



LITHOS ENERGY LTD.

**ANNUAL INFORMATION FORM
FOR THE FINANCIAL YEAR ENDED
APRIL 30, 2023**

December 5, 2023

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ADVISORIES

In this Annual Information Form (“AIF”), unless otherwise specified or if the context otherwise requires, references to “we”, “us”, “our”, “its”, “the Company” or “LiTHOS” mean LiTHOS Energy Ltd. and its subsidiaries, 1282112 BC Ltd., Iron Forge Holdings (1) Ltd., LiTHOS Technology LLC and Aqueous Resources LLC. The information in this AIF is stated as at April 30, 2023 unless otherwise indicated. For additional information and details, readers are referred to the audited consolidated financial statements for the year ended April 30, 2023 and notes that follow, as well as the accompanying annual Management’s Discussion and Analysis (“MD&A”), which are available on the Canadian Securities Administrator’s SEDAR+ System at www.SEDAR+plus.ca.

Cautionary Statement Regarding Forward-Looking Information and Statements

This AIF 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 AIF are reasonable, but no assurance can be given that these expectations will prove to be correct and such forward-looking statements should not be unduly relied upon. These statements speak only as of the date of this AIF 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 AIF 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 ongoing COVID-19 pandemic; and
- other statements under the heading “*Management’s Discussion and Analysis*”.

With respect to forward-looking statements contained in this AIF, 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 ongoing COVID-19 pandemic;
- the Company's negative operating cash flow;
- the Company's ability to obtain additional financing to fund the activities stated in AIF;
- 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 ongoing 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 AIF 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 AIF 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 AIF 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 AIF are made as of the date hereof.

Readers are cautioned that the preparation of financial statements in accordance with international financial reporting standards in Canada requires management to make certain judgments and estimates that affect the reported amounts of assets, liabilities, revenues and expenses. These estimates may change, having either a negative or positive effect on net earnings as further information becomes available and as the economic environment changes. The information contained in this AIF, including the documents incorporated by reference herein, identifies additional factors that could affect the operating results and performance of the Company. Readers are encouraged to carefully consider such factors.

Readers are also cautioned against placing undue reliance on forward-looking statements, which are given as of the date expressed in this AIF, or the MD&A disclosure incorporated by reference herein, and not to use future-oriented information or financial outlooks for anything other than their intended purpose. The forward-looking statements contained herein are expressly qualified in their entirety by this cautionary statement. The Company undertakes no obligation to publicly update or revise any forward-looking statements in this AIF or the MD&A or other disclosure incorporated by reference herein, whether as a result of new information, future events or otherwise, except as required by law.

Technical Information

Unless otherwise noted, the disclosure contained in this AIF of a scientific or technical nature for the Rhodes Marsh Project is based on the technical report prepared by Chris M. Healey, P. Geo., Principal Geologist for Healex Consulting Ltd., dated September 1, 2023 and entitled "*Rhodes Marsh Lithium Brine Project, Mineral County, Nevada, NI 43-101 Technical Report*" prepared in accordance with the requirements of NI 43-101.

Any mineral reserve or resource figures, and scientific, technical, or projected economic information or estimates referred to in this AIF are estimates, and no assurances can be given that the information will materialize. Such information is based on expressions of judgment based on knowledge, mining experience, analysis of drilling results and industry practices. Valid estimates made at a given time may significantly change when new information becomes available. While the Company believes that the information included in this AIF is well established, the information by its nature is imprecise and depends, to a certain extent, upon statistical inferences which may ultimately prove unreliable. If such estimates of such information are inaccurate or are reduced in the future, this could have a material adverse impact on the Company.

Reference should be made to the full text of the Technical Report which has been filed with Canadian securities regulatory authorities pursuant to NI 43-101 and is available for review under the Company's profile on SEDAR+ at www.SEDAR+plus.ca.

Chris M. Healey, P. Geo, is a "Qualified Person" under NI 43-101 has reviewed and approved the written scientific and technical disclosure contained in this AIF.

Monetary References

Except as otherwise indicated, all dollar amounts in this AIF are expressed in Canadian dollars and references to \$ are to Canadian dollars. References to US\$ are to United States dollars.

GLOSSARY OF TERMS

In this AIF, unless otherwise indicated or the context otherwise requires, the following terms shall have the indicated meanings. Words importing the singular include the plural and vice versa and words importing any gender include all genders. A reference to an agreement means the agreement as it may be amended, supplemented or restated from time to time.

“Affiliate”	means a company that is affiliated with another company as described below. A company is an Affiliate of another company if (a) one of them is the subsidiary of the other, or (b) each of them is controlled by the same person. A company is “controlled” by a person if (a) voting securities of the company are held, other than by way of security only, by or for the benefit of that person, and (b) the voting securities, if voted, entitle the person to elect a majority of the directors of the company. A person beneficially owns securities that are beneficially owned by (a) a company controlled by that person, or (b) an Affiliate of that person or an Affiliate of any company controlled by that person.
“AIF”	means this Annual Information Form dated December 5, 2023.
“Alinea”	has the meaning ascribed to such term under the heading <i>“General Development of the Business of the Company –Three Year History”</i> .
“All Nations”	has the meaning ascribed to such term under the heading <i>“General Development of the Business of the Company –Three Year History”</i> .
“Amalco”	has the meaning ascribed to such term under the heading <i>“General Development of the Business of the Company –Three Year History”</i> .
“Amalgamation Agreement”	has the meaning ascribed to such term under the heading <i>“General Development of the Business of the Company –Three Year History”</i> .
“Aqueous”	means Aqueous Resources LLC, a company incorporated under the laws of the State of Colorado and wholly-owned subsidiary of the Company.
“Aqueous Transaction”	has the meaning ascribed to such term under the heading <i>“General Development of the Business of the Company –Three Year History”</i> .
“Audit Committee”	means the audit committee of the Company.
“Author”	means Chris M. Healey, P. Geo., Principal Geologist for Healex Consulting Ltd., and author of the Technical Report.
“BCBCA”	means the <i>Business Corporations Act</i> (British Columbia), and the regulations thereunder, as amended from time to time.
“BCSC”	British Columbia Securities Commission;
“BLM”	means US Bureau of Land Management.
“Board”	means the board of directors of the Company.

“CEO”	means chief executive officer.
“CFI”	means conductive fracture imaging.
“CFO”	means chief financial officer.
“Closing”	means the closing of the Transaction pursuant to the terms of the Share Exchange Agreement.
“Common Share”	means a common share in the capital of the Company.
“company”	unless specifically indicated otherwise, means a corporation, incorporated association or organization, body corporate, partnership, trust, association or other entity other than an individual.
“Company” or “LiTHOS”	means LiTHOS Energy Ltd, a company incorporated under the laws of the Province of British Columbia.
“Compensation Committee”	means the compensation committee of the Company.
“Consolidation”	means the consolidation of Common Shares effective November 19, 2021 on the basis of 20 pre-consolidation Common Shares for each 1 post-consolidation Common Share.
“Consolidation Ratio”	has the meaning ascribed to such term under the heading <i>“General Development of the Business of the Company – Three Year History”</i> .
“Corporate Governance Committee”	means the corporate governance committee of the Company.
“CSE”	means the Canadian Securities Exchange, operated by CNSX Markets Inc.
“DLE”	means direct lithium extraction.
“Equity Incentive Plan”	means the equity incentive plan adopted by the Board on November 22, 2022, and as ratified by shareholders of the Company on December 23, 2022.
“Escrow Agreement”	means the NP 46-201 escrow agreement dated January 29, 2023 among the Company, Endeavor Trust Corporation and certain insiders of LiTHOS.
“Field Pilot Plant”	means field-based pilot plant.
“Iron Forge”	means Iron Forge Holdings (I) Ltd., a company incorporated under the laws of the Province of British Columbia and wholly-owned subsidiary of the Company.
“Iron Forge Securities”	means the Iron Forge Shares and any other securities or other indebtedness of Iron Forge convertible or exercisable into, or exchangeable for, Iron Forge Shares.
“Iron Forge Shares”	means all of the issued and outstanding shares in the capital of Iron Forge, being 9,800,000 common shares in the capital of Iron Forge.

“Lab Pilot Plant”	means lab scale pilot plant.
“LiOH-H₂O”	means lithium hydroxide monohydrate.
“LiTHOS Closing”	has the meaning ascribed to such term under the heading <i>“General Development of the Business of the Company – Three Year History”</i> .
“LiTHOS Technologies”	means LiTHOS Technologies Corp., a company continued under the Province of British Columbia.
“LiTHOS Transaction”	has the meaning ascribed to such term under the heading <i>“General Development of the Business of the Company – Three Year History”</i> .
“LOI”	means the letter of intent dated January 24, 2022 between the Company and Iron Forge setting out the fundamental terms of the Transaction.
“MD&A”	means From 51-102F1 – <i>Management’s Discussion & Analysis</i> .
“Membership Interests”	has the meaning ascribed to such term under the heading <i>“General Development of the Business of the Company – Three Year History”</i> .
“NI 43-101”	means National Instrument 43-101 – <i>Standards of Disclosure for Mineral Projects</i> .
“NI 51-102”	means National Instrument 51-102 – <i>Continuous Disclosure Obligations</i> .
“NI 52-110”	means National Instrument 52-110 – <i>Audit Committees</i> .
“NP 46-201”	means National Policy 46-201 – <i>Escrow for Initial Public Concurrent Financings</i> .
“NPOM”	means net proceeds of mines.
“Options”	means options to purchase Common Shares.
“Performance Share”	has the meaning ascribed to such term under the heading <i>“General Development of the Business of the Company – Three Year History”</i> .
“Person”	is to be construed broadly and includes any individual, company, partnership, joint venture, association, trust, trustee, executor, administrator, unincorporated association, governmental entity or other entity, whether or not having legal status.
“Qualified Person”	has the meaning ascribed to such term in NI 43-101.
“Related Person”	has the meaning ascribed to such term in CSE Policy 1 – <i>Interpretation</i> .
“Reporting Issuer”	has the meaning ascribed to such term in the <i>Securities Act</i> (British Columbia), as amended.
“Rhodes Marsh Project”	means the exploration property comprised of 46 placer leases, covering a total area of 947 acres (383 hectares) located in portions of Sections 11 and 23 of Township 5 North - Range 35 East, Mount Diablo Meridian, Mineral County, West-central Nevada.
“SEDAR+”	means the System for Electronic Document Analysis and Retrieval.

“Share Exchange Agreement”	means the share exchange agreement dated April 8, 2022, as amended, among the Company, Iron Forge and the shareholders of Iron Forge.
“Technical Report”	means the technical report of the Author dated September 1, 2023 entitled <i>“Rhodes Marsh Lithium Brine Project, Mineral County, Nevada, NI 43-101 Technical Report”</i> prepared in accordance with the requirements of NI 43-101.
“Transaction”	means the acquisition by the Company of all the securities of Iron Forge from the shareholders of Iron Forge and all other transactions contemplated by the Share Exchange Agreement in order to effect the business combination to combine the businesses of the Company and Iron Forge.
“TSXV”	means the TSX Venture Exchange Inc.
“United States”, “USA” or “US”	means, collectively, the United States of America, its territories and possessions.
“Warrants”	means Common Share purchase warrants of the Company.

CORPORATE STRUCTURE

Name, Address and Incorporation

The Company was incorporated on October 22, 2010 pursuant to the provisions of the BCBCA under the name “NY85 Capital Inc.”. On October 16, 2012, the Company filed articles of amendment changing its name from “NY85 Capital Inc.” to “Alchemist Mining Incorporated”. On August 15, 2023, the Company filed articles of amendment changing its name from “Alchemist Mining Incorporated” to “LiTHOS Energy Ltd.”.

Effective November 19, 2021, the Company completed the Consolidation which was a consolidation of the Common Shares of the Company on the basis of 20 pre-Consolidation Common Shares for every one post-Consolidation Common Share.

The Company’s head office is located at Suite 2380 – 1055 West Hastings Street, Vancouver, British Columbia, V6E 2E9, and its registered office is located at 800 – 885 West Georgia Street, Vancouver, British Columbia, V6C 3H1.

The Common Shares are listed and traded on the CSE under the symbol “LITS”. The Company is a Reporting Issuer in British Columbia, Alberta and Ontario and files its continuous disclosure documents on SEDAR+ at www.SEDAR-plus.ca. The Company’s filings through SEDAR+ are not incorporated by reference in this AIF.

Intercorporate Relationships

As of the date of this AIF, 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%
Aqueous Resources LLC	Colorado	100%

GENERAL DEVELOPMENT OF THE BUSINESS OF THE COMPANY

The principal business of the Company includes:

- *Technology:* LiTHOS owns AcQUA™ – a patent-pending¹ wastewater solutions technology for DLE from continental 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 and subsequent polishing into either lithium hydroxide monohydrate or lithium carbonate. These are the input feedstocks preferred for modern electric vehicle batteries.

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.

- *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.

Three Year History

A detailed description on the significant developments of the business of the Company for the past three years is set out below.

On September 2, 2020, the Company announced that it had entered a non-binding letter of intent, dated August 31, 2020, for the acquisition of All Nations Cannabis Corporation (“**All Nations**”), a company that was in the final stages of receiving a Health Canada License for the cultivation and processing of cannabis and associated products. The Company and All Nations signed an asset purchase agreement on December 7, 2020 which was then amended on March 1, 2021. In August 2021, the Company terminated the asset purchase agreement with All Nations.

On August 23, 2021, the Company entered into a letter of intent for the acquisition of all of the assets of Alinea Cannabis Inc., a Health Canada licensed, federally registered corporation (“**Alinea**”). On September 16, 2021, the Company entered into a share exchange agreement respecting the acquisition of all of the issued and outstanding shares of Alinea. On November 1, 2021, the Company terminated the share exchange agreement with Alinea.

On November 10, 2021, the Board approved the Consolidation of the Company’s issued share capital on the basis of twenty (20) pre-Consolidation Common Shares for one (1) post-Consolidation Common Share (the “**Consolidation Ratio**”). The Company had 76,610,714 Common Shares outstanding prior to the Consolidation and had 3,830,536 Common Shares outstanding after completion of the Consolidation on November 19, 2022. The number of outstanding Options and Warrants of the Company was adjusted by the Consolidation Ratio, and the exercise prices were adjusted accordingly.

On January 13, 2022, the Company completed a non-brokered private placement and issued an aggregate of 11,983,333 units at a price of \$0.075 per unit for aggregate gross proceeds of \$898,750. Each unit was comprised of one Common Share and one non-transferable Warrant. Each Warrant entitles the holder to purchase one additional Common Share for a period of four years from the closing date at an exercise price of \$0.20 per Common Share. Proceeds from the offering were used for payment of current payables and for general working capital purposes.

On February 18, 2022, the Company issued 2,497,080 Common Shares at a deemed price of \$0.12 per Common Share in settlement of an aggregate of \$299,650 debt owing to Kwanokeng Holdings Ltd., OIG Overseas Investment Group Ltd., Gang3 Capital Ltd., Nickel Arriere Inc. and Winsight Technology Canada Ltd., a company controlled by Paul Mann, the former President, CEO and a director of the Company. Accordingly, \$100,000 of the \$299,650 in debt was settled with Winsight Technology Canada Ltd.

On February 24, 2022, the Company closed a non-brokered private placement of 150,000 Common Shares at a price of \$0.70 per Common Share for gross proceeds of \$105,000, and which subscription was to be included in a pre-Consolidation private placement undertaken by the Company. Accordingly, the \$0.70 Common Share issuance price was the result of the adjustment caused by the Consolidation Ratio. Proceeds from the offering were used for general working capital purposes.

On March 29, 2022, the Company paid \$32,000 in settlement of a \$60,000 debt to Sukh Sandhu, a former director of the Company.

On March 30, 2022, Paul Mann resigned as President, CEO and a director of the Company and Brian Clay resigned as a director of the Company. The Company appointed Eric Boehnke as the CEO and a director to replace Mr. Mann and appointed Jennie Choboter, the Company’s CFO, as a director to replace Mr. Clay.

On March 31, 2022, Zeta Ceti and Awet Kidane resigned as directors of the Company. Effective March 31, 2022, the Company appointed James Carter as a director.

On June 8, 2022, the Company issued 648,706 units of the Company at a deemed price of \$0.145 per unit in settlement of \$94,062.50 debt owing to Gang3 Capital Ltd., an arm's length creditor. Each unit was comprised of one Common Share and one non-transferable Warrant. Each Warrant entitles the holder to purchase one additional Common Share for a period of four years from the closing date at an exercise price of \$0.145 per Common Share.

On January 20, 2023, the Company closed a non-brokered private placement of 5,860,853 Common Shares at a price of \$0.145 per Common Share for gross proceeds of \$849,824. Proceeds from the offering were used for general working capital purposes and to fund the Company's Phase 1 exploration program on the Rhodes Marsh Project.

On January 24, 2022, the Company and Iron Forge entered into the LOI setting out the essential terms and conditions by which the Company and Iron Forge proposed to complete a business combination and, in connection therewith, the Company proposed to acquire all of the issued and outstanding shares of Iron Forge from the shareholders of Iron Forge in exchange for the issuance of the Common Shares and Warrants.

On April 8, 2022, the Company entered into the Share Exchange Agreement, as amended, which replaced and superseded the LOI. On January 9, 2023, a majority of the Company's shareholders approved the Transaction by way of written consent resolution, and on January 27, 2023 the CSE conditionally approved the Transaction including the continued listing of the Common Shares on the CSE following completion of the Transaction.

On January 27, 2023, the Company acquired all of the issued and outstanding shares of Iron Forge and any other securities or other indebtedness of Iron Forge convertible or exercisable into, or exchangeable for shares of Iron Forge from the shareholders of Iron Forge in exchange for the issuance by the Company, to the shareholders of Iron Forge, on a pro rata basis, of an aggregate of 7,499,999 Common Shares at a deemed price of \$0.145 per Common Share as well as the issuance of an aggregate of 3,749,999 Warrants. Each Warrant entitles the holder to purchase one Common Share at an exercise price of \$0.20 per Common Share for a period of two years.

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 Agreement**") 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 AcQUA™ – a patent-pending wastewater solutions technology for direct lithium extraction ("**DLE**") from continental 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 water consumption by recycling 98.5% of the input brine water, and substantially eliminate the use of evaporation ponds in the pre-treatment and concentration phases of production.

LiTHOS Technologies also invested in the Company's proprietary cloud solution technology known as conductive fracture Imaging or CFI in March of 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.

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, at a deemed price of \$0.30 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 at a deemed price of \$0.30 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 was issued an 2,000,000 Common Shares at a deemed price of \$0.30 per Common Share in connection with the LiTHOS Transaction.

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 July 17, 2023, the Company appointed Robert Barnwell to its advisory board.

On June 13, 2023, the Company entered into a securities exchange agreement with Aqueous Resources LLC (“**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 at a deemed price of \$0.52 per Common Share (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 at a deemed price of \$0.47 per Common Share to one finder in connection with the Aqueous Transaction.

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.

On November 3, 2023, the Company closed a non-brokered private placement of non-convertible notes (the “**Notes**”) in the aggregate principal amount of USD\$550,000 and 999,900 Warrants. The Notes have a term of 91 days and bear interest at the rate of 15% per annum payable on closing of the offering. Each Warrant entitles the holder thereof to acquire one Common Share of the Company at a price of USD\$0.55 per Common Share until November 3, 2028. The proceeds will be 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 has 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 shall 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.

Significant Acquisitions

Aside from the Company’s transaction with Iron Forge and the LiTHOS Transaction, the Company did not complete any significant acquisitions during its most recently completed financial year for which disclosure is required under Part 8 of NI 51-102. For further information on the Company’s transaction with Iron Forge and the LiTHOS Transaction, see “*General Development of the Business of the Company – Three Year History*”.

DESCRIPTION OF THE BUSINESS OF THE COMPANY

General Overview

The Company’s business includes:

- **Technology:** LiTHOS owns AcQUA™ – a patent-pending² wastewater solutions technology for DLE from continental 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 and subsequent polishing into either lithium hydroxide monohydrate 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.

LiTHOS Technology

LiTHOS acquired AcQUA™ – a patent-pending wastewater solutions technology for DLE from continental brine reservoirs enriched with lithium. AcQUA™ is a unique modular technology which optimizes the pre-treatment of raw brines and is capable of 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 the development phase. AcQUA™ enables lithium brine resource operators to deploy economically viable and sustainable field-ready extraction solutions that will substantially reduce water consumption by recycling 98.5% of the input brine water, and substantially eliminate the use of evaporation ponds in the pre-treatment and concentration phases of production.

² 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.

From an economic standpoint, AcQUA™ aids mineral resource owners to extract multiple aqueous minerals of economic interest, being lithium, boron, and sodium carbonate, all at a substantially lower capital expenditure per tonne. By eliminating the inefficient, slow and environmentally harmful pre-treatment evaporation ponds, AcQUA™ aids in yielding sustainable lithium production and will help unlock stranded continental brine resources located in the United States. The fundamental DLE technology is a mature, field proven, operational system augmented from produced water management in the oil & gas sector.

The Company is also focused on processing continental brines from several strategic resource owners located in the United States, Argentina and Chile. The Company currently has multiple proof-of-concept level tests underway.

DLE Processing Facility and Proposed Facilities

A fully operational DLE processing facility has been commissioned in Denver, Colorado, USA. LiTHOS is focused on processing continental brines from several strategic resource owners located in the United States, Argentina and Chile.

In September 2023, the Company's Subsidiary, LiTHOS Technology LLC, signed a non-binding indicative term sheet with Sand Spirit LLC ("**Sand Spirit**") to develop, construct, own and operate a testing and production facility to handle raw brine and upgrade it into a final yield product of lithium hydroxide monohydrate, inclusive of, but not limited to, the following key operations and ancillary equipment and services to be located at Sand Spirit's Buildings 1, 2 and 3 located in Bessemer, Alabama (the "**Site**"):

- (i) storage of raw, intermediate, and processed brines;
- (ii) pre-treatment processing systems and operations;
- (iii) lithium chloride concentration processing systems and operations;
- (iv) direct lithium extraction processing systems and operations; and
- (v) lithium chloride treatment and refining activities.

Ancillary equipment and services will include all operations necessary for the completion of a successful lithium pre-treatment processing, LiCl concentration, DLE and refining operations including power, reagent, and water supply.

The term sheet with Sand Spirit sets out certain preliminary terms for a potential joint development agreement ("**JDA**") between LiTHOS and Sand Spirit, which the parties will seek to negotiate and enter within 180 days of date of entry of the term sheet.

The JDA will contemplate the establishment of a governance structure for the transaction as well as the allocation of the following duties and responsibilities of the parties for the development of each aspect of the site in the following three phases:

Phase 1: Site Development Strategy

Phase 2: Site Contracting and Implementation

- Complete front-end loading designs and engineering for the Site upon selection of a target source brine, volume of brine to be processed and location for processing plant; and
- Negotiate definitive agreements, including a fixed-price and date-certain engineering, procurement and construction contracts and a comprehensive lithium marketing and distribution strategy for the Site.

Phase 3: Final Investment Decision

- Mutually agree to a final investment decision ("FID"), provided that all conditions precedent to FID as set forth in the JDA are met to the satisfaction of each of the parties; and
- Complete the construction, commissioning, and placement into service of the Site consistent with the purpose and project phases. The pilot production system capacity shall be right-sized for building 3 or other suitable site as determined by the parties.

Facilities and equipment are in downtown Bessemer, Alabama. Bessemer is an adjacent city to Birmingham, Alabama and only 30 miles to the University of Alabama. The complex consists of three buildings that are 6,000, 7,000, and 42,000 sq. ft. each. Each building has an office, laboratory, and warehouse space.

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.

Key Partnerships and Customers

LITHOS has agreements 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. Phase 2 work will focus on yielding a fractionated lithium brine concentrate with the use of its proprietary DLE process.

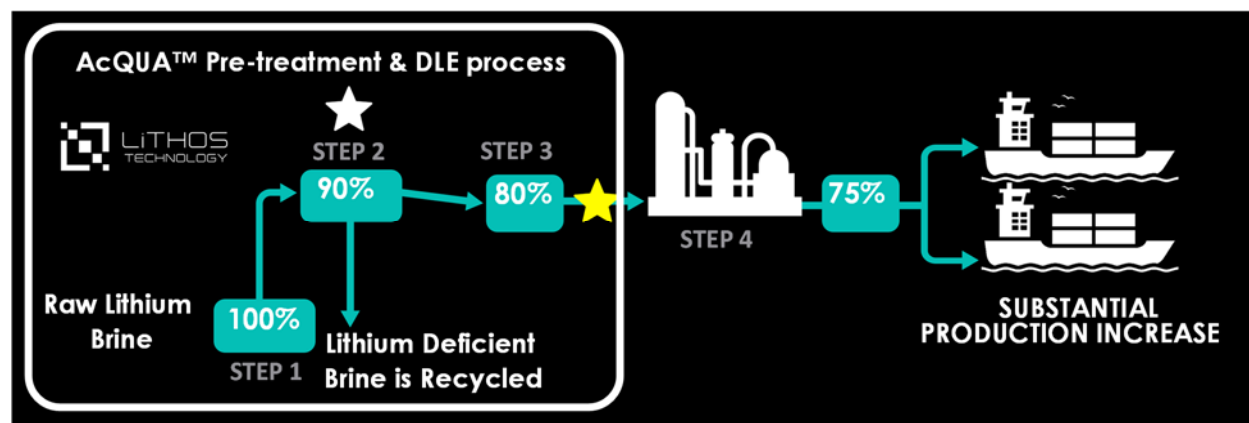
The Company's customers include:

- Tier 1 mining company with continental brine assets in Chile;
- Tier 1 mining company with continental lithium assets in Argentina;
- Supermajor energy company in Texas;
- Supermajor energy company in Arkansas;
- Supermajor energy company in New Mexico;
- Independent energy companies; and
- 3 Proton Lithium.

Development of AcQUA™, a Patent-Pending 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. The Company's process of delivering high grade lithium hydroxide or carbonate to the market is segmented into 4 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 conductive fracture imaging ("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.

Step 2 is the pre-treatment, selective targeted impurity removal, and concentration of lithium and other aqueous minerals of economic value. This step is often minimized or overlooked by other competing DLE technology providers. This is the critical step which is currently addressed at-scale with evaporation ponds. Evaporation ponds are not being permitted anywhere in North America and are being 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 3 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 fourth step of lithium production.

Step 4 is the production of a 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' 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. 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™ extraction technology at full commercial adoption across the complete value chain. This will occur as a series of steps increasing the operating scale and scope of demonstrated performance of the AcQUA™ extraction technology across the 4 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.

The next step in the development of the AcQUA™ extraction technology is the continuous flow testing of multiple candidate brines from reservoirs in the United States, Chile and Argentina. As part of the prototype phase, the Company has sanctioned a lab scale pilot plant ("**Lab Pilot Plant**") which is currently conducting small scale optimization testing with the aim of enabling the design of a field-based pilot plant ("**Field Pilot Plant**"), which is to be located in the Crimson Tide complex in Bessemer Alabama.

The Company anticipates that the continuous flow testing process and further Lab Pilot Plant evaluations will continue through 2024. The Company anticipates that the Field Pilot Plant will be operating by the end of Q2 in 2024. The Company believes that a successful pilot program should enable the demonstration of a commercially-scalable pre-treatment process. The Company aims to achieve the foregoing milestones and necessary construction activities required to complete an operational commercial pre-treatment lithium production facility by Q4 of 2024. 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

Q4 2023: Chilean Customer Validation (Step 2)

Management has secured all contractual agreements and export permits from the Chilean Ministry of Energy to receive four (4) brine samples from various stages of the evaporation pond network in the Atacama Desert, Chile.

A mutually agreed test plan has been signed and the definition of a successful pre-treatment and selective purification and lithium concentrate output for each of the sample brine chemistries is explicitly articulated to yield binary tests of the Company's patent-pending technology.

Q1 2024: Argentinian Customer Validation (Step 2 & 3)

Management is in the processing of securing all contractual agreements and export permits from the Argentinian Ministry of Energy to receive multiple brine samples from various stages of the evaporation pond network in the Salar de Rincon.

A draft flowsheet and test plan has been proposed and the definition of a successful pre-treatment and selective purification and lithium concentrate output for each of the sample brine chemistries is explicitly articulated to yield binary tests of the Company's patent-pending technology.

This test proposal expands the scope to include direct lithium extraction and additional downstream processing to optimize the overall recovery yields and reduce the utilization of fresh water and chemicals.

Q1 2024: Smackover (Arkansas) Reservoir Customer Validation

Tier 1 customer is conducting market review and management has proposed initial technical-economic specifications for client defined requirements. Management is working to secure brine samples and framing specific paid binary test plan.

Q2 2024: Factory Acceptance Testing for Chilean System

Full demonstration scale, modular pre-treatment (Step 2) system shall be run to specification in the Bessemer facility.

Q2 2024: Factory Acceptance Testing for Smackover (Step 2 & 3)

Full demonstration scale, modular pre-treatment (Step 2 & 3) system shall be run to specification in the Bessemer facility.

Q3 2024: Site Acceptance Testing for Chilean System

Q3 2024: Factory Acceptance Testing for Smackover (Step 2, 3, & 4)

Extend scope of value chain processing to lithium hydroxide monohydrate (" $\text{LiOH} \cdot \text{H}_2\text{O}$ ").

Q3 2024: Factory Acceptance Testing for Argentinian System

Q4 2024: Site Acceptance Testing for Argentinian System

Q4 2024: Site Acceptance Testing for Smackover System

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

LiTHOS' primary focus is to achieve its major milestones in Q4 of 2023 and deliver successful lab scale pre-treatment and selective purification results to a large Chilean customer. 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 broad commercial development of its AcQUA™ pre-treatment systems that will eliminate the use of evaporation ponds. The Company is focusing on assessing low-risk processes and technologies to be included in its initial AcQUA™ pre-treatment system design, which will result in commercially available solutions with the potential to reduce the time to design and construct and increase the likelihood of success of the initial commercial operations. This strategy should enable LiTHOS to move more quickly through the next stages of system development once its lab-scale results have been successfully validated by the customer.

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 it can materially accelerate the timeline to commercial adoption by leveraging its organizational experience and patent-pending AcQUA™ technology:

- **Brine Production:** A series shallow wells using industry standard pipeline connected wells delivers the brine from the shallow reservoirs to the pre-treatment processing facility.
- **Selective Purification and Pre-Treatment:** 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:** 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 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 advantages of LiTHOS bringing 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 provide 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 eliminate the use of evaporation ponds and become 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.
- **Crimson Tide 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-H₂O production facility in the Southeastern United States. We found a robust partner in Sand Spirit who brings engineering expertise, a large 55,000 sq ft complex, and the necessary environmental permits to produce LiOH-H₂O. The Company intends to have this facility producing LiOH-H₂O by Q4 of 2024. 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-H₂O process.
- **Offtake Contracts:** LiTHOS is active in developing relationships with the battery and automotive industries in the Southeastern United States 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 South Eastern 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 the US\$250,000 (CDN\$330,000) grant previously announced by the Colorado Global Business Development division of the Office of Economic Development and International Trade (OEDIT). On May 18, 2023, OEDIT announced that 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.

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 (CDN\$1,727,000) 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. The median Phase I award is \$200,000 for a period of six to twelve months.

On September 6, 2023, the DOE announced that it will provide US\$150 million of additional grant funding opportunities to support U.S. critical metals projects with bench- and pilot-scale research, development, and demonstration processing plants to produce and refine critical minerals and materials in the United States. According to the DOE, the funds, provided by the Bipartisan Infrastructure Law, will help to strengthen domestic critical material supply chains, and meet the growing demand for critical minerals and materials while reducing reliance on foreign sources. Aqueous has pre-qualified and commenced its application for up to US\$30 Million in awards under area of interest 1B Phase II from the DOE funding opportunity announced on September 6, 2023. The Company hopes to secure up to US\$30 million of total grant funding to support its pilot scale facility development and the construction of its lithium hydroxide processing plant to produce and refine critical minerals and materials in the United States. The application process is currently ongoing.

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.

Rhodes Marsh Project

The Company is planning a discovery well program. Rangefront Geosciences have been retained and are working with 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.

The following represents information summarized from the Technical Report on the Rhodes Marsh Project by the Author, a Qualified Person, prepared in accordance with the requirements of NI 43-101. All figures and tables from the Technical Report are reproduced in and form part of this AIF; a complete copy of the Technical Report is available for review under the Company's profile on SEDAR+ at www.SEDARplus.ca.

Property Description and Location

Location and Description

The total area of the Rhodes Marsh Project is approximately 920 acres (372 hectares). It is located in portions of Sections 11, 14 and 23 of Township 5 North - Range 35 East, Mount Diablo Meridian, Mineral County, west-central Nevada. The Rhodes Marsh Project area is located approximately 65 kilometers (40 miles) by road south of Hawthorne, Nevada (Figure 1.1).

Tenure and Ownership

Tenure

The Rhodes Marsh Project consists of 46 unpatented placer mining claims at a nominal 20 acres each. The claim block covers the eastern and southern margins of a well-developed playa in the eastern part of a large closed sedimentary basin. Maps of the claims are shown as Figures 1.2 and 1.3, and individual claims and identifications are listed Table 4.1. An annual maintenance fee (currently US \$165 per claim) must be paid to the Nevada State Office of BLM by September 1 of each year.

Table 4.1: List of Rhodes Marsh Claims

Claim Name	Location Date	Area (acres)	Section	Township	Range	County document #	BLM Serial #
RM01	2021-12-09	20	11	T5N	R35E	180582	NV105296900
RM02	2021-12-09	20	11	T5N	R35E	180583	NV105296901
RM03	2021-12-09	20	11	T5N	R35E	180584	NV105296902
RM04	2021-12-09	20	11	T5N	R35E	180585	NV105296903
RM05	2021-12-09	20	11	T5N	R35E	180586	NV105296904
RM06	2021-12-09	20	11	T5N	R35E	180587	NV105296905
RM07	2021-12-09	20	11	T5N	R35E	180588	NV105296906
RM08	2021-12-09	20	11	T5N	R35E	180589	NV105296907
RM09	2021-12-09	20	11	T5N	R35E	180590	NV105296908
RM10	2021-12-09	20	11	T5N	R35E	180591	NV105296909
RM11	2021-12-09	20	11	T5N	R35E	180592	NV105296910
RM12	2021-12-09	20	11	T5N	R35E	180593	NV105296911
RM13	2021-12-09	20	11	T5N	R35E	180594	NV105296912
RM14	2021-12-09	20	11	T5N	R35E	180595	NV105296913
RM15	2021-12-09	20	11	T5N	R35E	180596	NV105296914
RM16	2021-12-09	20	11	T5N	R35E	180597	NV105296915
RM17	2021-12-09	20	11	T5N	R35E	180598	NV105296916
RM18	2021-12-09	20	11	T5N	R35E	180599	NV105296917
RM19	2021-12-09	20	11	T5N	R35E	180600	NV105296918
RM20	2021-12-09	20	11	T5N	R35E	180601	NV105296919
RM21	2021-12-09	20	11	T5N	R35E	180602	NV105296920
RM22	2021-12-09	20	11	T5N	R35E	180603	NV105296921
RM23	2021-12-09	20	11	T5N	R35E	180604	NV105296922

Claim Name	Location Date	Area (acres)	Section	Township	Range	County document #	BLM Serial #
RM24	2021-12-09	20	11	T5N	R35E	180605	NV105296923
RM25	2021-12-09	20	11	T5N	R35E	180606	NV105296924
RM26	2021-12-09	20	11	T5N	R35E	180607	NV105296925
RM27	2021-12-09	20	11	T5N	R35E	180608	NV105296926
RM28	2021-12-09	20	11	T5N	R35E	180609	NV105296927
RM29	2021-12-09	20	14	T5N	R35E	180610	NV105296928
RM30	2021-12-09	20	14	T5N	R35E	180611	NV105296929
RM31	2021-12-09	20	23	T5N	R35E	180612	NV105296930
RM32	2021-12-09	20	23	T5N	R35E	180613	NV105296931
RM33	2021-12-09	20	23	T5N	R35E	180614	NV105296932
RM34	2021-12-09	20	23	T5N	R35E	180615	NV105296933
RM35	2021-12-09	20	23	T5N	R35E	180616	NV105296934
RM36	2021-12-09	20	23	T5N	R35E	180617	NV105296935
RM37	2021-12-09	20	23	T5N	R35E	180618	NV105296936
RM38	2021-12-09	20	23	T5N	R35E	180619	NV105296937
RM39	2021-12-09	20	23	T5N	R35E	180620	NV105296938
RM40	2021-12-09	20	23	T5N	R35E	180621	NV105296939
RM41	2021-12-09	20	23	T5N	R35E	180622	NV105296940
RM42	2021-12-09	20	23	T5N	R35E	180623	NV105296941
RM43	2021-12-09	20	23	T5N	R35E	180624	NV105296942
RM44	2021-12-09	20	23	T5N	R35E	180625	NV105296943
RM45	2021-12-09	20	23	T5N	R35E	180626	NV105296944
RM46	2021-12-09	20	23	T5N	R35E	180627	NV105296945

Permitting, Environmental Liabilities and Other Issues

The Rhodes Marsh Project is located entirely on public land that is administered by the BLM. Surface access to the placer claims and work involving “casual use” such as surface geologic mapping, geochemical sampling and geophysical surveys is right associated with mining claims. Permits are required for motorized work and surface disturbances such as road building, drilling and/or trenching. The type of permit required is dependent upon the nature and extent of the surface disturbance in accordance with BLM’s 3809 regulations. A Notice of Intent to explore is required for exploration activities, including drilling, which disturb less than 5 acres. A Plan of Operations is required for disturbance exceeding 5 acres and all mine extraction operations.

An environmental assessment has not been completed for the Rhodes Marsh Project but will be required prior to development activities. The Author is not aware of any specific environmental issues or liabilities related to the Rhodes Marsh Project.

State and Local Taxes and Royalties

At this time, no royalty is payable to the Federal Government for minerals produced from the claims. There are no underlying royalties payable from production on the Rhodes Marsh Project. There is no mineral severance tax in place on mining operations in Nevada.

Mining companies in Nevada pay three kinds of state and county taxes in addition to federal taxes, including:

- The NPOM Tax (Nevada Revised Statutes NRS 362.110), which has existed for decades and was increased from 3.65 percent to 5 percent in 1989. Mining is one of only four industries in Nevada with an industry-specific tax that must be paid in addition to conventional business taxes. More than half of NPOM tax revenue goes to the Nevada General Fund and is distributed on a per capita basis throughout the state. The remainder goes to the county in which the minerals were produced.
- Property taxes, which are paid on property, plants, and facilities, stay almost exclusively in the counties and special tax districts where mines are located.
- Sales and use taxes are primarily distributed throughout the state on a per capita basis, while a small amount goes to the state's General Fund and to school districts statewide on a per pupil basis. Because modern mining is a capital-intensive business that spends significant amounts on sophisticated equipment and supplies, sales taxes are the largest tax obligation for the industry.
- Lithium production is exempt from the new additions to the NPOM tax enacted in May 2021.

Surface Rights

Surface use on mining claims on BLM lands for the purposes of mineral development is allowed subject to CFR 3809 regulations but require permits depending on the type of use and area of disturbance. Additional surface rights would be required for the development of project infrastructure as the Rhodes Marsh Project develops.

Encumbrances and Risks

The unpatented placer mining claims will remain valid provided the filing and annual payment requirements with Mineral County and the BLM are kept current. Legal surveys of unpatented lode mining claims are not required and as of this writing the county records do not show any lode mining claims registered on the property. All of the unpatented lode mining claims have annual filing requirements (\$165 per claim) with the BLM, to be paid on or before September 1 of each year. Mining claims are subject to the Mining Law of 1872. In addition, a Notice of Intent to Hold is required to be filed each year with the Mineral County Recorder's Office at a cost of \$12 per claim and \$12 per document.

Accessibility, Climate, Local Resources, Infrastructure and Physiography

Mineral County is a large area with a small population. According to the 2010 census the 9,880 km² area had a population of 4,772. Hawthorne, the county seat, with a population of about 3,300, is located approximately 65 kilometers (45 miles) by road north of the Rhodes Marsh Project. Drilling and exploration services, supplies and contractors are available in Reno and Elko, Nevada and Salt Lake City, Utah.

Access

There is good road access to the Rhodes Marsh Project. The Rhodes Marsh Project is located 10 km (6 miles) south of Mina, which is a "census-designated place" with a population of 155 in 2010. There is an air-strip at Mina, suitable for small aircraft (runway length 1402 m, 4600 ft). US Highway 95 passes just west of the Rhodes Marsh Project. Direct access to the play is by a dirt road from US 95.

Climate

Climate conditions allow for year-round operations. The Köppen Climate System classifies the climate for Mina as semi-arid (*Bsk*) with an average precipitation of about 110 mm (4.5 inches) annually. The annual average high temperature is 21°C (70° F), and the average low is 4°C (39° F). July is the hottest month, with average high

temperatures 36°C (96° F) and January and December have the coldest temperatures, with lows averaging -6°C (21° F). The formation of the playa development in the basin is highly suggestive of a high evapotranspiration rate as compared to the recharge rate for the basin.

Table 5.1 summarizes climatic data for Mina, Nevada located approximately 30 miles to the north.

Table 5.1 Climate Data for Mina, Nevada

Climate data for Mina, Nevada													[hide]
Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
Average high °C (°F)	8 (46)	11 (52)	15 (59)	19 (67)	24 (76)	31 (87)	36 (96)	34 (93)	29 (85)	22 (72)	14 (57)	8 (47)	21 (70)
Average low °C (°F)	-6 (21)	-4 (25)	-1 (30)	2 (36)	7 (45)	12 (54)	16 (61)	14 (58)	9 (48)	3 (38)	-2 (28)	-6 (21)	4 (39)
Average precipitation mm (inches)	10 (0.4)	10 (0.4)	10 (0.4)	13 (0.5)	15 (0.6)	10 (0.4)	7.6 (0.3)	7.6 (0.3)	7.6 (0.3)	10 (0.4)	7.6 (0.3)	7.6 (0.3)	110 (4.5)
Source: Weatherbase ^[9]													

https://en.wikipedia.org/wiki/Mina,_Nevada

Property Infrastructure

There is no existing infrastructure on the Rhodes Marsh Project. The basic transportation network necessary to support exploration activity is located close to the Rhodes Marsh Project. Water is scarce and would be required to support lithium production facilities, including evaporation ponds.

Physiography and Vegetation

The Rhodes Marsh Project is located in Soda Spring Valley within the Great Basin physiographic province in a closed sedimentary basin. The area is a low, flat-lying plain including a large playa. The elevation of the area is about 1340 meters (4400 feet) and topographic relief is very low. Vegetation is sparse and consists of hardy, low-growing grasses and sage that are able to survive in high salinity soils and arid conditions. There is no vegetation growing on the playa.



Plate 5.1 View of the Rhodes Marsh

Flora and Fauna

Detailed vegetation and wildlife surveys of the Rhodes Marsh Project area have not been completed. There is no vegetation on the playa itself.

A review of published maps and data by the US fish and Wildlife (US Fish and Wildlife Service, Environmental Conservation Online System) indicates that the area is not critical habitat for any listed threatened or endangered species. The Author is not aware of any Federal or State species of interest which would hinder development of the Rhodes Marsh Project.

Surface Rights and Local Resources

As discussed under Section 4.3 “Companies with Mineral Projects – Property Description and Location”, LiTHOS has sufficient surface access rights for exploration and development activities. By virtue of rights held by placer claims, access for “casual use” is in place, and drilling, bulk sampling, trenching, etc. can be done through the permitting process which is regulated by the BLM.

History

The site of past salt and borate production facilities are located on the western side of the playa, west of the mining claims. No lithium production has been reported in the district. No historical mineral estimates are known for the Rhodes Marsh Project.

Historic Mining Activities

There has been historic production of borax minerals from Rhodes Marsh (USGS Mineral Resources Data System ID M035426). Salt was first produced in 1862, followed by borates around 1872. Initially salt was shipped by camel to Virginia City for use in extracting silver and gold from the Comstock area mines. With the discovery of borax in the early 1870s, cotton ball ulexite ($\text{NaCaB}_5\text{O}_6(\text{OH})_6 \cdot 5\text{H}_2\text{O}$), hydrated sodium calcium borate hydroxide, was recovered until the discovery of more easily recovered deposits in Death Valley, California. The marsh was also prospected for potash, but the content of the brines was too low to be economic. In the late 1920s and early 1930s, sodium sulphate was produced from mirabilite ($\text{Na}_2\text{SO}_4 \cdot 10\text{H}_2\text{O}$), hydrous sodium sulphate, and thenardite (Na_2SO_4), sodium sulphate.

Halite is most pure in the central part of the playa. Cottonball ulexite was the main borate ore and occurs in soft sediments within 30 to 60 cm of the surface along the west and north margins of the marsh. The ulexite areas partially surround the central halite area. Thenardite occurs in lenses 1.0 to 1.5 m thick, lying 0.6 to 2.0 m below the surface. Borax/tincalconite ($\text{Na}_2(\text{B}_4\text{O}_7)5\text{H}_2\text{O}$), hydrous sodium borate, is widely distributed as a crust 2 to 10 cm thick in the southern part of the playa and as crystals up to 2.5 cm on diameter in the near-surface mud to the west, SW and SE of the main halite area.

The thenardite lenses occur principally in a band that encircles most of the central halite area and mirabilite occurs mostly as disseminated crystals beneath the thenardite. A near surface layer of mirabilite up to 5 m thick has been reported in one area. Sodium carbonate has been reported as a surface crust in the SE part of the playa.

Ownership History of the Rhodes Marsh Project

LiTHOS conducted a regional literature survey for lithium brines in Nevada and selected the Rhodes Marsh as a prime exploration target. On December 9, 2021, a total of 46 placer mining claims (RM 01 to RM 46) were located by Cronin Capital (US) Corp. (formerly CT Corporation Systems) on behalf of Iron Forge. The claim locations are shown in figures 1.2 and 1.3.

Exploration and Development Work Undertaken

Prior to the May 2022 soil sampling program, there had been no recent exploration activities on the Rhodes Marsh Project.

Geological Setting and Mineralization

Rhodes Marsh lies within the Basin and Range Province, a vast physiographic region covering much of the inland Western United States and northwestern Mexico. The province is characterized by north-south oriented mountain ranges formed by block-faulting that are separated by broad valleys. This province also includes the Great Basin which is the largest area of closed drainage basins in the United States.

The topography and geology of the Basin and Range Province is the result of the extension and pulling apart of the North American Tectonic Plate. Mountain ranges have been uplifted along north-trending faults and valleys have dropped down. The rocks exposed in the mountain ranges consist of sedimentary, igneous and metamorphic rocks that range in age from Precambrian to Tertiary. The valleys are filled with younger (Quaternary and Tertiary aged) sediments which are often unconsolidated. Weathering and erosion have filled the valleys with alluvium and products of volcanism to depths of several thousand feet (Cannon, et al, 1975). Basins such as Rhodes Marsh are filled with Pleistocene and Holocene sediments interbedded with volcanic tuffs.

Surrounding Rhodes Marsh are Pilot Peak to the east, the Excelsior Mountains to the west and Candelaria Hill to the south. The bedrock of these uplifted areas to the west and south of the Flat consists of significant exposures of volcanic tuff and ash that could be a source of lithium brine deposits. A similar geologic setting occurs in the Clayton Valley where lithium is produced from subsurface brines, as discussed herein.

Regional Geological Setting

The regional geology is typical of the basin and range terrane of Nevada. The basins are typically alluvium filled with frequent dry lake beds or playas. The range rocks include a variety of Phanerozoic units, as described below, from oldest to youngest.

Golconda Terrane (Permian to upper Devonian)

The Golconda terrane is composed of deformed and imbricated thrust slices of upper Paleozoic rocks including deep-marine, pelagic and turbiditic, carbonate, terrigenous clastic and volcanoclastic rocks, radiolarian chert and argillite, and pillow basalt (Silberling, Jones, and others, 1992). While the terrane is characterized by a great diversity of rock types, all rocks are strongly deformed with an east-vergent fabric, a distinguishing characteristic of this terrane (Brueckner and Snyder, 1985; Jones, 1991a; Miller, Kanter, and others, 1982; Murchey, 1990; Stewart, Murchey, and others, 1986). It crops out in a long sinuous belt, up to 100 mi wide in places. Southwest of Mina, the belt trends east from the California border to just north of Tonopah, and then bends north-south to the west of Longitude 117° to about 50 mi north of Winnemucca, where it bends again, sharply to the east-north of Tuscarora with significant exposures eastward and to the northern border of the State.

Luning formation (Upper Triassic)

The Luning Formation is an allochthonous sequence of predominantly shallow marine volcanogenic-carbonate rocks. These include the full range of limestone-dolomite. The Luning also contains siliciclastic units. The allochthon consists of numerous, far-travelled thrust nappes, most of which are composed of single formations. It is deformed in polyphase folds.

Dunlap Formation (Lower Jurassic)

Dunlap clastic sedimentary rocks are a heterogeneous mixture of four types: (1) easterly derived pure quartz sandstone, texturally and compositionally like the Navajo and Aztec sandstones; (2) shallow marine and intertidal carbonates; (3) locally derived “orogenic” breccias, conglomerates and sandstone; and (4) volcanoclastic sediments derived from local Lower Jurassic and Triassic eruptive volcanics, principally andesitic flows and coarse pyroclastics.

Gold Range Assemblage (late Triassic to middle Jurassic)

This assemblage consists of mainly nonmarine, terrigenous clastic, and volcanogenic rocks. It is lying with angular unconformity over the Golconda Terrane. The oldest rocks are interbedded subaerial and shallow-marine terrigenous clastic, volcanoclastic, and minor carbonate rocks overlain by shelf carbonates containing Early Jurassic pelecypods. Unfossiliferous quartz arenite and coarse clastic rocks disconformably overlie the shelf carbonate and grade upward into poorly sorted volcanogenic sandstone and coarse clastic rocks. The assemblage is deformed by northeast-trending folds associated with the overlying Luning thrust as well as younger northwest-trending folds. They were originally mapped as the Luning Formation and in a few cases, the Excelsior Formation by early workers. Speed (1977) later modified the definition of the Gold Range Formation. Oldow (1981) included some of these rocks in the Water Canyon assemblage. Since the basement rocks are here included with the Golconda terrane, the term “Gold Range assemblage” is used only for the Mesozoic rocks unconformably overlying the Permian basement.

Ultramafic Rocks: (Triassic?)

Ultramafic rocks are present in very small belts or lenses in a few places across the State. In the Candelaria Hills along the Mineral-Esmeralda County boundary, they crop out in a thrust complex that overlies the Candelaria Formation.

Mafic and felsic phaneritic intrusive rocks (Miocene? to Jurassic?)

Poorly dated mafic intrusions are concentrated in two regions of Nevada, northwestern and west-central to southwestern parts of the State. They outcrop in northern Nye, Mineral, Esmeralda, Eureka, Humboldt, and Lander Counties, and include rocks described on the county maps as dioritic to andesitic rocks, diorite and related rocks, and granodiorite. Felsic phaneritic intrusions are widespread in Nevada. They are poorly dated, and comprise granitic rocks, granite porphyry, granodiorite, quartz monzonite and many undivided plutonic rocks.

Intermediate volcanics, silicic ash flow tuff, younger andesite, and intermediate flows and breccias (lower Miocene and Oligocene)

The intermediate silicic flows comprise mainly welded and nonwelded silicic ash flow tuffs. Aside from alluvium, this unit covers more of Nevada than any other rock. It is principally exposed in the central regions of the State. It locally includes thin units of air fall tuff and sedimentary rocks. The andesites include units mapped as pyroxene, hornblende phenoandesite, and phenodacite.

Esmeralda Formation (Miocene)

The Miocene rocks of the Esmeralda Formation consist of volcanic flows and breccias, as well as fluvio-lacustrine sedimentary rocks. The lower part of the formation contains small lacustrine claystone deposits that interfinger with volcanic breccias and flows. The main fluvio-lacustrine sequence is above the flows (Clausen, 1983).

Playa, lake bed, and flood plain deposits (Holocene and Pleistocene)

This map unit occurs in all counties in Nevada for recent lake beds, playas, and undivided alluvium, generally in flood plains.

Local Geology

The surface of Rhodes Marsh is composed of alluvial deposits of Quaternary age which were formed by the erosion of the surrounding mountain ranges. The playa is a salt flat and the underlying valley fill consists of gravel, sand, silt and clay, and some volcanic units. No drilling has been done to determine the thickness and water-bearing characteristics of the valley fill sediments. Locally the playa may be covered by wind-blown sand.

The surrounding hills exhibit a variety of rock types. To the southeast is Candelaria Hill area which is underlain mainly by the lower Miocene and Oligocene intermediate silicic ash flow tuff with younger andesitic flow and breccia unit. This is a potential source for lithium in the area. Immediately to the west lie the Excelsior Mountains, underlain by the Permian to upper Devonian Golconda Terrane and younger (lower Miocene and Oligocene) andesitic and intermediate flows. This is also a potential source for lithium. Immediately to the east lies Pilot Peak which is underlain mainly by rocks of the Golconda Terrane and the Gold Range Assemblage.

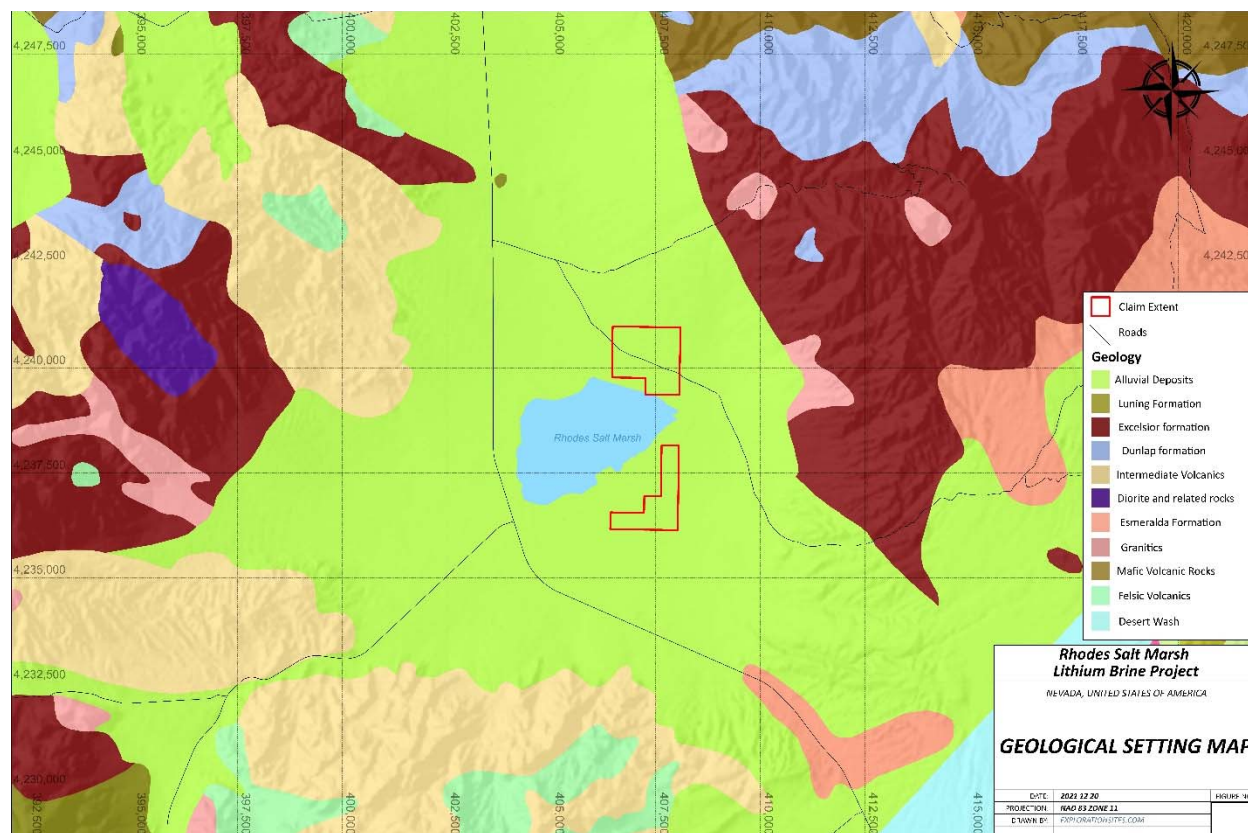


Figure 7.1 Geology

Structural Geology

As is common in the Basin and Range terrane of Nevada, the area has undergone a highly complex structural history. The northern Pilot Mountains, which are located immediately to the east of the property, consist of a complexly deformed terrane of imbricate thrust sheets composed of rocks of Mesozoic and possible late Palaeozoic ages. The major Soda spring Valley fault forms the western boundary of the Pilot Mountains, immediately adjacent to the Rhodes Marsh Project. Thrust nappes within the allochthonous terrane, named the Luning allochthon, are principally constituted by the Upper Triassic Luning formation. Locally, nappes contain numerous imbricate thrust slices, some of which are composed of undifferentiated Triassic and Jurassic rocks and unnamed volcanic-carbonate assemblages of probable Permian or Triassic age.

Three episodes of folding and thrusting are recognized on the basis of folded thrusts and thrustured folds, and deformation and emplacement of the allochthon is constrained as late Mesozoic. Folds apparently formed coevally with thrust faults and old geometry can be used to determine approximate directions of thrust transport. Thrust displacements are responsible for 35 to 40 km of an estimated 70 km of intra-allochthon contraction which is inferred from lithofacies analysis of rocks juxtaposed by thrust nappes and from the structural overlap of imbricate thrusts (Oldow, 1981).

The history of thrust displacement is complex and involves three directions of motion on a regionally extensive detachment surface, the Luning thrust. First motion, from NW to SE, resulted in the major component of stratal contraction and is the probable result of NW-SE regional compression. The final two episodes of motion are NE-SW followed by east to west. They resulted in small displacements and are possibly the product of gravity sliding of the thrust sheets into a depression formed beneath part of the allochthon within the autochthon. The site of downward in the autochthon may have formed by wither load-induced subsidence or regional compression.

Geothermal Activity in Rhodes Marsh Area

Bradley et al, 2013, Davis et al, 1986 and others discuss the importance of igneous and/or geothermal activity as a key factor in the leaching of lithium of adjacent source rocks in the formation of lithium bearing brines within the playa environments. Figure 7.3 shows hydrothermal activity within and in the vicinity of Rhodes Marsh (Penfield, et al, 2010).

Figure 7.2 shows a general area of thermal springs and wells along the eastern edge of Rhodes Marsh. This area contains >10 warm springs (20-37°C) on the east side of Rhodes Marsh, adjacent to Iron Forge's claims. In addition, a hot spring is located approximately 5 km (3 miles) north of the Rhodes Marsh Project, at Sodaville Springs.

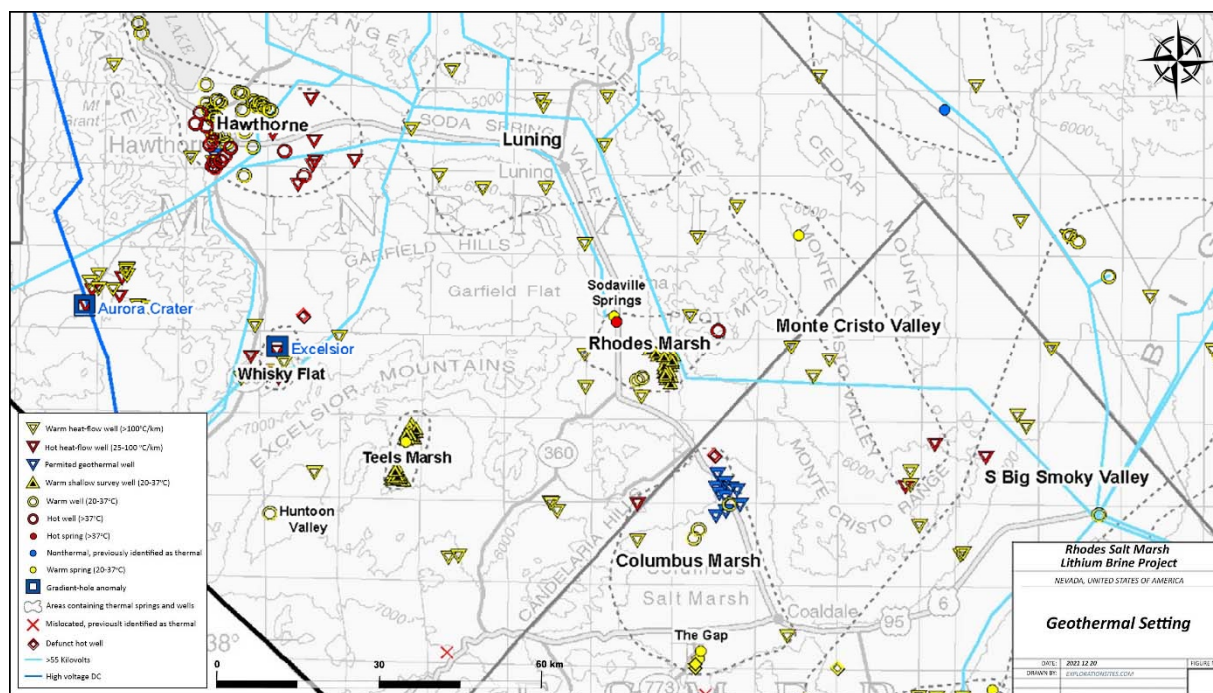


Figure 7.2 Geothermal Activity in Rhodes Marsh Area

Lithium Source Rocks

Regionally, Tertiary volcanic rocks surrounding the closed basins are considered to be the likely source rock for lithium within salt brines within closed basins playas including the Clayton Valley (Davis et al, 1986). More recent research (Munk, 2011) concludes that the source rocks for the lithium brine deposits are a combination the Tertiary

volcanic rocks surrounding the basins and lithium rich clays which formed in the ancient lake beds which formed from volcanic ash deposited in the basins. These potential source rocks, Tertiary volcanic and lacustrine deposits, are leached either by low temperature terrestrial waters, geothermal waters, or both then transported through the subsurface and concentrated through evapotranspiration in the playas (Munk, 2011).

As shown on Table 7.1 lithium is preferentially concentrated in closed basins where water is discharged predominantly by evapotranspiration. Cyclic processes of wetting and drying in the arid environment present in the region has resulted in the concentration of salts, including lithium in brines and in sediments within the closed basins (Cannon et al, 1975).

Table 7.1 Lithium Concentration in Closed and Open Basins (weight %)

Closed basins, discharged by evapotranspiration	
Amargosa Desert, Nye County, Nev., and Inyo County, Calif.....	0.15
Big Smoky Valley, Nye County, Nev.....	.01
Bristol Lake, San Bernardino County, Calif.....	.03
Clayton Valley, Esmeralda County, Nev.....	.05
Columbus Salt Marsh, Esmeralda County, Nev.....	.023
Death Valley, Inyo County, Calif.....	.03
Fourmile Flat, Churchill County, Nev.....	.007
Hector, Mohave Desert, San Bernardino County, Calif.....	.20
Oasis Valley, Nye County, Nev.....	.015
Owens Lake, Inyo County, Calif.....	.08
Railroad Valley, Nye County, Nev.....	.015
Sarcobatus Flat, Nye County, Nev.....	.03
Median.....	0.03
Open basins, discharged by underflow	
Cactus Flat, Nye County, Nev.....	0.004
Dry Lake Valley, Clark County, Nev.....	.005
Frenchman Flat, Nye County, Nev.....	.015
Gold Flat, Nye County, Nev.....	.008
Kawich Valley, Nye County, Nev.....	.008
Silver Lake, San Bernardino County, Calif.....	.008
Stonewall Flat, Nye County, Nev.....	.007
Yucca Flat, Nye County, Nev.....	.007
Median.....	0.0075

Rhodes Marsh and the Clayton Valley basins are similar in origin resulting from repetitive tectonic down-warping of the basins followed by erosion and deposition of sediments within the basins during Palaeozoic and Mesozoic times.

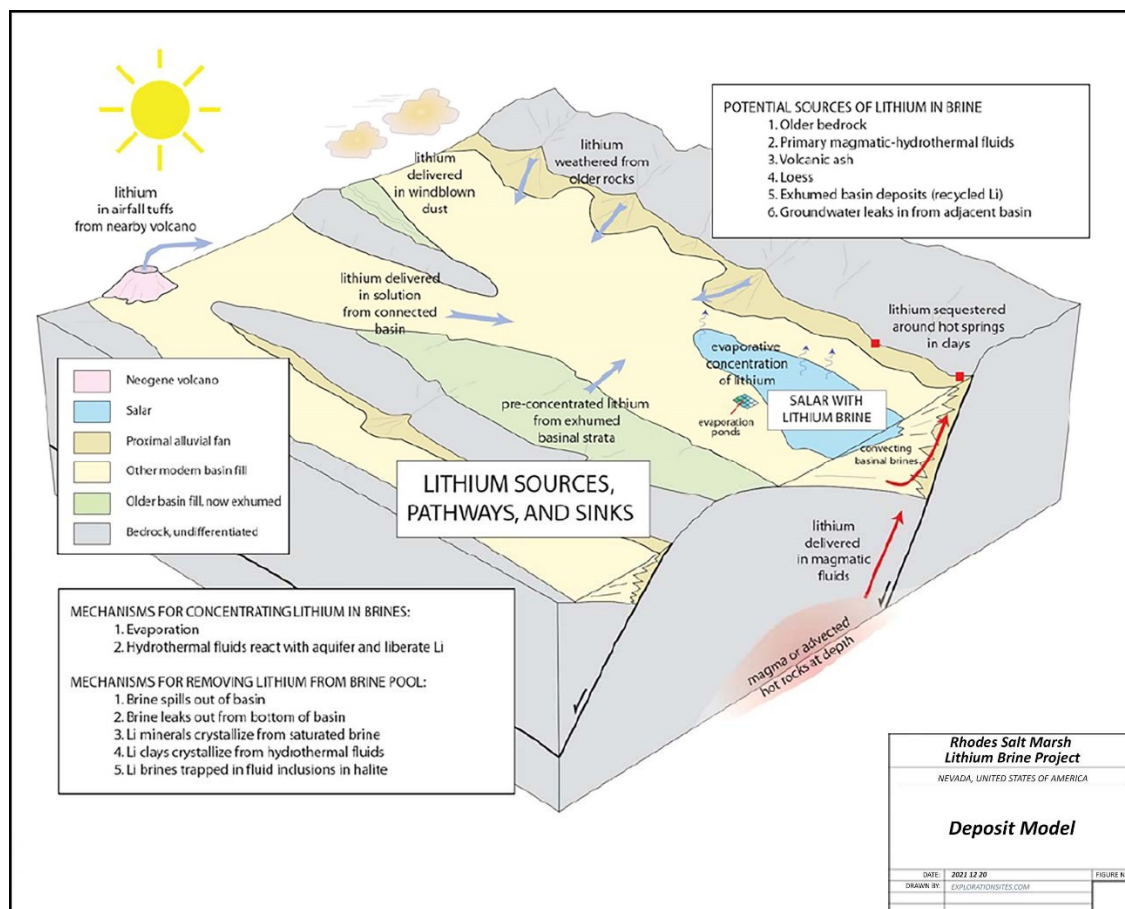
Lithium Brines

Currently available data relative to lithium brines is limited to the Clayton Valley. USGS Bulletin 1622 (Davis et al, 1986) provides analytical data from 8 wells the Silver Peak mine ranging from 26 to 283 ppm Lithium. Additional data from the Silver Peak mine is generally not available as the company is privately held and thus not required to release data publicly. Additional analytical data is available from an adjacent property, the Clayton Valley South Project, Pure Energy Minerals. The NI 43-101 technical report which states an inferred mineral resource for this project states average Lithium brine concentrations ranging from 37 to 370 ppm (Spanjers, 2015). There is no guarantee that similar results will be found on the Rhodes Marsh Project.

There is no current lithium brine data available for Rhodes Marsh.

Deposit Types

Lithium brine deposits result from the accumulation of saline groundwater. Typically, this occurs in closed structural sedimentary basins within arid environments. A preliminary geologic model for lithium brine deposits has been proposed (Bradley et al, 2013). Figure 8.1 from Bradley et al, 2013, shows a schematic diagram of the geologic model. Bradley noted that “all producing lithium brine deposits share a number of first-order characteristics: (1) arid climate; (2) closed basin containing a playa or solar; (3) tectonically driven subsidence; (4) associated igneous or geothermal activity; (5) suitable lithium source rocks; (6) one or more adequate aquifers; and (7) sufficient time to concentrate a brine.”



From Bradley, et al. 2013

Figure 8.1 Schematic Deposit Model for Lithium Brines

Exploration

Historic Exploration and Production

The Rhodes Marsh Project is a grassroots exploration project with no previous historical exploration. The mineral rights for the Rhodes Marsh Project were acquired following geologic investigations based on the geologic model for Lithium Brines as suggested in USGS Open File report 2013-1006 (D. Bradley et al, 2013). Historic production of borates and salt has been documented from Rhodes Marsh.

Recent Exploration

LiTHOS completed a soil sampling program over the Rhodes Marsh Project in May 2022. In total, 276 samples were collected by a hand-held power auger, drilling to a depth of approximately 60-75 cm. The program was operated by Rangefront Mining Services, under contract to LiTHOS. The Author was present during the program and observed the collection of the samples. He also provided guidance to the samplers to ensure best industry practices were followed. Results were very encouraging. Of the 276 samples collected, 100 returned analytical results of >50 ppm Li, of which 36 were >100 ppm Li (maximum value = 210 ppm Li). These results are presented in table 9.1 and summarized in table 9.2. Figure 9.1 shows the sample locations and figure 9.2 shows the lithium results.

The high values occur in the southern part of the north claim block and in the northern part of the south claim block. These two areas are where the claim blocks extend out on to the playa. To the north of the north block, the ground is covered with increasing thicknesses of pediment sediments, such that the auger was not able to penetrate to the underlying salt deposits. Similarly, in the southern extents of the south claim block, the salt pan is covered with variable thicknesses of wind-blown sand deposits.



Plate 9.1 Collection of soil samples



Plate 9.2 Sample material placed in sieve

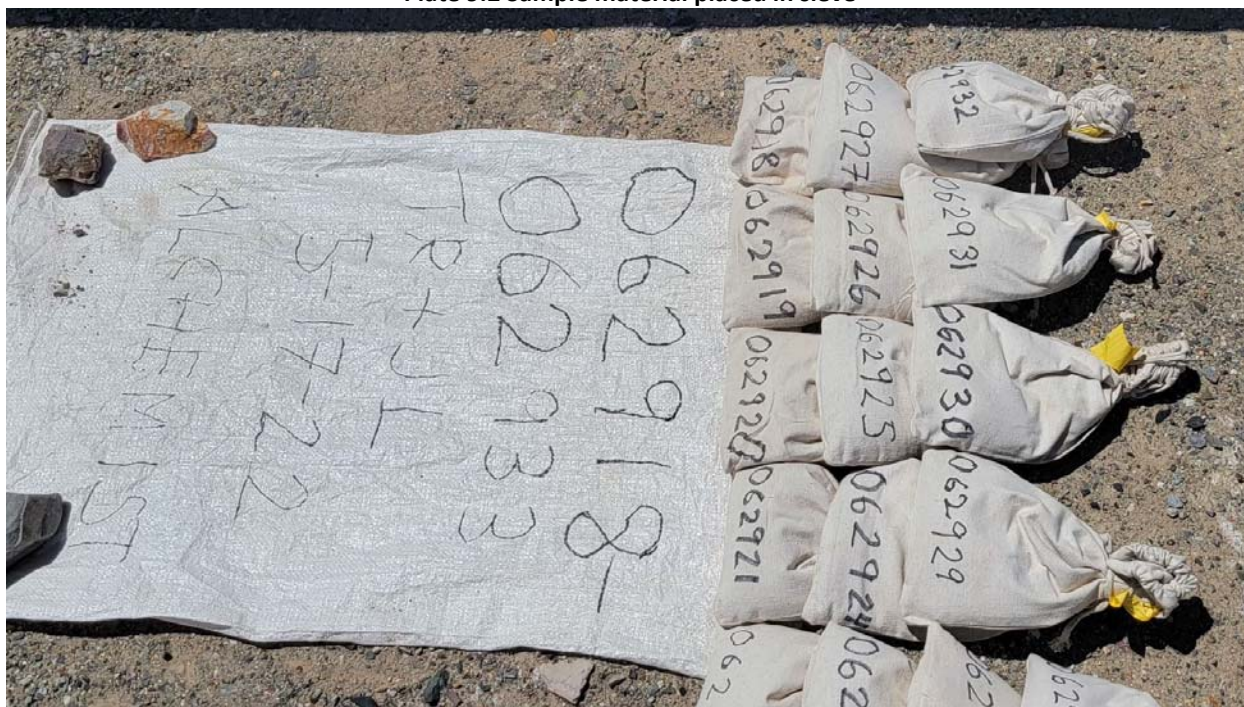


Plate 9.3 Bagged samples ready for packaging.

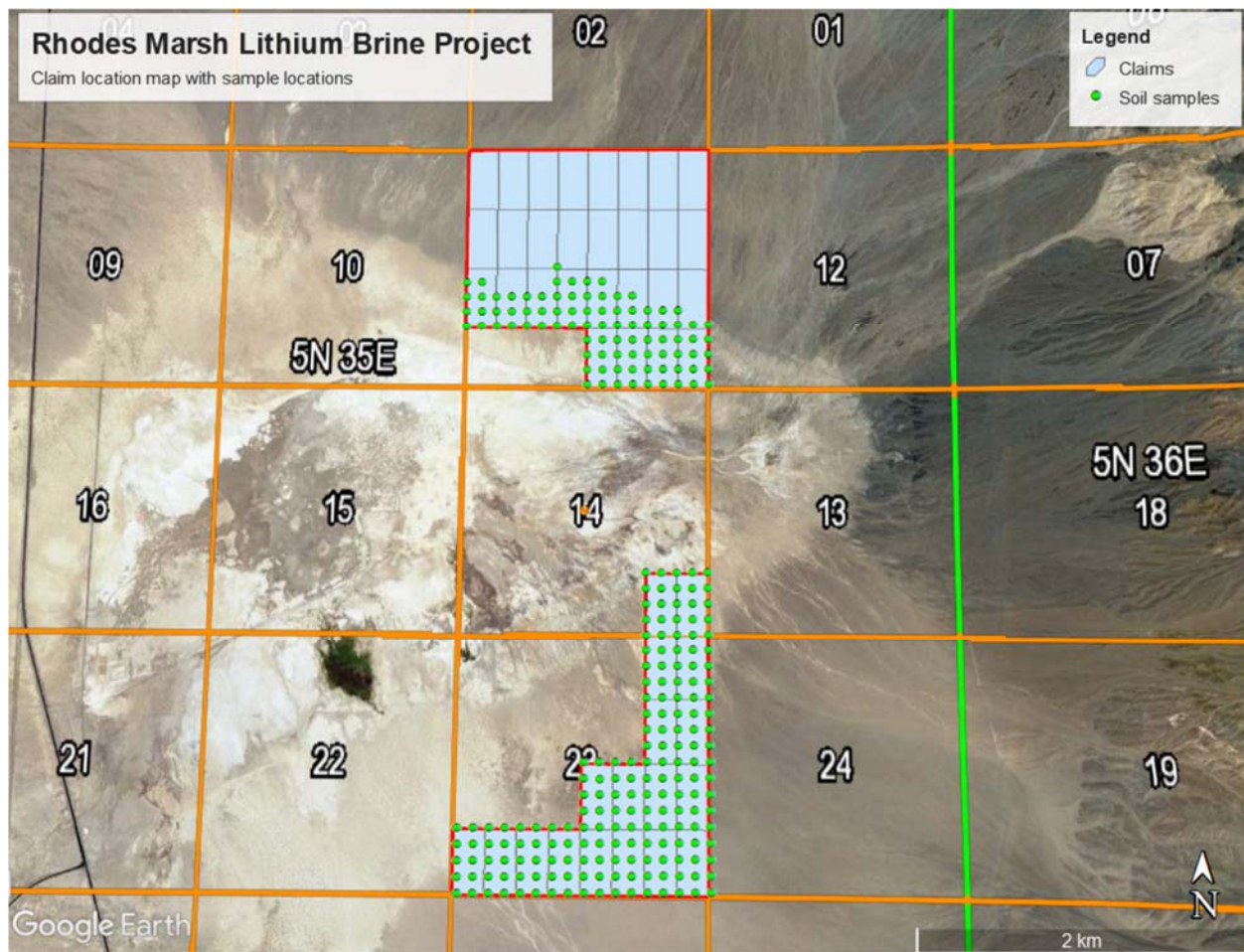


Figure 9.1 Soil sample locations

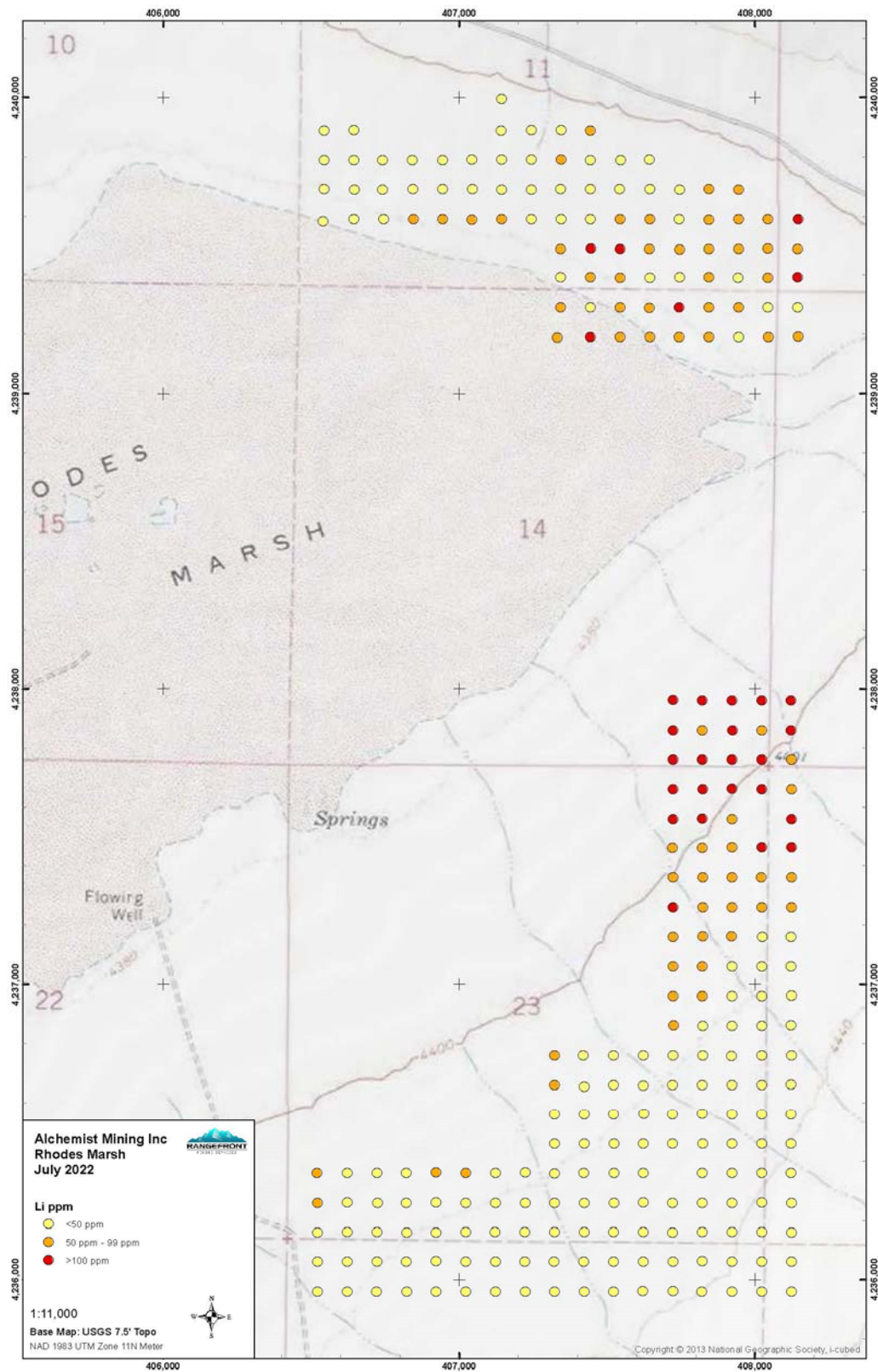


Figure 9.2 Lithium values from soil sampling program

Table 9.1 Analytical results of soil sampling program

Rhodes Marsh soil sampling 2022-05										
WETLAB report	Sample #	Site #	UTM			Li	B	Mg	K	
			East	North	Elevation	ppm	ppm	ppm	ppm	
22050492	55801	RM438	408120.33	4235959.54	1353.02	17	<9.3	5300	1900	
22050492	55802	RM421	408120.51	4236059.52	1353.67	15	<9.3	5200	1700	
22050492	55803	RM420	408020.50	4236059.22	1351.68	19	20	4500	2200	
22050492	55804	RM437	408020.32	4235958.79	1349.39	20	17	5000	2500	
22050492	55805	RM436	407919.79	4235958.71	1353.97	23	30	4700	2600	
22050492	55806	RM419	407920.76	4236059.02	1355.38	27	47	5900	3000	
22050492	55807	RM418	407819.99	4236060.40	1349.58	19	<9.0	5200	2100	
22050492	55808	RM435	407818.49	4235958.99	1355.35	23	37	5300	2700	
22050492	55809	RM434	407721.03	4235959.87	1352.32	20	26	5100	2200	
22050492	55810	RM417	407720.60	4236060.20	1347.35	24	51	6300	2900	
22050492	55811	RM416	407620.16	4236059.90	1347.94	20	23	5100	2400	
22050492	55812	RM433	407618.84	4235960.26	1349.80	25	25	4600	3200	
22050492	55813	RM432	407519.71	4235959.73	1348.13	18	<9.2	4600	2500	
22050492	55814	RM415	407520.34	4236059.83	1346.85	48	120	8200	5300	
22050492	55815	RM414	407419.54	4236058.87	1344.99	34	40	5300	4000	
22050492	55816	RM431	407420.31	4235958.65	1346.52	21	25	4800	2900	
22050492	55817	RM430	407320.41	4235959.12	1342.70	23	38	4100	2600	
22050492	55818	RM413	407318.41	4236059.47	1344.08	30	45	5200	3400	
22050492	55819	RM412	407219.81	4236060.15	1343.75	28	46	5600	3000	
22050492	55820	RM395	407219.82	4236159.92	1339.70	35	82	5800	4000	
22050492	55822	RM378	407221.32	4236259.57	1340.01	17	36	4000	2100	
22050492	55823	RM377	407121.84	4236258.71	1337.09	24	56	4300	2300	
22050492	55824	RM394	407120.00	4236159.74	1345.25	23	44	3600	2400	
22050492	55825	RM411	407120.77	4236059.30	1346.34	23	55	4100	2500	
22050492	55826	RM428	407120.41	4235958.98	1346.90	18	26	3900	2300	
22050492	55827	RM429	407221.11	4235959.16	1347.65	21	40	4000	2300	
22050492	55828	RM396	407319.99	4236159.11	1337.82	24	54	5000	2800	
22050492	55829	RM397	407420.43	4236159.40	1343.48	20	46	4400	2200	
22050492	55830	RM380	407420.70	4236259.50	1341.97	23	63	4000	2100	
22050492	55831	RM379	407320.79	4236259.65	1345.50	18	35	4700	2000	
22050492	55832	RM398	407518.77	4236159.38	1346.83	20	37	3700	1700	
22050492	55834	RM416	407620.85	4236058.57	1349.06	14	21	4100	1700	
22050492	55835	RM399	407620.17	4236159.89	1347.38	18	44	4500	2000	
22050492	55836	RM400	407719.54	4236158.75	1351.06	12	29	3400	1300	
22050492	55837	RM381	407521.13	4236259.35	1345.09	16	37	4100	1600	
22050492	55838	RM382	407620.27	4236260.43	1346.43	19	44	4600	2000	
22050492	55839	RM383	407719.64	4236259.07	1352.49	22	45	4800	2100	
22050492	55840	RM384	407820.06	4236258.49	1349.21	21	46	4500	2100	
22050492	55841	RM401	407819.46	4236159.17	1353.12	15	22	4100	1600	

22050492	55843	RM402		407919.20	4236159.70	1354.36	14	26	4000	1400
22050492	55844	RM385		407920.68	4236259.67	1349.93	17	35	4900	1700
22050492	55845	RM386		408021.03	4236259.97	1351.22	15	22	4300	1600
22050492	55846	RM403		408020.50	4236159.21	1352.16	18	35	4900	1800
22050492	55847	RM404		408120.41	4236158.85	1353.55	17	28	5000	1700
22050492	55848	RM363		407419.21	4236358.62	1346.15	18	38	4300	2000
22050492	55849	RM362		407320.95	4236357.30	1344.53	25	61	4500	2400
22050492	55850	RM361		407221.34	4236360.66	1345.92	17	41	4000	1700
22050595	55851	RM360		407120.54	4236359.27	1343.65	28	66	4400	2300
22050595	55852	RM359		407019.76	4236359.21	1344.49	58	160	6200	4300
22050595	55853	RM358		406919.78	4236360.36	1344.16	59	170	6400	4500
22050595	55854	RM357		406819.85	4236358.95	1341.00	36	85	4900	3400
22050595	55855	RM356		406720.65	4236359.32	1339.73	37	84	5400	3600
22050595	55856	RM355		406619.60	4236359.82	1340.59	48	100	6500	4600
22050595	55857	RM354		406518.30	4236359.66	1339.26	96	160	10000	8400
22050595	55858	RM371		406520.20	4236259.54	1341.60	63	210	7700	5800
22050595	55859	RM372		406620.64	4236259.71	1338.93	43	130	5800	4200
22050595	55860	RM373		406721.86	4236259.54	1339.07	31	90	4500	3000
22050595	55861	RM374		406819.84	4236259.19	1339.56	<9.6	27	1200	730
22050595	55862	RM375		406920.11	4236259.70	1341.56	<8.4	17	1200	760
22050595	55863	RM375	DUPLICATE	406920.11	4236259.70	1341.56	<9.5	13	960	530
22050595	55864	RM376		407020.18	4236258.87	1342.31	<9.0	14	990	510
22050595	55865	RM393		407020.17	4236159.22	1340.65	<8.8	12	1000	590
22050595	55866	RM392		406920.08	4236159.04	1341.20	8.8	26	1400	980
22050595	55867	RM391		406820.61	4236159.07	1336.77	<8.3	14	1100	630
22050595	55868	RM390		406720.35	4236159.35	1338.70	<9.1	24	1300	760
22050595	55869	RM389		406620.18	4236159.72	1338.01	11	49	1600	1100
22050595	55870	RM388		406519.74	4236158.89	1336.95	31	93	4600	3300
22050595	55871	RM405		406519.62	4236058.57	1335.99	42	150	6000	4400
22050595	55872	RM406		406620.16	4236059.51	1345.47	19	54	4200	2300
22050595	55873	RM407		406720.51	4236059.57	1345.00	35	85	5100	3300
22050595	55874	RM408		406819.81	4236059.77	1341.71	33	87	5300	3500
22050595	55875	RM409		406920.26	4236060.60	1343.17	24	42	4700	2800
22050595	55876	RM410		407020.78	4236059.56	1346.13	20	53	4000	2600
22050595	55877	RM422		406519.96	4235959.24	1343.64	37	130	5400	3800
22050595	55878	RM423		406620.14	4235959.30	1344.37	24	71	3900	2700
22050595	55879	RM424		406719.01	4235959.71	1343.18	24	73	4400	2600
22050595	55880	RM425		406820.23	4235959.11	1346.31	20	53	4100	2300
22050595	55881	RM426		406920.58	4235959.06	1348.84	21	45	4000	2400
22050595	55882	RM427		407019.53	4235959.03	1346.10	20	37	4600	2500
22050595	55883	RM364		407520.79	4236359.01	1341.46	19	39	3900	1600
22050595	55885	RM365		407620.86	4236358.97	1345.21	23	39	5500	2600
22050595	55887	RM367		407820.34	4236359.03	1346.00	15	20	4900	1500

22050595	55888	RM368		407920.25	4236360.11	1345.49	13	13	4000	1500
22050595	55889	RM369		408019.98	4236359.08	1348.81	17	16	5700	2000
22050595	55890	RM370		408119.02	4236359.40	1354.11	13	<9.8	5600	1500
22050595	55891	RM387		408120.32	4236258.95	1352.58	16	10	5500	1700
22050595	55892	RM353		408119.89	4236459.49	1347.71	19	<9.5	5800	1800
22050595	55893	RM352		408019.80	4236459.30	1351.85	19	15	5100	1500
22050595	55894	RM351		407919.55	4236459.44	1349.76	16	14	5300	1400
22050595	55895	RM350		407820.78	4236459.34	1348.85	20	24	4600	1500
22050595	55896	RM349		407718.87	4236460.06	1342.32	35	61	7300	2200
22050595	55897	RM348		407619.57	4236459.64	1344.89	29	44	5700	1800
22050595	55898	RM347		407521.25	4236460.54	1345.20	27	43	4200	1400
22050595	55899	RM346		407420.20	4236460.03	1345.72	32	64	5100	2100
22050595	55900	RM345		407320.28	4236459.07	1341.06	16	34	3800	1400
22050595	61301	RM336		407320.81	4236558.72	1340.08	36	170	6800	3200
22050595	61302	RM337		407420.37	4236559.24	1344.09	43	76	5200	2300
22050595	61303	RM338		407519.84	4236559.00	1339.01	35	65	5600	2600
22050595	61304	RM339		407621.50	4236559.94	1340.45	34	80	4700	1900
22050595	61305	RM340	DUPLICATE	407719.66	4236559.49	1346.69	28	76	5200	2000
22050595	61306	RM340		407719.66	4236559.49	1346.69	29	67	4700	2000
22050595	61307	RM341		407819.65	4236560.01	1343.66	21	21	6000	1800
22050595	61308	RM342		407920.95	4236558.75	1346.01	20	29	4600	1700
22050595	61309	RM343		408021.12	4236559.16	1351.92	26	36	6700	2200
22050595	61310	RM344		408120.23	4236558.70	1350.17	19	14	7100	1800
22050595	61311	RM335		408118.41	4236660.26	1351.94	15	30	4800	1400
22050595	61312	RM334		408020.25	4236659.38	1347.24	21	24	6600	2100
22050595	61313	RM333		407919.65	4236659.64	1348.22	27	62	6500	2000
22050595	61314	RM332		407820.25	4236658.55	1349.47	14	9.1	6100	1300
22050595	61315	RM331		407719.65	4236658.48	1342.63	26	69	5000	1700
22050595	61316	RM330		407620.18	4236658.17	1346.01	19	41	4200	1200
22050595	61317	RM329		407520.20	4236659.20	1339.49	19	42	4200	1300
22050595	61318	RM320		407519.85	4236759.19	1333.86	32	41	5200	1900
22050595	61319	RM319		407417.94	4236759.25	1337.17	39	100	6100	2800
22050595	61320	RM318		407320.58	4236759.60	1337.65	75	55	7900	4100
22050595	61321	RM327		407319.43	4236659.50	1340.18	59	170	7700	4400
22050595	61322	RM328		407421.63	4236653.78	1345.78	14	16	3700	1700
22050595	61323	RM321		407620.02	4236759.49	1336.55	22	31	4200	1600
22050595	61324	RM322		407721.42	4236760.00	1336.43	36	100	5500	2000
22050595	61325	RM323		407821.14	4236759.19	1338.00	36	150	7100	3500
22050595	61327	RM324		407918.05	4236757.98	1339.06	27	59	5300	2000
22050595	61328	RM325		408020.34	4236759.48	1340.56	21	50	4500	1700
22050595	61329	RM326		408122.08	4236759.43	1342.11	25	58	7800	2600
22050595	61330	RM317		408119.90	4236860.34	1341.79	18	28	6000	1400
22050595	61331	RM312		408120.42	4236960.20	1339.21	40	76	6900	2400

22050595	61332	RM307		408119.88	4237059.09	1337.04	50	150	7200	2900
22050595	61333	RM302		408120.24	4237159.18	1338.37	37	120	7500	1900
22050595	61334	RM297		408121.11	4237259.17	1336.34	59	60	7200	2400
22050595	61335	RM292		408120.32	4237359.16	1336.13	97	56	9500	3800
22050595	61336	RM287		408120.68	4237460.04	1336.05	110	61	12000	4700
22050595	61337	RM282		408120.94	4237559.80	1335.31	130	59	11000	5100
22050595	61338	RM277		408120.50	4237659.13	1335.37	92	59	8300	4300
22050595	61339	RM272		408120.68	4237759.67	1333.54	100	62	11000	5400
22050595	61340	RM267		408119.80	4237859.56	1330.44	130	270	7900	5100
22050595	61341	RM262		408119.98	4237959.66	1330.48	130	160	11000	5900
22050595	61342	RM313		407722.04	4236860.21	1336.62	55	180	6800	3000
22050595	61343	RM314		407821.40	4236858.40	1337.92	34	150	5100	1900
22050595	61344	RM315		407920.52	4236859.16	1337.70	33	160	5200	1800
22050595	61345	RM316		408019.90	4236859.03	1337.65	29	57	6500	1900
22050595	61346	RM311		408020.15	4236958.80	1334.75	28	69	6000	1500
22050595	61347	RM311	DUPLICATE	408020.15	4236958.80	1334.75	38	110	7100	2500
22050595	61348	RM310		407919.48	4236959.50	1336.08	43	160	7700	2600
22050595	61349	RM309		407820.18	4236958.96	1335.55	69	240	8000	3300
22050595	61350	RM308		407721.42	4236959.64	1334.35	78	150	7500	3800
22050595	61401	RM303		407721.26	4237059.86	1339.02	81	37	7200	3800
22050595	61402	RM304		407820.02	4237059.17	1340.49	72	78	8900	3600
22050595	61403	RM305		407920.17	4237059.15	1338.62	40	82	6700	1900
22050595	61404	RM306		408021.47	4237058.99	1339.88	42	180	7000	2300
22050595	61405	RM301		408022.26	4237159.08	1339.71	48	150	6000	2300
22050595	61406	RM300		407918.61	4237159.92	1338.12	76	40	9100	3700
22050595	61407	RM299		407820.63	4237159.60	1337.95	69	22	9500	3600
22050595	61408	RM298		407720.99	4237159.29	1337.23	69	22	9500	3600
22050595	61409	RM293		407720.38	4237258.85	1332.34	110	51	9900	4900
22050595	61410	RM294		407821.51	4237259.36	1342.20	100	52	9400	4500
22050595	61411	RM295		407920.53	4237259.90	1338.54	100	42	8900	3800
22050595	61412	RM296		408019.98	4237258.76	1340.78	82	71	9500	4000
22050595	61413	RM291		408018.85	4237359.43	1339.02	88	110	9700	4100
22050595	61414	RM290		407920.10	4237359.78	1338.63	82	69	9700	4200
22050595	61415	RM289		407820.83	4237360.25	1345.15	78	37	7700	4200
22050595	61416	RM288		407719.88	4237360.06	1336.38	98	64	14000	6300
22050595	61417	RM283		407719.70	4237459.16	1331.87	79	33	8100	4100
22050595	61419	RM284		407820.11	4237458.58	1334.86	100	58	9800	4600
22050595	61420	RM285		407919.93	4237459.77	1336.29	99	84	10000	5000
22050595	61421	RM286		408019.82	4237459.63	1336.90	120	54	12000	5600
22050595	61423	RM280		407919.84	4237559.09	1336.88	100	51	10000	4800
22050595	61424	RM279		407820.13	4237559.89	1334.97	110	49	9900	4700
22050595	61425	RM278		407721.10	4237559.03	1334.42	170	170	11000	7000
22050595	61426	RM273		407720.84	4237659.02	1330.77	140	68	12000	5100

22050595	61427	RM274		407820.65	4237659.77	1331.05	120	110	11000	5400
22050595	61428	RM275		407919.24	4237660.53	1332.06	130	73	9900	5400
22050595	61429	RM276		408020.43	4237659.27	1330.32	170	120	9700	6600
22050595	61430	RM271		408020.80	4237760.47	1330.16	110	37	9700	4400
22050595	61431	RM270		407920.63	4237759.29	1338.42	170	65	9100	5500
22050595	61432	RM269		407820.22	4237759.54	1332.83	190	68	8800	4100
22050595	61433	RM268		407720.33	4237759.79	1330.54	130	75	12000	4900
22050595	61434	RM263		407720.41	4237859.12	1330.82	170	82	9700	5600
22050595	61435	RM264		407819.78	4237858.87	1330.17	98	36	9500	4100
22050595	61436	RM265		407921.42	4237859.37	1331.11	170	70	8000	4200
22050595	61437	RM266		408019.99	4237858.47	1332.12	77	28	8800	4100
22050595	61438	RM261		408021.23	4237959.23	1328.33	120	49	7500	4100
22050595	61439	RM260	DUPLICATE	407920.10	4237958.60	1330.15	120	59	7800	4600
22050595	61440	RM260		407920.10	4237958.60	1330.15	130	94	7100	4200
22050595	61441	RM259		407819.87	4237959.19	1327.15	170	85	7600	4600
22050595	61442	RM258		407720.18	4237961.11	1332.62	210	78	13000	7100
22050595	61443	RM257		408143.08	4239190.89	1334.77	60	27	6000	3100
22050595	61444	RM256		408042.85	4239189.48	1333.02	55	33	6100	3100
22050595	61445	RM255		407941.57	4239189.85	1333.07	50	38	7700	4000
22050595	61446	RM254		407842.14	4239189.99	1330.05	55	47	8600	4300
22050595	61447	RM253		407741.22	4239190.59	1331.19	69	100	7300	4700
22050595	61448	RM252		407642.22	4239190.16	1332.05	54	68	6500	3900
22050595	61449	RM251		407542.77	4239189.20	1337.06	63	85	8400	4800
22050595	61450	RM250		407441.94	4239190.02	1329.03	200	140	12000	6900
22050594	61451	RM249		407329.66	4239186.93	1329.24	60	47	7400	4600
22050594	61452	RM240		407341.29	4239289.61	1334.10	57	53	9500	5000
22050594	61453	RM241		407442.21	4239289.34	1330.57	49	44	8700	4300
22050594	61454	RM242		407542.53	4239290.29	1330.23	69	54	9300	4700
22050594	61455	RM243		407640.73	4239289.17	1328.30	86	77	9300	5600
22050594	61456	RM244		407741.66	4239290.02	1334.11	150	82	6500	3400
22050594	61457	RM245		407842.06	4239290.76	1332.84	76	45	9000	4600
22050594	61458	RM246		407941.49	4239290.29	1335.62	77	37	9700	3800
22050594	61459	RM247		408041.80	4239290.04	1334.43	36	19	6200	2300
22050594	61461	RM248		408141.33	4239290.68	1334.49	40	22	7200	2300
22050594	61462	RM239		408141.76	4239390.10	1335.68	140	40	7800	2800
22050594	61463	RM238		408041.97	4239389.36	1337.05	99	71	6700	4300
22050594	61464	RM237		407941.40	4239389.61	1334.54	50	68	6300	2700
22050594	61465	RM236		407842.06	4239390.09	1330.70	91	37	7600	2900
22050594	61466	RM235		407742.54	4239390.22	1332.72	37	59	7800	2200
22050594	61467	RM234		407642.40	4239389.59	1331.80	39	100	6600	2700
22050594	61468	RM233		407541.48	4239389.86	1333.36	63	82	7600	3300
22050594	61469	RM232		407440.74	4239390.01	1333.94	59	1000	7500	3800
22050594	61470	RM231		407341.31	4239390.37	1331.38	32	92	6100	2200

22050594	61471	RM222		407340.97	4239490.14	1332.48	54	710	7700	4200
22050594	61472	RM223		407442.77	4239490.75	1332.75	190	290	15000	8200
22050594	61473	RM224		407541.05	4239489.85	1330.62	120	91	9300	4400
22050594	61474	RM225		407641.53	4239489.37	1335.16	100	59	8800	4200
22050594	61475	RM226		407742.26	4239488.55	1330.50	97	79	9900	5200
22050594	61476	RM227		407841.98	4239489.85	1337.00	81	52	7700	4100
22050594	61477	RM228		407941.76	4239489.38	1334.38	73	47	7200	4100
22050594	61478	RM229		408041.55	4239490.68	1340.05	70	64	9900	5100
22050594	61479	RM230		408142.28	4239489.87	1339.65	54	62	7500	4000
22050594	61480	RM221		408143.60	4239589.95	1339.60	47	32	7400	3400
22050594	61481	RM221	DUPLICATE	408143.60	4239589.95	1339.60	200	69	9600	6000
22050594	61482	RM220		408041.81	4239590.12	1342.13	55	25	6900	2700
22050594	61483	RM219		407941.95	4239591.03	1334.97	68	32	6000	2500
22050594	61484	RM218		407841.88	4239588.84	1334.54	63	41	7100	3400
22050594	61485	RM202		407942.90	4239689.56	1338.86	59	50	6800	3700
22050594	61486	RM201		407842.60	4239690.16	1338.99	66	71	8600	4900
22050594	61487	RM200		407742.29	4239689.75	1340.48	48	44	8500	4100
22050594	61488	RM217		407741.41	4239589.54	1334.18	46	57	6700	3800
22050594	61489	RM216		407642.16	4239589.79	1337.48	79	76	8800	5400
22050594	61490	RM215		407541.50	4239590.05	1336.93	87	65	10000	6000
22050594	61491	RM214		407441.89	4239589.86	1337.08	47	62	8600	4500
22050594	61492	RM213		407341.85	4239589.79	1335.58	35	60	6900	3400
22050594	61493	RM212		407242.15	4239589.27	1336.71	50	60	8400	4100
22050594	61494	RM211		407140.88	4239589.44	1337.72	91	110	10000	5900
22050594	61495	RM210		407040.65	4239588.26	1338.85	71	76	10000	5300
22050594	61496	RM209		406942.03	4239590.17	1338.72	71	76	13000	5800
22050594	61497	RM208		406842.78	4239590.09	1338.49	69	98	11000	5700
22050594	61498	RM207		406743.26	4239590.02	1336.21	46	110	8000	4000
22050594	61499	RM206		406642.08	4239590.42	1338.45	44	65	10000	5100
22050594	61500	RM205		406537.18	4239583.17	1337.20	38	78	8500	4400
22050595	62901	RM188		406541.72	4239691.45	1332.37	46	57	10000	5500
22050595	62903	RM189		406643.66	4239689.50	1331.82	22	130	6500	2900
22050595	62904	RM190		406739.59	4239689.61	1333.55	21	28	6400	3300
22050595	62905	RM191		406841.56	4239689.99	1338.76	44	76	9000	4400
22050595	62906	RM192		406942.66	4239690.15	1335.60	41	44	9200	4600
22050595	62907	RM193		407042.09	4239690.34	1333.52	48	280	7500	4200
22050595	62908	RM194		407142.11	4239688.85	1335.44	40	150	7100	3800
22050595	62909	RM195		407242.52	4239689.48	1333.65	27	110	5800	2800
22050595	62910	RM196		407341.43	4239690.12	1339.14	42	110	12000	2700
22050595	62911	RM197		407441.38	4239689.86	1333.16	22	51	5500	2800
22050595	62912	RM198		407540.90	4239690.28	1338.22	23	39	5900	2500
22050595	62913	RM199		407641.91	4239690.79	1335.38	33	74	6800	2500
22050595	62914	RM182		407641.22	4239791.00	1336.87	37	290	6000	3300

22050595	62915	RM181		407543.01	4239789.57	1334.28	32	100	6200	2900
22050595	62916	RM180		407442.01	4239790.18	1336.74	33	98	6300	2700
22050595	62917	RM163		407441.03	4239888.18	1339.83	86	200	8300	5500
22050595	62918	RM143		407141.97	4239995.05	1342.38	29	120	7100	5400
22050595	62919	RM160		407140.31	4239888.97	1342.22	25	57	7300	3300
22050595	62920	RM161		407241.31	4239889.58	1339.14	19	13	6100	2100
22050595	62921	RM162		407342.15	4239890.31	1338.71	42	250	6000	2800
22050595	62922	RM179		407342.06	4239790.77	1335.78	56	72	7300	2500
22050595	62923	RM178	DUPLICATE	407241.58	4239790.92	1335.72	25	150	6200	3100
22050595	62924	RM178		407241.58	4239790.92	1335.72	32	160	7000	4000
22050595	62925	RM177		407141.28	4239790.75	1340.33	31	98	6800	2900
22050595	62926	RM176		407040.97	4239790.67	1336.06	23	130	7100	2600
22050595	62927	RM175		406941.62	4239789.83	1333.97	22	63	7400	2300
22050595	62928	RM174		406840.27	4239790.32	1335.30	26	240	7400	3200
22050595	62929	RM173		406739.43	4239789.05	1332.90	21	91	5600	2600
22050595	62930	RM172		406642.19	4239789.28	1334.00	30	97	7100	3000
22050595	62931	RM171		406542.15	4239789.67	1335.01	28	55	6400	3000
22050595	62932	RM154		406541.29	4239888.44	1339.81	38	100	9000	4500
22050595	62933	RM155		406642.31	4239889.82	1333.70	19	53	6800	2800

Table 9.2 Summary of soil sampling analytical results

Summary of analytical results					
Element	n	Average	Minimum	Maximum	Median
Li	276	53	ND	210	37
B	276	77	ND	1000	59
Mg	276	6726	960	15000	6500
K	276	3240	510	8400	2900
values reported as parts per million					

Drilling

There has been no drilling on the Rhodes Marsh Project.

Sample Preparation, Security and Analysis

All the soil samples were collected using a small hand-held power auger at depths typically between 60 and 75 cm. Individual samples were placed in kraft paper bags marked with the sample tag number and packaged in rice bags. The Author then personally transported the samples to WETLAB in Reno, Nevada.

Samples preparation was by the EPA 200.2 method. After extraction, the solubilized analytes are diluted to specified volumes with ASTM Type 1 water, mixed and either centrifuged or allowed to settle overnight before analysis.

Metal concentrations were made using the EPD 200.7 method, which is the determination of metals and trace elements in water and wastes by inductively coupled plasma-atomic emission spectrometry (ICP-AES).

Elements tested were lithium, boron, magnesium and potassium.

Mineral Processing and Metallurgical Testing

No mineral processing or metallurgical testing has been carried on the Rhodes Marsh Project.

Mineral Resource Estimate

There are current Mineral Resources on the Rhodes Marsh Project.

Mineral Reserve Estimates

There are no current Mineral Reserves on the Rhodes Marsh Project.

Mining Method

The Rhodes Marsh Project is not an “advanced property” as defined by NI 43-101, therefore this section is not applicable.

Recovery Methods

The Rhodes Marsh Project is not an “advanced property” as defined by NI 43-101, therefore this section is not applicable.

Project Infrastructure

The Rhodes Marsh Project is not an “advanced property” as defined by NI 43-101, therefore this section is not applicable.

Market Studies and Contracts

The Rhodes Marsh Project is not an “advanced property” as defined by NI 43-101, therefore this section is not applicable.

Environmental Studies, Permitting and Social or Community Impact

The Rhodes Marsh Project is not an “advanced property” as defined by NI 43-101, therefore this section is not applicable.

Capital and Operating Costs

The Rhodes Marsh Project is not an “advanced property” as defined by NI 43-101, therefore this section is not applicable.

Economic Analysis

The Rhodes Marsh Project is not an “advanced property” as defined by NI 43-101, therefore this section is not applicable.

Adjacent Properties

Caeneus Minerals Ltd. has acquired 78 placer claims covering portions of the Rhodes Marsh. There is no publicly available technical information on these claims.

Mineral claims immediately adjacent to the Rhodes Marsh Project are shown on Figure 23.1

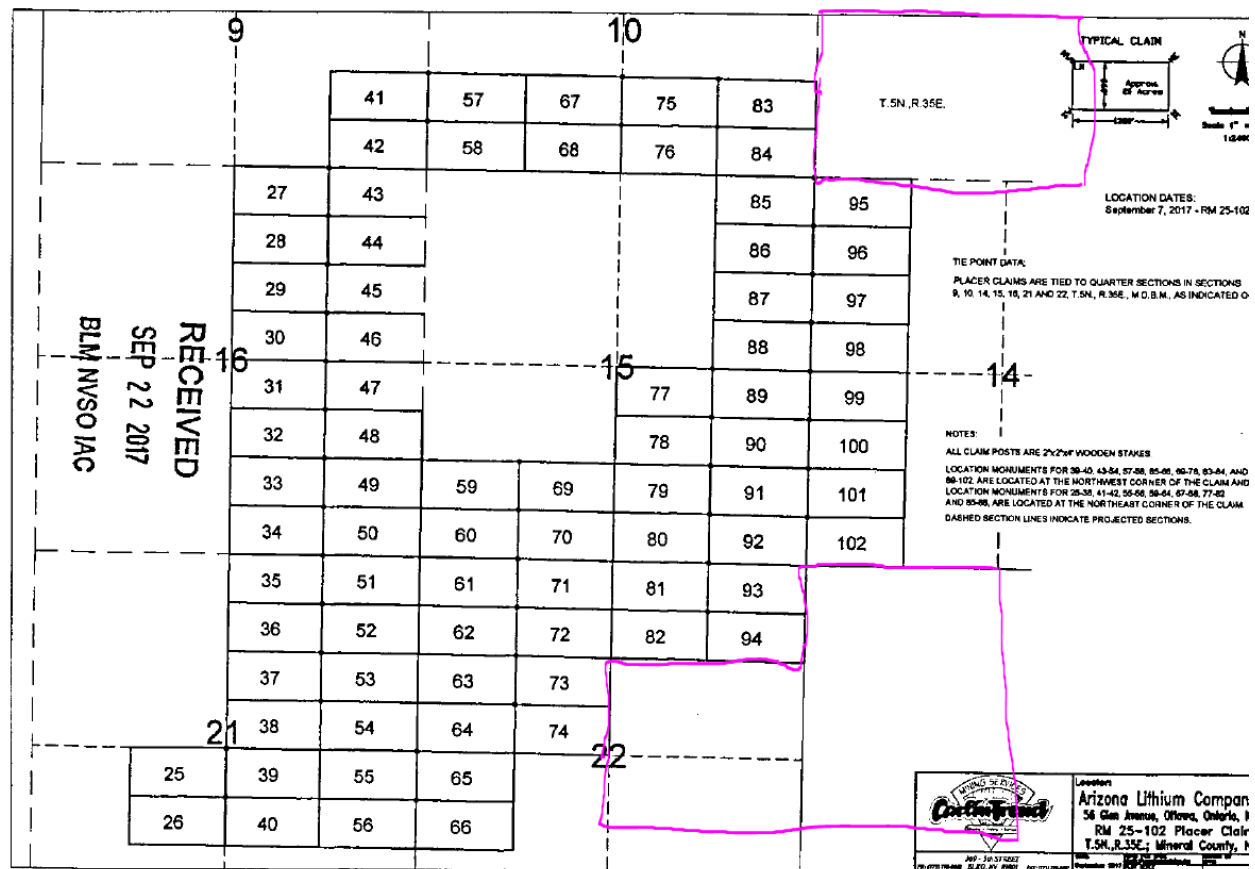


Figure 23.1 Adjacent Claims

Other Relevant Data and Information

No additional information or explanation is necessary to make this Technical Report understandable and not misleading.

Interpretation and Conclusions

The Author considers the data available to be reliable for the purposes of this Technical Report. There is a risk that additional exploration will not result in discovery of an economic mineral lithium brine resource within the project area.

The soil sampling program carries out in May 2022 clearly indicates the presence of highly anomalous lithium on the property, which is, in the Author's opinion, indicative of the potential presence of a lithium-rich brine at depth.

The exploration model for Lithium brine deposits includes the following key geologic and climatological parameters (Bradley et al, 2013).

1. Arid climate
2. Closed basin containing a playa or salar
3. Tectonically driven subsidence
4. Associated igneous or geothermal activity
5. Suitable lithium source rocks
6. One or more adequate aquifers
7. Sufficient time to concentrate a brine

In comparison to these key parameters the geologic and climatological setting for the Rhodes Marsh Project, as discussed in Sections 7 and 5, respectively, is summarized as follows:

1. *Arid Climate:* The average annual precipitation is approximately 5 inches annually.
2. *Closed basin containing a playa or salar:* Published topographic maps and Google Earth clearly indicate the presence of a playa on and immediately adjacent to the property.
3. *Tectonically driven subsidence:* The basin formation at Rhodes Marsh as with other basins in the region are similar in origin resulting from repetitive tectonic down-warping of the basins followed by erosion and deposition of sediments within the basins during the Paleozoic and Mesozoic (Davis et al, 1986).
4. *Associated igneous or geothermal activity:* Geothermal springs and wells are known within Rhodes Marsh particularly along the eastern margin (Penfield, et al, 2010).
5. *Suitable lithium source rocks:* Possible source rocks for the lithium brine deposits include both the volcanic rocks surrounding the basins and lithium rich clays which formed in the ancient lake beds (Munk, 2011). Published geologic mapping shows Rhodes Marsh to be surrounded by frequent occurrences of felsic to intermediate ash flows.
6. *One or more adequate aquifers:* There is no direct evidence of the presence of a suitable aquifer on the property; however, the presence of multiple geothermal wells on the property indicates that there is a realistic probability of the presence of such an aquifer.
7. *Sufficient time to concentrate the brine:* The geologic history and age of the basin/playa at Rhodes Marsh is similar to the Clayton Valley, 45 air miles to the SE, which produces lithium from brines.

In addition, the Rhodes Marsh Project does have risks that are similar in nature to other mineral exploration projects in general and lithium exploration projects specially, i.e., risks common to exploration and mining projects include:

- future commodity demand and pricing;
- environmental and political acceptance of the Rhodes Marsh Project;
- variance in capital and operating costs;
- mine and mineral processing recovery;

The Rhodes Marsh Project area reasonably conforms to the Preliminary Deposit Model for Lithium Brines as developed by the US Geological Survey (Bradley, et al, 2013).

References

For a complete list of references used in the Technical Report, reference should be made to the full text of the Technical Report which has been filed with Canadian securities regulatory authorities pursuant to NI 43-101 and is available for review under the Company's profile on SEDAR+ at www.SEDARplus.ca.

Specialized Skills and Knowledge

Successful exploration, development and operation of the Company's lithium projects will require access to personnel in a wide variety of disciplines, including geologists, geophysicists, chemical engineers, drillers, managers, project managers, accounting, financial and administrative staff, and others. Since the project locations are also in jurisdictions familiar with and friendly to resource extraction, management believes that the Company's access to the skills and experience needed for success is sufficient.

In addition to the professional and mineral exploration experience of the Company's management and the Board, the Company has established the Advisory Board. The function of the Advisory Board is to advise and make non-binding recommendations to the Board with respect to matters within the areas of each Advisory Board member's relevant experience and expertise. Accordingly, each Advisory Board member has entered into an advisor agreement with the Company. Pursuant to each advisory agreement, the advisor has agreed to provide services to the Company specific to their specialized skill and knowledge in accordance with, amongst other things, the Company's Advisory Board charter.

Members of the Advisory Board are as follows:

Dana Jurick

Mr. Jurick is an experienced business and industrial operations manager with 40 years of experience in the energy sector. With roles ranging from field operations geophysicist to Fortune 500 energy company technical group manager to Executive Vice President of an international fiber optics equipment and services enterprise, Mr. Jurick brings a wealth of practical, real-world experience to the enterprise. Mr. Jurick currently works as Executive Vice President for Neubrex Energy Services (US), LLC.

Mr. Jurick holds a B.S. in Geology from Syracuse University and an M.Sc. in Geophysics from University of Texas at El Paso. Dana was a commissioned officer in the U.S. Army and served eight years as a Strategic Intelligence Officer (USAR MIRC) during 2005-2012. In 2009, he was awarded the Army Achievement Medal for exceptionally meritorious service to the U.S. Army.

Kevin McKenna

Mr. McKenna serves on the Executive Leadership Team of Centric Infrastructure Group ("**Centric**") as Senior Vice President, Business Development. At Centric, Mr. McKenna focuses on the company's strategic growth initiatives and revenue delivery, overseeing a period of unprecedented expansion in the company's gas utility and fiber-to-the-home businesses. Most recently prior to joining Centric, Mr. McKenna served as Managing Partner at Teleios Commodities, LLC ("**Teleios**") in The Woodlands, TX, where he managed operations for the company in the competitive retail electric space. Before Teleios, Mr. McKenna was VP of Business Development at a Houston-based oilfield technology company serving the upstream exploration and production sector in North America. Mr. McKenna has over twenty years of experience in business development and executive management helping public and privately held businesses increase revenues, margins, and market share. Mr. McKenna holds a MSc in Global Energy Management from the University of Colorado in Denver and a BS in Geology from Trinity University.

Joseph Fuqua

Mr. Fuqua brings over 20 years of experience across technology, entrepreneurship, and investment funds to LiTHOS. He is based in Miami, Florida, where he advises companies and fund managers on their capital formation, marketing, and investor relations strategies has extensive experience in capital markets and investor relations. Mr. Fuqua spent 9 years in Hong Kong in private equity and funds space, covering investor relations and fundraising for strategies including real estate (debt and equity), venture capital, hedge funds, and fund of funds, where he covered investors in Asia, the Middle East, UK, EU, Switzerland, and the USA & Canada. In these roles, he covered a range of limited partners including high net worth individuals, single and multi-family offices, endowments, foundations, as well as corporate and government pensions. He has raised over US\$1.2 billion for private investments throughout his tenure across a range of structures and strategies.

Before Hong Kong, Mr. Fuqua lived in Shanghai, where he co-founded a company that helped international students apply to boarding school and college in the USA. He originally started his career in technology, working in software design for 6 years with companies in San Francisco and Silicon Valley.

Mr. Fuqua holds a BA Computer Science from Brown University and an MBA from UCLA Anderson School of Management.

Martín Corredera Silván

Mr. Silván has over 25 years of international managerial experience in private capital, and financial analysis. Throughout his involvement at several international organizations, he has actively contributed to advancing regional development of the private sector in Latin America and the Caribbean, and Europe, with a strong focus on investing for growth and sustainability. Over the years, Mr. Silván has been involved in several advisory and consultative roles at different organizations in the Americas and Europe.

He began his career in public accounting, in Spain and the United States, serving a variety of clients in the technology and telecommunication industries.

Mr. Silván holds an Executive MBA from Georgetown University (U.S.), an LL.B. from Universidad Nacional de Educación a Distancia (Spain), and a MSc. in Business Administration from Universidad Complutense (Spain). Mr. Silván also holds a current U.S. CPA license.

Robert Barnwell IV

Mr. Barnwell serves as the Chief Executive Officer and Director of Centric. Centric builds strategic natural gas and fiber-optic telecom assets to high-growth markets across the United States – bridging consumer demand for an affordable, reliable, timely, and best-in-class internet and natural gas company. During his 15-year tenure, he has been an integral contributor to the strategic growth of the company. Mr. Barnwell has worn multiple hats at Centric, ranging from field construction to billing, accounting, business development, and executive management. Currently, Mr. Barnwell is responsible for the successful execution of Centric’s strategic vision and growth plans. Leaning on his strong financial background, he guides and supports executive management with respect to the Company’s capital allocation strategy and the oversight of all aspects of daily operations.

Prior to joining Centric Infrastructure, Mr. Barnwell worked as an Associate for a Dallas-based private equity firm focused on middle-market oil and gas investments. He began his career in Wells Fargo’s financial analyst program.

Mr. Barnwell holds a Bachelor of Business Administration from Southern Methodist University in Accounting and Finance and a Master of Accountancy in Taxation from the University of Houston. He is a member of the Texas Gulf Coast Chapter of YPO, where he currently presides as the Learning Officer. He is also active in the north Houston Fellowship of Christian Athletes organization, where he serves on the Board of Directors.

Competitive Conditions

The mineral exploration industry is competitive, with many companies competing for the limited number of precious and base metals acquisition and exploration opportunities that are economic under current or foreseeable metals prices, as well as for available investment funds. Competition is also high for the recruitment of qualified personnel and equipment. Significant and increasing competition exists for mineral opportunities in Canada and in the State of Nevada in the United States. There are a number of large established mineral exploration companies in these jurisdictions with substantial capabilities and greater financial and technical resources than the Company. The Company competes with numerous other companies and individuals possessing greater financial resources and technical facilities than themselves in the search for, and acquisition of, mineral claims, leases and other mineral interests, as well as the recruitment and retention of suitably qualified individuals and the development of viable lithium extraction technology. Inability to compete will have a negative impact on the financial position and business operations of the Company. See "Risk Factors" below.

Business Cycles

Mining and mineral exploration is a cyclical industry and commodity prices fluctuate according to global economic trends and conditions. See "Risk Factors" below for more information.

Intangible Properties

In accordance with industry practice, the Company, LiTHOS Technology, and Aqueous protect their proprietary rights through a combination of patent, copyright, trademark, trade secret laws and contractual provisions. The following table discloses information concerning Aqueous' patent-pending pre-treatment to LiOH-H₂O process, AcQUA™ technology:

Title	Country	Document/Patent Number	File Date	Publication Date	Expiry Date	Status
Electro-Pressure Membrane Method for Recovery and Concentration of Lithium from Aqueous Sources	U.S.	US-20230014044-A1	2022-07-12	2023-01-19	N/A	Patent Pending ⁽¹⁾
Electro-Pressure Membrane Method for Recovery and Concentration of Lithium from Aqueous Sources	Canada	CA 3167919	2022-07-15	2023-01-19	N/A	Patent Pending ⁽¹⁾

⁽¹⁾ A patent application publication does not signify that a patent has been granted; it indicates that the patent application is pending and has been made public for informational purposes and to allow for public input during the examination process. The grant of a patent comes after a successful examination and review by the United States Patent and Trademark Office and Canadian Intellectual Property Office.

For more information on Aqueous' patent-pending pre-treatment to LiOH-H₂O process, AcQUA™ technology, see "General Description of the Business – LiTHOS Technology".

Environmental Protection

Environmental risk is inherent with mining operations, including exploration and development activities. The current or future operations of the Company require permits from various governmental authorities. Such operations are governed by laws and regulations that govern prospecting, mining, development, production, taxes, labour standards, occupational health, waste disposal, toxic substances, land use, environmental protection, mine safety, and other matters. There can be no assurance that all permits that the Company requires for future exploration and

development of mining facilities or the development of its technology will be obtainable on reasonable terms or that such laws and regulations would not have an adverse effect on the operations of the Company.

The legal framework governing this area is constantly developing, therefore the Company is unable to fully ascertain any future liability that may arise from the implementation of any new laws or regulations, although such laws and regulations are typically strict and may impose severe penalties (financial or otherwise). The proposed activities of the Company, as with any exploration, may have an environmental impact which may result in unbudgeted delays, damage, loss and other costs and obligations including, without limitation, rehabilitation and/or compensation. There is also a risk that the operations of the Company and financial position may be adversely affected by the actions of environmental groups or any other group or person opposed in general to the activities of the Company.

Employees

As of the date of this AIF, the Company did not have any employees and the services of Chief Executive Officer, Chief Financial Officer and Corporate Secretary were provided by contractors.

SOURCES OF AVAILABLE FUNDS AND PRINCIPAL PURPOSES

Available Funds

As at September 30, 2023, the Company had a working capital position of approximately \$2,349,680 on an unaudited basis, which amount is inclusive of USD\$2,108,200.00³ in grant awards received by the Company as of the date hereof.

Business Objectives

LiTHOS' intended uses of the available funds are as follows:

- *Objective #1* – Conduct the Phase 1 exploration program on the Rhodes Marsh Project recommended in the Technical Report;
- *Objective #2* – Identify and potentially acquire additional property interests in Utah, Nevada or Arkansas and conduct exploration and evaluation to assess their potential;
- *Objective #3* – Identify and secure additional chemical processing facility footprint in the Southern United States with a view to conduct pilot scale lithium hydroxide monohydrate production testing;
- *Objective #4* – Validate brine pre-treatment and direct lithium extraction (“DLE”) technology as follows:

A. Chile

- Largest operator in Chile - 4 samples from various stages
- Process review and recommendation issued
- Pilot testing underway

³ Calculated using the Bank of Canada's exchange rate as of October 18, 2023.

B. **Argentina**

- Large multinational and early-stage customer identified under non-disclosure agreement to scope pilot project
- Process review and recommendation issued
- Pilot testing underway

C. **United States**

- Nevada
 - Sample received and tested
 - Works ongoing awaiting new well data
- Arkansas (Smackover)
 - Data being analyzed for development of a better DLE system
 - Technical proposal submitted
 - Request for pilot scale processing facility
- *Objective #5 – Pending successful validation, commence sales of pre-treatment and DLE technology.*
 - A. *Explore various revenue models with large and small customers foreign and domestic*
 - B. *Optimize the CAPEX per unit throughput capacity*
 - C. *Commission first pilot scale system(s) on site in field*
- *Objective #6 – Secure institutional level funding of debt and/or equity.*

Accordingly, the table below describes each of the principal objectives noted above, with approximate amounts, for which the funds available disclosed above are anticipated to be used by the Issuer.

Issuer Principal Purposes for Use of the Available Funds	Estimated Amount
Cumulative exploration works on discovery drilling (Objectives 1 and 2 above)	\$200,000.00
Cumulative engineering and final investment decision on lithium hydroxide facility in Alabama (Objective 3 above)	\$200,000.00
Cumulative DLE customer validation and acquisition costs (Objectives 4 and 5 above)	\$1,800,000.00
Close institutional round of working debt & equity capital (Objective 6 above)	\$50,000.00
Unallocated working capital	\$99,680.00
Total Funds Used:	\$2,349,680.00

Labour shortages, inflationary pressures, rising interest rates, the consistently evolving nature of the conflict between Russia and the sovereign state of the Ukraine and their respective effects on the broader global economy and capital markets, may have a negative effect on the Company and the advancement of the of the Company's business objectives. Accordingly, the actual amount that the Company spends in connection with each intended use of funds may vary significantly from the amounts specified above and will depend on a number of factors including those listed under the heading "*Risk Factors*."

RISK FACTORS

The following specific factors could materially adversely affect the Company and should be considered when deciding whether to make an investment in the Company. You should carefully consider the risks described below, which are qualified in their entirety by reference to, and must be read in conjunction with, the detailed information appearing elsewhere in this AIF, and all other information contained in this AIF. The risks and uncertainties described in this AIF and the information incorporated by reference herein 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.

Investors should carefully consider the risk factors set out below and consider all other information contained herein and in the Company's other public filings before making an investment decision.

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 AIF.

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 AcQUA™ technology. The successful development of the AcQUA™ 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 AcQUA™ 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.

Unless otherwise indicated, mineralization figures presented in this AIF are based upon estimates made by the Company, personnel and independent geologists. These estimates are imprecise and depend upon geological interpretation and statistical inferences drawn from drilling and sampling analysis which may prove to be unreliable. There can be no assurance that these estimates will be accurate; resource or other mineralization figures will be accurate; or such mineralization could be mined or processed profitably.

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 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 covers 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 the 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 evolving 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.

DESCRIPTION OF CAPITAL STRUCTURE

Common Shares

The Company's authorized share structure consists of an unlimited number of Common Shares.

As of the date hereof, 81,739,922 Common Shares are issued and outstanding, 1,920,000 Options, each exercisable for one Common Share, 255,000 restricted share units (RSUs), each exercisable for one Common Share and 15,797,992 Warrants, each exercisable for one Common Share. See "*Market for Securities – Prior Sales*" for more information.

The holders of Common Shares are entitled to dividends if, as and when declared by the Board. The holders of the Common Shares shall be entitled to vote at all meetings of shareholders of the Company and at all such meetings each such holder has one (1) vote for each Common Share held. Each holder of Common Shares is, upon liquidation, entitled to share equally in such assets of the Company as are distributable to the holders of Common Shares.

In the event of a liquidation, dissolution or winding up of the Company, whether voluntary or involuntary, or other distribution of assets or property of the Company amongst its shareholders for the purpose of winding up its affairs, shareholders will be entitled to receive all property and assets of the Company properly distributable to the shareholders.

There are no pre-emptive rights, no conversion or exchange rights, no redemption, retraction, purchase for cancellation or surrender provisions. There are no sinking or purchase fund provisions, no provisions permitting or restricting the issuance of additional securities or any other material restrictions, and there are no provisions which are capable of requiring a security holder to contribute additional capital.

Omnibus Equity Incentive Plan

The Company adopted its Omnibus Equity Incentive Plan on November 22, 2022. The Omnibus Plan provides flexibility to the Company to grant equity-based incentive awards in the form of Options, restricted share units (RSUs), performance share units (PSUs) and deferred share units (DSUs). The purpose of the Omnibus Plan is to, among other things, provide the Company with a share related mechanism to attract, retain and motivate qualified directors, officers, employees and consultants of the Company and to reward such of those directors, officers, employees and consultants for their contributions toward the long-term goals and success of the Company and to enable and encourage such directors, employees and consultants to acquire Shares as long-term investments and proprietary interests in the Company.

The Omnibus Plan is a rolling plan which, subject to the adjustment provisions provided for therein (including a subdivision or consolidation of Common Shares), provides that the aggregate maximum number of Common Shares that may be issued upon the exercise or settlement of awards granted under the Omnibus Plan shall not exceed 20% of the Company's issued and outstanding Common Shares from time to time. The Omnibus Plan is considered an "evergreen" plan, since the Common Shares covered by awards which have been exercised, settled or terminated shall be available for subsequent grants under the Omnibus Plan and the number of awards available to grant increases as the number of issued and outstanding Common Shares increases.

As of December 5, 2023, the Company had granted 1,920,000 Options, 255,000 restricted share units (RSUs), nil performance share units (PSUs) and nil deferred share units (DSUs).

MARKET FOR SECURITIES

Trading Price and Volume of Common Shares

The Common Shares are listed and posted for trading on the CSE under the symbol "LITS". Previously, the Common Shares traded on the CSE under the symbol "AMS" and "AMS.X". The following table sets forth the price range (high and low prices) in Canadian dollars of the Common Shares and volume traded on the CSE, for the periods indicated.

2023	High (\$)	Low (\$)	Volume
December 1 to 5	0.60	0.52	150,477
November	0.68	0.53	1,479,353
October	0.78	0.60	1,133,762
September	1.02	0.63	2,715,725
August	0.80	0.59	1,833,859
July	0.68	0.55	854,234
June	0.70	0.58	660,718
May	0.73	0.56	1,009,557
April	0.65	0.55	762,963
March	0.70	0.385	1,278,915
February	0.50	0.30	1,459,412
January ⁽¹⁾	No trades		
2022			
December ⁽¹⁾	No trades		
November ⁽¹⁾	No trades		

October ⁽¹⁾	No trades
September ⁽¹⁾	No trades
August ⁽¹⁾	No trades
July ⁽¹⁾	No trades
June ⁽¹⁾	No trades
May ⁽¹⁾	No trades

⁽¹⁾ The Common Shares were halted at the request of the Company on April 8, 2022 in connection with the Transaction.

Prior Sales

The following table summarizes the issuances of unlisted securities during the year ended April 30, 2023:

Date of Issuance	Securities	Number of Common Shares Issued/Issuable or Aggregate Amount	Exercise Price per Security (\$)
June 8, 2022	Warrants ⁽¹⁾	648,706	\$0.145
January 27, 2023	Warrants ⁽²⁾	3,749,999	\$0.20
April 27, 2023	Options ⁽³⁾	350,000	\$0.30

⁽¹⁾ These Warrants were issued in connection with the settlement of outstanding debt in the amount of \$94,062.50 via the issuance of units of the Company at a deemed price of \$0.145 per Unit. Each unit was comprised of one Common Share and one non-transferable Warrant, with each Warrant entitling the holder to purchase one additional Common Share for a period of four years from the closing date at an exercise price of \$0.145 per Common Share.

⁽²⁾ Issued pursuant to the terms of the Share Exchange Agreement in connection with the closing of the Transaction. See *“General Development of the Business of the Company – Three Year History”* for a description of the Share Exchange Agreement and more information on the Transaction.

⁽³⁾ These Options were issued in connection with the closing of the LiTHOS Transaction and are exercisable at a price of \$0.30 per Common Share until April 27, 2025. See *“General Development of the Business of the Company – Three Year History”* for a description of the Amalgamation Agreement and more information on the LiTHOS Transaction.

ESCROWED SECURITIES

The following table summarizes the Company's securities that remain in escrow or subject to restrictions on transfer as of the date hereof:

Designation of Class	Number of securities held in escrow or that are subject to contractual restriction on transfer	Percentage of Class
Common Shares	827,587 ⁽¹⁾	1.01% ⁽²⁾
Common Shares	11,250,006 ⁽³⁾	13.76% ⁽²⁾
Common Shares	15,750,000 ⁽⁴⁾	19.26% ⁽²⁾
Warrants	750,000 ⁽¹⁾	4.75% ⁽⁵⁾

⁽¹⁾ In connection with the listing of the Common Shares for trading on the CSE, an aggregate of 2,103,448 Common Shares and 1,000,000 Warrants were deposited in escrow with Endeavor Trust Corporation. 10% of such Common Shares were released from escrow on the date the Common Shares were listed on the CSE (being February 2, 2023), 1/6 of the remainder of Common Shares were released from escrow on the date that was six months after the Common Shares were listed on the CSE, 1/5 of the remainder of Common Shares will be released from escrow on the date that is twelve months after the

Common Shares were listed on the CSE, 1/4 of the remainder of Common Shares will be released from escrow on the date that is eighteen months after the Common Shares were listed on the CSE, 1/3 of the remainder of Common Shares will be released from escrow on the date that is twenty-four months after the Common Shares were listed on the CSE, 1/2 of the remainder of Common Shares will be released from escrow on the date that is thirty months after the Common Shares were listed on the CSE, and the remainder of Common Shares will be released from escrow on the date that is thirty-six months after the Common Shares were listed on the CSE, subject to acceleration provisions provided for in National Policy 46-201 – *Escrow for Initial Public Offerings*.

- (2) Percentages based on 81,739,922 Common Shares issued and outstanding as of the date hereof.
- (3) In connection with the LiTHOS transaction, these Common Shares are subject to a voluntary lock up such that 2,249,996 will be released from escrow on April 27, 2024, 2,249,997 will be released from escrow on October 27, 2024, 2,249,997 will be released from escrow on April 27, 2025, 2,249,997 will be released from escrow on October 27, 2025, and 2,250,018 will be released from escrow on April 27, 2026.
- (4) In connection with the Aqueous Transaction, these Common Shares are subject to a voluntary lock up such that 2,625,000 will be released from escrow on February 4, 2024, August 4, 2024, February 4, 2025, August 4, 2025, February 4, 2026 and August 4, 2026.
- (5) Percentage based on 15,797,992 Warrants outstanding as of the date hereof.

DIVIDENDS AND DISTRIBUTIONS

The Company has not declared or paid a dividend. Other than the requirements of the BCBCA, there are no restrictions on the Company that would prevent it from paying a dividend. However, as of the Effective Date, the Board intends to retain any future earnings (when available) for reinvestment in the Company's business, and therefore, it has no current intention to declare or pay dividends on the Common Shares in the foreseeable future. Any future determination to pay dividends on the Common Shares will be at the sole discretion of the Board after considering a variety of factors and conditions existing from time to time including its earnings, financial condition and other relevant factors.

DIRECTORS AND OFFICERS

As at the date hereof, the Board is comprised of six individuals. The following table sets forth the names and municipalities of residence of the current directors and executive officers of the Company, their respective positions and offices with the Company and the date first appointed or elected as a director and/or officer and their principal occupation(s) within the past five years.

Name, Occupation and Security Holding

Name and Municipality of Residence	Position Held and Date Appointed	Principal Occupation within the past five years
Scott Taylor⁽³⁾ <i>Highlands Ranch, Colorado, USA</i>	Chief Executive Officer and Director (April 27, 2023)	Scott Taylor has over 20 years' direct experience in finance, energy, mining, defense, and civil engineering industries. Mr. Taylor started his career raising money in both public and private markets for a variety of resource projects including physical intermediation of international commodities trades. Mr. Taylor co-founded Reservoir Imaging Solutions (RIS) in 2019, a technology driven subsurface imaging company that was recognized by Darcy Partners as one of the top 10 subsurface oilfield technologies in 2021. Mr. Taylor has prior technical and financial experience in exploration, development, and pilot scale production on private mines in Canada, Mexico, and Internationally. His experience also includes five years working for an engineering company in the mining and energy space which included subsurface characterization, resource development, exploration and in-fill drill programs, and production remediation on mines. He is a published author, invited speaker, and member of the Society of Petroleum Engineers and the Society of Exploration Geophysicists.

Name and Municipality of Residence	Position Held and Date Appointed	Principal Occupation within the past five years
Jennie Choboter <i>Mission, British Columbia, Canada</i>	Chief Financial Officer (December 15, 2021) Director (March 30, 2022)	Jennie Choboter holds CPA-CA designations in the provinces of British Columbia and Alberta. She has been the chief financial officer of the British Columbia Innovation Council since December 2012. Ms. Choboter is currently a director and the CFO of Trenchant Capital Corp., an investment issuer, listed on the CSE, the CFO and corporate secretary of Open Daily Technologies Inc., a private company, the CFO, corporate secretary and a director of Vinza Capital Management Corp., an unlisted reporting company, and the CFO and a director of Alt House Cannabis Inc., an unlisted reporting cannabis company. Previously, she has served as a director and/or officer of numerous other public companies. Ms. Choboter holds a Bachelor of Commerce degree from the University of Calgary.
Anton Fredrik Klaveness⁽¹⁾⁽²⁾ <i>Englewood, Colorado, USA</i>	Secretary (August 17, 2023) Director (August 4, 2023)	Anton Fredrik Klaveness worked as a private, early-stage investor in Europe for nearly 20 years before founding NLB Water LLC an oil and gas waste water solutions company and Aqueous Resources LLC, an innovative, technology-driven solution developer for the lithium industry. He holds a BSBA from the University of Denver (1991) and an MBA from the Columbia Business School in New York (1997).
Martín Corredera Silván⁽¹⁾⁽²⁾⁽³⁾⁽⁵⁾ <i>Luxembourg, Grand Duchy of Luxembourg</i>	Director (August 17, 2023)	Martín Silván has been the principal investment officer, lead of Geographical Center of European Investment Fund, member of the European Investment Bank (EIB) Group since June 2017.
Michael Westlake⁽¹⁾⁽³⁾⁽⁵⁾⁽⁶⁾ <i>Ottawa, Ontario, Canada</i>	Director (August 17, 2023)	Michael Westlake has been the strategic lead, Indigenous Led Area Based Conservation of Present Environment and Climate Change Canada since 2022. He was a project advisor with Crown-Indigenous Relations and Northern Affairs Canada from 2015 to 2022.
Michael Kevin McKenna⁽¹⁾⁽³⁾⁽⁴⁾⁽⁵⁾ <i>The Woodlands, Texas, USA</i>	Director (August 17, 2023)	Michael McKenna has served on the Executive Leadership Team of Centric Infrastructure Group as senior vice president from 2021 to present. He was the managing partner at Teleios Commodities from 2017 to 2021.

⁽¹⁾ Member of the Audit Committee.

⁽²⁾ Chair of the Audit Committee.

⁽³⁾ Member of the Corporate Governance Committee.

⁽⁴⁾ Chair of the Corporate Governance Committee.

⁽⁵⁾ Member of the Compensation Committee.

⁽⁶⁾ Chair of the Compensation Committee Charter.

As at the date hereof, the directors and senior officers of LiTHOS, as a group, beneficially own or control, directly or indirectly, 12,445,481 Common Shares or 15.22% of the issued and outstanding Common Shares.

The directors listed above will hold office until the next annual meeting of the Company or until their successors are elected or appointed.

Corporate Cease Trade Orders, Bankruptcies, Penalties or Sanctions

Other than disclosed below, to the knowledge of management, no director or executive officer as at the date hereof, is or was within 10 years before the date hereof, a director, chief executive officer or chief financial officer of any company (including LiTHOS), that (a) was subject to an order that was issued while the director or executive officer was acting in the capacity as director, chief executive officer or chief financial officer, or (b) was subject to an order that was issued after the director or executive officer ceased to be a director, chief executive officer or chief financial officer and which resulted from an event that occurred while that person was acting in the capacity as director, chief

executive officer or chief financial officer. For the purposes hereof, “order” means (a) a cease trade order, (b) an order similar to a cease trade order, or (c) an order that denied the relevant company access to any exemption under securities legislation that was in effect for a period of more than 30 consecutive days.

To the knowledge of management, other than as disclosed herein, no director or executive officer of LiTHOS, or a shareholder holding a sufficient number of securities of LiTHOS to affect materially the control of the company (a) is, as at the date hereof, or has been within the 10 years before the date hereof, a director or executive officer of any company (including LiTHOS) that, while that person was acting in that capacity, or within a year of that person ceasing to act in that capacity, became bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency or was subject to or instituted any proceedings, arrangement or compromise with creditors or had a receiver, receiver manager or trustee appointed to hold its assets, or (b) has, within the 10 years before the date hereof, become bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency, or become subject to or instituted any proceedings, arrangement or compromise with creditors, or had a receiver, receiver manager or trustee appointed to hold the assets of the director, executive officer or shareholder.

In August 2015, when Jennie Choboter was a director and/or officer of Trenchant Capital Corp. (“**Trenchant**”), the British Columbia Securities Commission (the “**BCSC**”) issued a cease trade order against Trenchant for failure to file its annual audited financial statements and management discussion and analysis for the year ended March 31, 2015, and trading in the common shares of Trenchant was halted by the TSX Venture Exchange (the “**TSXV**”). In January 2016, the BCSC issued a partial revocation order in respect of the cease trade order, pursuant to which Trenchant was permitted to undertake a \$600,000 private placement, in order to enable the company to complete its delinquent filings. The BCSC revoked the cease trade order on April 25, 2016, when the outstanding filings were completed, and the TSXV reinstated trading in the common shares of Trenchant on the NEX board of the TSXV on May 3, 2016.

Penalties or Sanctions

No director, executive officer or shareholder holding a sufficient number of securities of LiTHOS to materially affect the control of the Company has been subject to: (i) any penalties or sanctions imposed by a court relating to securities legislation or by a securities regulatory authority or has entered into a settlement agreement with a securities regulatory authority; or (ii) any other penalties or sanctions imposed by a court or regulatory body that would likely be considered important to a reasonable investor in making an investment decision.

Advisory Board

The Company’s advisory board consists of Dana Jurick, Joseph Fuqua and Robert Barnwell IV.

Dana Jurick

Dana Jurick is an experienced business and industrial operations manager with 40 years of experience in the energy sector. With roles ranging from field operations geophysicist to Fortune 500 energy company technical group manager to Executive Vice President of an international fiber optics equipment and services enterprise, Dana brings a wealth of practical, real-world experience to the enterprise. Mr. Jurick holds a B.S. in Geology from Syracuse University and an M.Sc. in Geophysics from University of Texas at El Paso. Dana was a commissioned officer in the U.S. Army and served 8 years as a Strategic Intelligence Officer (USAR MIRC) during 2005-2012. In 2009, he was awarded the Army Achievement Medal for exceptionally meritorious service to the U.S. Army. Mr. Jurick currently works as Executive Vice President for Neubrex Energy Services (US), LLC.

Joseph Fuqua

Mr. Fuqua brings over 20 years of experience across technology, entrepreneurship, and investment funds to LiTHOS. Mr. Fuqua is based in Miami, Florida, where he advises companies and fund managers on their capital formation, marketing, and investor relations strategies has extensive experience in capital markets and investor relations. Mr.

Fuqua spent 9 years in Hong Kong in private equity and funds space, covering investor relations and fundraising for strategies including real estate (debt and equity), venture capital, hedge funds, and fund of funds, where he covered investors in Asia, the Middle East, UK, EU, Switzerland, and the USA & Canada. In these roles, he covered a range of limited partners including high net worth individuals, single and multifamily offices, endowments, foundations, as well as corporate and government pensions. Mr. Fuqua has raised over US\$1.2 billion for private investments throughout his tenure across a range of structures and strategies. Mr. Fuqua originally started his career in tech, working in software design for 6 years with companies in San Francisco and Silicon Valley. Mr. Fuqua holds a BA Computer Science from Brown University and an MBA from UCLA Anderson School of Management.

Robert Barnwell IV

Mr. Barnwell serves as the Chief Executive Officer and Director of Centric Infrastructure. Centric builds strategic natural gas and fiber-optic telecom assets to high-growth markets across the United States – bridging consumer demand for an affordable, reliable, timely, and best-in-class internet and natural gas company. During his 15-year tenure, he has been an integral contributor to the strategic growth of the company. Mr. Barnwell has worn multiple hats at Centric, ranging from field construction to billing, accounting, business development, and executive management. Currently, Mr. Barnwell is responsible for the successful execution of the Company's strategic vision and growth plans. Leaning on his strong financial background, he guides and supports executive management with respect to the Company's capital allocation strategy and the oversight of all aspects of daily operations. Prior to joining Centric Infrastructure, Mr. Barnwell worked as an Associate for a Dallas-based private equity firm focused on middle-market oil & gas investments. Mr. Barnwell began his career in Wells Fargo's financial analyst program. Mr. Barnwell holds a Bachelor of Business Administration from Southern Methodist University in Accounting and Finance and a Master of Accountancy in Taxation from the University of Houston. Mr. Barnwell is a member of the Texas Gulf Coast Chapter of YPO, where he currently presides as the Learning Officer. He is also active in the north Houston Fellowship of Christian Athletes organization, where he serves on the Board of Directors.

Conflicts of Interest

There are potential conflicts of interest to which the directors and officers of LiTHOS will be subject to in connection with the operations of LiTHOS. In particular, certain of the directors and officers of LiTHOS are involved in managerial or director positions with other companies whose operations may, from time to time, be in direct competition with those of LiTHOS or with entities which may, from time to time, provide financing to, or make equity investments in, competitors of LiTHOS.

In accordance with the applicable corporate and securities legislation, directors who have a material interest or any person who is a party to a material contract or a proposed material contract with LiTHOS are required, subject to certain exceptions, to disclose that interest and generally abstain from voting on any resolution to approve the contract. In addition, the directors are required to act honestly and in good faith with a view to the best interests of LiTHOS. Certain of the directors and each of the executive officers of LiTHOS have either other employment or other business or time restrictions placed on them and accordingly, these directors of LiTHOS will only be able to devote part of their time to the affairs of LiTHOS. To the extent that conflicts of interest arise, such conflicts will be resolved in accordance with the provisions of the applicable corporate law.

AUDIT COMMITTEE

Audit Committee Charter

The full text of the Company's Audit Committee Charter is included as Schedule A to the AIF.

Audit Committee Composition

The following are the members of the Audit Committee as at the date hereof:

Audit Committee Members

Martín Corredera Silván (Chairman)	Independent ⁽¹⁾	Financially Literate ⁽²⁾
Michael Kevin McKenna	Independent ⁽¹⁾	Financially Literate ⁽²⁾
Michael Westlake	Independent ⁽¹⁾	Financially Literate ⁽²⁾

⁽¹⁾ A member of an audit committee is independent if the member has no direct or indirect material relationship with the Company, which could, in the view of the Board, reasonably interfere with the exercise of a member's independent judgment. Under NI 52-110, an individual who is, or has been within the last three years, an employee or executive officer of the issuer, is considered to have a material relationship with the issuer.

⁽²⁾ An individual is financially literate if he has the ability to read and understand a set of financial statements that present a breadth of complexity of accounting issues that are generally comparable to the breadth and complexity of the issues that can reasonably be expected to be raised by the Company's financial statements.

Relevant Education and Experience

Martín Corredera Silván - Chairman

Mr. Silván has been the principal investment officer, lead of Geographical Center of European Investment Fund, member of the European Investment Bank (EIB) Group since June 2017. Mr. Silván has over 25 years of international managerial experience in private equity investments, financial analysis, and accounting. Currently, Mr. Silván serves as Principal at the European Investment Fund, targeting investments in the lower-mid market segment. He is currently an active member in 35+ advisory boards, and acts as observer in a number of investment committees. Previously, he held several positions at the Inter-American Development Bank Group, based in Washington, D.C., where he focused on developing, promoting, and structuring investments to support the private sector in advancing regional development in Latin America and the Caribbean. Mr. Silván started his career with PricewaterhouseCoopers, in Spain and the US, serving a variety of clients in the technology and telecommunication industries. He holds an Executive MBA from Georgetown University (US), a Law Degree from Universidad Nacional de Educación a Distancia (Spain), and a MSc. in Business Administration from Universidad Complutense (Spain). Mr. Silván also holds a current US CPA license.

Michael Kevin McKenna

Mr. McKenna serves on the Executive Leadership Team of Centric Infrastructure Group as Senior Vice President, Business Development from 2021 to present. At Centric, Mr. McKenna focuses on the company's strategic growth initiatives and revenue delivery, overseeing a period of unprecedented expansion in the company's gas utility and fiber-to-the-home businesses. Most recently prior to joining Centric from 2017 to 2021, Mr. McKenna served as Managing Partner at Teleios Commodities in The Woodlands, Texas, where he managed operations for the company in the competitive retail electric space. Before Teleios, Mr. McKenna was VP of Business Development at a Houston-based oilfield technology company serving the upstream E&P sector in North America. Mr. McKenna has over twenty years of experience in business development and executive management helping public and privately held businesses increase revenues, margins, and market share. Mr. McKenna holds a MSc in Global Energy Management from the University of Colorado in Denver and a BS in Geology from Trinity University.

Michael Westlake

Mr. Westlake has been the strategic lead, Indigenous Led Area Based Conservation of Present Environment and Climate Change Canada since 2022. He was a project advisor with Crown-Indigenous Relations and Northern Affairs Canada from 2015 to 2022. Michael has extensive experience in stakeholder relations, intergovernmental affairs as well working on the remediation of contaminated mine sites, where an in-depth understanding of mine processes

as well as the application of sustainable technologies is paramount. Westlake holds a B.Sc. in Chemistry and Environmental Studies from the University of Victoria and a M.Sc. from the University of Edinburgh in Environmental Change and Sustainability.

Each member of the Audit Committee has:

- an understanding of the accounting principles used by the Company to prepare its financial statements, and the ability to assess the general application of those principles in connection with estimates, accruals and reserves;
- experience with analyzing or evaluating financial statements that present a breadth and level of complexity of accounting issues that are generally comparable to the breadth and complexity of issues that can reasonably be expected to be raised by the Company's financial statements, or experience actively supervising individuals engaged in such activities; and
- an understanding of internal controls and procedures for financial reporting.

Audit Committee Oversight

At no time since the commencement of the Company's financial year ended April 30, 2023, was a recommendation of the Committee to nominate or compensate an external auditor not adopted by the Board.

Reliance on Certain Exemptions

At no time since the commencement of the Company's financial year ended April 30, 2023, has the Company relied on the exemptions contained in Sections 2.4, 6.1.1(4), 6.1.1(5) or Part 8 of NI 52-110. Section 2.4 (*De Minimis Non-audit Services*) provides an exemption from the requirement that the Audit Committee must pre-approve all non-audit services to be provided by the auditor, where the total amount of fees related to the non-audit services are not expected to exceed 5% of the total fees payable to the auditor in the financial year in which the non-audit services were provided. Sections 6.1.1(4) (*Circumstance Affecting the Business or Operations of the Venture Issuer*), 6.1.1(5) (*Events Outside Control of Member*) and 6.1.1(6) (*Death, Incapacity or Resignation*) provide exemptions from the requirement that a majority of the members of the Company's Audit Committee must not be executive officers, employees or control persons of the Company or of an affiliate of the Company. Part 8 (*Exemptions*) permits a company to apply to a securities regulatory authority or regulator for an exemption from the requirements of NI 52-110 in whole or in part.

During the fiscal year ended April 30, 2023, the Company relied upon the exemption provided by section 6.1 of NI 52-110 which exempts venture issuers from the requirement to comply with the restrictions on the composition of its Audit Committee.

During the period starting March 30, 2022 and ending August 17, 2023, the Company was in default of the audit committee composition requirements as set forth in section 6.1.1(3) of NI 52-110 as a majority of its Audit Committee members were executive officers of the Company, and the Company was unable to rely on the exemptions contained in Sections 6.1.1(4), 6.1.1(5) and 6.1.1(6) during that time. On August 17, 2023, the Board resolved to re-constitute the composition of the Audit Committee such that none of its members are executive officers, employees or control persons of the Company or of an affiliate of the Company, causing the Company to become compliant with the audit committee composition requirements as set forth in section 6.1.1(3) of NI 52-110.

Pre-Approval Policies and Procedures

The Audit Committee is authorized by the Board to review the performance of the Company's external auditors and approve in advance provision of services other than auditing and to consider the independence of the external auditors, including reviewing the range of services provided in the context of all consulting services bought by the

Company. The Audit Committee is authorized to approve any non-audit services or additional work which the Chairman of the Audit Committee deems as necessary who will notify the other members of the Audit Committee of such non-audit or additional work.

External Auditor Service Fees

The aggregate fees billed by the Company's external auditors in each of the last two fiscal years for audit fees are as follows:

Financial Year Ending	Audit Fees ⁽¹⁾ (\$)	Audit Related Fees ⁽²⁾ (\$)	Tax Fees ⁽³⁾ (\$)	All Other Fees ⁽⁴⁾ (\$)
2023	Nil	\$13,500	Nil	Nil
2022	\$17,500	Nil	\$1,000	Nil

(1) "Audit Fees" include fees necessary to perform the annual audit and quarterly reviews of our financial statements. Audit Fees include fees for review of tax provisions and for accounting consultations on matters reflected in the financial statements. Audit Fees also include audit or other attest services required by legislation or regulation, such as comfort letters, consents, reviews of securities filings and statutory audits.

(2) "Audit-Related Fees" for assurance and related services that are reasonably related to the performance of the audit or review of the Company's financial statements and are not reported as audit fees. The services provided in this category include due diligence assistance, accounting consultations on proposed transactions, and consultation on International Financial Reporting Standards conversion.

(3) "Tax Fees" include fees for all tax services other than those included in "Audit Fees" and "Audit-Related Fees". This category includes fees for tax compliance, tax planning and tax advice.

(4) "All Other Fees" includes all fees other than those reported as Audit Fees, Audit-Related Fees or Tax Fees.

(5) For the period from incorporation on September 11, 2019 to December 31, 2019.

LEGAL PROCEEDINGS AND REGULATORY ACTIONS

LiTHOS is not, and has not been at any time within the most recently completed financial year, a party to any legal proceedings, nor is or was LiTHOS's property the subject of any legal proceedings, known or contemplated, that involves a claim for damages exclusive of interest and costs that met or exceeded 10% of the Company's current assets.

Further, there have not been any (a) penalties or sanctions imposed against the Company by a court relating to securities legislation or by a securities regulatory authority during the year ended April 30, 2023, (b) any other penalties or sanctions imposed by a court or regulatory body against the Company that would likely be considered important to a reasonable investor in making an investment decision, or (c) settlement agreements entered into by the Company before a court relating to securities legislation or with a securities regulatory authority during the year ended April 30, 2023.

INTERESTS OF MANAGEMENT AND OTHERS IN MATERIAL TRANSACTIONS

Other than as set forth herein, or as previously disclosed, the Company is not aware of any material interests, direct or indirect, by way of beneficial ownership of securities or otherwise, of any director or executive officer or any shareholder holding more than 10% of the Common Shares or any associate or affiliate of any of the foregoing in any transaction within the three most recently completed financial years or during the current financial year or any proposed or ongoing transaction of the Company which has or will materially affect the Company.

CORPORATE GOVERNANCE

Pursuant to National Instrument 58-101 *Disclosure of Corporate Governance Practices*, the Company is required to disclose its corporate governance practices as follows:

General

National Instrument 58-101 *Disclosure of Corporate Governance Practices*, as adopted by the Canadian Securities Administrators, prescribes certain disclosure by the Company of its corporate governance practices. This disclosure is presented below.

Board of Directors

The Board facilitates its exercise of independent supervision over the Company's management through meetings of the Board and through consultation with the Corporate Governance Committee. The Corporate Governance Committee's primary responsibilities include reviewing the skills, areas of expertise, backgrounds, independence, and qualifications of the members of the Board, reviewing the size and composition of the Board to ensure there remain an appropriate number of "unrelated" and "independent" directors, recommending to the Board structures and procedures to enable the Board to function independently of management, overseeing the development and implementation of any structures and procedures approved by the Board, and reviewing the relationship of the Board with management and recommending, where appropriate, limits on management's authority to act without the express approval of the Board.

Each of Anton Fredrik Klaveness, Martín Corredera Silván, Michael Kevin McKenna and Michael Westlake are considered to be independent in that each of them are independent and free from any interest and any business or other relationship which could or could reasonably be perceived to materially interfere with the director's ability to act with the best interests of the Company, other than the interests and relationships arising from being Shareholders.

Each of Scott Taylor and Jennie Choboter are not considered to be independent on the basis that each is or has been an executive officer or employee of the Company within the last three years, as is consistent with the "Meaning of Independence" under section 1.2 of NI 58-101.

Directorships

The following table sets out information regarding other directorships presently held by directors of the Company with other reporting issuers (or the equivalent) in Canada or any foreign jurisdiction:

Name of Director	Name of Other Reporting Issuers	Securities Exchange
Jennie Choboter	Trenchant Capital Corp.	CSE
	Vinza Capital Management Inc.	N/A
	Alt House Cannabis Inc.	CSE

Orientation and Continuing Education

The Board briefs all new directors with respect to the policies of the Board and other relevant corporate and business information. The Corporate Governance Committee oversees the development and implementation of orientation programs for new directors and continuing education for all directors.

Ethical Business Conduct

The Board has found that the fiduciary duties placed on individual directors by the Company's governing corporate legislation and the common law and the restrictions placed by applicable corporate legislation on an individual director's participation in decisions of the Board in which the director has an interest have been sufficient to ensure that the Board operates independently of management and in the best interests of the Company.

Nomination of Directors

The Board develops appropriate criteria for selection and nomination of new directors in consultation with the Corporate Governance Committee. The Corporate Governance Committee periodically reviews the criteria adopted by the Board and recommends changes to such criteria if deemed necessary or desirable.

The Corporate Governance Committee identifies and recommends qualified candidates to the Board who meet the selection criteria approved by the Board, and recommends the slate of nominees for election by shareholders at the annual meeting. The Corporate Governance Committee has the sole authority to retain and terminate any search firm to be used to identify director candidates or to otherwise assist the Committee in the discharge of its responsibilities, including the sole authority to approve the search firm's fees and other retention terms.

Compensation

Compensation is determined by the Board in consultation with the Compensation Committee, whose roles include reviewing and recommending to the Board the appropriate compensation for the Company's executive officers and directors, overseeing the Company's compensation and benefit plans, policies and practices, and monitoring and evaluating matters relating to the compensation and benefits structure of the Company.

With respect to compensation of executive officers, the Compensation Committee reviews and approves corporate goals and objectives relevant to the compensation of the CEO and CFO and recommends them to the Board for approval, and leads the evaluation of the CEO's and CFO's performance in light of such goals and objectives and recommend the compensation of the CEO and the CFO based on this evaluation.

With respect to compensation of directors, the Compensation Committee reviews the adequacy and form of compensation of directors and ensures that the compensation realistically reflects the responsibilities and risks of such positions and fixes the amount and composition of compensation to be paid to members of the Board and the committees thereof.

Other Board Committees

The Board has no committees other than the Audit Committee, Corporate Governance Committee and Compensation Committee.

Assessments

The Board regularly monitors the adequacy and effectiveness of information given to directors, communications between the Board and management, and the strategic direction and processes of the Board and its committees.

AUDITOR, TRANSFER AGENT AND REGISTRAR

The auditors of the Company are Charlton & Company, Chartered Professional Accountants, located at 1110 Melville Street, Suite 1430, Vancouver, BC V6E 4A6.

The transfer agent and registrar for the Common Shares is Endeavor Trust Corporation, located at Suite 702, 777 Hornby Street, Vancouver, BC, V6Z 1S2.

MATERIAL CONTRACTS

Except for contracts entered into in the ordinary course of business, the only contracts which have been entered into by the Company as of the date hereof, or which will be entered into prior to the Closing and which are regarded presently as material are:

1. Share Exchange Agreement dated April 8, 2022, as amended, among the Company, Iron Forge and the shareholders of Iron Forge. See *“General Development of the Business of the Company – Three Year History”* for a description of the Share Exchange Agreement;
2. Equity Incentive Plan adopted by the Board on November 22, 2022;
2. Escrow Agreement dated January 29, 2023 among the Company, Endeavor Trust Corporation and certain insiders of LiTHOS;
3. Amalgamation Agreement dated March 6, 2023, as amended by an amendment agreement dated March 23, 2023 with LiTHOS Technologies and NewCo. See *“General Development of the Business of the Company – Three Year History”*; and
4. Securities and Exchange Agreement dated June 13, 2023, with Aqueous. See *“General Development of the Business of the Company – Three Year History”*.

INTERESTS OF EXPERTS

There is no person or company whose profession or business gives authority to a statement made by such person or company and who is named as having prepared or certified a statement, report or valuation described or included in a filing, or referred to in a filing, made under NI 51-102 by the Company during, or related to, the Company's most recently completed financial year other than Charlton and Company, the Company's auditors.

Charlton and Company are the auditors of the Company and have confirmed that they are independent with respect to the Company within the meaning of the relevant rules and related interpretations prescribed by the relevant bodies in Canada and any applicable legislation or regulations.

ADDITIONAL INFORMATION

Additional information relating to the Company may be found on SEDAR+ at www.SEDARplus.ca.

Additional information, including directors' and officers' remuneration and indebtedness, principal holders of LiTHOS's securities and securities authorized for issuance under equity compensation plans, where applicable, will be contained in LiTHOS's information circular for the next annual meeting of shareholders that involves the election of directors and additional information as provided in LiTHOS's comparative financial statements for its most recently completed financial year. LiTHOS will provide this information to any person, upon request made to the Chief Financial Officer of LiTHOS at 2380 – 1055 West Hastings Street, Vancouver, British Columbia, V6E 2E9. The documents will also be located on SEDAR+ at www.SEDARplus.ca.

Additional financial information is provided in the Company's comparative financial statements and management's discussion and analysis for the period ended April 30, 2023, which are also available on SEDAR+.

Schedule A

AUDIT COMMITTEE CHARTER (Adopted as of August 17, 2023)

1. PURPOSE OF THE AUDIT COMMITTEE

The Audit Committee (the “Committee”) is a standing committee of the Board of Directors (the “Board”) of the Company. The role of the Committee is to:

- (a) assist the Board in its oversight responsibilities by reviewing: (i) the Company’s consolidated financial statements, the financial and internal controls and the accounting, audit and reporting activities, (ii) the Company’s compliance with legal and regulatory requirements, (iii) the external auditors’ qualifications and independence, and (iv) the scope, results and findings of the Company’s external auditors’ audit and non-audit services;
- (b) prepare any report of the Committee required to be included in the Company’s annual report or proxy material; and
- (c) take such other actions within the scope of this Charter as the Board may assign to the Committee from time to time or as the Committee deems necessary or appropriate.

2. COMPOSITION, OPERATIONS AND AUTHORITY

Composition

The Committee shall be composed of a minimum of three members of the Board. Unless otherwise permitted by Applicable Law (as defined herein), each member of the Committee shall be independent as determined by the Board in accordance with the applicable requirements of the laws governing the Company, the applicable stock exchanges on which the Company’s securities are listed and applicable securities regulatory authorities (collectively, the “Applicable Law”). Each member of the Committee shall be “financially literate” and at least one member of the Audit Committee shall be a “financial expert”, as such terms are defined by the Applicable Law.

Members of the Committee shall be appointed by the Board and continue to be members until their successors are elected and qualified or until their earlier retirement, resignation or removal. Any member of the Committee may be removed by the Board in its discretion. However, a member of the Committee shall automatically cease to be a member of the Committee upon either ceasing to be a director of the Board or, if applicable, ceasing to be independent as required in this Section 2 of this Charter. Vacancies on the Committee will be filled by the Board.

Authority

The authority of the Committee is subject to the provisions of this Charter, the constating documents of the Company, such limitations as may be imposed by the Board from time to time and Applicable Law.

The Committee shall have the authority to: (i) retain (at the Company’s expense) its own legal counsel and other advisors and experts that the Committee believes, in its sole discretion, are needed to carry out its duties and responsibilities; (ii) conduct investigations that it believes, in its sole discretion, are necessary to carry out its responsibilities; and (iii) take whatever actions that it deems appropriate to foster an internal culture that is committed to maintaining quality financial reporting, sound business risk practices and ethical behavior within the Company. In addition, the Committee shall have the authority to request any officer, director or employee of the Company, or any other persons whose advice and counsel are sought by the Committee, such as members of the Company’s management or the Company’s outside legal counsel and external auditors, to meet with the Committee

or any of its advisors and to respond to their inquiries. The Committee shall have full access to the books, records and facilities of the Company in carrying out its responsibilities.

The Committee shall have the authority to delegate to one or more of its members, responsibility for developing recommendations for consideration by the Committee with respect to any of the matters referred to in this Charter.

Operations

The Board may appoint one member of the Committee to serve as chair of the Committee (the “Chair”), but if it fails to do so, the members of the Committee shall designate a Chair by majority vote of the full Committee to serve at the pleasure of the majority of the full Committee. If the Chair of the Committee is not present at any meeting of the Committee, an acting Chair for the meeting shall be chosen by majority vote of the Committee from among the members present. In the case of a deadlock on any matter or vote, the Chair shall refer the matter to the Board. The Committee may appoint a secretary who need not be a director of the Board or Committee.

The Chair shall preside at each meeting of the Committee and set the agendas for the Committee meetings. The Committee shall have the authority to establish its own rules and procedures for notice and conduct of its meetings as long as they are not inconsistent with any provisions of the Company’s constating documents or this Charter.

The Committee shall meet (in person or by telephonic meeting) at least quarterly or more frequently as circumstances dictate. As a part of each meeting of the Committee at which the Committee recommends that the Board approve the annual audited financial statements, the Committee shall meet in a separate session with the external auditors and, if desired, with management and/or the internal auditor. In addition, the Committee or the Chair shall meet with management quarterly to review the Company’s financial statements and the Committee or a designated member of the Committee shall meet with the external auditors to review the Company’s financial statements on a regular basis as the Committee may deem appropriate. The Committee shall maintain written minutes or other records of its meetings and activities, which shall be duly filed in the Company’s records.

Except as otherwise required by the Company’s constating documents, a majority of the members of the Committee shall constitute a quorum for the transaction of business and the act of a majority of the members present at any meeting at which there is a quorum shall be the act of the Committee. The Committee may also act by unanimous written consent in lieu of a meeting.

The Chair of the Committee shall report to the Board following meetings of the Committee and as otherwise requested by the Board.

3. RESPONSIBILITIES AND DUTIES

The Committee’s primary responsibilities are to:

General

- (a) review and assess the adequacy of this Charter on an annual basis and, where necessary or desirable, recommend changes to the Board;
- (b) report to the Board regularly at such times as the Chair may determine to be appropriate but not less frequently than four times per year;
- (c) follow the process established for all committees of the Board for assessing the Committee’s performance;

Review of Financial Statements, MD&A and other Documents

- (d) annual reports or other financial information to be submitted to any governmental body or the public, including any certification, report, opinion or review rendered by the external auditors before they are approved by the Board and publicly disclosed;
- (e) review with the Company's management and, if applicable, the external auditors, the Company's quarterly financial statements and related management's discussion and analysis, before they are released;
- (f) ensure that adequate procedures are in place for the review of the Company's disclosure of financial information extracted or derived from the Company's financial statements other than the disclosure referred to in the two immediately preceding paragraphs and periodically assess the adequacy of such procedures;
- (g) review the effects of regulatory and accounting initiatives, as well as off-balance sheet structures, on the financial statements of the Company;
- (h) review with the Company's management any press release of the Company which contains financial information;
- (i) review analyses prepared by management and/or the external auditors setting forth significant reporting issues and judgments made in connection with the preparation of the Company's financial statements;

External Auditors

- (j) recommend external auditors' nominations to the Board to be put before the shareholders for appointment and, as necessary, the removal of any external auditors in office from time to time;
- (k) approve the fees and other compensation to be paid to the external auditors;
- (l) pre-approve all significant non-audit engagements to be provided to the Company with the external auditors;
- (m) require the external auditors to submit to the Committee, on a regular basis (at least annually), a formal written statement delineating all relationships between the external auditors and the Company and discuss with the external auditors any relationships that might affect the external auditors' objectivity and independence;
- (n) recommend to the Board any action required to ensure the independence of the external auditors;
- (o) advise the external auditors of their ultimate accountability to the Board and the Committee;
- (p) oversee the work of the external auditors engaged for the purpose of preparing an audit report or performing other audit, review and attest services for the Company;
- (q) evaluate the qualifications, performance and independence of the external auditors which are to report directly to the Committee, including (i) reviewing and evaluating the lead partner on the external auditors' engagement with the Company, (ii) considering whether the auditors' quality controls are adequate and the provision of permitted non-audit services is compatible with maintaining the auditors' independence, (iii) determine the rotation of the lead audit partner and

the audit firm, and (iv) take into account the opinions of management and the internal audit function in assessing the external auditors' qualifications, independence and performance;

- (r) present the Committee's conclusions with respect to its evaluation of external auditors to the Board and take such additional action to satisfy itself of the qualifications, performance and independence of external auditors and make further recommendations to the Board as it considers necessary;
- (s) obtain and review a report from the external auditors at least annually regarding the external auditors' internal quality-control procedures; material issues raised by the most recent internal quality-control review, or peer review, of the firm, or by any inquiry or investigation by governmental or professional authorities within the preceding five years respecting one or more external audits carried out by the firm; any steps taken to deal with any such issues; and all relationships between the external auditors and the Company;
- (t) establish policies for the Company's hiring of employees or former employees of the external auditors;
- (u) monitor the relationship between management and the external auditors including reviewing any management letters or other reports of the external auditors and discussing any material differences of opinion between management and the external auditors;

Financial Reporting Process

- (v) periodically discuss the integrity, completeness and accuracy of the Company's internal controls and the financial statements with the external auditors in the absence of the Company's management;
- (w) in consultation with the external auditors, review the integrity of the Company's financial internal and external reporting processes;
- (x) consider the external auditors' assessment of the appropriateness of the Company's auditing and accounting principles as applied in its financial reporting;
- (y) review and discuss with management and the external auditors at least annually and approve, if appropriate, any material changes to the Company's auditing and accounting principles and practices suggested by the external auditors, internal audit personnel or management;
- (z) review and discuss with the Chief Executive Officer ("CEO") and the Chief Financial Officer (the "CFO") the procedures undertaken in connection with the Chief Executive Officer and Chief Financial Officer certifications for the interim and annual filings with applicable securities regulatory authorities;
- (aa) review disclosures made by the CEO and CFO during their certification process for the annual and interim filings with applicable securities regulatory authorities about any significant deficiencies in the design or operation of internal controls which could adversely affect the Company's ability to record, process, summarize and report financial data or any material weaknesses in the internal controls, and any fraud involving management or other employees who have a significant role in the Company's internal controls;
- (bb) establish regular and separate systems of reporting to the Committee by management and the external auditors of any significant decision made in management's preparation of the financial statements,

including the reporting of the view of management and the external auditors as to the appropriateness of such decisions;

- (cc) discuss during the annual audit, and review separately with each of management and the external auditors, any significant matters arising from the course of any audit, including any restrictions on the scope of work or access to required information; whether raised by management, the head of internal audit or the external auditors;
- (dd) resolve any disagreements between management and the external auditors regarding financial reporting;
- (ee) review with the external auditors and management the extent to which changes or improvements in financial or accounting practices, as approved by the Committee, have been implemented at an appropriate time subsequent to the implementation of such changes or improvements;
- (ff) retain and determine the compensation of any independent counsel, accountants or other advisors to assist in its oversight responsibilities (the Committee shall not be required to obtain the approval of the Board for such purposes);
- (gg) discuss any management or internal control letters or proposals to be issued by the external auditors of the Company;

Corporate Controls and Procedures

- (hh) receive confirmation from the CEO and CFO that reports to be filed with Canadian Securities commissions and any other applicable regulatory agency: (a) have been prepared in accordance with the Company's disclosure controls and procedures; and (b) contain no material misrepresentations or omissions and fairly presents, in all material respects, the financial condition, results of operations and cash flow as of and for the period covered by such reports;
- (ii) receive confirmation from the CEO and CFO that they have concluded that the disclosure controls and procedures are effective as of the end of the period covered by such reports;
- (jj) discuss with the CEO and CFO any reasons for which any of the confirmations referred to in the two preceding paragraphs cannot be given by the CEO and CFO;

Code of Conduct and Ethics

- (kk) review and discuss the Company's Code of Business Conduct and Ethics and the actions taken to monitor and enforce compliance with the Code;
- (ll) establish procedures for: i) the receipt, retention and treatment of complaints regarding accounting, internal controls or auditing matters; and ii) the confidential, anonymous submission of concerns regarding questionable accounting, internal control and auditing matters;

Legal Compliance

- (mm) confirm that the Company's management has the proper review system in place to ensure that the Company's financial statements, reports, press releases and other financial information satisfy Applicable Law;
- (nn) review legal compliance matters with the Company's legal counsel;

- (oo) review with the Company's legal counsel any legal matter that the Committee understands could have a significant impact on the Company's financial statements;
- (pp) conduct or authorize investigations into matters within the Committee's scope of responsibilities;
- (qq) perform any other activities in accordance with the Charter, the Company's constating documents and Applicable Law the Committee or the Board deems necessary or appropriate;

Related Party Transactions

- (rr) review the financial reporting of any transaction between the Company and any officer, director or other "related party" (including any shareholder holding an interest greater than 5% in the Company) or any entity in which any such person has a financial interest;
- (ss) review policies and procedures with respect to directors' and officers' expense accounts and management perquisites and benefits, including their use of corporate assets and expenditures;

Reporting and Powers

- (tt) report to the Board following each meeting of the Committee and at such other times as the Board may consider appropriate; and
- (uu) exercise such other powers and perform such other duties and responsibilities as are incidental to the purposes, duties and responsibilities specified herein and as may from time to time be delegated to the Committee by the Board.

4. LIMITATION OF RESPONSIBILITY

While the Committee has the responsibilities and powers provided by this Charter, it is not the duty of the Committee to plan or conduct audits or to determine that the Company's financial statements are complete and accurate and are in accordance with generally accepted accounting principles. This is the responsibility of management (with respect to whom the Committee performs an oversight function) and the external auditors.