies. The Company is also pursuing the resource development of over 27,000 acres of separate brine leases located in southwest Arkansas (the "**South-West Arkansas Project**" (formerly known as the "**TETRA Project**"), and together with the LANXESS Property Project, the "**Arkansas Lithium Project**"). In addition, the Company has an interest in certain mineral leases located in the Mojave Desert in San Bernardino county, California.

Standard was incorporated under the laws of the Province of British Columbia on August 14, 1998 under the name "Tango Capital Corp." Effective April 7, 1999, Tango Capital Corp. changed its name to "Patriot Capital Corp." Effective March 5, 2002, Patriot Capital Corp. changed its name to "Patriot Petroleum Corp." At its annual general and special meeting of shareholders held on November 3, 2016, the shareholders of the Company approved a change of name of the Company to "Standard Lithium Ltd." and to the continuance of the Company from the *Business Corporations Act* (British Columbia) to the *Canada Business Corporations Act*. On December 1, 2016, completed the name change and continuation.

Standard is listed on the TSX Venture Exchange and trades under the symbol "SLI", on the NYSE American, LLC ("**NYSE American**") under the symbol "SLI" and on the Frankfurt Stock Exchange under the symbol "SSL". The Company is a reporting issuer in British Columbia, Alberta, Saskatchewan, Manitoba, Ontario, New Brunswick, Nova Scotia, Prince Edward Island and Newfoundland and files its continuous disclosure documents with the Canadian Securities Authorities in such provinces. Such documents are available on SEDAR at [www.sedar.com](http://www.sedar.com).

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The Company's corporate office is located at Suite 110, 375 Water Street, Vancouver, British Columbia, V6B 5C6 and its registered office is located at Suite 2200, 885 West Georgia Street, Vancouver, British Columbia, V6C 3E8.

### HIGHLIGHTS FOR THE YEAR ENDED JUNE 30, 2022

- On June 17, 2022, the Company entered into a master services agreement (the "**MSA**") with Telescope Innovations Corp. ("**Telescope**"), a related party of the Company. Under the MSA, Telescope will provide to the Company various laboratory and research services for the purpose of developing new technologies. The Company will fund an initial project for one year under the MSA, which will aim to evaluate the utilisation and sequestration of CO<sub>2</sub> within the lithium brine extraction and reinjection processes developed by the Company. This project works towards the decarbonization of the lithium supply chain and continues to strategically deploy Telescope's tools and expertise across the chemical industry. The Company incurred \$755,533 of costs related to this agreement during the year ended June 30, 2022.
- On May 12, 2022, the Company announced an equity investment of \$3,113,991 (NOK 23.3 million) into Aqualung Carbon Capture AS ("**Aqualung**"), a leader in carbon capture technology.
- On May 2, 2022, the Company announced the commencement of a pre-feasibility study ("**PFS**") at the South-West Arkansas Project.
- On February 24, 2022, the Company announced that it had entered into an amended and restated memorandum of understanding dated February 23, 2022 (the "**Amended and Restated MOU**") with LANXESS to streamline and expedite the development of the first commercial lithium project in Arkansas to be constructed at the LANXESS Property Project.
- On January 20, 2022, the Company provided an update with respect to project and other related developments including, but not limited to, the announcement that the SiFT lithium carbonate plant, previously installed in Q3 2021, had been successfully commissioned and used to produce battery quality lithium carbonate at plant.
- On December 15, 2021, the Company announced that it signed a letter of intent with Koch Engineered Solutions ("**KES**") for support with pre-FEED at the Company's proposed first commercial plant located at the LANXESS facility in southern Arkansas.
- On November 30, 2021, the Company closed on a direct private placement by Koch Strategic Platforms ("**KSP**"), a subsidiary of Koch Investments Group, comprising 13,480,083 common shares in the capital of the Company (each, a "**Share**") at price of \$9.43 (approximately US\$7.42) for aggregate gross proceeds of approximately \$127,070,000 (approximately US\$100,000,000) (the "**Direct Investment**"). In connection with the Direct Investment, the parties entered into a subscription agreement dated November 23, 2021 pursuant to which Standard granted KSP the right of first offer to participate in future equity financings for a period of sixty months and certain registration rights. In connection with the Direct Investment, the Company paid a cash commission of US\$5,000,000 and issued 336,877 Share purchase warrants (each, a "**Warrant**"). Each Warrant is exercisable to acquire one Share at an exercise price of \$11.09 per Share until November 30, 2023.
- On November 25, 2021, the Company filed a preliminary economic assessment ("**PEA**") and updated inferred mineral resource for its South-West Arkansas Project.
- On July 20, 2021, the Company appointed Dr. Volker Berl as an independent director of the Company.
- On July 15, 2021, the Company announced delivery of its SiFT lithium carbonate plant to the El Dorado Arkansas project site located at the LANXESS south plant facility.

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### EVENTS SUBSEQUENT TO THE YEAR ENDED JUNE 30, 2022

- On September 7, 2022, the Company announced that it had completed the front-end engineering design ("**FEED**") and definitive feasibility study ("**DFS**") selection process for the LANXESS Property Project and awarded the contract to OPD LLC, a Koch-owned business based in Katy, Texas.

### PROJECT OVERVIEW

Standard Lithium currently has the following projects:

#### ARKANSAS LITHIUM PROJECT

The Arkansas Lithium Project consists of two main areas of interest. The first is pursuant to the TETRA 1st Option Agreement (as defined below) to acquire certain rights to conduct brine exploration and production and lithium extraction activities on approximately 27,262 net acres of brine leases and deeds located in Columbia and Lafayette Counties, Arkansas. The terms and conditions of the TETRA 1st Option Agreement are set forth below. The second is pursuant to the Amended and Restated MOU with LANXESS to streamline and expedite the development of the first commercial lithium project in Arkansas to be constructed at the LANXESS Property. The Amended and Restated MOU replaces the previous memorandum of understanding dated May 9, 2018 (the "**LANXESS MOU**") as among the Company, LANXESS and its U.S. affiliate, Great Lakes Chemical Corporation, and subsequent term sheet dated November 9, 2018 (the "**LANXESS JV Term Sheet**") for a contemplated joint venture with LANXESS regarding the testing and proving of commercial viability of lithium extraction from brine that is produced as part of LANXESS' bromine extraction business at its three facilities in Union County, southern Arkansas. It is a matter of public record that LANXESS operates approximately 150,000 acres of brine leases in southern Arkansas via three unitized areas.

#### *TETRA 1st Option Agreement*

The Company entered into an option agreement on December 29, 2017 (the "**TETRA 1st Option Agreement**") with Tetra Technologies Inc. ("**TETRA**") to acquire certain rights to conduct brine exploration and production and lithium extraction activities on approximately 27,262 brine acres located in Columbia and Lafayette Counties, Arkansas. Thereunder, the Company will be required to: pay TETRA US\$500,00 by January 28, 2018 (paid), US\$600,000 by December 29, 2018 (paid), US\$700,000 by January 31, 2020 (paid) and US\$750,000 by December 29, 2020 (paid); and pay additional annual payments of US\$1,000,000 by each annual anniversary date beginning on the date that is 48 months following the date of the TETRA 1st Option Agreement, until the earlier of the expiration of the Exploratory Period or, if the Company exercises the option, the Company beginning payment of the Royalty. During the Lease Period, at any time following the commencement of Commercial Production, the Company agreed to pay a royalty of 2.5% (minimum royalty US\$1,000,000) to TETRA.

#### *Amended and Restated MOU*

The Company entered into the Amended and Restated MOU on February 23, 2022 with LANXESS to streamline and expedite the development of the first commercial lithium project in Arkansas to be constructed at the LANXESS Property. Under the terms of the Amended and Restated MOU, the Company will control all development of the LANXESS Property Project leading up to and including the completion of the FEED study, which will ultimately inform a feasibility study prepared in accordance with NI 43-101.

The Amended and Restated MOU contemplates a phased development of the LANXESS Property Project as follows:

- Within six (6) months of the execution of the Amended and Restated MOU, Standard is to commence work on a feasibility study in accordance with NI 43-101 describing the technical and economic criteria by which the feasibility of the development of a commercial scale plant to produce commercial quantities of lithium, including battery-grade lithium, located at the LANXESS Property (the "**Commercial Plant**") shall be determined;

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- Within twelve (12) months of the execution of the Amended and Restated MOU, Standard shall complete the feasibility study;
- Within twelve (12) months of the execution of the Amended and Restated MOU, the relevant parties will have entered into certain agreements including, but not limited to, with respect to tail brine supply and disposal, offtake, site lease at the LANXESS Property, service agreements, development agreements, license agreements and, if agreed to by the parties, an operations and maintenance agreement; provided, however, that such agreements shall be conditioned upon the occurrence of Standard obtaining construction financing (the **"Commercial Plant Financing"**); and
- Within eighteen (18) months of the execution of the Amended and Restated MOU, Standard will have made a decision to proceed with the Commercial Plant Financing and proceed under applicable engineering, procurement and construction contracts for the Commercial Plant.

If the relevant timeframes are not met, subject to certain notice requirements thereafter, the applicable parties will be entitled in certain circumstances to cancel the Amended and Restated MOU.

Under the Amended and Restated MOU, Standard is to incorporate a wholly-owned Company to own the Commercial Plant (the **"Project Company"**). Upon a feasibility study being furnished to LANXESS and a schedule for a Commercial Plant Financing, Standard will offer to LANXESS an election to acquire up to a 49% and not less than 30% equity interest in the Project Company at a price equal to a ratable share of Standard's aggregate investment in the Project Company.

If LANXESS acquires an ownership interest in the Project Company, LANXESS will be responsible for a ratable portion of funding obligations of the Project Company relating to the Commercial Plant. Provided LANXESS acquires an ownership interest in the Project Company, LANXESS will have the right to purchase and take from the Commercial Plant up to 100% of the lithium output at market-based terms less a handling fee. If LANXESS does not acquire an ownership interest, the Company will own 100% of the LANXESS Property Project including customary dividends, distribution or similar rights. In the event that LANXESS does not accept the offer for an equity interest in the Project Company, the Company can, if it so chooses, elicit bids from other interested parties to buy the up to 49% interest in the Project Company offered to LANXESS provided that such sale is on terms and at a price, taken as a whole, that are no more favourable to such third party than those specified to LANXESS. Where LANXESS does not take up the equity interest in the Project Company, LANXESS will have the right to purchase and take from the Commercial Plant up to 100% of the lithium output at market-based terms minus up to 20%.

LANXESS and the Company have also agreed that development of the second and third projects on the LANXESS Property will be on a joint basis and that the parties will perform the same roles using similar contractual structures as the first LANXESS Property Project. LANXESS will also have the right to purchase the lithium carbonate offtake from the additional projects upon market-based terms to be agreed by LANXESS and Standard, taking into consideration other commercial agreements required for their development (e.g., site leases, brine supply/disposal etc.).

The Company will also retain 100% ownership of its South-West Arkansas Project, all of the proprietary extraction technologies, relevant IP and know-how. Under the terms of the Amended and Restated MOU, LANXESS will have certain offtake rights with respect to the sale of lithium output produced by a lithium carbonate production project located in the Smackover Formation in Arkansas owned by Standard using the same extraction technology and IP as at the Commercial Plant.

In addition to those circumstances set out above, under the Amended and Restated MOU both parties will be entitled to terminate the Amended and Restated MOU in certain circumstances including, but not limited to, Standard ceasing to hold a 50% or more equity interest of the Project Company and certain competitors of the parties acquiring an interest in the parties.

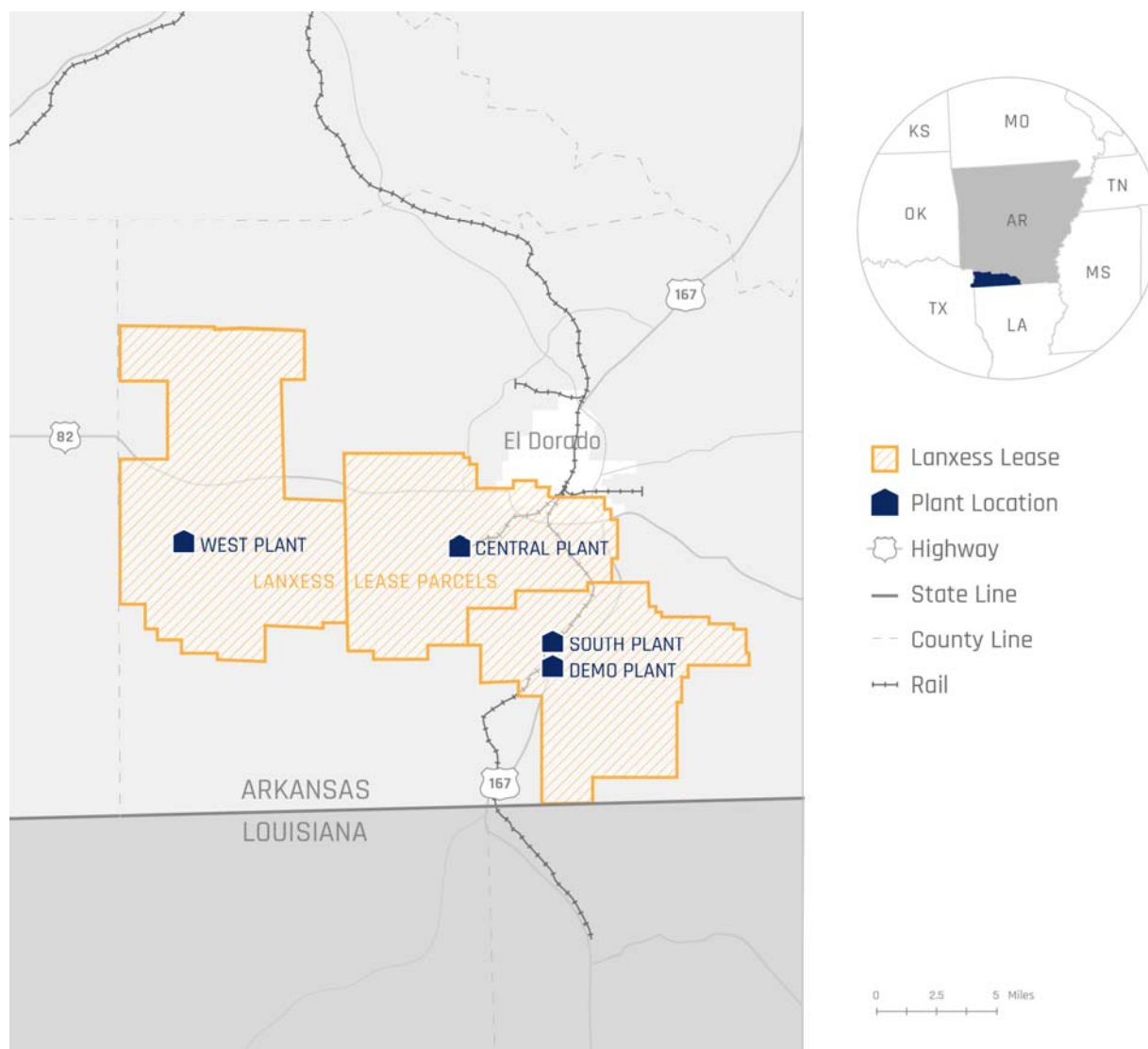
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The Amended and Restated MOU replaces the LANXESS MOU and LANXESS JV Term Sheet, which previously set out the basis on which the parties had agreed to cooperate in a phased process towards developing commercial opportunities related to the production, marketing and sale of battery grade lithium products that may be extracted from tail brine and brine produced from the Smackover Formation. In particular, the Amended and Restated MOU expressly acknowledges execution of certain agreements with respect to the Demonstration Plant and payment of the reservation of rights fee, paid by Standard to LANXESS in two (2) equal installments of US\$3,000,000.

### THE LANXESS PROPERTY PROJECT



- 10 kilometers from El Dorado, Arkansas, a geo-politically low-risk, business-friendly, low-cost location.
- One of the largest lithium projects in the U.S. with a 3.14 million tonnes ("Mt") lithium carbonate equivalent ("LCE") indicated mineral resource.
- Strategic partnership with global chemical major LANXESS, the operator of the largest brine processing operations in North America.



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- 150,000-acre brownfield project that leverages existing commercial brine operations to fast-track production.
- Currently testing and proving the commercial viability of lithium extraction using DLE technology that extracts, concentrates and purifies lithium from the brine by-product of the existing LANXESS bromine production.
- Minimal environmental footprint that leverages existing industrial site and infrastructure and DLE technology.
- Strong stakeholder and community support.
- Targeted production of 20,900 t per year ("**tpy**") of lithium carbonate.
- Operating costs of US\$4,319 per tonne battery quality ("**BQ**") lithium carbonate.
- Estimated capital expenditures of US\$437 million including 25% contingency.

Please refer to the technical report titled "Preliminary Economic Assessment of LANXESS Smackover Project" dated August 1, 2019 (the "**LANXESS PEA**"), as filed on the Company's SEDAR profile at [www.sedar.com](http://www.sedar.com) for further information with respect to the LANXESS Property Project.

### LANXESS Property Project Background & Outlook

South Arkansas is a region that has been extracting minerals from brine since the late 1950s.

The Smackover Formation – a limestone aquifer that extends approximately 1,000 kilometers from central Texas to Florida and runs through south Arkansas – has been developed for oil and gas production for over 100 years and is one of the world's largest commercial brine resources. It is very productive for brine because it is highly porous and permeable, which allows for massive volumes of brine to be pumped, processed and reinjected. For more than 60 years, bromine has been the primary mineral extracted from this brine; however, it is also rich in lithium.

LANXESS, a specialty chemicals company based in Cologne, Germany, currently operates the largest brine extraction and processing operations in south Arkansas, that includes three operating brine processing facilities – the South, Western and Central plants. Each plant has its own brine supply and disposal pipeline network and bromine processing (separation) infrastructure.

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In 2018, Standard Lithium and LANXESS signed the LANXESS MOU to test and prove the commercial viability of extracting lithium from brine ("**tail-brine**") at LANXESS's bromine extraction operation (see AIF for more information about the LANXESS Property Project information including history, ownership, geology and mineralization). The LANXESS MOU has since been replaced by the Amended and Restated MOU.

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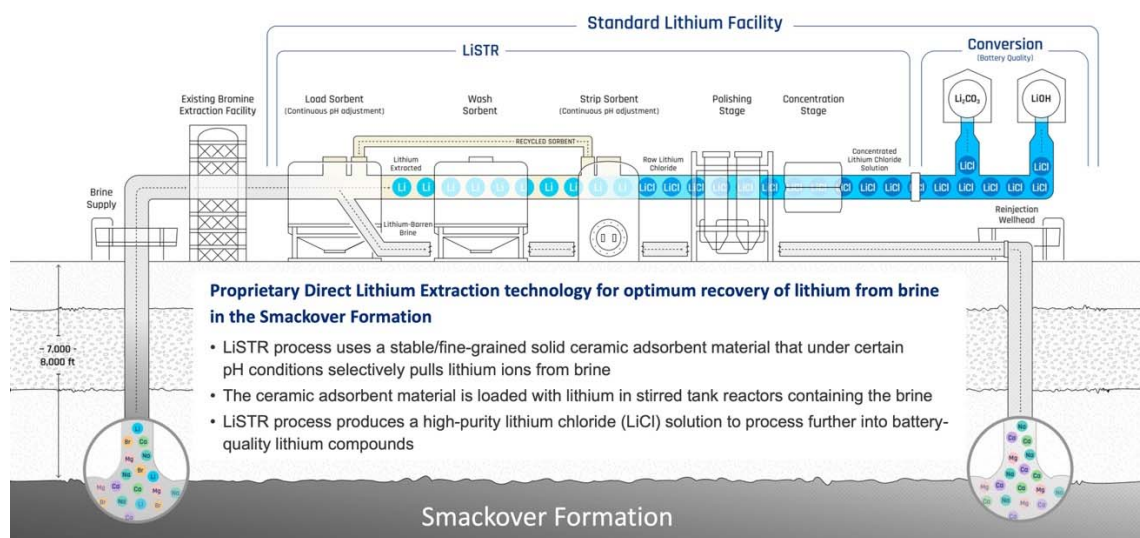
In May 2020, the Company commissioned its industrial-scale DLE Demonstration Plant at LANXESS' South Plant. The Demonstration Plant, which is the first-of-its-kind in the world, utilizes the Company's proprietary DLE technology to extract lithium from LANXESS's post bromine extraction tail brine.

After LANXESS extracts the bromine from the brine, Standard Lithium removes the lithium from the tail brine using the Company's proprietary DLE lithium stirred tank reactor ("**LiSTR**") process. This is a very efficient process that produces a high-purity lithium chloride ("**LiCl**") solution for further processing into battery-quality lithium carbonate or lithium hydroxide.

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The highly automated, three-story Demonstration Plant includes an integrated office and control room, as well as a process-specific analytical laboratory where the tail brine quality, lithium concentration, and reagents used are all closely measured and monitored.

At the Demonstration Plant, there are several stages of washing, thickening and stripping to produce raw lithium chloride solution. This solution is then polished to produce an extremely high purity dilute lithium chloride which is then concentrated using a reverse osmosis process. The high purity lithium chloride can be sent to the Company's on-site carbonation pilot plant or off-site to a third party using an original equipment manufacturer ("OEM") technology to produce lithium carbonate.

In March 2021, the Company announced the successful conversion of lithium chloride solution produced from the Demonstration Plant into 99.985% pure lithium carbonate using OEM technology.

The Company entered into the Amended and Restated MOU on February 23, 2022 with LANXESS to streamline and expedite the development of the first commercial lithium project in Arkansas to be constructed at the LANXESS Property. Under the terms of the Amended and Restated MOU, the Company will control all development of the LANXESS Property Project leading up to and including the completion of the FEED study, which will ultimately inform a feasibility study prepared in accordance with NI 43-101.

The objective is to produce battery-grade lithium carbonate from all three of the LANXESS plant facilities. Each facility will have its own primary plant that will produce purified and concentrated lithium chloride solutions. These solutions will be conveyed, via pipelines, to one location (the Central Plant) for further processing to the final product – lithium carbonate.

The Company anticipates that development of the LANXESS Property Project will be done in stages. The first stage involves constructing a commercial lithium extraction and conversion facility directly adjacent to the LANXESS south plant. A 60-acre site for the first plant has been identified, and lease agreements are being negotiated.



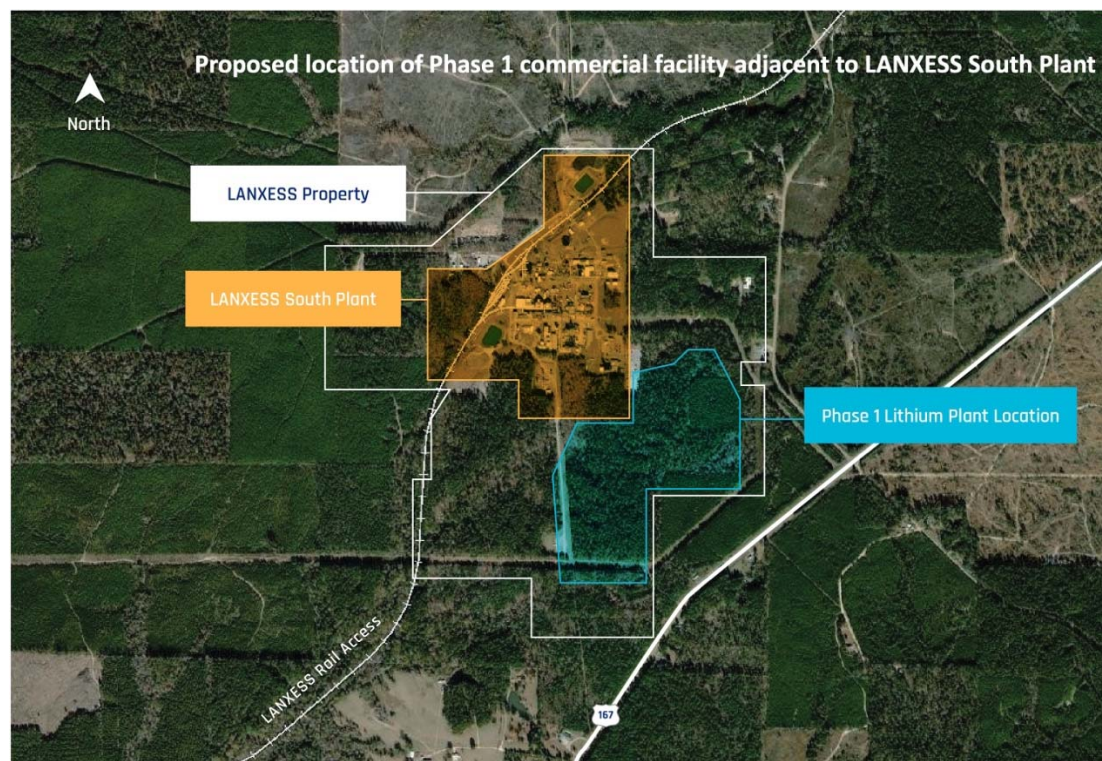
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The Company has filed two NI 43-101 technical reports for the LANXESS Property Project:

- In November 2018, the first mineral resource estimate was filed and comprised an inferred mineral resource estimate for lithium contained in brine.
- In August 2019, the Company filed the LANXESS PEA, which comprised an upgraded indicated mineral resource estimate for the LANXESS Property, as well as a PEA for proposed commercial plants at the LANXESS Property.

On December 15, 2021, the Company announced that it signed a letter of intent with KES for support with pre-FEED at the Company's proposed first commercial plant located at the LANXESS facility in southern Arkansas.

On September 7, 2022, the Company announced that it had completed the FEED and DFS selection process for the LANXESS Property Project and awarded the contract to OPD LLC, a Koch-owned business based in Katy, Texas. The completed FEED and DFS are expected to be completed in Q1 2023. A final investment decision is expected to follow, and construction on the first Commercial Plant, adjacent to the Demonstration Plant, would begin soon after. The Company intends on expending additional funds during the upcoming year to advance the LANXESS Property Project.

### Strong Partnerships Key to Success

The partnership between Standard Lithium and LANXESS allows the Company to demonstrate the commercial viability of the DLE process. By connecting to LANXESS's existing permitted operations, the Company is saving both significant time and infrastructure costs.

On December 1, 2021, the Company closed on the Direct Investment by KSP, a subsidiary of Koch Investments Group, for aggregate gross proceeds of approximately \$127,070,000 (approximately US\$100,000,000). This investment supports the Company's efforts to:

- Rapidly advance the first commercial DLE project in North America at the LANXESS facility;

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- Accelerate and expand the development of the Company's South-West Arkansas Project;
- Continue to develop and commercialize modern lithium extraction and processing technologies, and work collaboratively with KES businesses; and
- Allow for strategic project expansion.

### LANXESS Property Project Economics

The LANXESS Project economics are favorable because of the project's location in the Gulf Coast of the United States. A 2.2-gigawatt powerplant just outside El Dorado is one of the largest combined-cycle-gas power plant in the U.S. A number of the principal reagents used at the LANXESS Project can be sourced locally because they used by the regions bromine producers.

The discounted cash flow economic analysis, at a discount rate of 8%, indicates that the LANXESS Property Project is economically viable under the base case conditions. Key economic indicators include – net present value ("NPV") of US\$989.4 million (post-tax) and internal rate of return ("IRR") of 36% (post-tax) – are very positive.

The project economics assumed a three-year rolling average price of US\$13,550/t for the lithium carbonate product. The results for IRR and NPV from the assumed CAPEX, OPEX and price scenario at full production, are presented in the table below.

#### Economic Evaluation – Case 1 (Base Case) Summary

Overview	Units	Values	Comments
Production	tpy	20,900	At completion of Phase 3 production
Plant Operation	years	25	From the start of Phase 1 production
Capital Cost (CAPEX)	US\$	437,162,000	
Annual Operating Cost (OPEX)	US\$	90,259,000	
Average Selling Price	US\$/t	13,550	
Annual Revenue	US\$	283,195,000	
Discount Rate	%	8	
Net Present Value (NPV) Post-Tax	US\$	989,432,000	
Net Present Value (NPV) Pre-Tax	US\$	1,304,766,000	
Internal Rate of Return (IRR) Post-Tax	%	36.0	
Internal Rate of Return (IRR) Pre-Tax %	%	41.8	

Please refer to the AIF and the technical report titled "Preliminary Economic Assessment of LANXESS Smackover Project" dated August 1, 2019 (the "LANXESS PEA"), as filed on the Company's SEDAR profile at [www.sedar.com](http://www.sedar.com) for further information with respect to the LANXESS Property Project.

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# STANDARD LITHIUM LTD.

## Management's Discussion and Analysis

For the Year Ended June 30, 2022

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### Environmental

Standard Lithium is committed to responsibly producing sustainable lithium chemicals that support the transition to a lower carbon economy.

The first phase of the LANXESS Property Project will not require any new brine supply or injection wells, and most of the major infrastructure – roads, rail, power and water – already exists. This, plus the use of DLE technology, results in a much smaller footprint than the conventional evaporation pond process and hard-rock lithium mining operation. The LANXESS Property Project is in a large, existing industrial area where timber harvesting, oil and gas and brine industries have been operating for decades. Because the LANXESS Property Project has a small footprint and is on private property, the permitting process is expected to be straightforward.

To demonstrate its commitment to minimizing CO<sub>2</sub> emissions from future operations and supply chain activities, in September 2021, Standard Lithium began working with Aqualung – a leader in carbon capture technology – on a pilot project to capture CO<sub>2</sub> emissions and permanently sequester them. In May 2022, the Company announced an equity investment of \$2,500,000 into Aqualung. The Company also signed a MSA with Telescope in June 2022 to evaluate the ability to sequester CO<sub>2</sub> within the lithium brine extraction and reinjection process.

### Social Responsibility and Community Relations

Although DLE is a new technology, there are decades worth of industry experience and understanding of environmental and regulatory requirements when pumping and reinjecting brine in south Arkansas.

The community is supportive of the brine extraction industry, and the local workforce is highly skilled and qualified for the jobs needed at the LANXESS Property Project. South Arkansas Community College in El Dorado supports skills development by offering courses in critical areas such as chemical processing, industrial engineering and automation controls. The Company currently employs approximately 30 engineers, operators, technicians and administrative staff who live in the nearby communities.

In May 2022, Standard Lithium partnered with Entergy, Adopt a Charger, and South Arkansas Community College on the installation of the six Level 2 – 240 volt EVCS charging stations, free for public use, located near the Murphy Arts District in downtown El Dorado, Arkansas.

### Expenditures and Operating Costs

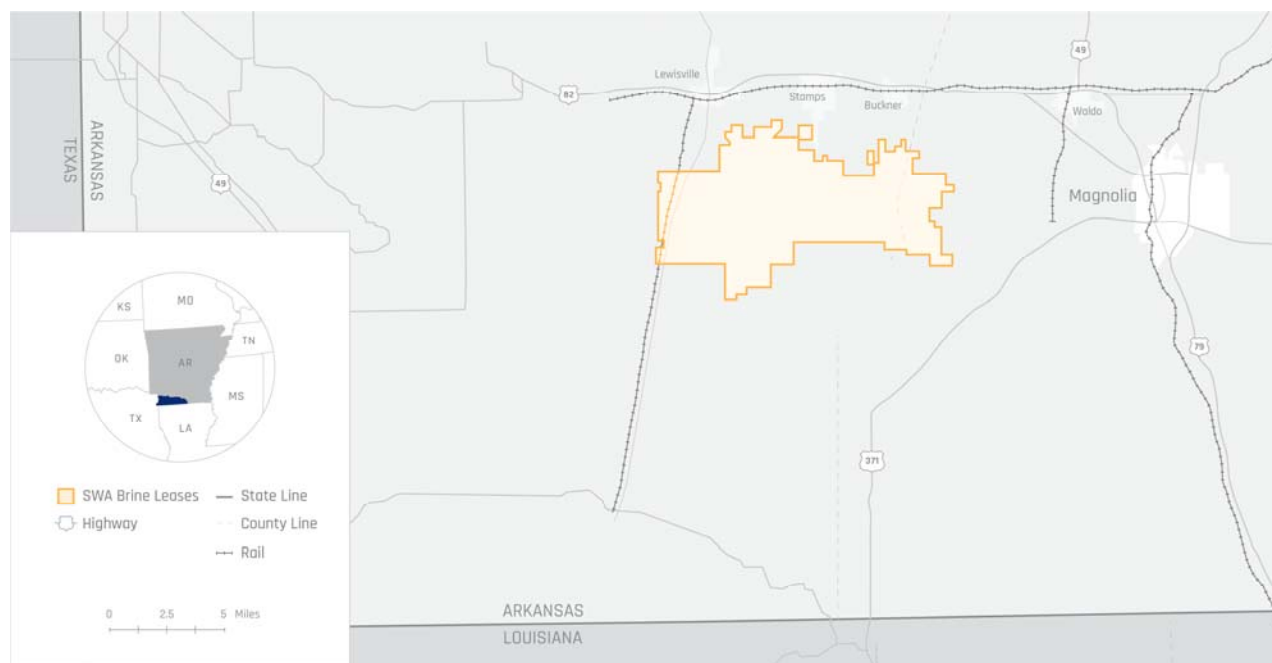
Expenditures for the LANXESS Property Project consist of operating costs for the Demonstration Plant which for the year ended June 30, 2022 were \$9,907,473 (June 30, 2021 - \$4,596,156). Operating costs for the Demonstration Plant for Q4 2022 were \$4,136,665 (Q4 2021 - \$1,523,934). The increase in the Company's operating costs for the Demonstration Plant for the year ended June 30, 2022 and Q4 2022 was predominantly due to an increase in the hours the Demonstration Plant operated, increased testing activity and associated increases in the costs of reagents, supplies and utilities.

# STANDARD LITHIUM LTD.

## Management's Discussion and Analysis

For the Year Ended June 30, 2022

### SOUTH-WEST ARKANSAS PROJECT



- 40 kilometers west of the LANXESS Property Project.
- 27,262-net mineral acres greenfield project.
- 1.195 Mt lithium carbonate equivalent inferred mineral resource.
- Lithium grade between 132 and 461 milligrams per liter (mg/L) or parts per million.
- Filed PEA in November 2021 and commenced the preliminary feasibility study (“PFS”) in May 2022.
- US\$2.8 billion pre-tax NPV.
- Targeted 30,000 tonne per annum BQ lithium hydroxide monohydrate (“LHM”).
- Operating costs of US\$2,599 per tonne of BQ LHM.
- Capital expenditures of US\$870 million including 25% contingency on direct capital costs.

Please refer to the technical report titled “Standard Lithium Ltd. Preliminary Economic Assessment of SW Arkansas Lithium Project” dated November 20, 2021 (the “**South-West Arkansas PEA**”), as filed on the Company’s SEDAR profile at [www.sedar.com](http://www.sedar.com) for further information with respect to the South-Arkansas Project.

### South-West Arkansas Project Background & Outlook

In December 2017, Standard Lithium entered into the TETRA 1st Option Agreement with TETRA to acquire certain rights to conduct brine exploration and production and lithium extraction activities on approximately 27,262 brine acres located in Columbia and Lafayette Counties, Arkansas. As noted above, the leases and deeds held by TETRA which the Company



# STANDARD LITHIUM LTD.

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acquired under the TETRA 1st Option Agreement provided the Company makes applicable annual payments comprise the South-West Arkansas Project.

The South-West Arkansas Project is approximately 40 km from the LANXESS Property Project and shares the long history of oil and gas drilling and nearby brine extraction. There are 2,041 exploration and production wells in or immediately adjacent to the South-West Arkansas Project. A portion of these wells had available petro-physical logs of the Smackover Formation brine-bearing zone. Around 14 additional wells have core reports with porosity and permeability data.

In August 2018, the Company announced the analysis of four brine samples recovered from two existing wells in the South-West Arkansas Project area. These samples reported lithium concentrations ranging between 347 to 461 mg/L lithium, with an average of 450 mg/L lithium in one of the wells, and 350 mg/L in the other – all higher grades than that of the LANXESS Property Project.

The Company has filed two NI 43-101 technical reports for the South-West Arkansas Project:

- In March 2019, the first mineral resource estimate was filed and comprised an inferred mineral resource estimate for lithium contained in brine.
- In November 2021, the Company filed the South-West Arkansas PEA, which comprised an updated inferred mineral resource estimate for a unitized property, as well as a PEA for the proposed commercial plant at the property.

On May 2, 2022, the Company announced the commencement of a PFS at the South-West Arkansas Project.

The Company anticipates elevating the South-West Arkansas Project to a higher level of mineral resource classification and project definition. The Company will be collecting additional brine samples and conducting additional testing, modeling and analysis. Following the completion of the PFS (which is expected in early 2023), a DFS will commence. The Company intends on expending funds during the upcoming year to advance the South-West Arkansas Project.

### South-West Arkansas Project Economics

The discounted cash flow economic analysis, at a discount rate of 8%, indicates that the South-West Arkansas Project is economically viable. The key economic indicators – an NPV of US\$1.965 million (post-tax) and IRR of 32.1% (post-tax) – are very positive.

The South-West Arkansas Project economics assumed a selling price of battery quality LHM based on an initial price of US\$14,500/tonne in 2021, adjusted for inflation at 2% per annum. The results for IRR and NPV from the assumed CAPEX, OPEX and price scenario at full production, are presented in the table below.

#### Economic Evaluation Summary

Description	Units	Values
Average Annual Production (as LiOH•H <sub>2</sub> O)	tpa <sup>[1]</sup>	30,000 <sup>[2]</sup>
Plant Operation	years	20
Total Capital Cost (CAPEX)	US\$	869,868,000 <sup>[3]</sup>
Operating Cost (OPEX) per year	US\$/yr	77,972,000 <sup>[4]</sup>
OPEX per tonne	US\$/t	2,599
Initial Selling Price	US\$/t	14,500 <sup>[5]</sup>
Average Annual Revenue	US\$	570,076,000 <sup>[6]</sup>
Discount Rate	%	8.0
Net Present Value (NPV) Pre-Tax	US\$	2,830,190,000
Net Present Value (NPV) Post-Tax	US\$	1,965,427,000

# STANDARD LITHIUM LTD.

## Management's Discussion and Analysis

For the Year Ended June 30, 2022

Description	Units	Values
Internal Rate of Return (IRR) Pre-Tax	%	40.5
Internal Rate of Return (IRR) Post-Tax	%	32.1

Notes:

All model outputs are expressed on a 100% project ownership basis with no adjustments for project financing assumptions

[1] Metric tonnes (1,000 kg) per annum

[2] Total production for years 1 to 15 is 30,666 tpa LHM and 28,000 tpa LHM for years 16 to 20

[3] AACE Class 5 estimate includes 25% contingency on direct capital costs

[4] Includes all operating expenditures, ongoing land costs, established Royalties, sustaining capital and allowance for mine closure. All costs are escalated at 2% per annum

[5] Selling price of battery quality LHM based on an initial price of \$14,500/t in 2021, adjusted for inflation at 2% per annum. Sensitivity analysis modelled the starting price between US\$12,500-US\$16,500/t.

[6] Average annual revenue over projected 20 year mine-life.

### South-West Arkansas Project Related Risks and Uncertainties

As with any development project there exists potential risks and uncertainties. The Company will attempt to reduce risk/uncertainty through effective project management, engaging technical experts and developing contingency plans. See the Company's AIF with respect to highlights of risks and uncertainties which have been identified at this stage of project development.

### Expenditures

Expenditures for the South-West Arkansas Project consist of exploration and development costs which for the year ended June 30, 2022 were \$1,442,241 (June 30, 2021 - \$408,853) and for Q4 2022 were \$562,753 (Q4 2021 - \$179,227). The increase in the exploration and development costs for the South-West Arkansas Project for the year ended June 30, 2022 and Q4 2022 was primarily due to an increase in exploration activity initiated by the Company during these periods.

### CALIFORNIA LITHIUM PROJECT

The Company's California lithium property (the "California Lithium Project") is located in San Bernardino County, California approximately 150 miles east-northeast of Los Angeles. The California Lithium Project comprises 55 (fifty-five) unpatented placer mining claims located on Bristol Dry Lake adjacent to Amboy, California. The claims cover a total of approximately 4,020 acres on federal lands controlled by the Bureau of Land Management. As public lands, there is free right of access within the restrictions of special land designations. Both surface and mineral rights are held by the Federal government. The Company's acquired its interests in the overall land package through a series of commercial agreements.

The California Lithium Project is subject to a technical report titled "Technical Report on the Mojave Lithium Property, San Bernardino County, California, USA" dated September 13, 2016 with an effective date of September 13, 2016 (the "California Technical Report") and is available under the Company's SEDAR profile at [www.sedar.com](http://www.sedar.com).

Following the initial California Technical Report for the California Lithium Project, and subsequent to the various commercial agreements that allowed the Company to access and explore most parts of the Bristol Dry Lake Playa, the Company has completed several phases of exploration and process testing work consisting of geophysical surveys, drilling and sampling, test-pitting and sampling, completion of evaporation pond performance testing and other water level surveys.

As of the date of this MD&A, this data has not been integrated into an updated technical report for the California Lithium Project, however, the Company does intend on completing the necessary work to complete an updated technical report. The Company does not currently have a timeframe for when this work, and the technical report, will be completed.

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# STANDARD LITHIUM LTD.

## Management's Discussion and Analysis

For the Year Ended June 30, 2022

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### SCIENTIFIC AND TECHNICAL INFORMATION

The scientific and technical information contained in this MD&A has been reviewed and approved by Steve Ross, P. Eng., Senior Project Manager of the Company, who is a "qualified person" as defined in NI 43-101.

### SHARE ISSUANCES

On November 30, 2021, the Company closed a non-brokered private placement of 13,480,083 common shares at a price of \$9.43 per share (approximately US\$7.42) for aggregate gross proceeds of approximately \$127,070,000 (approximately US\$100,000,000). In connection with the closing of the private placement, the Company paid a cash finders' fee of \$6,384,050, issued 336,877 finders' warrants with a fair value of \$2,211,663 and incurred \$450,942 of additional share issuance costs. All shares and finders' warrants were restricted for resale until March 31, 2021. The fair value of the finders warrants was calculated using the Black-Scholes option pricing model using an annualized volatility of 83%, a risk-free interest rate of 0.92%, a dividend rate of 0%, an expected life of 2 years and a share price on grant date of \$13.23.

On March 29, 2022, the Company issued 60,235 Shares with a fair value of \$500,000 to Stifel Nicolaus Canada in consideration for advisory services provided to the Company in connection with the finalisation of terms for the joint venture relationship with LANXESS, which occurred on February 23, 2022.

On April 25, 2022, the Company issued 400,000 common shares with a fair value of \$3,240,000 to TETRA Technologies, Inc.

On May 24, 2022, the Company issued 200,000 common shares with a fair value of \$1,380,000 to National Chloride.

During the year ended June 30, 2022, the Company issued a total of 6,684,892 common shares for the exercise of share purchase warrants for gross proceeds of \$7,389,127.

During the year ended June 30, 2022, the Company issued a total of 4,410,784 Shares for the exercise of stock options. The Company received proceeds of \$8,517,711 and reclassified \$4,106,212 from reserves to share capital upon exercise.

Subsequent to June 30, 2022, the Company issued 150,000 Shares for the exercise of stock options. The Company received proceeds of \$112,500.

### STOCK OPTION GRANTS

On July 20, 2021, the Company granted 200,000 stock options to a director of the Company with an exercise price of \$6.08 for a period of 5 years. All the stock options vested at grant.

On February 14, 2022, the Company granted 500,000 stock options to consultants of the Company at a price of \$7.55 for a period of 3 years with the stock options vesting one quarter at grant, one quarter at three months from grant date, one quarter at six months from grant date and one quarter at nine months from grant date.

On March 7, 2022, the Company granted 200,000 stock options to a consultant of the Company at a price of \$6.31 for a period of 5 years with the stock options vesting one quarter three months from grant date, one quarter six months from grant date, one quarter at nine months from grant date and one quarter at one year from grant date.

On March 17, 2022, the Company granted 170,000 stock options to consultant of the Company at a price of \$8.25 for a period of 5 years with the stock options vesting one quarter on May 17, 2022, one quarter on June 17, 2022, one quarter on September 17, 2022 and on December 17, 2022.

# STANDARD LITHIUM LTD.

## Management's Discussion and Analysis

For the Year Ended June 30, 2022

On April 12, 2022, the Company granted 100,000 stock options to a consultant with an exercise price of \$9.40 for a period of 5 years. One quarter of the stock options vested at grant, one quarter will vest three months from grant date, one quarter will vest six months from grant date and one quarter will vest nine months from grant date.

### SELECTED ANNUAL FINANCIAL INFORMATION

The following table contains a summary of the Company's financial results as reported under IFRS:

	June 30, 2022 \$	June 30, 2021 \$	June 30, 2020 \$
Total revenue	-	-	-
Total assets	183,645,295	74,075,708	57,761,812
Working capital surplus (deficiency)	125,024,698	25,969,236	(2,605,318)
Total non-current financial liabilities	337,295	123,940	5,091,780
Net loss	38,100,312	25,434,376	9,527,368
Net loss per share	0.25	0.21	0.11

### RESULTS OF OPERATIONS

#### *Three months ended June 30, 2022 compared to the three months ended June 30, 2021:*

The Company incurred a net loss of \$6,432,435 for the quarter ended June 30, 2022 ("Q4-2022") compared to a net loss of \$7,080,345 for the quarter ended June 30, 2021 ("Q4-2021"). The primary reason for the decrease in loss was related to decrease in the amortisation of the pilot plant and increased gain on foreign exchange as compared to the same period last year. Management fees incurred during Q4-2022 of \$461,831 were higher than fees incurred during Q4-2021 mainly due to bonus paid to management. Filing and transfer agent fees of \$92,755 were higher than fees of \$40,264 during Q4-2021. The increase is related to the volume of warrant exercises and sustaining fees for NYSE American. Office and administration cost of \$814,015 were higher than the costs of \$200,485 incurred during the comparative quarter due to higher insurance costs, information technology costs and costs related to the set-up of the El Dorado office in Arkansas. Advertising and investor relations costs incurred during Q4-2022 of \$206,678 were higher than costs incurred during Q4-2021 of \$135,763 due to the purchasing of ads. Travel costs of \$168,151 incurred during Q4-2022 was higher than costs of \$26,016 incurred during Q4-2021 due to the restrictions on travel abroad and to the United States being lifted. The share-based payment during the period was \$1,766,011 as compared to \$459,583 recognized in Q4-2021 as share-based compensation. The Company incurred \$Nil of cost associated with a PEA during Q4-2022 with \$194,903 incurred during Q4-2021. The Company incurred \$179,238 of costs related to patent applications as compared to \$116,256 of costs incurred during Q4-2021. The increase in fees relates to the advancement of the applications. Pilot plant operating costs incurred during Q4-2022 of \$4,136,665 was higher than the costs incurred of \$1,523,934 during Q4-2021. The Company incurred \$511,063 of costs associated with the investigation and evaluation of potential new projects for the Company as compared to \$163,416 of costs incurred during Q4-2021.

#### *Twelve months ended June 30, 2022 compared to the twelve months ended June 30, 2021:*

The Company incurred a net loss of \$38,100,312 for the year ended June 30, 2022 ("FY2022") compared to a net loss of \$25,434,376 for the year ended June 30, 2021 ("FY2021"). The primary reason for the increase in loss was amortisation of the pilot plant, costs related to the operation of the pilot plant and project investigation, increased professional fees, consulting fees, management fees, office and administration, travel and increased share-based payments. These increased costs were offset by an increased gain on foreign exchange. Consulting fees increased to \$2,467,072 during FY2022, compared with \$934,479 in FY2021 as a result of additional engagement of consultants to support and advance the company in the next stage of development and the finalization of the LANXESS negotiation, and the addition of the engagement of a lobbyist and the addition of strategic advisors. Management fees of \$2,686,780 during FY2022 increased

# STANDARD LITHIUM LTD.

## Management's Discussion and Analysis

For the Year Ended June 30, 2022

from fees of \$1,526,911 incurred during FY2021 mainly due to a bonus paid to management. Professional fees of \$779,952 were higher than fees of \$711,741 during FY2021. This is mainly due to higher legal fees and audit fees incurred during the period. Filing and transfer agent fees of \$644,988 were higher than fees of \$154,230 during FY2021 mainly due fees related to the volume of warrant exercises and sustaining fees for NYSE American. Office and administration cost of \$2,738,483 were higher than the costs of \$574,275 incurred during the comparative year mainly due to higher insurance costs, information technology costs and costs associated with the set-up of the El Dorado office in Arkansas. Advertising and investor relations costs of \$477,810 were incurred during FY2022 as compared to \$496,230 during FY2021 as the Company continues its efforts to raise awareness of the Company to Canadian and U.S. institutional investors. Travel costs of \$345,952 incurred during FY2022 was higher than costs of \$26,474 incurred during FY2021 due to the restriction of travel abroad and to the United States being loosened up and a trip made by management to the project in Arkansas. The share-based payment during the year was \$4,276,333 as compared to \$4,828,614 recognized in FY2021 as share-based compensation. Pilot plant operating costs incurred during FY2022 of \$9,907,473 was higher than the costs incurred of \$4,596,156 during FY2021. The Company incurred \$87,130 of cost associated with a PEA during FY2022 as compared with costs of \$210,283 incurred during FY2021. The Company incurred \$506,415 of costs related to patent applications as compared to \$269,765 of costs incurred during FY2021.

### SUMMARY OF QUARTERLY RESULTS

The following table presents selected unaudited consolidated financial information for the last eight quarters in accordance with IFRS, stated in Canadian dollars:

Quarter Ended	Total Revenues	Net Income/(Loss)	Earnings/(Loss) Per Share
September 30, 2020	\$Nil	\$ (2,787,507)	\$ (0.04)
December 31, 2020	\$Nil	\$ (5,764,090)	\$ (0.05)
March 31, 2021	\$Nil	\$ (9,802,434)	\$ (0.07)
June 30, 2021	\$Nil	\$ (7,080,345)	\$ (0.05)
September 30, 2021	\$Nil	\$ (9,358,988)	\$ (0.07)
December 31, 2021	\$Nil	\$ (8,567,905)	\$ (0.06)
March 31, 2022	\$Nil	\$ (13,740,984)	\$ (0.08)
June 30, 2022	\$Nil	\$ (6,432,435)	\$ (0.04)

### LIQUIDITY AND CAPITAL RESOURCES

The Company does not have a mineral property in production and consequently does not receive revenue from the sale of lithium-based products. The Company currently has no operations that generates cash flow. The Company has financed its operations primarily through the issuance of share capital. The continued operations of the Company are dependent on its ability to complete sufficient equity financing or generate profitable operations in the future.

As of June 30, 2022, the Company had a working capital surplus of \$125,024,698 compared to a working capital surplus of \$25,969,236 as of June 30, 2021. Cash and cash equivalents at June 30, 2022 totaled \$129,065,348 compared to \$27,988,471 at June 30, 2021. During the year ended June 30, 2022, the Company had a net cash inflow of \$101,076,877. Working capital increased in the current year compared to year ended June 30, 2021 mostly due to the issuance of Shares pursuant to financings and on exercise of warrants and stock options.

During the year ended June 30, 2022, the Company issued 6,684,892 Shares for proceeds of \$7,389,127 upon the exercise of warrants.

During the year ended June 30, 2022, the Company issued a total of 4,410,784 Shares for the exercise of stock options. The Company received proceeds of \$8,517,711 and reclassified \$4,106,212 from reserves to share capital upon exercise.

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# STANDARD LITHIUM LTD.

## Management's Discussion and Analysis

For the Year Ended June 30, 2022

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During the year ended June 30, 2022, the Company issued 600,000 Shares with a value of \$4,620,000 related to property agreements.

During the year ended June 30, 2022, the Company issued 60,235 Shares with a fair value of \$500,000 to Stifel Nicolaus Canada in consideration for advisory services provided to the Company in connection with the finalization of terms for the joint venture relationship with LANXESS, with occurred on February 23, 2022.

Subsequent to June 30, 2022, the Company issued 150,000 Shares with a fair value of \$112,500 upon the exercise of stock options.

Management has determined that the cash resources will be sufficient to continue operations in the short term and additional funding will be required to sustain the Company's ongoing operations. As a result, the Company will continue to attempt to raise funds through equity or debt financing to meet its on-going obligations. There can be no certainty that such additional funds may be raised on a timely basis or on terms acceptable to the Company when required.

Except as disclosed, the Company does not know of any trends, demands, commitments, events or uncertainties that will result in, or that are reasonably likely to result in, its liquidity and capital resources either materially increasing or decreasing at present or in the foreseeable future. The Company does not engage in currency hedging to offset any risk of currency fluctuations.

### LITIGATION MATTERS

On January 27, 2022, a putative securities class action lawsuit was filed against the Company, Robert Mintak, and Kara Norman in the United States District Court for the Eastern District of New York, captioned *Gloster v. Standard Lithium Ltd., et al.*, 22-cv-0507 (E.D.N.Y.) (the "**Action**"). The complaint seeks to certify a class of investors who purchased or otherwise acquired the Company's publicly traded securities between May 19, 2020 and November 17, 2021, and asserts violations of Section 10(b) of the U.S. Securities Exchange Act of 1934, as amended (the "**Exchange Act**") against all defendants and Section 20(a) of the Exchange Act against the individually-named defendants. The complaint alleges, among other things, that during the proposed class period, defendants misrepresented and/or failed to disclose certain material facts regarding the Company's LiSTR DLE technology and "final product lithium recovery percentage" at its DLE Demonstration Plant in southern Arkansas. Plaintiff seeks various forms of relief, including monetary damages in an unspecified amount. The Company intends to vigorously defend against the Action.

# STANDARD LITHIUM LTD.

## Management's Discussion and Analysis

For the Year Ended June 30, 2022

### TRANSACTIONS WITH RELATED PARTIES

Key management personnel are persons responsible for planning, directing and controlling the activities of the entity, and include directors and officers of the Company.

Compensation to key management is comprised of the following:

	June 30, 2022	June 30, 2021
Non-Executive Chair of the Board, Robert Cross (Paloduro Investments Inc.)	\$ 106,997	\$ 81,250
President and Chief Operating Officer, Dr. Andy Robinson (Green Core Consulting Ltd.)	854,321	450,003
Chief Executive Officer, Robert Mintak (Rodhan Consulting & Management Services)	854,317	450,000
Director, Anthony Alvaro (Varo Corp Capital Partners Inc.)	250,000	295,000
Director, Jeffrey Barber (JSB Investments Inc.)	101,930	87,500
Director, Volker Berl (New Age Ventures LLC)	85,587	-
Chief Financial Officer, Kara Norman	433,628	163,158
Share-based payment	940,268	4,072,365
	\$ 3,627,048	\$ 5,599,276

As at June 30, 2022, there is \$287,063 (2021: \$404,296) in accounts payable and accrued liabilities owing to officers of the Company.

As at June 30, 2022, there is \$793,310 (2021: \$Nil) in accounts payable owing to Telescope Innovations Corp.

Amounts due to/from the related parties are non-interest bearing, unsecured and have no fixed terms of repayment.

On June 17, 2022, the Company entered into a Master Services Agreement ("the MSA") with Telescope Innovations Corp. ("Telescope"). Robert Mintak, CEO of the Company and Dr. Andy Robinson, President and COO of the Company are directors of Telescope Innovations Corp. Under the MSA, Telescope will provide various research and development ("R&D") services for the purpose of developing new technologies. The Company will fund an initial project for one year under the MSA, which will aim to evaluate the use of captured CO<sub>2</sub> in the Company's various chemical processes, as well as investigating the potential for permanent geological sequestration of CO<sub>2</sub> within the lithium brine extraction and reinjection processes contemplated by the Company. Other R&D projects may be performed for the Company by Telescope as required. The Company incurred \$755,533 of costs related to this agreement during the year ended June 30, 2022.

### OUTSTANDING SHARE DATA

The authorized capital of Standard Lithium consists of an unlimited number of common shares and preferred shares without par value.

As of the date of this MD&A, there were 166,552,197 Shares issued and outstanding, 10,020,000 stock options and 3,462,502 warrants outstanding. Of the warrants outstanding, 3,125,625 are exercisable to acquire one Share at \$1.20 expiring June 10, 2024, and 336,877 are exercisable to acquire one Share at \$11.09 expiring on November 30, 2023.

# STANDARD LITHIUM LTD.

## Management's Discussion and Analysis

For the Year Ended June 30, 2022

Details of options outstanding and exercisable at the date of this report are as follows:

Exercise Price \$	Number of Shares	Options Outstanding		Options Exercisable	
		Weighted Average Remaining Contractual Life (years)	Weighted Average Exercise Price \$	Number Exercisable	Weighted Average Exercise Price \$
0.75	450,000	0.62	0.75	450,000	0.75
0.76	4,450,000	0.47	0.76	4,450,000	0.76
1.40	1,900,000	0.96	1.40	1,900,000	1.40
2.10	450,000	0.42	2.10	450,000	2.10
3.39	1,200,000	3.33	3.39	1,200,000	3.39
3.43	400,000	1.57	3.43	400,000	3.43
6.08	200,000	3.84	6.08	200,000	6.08
6.31	200,000	4.46	6.31	100,000	6.31
7.55	500,000	2.41	7.55	375,000	7.55
8.25	170,000	4.49	8.25	127,500	8.25
9.40	100,000	4.56	9.40	50,000	9.40
	10,020,000	1.31	2.13	9,702,500	1.95

### OFF-BALANCE SHEET ARRANGEMENTS

The Company does not have any off-balance sheet arrangements that have or are reasonably likely to have a current or future effect on the Company's financial condition, changes in financial condition, revenues or expenses, results of operations, liquidity, capital expenditures or capital resources that are material to investors.

### CRITICAL ACCOUNTING ESTIMATES AND JUDGMENTS

The preparation of financial statements requires management to make judgments, estimates and assumptions that affect the application of policies and reported amounts of assets, liabilities and contingent liabilities as at the date of the financial statements, and the reported amount of revenues and expenses during the reporting period. Estimates and judgments are continuously evaluated and are based on management's experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances. Actual results may differ from these estimates.

### CHANGES IN ACCOUNTING POLICIES

Refer to the notes accompanying the audited consolidated financial statements of the Company for the year ended June 30, 2022 for disclosure of the Company's significant accounting policies and applicable changes.

### FINANCIAL INSTRUMENTS AND RISK MANAGEMENT

The fair value of financial instruments is the amount of consideration that would be agreed upon in an arm's length transaction between knowledgeable, willing parties who are under no compulsion to act. Fair values are determined by reference to quoted market prices, as appropriate, in the most advantageous market for that instrument to which the Company has immediate access. In the absence of an active market, fair values are determined based on prevailing market rates for instruments with similar characteristics.

The fair value of current financial instruments approximates their carrying value as they are short term in nature.



# STANDARD LITHIUM LTD.

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Financial instruments that are held at fair value are categorized based on a valuation hierarchy which is determined by the valuation methodology utilized:

Level 1 – quoted prices (unadjusted) in active markets for identical assets or liabilities.

Level 2 – inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (that is as prices) or indirectly (that is, derived from prices).

Level 3 – inputs for the asset or liability that are not based on observable market data (unobservable inputs).

There were no transfers between Levels 1, 2 or 3 for the year ended June 30, 2022 and the year ended June 30, 2021.

The following table sets forth the Company's financial assets measured at fair value by level within the fair value hierarchy:

June 30, 2022	Level 1	Level 2	Level 3	Total
Cash	\$ 129,065,348	\$ -	\$ -	\$ 129,065,348
Investment in Aqualung Carbon Capture SA	\$ -	\$ 3,221,491	\$ -	\$ 3,221,491

June 30, 2021	Level 1	Level 2	Level 3	Total
Cash	\$ 27,988,471	\$ -	\$ -	\$ 27,988,471

The Company's board of directors has the overall responsibility for the establishment and oversight of the Company's risk management framework. The Company's risk management policies are established to identify and analyze the risks faced by the Company, to set appropriate risk limits and controls, and to monitor risks and adherence to limits. Risk management policies and systems are reviewed regularly to reflect changes in market conditions and in response to the Company's activities. Management regularly monitors compliance with the Company's risk management policies and procedures and reviews the adequacy of the risk management framework in relation to the risks faced by the Company.

In the normal course of operations, the Company is exposed to various risks such as commodity, interest rate, credit and liquidity risk. To manage these risks, management determines what activities must be undertaken to minimize potential exposure to risks. The objectives of the Company in managing risk are as follows:

- maintaining sound financial condition;
- financing operations; and
- ensuring liquidity to all operations.

In order to satisfy these objectives, the Company has adopted the following policies:

- recognize and observe the extent of operating risk within the business; and
- identify the magnitude of the impact of market risk factors on the overall risk of the business and take advantage of natural risk reductions that arise from these relationships.

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For the Year Ended June 30, 2022

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(i) Interest rate risk

The Company does not have any financial instruments which are subject to interest rate risk.

(ii) Credit risk

Credit risk is the risk of loss if counterparties do not fulfill their contractual obligations and arises principally from trade receivables. The Company does not have any financial instruments which are subject to credit risk.

(iii) Liquidity risk

Liquidity risk is the risk that the Company will not be able to meet its financial obligations as they come due. The Company manages this risk by careful management of its working capital to ensure its expenditures will not exceed available resources. As at June 30, 2022, the Company has a working capital surplus of \$125,024,698. The Company is actively engaged in raising additional capital to meet financial obligations.

(iv) Foreign Exchange Risk

Currency risk is the risk to the Company's earnings that arises from fluctuations of foreign exchange rates and the degree of volatility of these rates. The Company does not use derivative instruments to reduce its exposure to foreign currency risk. The Company is exposed to currency risk through the following assets and liabilities denominated in US dollars:

	June 30, 2022	June 30, 2021
	\$	\$
Cash	106,802,040	736,623
Accounts payable	(3,431,920)	(1,520,823)

At June 30, 2022, US Dollar amounts were converted at a rate of USD 1.00 to CAD 1.2886. A 10% increase or decrease in the US Dollar relative to the Canadian Dollar would result in a change of approximately \$10,337,000 (2021: \$78,000) in the Company's comprehensive loss for the year.

### DISCLOSURE CONTROLS AND PROCEDURES

Disclosure controls and procedures are designed to provide reasonable assurance that material information is gathered and reported to management, as appropriate to allow for timely decisions about public disclosure. The Company has disclosure controls and procedures in place to provide reasonable assurance that any information required to be disclosed by the Company under securities legislation is recorded, processed, summarized, and reported within the applicable time periods and that required information is accumulated and communicated to the Company's management, so that decisions can be made about the timely disclosure of that information.

Management has evaluated the effectiveness of the design and operation of the Company's disclosure controls as of June 30, 2022 and concluded that the disclosure controls and procedures were effective.

### INTERNAL CONTROLS OVER FINANCIAL REPORTING

Management is responsible for establishing and maintaining adequate internal controls over financial reporting as such term is defined in the rules of the National Instrument 52-109 – *Certification of Disclosure in Issuers' Annual and Interim Filings* ("NI 52-109") in Canada and Rules 13a-15(f) and 15d-15(f) of the Exchange Act in the United States. The Company's internal controls over financial reporting is designed to provide reasonable assurance regarding the reliability of the Company's financial reporting for external purposes in accordance with IFRS as issued by the IASB.

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Based on the criteria set forth in Internal Control – Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission, the Company's internal controls over financial reporting include:

- (a) Maintaining records, that in reasonable detail, accurately and fairly reflect our transactions and dispositions of the assets of the Company;
- (b) Providing reasonable assurance that transactions are recorded as necessary for preparation of the consolidated financial statements in accordance with IFRS as issued by the IASB;
- (c) Providing reasonable assurance that receipts and expenditures are made in accordance with authorizations of management and the directors of the Company; and
- (d) Providing reasonable assurance that unauthorized acquisition, use or disposition of Company assets that could have a material effect on the Company's consolidated financial statements would be prevented or detected on a timely basis.

Management has evaluated the effectiveness of the internal controls over financial reporting as of June 30, 2022 and concluded that those controls were effective.

### LIMITATION OF CONTROLS AND PROCEDURES

Management believes that any disclosure controls and procedures or internal control over financial reporting, no matter how well designed and operated, have their inherent limitations. Due to those limitations (resulting from unrealistic or unsuitable objectives, human judgment in decision making, human errors, management overriding internal control, circumventing controls by the individual acts of some persons, by collusion of two or more people, external events beyond the entity's control), internal control can only provide reasonable assurance that the objectives of the control system are met.

The design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Due to the inherent limitations in a cost-effective control system, misstatements due to error or fraud may occur and not be detected.

There were no changes in internal controls of the Company during the year ended June 30, 2022 that have materially affected, or are likely to materially affect, the Company's internal control over financial reporting.

### RISK FACTORS

There are a number of risks that may have a material and adverse impact on the future operating and financial performance of the Company and could cause the Company's operating and financial performance to differ materially from the estimates described in forward-looking statements relating to the Company. These include widespread risks associated with any form of business and specific risks associated with the Company's business and its involvement in the lithium exploration and development industry.

Readers are advised to study and consider risk factors disclosed in the Company's AIF for the fiscal year ended June 30, 2022 and available under the Company's profile on SEDAR at [www.sedar.com](http://www.sedar.com).