Management's Discussion and Analysis

FOR THE NINE MONTHS ENDED MARCH 31, 2022

INTRODUCTION

The following management's discussion and analysis ("**MD&A**") for Standard Lithium Ltd. was prepared by management based on information available as at May 12, 2022 and it should be reviewed in conjunction with the unaudited condensed consolidated interim financial statements and related notes thereto of the Company for the nine months ended March 31, 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 Canandian dollars unless otherwise stated. These documents and additional information on the corporation are available on SEDAR at www.sedar.com.

As used in this MD&A, the terms "Standard Lithium" and "the Company" mean Standard Lithium Ltd., unless the context clearly requires otherwise.

FORWARD-LOOKING STATEMENTS

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. 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, commercial opportunities for lithium products, 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, expectations and anticipated 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 statements do 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 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; 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 statements 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 statements. 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 risk; stock market volatility; volatility in market prices for commodities; liabilities inherent in the mining industry; 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 Annual Information Form prepared by the Company for the year ended June 30, 2021.

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 statements, 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.

SUMMARY OF STANDARD LITHIUM'S BUSINESS

Standard Lithium Ltd. ("Standard", the "Company" or "SLI") was incorporated under the laws of the Province of British Columbia on August 14, 1998. At its annual general meeting held on November 3, 2016, the shareholders of the Company approved the 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*
The Company's common shares are listed on the TSX Venture Exchange (the "TSXV") and the NYSE American Stock Exchange under the symbol "SLI", and the Frankfurt Stock Exchange under the symbol "S5L". The Company's head office is located at 375 Water Street, Suite 110, Vancouver, British Columbia, V6B 5C6 Canada.

The Company is 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 has developed a suite of Intellectual Property ("IP") related to novel technologies that can be deployed to either selectively extract lithium from brine or convert and purify intermediate lithium chemicals to higher purity materials.

This IP suite is protected by a series of patent applications, and where the underlying inventor is an associate of, or consultant to Standard, exclusive rights or sole-licensing agreements are in place to allow Standard unfettered access to the patent(s) and associated know-how.

The Company has also either directly secured brine leases from public lands or private landowners, or has partnered, in a variety of commercial relationships, with existing brine resource holders in Arkansas and California.

The Company's immediate attention is on advancing its south Arkansas lithium project towards commercial production. The Company also has an early stage lithium brine project in the Mojave Desert in California

Historical information relating to the formation of the various land packages and commercial agreements are available under the Company's SEDAR profile.

ARKANSAS LITHIUM

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**"). The Company has commissioned its first industrial-scale direct lithium extraction demonstration plant (the "**Demonstration Plant**") at LANXESS' (as defined herein) south plant facility connected to existing LANXESS infrastructure. 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 LiSTR process is capable of producing a high-purity lithium chloride solution for further processing into battery-quality lithium carbonate or lithium hydroxide. The Demonstration Plant is being used for technical and operational, engineering design and commercial feasibility studies. The Company is also pursuing the resource development of over 27,000 acres of separate brine leases and deeds located in southwestern Arkansas (the "**South-West Arkansas Lithium Project**", and together with the LANXESS Property, the "**Arkansas Lithium Project**").

LANXESS PROJECT

On May 9, 2018, the Company announced the signing of a MOU with global specialty chemicals company LANXESS Corporation ("**LANXESS**") and its US affiliate Great Lakes Chemical Corporation, with the purpose of testing and proving the commercial viability of extraction of lithium from brine ("tail-brine") that is produced as part of LANXESS' bromine extraction business at its three Southern Arkansas facilities.

The MOU sets out the basis on which the parties have 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. The MOU forms the basis of what will become a definitive agreement and is binding until the execution of a more comprehensive agreement that the parties

LANXESS PROJECT- CONTINUED

may execute on the completion of further development phases. The Company paid an initial US$3,000,000 reservation fee to LANXESS allowing the Company to: locate and interconnect a lithium extraction demonstration plant at one of LANXESS processing facilities in south Arkansas, secure access to tail-brine produced as part of LANXESS bromine extraction business, cooperate with LANXESS as may be required to operate the demonstration plant with additional fees and obligations due from the Company to LANXESS in the future subject to certain conditions.

In addition, on November 9, 2018, the Company signed the LANXESS JV Term Sheet for a contemplated joint venture to coordinate in the commercial development of lithium extracted from the Smackover Formation in Southern Arkansas. Under the proposed terms of the joint venture, LANXESS would contribute lithium extraction rights and grant access to its existing infrastructure to the joint venture, and Standard Lithium would contribute existing rights and leases held in the Smackover Formation and the pilot plant being developed on the property, as well as its proprietary extraction processes including all relevant intellectual property rights.

On February 23, 2022, an amended and restated MOU was entered into between LANXESS and the Company that streamlines and expedites the plan for development of the first commercial lithium project in Arkansas, which is to be constructed at an operational LANXESS facility in El Dorado, AR. Under the Agreement, the Company will control all development of the Project leading up to and including the completion of the Front-End Engineering and Design ("FEED") study. The Company will hold a minimum 51% majority equity stake in the Project and may retain as much as 100% of the Project. The Company will also retain 100% ownership of its South-West Arkansas Lithium Project, all of the proprietary extraction technologies, relevant intellectual property and know-how.

Under the terms of the Agreement, the Company will form an initially wholly-owned project company that owns 100% of the Project during the pre-FEED and FEED engineering studies (20th January 2022 News Release). The FEED engineering study will produce a NI43-101 Definitive Feasibility Study ("DFS") targeted to be completed in Q4 2022. LANXESS will, via a series of agreements, provide the brine supply for the Project, the Project site lease, and rights of way, infrastructure, and other services for the Project. The Company will provide a market fee-based license to the Project Company of its suite of intellectual property. LANXESS is obliged to support development of the Project and via a series of agreements that are being negotiated, will provide the brine supply for the Project, the Project site lease, and rights of way, infrastructure, and other services to the Project. The Company is able to utilize its intellectual property, extraction technology and know-how at it 100% owned South-West Arkansas Lithium Project, certain other sites in Arkansas and at all project sites outside of Arkansas and will maintain control and ownership over the future development of its IP portfolio. Upon completion of the DFS, LANXESS has the option to acquire an equity interest in the Project Company of up to 49% and not less than 30% at a price equal to a ratable share of the Company's aggregate investment in the Project Company.

If LANXESS acquires an ownership interest, the parties will share the costs of financing construction of the Project on a ratable basis and LANXESS will have the right to acquire some, or all of the lithium carbonate off-take produced at the commercial plant at market-based terms less a handling fee. If LANXESS does not acquire an ownership interest, the Company will own 100% of the Project including customary dividends, distribution, or similar rights. The Company can if it so choses, elicit bids from other interested parties to buy up to 49% of the Project Company and LANXESS will have the right to acquire some, or all of the lithium carbonate off-take produced at the commercial plant at a price of market minus up to 20%, to be agreed by LANXESS and the Company and taking into consideration several key commercial agreements,

including the costs of brine supply and disposal for the Project, the Project site lease cost and rights of way, infrastructure, and other services for the Project.

LANXESS and the Company have also agreed that development of the second and third projects on the LANXESS properties will be on a joint basis and that the parties will perform the same roles using similar contractual structures

LANXESS PROJECT - CONTINUED

as the first Project. LANXESS will also have the right to purchase the lithium carbonate off-take from the additional projects upon market-based terms to be agreed by LANXESS and Standard Lithium, taking into consideration other commercial agreements required for their development (e.g., site leases, brine supply/disposal etc.).

The Company has issued two technical reports for the LANXESS Project. The first Resource Report was filed on the Company's SEDAR profile on November 19, 2018 and comprised an Inferred Resource estimate for lithium contained in brine underlying the LANXESS Property (19th Nov 2018 Inferred Resource report). The second report was a Preliminary Economic Assessment (PEA), filed on August 1, 2019 (link to PEA on SLL's SEDAR page). The PEA comprised an upgraded Indicated Resource estimate for the property, as well as preliminary capital and operational costing and project economics for proposed commercial plants at the property. All information contained within the PEA superseded that which had been previously reported for the LANXESS Project.

As described above, on August 1, 2019, the Company issued the Preliminary Economic Assessment (PEA) for the LANXESS Property and the Executive Summary of this is provided below. The full report is available under the Company's SEDAR profile.

Property Location and Description

The LANXESS Property is located south and west of the City of El Dorado in Union County, AR, U.S.A. The southern and western edges of the Property border the State of Louisiana (LA) and Columbia County, respectively. The Property encompasses Townships 16-19 South, and Ranges 15-18, West of the 5th Meridian (W5M). The Property centre is at UTM 520600 Easting, 3670000 Northing, Zone 15N, NAD83.

Ownership and History

The LANXESS Property is presently owned by LANXESS Aktiengesellschaft (LANXESS), a specialty chemicals company based in Cologne, Germany. Presently, LANXESS is listed in the Dow Jones Sustainability Index and FTSE4Good Index. LANXESS owns 100% of the brine leases and brine rights on their properties, either by an executed brine lease or by operation of law, as a result of unitization by the AOGC. The land package consists of 150,081.81 acres that cover over 607 km^2. Of the total land package, 142,881.81 acres are 'Unitized' and approximately 7,200 acres occur outside the Unit boundaries (Non-Unitized).

Each Unit (South, Central and West) has their own brine supply wells, pipeline network and bromine processing (separation) infrastructure. The facilities and their locations, which are 100% owned and operated by Great Lakes Chemical Corporation, a wholly-owned subsidiary of LANXESS, are as follows:

South Unit (South Plant): 324 Southfield Cutoff, El Dorado, AR 71730;
Central Unit (Central Plant): 2226 Haynesville Highway (HWY 15S), El Dorado, AR 71731; and
West Unit (West Plant): 5821 Shuler Road, Magnolia, AR 71731.

Geology and Mineralization

The authors have reclassified the LANXESS Li-Brine Resource from an Inferred Mineral Resource to an Indicated Mineral Resource in the current Technical Report. The average lithium concentration used in the resource calculation is 168 mg/L Li. Resources have been estimated using a cut-off grade of 100 mg/L lithium. The total Indicated LANXESS Li-Brine Resource for the South, Central and West brine units is estimated at 590,000 tonnes of elemental Li. The total lithium carbonate equivalent (LCE) for the main resource is 3,140,000 tonnes LCE. With a planned level of production of 20,900 tonnes per year (tpy) of LCE, the resources will exceed the planned 25 years of operation by a significant margin. 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.

LANXESS PROJECT - CONTINUED

Recovery Method and Mineral Processing

Standard Lithium's objective is to produce battery-grade lithium carbonate from the tail-brine that exits the LANXESS bromine extraction operations. There are three (3) bromine extraction operations that will be used for lithium extraction (South, Central and West). Each facility will have its own primary lithium chloride extraction plant, which will produce purified and concentrated lithium chloride solutions. These solutions will be conveyed, via pipelines, to one location (Central Plant) for further processing to the final product - lithium carbonate. The total lithium carbonate production is 20,900 tpy based on a lithium recovery of about 90%. The production process parameters in the PEA were supported by bench scale metallurgical testing and mini-pilot plant testing program results.

CAPEX

Capital expenditures are based on an operating capacity of 20,900 tpy of battery grade lithium carbonate. Capital equipment costs have been obtained from in-house data and solicited budget price information. The estimate is compliant to the AACE International Class 5 standard. The accuracy of this estimate is expected to be within a -30% / +50% range.

The production process parameters are supported by bench scale metallurgical testing and mini-pilot plant testing program results.

CAPEX Summary

Stage of Development	Description	Cost (US$)
Phase 1	South Lithium Chloride Plant	106,886,000
	Central Lithium Carbonate Plant – Train № 1	27,711,000
	Pipelines	2,340,000
	Contingency 25%	34,234,000
	Phase 1 Subtotal	171,171,000
Phase 2	West Lithium Chloride Plant	99,393,000
	Central Lithium Carbonate Plant – Train № 2	25,769,000
	Pipelines	3,780,000
	Contingency 25%	32,236,000
	Phase 2 Subtotal	161,178,000
Phase 3	Central Lithium Chloride Plant	66,589,000
	Central Lithium Carbonate Plant – Train № 3	17,261,000
	Contingency 25%	20,963,000
	Phase 3 Subtotal	104,813,000
	CAPEX TOTAL	**437,162,000**

LANXESS PROJECT - CONTINUED

OPEX

Operating expenditures are based on a phased development with an increasing lithium carbonate production capacity: Phase 1: 9,700 tpy, Phase 2: 8,200 tpy, Phase 3: 3,000 tpy. The OPEX summary (rounded to '000) is presented in the table below.

Annual Operating Cost Summary

Description	**Phase 1 (US$)**	**Phase 2 (US$)**	**Phase 3 (US$)**
Manpower	3,745,000	5,680,000	6,710,000
Electrical Power	4,040,000	7,306,000	9,097,000
Reagents & Consumables	30,138,000	55,615,000	64,936,000
Water	496,000	916,000	1,070,000
Natural Gas	582,000	1,074,000	1,254,000
Miscellaneous Direct Expenditures	605,000	1,098,000	1,299,000
Sustaining Capital Cost	1,199,000	2,314,000	3,061,000
Brine Transportation	48,000	123,000	123,000
Land lease	100,000	200,000	300,000
Subtotal	**40,953,000**	**74,326,000**	**87,849,000**
Indirect Operational Expenditures	1,009,000	1,901,000	2,410,000
TOTAL	**41,962,000**	**76,227,000**	**90,259,000**

Note: OPEX per one metric tonne of production is US$4,319.

Economic Analysis

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	At completion of Phase 3 production
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	

LANXESS PROJECT - CONTINUED

Conclusions

- The total Indicated LANXESS Li-Brine Resource is estimated at 3,140,000 tonnes of LCE. The volume of resources will allow the lithium bearing brine extraction operations to continue well beyond the currently assumed 25 years.
- The results of the geological evaluation and resource estimates for the Preliminary Economic Assessment of LANXESS Smackover Project justifies development of the project to further evaluate the feasibility of production of lithium carbonate.
- The experience gained from the long-term operations of the brine extraction and processing facilities on the LANXESS controlled properties decreases the risk related to sustainability of the brine extraction from the Smackover Formation.
- The well-developed infrastructure and availability of a qualified work force will decrease the risks related to construction, and commissioning and operating of the lithium extraction and lithium carbonate processing plants.
- The results of the bench scale testing and mini-plant process testing program increase the level of confidence in the key parameters for the operating cost estimate.
- Improvements made to process efficiency, particularly the reduction of reagents and chemicals consumption, will improve the economics of the Project.
- The discounted cash flow economic analysis, at a discount rate of 8%, indicates that the Project is economically viable under the base case conditions. The key economic indicators, NPV = US$989,432,000 (post-tax) and IRR = 36% (post-tax), are very positive.

Recommendations

- The LANXESS Li-brine resource estimate should be upgraded from the current classification of "Indicated" to "Measured", as classified according to CIM (2014) definition standards.
- The sampling and testing program should be continued to allow for the most updated calculation of the lithium concentration to be used in the resource estimate calculation.
- The testing program should address the opportunities to reduce the usage of reagents for production of lithium chloride to lower the operating cost.
- The large Demonstration Plant scheduled for deployment in late-2019 at the South Plant should be used to collect as much data as possible to inform the next phases of study.
- Complete an evaluation of the SiFT process to produce battery quality lithium carbonate vs. the traditional OEM process used in this PEA.
- On completion of the PEA, the project should progress to a NI 43-101 compliant PFS.

LANXESS Project – Current Status

During 2019, the Company designed and constructed a modular demonstration-scale lithium extraction plant in Ontario, Canada. This Demonstration Plant was mobilized and transported to LANXESS' operational brine processing facility at their South Plant. The initial installation of the plant was completed in mid-October 2019, a semi-permanent structure to enclose the plant and ancillary laboratory, office and control room were installed by December 2019, and all utility and service connections were completed by the end of January 2020. In mid-May 2020 the Company announced the completion of the commission phase of the Demonstration Plant. The Demonstration Plant is designed to continuously process an input tail brine flow of up to 50 gallons per minute (gpm; or 11.4 m^3/hr) from the LANXESS South Plant, which is equivalent to an annual production of up to 100-150 tonnes per annum of lithium carbonate. The highly automated, three-story demonstration plant includes an integrated office and control room, as well as a full, process-specific analytical laboratory.

On September 9, 2020 the Company shipped a large volume of lithium chloride solution product from the Arkansas Demonstration Plant for final conversion to lithium carbonate. The Company shipped an initial total volume of 20,000

LANXESS PROJECT - CONTINUED

liters of lithium chloride product for conversion to battery quality lithium carbonate using: (1) a third-party OEM/vendor in Plainfield, Illinois for lithium carbonate conversion using a conventional process; and (2) Saltworks Technologies Inc. in Richmond, B.C. to continue work currently underway using the Company's proprietary SiFT crystallization process.

The Company's industrial-scale lithium carbonate SiFT crystallization pilot plant, operated successfully in Richmond, BC from mid-July 2020 until June 2021 (when it was relocated to Arkansas). Initially, the SiFT plant used a lithium chloride solution that was produced in 2019 by the Company's mini-pilot DLE plant (note, this lithium chloride solution was produced from Arkansas brine). Additional bulk volumes of polished lithium chloride product were shipped from Arkansas to BC and successfully converted to battery quality lithium carbonate. In the summer of 2021, the SiFT plant was relocated from BC to the main project location at the LANXESS South Plant, immediately adjacent to, and connected to the Company's LiSTR Demonstration Plant.

On March 1, 2021, the Company announced that it had completed the conversion of its Arkansas-produced lithium chloride into 99.985% pure lithium carbonate using original equipment manufacturer (OEM) technology. The work was completed by Veolia Water Technologies at their facility in Plainfield, Illinois, and demonstrates that the lithium chloride intermediate product produced by Standard Lithium's industrial-scale LiSTR direct lithium extraction (DLE) plant in Arkansas can be converted into better than battery-quality lithium carbonate using established OEM carbonation technology.

On January 20, 2022, the Company announced that it had installed at the Demonstration Plant a novel osmotically assisted High Pressure Reverse Osmosis (HPRO) unit to concentrate the LiCl solution prior to carbonation. This HPRO unit was successfully integrated into the Demonstration Plant and has been operating according to design criteria since September 2021 and consistently producing LiCl solutions containing approximately 7,000 mg/L lithium.

SOUTH-WEST ARKANSAS LITHIUM PROJECT (FORMERLY KNOWN AS TETRA PROJECT)

On December 29, 2017, the Company entered into an Option Agreement with Tetra Technologies Inc. to acquire certain rights to conduct brine exploration and production and lithium extraction activities on approximately 27,000+ net brine acres of leases located in Columbia and Lafayette Counties, Arkansas.

The lease area has been historically drilled for oil and gas exploration, and approximately 256 exploration and production wells have been completed in the Smackover Formation in or immediately adjacent to the South-Wwest Arkansas Lithium Project. All of these 256 wells have geological logs, and all can be used to constrain the top of the Smackover Formation brine-bearing zone. In addition, a subset of 30 wells has full core reports that provide detailed data, and downhole geophysical logs that include formation resistivity and porosity data.

On August 28, 2018, the Company announced analysis from four brine samples recovered from two existing wells in the project area showed lithium concentrations ranging between 347–461 mg/L lithium, with an average of 450 mg/L lithium in one of the wells, and 350 mg/L in the other. The brines were sampled from preexisting oil and gas wells that had been previously drilled into the Smackover Formation, and were completed at depths of approximately 9,300 ft (2,830 m) below ground level.

The Company has issued two technical reports for the South-West Arkansas Lithium Project. The first Resource Report was filed on the Company's SEDAR profile on March 13, 2019 and comprised an Inferred Resource estimate for lithium contained in brine underlying the South-West Arkansas Lithium Project. The second report was a Preliminary Economic Assessment (PEA), filed on November 25, 2021. The PEA comprised an updated Inferred Resource estimate for a unitized property, as well as preliminary capital and operational costing and project economics for proposed

SOUTH-WEST ARKANSAS LITHIUM PROJECT (FORMERLY KNOWN AS TETRA PROJECT) - CONTINUED

commercial plant at the property. All information contained within the PEA superseded that which had been previously reported for the South-West Arkansas Lithium Project.

As described above, on November 25, 2021, the Company issued the Preliminary Economic Assessment (PEA) for the South-West Arkansas Lithium Project and the Executive Summary of this is provided below. The full report is available under the Company's SEDAR profile.

Property Location and Ownership

The centre of the South-West Arkansas Lithium Project is located approximately 24 km (15 miles) west of the City of Magnolia in Lafayette County, south western Arkansas, United States. The South-West Arkansas Lithium Project encompasses Townships 16-17 South and Ranges 22-24 West of the 5th Meridian and lies wholly within Lafayette and Columbia counties.

The South-West Arkansas Lithium Project is comprised of 489 land tracts containing 802 individual leases and eight salt water (brine) deeds that covers 11,033 net mineral hectares (27,262 net mineral acres). The proposed unitised SWA Property encompasses 14,638 gross mineral hectares (36,172 gross mineral acres) and forms the updated 2021 resource and project area.

The leases and deeds are held by TETRA Technologies Inc. (TETRA). Standard Lithium acquired the South-West Arkansas Lithium Project brine production rights to lithium directly from TETRA through an option agreement providing that Standard Lithium makes annual payments. TETRA began acquiring brine deeds and/or brine leases in 1992 and added additional brine leases in 1994, 2006 and 2017. The South-West Arkansas Lithium Project brine leases and deeds have yet to be developed for production of brine minerals.

Geology and Inferred Resource Estimation

The lithium brine Inferred Resource, as reported, is contained within the Upper and Middle Members of the Smackover Formation, a late Jurassic oolitic limestone aquifer that underlies the entire Project area. The Upper and Middle Smackover formations aquifer is situated at a depth of approximately 2,700 m (or about 8,800 feet) beneath ground level. This brine resource is in an area where there is localised oil and gas production, and where brine is produced as a by-product of hydrocarbon extraction. The data used to estimate and model the resource were gathered from existing and suspended oil and gas production wells on or adjacent to the South-West Arkansas Lithium Project and surface seismic information.

The resource present in the Smackover Formation below the SWA Project was updated based on the proposed unitized area encompassing 36,172 gross mineral acres (14,638 gross mineral hectares. Using a cut-off criteria of 50 mg/L lithium, the South-West Arkansas Lithium Project resource estimate is classified as 'Inferred' according to the Canadian Institute of Mining (CIM) definition standards (see note 4 after table below). The total (global) in-situ 'Inferred' lithium brine resource is estimated at 225,000 tonnes of elemental lithium, or 1,195,000 tonnes lithium carbonate equivalent ("LCE"); see table below for more detail.

	Upper Smackover Formation		Middle Smackover Formation		Total (and main resource)[1,2]
Parameter	**South Resource Area**	**North Resource Area**	**South Resource Area**	**North Resource Area**	
Aquifer Volume (km^3)	2.852	4.226	0.704	1.080	8.862
Brine Volume (km^3)	0.281	0.416	0.071	0.110	0.878
Average Lithium concentration (mg/L)	399	160	399	160	255
Average Porosity	10.1 %	10.1 %	10.3 %	10.3 %	10.1 %
Total Li inferred resource (as metal) metric tonnes [4][5]	112,000	67,000	28,000	18,000	225,000
Total LCE inferred resource (metric tonnes)[4][5]	596,000	354,000	152,000	93,000	1,195,000

Notes:

[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.

[2] Numbers may not add up due to rounding to the nearest 1,000 unit).

[3] The resource estimate was completed and reported using a cut-off of 50 mg/L lithium.

Recovery Method and Mineral Processing

Standard Lithium's objective is to produce battery-grade lithium hydroxide monohydrate (LHM) from the brine produced from the Smackover Formation. A network of 23 brine supply wells would produce from the Smackover Formation in the higher-grade South resource area averaging about 1,715 m^3/day per well for an aggregated total production of 39,452 m^3/day (1,644 m^3/hr or 7,238 US gallons per minute). Brine from the supply wells would be conveyed to a single combined lithium extraction and lithium hydroxide production facility by a network of underground fibreglass pipelines totalling approximately 18.3 km (11.4 miles) in length. The brine entering the processing facility would be pre-treated to remove hydrogen sulphide gas (H_2S), suspended solids and hydrocarbons, prior to processing by the Company's proprietary direct lithium extraction process (LiSTR). After lithium extraction, the lithium depleted brine is returned to the lower lithium-grade North resource area by a pipeline system 20.3 km (12.6 miles) in length to a network of 24 brine reinjection wells completed in the Smackover Formation. The project as proposed would produce, on average, 30,000 tonnes of battery-quality LHM per year, over a 20-year timeframe. The final product lithium recovery is about 90%.

The production process parameters are supported by bench scale metallurgical testing, mini-pilot plant testing and Demonstration Plant program results. It is the Company's plan to take large-scale brine samples from the SWA Property, and test using the LiSTR proprietary technology, at the Demonstration Plant located at LANXESS's South Plant. The Demonstration Plant is located about 40 km (25 miles) east of the SWA Project. It is the Company's intent to use the information obtained from the large-scale brine samples to gather specific data related to lithium extraction scalability and economics.

Capital and Operating Cost Estimates

Capital Expenditure Costs

At full build-out, with estimated average production over 20 years of 30,000 tonnes per annum of LHM, the direct capital costs are estimated to be US$532 million, with indirect costs of US$205 million. A contingency of 25% was applied to direct costs (US$133 million) to yield an estimated all-in capital cost of US$870 million. A summary of the capital costs is provided in table below.

Capital cost summary

Description	Direct Costs Million US$[1]	Indirect Costs Million US$[2]
Extraction and Reinjection Wellfield[3]	204.9	2.3
Pipelines[3]	38.7	2.5
Receiving/Pre-Treatment	35.4	28.1
Lithium Extraction (LiSTR)	135.0	103.8
Lithium Hydroxide Conversion	90.9	39.9
Utilities/Infrastructure	26.9	28.5
Contingency	133.0[4]	-
Total	664.8	205.1
CAPEX TOTAL	US$869.9 million	

Notes:

[1] Direct costs were estimated using either vendor-supplied quotes, and/or engineer estimated pricing (based on recent experience) for all major equipment. Major equipment prices were scaled using appropriate AACE Class 5 Direct Cost Factors (provided by the relevant QP) to derive all direct equipment costs

[2] Indirect costs were estimated using AACE Class 5 Indirect Cost Factors multiplied by the direct costs. Indirect costs include all contractor costs (including engineering); indirect labor costs and Owner's Engineer costs

[3] Exceptions to above costing estimate methodology were the wellfield and pipelines, which were based on HGA's recent project experience in the local area

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

Capital and Operating Cost Estimates – Continued

Operating Expenditure Costs

The operating cost estimate includes both direct costs and indirect costs, as well as allowances for mine closure (see table below). The majority of the operating cost comprises reagent usage required to extract the lithium from the brine, as well as conversion to LHM and electricity consumption. Out of this, the greatest amount is related to acid and base consumption (hydrochloric acid and ammonium hydroxide) and was estimated using information from the operating Demonstration Plant located in Union County, Arkansas. The all-in operating cost of $2,599 per tonne of LHM is one of the lowest reported in the industry owing to two key factors which are location-specific. The direct lithium extraction (DLE) processes are reagent intensive; in the case of the LiSTR process, the principal reagent is hydrochloric acid. A large portion (approximately 50%) of the acid required is produced on-site as a by-product of the electrochemical conversion of lithium chloride to lithium hydroxide. This results in significant cost-savings during the DLE step. The electrochemical conversion uses a large quantity of electricity, which would normally (in most jurisdictions around the world) result in a cost disbenefit; however, bulk electricity pricing in southern Arkansas is favorable (<6 cents/kWh), and hence results in overall lower-than-normal operating costs.

Operating cost summary

Description	Operating Cost US$/tonne LHM[1]
Workforce[2]	190
Electrical Power[3]	378
Reagents and Consumables[4]	836
Natural Gas[5]	39
Maintenance/Waste Disposal/Misc[6]	563
Indirect Operational Costs[7]	110
Royalties and Land/Lease Costs[8]	482
OPEX Total	2,599

Notes:

[1] Operating costs are calculated based on average annual production of 30,000 tonnes of LHM

[2] Approximately 75 full time equivalent (FTE) positions

[3] Approximately 40% of electrical energy consumed by wellfield and pipelines; 60% by the processing facilities

[4] Majority of reagent costs are comprised of hydrochloric acid and ammonium hydroxide consumption. As discussed above, approximately 50% of the required hydrochloric acid is produced on-site as a by-product of the electrochemical conversion of lithium chloride solution to lithium hydroxide solution, resulting in a significant cost saving. Additional cost savings can be attributed to the on-site production of concentrated sodium chloride solution, resulting from pre-concentration of the lithium chloride ahead of conversion. This sodium chloride solution is used as a regenerant in some of the polishing ion exchange (IX) processes. Other reagents and consumables are air, lithium titanate make-up (owing to small losses in the process), membrane replacement, nitrogen and scale inhibitors for pumps/wellheads.

Capital and Operating Cost Estimates – Continued

[5] Assumes that all natural gas is purchased from open market and none is co-produced at the wellheads

[6] Includes all maintenance and workover costs and is based on experience in similar-sized electrochemical facilities, brine processing facilities and Smackover Formation brine production wellfields

[7] Indirect costs (insurance, environmental monitoring, community benefits etc.) are factored from other capital and operational costs, except for mine closure, which is based on known well-abandonment costs

[8] Based on agreed royalties and expected future lease costs. Does not include future lease-fees-in-lieu-of-royalties which are still to be determined and subject to regulatory approval (lease-fees-in-lieu-of-royalties have been determined for bromine and certain other minerals in the State of Arkansas, but have not yet been determined for lithium extraction)

Economic Analysis

The SWA 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 internal rate of return (IRR) and net present value (NPV) from the assumed CAPEX, OPEX and price scenario at full production, are presented in table below.

Economic evaluation summary

Description	Units	Values
Average Annual Production (as $LiOH \bullet H_2O$)	tpa[1]	30,000[2]
Plant Operation	years	20
Total Capital Cost (CAPEX)	US$	869,868,000[3]
Operating Cost (OPEX) per year	US$/yr	77,972,000[4]
OPEX per tonne	US$/t	2,599
Initial Selling Price	US$/t	14,500[5]
Average Annual Revenue	US$	570,076,000[6]
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
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

Economic Analysis - Continued

[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.

LHM battery quality pricing sensitivity assessment was completed. LHM pricing was based upon a current price of $14,500 US/tonne adjusted for inflation to the start of production in 2025. The sensitivity analysis is provided in table below.

Lithium Hydroxide Monohydrate sale price post-tax sensitivity analysis

LHM Price in 2021[1] (US$/t)	Post-Tax NPV (US$ Million)	Post-Tax IRR
12,500	1,544.7	27.6%
13,500	1,755.1	29.9%
14,500	1,965.4	32.1%
15,500	2,175.8	34.2%
16,500	2,386.1	36.3%

Note:

[1] 2% annual LHM price escalation from 2021 to the start of production in 2025 was applied.

Conclusions

- The total SWA Project Inferred Li-Brine Resource estimate is 1,195,000 tonnes of LCE. The volume of resources will allow the lithium bearing brine extraction operations to continue well beyond the currently assumed 20 years.
- The results of the geological evaluation and resource estimates for the PEA of SWA Project justifies development of the project to further evaluate the feasibility of production of LHM.
- The experience gained from the long-term operations of the brine extraction and processing facilities on the LANXESS controlled properties decreases the risk related to sustainability of the brine extraction from the Smackover Formation.
- Available infrastructure (roads, rail, power, etc.), qualified work force and access to Gulf Coast reagent supply will decrease the risks related to construction, and commissioning and operating of the lithium extraction and LHM processing facilities.
- The results of the bench scale testing, mini-plant and operating Demonstration Plant at LANXESS South Plant, increase the level of confidence in the key parameters for the operating cost estimate.
- Improvements made to process efficiency, particularly the reduction of reagents and chemicals consumption, will improve the economics of the SWA Project.
- The discounted cash flow economic analysis, at a discount rate of 8%, indicates that the Project is economically viable. The key economic indicators, NPV = US$1,965,000 (post-tax) and IRR = 32.1% (post-tax), are very positive.

Key Study Recommendations

As per the CIM guidelines for lithium-brine, and when reporting higher level of resource classification than reported in this PEA (i.e., Indicated and Measured Brine Resources), the QP's must consider only those resources that are, or may become, recoverable under reasonably assumed technical and economic conditions. The logical next steps and work recommendations for Standard Lithium to elevate the South-West Arkansas Lithium Project to a higher level of resource classification and project definition is to:

1. Collect additional brine samples from the Upper and Middle Smackover Formations either from existing wells on the SWA Property, or recomplete existing/abandoned wells or install new wells (US$1.5mm);
2. Analyse available Smackover Formation core at several locations from the Arkansas Geological Survey at 0.3 m intervals throughout the Upper and Middle Smackover Formations to assess porosity and permeability (US$0.1mm);
3. Perform long-duration pumping tests to confirm aquifer properties (US$0.9mm);
4. Complete reservoir and resource modelling (US$0.75mm);
5. Continue with ongoing direct lithium extraction pre-commercial demonstration using brines from the SWA Project (US$0.75mm);
6. Conduct lithium chloride to lithium hydroxide conversion at suitable scale (US$1.0mm);
7. Complete additional permitting and environmental studies where appropriate (US$0.5mm); and,
8. Conduct all additional necessary engineering and pre-feasibility studies to integrate the project development findings into an updated resource classification and prefeasibility study (PFS) (US$1.5mm).

The authors recommend Standard Lithium approaches accomplishing these tasks over a two year period. The total estimated cost of the recommended work including contingency is US$7,000,000.

SW Arkansas Project Related Risks and Uncertainties

As with any development project there exists potential risks and uncertainties. Standard Lithium will attempt to reduce risk/uncertainty through effective project management, engaging technical experts and developing contingency plans. With respect to access, title, or the right or ability to perform work on the property, highlights some risks and uncertainties which have been identified at this stage of project development (see table below).

Risk Assessment Matrix

Risk No.	Risk Description	Existing Controls	Initial Risk (after Existing Controls)	Risk Treatment Plan	Residual Risk
1	Brine production of 1,800 m^3/h and/or lithium concentration of 399 mg/L not available. Includes associated drilling risk.	A geological assessment, in addition to testing existing brine supply wells	Medium	Additional testing of existing and new brine supply wells is planned.	Low
2	If innovative lithium extraction process does not perform as expected, could result in higher OPEX and CAPEX.	Extended pilot tests completed.	Low	Continued operation and process optimization of Demonstration Plant operation. This will also not be the first commercial plant of this type	Low

Risk No.	Risk Description	Existing Controls	Initial Risk (after Existing Controls)	Risk Treatment Plan	Residual Risk
3	If electrochemical and associated Lithium Hydroxide conversion process does not perform as expected, it could result in higher OPEX and CAPEX.	Based on existing chloralkali industry technology and specific experience with Lithium solutions.	Medium	Long-term membrane testing with representative enriched LiCl solution planned, as well as pilot testing of commercial-scale electrochemical cells.	Low
4	If market price of LHM drops, project economics will be negatively affected.	Demand is increasing faster than supply is coming to the market. Sensitivity analysis shows favourable economics even for significantly lower Lithium Hydroxide price.	High	To evaluate alternate contracts with vendors to mitigate short term price decline.	High
5	Global supply chain shortages / delays could influence schedule and CAPEX	Understanding long-lead items that would be impacted by supply chain constraints	Medium	A mitigating action plan will be put in place to minimize supply chain risk.	Low
6	If natural disaster occurs (e.g., tornado, earthquake), could result in loss of production.	Understanding of current risks at plant location.	Medium	Engineering of the plant will take into account weather risks. Provide shelter for personnel. Design critical facilities to withstand moderate tornados and earthquakes. Carry special insurance.	Low
7	If unknown infringement of sorbent and process patents occurs, could result in licensing claims.	Conducted freedom to operate searches.	Medium	Continue patent research. Ensure contingency funds in place to cover licensing fees.	Low
8	Construction cost/schedule overruns	25% contingency included in current economics. Sensitivity analysis shows favourable economics even for higher CAPEX	Medium	Work with experienced EPC contractor; lump-sum turnkey where possible. PFS will provide improved cost confidence.	Low
9	Lithium brine royalty assessment by the Arkansas Oil and Gas Commission is not completed in a timely manner and/or the royalty rates overly impact project economics.	Established process completed for bromine and most recently for calcium chloride and magnesium chloride	Medium	Work with experienced and qualified team and engage stakeholders early in the process.	Low

CALIFORNIA LITHIUM

The Company also has a lithium brine development project in the Mojave Desert region of California. This project consists of approximately 48,000 acres of mixed private, patented and placer claim land in the Bristol Dry Lake and Cadiz Dry Lake basins (collectively known as The Bristol Dry Lake Project). The Bristol Dry Lake Project is located in San Bernardino County, CA approximately 150 miles east-northeast of Los Angeles. The Company has rights and access to four sets of placer mining claims (and some patented claims) which are mostly situated on Federal lands controlled by the Bureau of Land Management (BLM). The Bristol Lake playa is a flat, dry salt lake in the Mojave Desert that occupies approximately 155 sq. km in a 2,000 sq. km arid drainage basin. There are two established brine producers in the basin and 100+ years of industrial mineral production (salts and brines) from the below-surface brine deposits.

The land package consists of:

- Option purchase agreement with Nevada Alaska Mining Inc.;
- Property lease agreement with National Chloride; and,
- A License, exploration and operation agreement with TETRA Technologies.

Details regarding the various commercial agreements with these companies and the Company's ongoing commitments can be found in previous versions of the Company's MD&A.

Some limited investigation and processing works have been completed at the Bristol Dry Lake Project, 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 time of writing of this document, these data have not been integrated into a technical report for the Project, however it is the Company's intention to complete any necessary investigation works and deliver a technical report in the future.

QA/QC

Steve Ross, P.Geol., a Qualified Person as defined by NI 43-101, has reviewed and approved the technical disclosure in this MD&A.

2. HIGHLIGHTS FOR THE NINE MONTHS ENDED MARCH 31, 2022

An AIF for the Fiscal Year 2021 (ended on June 30, 2021) was issued and filed by the Company on October 28, 2021 and can be viewed in its entirety under the Company's SEDAR profile.

On July 13, 2021, the Company began trading on the NYSE American Exchange ("NYSE AMEX") under the symbol "SLI". The Company concurrently changed the trading symbol on the TSX Venture Exchange to "SLI.V".

On August 20, 2021, the Company filed a Preliminary Short Form Base Shelf Prospectus to raise capital of up to $250 million USD for a period of 25 months by the issuance of Common Shares, Preferred Shares, Debt Securities, subscription Receipts, Warrants or Units.

On November 29, 2021, the Company filed an Amended 43-101 Technical Report on the SW Arkansas Project.

On November 30, 2021, the Company completed a transaction with Koch Strategic Platforms (KSP), a subsidiary of Koch Investments Group. The transaction was a direct private placement of US$100,000,000 (CDN$127,070,000) into the Company.

2. HIGHLIGHTS FOR THE NINE MONTHS ENDED MARCH 31, 2022 - CONTINUED

The private placement was completed in order to support the Company's strategic development goals and to be used by the Company to pursue the following objectives:

- Continue to rapidly advance the first commercial project proposed for the LANXESS facility;
- Accelerate and expand the Company's development of the South West Arkansas Lithium Project;
- Continue to develop and commercialise modern lithium extraction and processing technologies and work collaboratively with Koch Engineered Solutions businesses; and,
- Allow for strategic project expansion.

In connection with the investment, Standard Lithium has granted KSP the right of first offer to participate in future equity financings for a period of sixty months.

On February 23, 2022, the Company and LANXESS entered into an amended and restated agreement of the MOU between LANXESS and the Company. See LANXESS Project above form more details.

On May 12, 2022, the Company announced an equity investment of approximately US$2.5 million as part of a US$10 million strategic round into Aqualung Carbon Capture AS, a leader in carbon capture technology. The company received 179,175 common shares of Aqualung from the investment.

Share Issuances

On November 30, 2021, the Company closed a $100 million USD Direct Investment from Koch Strategic Platforms and issued 13,480,083 common shares for gross proceeds of $127,070,000 CAD. All common shares issued are restricted for resale until March 31, 2022.

On March 29, 2022, the Company issued 60,235 common 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 Corporation, which occurred on February 23, 2022.

During the nine months ended March 31, 2022, the Company issued 6,684,892 common shares for gross proceeds of $7,389,127 upon the exercise of warrants.

During the nine months ended March 31, 2022, the Company issued a total of 2,910,784 common shares for the exercise of stock options. The Company received proceeds of $2,986,499 and transferred $2,868,458 from reserves to share capital upon exercise.

Subsequent to March 31, 2022, the Company issued 400,000 common shares with a fair value of $3,240,000 in accordance with property agreements and issued 100,000 common shares upon exercise of stock options for proceeds of $81,000.

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 three 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.

2. HIGHLIGHTS FOR THE NINE MONTHS ENDED MARCH 31, 2022 - CONTINUED

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.

On April 12, 2022, the Company granted 100,000 options to a consultant with an exercise price of $9.40 for a period of 5 year. One quarter of the 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.

3. RESULTS OF OPERATIONS

Three months ended March 31, 2022 compared to the three months ended March 31, 2021:

The Company incurred a net loss of $13,740,984 for the quarter ended March 31, 2022 ("Q3-2022") compared to a net loss of $9,802,434 for the quarter ended March 31, 2021 ("Q3-2021"). The primary reason for the increase in loss was costs related to the operation of the pilot plant, amortisation of the pilot plant, amortisation of the office lease, increased consulting fees and management fees, increased filing and transfer agent, increased office and administration, project investigation costs, increased professional fees and share-based payments. Consulting fees were higher when comparing quarter to quarter as a result of additional engagement of consultants to support and advance the company in the next stage of development and the finalisation of the LANXESS MOU negotiation. Management fees incurred during Q3-2022 of $1,484,715 were higher than fees incurred during Q3-2021 of $342,721 due to annual bonus accrued for calendar year 2021. Professional Fees of $940,955 were higher than fees of $141,552 during Q3-2021. This is mainly due to higher legal and audit fees incurred during the period. Filing and transfer agent fees of $365,613 were higher than fees of $34,617 during Q3-2021. The increase is related to the volume of warrant exercises and sustaining fees or the NYSE American Exchange. Office and administration cost of $696,073 were higher than the costs of $184,656 incurred during the comparative quarter mainly due to higher insurance costs. Advertising and investor relations costs incurred during Q3-2022 of $156,068 were lower than costs incurred during Q3-2021 of $220,383 due to a decrease in the purchasing of ads. Travel costs of $52,174 incurred during Q3-2022 was higher than costs of $400 incurred during Q3-2021 due to the restriction of travel abroad and to the United States being loosened and a trip made by management to the project in Arkansas. The share-based compensation during the period was $1,323,477 as compared to $4,077,810 recognized in Q3-2021 as share-based compensation. The Company did not incur any cost associated with a preliminary economic assessment during Q3-2022 as compared to $15,380 of costs incurred during Q3-2021. The updated PEA was released on October 28, 2021. The Company incurred $91,017 of costs related to patent applications as compared to $47,304 of costs incurred during Q3-2021. The increase in fees relates to the advancement of the applications. The Company incurred $310,104 of costs associated with the investigation and evaluation of potential new projects for the Company as compared to $65,841 of costs incurred during Q3-2022.

Nine months ended March 31, 2022 compared to the Nine months ended March 31, 2021:

The Company incurred a net loss of $31,667,877 for the nine months ended March 31, 2022 ("YTD2022") compared to a net loss of $18,354,031 for the nine months ended March 31, 2021 ("YTD2021"). The primary reason for the increase in loss was costs related to the operation of the pilot plant, amortisation of the pilot plant, amortisation of the office lease, increased consulting fees and management fees, increased filing and transfer agent, increased office and administration, project investigation costs, increased professional fees and share-based payments. Consulting fees were higher when comparing YTD2022 to YTD2021 as a result of additional engagement of consultants to support and advance the company in the next stage of development and the finalisation of the LANXESS negotiation. Management

3. RESULTS OF OPERATIONS - CONTINUED

fees of $2,224,949 during FY2022 increased from fees of $1,194,159 incurred during FY2020 mainly due to bonus payable to management and related to calendar year 2021 was approved by the board of directors and accrued. Professional Fees of $1,623,826 were higher than fees of $351,803 during YTD2021. This is mainly due to higher legal and audit fees incurred during the period. Filing and transfer agent fees of $552,233 were higher than fees of $113,966 during YTD2021. The increase is related to the volume of warrant exercises and sustaining fees for NYSE American Exchange. Office and administration cost of $1,924,468 were higher than the costs of $373,790 incurred during the comparative quarter due to higher insurance costs. Advertising and investor relations costs incurred during YTD2022 of $271,132 were lower than costs incurred during YTD2021 of $360,467 due to a decrease in the purchasing of ads. Travel costs of $177,801 incurred during YTD2022 was higher than costs of $458 incurred during YTD2021 due to the restriction of travel abroad and to the United States being loosened and a trip made by management to the project in Arkansas. The share-based compensation during the period was $2,510,322 as compared to $4,369,031 recognized in YTD2021 as share-based compensation. The Company incurred $87,130 of cost associated with a preliminary economic assessment during YTD2022 with $15,380 incurred during YTD2021. The updated PEA was released on October 28, 2021. The company incurred $327,177 of costs related to patent applications as compared to $153,509 of costs incurred during YTD2021. The increase in fees relates to the advancement of the applications. The Company incurred $885,964 of costs associated with the investigation and evaluation of potential new projects for the Company as compared to $65,841 of costs incurred during YTD2021.

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
June 30, 2020	$Nil	$ (4,468,997)	$ (0.05)
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)

Liquidity and Capital Resources

As of March 31, 2022, the Company had a working capital surplus of $134,622,212 compared to a working capital surplus of $25,969,236 as of June 30, 2021. Cash and cash equivalents at March 31, 2022 totaled $136,913,330 compared to $27,988,471 at June 30, 2021. During the nine months ended March 31, 2022, the Company had a net cash inflow of $108,924,859 compared to a net cash inflow of $26,122,533 during the nine months ended March 31, 2021.

During the nine months ended March 31, 2022, the Company issued 6,684,892 common shares for gross proceeds of $7,389,127 upon the exercise of warrants.

3. RESULTS OF OPERATIONS – CONTINUED

During the nine months ended March 31, 2022, the Company issued a total of 2,910,784 common shares for the exercise of stock options. The Company received proceeds of $2,986,499 and transferred $2,868,458 from reserves to share capital upon exercise.

Subsequent to March 31, 2022, the Company issued 400,000 common shares with a fair value of $3,240,000 in accordance with property agreements and issued 100,000 common shares upon exercise of stock options for proceeds of $81,000.

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.

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 Securities Exchange Act of 1934 ("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 Direct Lithium Extraction ("LiSTR") technology and "final product lithium recovery percentage" at its Direct Lithium Extraction 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.

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:

	March 31, 2022	March 31, 2021
Non-Executive Chair of the Board due to Paloduro Investments Inc.	$ 75,405	$ 68,750
President and Chief Operating Officer due to Green Core Consulting Ltd.	726,637	350,000
Chief Executive Officer due to Rodhan Consulting & Management Services	726,633	350,000
Due to Varo Corp Capital Partners Inc.	204,138	232,500
Director due to JSB Investments Inc.	69,155	68,750
Director due to New Age Ventures LLC	69,155	-
Chief Financial Officer due to Kara Norman	353,826	124,158
Share-based payments	940,268	4,072,365
	$ 3,165,217	$ 5,266,524

As at March 31, 2022, there is $1,344,498 (June 30, 2021: $404,296) in accounts payable and accrued liabilities owing to officers of the Company. Amounts due to/from the related parties are non-interest bearing, unsecured and have no fixed terms of repayment.

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 164,802,197common shares issued and outstanding, 11,910,000 stock options and 3,462,502 warrants outstanding. Of the warrants outstanding, 3,125,625 are exercisable to acquire one common share at $1.20 expiring on June 10, 2024 and 336,877 are exercisable to acquire one common share at $11.09 expiring on November 30, 2023.

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

	Options Outstanding			Options Exercisable	
Exercise Price $	Number of Shares	Weighted Average Remaining Contractual Life (years)	Weighted Average Exercise Price $	Number Exercisable	Weighted Average Exercise Price $
0.96	1,740,000	0.10	0.96	1,740,000	0.96
2.10	450,000	0.78	2.10	450,000	2.10
1.40	1,900,000	1.32	1.40	1,900,000	1.40
0.75	150,000	1.43	0.75	150,000	0.75
0.76	4,450,000	0.82	0.76	4,450,000	0.76
0.75	450,000	0.98	0.75	450,000	0.75
3.39	1,200,000	3.69	3.39	1,200,000	3.39
3.43	400,000	1.92	3.43	400,000	3.43
6.08	200,000	4.19	6.08	200,000	6.08
7.55	500,000	2.76	7.55	125,000	7.55
6.31	200,000	4.82	6.31	-	-
8.25	170,000	4.85	8.25	-	-
9.40	100,000	4.92	9.40	25,000	9.40
	11,910,000	2.51	1.94	11,090,000	2.09

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.

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.

Financial Instruments and Risk Management - continued

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

Financial instruments that are held at fair value are categorised based on a valuation hierarchy which is determined by the valuation methodology utilised:
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 nine month period ended March 31, 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:

March 31, 2022	Level 1	Level 2	Level 3	Total
Cash	$136,913,330	$ -	$ -	$ 136,913,330

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;
- 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.

(i) Interest rate risk

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

Financial Instruments and Risk Management - continued

(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 other 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 March 31, 2022, the Company has a working capital surplus of $134,622,212. The Company is actively engaged in raising additional capital to meet financial obligations.

(iv) Currency 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:

	March 31, 2022 $	June 30, 2021 $
Cash	113,997,420	736,623
Accounts payable	(2,450,239)	(1,520,823)

At March 31, 2022, US Dollar amounts were converted at a rate of USD 1.00 to CAD 1.2496. A 10% increase or decrease in the US Dollar relative to the Canadian Dollar would result in a change of approximately $11,155,000 (June 30, 2021: $78,000) in the Company's comprehensive loss for the year to date.

4. 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 Annual Information Form for the fiscal year ended June 30, 2021 and available under the Company's profile on SEDAR at www.sedar.com.