Introduction

This Management's Discussion and Analysis ("MD&A") is a review of the operations, current financial position and outlook for Lithos Group Ltd. (formerly Lithos Energy Ltd.) (the "Company" or "LiTHOS"). This discussion should be read in conjunction with the Company's audited consolidated financial statements for the year ended April 30, 2024, and the unaudited financial statements and accompanying notes for the nine months ended January 31, 2025, available through the SEDAR+ website at www.sedarplus.ca.

The Company's financial statements are prepared in accordance with IFRS Accounting Standards ("IFRS"). The Company's reporting currency is the Canadian Dollar, which is the presentation currency of the consolidated financial statements, unless otherwise stated. This MD&A is dated March 17, 2025.

The Company was incorporated as NY85 Capital Inc. under the *Business Corporations Act* (British Columbia) ("BCBCA") on October 22, 2010, in the Province of British Columbia. On May 31, 2012, the Company completed its Qualifying Transaction and received the Final Exchange Bulletin from the TSX Venture Exchange ("TSX-V") and commenced trading on the TSX-V. On October 1, 2012, the shareholders of the Company approved the name change from "NY85 Capital Inc." to "Alchemist Mining Inc." at the Annual General and Special Meeting of the Company. On August 20, 2014, the Company de-listed from the TSX-V and commenced trading on the Canadian Securities Exchange ("CSE"). Effective August 15, 2023, the Company changed its name from "Alchemist Mining Inc." to "Lithos Energy Ltd.". On December 8, 2023, the Company de-listed from the CSE and commenced trading on Cboe Canada under the ticker symbol "LITS". On January 24, 2024, the Company changed its name from "Lithos Energy Ltd." To "Lithos Group Ltd."

The registered and records office of the Company is located at 2380, 1055 West Hastings Street, Vancouver, B.C. V6E 2E9.

Intercorporate Relationships

As of the date of this MD&A, the Company has the following subsidiaries:

Subsidiary	Jurisdiction of Incorporation	Ownership Percentage
1282112 B.C. Ltd.	British Columbia	100%
Iron Forge Holdings (I) Ltd.	British Columbia	100%
Lithos Technologies Corp.	British Columbia	100%
Lithos Technology LLC	Delaware	100%
Lithos Alabama LLC	Alabama	100%
Aqueous Resources LLC	Colorado	100%

To date, the Company has not generated any revenue and has met its cash requirements primarily through share issuances. Until the Company attains profitability, it will be necessary to raise additional financing for general working capital. If the Company is unable to obtain financing in the amounts and on terms deemed acceptable, the future success of the business could be adversely affected. There is no assurance that the Company will be able to obtain adequate financing in the future or that such financing will be on terms advantageous to the Company.

The Company expects to use its available working capital for general working capital, including engineering and technical and sales devoted to three multi-billion dollar lithium producers under contract for pilot testing. The Company's objectives are to evaluate other opportunities to build shareholder value.

Overall Performance

On April 27, 2023, the Company closed the transactions contemplated in an amalgamation agreement dated March 6, 2023, as amended by an amendment agreement dated March 23, 2023 (together, the "**Amalgamation Agreemen**t") with LiTHOS Technologies Corp. ("**LiTHOS Technologies**"), a private arm's length company continued under the Province of British Columbia, and 1404366 B.C. Ltd. ("**NewCo**"), a wholly-owned subsidiary of the Company, pursuant to which the Company completed a business combination with LiTHOS Technologies and acquired all of the outstanding securities of LiTHOS Technologies from the securityholders of LiTHOS Technologies (the "**LiTHOS Transaction**").

LiTHOS Technologies invested in and aided commercial and technical development of AcQUA™ – a patent-pending wastewater solutions technology for conditioning, pre-treatment and direct lithium extraction ("**DLE**") from brine reservoirs enriched with lithium. AcQUA™ is a unique modular technology which optimizes the pre-treatment, selective purification, and concentration of lithium-enriched brines prior to extracting lithium chloride. The unique AcQUA™ technology avoids the typical challenges faced by chemically-intensive DLE technologies currently in development phase. AcQUA™ enables lithium brine resource operators to deploy economically viable and sustainable field-ready extraction solutions that will substantially reduce fresh water and chemical reagent consumption by utilizing a novel, commercially mature electro-pressure membrane approach. The aim of AcQUA™ is to substantially eliminate the use of evaporation ponds in the conditioning, pre-treatment and concentration phases of lithium salt production. The Company filed for a trademark on September 5, 2023, with the USPTO and filed on August 30, 2023, with the Canadian Intellectual Property Office to protect the branding of this service as AcQUA™.

LiTHOS Technologies also invested in the Company's proprietary cloud solution technology known as conductive fracture Imaging or CFI in March, 2023. The CFI technology was acquired prior to the LiTHOS Transaction from Reservoir Imaging Solutions ("**RIS**"), a company controlled by LiTHOS' Chief Executive Officer, pursuant to the terms of an asset purchase agreement dated April 20, 2023. The CFI subsurface imaging technology has the potential to reduce the risks of induced seismicity and optimize the pressure drive, and overall reservoir management for all brine assets. Following the acquisition of the CFI technology, LiTHOS Technology and RIS entered into a license agreement dated April 20, 2023 pursuant to which LiTHOS Technology granted back to RIS the right to use the CFI Technology. Pursuant to the terms of the license agreement, the license of the CFI technology to RIS is for an indefinite period in consideration for the payment by RIS to LiTHOS Technology of an amount equal to all fees generated from use of the CFI technology by RIS less any costs incurred by RIS in using the CFI technology. CFI shall be applied to professionally manage and diagnose the re-injection of spent brine as a result of the AcQUA™ process. The Company filed for a trademark with the USPTO on September 5, 2023 and on August 30, 2023 with the Canadian Intellectual Property Office to protect the branding of this service as TiERRA™.

Pursuant to the terms of the Amalgamation Agreement, LiTHOS acquired all of the issued and outstanding common shares (each, a "**LiTHOS Share**") in the capital of LiTHOS Technologies by way of "three-cornered" amalgamation whereby NewCo and LiTHOS Technologies amalgamated to form a new entity ("**AmalCo**"), and AmalCo became a wholly-owned subsidiary of LiTHOS upon the closing of the LiTHOS Transaction (the "**LiTHOS Closing**"). At the effective time of the LiTHOS Closing, each outstanding LiTHOS Share was cancelled and, in consideration for such LiTHOS Share, each respective LiTHOS Technologies shareholder received their pro rata portion of an aggregate of 15,000,000 Common Shares, with a fair value of

$0.60 per Common Share. In addition, the Company issued an aggregate of 10,000,000 performance shares (each, a "**Performance Share**"), on terms and conditions mutually agreed upon by the parties, to certain employees and consultants of LiTHOS Technologies, each with a fair value of $0.60 per Performance Share. Accordingly, each Performance Share vested upon the achievement upon the receipt by LiTHOS of its first brine shipment from 3 Proton Lithium ("**3PL**") at its Denver-based testing facility. Pursuant to the terms of a finder's fee agreement dated April 25, 2023, an arm's length finders fee was issued for 2,000,000 Common Shares with a fair value of $0.60 per Common Share in connection with the LiTHOS Transaction.

On May 18, 2023, the Colorado Office of Economic Development and International Trade awarded Aqueous Resources LLC ("**Aqueous**") up to a USD$250,000 early stage capital retention grant. During the nine months ended January 31, 2025, the Company received USD $139,813 ($193,068) (2023 - $nil) in grant funding under the program.

On May 31, 2023, the Company appointed Dana Jurick to its advisory board.

On June 5, 2023, the Company appointed Michael Kevin McKenna to its advisory board.

On June 6, 2023, the Company appointed Joseph Fuqua to its advisory board.

On June 7, 2023, the Company appointed Martín Corredera Silván to its advisory board.

On June 13, 2023, the Company entered into a securities exchange agreement with Aqueous, a private arm's length limited liability company based in Denver, Colorado, USA, pursuant to which the Company acquired all of the outstanding membership interests of Aqueous (collectively, the "**Membership Interests**") from the holders of the Membership Interests, in exchange for 17,500,000 Common Shares (the "**Aqueous Transaction**"). Upon Closing, Aqueous became a wholly-owned subsidiary of the Company. Upon Closing, in accordance with the terms of conditions of the Agreement, Fredrik Klaveness was appointed as a director to the Board. Pursuant to the terms of a finder's fee agreement dated August 4, 2023, the Company issued an aggregate of 1,000,000 Common Shares to one finder in connection with the Aqueous Transaction.

On July 10, 2023, The United States Department of Energy (DOE) awarded Aqueous up to a USD$1.3 million FASTRACK grant entitled "Sustainable Direct Lithium Extraction ("DLE") for the Recovery, Concentration, and Production of Lithium Chloride from Aqueous Sources". During the nine months ended January 31, 2025, the Company received USD $58,350 ($80,575) (2023 - $nil) in grant funding under the program.

On July 7, 2023, the Company appointed Robert Barnwell to its advisory board.

On July 10, 2023, the DOE awarded Aqueous a USD$1.3 million FASTRACK grant entitled "*Sustainable Direct Lithium Extraction for the Recovery, Concentration, and Production of Lithium Chloride from Aqueous Sources*".

On August 4, 2023, the Company closed the securities exchange agreement with Aqueous.

On August 15, 2023, the Company changed its name from "Alchemist Mining Incorporated" to "LiTHOS Energy Ltd." and its Common Shares were listed for trading on the CSE under the symbol "LITS".

On August 17, 2023, Michael Kevin McKenna, Michael Westlake and Martín Corredera Silván were elected as independent directors at the annual general meeting of the Company. Eric Boehnke elected not to stand for re-election at the annual general meeting.

The Company filed for a trademark on September 5, 2023 with the USPTO and filed on August 30, 2023, with the Canadian Intellectual Property Office to protect the branding of AcQUA™.

On October 4, 2023, the Company began trading on the OTCQB market in the United States under the symbol LITSF.

On October 23, 2023, the Company received the necessary Chilean government authorizations to send brine samples from Salar de Atacama.

On November 3, 2023, the Company completed a non-brokered private placement pursuant to which it issued 550 non-convertible note units (the "Notes") for gross proceeds of USD$550,000 ($752,565). The Notes were priced at USD $1,000 each and had 1,818 share purchase warrants attached, for a total of 999,900 share purchase warrants. The Notes had a term of 91 days and bear interest at the rate of 15% per annum payable on maturity. Each warrant entitles the holder thereof to acquire one common share each of the Company at a price of USD$0.55 per warrant for a period of five years from closing. Subsequent to their issuances, the Company extended the maturity date of the notes to June 30, 2024 and then again to December 30, 2024.

The proceeds were used for working capital and for the scaling up of the Company's processing testing facility.

The Company entered into an engagement agreement (the "**Agreement**") with Oak Hill Financial Inc. ("**Oak Hill Financial**"), whereby Oak Hill Financial agreed to provide investor relations and capital markets advisory services to the Company for an initial four-month period, effective from November 7, 2023, with provisions for automatic renewals unless a written notice is provided by the Company or Oak Hill Financial within five business days of a monthly renewal. As part of the Agreement, Oak Hill Financial will receive $12,000 per month plus expenses pre-approved by the Company during the term of the Agreement. In addition, the Company granted Oak Hill Financial 300,000 options, at an exercise price of $0.56. The Options vest on a quarterly basis commencing on the date that is three months from the date of execution of the Agreement. If the Agreement is terminated for any reason, Oak Hill Financial shall have 60 days to exercise all vested Options, after which point they are cancelled. The options shall have an 18-month term.

On November 20, 2023, the Company received several brine samples from the Salar de Atacama (Chile).

On December 6, 2023, the Company filed its Annual Information Form (AIF) on SEDAR+ and was accepted by Cboe Global Markets - Canada – Toronto. The Company delisted from the CSE on December 7, 2023 and began trading on the Cboe Canada under the same LITS symbol on December 8, 2023.

On December 14-15, 2023, the Company performed a project review with Customer A in its Alabama processing facility.

On January 22, 2024, the Company announced a name change from "Lithos Energy Ltd. to "Lithos Group Ltd." (the "**Name Change**"), to be effective on January 24, 2024. The Company's common shares trade under the new name and existing ticker symbol "LITS" on Cboe Canada as of the start of trading on January 24, 2024. In connection with the Name Change, the Company's new CUSIP is 53687L102 and the new ISIN is CA53687L1022. There is no consolidation of shares associated with the name change.

On January 24, 2024, company was awarded a purchase order from a major American lithium producer for lab scale testing and was subsequently sent field brines for processing.

On January 29, 2024, Fredrik Klaveness resigned from an operations and management position but remained as an independent director.

On February 26, 2024, Lithos Technology was awarded a purchase order from a major international lithium producer for lab testing and was sent field brines for processing.

On March 18, 2024, the Company completed a first tranche of its non-brokered private placement (the "**Initial Tranche**"), pursuant to which it has issued an aggregate of 992,871 units (each, a "**Unit**") at a price of $0.70 per Unit raising gross proceeds of $695,010. Each Unit is comprised of one common share of the Company (each, a "**Share**") and one common share purchase warrant (each, a "**Warrant**"), with each Warrant entitling the holder to purchase one Share at a price of $0.90 per Share for a period of three years following the closing date of the offering.

The aggregate gross proceeds from the Initial Tranche were used for working capital, business development and for completion of customer pilot projects. The Company paid cash finder's fees of $26,103 to one finder in connection with the Initial Tranche.

On March 25, 2024, the Company commenced manufacturing of a demonstration scale AcQUA™ modular field unit. Once the modular AcQUA™ system passes factory acceptance testing it will immediately be deployed to the field for site acceptance testing which requires 1,500 hours (approximately ~2.5 months) of operational performance validation with each customer.

On March 27, 2024, the Company announced the promotion of Joe Fuqua to Chief Operating Officer ("**COO**") and corporate secretary and the appointments of Michael Westlake as President, and Gabe Segal as Vice President – Strategy & Finance.

On April 15, 2024, the Company completed a second tranche of its non-brokered private placement, pursuant to which it issued an aggregate of 644,684 Units at a price of $0.70 per Unit raising gross proceeds of $451,279. The Company has received an aggregate of $1,146,289 from the closing of this financing two tranches.

On April 25, 2024, the Company was selected from the first phase of the Chilean National Mining Company (ENAMI)'s direct lithium extraction project for further review. LiTHOS was one of 26 global DLE companies announced after an initial Request for Information (RFI) was sent to 76 DLE companies. LiTHOS offered its innovative AcQUA™ pre-treatment, and concentration technology for ENAMI's High Andean Salt Flats project in the Atacama Region.

On April 26, 2024, the Board of Directors unanimously approved the appointment of Seth Coblentz as Corporate Secretary.

On May 23rd the Company welcomed Customer B to its Bessemer, AL facility for a live process test and technical due diligence visit.

On May 29, 2024, the Company announced Judson LaCapra as its new Chief Development Officer, Seth Coblentz as General Counsel and Elyssia Patterson as VP of Corporate Communications.

On June 5, 2024, the Company announced the entry into of a non-binding letter of intent with 1481450 B.C. Ltd. ("**1481450**") pursuant to which the Company agreed to acquire all of the outstanding securities of 1481450 from the securityholders of 1481450 (the "**1481450 Transaction**"). In connection with the 1481450 Transaction, 1481450 has entered into a separate agreement whereby it, at the time of closing of the 1481450 Transaction, will hold all of the outstanding securities of RIS. Pursuant to the terms of the letter of intent with 1481450, the parties had until July 29, 2024 to complete the 1481450 Transaction. The 1481450 Transaction was not completed prior to this deadline.

On June 11th the Company presented interim fluid process results to Customer C.

On June 17, 2024, the Company announced its alliance with the Alabama Mobility and Power ("**AMP**") Center. This strategic alliance includes esteemed partners such as the University of Alabama, Alabama Power, and Mercedes-Benz U.S. International. The AMP Center is a premier research and development hub for EV and battery technologies, dedicated to pioneering solutions across the entire EV ecosystem, from raw material extraction to end-of-life battery recycling. This partnership seeks to enable LiTHOS to leverage the center's extensive network of industry, government, and academic partners to advance its innovative patent-pending AcQUA™ technology. The collaboration also aims to tackle critical challenges in lithium extraction and battery technology, contributing to the overall growth and sustainability of the EV sector.

On June 30th the Company re-submitted its commercial proposal to Customer A.

On July 4th and subsequently on July 31st the company submitted, and re-submitted a requested commercial proposal to Customer B.

On August 20, 2024, the Company announced **positive results from AcQUA™ technology Lithium Brine Tests with SQM on Salar de Atacama Brines**

On August 24, 2024, Seth Coblentz passed away unexpectedly. Following the passing of Mr. Coblentz, the Company announce the appointment of Hannah Benson as Corporate Secretary.

On September 20, 2024, the Company granted an aggregate of 1,422,350 RSUs to certain executive officers of the Company. Each RSU entitles the holder thereof to one Common Share under the terms and conditions of the agreement representing the RSUs.

On October 2, 2024, Joe Fuqua was terminated as COO of the Company.

On October 28, 2024, the Company announced the allowance by the USPTO of its U.S. patent for the "*Electro-Pressure Membrane Method for Recovery and Concentration of Lithium from Aqueous Sources*". The patent, which was issued on November 26, 2024, secures LiTHOS' ability to operate across the full lithium extraction and refinement process, covering essential stages from pre-treatment through lithium concentration to final processing for lithium carbonate (Li_2CO_3) or lithium hydroxide (LiOH) production. It also seek to safeguard LiTHOS' flexibility to integrate any DLE method, supporting an adaptable approach to refining.

On November 26, 2024 "*Electro-Pressure Membrane Method for Recovery and Concentration of Lithium from Aqueous Sources*" issued as U.S. Patent No. 12,151,211

On January 14, 2025 Chris Green was terminated as CTO of the Company. Co-incidentally Micheal Westlake was appointed interim CTO

On January 24, Hannah Benson was terminated and co-incidentally Scott Taylor was appointed as interim Corporate Secretary

DESCRIPTION OF THE BUSINESS OF THE COMPANY

General Overview

The Company's business includes:

- *Technology*: LiTHOS owns 100% of AcQUA™ – a patent-pending[1] selective conditioning, pre-treatment, and concentrating solutions DLE technology for extracting lithium salts from a variety of brine reservoirs enriched with lithium in aqueous form. AcQUA™ is a unique modular technology which optimizes the fluid chemistry of lithium-enriched brines prior to extracting lithium chloride and subsequent polishing into either lithium hydroxide monohydrate

[1] United States Patent Application Publication No.: US 20230014044 A1, Publication Date: January 19, 2023 ELECTRO-PRESSURE MEMBRANE METHOD FOR RECOVERY AND CONCENTRATION OF LITHIUM FROM AQUEOUS SOURCES. Canadian Patent Application Publication No.: CA 3167919, Publication Date: January 19, 2023 ELECTRO-PRESSURE MEMBRANE METHOD FOR RECOVERY AND CONCENTRATION OF LITHIUM FROM AQUEOUS SOURCES.

or lithium carbonate. These are the input feedstocks preferred for modern electric vehicle batteries.

- *Exploration*: The Company has the exploration and development rights to the Rhodes Marsh Property and intends on acquiring additional land positions in other prospective lithium-enriched continental brine basins.

The Company's proprietary lithium extraction technology makes it a vertically integrated lithium exploration company with a cost advantage and a technical advantage which allows it to understand rapidly the quality and viability of any continental brine exploration target.

BACKGROUND

LiTHOS acquired 100% of Aqueous and its AcQUA™ technology in August of 2023. AcQUA™ originates from an existing Technology Readiness Level -9 frac-water recycling technology currently recycling between 10,000 to 30,000 barrels per day.

The United States Department of Energy (DOE) awarded LiTHOS a grant entitled "Sustainable Direct Lithium Extraction ("DLE") for the Recovery, Concentration, and Production of Lithium Chloride from Aqueous Sources" in July of 2023.

Membranes and Stack Technology Readiness Level (TRL)

Today, through use of the DOE grant funds and testing contracts with several large lithium producers, the AcQUA™ system has a Technology Readiness Level (TRL) of 6. Lithos has multiple field demonstration proposals under review by these large lithium producers. We project the deployment of these projects into the field will accelerate the currently proven bench scale lithium extraction technologies above TRL-8 within 12 months, with a goal to achieve a TRL-9 rating after demonstrating operating performance in the field in collaboration with these customers.

LiTHOS expects to secure an exclusive supply agreement together with technical and manufacturing support from a European manufacturer who has been in operations for over 40 years. Securing this exclusive agreement should greatly enhance the ability of Lithos to scale up its projects from pilot to commercial scale quickly and continue to regularly supply systems to the largest producers.

The membranes, electrodialysis stacks, and filtration membranes are all TRL-9. Based on our tests to date, these membranes are the highest fatigue component with a proven cycle time up to two years of continuous throughput. We have been told the pilot field system will need to be run for at least 1,500 hours, producing results close to the lab results in order to validate its viability before the scale-up to a battery of commercial-scale systems can be approved.

LiTHOS Technology

LiTHOS performs conditioning, pre-treatment, selective purification, and concentration of lithium salts from brines using the Issue Notification received from the USPTO for United States Patent Application Serial No. 17/862,572. Accordingly, LiTHOS received an Issue Notification from the USPTO for United States Patent Application Serial No. 17/862,572 which indicates that "*Electro-Pressure Membrane Method for Recovery and Concentration of Lithium from Aqueous Sources*" issued as U.S. Patent No. 12,151,211 on November 26, 2024. Hence, any product covered by this patent and any associated packaging enclosing the covered product can now progress from "Patent Pending" to "U.S. Pat. No. 12,151,211" or equivalent marking. This is our Electro-pressure membrane method for recovery and concentration of lithium from aqueous sources. LiTHOS is the 100% owner of this intellectual property. The lithium brine pre-treatment, extraction, and process consumable generation technology enabled service is offered under the registered trademark name AcQUA™. LiTHOS' managed fluid re-injection technology enabled service is offered under the registered trademark name TiERRA™. LITHOS refers to the integrated brine to battery process as e-BRINE™.

The LiTHOS Service Offers Unique Benefits

Customers are projected to realize many benefits through the implementation of this solution. LiTHOS has designed an operation using its patent pending and world-class brine pre-treatment technology, AcQUA™:

- **Service Solution**

The implementation and management of this service is the responsibility of LiTHOS. Customers provide support in the importation of the systems to the field location, sufficient land for the installation of all equipment sufficient electrical power to run the system consistently, and minor site prep to include civil works and engineering to support the AcQUA™ location.

LiTHOS will provide, operate, and maintain the AcQUA™ system for the project.

- **Modular Approach Allows Scalability and Reconfiguration with Growth**

LiTHOS can relocate and scale its systems to meet expected expansion and reconfiguration plans of our customers. The AcQUA™ field processing units are designed to be delivered and operated in remote conditions within standard 40 ft sea containers. Each system is designed with a 24 cubic meter per day brine feed rate throughput capacity. We plan to provide a network of AcQUA™ field processing units will connect to a multiplicity of wellheads to meet the desired industrial capacity.

- High purity Lithium Chloride Cation Monovalent concentrate product suitable to any downstream concentration approach or technology

- Reduced fresh water and chemical reagents in process

Opportunity to boost re-injection ratio substantially with spent divalent pre-treated fluid stream devoid of reagents or chemicals. (Suitable to optimally re-inject). LiTHOS will be able to share the latest trends in pre-treatment and re-injection.

Brine Fluid Processing Facility

There is no guarantee that the proposed testing facility will be successful or that a commercial lithium production facility will be developed. See "*Risk Factors*" below.

Go-To Market Strategy

Utilize a novel combination of proven technologies, existing supply-chain, and industry expertise to disrupt current lithium salt production from brine reservoirs in a sustainable manner without evaporation ponds.

- Use Existing Infrastructure for Rapid Market Entry:
    - Leverage existing manufacturing capacity of membrane suppliers and electrodialysis stack system integrators
    - Already assembled team of technical experts with proven experience in systems engineering and scaling of the technologies for applications like desalination and industrial water treatment
- Strategically Approach Value Chain:
    - Rather than attacking entire value chain, initial focus is on upstream brine pre-treatment and conditioning using AcQUA™
    - Model in place to be cashflow positive in short order and expand manufacturing, supply chain, and field services teams
    - Expand to downstream operations as customer relationships strengthen and free cashflows permit

- Prioritize Specific Customer Profile:

  - Possess extensive DLE experience

  - Have strong and committed financial resources for process transformation away from evaporation ponds

  - Operate existing DLE pilot(s) where AcQUA™ can immediately demonstrate value

  - Show willingness to invest and partner with innovative companies

  - Have invested substantial time and resources performing technical due diligence on AcQUA™ using the field brines of large lithium producers

  - Collaborate with other, more established DLE companies wherever possible

  - Leverage State and Federal Grant programs and tax credits wherever possible

Rise of DLE will open up new sources of lithium supply this decade

The rise of Direct Lithium Extraction (DLE) technology promises to open up new sources of lithium supply this decade, helping to avert a forecast shortfall of supply, according to a new Benchmark special report. DLE is an umbrella term for a group of technologies that selectively extracts lithium from brines.

There are currently 13 operating DLE projects forecast to produce around 124,000 tonnes LCE of lithium chemicals in 2024. By 2035, DLE is expected to contribute 14% of total lithium supply, at around 470kt LCE, according to Benchmark's Lithium Forecast.

The majority of the 2035 supply is set to come from continental brines, but with geothermal and oil fields expected to take a 9%, 14% share respectively, according to Benchmark.

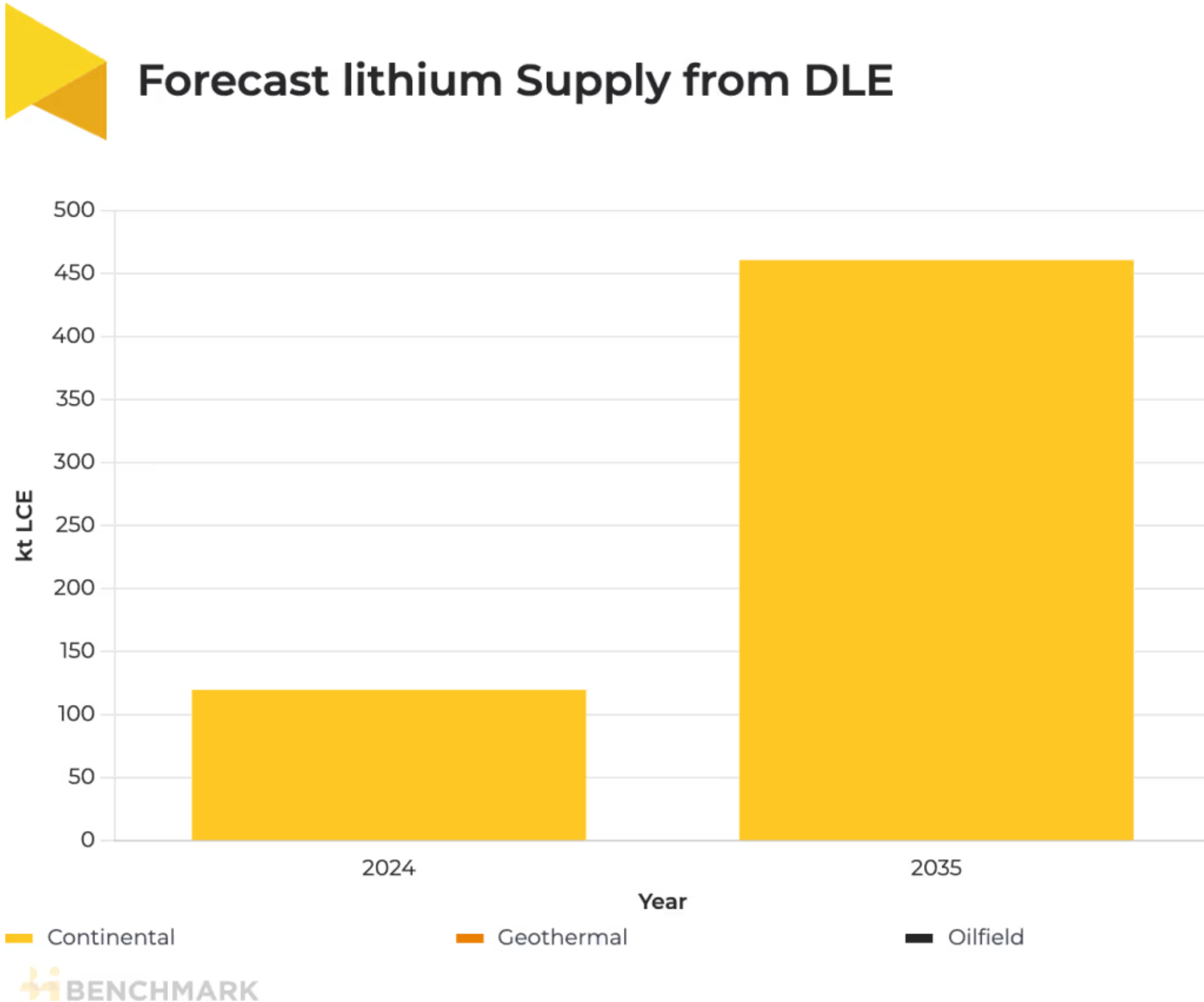


Figure 1 – Source: BENCHMARK (JULY 23, 2024)

Almost three-fourths of new brine projects will use some form of DLE, according to Benchmark.

The rise of DLE highlights a reality for supply over the next decade: the growing importance of unconventional supply and the expanding ecosystem of new players in the lithium value chain – particularly oil companies – who will bring capital and expertise to the industry.

However, DLE's path to commercialization could also take time, due to challenges around scalability, inflationary pressures, and delays at new brine projects. Technical risk also provides a hurdle for new investors in the sector.

Benchmark's DLE special report provides an overview of the different DLE technology types including adsorption, ion exchange, solvent extraction, and membranes.

Adsorption is the most widely adopted and best-established technology, having been commercially applied by Arcadium and various companies in China.

Due to the uniqueness of each brine in terms of impurity levels and lithium concentration, there is no 'one-size-fits-all solution'. Therefore, for each project, the DLE solution will likely need to be modified to meet the specific environmental and economic conditions.

Oil-field brines

The utilisation of DLE will open up previously undeveloped sources, namely those with low concentrations of lithium such as petro brines, and geothermal deposits. DLE has the potential for 80-90% recovery rates compared with the current evaporation yields of 20-50%.

DLE could also unlock vast "unconventional" brine resources located in western jurisdictions, at a time when building localised and diversified streams of critical minerals is increasingly a political priority in the US and European Union.

These "unconventional" resources include previously untapped geothermal and oilfield lithium-bearing brine resources, currently considered uneconomic due to lower lithium concentrations and an inability to extract lithium via traditional evaporation methods.

For this reason, DLE's potential is attracting major players to the table. Amongst whom oil and gas companies are increasingly allocating capital and resources to the technology's development, due to DLE's similarities with upstream oil extraction and refining.

Standard Lithium's Stage 1A project in Arkansas is forecast to be the first petrobrine project to come online in 2026 bringing an initial 5,000 tonnes a year to the market.

Oil giant Exxon Mobil is also investing in the state. Last month Exxon Mobil said it had signed a non-binding memorandum of understanding (MOU) with battery producer SK On for supply of up to 100,000 tonnes from the company's DLE lithium project in Arkansas.

Key Partnerships and Customers

LiTHOS has agreements signed with major existing producers for the pilot projects to process the brine samples and will also use the technology to process the brine from the exploration on its own properties.

In May 2023, LiTHOS announced a partnership with 3PL to process an initial shipment of salt saturated superbrine from 3PL's Railroad Valley playa leasehold. Phase 1 of the partnership focuses on the application of LiTHOS pre-treatment technology to eliminate the use of evaporation ponds and to extract and concentrate three or more minerals of interest: sodium carbonate, boron, and lithium. This project is in abeyance until 3PL is able to supply brine fluids after their current drilling program.

On October 23, 2023 the Company received the necessary Chilean government authorizations to send brine samples from Salar de Atacama.

On November 20, 2023, the Company received several brine samples from the Salar de Atacama (Chile).

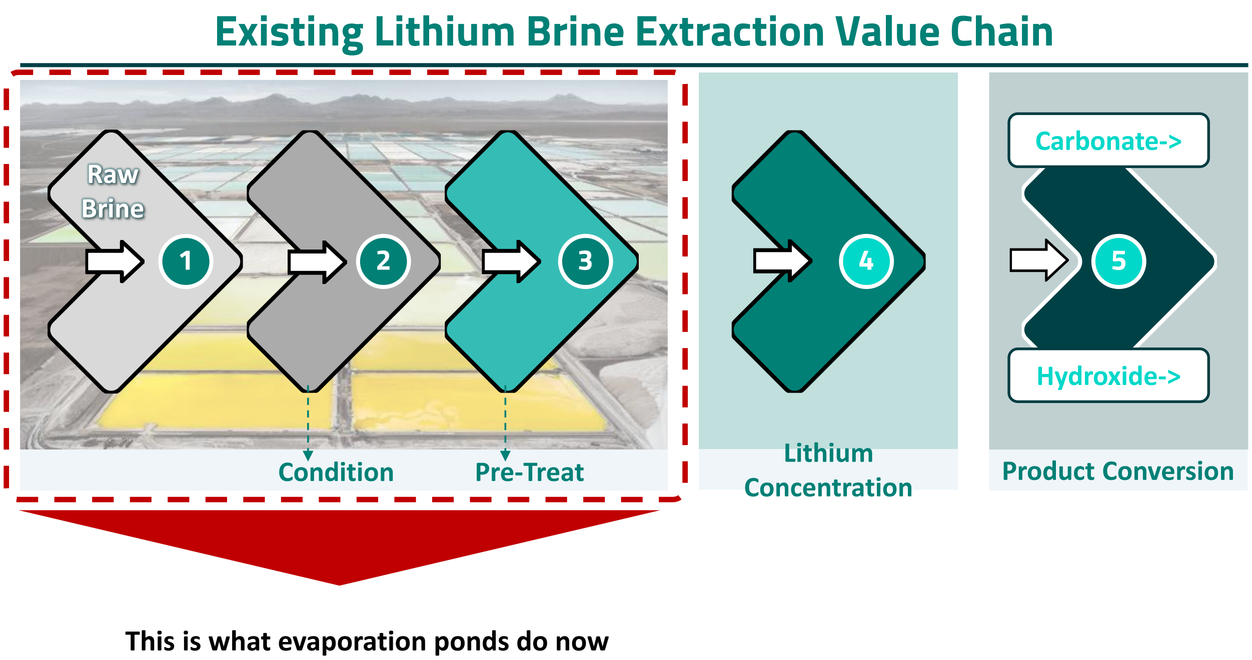
On December 14-15, 2023, the Company performed a project review with Customer A in its Alabama processing facility.

On January 24, 2024, the Company was awarded a purchase order from a major American lithium producer for lab scale testing and was subsequently sent field brines for processing.

On February 26, 2024, the Company was awarded a purchase order from a major international lithium producer for lab testing and was sent field brines for processing.

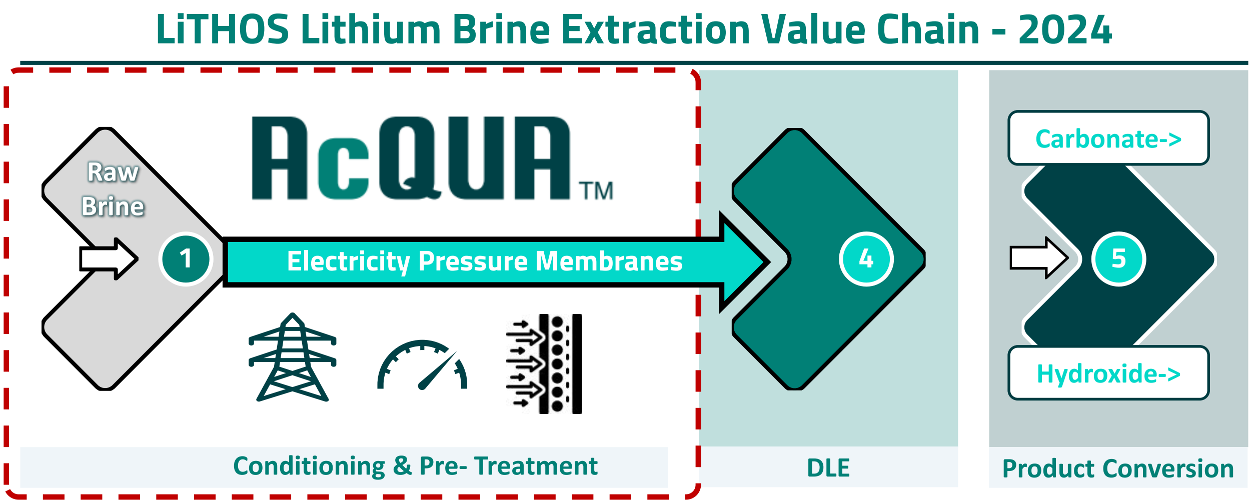
On August 20, 2024, LiTHOS announced positive results from its AcQUA™ technology lithium brine tests with Sociedad Química y Minera on Salar de Atacama Brines.

EXISTING LITHIUM BRINE VALUE CHAIN



Development of AcQUA™, a Patented Lithium Extraction Technology

With a potential source of lithium secured with the Rhodes Marsh Project, the Company's focus has shifted to demonstrating the commercial scale production viability of the patent-pending AcQUA™ lithium extraction technology by partnering with existing and prospective major producers. The Company's process of delivering high grade lithium hydroxide or carbonate to the market is segmented into 5 steps within the complete value chain.



Step 1 involves pumping the brine to the surface using new or existing infrastructure, or a combination of both. This process is well understood in the United States through oil and gas production which has demonstrated that large volumes of brine can be cycled to surface and back into the reservoir. The use of the Company's proprietary TiERRA™ subsurface imaging technology has the potential to reduce the risks of induced seismicity and optimize the pressure drive, and overall reservoir management for all brine assets.

Steps 2 & 3 is the conditioning and pre-treatment of the raw brine where the aim is selective, targeted impurity removal, and slight concentration of lithium. This step is often minimized or overlooked by other competing DLE technology providers. However, this is the critical step which is currently addressed at-scale with evaporation ponds. Evaporation ponds are heavily chemical intensive, not currently being permitted in North America and are expected to be phased out in Chile starting in 2026. It is this step which imparts excessive operating expenses on many of the well-known DLE processes with fouling or sludge contamination. This is the phase of the process (value chain) that LiTHOS is currently most focused on delivering results and pivoting to revenue generating field demonstration systems.

Step 4 is the DLE technology to selectively extract and further concentrate lithium from the brine. The process both concentrates the brine and removes most of the remaining impurities with a highly adaptable process. This technology development is the key link between optimizing the recovery factor and economics from existing brine (Salar) production and readily available polishing technology utilized for the fifth step of lithium production.

Step 5 is the production of high purity lithium salts and involves refining the concentrate generated from the Company's DLE process to further remove the last of the impurities and produce a high-grade lithium product for direct sale into the battery market.

All process steps may utilize LiTHOS's existing patent-pending technology modified and calibrated for the specifics of each end user reservoir. The Company believes the key to delivering successful commercial extraction projects at-scale in the future is the continued development of our AcQUA™ extraction technology and demonstrating its ability to concentrate lithium and remove brine impurities from a multiplicity of raw brines sourced from the United States, Chile, and Argentina, as well as working with multiple DLE providers as precursor to their process, and hence getting access to their existing customers. There is no guarantee that the Company will be successful in developing the AcQUA™ extraction technology. See "Mineral Projects" and "Risk Factors".

The Company is currently in the process of demonstrating the AcQUA™ conditioning and pre-treatment technology with multiple multibillion dollar lithium producers who are already in full scale production. This is planned to be a series of steps increasing the operating scale and scope of demonstrated performance of the AcQUA™ extraction technology across the 5 key process steps outlined above. The Company opened its Denver-based testing facility in early 2023 with a focus on improving the pre-treatment process for electro-pressure membrane flowsheet. The pre-treatment process has been tested rigorously on multiple oilfield brines spanning a majority of the shale oil and gas basins in the United States: Williston Basin, DJ Basin, Permian Basin, and Delaware Basin since early in 2017. The technology has achieved high performance represented by selectively high removal of impurities, while demonstrating a robust cycle life at field scale.

As of the period ending January 2025, The Company is currently negotiating contracts for AcQUA™ Field Pilot Plants on two lithium DLE pilot projects, one in Chile and the other in Argentina. The Company believes that a successful field pilot program with each customer will enable the demonstration of AcQUA™ as a commercially scalable, economically and technically viable conditioning and pre-treatment process. The Company aims to achieve the foregoing milestones and necessary construction activities required to complete an operational commercial pre-treatment lithium field production facility by Q4 of 2025.

At this time the longest lead input system components were ordered on March 25, 2024. A large deposit was paid and the Factory Acceptance Test (FAT) of these components remains ongoing. There is no guarantee that the Field Pilot Plant testing and evaluations will be successful or that a commercial lithium production facility or obtaining funding related to these activities within these timeframes or at all. See "*Mineral Projects*" and "*Risk Factors*".

Current Outlook

Business Goals

Q1 2025:

Management submitted a commercial proposal in February 2025 to Tier 1 customer. At the time of the submission of this MD&A the customer is conducting a technical and economic review of the Company's proposed initial technical-economic specifications and costs for client defined requirements.

LiTHOS Focused Path to First AcQUA™ Pre-Treatment Field Deployment

LiTHOS' primary focus is to achieve its major milestones in Q2 of 2025 and secure contracts for demonstration scale pre-treatment and selective purification . LiTHOS believes that reaching these goals, culminating with the completion of a demonstration scale AcQUA™ field deployable pre-treatment system, will be the catalyst for LiTHOS to move towards broader commercial development of its AcQUA™ pre-treatment systems.

Producing battery-grade lithium from a continental brine resource involves bringing together four well known and understood processes into a combined flowsheet. Within each of these processes are commercially operating solutions that LiTHOS believes can materially accelerate the timeline to commercial adoption by leveraging its organizational experience and patent-pending AcQUA™ technology:

- **Brine Production:** A series of shallow wells using industry standard pipelines connected wells delivers the brine from the shallow reservoirs to the pre-treatment processing facility.

- **Selective Conditioning, and Pre-Treatment for Purification of Lithium Chloride salts**: This is the process step which principally drives the requirement for evaporation ponds. This is the segment of the value chain that LiTHOS is most likely to add maximum value given the historical performance of AcQUA™ technology to recycle produced water from hydrocarbon and chemically laced oilfield brines at scale. This is the step of the process where LiTHOS has the fastest pathway to commercial validation and revenue generation.

- **Direct Lithium Extraction**: Consists of selective lithium purification, concentration and further divalent (purge) stream removal, designed specifically for the extraction of lithium and other aqueous minerals of value, employs a patent-pending electro-pressure membrane approach. The specifically implemented sequence of process steps are tuned to the unique chemical characteristics of each continental brine reservoir.

- **Lithium Production**: Conversion from lithium sulphate or chloride to lithium hydroxide using conversion technology is utilized in most current lithium hydroxide and carbonate production, which LiTHOS expects will be designed together with Sand Spirit.

LiTHOS has assembled a team of qualified process, chemical, and project engineers with experience building oilfield brine processing facilities in the United States similar in size to LiTHOS' contemplated first modular, field-deployable commercial lithium pre-treatment production facility. The Company's management team has a clear vision for accomplishing this goal, robust working relationships with an established supply chain, and contracted lab scale pilot projects with world class lithium brines to get to market expediently.

De-Risking Factors for LITHOS' Path to First Lithium

- **Early-To-Market Pre-Treatment Processing Advantages:** Recent announcements of major investments in the lithium industry highlight the need for LiTHOS to bring lithium pre-treatment processing solutions to commercial, field-proven scale expeditiously. LiTHOS predicts the early-to-market advantage specifically focused on the pre-treatment and selective purification of raw brines provides the Company with the potential to capture market share in this segment of the value chain.

- **Validating LiTHOS Processing Technology on Significant Resources:** LiTHOS has focused initially on validating its AcQUA™ pre-treatment and selective purification technology only on producing assets in Chile and Argentina. The reason for this approach is to prove commercial readiness on world-class lithium brine reservoirs, systematically eliminating the use of evaporation ponds and becoming an indispensable technology partner for multi-billion-dollar mining companies. This approach may offer opportunities to partner with larger companies on developing their assets that may assist in securing substantial capital funding and advancing LiTHOS' growth trajectory.

- **Global Sustainable Lithium without Evaporation Ponds:** In the global landscape, the search for critical minerals to fuel the race to electrify transport has brought the focus to the supply chain and the impacts of acquiring these minerals. By eliminating the evaporation ponds with our modular AcQUA™ units, we anticipate using only about 1% of the land relative to conventional and currently operating lithium production systems in Chile and Argentina. The pre-treatment AcQUA™ units are closed loop systems that do not interact with or consume the local fresh water sources. The divalent (purge) waste stream is readily amenable for re-injection. Given our operations resemble those of the oil and gas industry, there is long-standing support and relationships with stakeholders where LiTHOS will be operating in the United States.

- **Lithium Hydroxide Facility in Bessemer Alabama:** Positioning itself for the future, LiTHOS continues its strategic partnership with Sand Spirit at the Bessemer, Alabama Crimson Tide complex. The Crimson Tide facility will be the first $LiOH\text{-}H_20$ production facility in the Southeastern United States. Lithos has found a robust partner in Sand Spirit who bring engineering expertise, a large 55,000 sq ft complex, and the necessary regulatory permits to produce $LiOH\text{-}H_20$. The facility is strategically located next to the Smackover reservoir which is the most prospective lithium enriched brine reservoir in the United States. ExxonMobil, Standard Lithium, Galvanic Energy, TerraVolta, and Vital Energy, Inc. are all actively developing Smackover lithium projects which present production offtake opportunities for the Crimson Tide facility. The Crimson Tide facility will leverage a license to LiTHOS's patent-pending pre-treatment to $LiOH\text{-}H_20$ process.

- **Offtake Contracts:** LiTHOS is active in developing relationships with the battery and automotive industries in the Southeastern United States through the Alabama Mobility and Power (AMP) Consortium as it moves through the next phase of project development in 2024. LiTHOS' strategy has been to develop meaningful agreements that provide binding provisions for the development of future sales contracts on the supply side with resource owners in the Smackover (Arkansas) reservoir. LiTHOS is working with battery and automotive manufacturers situated in the Southeastern United States.

Other

The Company is continuing to review its options with respect to the current and other prospective brine pilot projects with major energy and mining companies in the United States, Chile and Argentina.

Government Grants

In June 2023, the Company's subsidiary, Aqueous, was awarded a definitive contract for up to USD $250,000 grant previously announced by the Colorado Global Business Development division of the Office of Economic Development and International Trade ("**OEDIT**"). Aqueous was selected for an Early-Stage Capital and Retention grant that supports businesses commercializing innovative and disruptive technologies in the advanced industries that will be created or manufactured in Colorado.

During the nine months ended January 31, 2025, the Company received USD $175,322 (2023 - $nil) in grant funding under the program.

In July 2023, Aqueous was awarded one (1) of ten (10) Fast-Track grants by the U.S. Department of Energy ("**DOE**"). The USD $1,300,000 grant was announced on July 10, 2023 by the DOE. The DOE funded a total of $72 million for 296 projects for leading small businesses to pursue scientific, clean energy, and climate research, development, and demonstration projects. Only ten (10) Fast-Tracks (combined Phase I and Phase II awards) were awarded out of these 296 projects.

During the nine months ended January 31, 2025, the Company received USD $320,001 (2024 - $nil) in grant funding under the program. Of the amount received, $114,138 (2024 - $nil) was allocated to deferred grant income, as it relates to the purchase of capital assets.

Exploration and evaluation assets

Rhodes Marsh Property

On January 27, 2023, the Company acquired the Rhodes Marsh property pursuant to the acquisition of Iron Forge. The Rhodes Marsh property is an early-stage exploration project located in Mineral County, Nevada, USA. The project is comprised of two separate claim blocks within the Rhodes Marsh area, within the Spring Valley, approximately 350km northwest of Las Vegas. See Notes 7 and 8 of the April 30, 2024, Financial Statements for the valuation of the exploration and evaluation asset.

The Company is planning a discovery well program. Rangefront Geosciences have been retained and are working with the Bureau of Land Management in Nevada to get permitting approved on identified drill sites. The Company is working with the original vendor of the asset to acquire a working interest in additional land from a private landowner. The Company is waiting on firm quotes from three drilling contractors before selecting a drill contractor. The Company intends to test down through conductive brine reservoir at ~2500ft TVD subsurface.

Results of Operations

For the nine months ended January 31, 2025, the Company incurred a net loss of $6,130,927 compared to a net loss of $4,456,272 for the nine months ended October 31, 2024. The Company's loss included expenditures as follows:

- Grant income was $456,899 (2024 - $Nil) received from the OEDIT and DOE government grants.

- Professional fees of $241,451 (2024 – $401,987) decreased due to higher audit in current period but higher legal fees associated with acquisitions in the prior period.
- Business development costs of $116,338 (2024 - $341,419) are reflective of the activities in the current period.
- Consulting fees of $846,751 (2024 - $440,039) increased due to the use of consultants associated with increased business transactions compared to the prior period.
- Depreciation was $2,716,594 (2024 - $1,052,064) which is primarily related to intangible assets.
- Office and general expenses $146,322 (2024 -$198,092) include communication, insurance and general expenses associated with increased business activities.
- Filing fees and shareholder information $101,096 (2024 - $432,893) decreased due to fewer disclosures and filings that are required.
- Share based compensation was $2,299,022 (2024 - $347,049) for the recognition of stock options, restricted share units and performance share units that were amortized in the period.
- Change in fair value of derivative resulted in a gain of $284,478 (2024 - $Nil) recorded for the 999,900 warrants exercisable into common shares at USD $0.55 per warrant.
  The notes were revalued for the nine months ended January 31, 2025. The maturity date of the notes was extended, resulting in a gain of $211,942 on the modification.

For the three months ended January 31, 2025, the Company incurred a net loss of $933,063 compared to a net loss of $1,706,115 for the three months ended October 31, 2024. The Company's loss included expenditures as follows:

- Professional fees of $51,231 (2024 – $142,031) decreased due to higher legal fees associated with business transactions in the prior period.
- Business development costs of $1,966 (2024 - $127,876) are reflective of the activities in the current period.
- Consulting fees of $208,961 (2024 - $108,397) remained constant with the use of consultants associated with the business transactions.
- Depreciation was $366,750 (2024 - $516,637) which is related to intangible assets, ROU asset, and capital assets acquired and put into use in the period.
- Filing fees and shareholder information of $11,215 (2024 - $151,985) are less due to fewer filings in the current period.
- Office and general expense of $(19,907) (2024 - $158,049) include communication, insurance and general expenses associated with increased

business activities. The recovery in the current period was do to a reallocation of some expenses.

Summary of Quarterly Financial Results

Results for the most recent quarters including the last quarter ended January 31, 2025, are as follows:

For the Quarterly Periods ended:	January 31, 2025	October 31, 2024	July 31, 2024	April 30, 2024
			$	$
Total revenues	-	-	-	-
Net loss for the period	(933,063)	(3,194,363)	(2,003,501)	(2,867,761)
Net loss per common share, basic and diluted	(0.01)	(0.04)	(0.02)	(0.04)

For the Quarterly Periods ended:	January 31, 2024	October 31, 2023	July 31, 2023	April 30, 2023
	$	$	$	$
Total revenues	-	-	-	-
Net (loss) earnings for the period	(1,706,115)	(2,138,02)	(612,136)	(1,672,178)
Net (loss) earnings per common share, basic and diluted	(0.02)	(0.03)	(0.01)	(0.07)

Proposed Transactions

As at the date of this MD&A, there were no proposed transactions.

Related Party Transactions

Key management personnel compensation

The remuneration of the Company's directors and other members of key management, who have the authority and responsibility for planning, directing and controlling the activities of the Company consists of the following amounts:

	January 31, 2025	January 31, 2024
	$	$
Accounting fees	45,000	58,629
Consulting fees	332,627	144,477
Rent	-	13,882
Salaries and wages	112,288	-
Share-based payments:		
Stock options	5,589	347,049
PSU compensation expense	642,134	-
RSU compensation expense	1,215,949	269,660
	2,353,587	825,697

As at January 31, 2025, there was $734,186 (2024 - $156,083) in unpaid consulting and professional fees, which was included in accounts payable and accrued liabilities. The amounts are unsecured, non-interest bearing and due on demand.

Liquidity and Capital Resources

As at January 31, 2025, the Company had $50,399 (April 30, 2024 - $691,178) in cash and other current assets of $236,506 (2024 - $999,528). Current liabilities totaled $3,281,601 (2024- $2,905,371). Accordingly, as at April 30, 2024, the Company had a working capital deficiency of $3,045,095 (April 30, 2024 - working capital of $1,905,843). These factors indicate the existence of a material uncertainty that may raise significant doubt about the Company's ability to continue as a going concern.

Financings

For the year ended April 30, 2024:

On May 29, 2023, the Company closed a private placement of 1,233,819 common shares at a price of $0.44 per share for gross proceeds of $542,880.

On June 9, 2023, the Company settled accounts payable of $69,435 by issuing 61,995 common shares at a price of $0.66 per share and by paying cash of $34,717. The Company recognized a loss of $6,199 on the settlement.

On November 3, 2023 the Company completed a non-brokered private placement pursuant to which it issued 550 non-convertible note units (the "**Notes**") for gross proceeds of USD$550,000 ($752,565). The Notes were priced at USD $1,000 each and had 1,818 share purchase warrants attached, for a total of 999,900 share purchase warrants. The Notes had a term of 91 days and bear interest at the rate of

15% per annum payable on maturity. Each warrant entitles the holder thereof to acquire one common share each of the Company at a price of USD$0.55 per warrant for a period of five years from closing. Subsequent to their issuances, the Company extended the maturity date of the notes to June 30, 2024.

On March 8, 2024, the Company issued 75,000 common shares at $0.56 per common shares on the exercise of options. On the exercise of the options $14,050 was reclassified from reserves to share capital.

On March 15, 2024, the Company issued an aggregate of 992,871 units at a price of $0.70 per unit for gross proceeds of $695,010 in a non-brokered private placement. Each unit is comprised of one common share and one common share purchase warrant. Each warrant will entitle the holder thereof to purchase one common shares at a price of $0.90 per warrant share and exercisable for 3 years. In connection with the financing, the Company paid $26,103 in share issuance costs. The warrants were assigned a value of $nil under the residual value method.

On April 15, 2024, the Company issued an aggregate of 644,684 units at a price of $0.70 per unit for gross proceeds of $451,279 in a non-brokered private placement. Each unit is comprised of one common share and one common share purchase warrant. Each warrant will entitle the holder thereof to purchase one common shares at a price of $0.90 per warrant share and exercisable for 3 years. In connection with the financing, the Company paid $3,003 in share issuance costs. The warrants were assigned a value of $19,341 under the residual value method.

During the year ended April 30, 2024, Company issued 2,537,007 common shares on the exercise of 2,537,007 warrants with an exercise price ranging from $0.145 to $0.20. The Company received gross proceeds of $493,926.

For the year ended April 30, 2023:

On June 8, 2022, the Company settled its convertible debt of $94,062 by issuing 648,706 units at $0.145 per unit. Each unit is comprised of one common share with a fair value of $0.30 per share and one common share purchase warrant. Each warrant will entitle the holder thereof to acquire one share at a price of $0.145 per warrant share and exercisable for 4 years. The warrants had a residual value of $nil.

On January 20, 2023, the Company issued an aggregate of 5,860,853 common shares at a price of $0.145 per share for gross proceeds of $849,824 in a non-brokered private placement. In connection with the financing, the Company paid $12,999 in share issuance costs.

On January 27, 2023, the Company issued an aggregate of 7,499,999 common shares to the shareholders of Iron Forge with a fair value of $0.145 per common share and 3,749,999 share purchase warrants. Each warrant entitles the holder thereof to purchase one common share in the capital of the Company at an exercise price of $0.20 for a period of two years after the date of issuance. The warrants had a residual value of $nil.
On February 9, 2023, the Company issued an aggregate of 889,655 common shares at a price of $0.145 per share for gross proceeds of $129,000 in a non-brokered private placement.

On April 27, 2023, the Company issued an aggregate of 15,000,000 common shares to the Lithos shareholders and 10,000,000 performance shares to certain employees and consultants of Lithos. The equity instruments had a fair value of $0.60 per share for total consideration of $15,000,000. In addition, the Company issued 2,000,000 common shares with a fair value of $1,200,000 to an arms length party as a finders' fee. The transaction costs were incurred in connection with the business combination and were expensed through the statement of loss and comprehensive loss.

Outstanding Shares

The following table sets forth information concerning the outstanding securities of the Company:

	January 31, 2025	April 30, 2024
Common shares	84,617,578	84,537,988
Stock options	1,845,000	1,845,000
Warrants	13,431,086	16,482,486
Restricted share units	3,366,100	1,595,000
Performance share units	6,448,888	5,848,888
Fully Diluted Shares	109,708,652	110,309,362

Financial and Other Instruments

Financial instruments are agreements between two parties that result in promises to pay or receive cash or equity instruments. The carrying values of these instruments approximate their fair values due to their short term to maturity.

Fair value measurements of financial instruments are required to be classified using a fair value hierarchy that reflects the significance of inputs used in making the measurements. The levels of the fair value hierarchy are defined as follows:

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 or indirectly.
Level 3: Inputs for assets or liabilities that are not based on observable market data.

The Company's financial instruments classified as Level 1 in the fair value hierarchy include cash. The Company has recorded its derivative liability as a level 2 financial instrument. The carrying values of advances receivable, accounts payable and accrued liabilities, notes payable, and lease liability approximate their fair values due to the short-term maturity of these instruments.

- Credit risk;
- Liquidity risk; and
- Market risk.

Credit risk

Credit risk is the risk that one party to a financial instrument will cause a financial loss for the other party by failing to discharge an obligation. The Company manages credit risk, in respect of cash, by placing cash at major financial institutions in Canada and the United States.

Liquidity risk

Liquidity risk is the risk that the Company will not be able to meet its financial obligations as they fall due. The Company's approach to managing liquidity is to ensure, as far as possible, that it will always have sufficient liquid funds to meet its liabilities when due, under both normal and stressed conditions, without incurring unacceptable losses or risking damage to the Company's reputation.

The current contractual financial liabilities of the Company as of January 31, 2025 equal $3,198,675 (2023 - $2,905,371). All of the liabilities presented as accounts payable are due within 90 days of the end of the period. The Company is seeking additional sources of capital through financing opportunities.

Market risk

Market risk is the risk that changes in market prices, such as foreign exchange rates and interest rates, will affect the Company's income or the value of its holdings of financial instruments. The objective of market risk management is to manage and control market risk exposures within acceptable parameters, while optimizing the return on capital.

The parent Company's functional currency is the Canadian dollar. The Company is subject to foreign exchange risk as it incurs a significant number of transactions denominated in USD. A 10% variance in the foreign exchange rates would expose the Company to a positive or negative impact on its statement of loss and comprehensive loss is immaterial during the nine months ended January 31, 2025. The Company does not engage in any hedging activities to reduce its foreign currency risk.
As at January 31, 2025 and 2024, the Company is not exposed to significant market risk.

Critical Accounting Estimates

The preparation of consolidated financial statements requires management to make judgments, estimates and assumptions that affect the application of policies and reported amounts of assets, liabilities, contingent assets, and contingent liabilities at the date of the financial statements and reported amounts of revenue and expenses during the reporting period. Estimates and assumptions 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. However, actual outcomes may differ from these estimates.

Significant accounting judgments

Acquisitions
Judgment is used when determining whether an acquisition is a business combination or an asset acquisition. When applicable, management may consider the optional use of the concentration test, when in substance, an acquisition represents the purchase of a single asset or group of similar assets. Judgment is also used in measuring the fair value of equity instruments issued as consideration in an asset acquisition or business combination.

The Company measures all assets acquired and liabilities assumed at their acquisition-date fair values. In a business combination, the excess of the aggregate of the consideration transferred over the net assets of the acquisition-date amounts of all identifiable assets acquired and the liabilities assumed, is recognized as goodwill as of the acquisition date.

Cash generating unit ("CGUs")
The identification of cash generating units involves significant judgment when identifying and allocating assets and liabilities to the smallest group of assets that is largely independent of the cash inflows from other assets or groups of assets. Management considers the organizational structure and business operations when making this determination. These judgments are critical in the impairment process and could have a material impact on the accuracy of impairment testing.

Going concern
The assessment of the Company's ability to continue as a going concern and to raise sufficient funds to pay for its ongoing operating expenditures, meet its liabilities for the ensuing year, and to fund planned and contractual technology development programs, involves significant judgment based on historical experience and other factors, including expectation of future events that are believed to be reasonable under the circumstances.

Title to mineral property interest
Although the Company has taken steps to verify title to mineral properties that it currently has under option, these procedures do not guarantee the Company's title. Such properties may be subject to prior agreements or transfer and title may be affected by undetected defects.

Significant accounting estimates and assumptions

Valuation of equity consideration granted for acquisitions
The valuation of share consideration granted involves management judgment in determining the valuation of the share consideration granted. Judgment is exercised in assessing the fair value of the shares granted as well as any potential lock-up provisions on the common shares or performance shares.

Estimated useful life of intangible assets and property, plant and equipment
Amortization of capital and intangible assets is dependent upon estimates of useful lives based on management's judgment. Additional determination must be made by management whether the identified intangible assets have an indefinite life or if not, management determines its lifespan. In management's view, the Lithos technology and the Aqueous technology will have finite lives and will have a useful life of 7 years.

Impairment of exploration and evaluation assets
The application of the Company's accounting policy for exploration and evaluation expenditures requires judgment in determining whether it is likely that future

economic benefits will flow to the Company, which may be based on assumptions about future events or circumstances.

Estimates and assumptions made may change if new information becomes available. If, after an expenditure is capitalized, information becomes available suggesting that the recovery of the expenditure is unlikely, the amount capitalized is written off in the profit or loss in the period the new information becomes available.

Discount rate used to present value lease liability
Management is required to estimate the Company's incremental borrowing rate. This rate is used to discount the future lease cash flows to determine the carrying value of the lease liability. Management estimates its incremental borrowing rate based on the risk-free rate and a credit risk premium for a period commensurate with the term of the lease.

Impairment considerations of capital assets, intangible assets and goodwill
Goodwill impairment testing requires management to make critical estimates within the impairment testing model. On an annual basis, the Company tests whether goodwill is impaired.

Determining whether any charge to impairment against the Company's capital assets and finite lived intangible assets require management to estimate the recoverable amount, which is defined as the higher of fair value less the cost of disposal or value in use. Many factors used in assessing recoverable amounts are outside of the control of management and it is reasonably likely that assumptions and estimates will change from period to period. Impairment is reviewed on an annual basis or as events and conditions change.

The recoverable value of goodwill and intangible assets is determined using discounted cash flow models, which incorporate assumptions about future events including future cash flows, growth rates and discount rates.

Deferred income tax
The Company recognizes deferred tax assets to the extent their recovery is probable. Assessing the recoverability of deferred tax assets requires management to make significant estimates of future taxable profit against which deductible temporary differences and the carry-forward of unused tax credits and unused tax losses can be utilized. In addition, changes in tax laws could limit the ability of the Company to obtain tax deductions in future periods.

Share-based payments
The determination of the fair value related to share-based payments are subject to estimate. Estimating fair value for share-based payment transactions requires

determining the most appropriate valuation model, which is dependent on the terms and conditions of the grant. This estimate also requires determining the most appropriate inputs to the valuation model including the expected life of the share option, volatility and dividend yield and making assumptions about them. Where a share-based payment includes performance conditions that impact the vesting of the award, management applies estimates to the likelihood the performance obligation will be met and the percentage of forfeitures.

Derivatives

Determining the fair value of the warrant derivative liability requires estimates relating to the choice of a valuation model and may involve the estimation of price volatility, the expected term, and risk-free interest rates. The Company elects to use the Black-Scholes Option Pricing Model. Any changes in the estimates or inputs utilized to determine fair value could have a significant impact on the Company's future operating results.

Accounting Standards, Amendments and Interpretations not yet Effective

For details of the Company's Future Accounting Standards, including accounting standards not yet adopted, new accounting standards adopted, and accounting standards amended but not yet effective, please refer to Note 4 of the Company's interim consolidated financial statements for the nine months ended January 31, 2025.

Off-Balance Sheet Arrangements

The Company did not enter into any off-balance sheet arrangements as at January 31, 2025, or as of the date of this report.

Risks and Uncertainties

The Company believes that the following risks and uncertainties may materially adversely affect the Company and its business. The risks and uncertainties described in this MD&A are those the Company currently believes to be material, but they are not the only ones the Company will face. If any of the following risks, or any other risks and uncertainties that the Company has not identified or that it currently considers not to be material, actually occur or become material risks, the Company's business, prospects, financial condition, results of operations and cash flows, and consequently the price of the common shares could be materially and adversely affected. In all these cases, the trading price of the Company's securities could decline, and prospective investors could lose all or part of their investment.

Any reference to "the Company" or "LiTHOS" in the risk factors refers to the Company and its subsidiaries together on a consolidated basis.

Insufficient Capital

The Company currently has minimal revenue producing operations and may continue to report a working capital deficit. To maintain its activities, the Company will require additional funds which may be obtained either by the sale of equity capital, debt financing, government grants or by entering into an option or joint venture agreement with a third party providing such funding. There is no assurance that the Company will be successful in obtaining such additional financing; failure to do so could result in the loss or substantial dilution of the Company. The Company's unallocated working capital may not suffice to fund its business goals and objects as stated elsewhere in the MD&A.

The Company has not yet commenced commercial production at any of its properties and as such, it has not generated positive cash flows from its properties to date and has no reasonable prospects of doing so unless successful commercial production can be achieved at the Company's projects. The Company expects to continue to incur negative investing and operating cash flows until such time as it enters into commercial production of its properties or successfully demonstrates and commercializes its technology. This will require the Company to deploy its working capital to fund such negative cash flow and to seek additional sources of financing. There is no assurance that any such financing sources will be available or sufficient to meet the Company's requirements. There is no assurance that the Company will be able to continue to raise equity capital or that the Company will not continue to incur losses.

Limited Operating History

The Company is an early-stage company and its technology has not yet been commercialized and its mineral properties are exploration stage properties. As such, the Company will be subject to all of the business risks and uncertainties associated with any new business enterprise, including under-capitalization, cash shortages, limitations with respect to personnel, financial and other resources and lack of revenues. Accordingly, the current state of the Company's technology and the Rhodes Marsh Project each require significant additional expenditures before any cash flow may be generated. There is no assurance that the Company will be successful in achieving a return on shareholders' investment and the likelihood of success of the Company must be considered in light of the problems, expenses, difficulties, complications and delays frequently encountered in connection with the establishment of any business.

Lack of Operating Cash Flow

The Company currently has no source of operating cash flow and is expected to continue to do so for the foreseeable future. The Company's failure to achieve profitability and positive operating cash flows could have a material adverse effect on its financial condition and results of operations. If the Company sustains losses over an extended period of time, it may be unable to continue its business. Further exploration and development of the Rhodes Marsh Project will require the commitment of substantial financial resources. It may be several years before the Company may generate any revenues from operations, if at all. There can be no assurance that the Company will realize revenue or achieve profitability.

Resale of Common Shares

The continued operation of the Company will be dependent upon its ability to generate operating revenues and to procure additional financing. There can be no assurance that any such revenues can be generated or that other financing can be obtained. If the Company is unable to generate such revenues or obtain such additional financing, any investment in the Company may be lost. In such event, the probability of resale of the Common Shares purchased would be diminished.

Development of the Testing and Production Facility with Sand Spirit

The Company's business strategy depends in large part on the successful development of the testing and production facility with Sand Spirit. The capital expenditures and time required to develop the facility are significant and the Company has not yet secured funding that it believes will be sufficient to cover its share of capital expenditure obligations for the development of the facility. If the Company is unable to develop the facility, its business and financial condition will be materially adversely affected.

The Company believes that one of the key elements to the successful development of a feasible project in the future is the continued scale-up of the AcQUATM technology. The successful development of the AcQUATM technology is dependent on the Company obtaining positive results from testing and production of lithium at the facility. The Company believes that a successful pilot program should enable the commercialization of the Company proprietary process. There is no guarantee that the Company will be successful in developing the facility, a commercial lithium production facility or obtaining funding related to these activities within the intended timeframes or at all. Hence, there is no guarantee that the Company will be successful in developing the AcQUATM technology. If the Company is unable to utilize its own or others DLE technology, its business and financial condition could be materially adversely affected.

Exploration of Mineral Property Interests

Although substantial benefits may be derived from the discovery of a major mineralized deposit, no assurance can be given that minerals will be discovered in sufficient quantities to justify commercial operations or that the funds required for development can be obtained on a timely basis. The discovery of mineral deposits is dependent upon a number of factors. The commercial viability of a mineral deposit once discovered is also dependent upon a number of factors, some of which relate to particular attributes of the deposit, such as size, grade and proximity to infrastructure, and some of which are more general such as commodity prices and government regulations, including environmental protection. Most of these factors are beyond the control of the Company. In addition, because of these risks, there is no certainty that the expenditures to be made by the Company on the exploration of its various mineral properties as described herein will result in the discovery of commercial quantities of ore. The Company has no history of operating earnings and the likelihood of success must be considered in light of problems, expenses, etc. which may be encountered in establishing a business.

Exploring and developing natural resource projects bears a high potential for all manner of risks. Additionally, few exploration projects successfully achieve development due to factors that cannot be predicted or foreseen. Moreover, even one such factor may result in the economic viability of a project being detrimentally impacted, such that it is neither feasible nor practical to proceed. Natural resource exploration involves many risks, which even a combination of experience, knowledge and careful evaluation may not be able to overcome. Operations in which the Company has a direct or indirect interest will be subject to all the hazards and risks normally incidental to exploration, development and production of natural resources, any of which could result in work stoppages, damage to property, and possible environmental damage. If any of the Company's exploration programs are successful, there is a degree of uncertainty attributable to the calculation of resources and corresponding grades and in the analysis of the economic viability of future development and mineral extraction. Until actually extracted and processed, the quantity of lithium reserves and grade must be considered as estimates only. In addition, the quantity of reserves and resources may vary depending on commodity prices and various technical and economic assumptions. Any material change in quantity of reserves, grade or recovery ratio, may affect the economic viability of the Company's properties. In addition, there can be no assurance that results obtained in pilot plants will be duplicated in larger scale tests under on-site conditions or during production. The Company closely monitors its activities and those factors which could impact them, and employs experienced consulting, engineering, and legal advisors to assist in its risk management reviews where it is deemed necessary.

Exploration, Development and Production Risks

The exploration for and development of minerals involves significant risks, which even a combination of careful evaluation, experience and knowledge may not eliminate. Few properties that are explored are ultimately developed into producing mines. There can be no guarantee that the estimates of quantities and qualities of minerals disclosed will be economically recoverable. With all mining operations there is uncertainty and, therefore, risk associated with operating parameters and costs resulting from the scaling up of extraction methods tested in pilot conditions. Mineral exploration is speculative in nature and there can be no assurance that any minerals discovered will result in an increase in the Company's resource base.

The Company's operations will be subject to all of the hazards and risks normally encountered in the exploration, development and production of minerals. These include unusual and unexpected geological formations, rock falls, seismic activity, flooding and other conditions involved in the extraction of material, any of which could result in damage to, or destruction of, mines and other producing facilities, damage to life or property, environmental damage and possible legal liability. In addition, operations are subject to hazards that may result in environmental pollution, and consequent liability that could have a material adverse impact on the business, operations and financial performance of the Company.

Substantial expenditures are required to establish ore reserves through drilling, to develop metallurgical processes to extract the metal from the ore and, in the case of new properties, to develop the mining and processing facilities and infrastructure at any site chosen for mining. Although substantial benefits may be derived from the discovery of a major mineralized deposit, no assurance can be given that minerals will be discovered in sufficient quantities to justify commercial operations or that funds required for development can be obtained on a timely basis. The economics of developing gold and other mineral properties is affected by many factors including the cost of operations, variations in the grade of ore mined, fluctuations in metal markets, costs of processing equipment and such other factors as government regulations, including regulations relating to royalties, allowable production, importing and exporting of minerals and environmental protection. The remoteness and restrictions on access of properties in which the Company has an interest will have an adverse effect on profitability as a result of higher infrastructure costs. There are also physical risks to the exploration personnel working in the terrain in which the Company's properties will be located, often in poor climate conditions.

The long-term commercial success of the Company depends on its ability to explore, develop and commercially produce minerals from its properties and to locate and acquire additional properties worthy of exploration and development for minerals. No assurance can be given that the Company will be able to locate satisfactory properties for acquisition or participation. Moreover, if such acquisitions or participations are identified, the Company may determine that current markets, terms of acquisition and participation or pricing conditions make such acquisitions or participation uneconomic.

Mineral Resources and Reserves

Because the Company has not defined or delineated any proven or probable reserves on any of its properties, mineralization estimates for the Company's properties may require adjustments or downward revisions based upon further exploration or development work or actual production experience. In addition, the grade of ore ultimately mined, if any, may differ from that indicated by drilling results. There can be no assurance that minerals recovered in small-scale tests will be duplicated in large-scale tests under on-site conditions or in production scale.

Obtaining and Renewing Licenses and Permits

The Company's operations, development projects and exploration activities are subject to receiving and maintaining licenses, permits and approvals, including regulatory relief or amendments, from appropriate governmental authorities. Before any development on any of its properties, the Company must receive numerous permits, and continued operations at the Company's properties, including the Marsh Rhodes Project, is also dependent on maintaining, complying with and renewing required permits or obtaining additional permits.

The Company may be unable to obtain on a timely basis or maintain in the future all necessary permits required to explore and develop its properties, commence construction or operation of facilities and properties or maintain continued operations. Delays may occur in connection with obtaining necessary renewals of permits for The Company's existing operations and activities, additional permits for existing or future operations or activities, or additional permits associated with new legislation. It is possible that previously issued permits may become suspended or revoked for a variety of reasons, including through government or court action.

Governmental Regulation and Policy

Mining operations and exploration activities are subject to extensive laws and regulations. Such regulations relate to production, development, exploration, exports, imports, taxes and royalties, labor standards, occupational health, waste disposal, protection and remediation of the environment, toxic and radioactive substances, transportation safety and emergency response, and other matters. Compliance with such laws and regulations increases the costs of exploring, developing, constructing, and operating projects. It is possible that, in the future, the costs, delays and other effects associated with such laws and regulations may impact decisions of the Company with respect to the exploration and development of properties, such as the properties in which the Company has an interest. The Company will be required to expend significant financial and managerial resources to comply with such laws and regulations. Since legal requirements change frequently, are subject to interpretation and may be enforced in varying degrees in practice, the Company is unable to predict the ultimate cost of compliance with these requirements or their effect on operations. Furthermore, future changes in governments, regulations and policies and practices, such as those affecting exploration and development of the Company's properties could materially and adversely affect the results of operations and financial condition of the Company in a particular year or in its long-term business prospects.

No Assurances

There is no assurance that economic mineral deposits will ever be discovered, or if discovered, subsequently put into production. Most exploration activities do not result in the discovery of commercially mineable deposits. Mining exploration is highly speculative in nature, involves many risks and frequently is not productive. Most exploration projects do not result in the discovery of commercially mineable ore deposits and no assurance can be given that any anticipated level of recovery of mineral reserves will be realized or that any identified mineral deposit will ever qualify as a commercially mineable (or viable) ore body which can be legally and economically exploited. There can be no assurance that the Company's exploration efforts at the Rhodes Marsh Project will be successful.

Risk Related to the Cyclical Nature of the Lithium Business

The lithium business and the marketability of the products that are produced are affected by worldwide economic cycles. At the present time, the significant demand for lithium and other commodities in many countries is driving increased prices, but it is difficult to assess how long such demand may continue. Fluctuations in supply and demand in various regions throughout the world are common.

Title Claims and First Nations Rights

The Company has investigated its rights to explore and exploit its projects and, to the best of its knowledge, its rights in relation to lands covering the projects are in good standing. Nevertheless, no assurance can be given that such rights will not be revoked, or significantly altered, to the Company's detriment. There can also be no assurance that the Company's rights will not be challenged or impugned by third parties.
Although the Company is not aware of any existing title uncertainties with respect to lands covering material portions of its projects, there is no assurance that such uncertainties will not result in future losses or additional expenditures, which could

have an adverse impact on the Company's future cash flows, earnings, results of operations and financial condition.

Certain of the Company's properties may be subject to the rights or the asserted rights of various community stakeholders, including First Nations and other indigenous peoples. The presence of community stakeholders may impact the Company's ability to develop or operate its mining properties and its projects or to conduct exploration activities. Accordingly, the Company is subject to the risk that one or more groups may oppose the continued operation, further development or new development or exploration of the Company's current or future mining properties and projects.

Such opposition may be directed through legal or administrative proceedings, or through protests or other campaigns against the Company's activities.

Governments in many jurisdictions must consult with, or require the Company to consult with, indigenous peoples with respect to grants of mineral rights and the issuance or amendment of project authorizations. Consultation and other rights of indigenous peoples may require accommodation including undertakings regarding employment, royalty payments and other matters. This may affect the Company's ability to acquire within a reasonable time frame effective mineral titles, permits or licenses in any jurisdictions in which title or other rights are claimed by First Nations and other indigenous peoples, and may affect the timetable and costs of development and operation of mineral properties in these jurisdictions. The risk of unforeseen title claims by indigenous peoples also could affect existing operations as well as development projects. These legal requirements may also affect the Company's ability to expand or transfer existing operations or to develop new projects.

Community Relations and License to Operate

The Company's relationship with the host communities where it operates is critical to ensure the future success of its existing operations and the construction and development of its projects. There is an increasing level of public concern relating to the perceived effect of mining activities on the environment and on communities impacted by such activities. Certain non-governmental organizations ("**NGOs**"), some of which oppose globalization and resource development, are often vocal critics of extractive industries and their practices. Adverse publicity generated by such NGOs or others related to extractive industries generally, or the Company's exploration or development activities specifically, could have an adverse effect on the Company's reputation. Reputation loss may result in decreased investor confidence, increased challenges in developing and maintaining community relations and an impediment to the Company's overall ability to advance its projects, which could have a material adverse impact on the Company's results of operations, financial condition and prospects. While the Company is committed to operating in a socially responsible manner, there is no guarantee that the Company's efforts in this respect will mitigate this potential risk.

Title Risks

Although the Company has exercised the usual due diligence with respect to determining title to properties in which it has a material interest, there is no guarantee that title to such properties will not be challenged or impugned. The Company's mineral property interests may be subject to prior unregistered agreements or transfers or native land claims and title may be affected by undetected defects. Surveys have not been carried out on any of the Company's mineral properties, therefore, in accordance with the laws of the jurisdiction in which such properties are situated; their existence and area could be in doubt. Until competing interests in the mineral lands have been determined, the Company can give no assurance as to the validity of title of the Company to those lands or the size of such mineral lands.

Uninsurable Risks

In the course of exploration, development and production of mineral properties, certain risks, and in particular, unexpected or unusual geological operating conditions including rock bursts, cave-ins, fires, flooding and earthquakes may occur. It is not always possible to fully insure against such risks and the Company may decide not to take out insurance against such risks as a result of high premiums or other reasons. Should such liabilities arise, they could reduce or eliminate any future profitability and result in increasing costs and a decline in the value of the securities of the Company.

Additional Funding Requirements

The development of the Company's DLE technology and the exploration and development of the Rhodes Marsh Project will require substantial additional capital. When such additional capital is required, the Company will need to pursue various financing transactions or arrangements, including joint venturing of projects, debt financing, equity financing, government grants or other means. Additional financing may not be available when needed or, if available, the terms of such financing might not be favorable to the Company and might involve substantial dilution to existing shareholders. The Company may not be successful in locating suitable financing transactions in the time period required or at all. Although the Company has successfully secured government grants in the past, the success of pending or future applications for additional government funding may not be successful, may not generate sufficient funds in the absence of other financing arrangements, or may be subject to conditions that restrict the use or purpose of such funding. A failure to raise capital when needed would have a material adverse effect on the Company's business, financial condition and results of operations. Any future issuance of securities to raise required capital will likely be dilutive to existing shareholders. In addition, debt and other debt financing may involve a pledge of assets and may be senior to the interests of equity holders. The Company may incur substantial costs in pursuing future capital requirements, including investment banking fees, legal fees, accounting fees, securities law compliance fees, printing and distribution expenses and other costs. The ability to obtain needed financing may be impaired by such factors as the capital markets, the Company's operating history, the location of its mineral properties, the price of commodities and/or the loss of key management personnel.

Future Share Issuances May Affect the Market Price of the Common Shares

In order to finance future operations, the Company may raise funds through the issuance of additional Common Shares or the issuance of debt instruments or other securities convertible into Common Shares. The Company cannot predict the size of future issuances of Common Shares or the issuance of debt instruments or other securities convertible into Common Shares or the dilutive effect, if any, that future issuances and sales of the Company's securities will have on the market price of the Common Shares.

Dilution

Common Shares, including rights, warrants, special warrants, subscription receipts and other securities to purchase, to convert into or to exchange into Common Shares, may be created, issued, sold and delivered on such terms and conditions and at such times as the Board may determine. In addition, the Company may issue additional Common Shares from time to time pursuant to Common Share purchase warrants and the options to purchase Common Shares issued from time to time by the Board. The issuance of these Common Shares could result in significant dilution to holders of Common Shares.

Operational Risks

The Company will be subject to a number of operational risks and may not be adequately insured for certain risks, including: environmental contamination, liabilities arising from historic operations, accidents or spills, industrial and transportation accidents, which may involve hazardous materials, labor disputes, catastrophic accidents, fires, blockades or other acts of social activism, changes in the regulatory environment, impact of non-compliance with laws and regulations, natural phenomena such as inclement weather conditions, floods, earthquakes, ground movements, cave-ins, and encountering unusual or unexpected geological conditions and technological failure of exploration methods.

There is no assurance that the foregoing risks and hazards will not result in damage to, or destruction of, the property of the Company, personal injury or death, environmental damage or, regarding the exploration or development activities of the Company, increased costs, monetary losses and potential legal liability and adverse governmental action. These factors could all have an adverse impact on the Company's future cash flows, earnings, results of operations and financial condition.

Additionally, the Company may be subject to liability or sustain loss for certain risks and hazards against which the Company cannot insure or which the Company may elect not to insure because of the cost. This lack of insurance coverage could have an adverse impact on the Company's future cash flows, earnings, results of operations and financial condition.

Construction Risks

As a result of the substantial expenditures involved in development projects, developments are prone to material cost overruns versus budget. The capital expenditures and time required to develop new projects are considerable and changes in cost or construction schedules can significantly increase both the time and capital required to build the project.

Construction costs and timelines can be impacted by a wide variety of factors, many of which are beyond the control of the Company. These include, but are not limited to, weather conditions, ground conditions, availability and performance of contractors and suppliers, delivery and installation of equipment, design changes, accuracy of estimates and availability of accommodations for the workforce.

Project development schedules are also dependent on obtaining the governmental approvals necessary for the operation of a project. The timeline to obtain these government approvals is often beyond the control of the Company. A delay in start-up or commercial production would increase capital costs and delay receipt of revenues.

Environmental Risks

All phases of mineral exploration and development businesses present environmental risks and hazards and are subject to environmental regulations. Environmental legislation provides for, among other things, restrictions and prohibitions on spills, releases or emissions of various substances used and or produced in association with natural resource exploration and production operations. The legislation also requires that facility sites be operated, maintained, abandoned and reclaimed to the satisfaction of applicable regulatory authorities.

Compliance with such legislation can require significant expenditures, and a breach may result in the imposition of fines and penalties, some of which may be material.

Environmental legislation is evolving in a manner expected to result in stricter standards and enforcement, larger fines and liability and potentially increased capital expenditures and operating costs. The discharge of pollutants into the air, soil or water may give rise to liabilities to foreign governments and third parties and may require the Company to incur costs to remedy such discharge. No assurance can be given that the application of environmental laws to the business and operations of the Company will not result in a curtailment of production or a material increase in the costs of production, development or exploration activities or otherwise adversely affect the Company's financial condition, results of operations or prospects.

Commodity Price Fluctuations

The prices of commodities vary on a daily basis. Price volatility could have dramatic effects on the results of operations and the ability of the Company to execute its business plan. The price of lithium materials may also be reduced by the discovery of new lithium deposits, which could not only increase the overall supply of lithium (causing downward pressure on its price) but could draw new firms into the lithium industry which would compete with the Company.

Regulatory Requirements

Even if the Rhodes Marsh Project is proven to host economic reserves of precious or non-precious metals, factors such as governmental expropriation or regulation may prevent or restrict mining of any such deposits. Exploration and mining activities may be affected in varying degrees by government policies and regulations relating to the mining industry. Any changes in regulations or shifts in political conditions are beyond the control of the Company and may adversely affect its business. Operations may be affected in varying degrees by government regulations with respect to restrictions on production, price controls, export controls, income taxes, expropriation of such mineral properties, environmental legislation and mine safety.

Volatility of Mineral Prices

The Company's revenues, if any, are expected to be in large part derived from the extraction and sale of precious and base minerals and metals. Factors beyond the control of the Company may affect the marketability of metals discovered, if any. Metal prices have fluctuated widely, particularly in recent years. Consequently, the economic viability of any of the Company's exploration projects cannot be accurately predicted and may be adversely affected by fluctuations in mineral prices. In addition, currency fluctuations may affect the cash flow which the Company may realize from its operations, since most mineral commodities are sold in a world market in US dollars.

Infrastructure

Exploration, development and processing activities depend, to one degree or another, on adequate infrastructure. Reliable roads, bridges, power sources and water supply are important elements of infrastructure, which affect access, capital and operating costs. The lack of availability on acceptable terms or the delay in the availability of any one or more of these items could prevent or delay exploration on the Rhodes Marsh Project. If adequate infrastructure is not available in a timely manner, there can be no assurance that the exploration or development will be commenced or completed on a timely basis on the Rhodes Marsh Project, if at all. Furthermore, unusual or infrequent weather phenomena, sabotage, government or other interference in the maintenance or provision of necessary infrastructure could adversely affect our operations.

Risks Associated with Acquisitions

As part of its business strategy, the Company has sought and will continue to seek new operating, development and exploration opportunities in the extractive industry. In pursuit of such opportunities, the Company may fail to select appropriate acquisition candidates or negotiate acceptable arrangements, including arrangements to finance acquisitions or integrate the acquired businesses and their personnel into the Company. The Company cannot assure that it can complete any acquisition or business arrangement that it pursues, or is pursuing, on favourable terms, if at all, or that any acquisition or business arrangement completed will ultimately benefit its business. Such acquisitions may be significant in size, may change the scale of the Company's business and may expose the Company to new geographic, political, operating, financial or geological risks. Further, any acquisition the Company makes will require a significant amount of time and attention of the Company's management, as well as resources that otherwise could be spent on the operation and development of the Company's existing business.

Any future acquisitions would be accompanied by risks, such as a significant decline in the relevant metal price after the Company commits to complete an acquisition on certain terms; the quality of the mineral deposit acquired proving to be lower than expected; the difficulty of assimilating the operations and personnel of any acquired companies; the potential disruption of the Company's ongoing business; the inability of management to realize anticipated synergies and maximize the Company's financial and strategic position; the failure to maintain uniform standards, controls, procedures and policies; the impairment of relationships with employees, customers and contractors as a result of any integration of new management personnel; and the potential for unknown or unanticipated liabilities associated with acquired assets and businesses, including tax, environmental or other liabilities. In addition, the Company may need additional capital to finance an acquisition. Debt financing related to any acquisition may expose the Company to the risks related to increased leverage, while equity financing may cause existing shareholders to suffer dilution. There can be no assurance that any business or assets acquired in the future will prove to be profitable, that the Company will be able to integrate the acquired businesses or assets successfully or that it will identify all potential liabilities during the course of due diligence. Any of these factors could have a material adverse effect on the Company's business, prospects, results of operations and financial condition.

Lithium Demand

Lithium is considered an industrial mineral and the sales prices for the different lithium compounds are not public. Lithium is not a traded commodity like base and precious metals. Sales agreements are negotiated on an individual and private basis with each different end-user. Therefore, it is possible that the sales prices used in preliminary economic assessments, pre-feasibility studies or feasibility studies prepared for the Company will be different than the actual prices at which the Company is able to sell its lithium compounds. In addition, there are a limited number of producers of lithium compounds and it is possible that these existing producers will try to prevent newcomers from entering the chain of supply by increasing their production capacity and lowering sales prices. Factors such as foreign currency fluctuation, supply and demand, industrial disruption and actual lithium market sale prices could have an adverse impact on operating costs and stock market prices and on the Company's ability to fund its activities. In each case, the economics of the properties could be materially adversely affected, even to the point of being rendered uneconomic.

Global Financial Conditions

Global financial conditions have from time to time been subject to periods of elevated volatility. Government debt, the risk of sovereign defaults, political instability and wider economic concerns in many countries have been causing significant uncertainties in the markets. Disruptions in the credit and capital markets can have a negative impact on the availability and terms of credit and capital. Uncertainties in these markets could have a material adverse effect on the Company's liquidity, ability to raise capital and cost of capital. High levels of volatility and market turmoil could also adversely impact commodity prices, exchange rates and interest rates and have a detrimental effect on the Company's business.

In February 2022, Russian military forces invaded Ukraine. In response, Ukrainian military personnel and civilians are actively resisting the invasion. The conflict continues unabated, the outcome of the conflict is uncertain and is likely to have wide-ranging consequences on the peace and stability of the region and the world economy. Certain countries including Canada and the United States, have imposed strict financial and trade sanctions against Russia, which sanctions may have far reaching effects on the global economy and financial markets and could result in increased volatility in commodity prices. Any such occurrence may have a material adverse effect on the Company's business, financial condition, results of operations or ability to access debt or equity financing.

Analyst Coverage

The trading market of the Common Shares depends, to some extent, on the research and reports that securities or industry analysts publish about the Company or its business. The Company has no control over these analysts. If one or more of the analysts who cover the Company should downgrade the Common Shares or change their opinion of the Company's business prospects, the Company's share price would likely decline. If one or more of these analysts ceases coverage of the Company or fails to regularly publish reports on the Company, the Company could lose visibility in the financial markets, which could cause the Company's share price or trading volume to decline.

Executive Employee Recruitment and Retention

The success of the Company will be dependent upon the performance of its management and key employees. The loss of any key executive or manager of the Company may have an adverse effect on the future of the Company's business. The number of persons skilled in acquisition, exploration and development of mining properties is limited and competition for such persons is intense. As the Company's business activity grows, it will require additional key financial and administrative personnel as well as additional operations staff. Recruiting qualified personnel as the Company grows will be critical to its success. The number of persons skilled in the acquisition, exploration and development of lithium brine projects is limited, and competition for such persons is intense. As the Company's business activity grows, it will require additional key financial, administrative, engineering, geological and other personnel. If the Company is not successful in attracting and training qualified personnel, the efficiency of its operations could be affected, which could have an adverse impact on future cash flows, earnings, results of operations and the financial condition of the Company. The Company is particularly at risk at this state of its development as it relies on a small management team, the loss of any member of which could cause severe adverse consequences. There is no assurance that it will be successful in attracting, training and retaining qualified personnel as competition for persons with these skill sets increases. If the Company is not successful in attracting, training and retaining qualified personnel, the efficiency of its operations could be impaired, which could have an adverse impact on its future cash flows, earnings, results of operations and financial condition.

Adverse General Economic Conditions

The unprecedented events in global financial markets in the past several years have had a profound impact on the global economy. Many industries, including the mineral exploration sector, were impacted by these market conditions. Some of the key impacts of the financial market turmoil included contraction in credit markets resulting in a widening of credit risk, devaluations, high volatility in global equity, commodity, foreign exchange and precious metal markets, a lack of market liquidity, natural disasters, public health crisis (such as the ongoing dispute between the sovereign state of the Ukraine and Russia) and other events outside of the Company's control. A similar slowdown in the financial markets or other economic conditions, including but not limited to, inflation, fuel and energy costs, lack of available credit, the state of the financial markets, interest rates and tax rates, may adversely affect the Company's operations. Specifically, a global credit/liquidity crisis could impact the cost and availability of financing and our overall liquidity, the volatility of mineral prices would impact the Company's prospects, volatile energy, commodity and consumables prices and currency exchange rates would impact costs and the devaluation and volatility of global stock markets would impact the valuation of its equity and other securities. These factors could have a material adverse effect on the Company's financial condition and results of operations.

In recent years, the securities markets in Canada, as well as in other countries around the world, have experienced a high level of price and volume volatility, and the market prices of securities of many companies have experienced wide fluctuations in price that have not necessarily been related to the operating performance, underlying asset values or prospects of such companies. There can be no assurance that continual fluctuations in price will not occur. It may be anticipated that any quoted market for the Common Shares will be subject to market trends and conditions generally, notwithstanding any potential success of the Company in developing assets, adding additional resources, establishing feasibility of deposits or creating revenues, cash flows or earnings. The value of securities will be affected by market volatility. An active public market for Common Shares might not develop or be sustained. If an active public market for the Common Shares does not develop or continue, the liquidity of a shareholder's investment may be limited and the price of the Common Shares may decline.

Force Majeure

The Rhodes Marsh Project now or in the future may be adversely affected by risks outside the control of the Company, including the price of gold on world markets, labour unrest, civil disorder, war, subversive activities or sabotage, fires, floods, explosions or other catastrophes, epidemics or quarantine restrictions, including those related to the aftermath of the COVID-19 pandemic.

Legal and Litigation

All industries, including the mining industry, are subject to legal claims, with and without merit. Defense and settlement costs of legal claims can be substantial, even with respect to claims that have no merit. Due to the inherent uncertainty of the litigation process, the resolution of any particular legal proceeding to which the Company may become subject could have a material adverse effect on the Company's business, prospects, financial condition, and operating results. There are no current claims or litigation outstanding against the Company.

Insurance

The Company is also subject to a number of operational risks and may not be adequately insured for certain risks, including: accidents or spills, industrial and transportation accidents, which may involve hazardous materials, labor disputes, catastrophic accidents, fires, blockades or other acts of social activism, changes in the regulatory environment, impact of non-compliance with laws and regulations, natural phenomena such as inclement weather conditions, floods, earthquakes, tornados, thunderstorms, ground movements, cave-ins, and encountering unusual or unexpected geological conditions and technological failure of exploration methods.

There is no assurance that the foregoing risks and hazards will not result in damage to, or destruction of, the properties of the Company, personal injury or death, environmental damage or, regarding the exploration or development activities of the Company, increased costs, monetary losses and potential legal liability and adverse governmental action, all of which could have an adverse impact on the Company's future cash flows, earnings, results of operations and financial condition. The payment of any such liabilities would reduce the funds available to the Company. If the Company is unable to fully fund the cost of remedying an environmental problem, it might be required to suspend operations or enter into costly interim compliance measures pending completion of a permanent remedy.

No assurance can be given that insurance to cover the risks to which the Company's activities are subject will be available at all or at commercially reasonable premiums. The Company is not currently covered by any form of environmental liability insurance, since insurance against environmental risks (including liability for pollution) or other hazards resulting from exploration and development activities is unavailable or prohibitively expensive. This lack of environmental liability insurance coverage could have an adverse impact on the Company's future cash flows, earnings, results of operations and financial condition.

Competition

All aspects of the Company's business will be subject to competition from other parties. Many of the Company's competitors for the acquisition, exploration, production and development of mineral properties, and for capital to finance such activities, will include companies that have greater financial and personnel resources available to them than the Company. Competition could adversely affect the Company's ability to acquire suitable properties or prospects in the future. The international resource industries are highly competitive. The value of any future reserves discovered and developed by the Company may be limited by competition from other world resource mining companies, or from excess inventories. Existing international trade agreements and policies and any similar future agreements, governmental policies or trade restrictions are beyond the control of the Company and may affect the supply of and demand for minerals, including lithium, around the world.

Conflicts of Interest

Certain of the directors and officers of the Company will be engaged in, and will continue to engage in, other business activities on their own behalf and on behalf of other companies and, as a result of these and other activities, such directors and officers of the Company may become subject to conflicts of interest. The BCBCA provides that in the event that a director has a material interest in a contract or proposed contract or agreement that is material to the issuer, the director shall disclose his interest in such contract or agreement and shall refrain from voting on any matter in respect of such contract or agreement, subject to and in accordance with the BCBCA. To the extent that conflicts of interest arise, such conflicts will be resolved in accordance with the provisions of the BCBCA.

Volatility of the Market Price of the Common Shares

Securities of junior companies have experienced substantial volatility in the past, often based on factors unrelated to the financial performance or prospects of the companies involved. These factors include macroeconomic developments in North America and globally and market perceptions of the attractiveness of particular industries. The Common Share price is also likely to be significantly affected by delays experienced in progressing with development plans, a decrease in investor appetite for junior stocks, or in adverse changes in the Company's financial condition or results of operations as reflected in the Company's quarterly and annual financial statements. Other factors unrelated to performance that could have an effect on the price of the Common Shares include: (a) the trading volume and general market interest in the Common Shares could affect a shareholder's ability to trade significant numbers of Common Shares; and (b) the size of the public float in the Common Shares may limit the ability of some institutions to invest in the Company's securities.

As a result of any of these or other factors, the market price of the Common Shares at any given point in time might not accurately reflect the Company's long-term value. Securities class action litigation has been brought against companies following years of volatility in the market price of their securities. The Company could in the future be the target of similar litigation. Securities litigation could result in substantial costs and damages and divert management's attention and resources.

Dividends

The Company has never paid cash dividends on its Common Shares and does not expect to pay any cash dividends in the future in favor of utilizing cash to support the development of our business. Any future determination relating to the Company's dividend policy will be made at the discretion of the Board of Directors and will depend on a number of factors, including future operating results, capital requirements, financial condition and the terms of any credit facility or other financing arrangements the Company may obtain or enter into, future prospects and other factors the Company's Board of Directors may deem relevant at the time such payment is considered. As a result, shareholders will have to rely on capital appreciation, if any, to earn a return on their investment in the Common Shares for the foreseeable future.

Reporting Issuer Status

As a reporting issuer, the Company will be subject to reporting requirements under applicable securities law and stock exchange policies. Compliance with these requirements will increase legal and financial compliance costs, make some activities more difficult, time-consuming or costly, and increase demand on existing systems and resources. Among other things, the Company will be required to file annual, quarterly and current reports with respect to its business and results of operations and maintain effective disclosure controls and procedures and internal controls over financial reporting. In order to maintain and, if required, improve disclosure controls and procedures and internal controls over financial reporting to meet this standard, significant resources and management oversight may be required. As a result, management's attention may be diverted from other business concerns, which could harm the Company's business and results of operations.

The Company may need to hire additional employees to comply with these requirements in the future, which would increase its costs and expenses.

Management of the Company expects that being a reporting issuer will make it more expensive to maintain director and officer liability insurance. This factor could also make it more difficult for the Company to retain qualified directors and executive officers.

Tax Issues

Income tax consequences in relation to the Common Shares will vary according to the circumstances by each purchaser. Prospective purchasers should seek independent advice from their own tax and legal advisors prior to subscribing for Common Shares.

Caution Regarding Forward Looking Statements

This MD&A contains forward-looking information and statements (collectively, "forward-looking statements"). These forward-looking statements relate to LiTHOS's current expectations, estimates and projections as to future events or LiTHOS's future performance and are provided to allow readers a better understanding of LiTHOS's business and prospects and may not be suitable for other purposes. All statements, other than statements of historical fact, may be considered forward-looking statements. Forward-looking statements are often, but not always, identified by the use of words such as "seek", "anticipate", "plan", "continue", "estimate", "expect", "may", "will", "project", "predict", "potential", "targeting", "intend", "could", "might", "should", "believe" and similar expressions. Forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause actual results or events to differ materially from those anticipated in, or suggested by, such forward-looking statements. LiTHOS believes the expectations reflected in the forward-looking statements included in this MD&A and are expressly qualified, in their entirety, by this cautionary statement. LiTHOS assumes no obligation to revise or update these statements except as required pursuant to applicable securities laws.
In particular, this MD&A contains forward-looking statements pertaining to the following:

- expectations as to future operations of the Company;
- the Company's dependence on management;
- the Company's plans in respect of development and operations;
- the cost and timing of the Company's services;
- potential environmental issues and liabilities associated with exploration, development and mining activities;
- title risks, and the obtaining and renewing of material licences and/or permits;
- the Company's capital and funding requirements;
- the ability of the Company to obtain future financing on acceptable terms or at all;
- the Company's risks associated with economic conditions, including those related to the COVID-19 pandemic; and

- other statements under the heading "*Management's Discussion and Analysis*".

With respect to forward-looking statements contained in this MD&A, the Company has made assumptions regarding, among other things:

- the Company's access to adequate services and supplies;
- favourable economic conditions, commodity prices, foreign currency exchange rates, interest rates, access to capital and debt markets;
- the availability of a qualified work force;
- that exploration timetables and capital costs for the Company's exploration plans are not incorrectly estimated or affected by unforeseen circumstances or adverse weather conditions;
- that any environmental and other proceeding or dispute is, if ever initiated against the Company, satisfactorily resolved, and that the Company is able to maintain its ongoing relations with its business partners and governmental authorities;
- the Company's ability to commercially scale its direct lithium extraction technology;
- the Company's ability to obtain and maintain financing on acceptable terms;
- the impact of competition;
- changes in laws, rules and regulations;
- the Company's ability to retain key personnel; and
- the absence of material adverse changes in the industry or Canadian or global economy, including as a result of the COVID-19 pandemic.

These forward-looking statements are based upon certain material factors, assumptions and analyses that were applied in drawing a conclusion or making a forecast or projection, including management's experience and perceptions of historical trends, current market conditions and expected future developments, the timing and amount of capital and other expenditures, and other factors believed to be reasonable in the circumstances.

By their nature, forward-looking statements are subject to inherent risks and uncertainties which give rise to the possibility that expectations, forecasts, predictions, projections or conclusions will not prove to be accurate, that assumptions may not be correct, and that objectives, strategic goals and priorities will not be achieved. A variety of material factors, many of which are beyond the control of the Company, could cause actual results to differ materially from current expectations of estimated or anticipated events or results. The risks, uncertainties and other factors that could influence actual results include, but are not limited to:

- the Company's inability to efficiently manage its operations;
- general economic and business conditions, including those resulting from the effects of the COVID-19 pandemic;
- the Company's negative operating cash flow;
- the Company's ability to obtain additional financing to fund the activities stated in MD&A ;
- increases in the Company's capital and operating costs;
- volatility of commodity prices and the Company's Common Shares;
- general risks associated with mineral exploration industry;
- the ability to comply with applicable governmental regulations and standards;
- risks relating to regulatory changes or actions;
- competition within the mineral exploration industry;
- competition within the lithium pre-treatment and direct extraction industry;
- general risks relating to the COVID-19 pandemic; and
- other factors as more particularly described under the heading "Risk Factors".

Readers are cautioned that the foregoing list of factors is not exhaustive and that other factors may emerge from time to time. It is not possible for management to predict all such factors and to assess in advance the impact of each such factor on the business of the Company, or the extent to which any factor or combination of factors may cause actual results to differ materially from those contained in any forward-looking statement. Readers are also cautioned to consider these and other factors, uncertainties and potential events carefully and not to put undue reliance on forward-looking statements. Although the forward-looking statements contained in this MD&A are based upon what management of the Company currently believe to be reasonable assumptions, actual results, performance or achievements could differ materially from those expressed in, or implied by, the forward-looking statements and, accordingly, no assurance can be given that any of the events anticipated by the forward-looking statements will transpire or occur. The forward-looking statements contained herein are made as of the date of this MD&A and, other than as specifically required by law, the Company does not assume any obligation to update or revise any forward-looking statement to reflect events or circumstances after the date on which such statement is made, or to reflect the occurrence of unanticipated events, whether as a result of new information, future events or results, or otherwise.

The Company has included the above summary of assumptions and risks related to forward-looking statements contained in this MD&A in order to provide investors with a more complete perspective on the Company's current and future operations and such information may not be appropriate for other purposes.

Additional information on these and other factors is available in the reports filed by the Company with Canadian securities regulators and available under the Company's profile on SEDAR+ at www.SEDAR+plus.ca. The forward-looking statements and information contained in this MD&A are made as of the date hereof.

Additional Disclosure for Venture Issuers without Significant Revenue

Additional financial information is available in the Company's audited consolidated financial statements for the nine months ended January 31, 2025 and the audited annual financial statements for the year ended April 30, 2023. These statements are available on SEDAR+ at www.sedarplus.ca.

The following addresses the specific disclosure requirements for venture issues without significant revenues:

(a) Capitalized or expensed exploration and development costs –See *Overall Performance*.
(b) Expensed research and development costs – Not applicable
(c) Deferred development costs – Not applicable
(d) General administrative expenses – the financial information is presented in the Statement of Loss and Comprehensive Loss in the financial statements.
(e) Any material costs, whether capitalized, deferred or expensed, not referred to in (a) through (d) – None.

Officers and Directors

Certain directors of the Company are also directors, officers and/or shareholders of other companies that are similarly engaged in the business of acquiring, developing and exploring natural resource properties. Such associations may give rise to conflicts of interest from time to time. The directors of the Company are required to act in good faith with a view to the best interests of the Company and to disclose any interest which they may have in any project opportunity of the Company. If a conflict of interest arises at a meeting of the board of directors, any director in a conflict will disclose his/her interest and abstain from voting on the matter(s). In determining whether or not the Company will participate in any project or opportunity, the directors will primarily consider the degree of risk to which the Company may be exposed and its financial position at the time.

Current Directors of the Company are as follows:

Scott Taylor, Director, President & CEO
Jennie Choboter, Director & CFO
Anton Fredrik Klaveness, Director
Michael Kevin McKenna, Independent Director
Michael Westlake, Independent Director
Martín Corredera Silván, Independent Director

Approval

The Board of Directors of LiTHOS Energy Ltd. has approved the disclosure contained in this MD&A on March 17, 2025.

Additional information related to the Company is available on SEDAR+ at www.sedarplus.ca, on the Company's website at www.lithostechnology.com.