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#### FORWARD LOOKING STATEMENTS

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

In particular, this AIF contains forward-looking information, including, without limitation, with respect to the following matters or the Company's expectations relating to such matters: the expected benefits from the Project Investment, including successful closing and timing thereof; statements regarding anticipated decision making with respect to Minera Exar; capital expenditures and programs; estimates of the Mineral Resources and Mineral Reserves at its properties: development of Mineral Resources and Mineral Reserves; government regulation of mining operations and treatment under governmental and taxation regimes; the future price of commodities, including lithium; the realization of Mineral Resources and Mineral Reserves estimates, including whether Mineral Resources will ever be developed into Mineral Reserves and information and underlying assumptions related thereto; the timing and amount of future production; currency exchange and interest rates; expected outcome and timing of environmental surveys and permit applications and other environmental matters; the Company's ability to raise capital; expected expenditures to be made by the Company on its properties; the timing, cost, quantity, capacity and product quality of production of the Cauchari-Olaroz Project, which is held and operated through the Company's joint venture with Ganfeng; successful operations of the Ganfeng co-ownership structure, the timing, cost, quantity, capacity and product quality of production at the Thacker Pass Project; capital costs, operating costs, sustaining capital requirements, after tax net present value and internal rate of return; payback period, and sensitivity analyses; net cash flows and EBITDA of the Cauchari-Olaroz Project; cash flows and EBITDA of the Thacker Pass Project; the cost, timing and size of a potential expansion of the Cauchari-Olaroz Project; whether the Company ever adopts a 40,000 tpa development plan for Caucharí-Olaroz, that the Company is able to successfully monetize any increase in off-take from any such increased development plan, the potential for partnership and financing scenarios for the Thacker Pass Project; the identification and development of lithium resource projects pursuant to the Strategic Agreement; construction of the pilot plant and laboratory in Reno, Nevada; and the development of new organoclay products and the timing, cost, quantity, capacity and product quality of sales and commercial production from RheoMinerals.

Forward-looking information does not take into account the effect of transactions or other items announced or occurring after the statements are made. Forward-looking information is based upon a number of expectations and assumptions and is subject to a number of risks and uncertainties, many of which are beyond the Company's control, that could cause actual results to differ materially from those that are disclosed in or implied by such forward-looking information. With respect to forward-looking information listed above and incorporated by reference herein, the Company has made assumptions regarding, among other things:

- current technological trends;
- a cordial business relationship between the Company and Ganfeng for the Cauchari-Olaroz Project, and in respect of the Strategic Agreement:
- ability of the Company to fund, advance and develop the Cauchari-Olaroz Project and the Thacker Pass Project;
- the Company's ability to operate in a safe and effective manner;



- ability to obtain and maintain mining, exploration, environmental and other permits or approvals in Nevada and Argentina;
- the results from the pilot plant and laboratory in Reno, Nevada, including the timing thereof;
- the ability to identify and develop lithium resource projects pursuant to the Strategic Agreement;
- demand for lithium, including that such demand is supported by growth in the electric vehicle market:
- the impact of increasing competition in the lithium business, and LAC's competitive position in the industry;
- general economic conditions;
- estimates of and unpredictable changes to the market prices for lithium and clay-based organoclay products;
- exploration, development and construction costs for the Cauchari-Olaroz Project and the Thacker Pass Project;
- estimates of Mineral Resources and Mineral Reserves, including whether Mineral Resources will ever be developed into Mineral Reserves;
- reliability of technical data;
- anticipated timing and results of exploration, development and construction activities;
- the Company's ability to obtain additional financing on satisfactory terms or at all;
- the ability to develop and achieve production at any of the Company's mineral exploration and development properties;
- successful closing of the Project Investment, including satisfaction of conditions precedent thereto and timing thereof;
- accuracy of current budget and construction estimates;
- preparation of a development plan for lithium production at the Thacker Pass Project; and
- the continued growth of demand for organoclay products or for lithium chemicals.

Although the Company believes that the assumptions and expectations reflected in such forward-looking information are reasonable, LAC can give no assurance that these assumptions and expectations will prove to be correct, and since forward-looking information inherently involves risks and uncertainties, undue reliance should not be placed on such information.

The Company's actual results could differ materially from those anticipated in any forward-looking information as a result of the risk factors contained in this AIF, including but not limited to, the factors referred to under the heading "Risk Factors" in this AIF. Such risks include, but are not limited to the following: risks inherent in transactions similar to the Project Investment, including successful completion of all conditions precedent thereto; the Company's mineral properties may not be developed as planned and uncertainty of whether there will ever be production at the Company's mineral exploration properties: cost overruns; risks associated with the Company's ability to successfully secure adequate funding; market prices affecting the ability to develop the Company's mineral properties; risks associated with co-ownership arrangements; risk to the growth of lithium markets; lithium prices; inability to obtain required governmental permits and operations may be limited by government-imposed limitations; technology risk; inability to achieve and manage expected growth; political risk associated with foreign operations, including coownership arrangements with foreign domiciled partners; emerging and developing market risks; risks associated with not having production experience; operational risks; changes in government regulations; changes to environmental requirements; failure to obtain or maintain necessary licenses, permits or approvals; insurance risk; receipt and security of mineral property titles and mineral tenure risk; mining industry competition; market risk; volatility in global financial condition; uncertainties associated with

estimating Mineral Resources and Mineral Reserves, including uncertainties relating to the assumptions underlying Mineral Resource and Mineral Reserve estimates and whether Mineral Resources will ever be developed into Mineral Reserves; opposition to development of the Company's mineral properties; lack of unitization and reservoir management rules; surface access risk; geological, technical, drilling or processing problems; uncertainties in estimating capital and operating costs, cash flows and other project economics; liabilities and risks, including environmental liabilities and risks inherent in mineral extraction operations; health and safety risks; incorrect assessments of the value of acquisitions; unanticipated results of exploration activities; unpredictable weather conditions; unanticipated delays in preparing technical studies; the ability to manufacture organoclay products that meet customer requirements; an increase in the costs of manufacturing organoclay products, including the costs of any raw materials used in the process; a reduction in demand for organoclay products or for lithium chemicals; inability to generate profitable operations; restrictive covenants in debt instruments; lack of availability of additional financing on terms acceptable to the Company and/or joint venture partners; shareholder dilution; intellectual property risk; dependency on key personnel; payment of dividends; competition for, amongst other things, capital, undeveloped lands and skilled personnel; fluctuations in currency exchange and interest rates; regulatory risk, including as a result of the Company's dual-exchange listing and increased costs thereof; conflicts of interest; Common Share price volatility; and cyber-security risks and threats. Consequently, actual results and events may vary significantly from those included in, contemplated or implied by such statements.

Readers are cautioned that the foregoing lists of factors are not exhaustive. The forward-looking information contained in this AIF is expressly qualified by these cautionary statements. All forward-looking information in this AIF speaks as of the date of this AIF. The Company does not undertake any obligation to update or revise any forward-looking information, whether as a result of new information, future events or otherwise, except as required by law. Additional information about these assumptions and risks and uncertainties is contained in the Company's filings with securities regulators, including the Company's most recent MD&A for the most recently completed financial year, which are available on SEDAR at www.sedar.com.

# CAUTIONARY NOTICE REGARDING MINERAL RESERVES AND MINERAL RESOURCE ESTIMATES

The disclosure included in this AIF uses Mineral Reserves and Mineral Resources classification terms that comply with reporting standards in Canada and the Mineral Reserves and Mineral Resources estimates are made in accordance with the CIM Definition Standards adopted by the CIM Council on May 10, 2014 and NI 43-101. NI 43-101 is a rule developed by the Canadian Securities Administrators that establishes standards for all public disclosure an issuer makes of scientific and technical information concerning mineral projects. The following definitions are reproduced from the CIM Definition Standards:

A **Mineral Resource** is a concentration or occurrence of solid material of economic interest in or on the Earth's crust in such form, grade or quality and quantity that there are reasonable prospects for eventual economic extraction. The location, quantity, grade or quality, continuity and other geological characteristics of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge, including sampling. Mineral Resources are sub-divided, in order of increasing geological confidence, into Inferred, Indicated and Measured categories.

An **Inferred Mineral Resource** is that part of a Mineral Resource for which quantity, grade or quality are estimated on the basis of limited geological evidence and sampling. Geological evidence is sufficient to imply but not verify geological and grade or quality continuity. An Inferred Mineral Resource has a lower level of confidence than that applying to an Indicated Mineral Resource and must not be converted to a Mineral Reserve. It is reasonably expected that the majority of Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration.

An **Indicated Mineral Resource** is that part of a Mineral Resource for which quantity, grade or quality, densities, shape and physical characteristics are estimated with sufficient confidence to allow the application of Modifying Factors in sufficient detail to support mine planning and evaluation of the economic viability of the deposit. Geological evidence is derived from adequately detailed and reliable exploration, sampling and testing and is sufficient to assume geological and grade or quality continuity between points of observation. An Indicated Mineral Resource has a lower level of confidence than that applying to a Measured Mineral Resource and may only be converted to a Probable Mineral Reserve. "Modifying Factors" are considerations used to convert Mineral Resources to Mineral Reserves. These include, but are not restricted to, mining, processing, metallurgical, infrastructure, economic, marketing, legal, environmental, social and governmental factors.

A **Measured Mineral Resource** is that part of a Mineral Resource for which quantity, grade or quality, densities, shape, and physical characteristics are estimated with confidence sufficient to allow the application of Modifying Factors to support detailed mine planning and final evaluation of the economic viability of the deposit. Geological evidence is derived from detailed and reliable exploration, sampling and testing and is sufficient to confirm geological and grade or quality continuity between points of observation. A Measured Mineral Resource has a higher level of confidence than that applying to either an Indicated Mineral Resource or an Inferred Mineral Resource. It may be converted to a Proven Mineral Reserve or to a Probable Mineral Reserve.

A **Mineral Reserve** is the economically mineable part of a Measured and/or Indicated Mineral Resource. It includes diluting materials and allowances for losses, which may occur when the material is mined or extracted and is defined by studies at Pre-Feasibility or Feasibility level as appropriate that include application of Modifying Factors. Such studies demonstrate that, at the time of reporting, extraction could reasonably be justified. The reference point at which Mineral Reserves are defined, usually the point where the ore is delivered to the processing plant, must be stated. It is important that, in all situations where the reference point is different, such as for a saleable product, a clarifying statement is included to ensure that the reader is fully informed as to what is being reported. Mineral Reserves are sub-divided in order of increasing confidence into Probable Mineral Reserves and Proven Mineral Reserves. The public disclosure of a Mineral Reserve must be demonstrated by a Pre-Feasibility Study or Feasibility Study.



A **Probable Mineral Reserve** is the economically mineable part of an Indicated, and in some circumstances, a Measured Mineral Resource. The confidence in the Modifying Factors applying to a Probable Mineral Reserve is lower than that applying to a Proven Mineral Reserve.

A **Proven Mineral Reserve** is the economically mineable part of a Measured Mineral Resource. A Proven Mineral Reserve implies a high degree of confidence in the Modifying Factors.

Unless otherwise indicated, all Mineral Reserves and Mineral Resources estimates included in this AIF have been prepared in accordance with NI 43-101. These standards differ significantly from the requirements of the SEC set out in SEC Industry Guide 7. Consequently, Mineral Reserves and Mineral Resources information included in this AIF is not comparable to similar information that would generally be disclosed by domestic U.S. reporting companies subject to the reporting and disclosure requirements of the SEC.

In particular, SEC Industry Guide 7 applies different standards in order to classify mineralization as a Mineral Reserve. As a result, the definitions of "Proven Mineral Reserves" and "Probable Mineral Reserves" used in NI 43-101 differ from the definitions in SEC Industry Guide 7. Under SEC standards, mineralization may not be classified as a "reserve" unless the determination has been made that the mineralization could be economically and legally produced or extracted at the time the reserve determination is made. Among other things, all necessary permits would be required to be in hand or issuance imminent in order to classify mineralized material as reserves under the SEC standards. Accordingly, Mineral Reserves estimates included in this AIF may not qualify as "reserves" under SEC standards.

In addition, this AIF uses the terms "Mineral Resources," "Measured Mineral Resources," "Indicated Mineral Resources" and "Inferred Mineral Resources" to comply with the reporting standards in Canada. SEC Industry Guide 7 does not recognize Mineral Resources and U.S. companies are generally not permitted to disclose resources in documents they file with the SEC. "Inferred Mineral Resources" have a great amount of uncertainty as to their existence and as to whether they can be mined legally or economically. Therefore, investors are also cautioned not to assume that all or any part of an Inferred Mineral Resource exists. In accordance with Canadian rules, estimates of "Inferred Mineral Resources" cannot form the basis of feasibility or pre-feasibility studies. It cannot be assumed that all or any part of "Mineral Resources," "Measured Mineral Resources," "Indicated Mineral Resources" or "Inferred Mineral Resources" will ever be upgraded to a higher category. Investors are cautioned not to assume that any part of the "Mineral Resources," "Measured Mineral Resources," "Indicated Mineral Resources" or "Inferred Mineral Resources" reported in this AIF is economically or legally mineable. In addition, the definitions of "Proven Mineral Reserves" and "Probable Mineral Reserves" under reporting standards in Canada differ in certain respects from the standards of the SEC. For the above reasons, information included in this AIF that describes the Company's Mineral Reserves and Mineral Resources estimates is not comparable to similar information made public by U.S. companies subject to the reporting and disclosure requirements of the SEC.

#### **DEFINITIONS AND OTHER INFORMATION**

### **Definitions**

For a description of defined terms and other reference information used in this AIF, please refer to Schedule "A".

#### Consolidation

On November 8, 2017, the Company effected the Consolidation of its outstanding Common Shares on the basis of one Common Share for every five previously-outstanding Common Shares. Unless noted otherwise, all references to the number of shares, warrants and stock options and their strike price and per share information in this AIF reflect the Consolidation.



# Currency

This AIF contains references to United States dollars and Canadian dollars. All dollar amounts referenced, unless otherwise indicated, are expressed in Canadian dollars. References to United States dollars are referred to as "US\$".

The following table sets forth the high and low exchange rates for one US dollar expressed in Canadian dollars for each period indicated, the average of the exchange rates for each period indicated and the exchange rate at the end of each such period, based upon the daily exchange rates provided by the Bank of Canada:

	United States Dollars into Canadian Dollars			
	<u>2018</u>	<u>2017</u>	<u>2016</u>	
High	\$1.3642	\$1.3743	\$1.4589	
Low	\$1.2288	\$1.2128	\$1.2544	
Rate at end of period	\$1.3642	\$1.2986	\$1.3427	
Average rate for period	\$1.2957	\$1.2545	\$1.3248	

On March 29, 2019, the rate for Canadian dollars in terms of the United States dollar, as quoted by the Bank of Canada, was US\$1.00 = \$1.3363.

#### CORPORATE STRUCTURE OF THE COMPANY

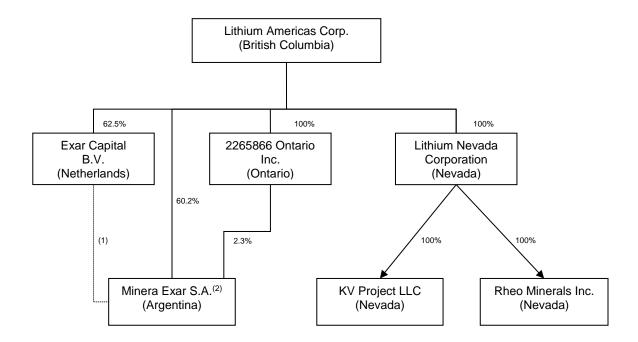
## Name, Address and Incorporation

The Company was incorporated under the BCBCA on November 27, 2007 under the name "Western Lithium Canada Corporation". On May 31, 2010, the Company changed its name to "Western Lithium USA Corporation". The Company amended its Articles in 2013 to add advance notice requirements for the election of directors and in 2015 to give the Board the authority by resolution to alter the Company's authorized share capital and to effect amendments to the Articles, except as otherwise specifically provided in the Articles or the BCBCA. On March 21, 2016, the Company changed its name to "Lithium Americas Corp.". On November 8, 2017, the Company completed the Consolidation.

The Company's head and registered office is located at Suite 300 – 900 West Hastings St., Vancouver, British Columbia, V6C 1E6.

## Intercorporate Relationships

The corporate structure of LAC, its material subsidiaries, the jurisdiction of incorporation of such corporations and the percentage of equity ownership are set out in the following chart:



#### Notes:

- (1) Exar Capital B.V. holds no equity interest in Minera Exar S.A., but has and continues to provide shareholder loans.
- (2) Pursuant to the JEMSE LOI, JEMSE may acquire an 8.5% equity interest in Exar, which in turn would dilute LAC's direct and indirect interest in Exar to an aggregate 57.2%. For more information please see "The Cauchari-Olaroz Project Property Description and Location and Access".



#### **GENERAL DEVELOPMENT OF THE BUSINESS**

#### Overview

LAC is a Canadian based resource company focused on advancing two significant lithium development projects, the Cauchari-Olaroz Project, located in the Province of Jujuy in Argentina, and the Thacker Pass Project (formerly "Stage 1" of the Lithium Nevada Project), located in north-western Nevada, USA. LAC also owns and operates RheoMinerals, which manufactures and sells organoclay products used in complex oil and gas drilling and other applications, from its Fernley Facility.

LAC intends to focus its business activity in the near term on advancing of the Cauchari-Olaroz Project and the Thacker Pass Project. The Company intends to pursue other attractive business development opportunities in the lithium space from time to time as they arise.

## **Three Year History**

#### Fiscal 2016

In March 2016, the Company signed definitive agreements with SQM to form the Cauchari Joint Venture. Pursuant to the transaction, SQM acquired a 50% equity interest in Exar in consideration for a cash payment of US\$25 million, of which US\$10 million was retained by Exar to support project development and the balance distributed to LAC. The parties' interests were governed by a shareholder agreement that provided for (i) equal representation by the Company and SQM on the Exar management committee, (ii) unanimous approval by the Company and SQM on budgets and timing of expenditures, (iii) the mutual right to purchase a 50% share of the production, and (iv) buyout and termination provisions in the event that SQM chose not to proceed with the project. For details regarding the subsequent sale of SQM's 50% equity interest in Exar, please see "Three Year History – Fiscal 2018".

In June 2016, the Company announced filing of an updated NI 43-101 technical report on the then-named Lithium Nevada Project. In the report, the authors included a Mineral Resource estimate on each of the "Stage I Lens" and "Stage II Lens" of the property, while no Mineral Reserve estimate was reported.

### Fiscal 2017

In January 2017, LAC entered into the Ganfeng Investment Agreement and the BCP Investment Agreement. These agreements established the framework of the Cauchari Financing Transactions, in which BCP and Ganfeng agreed to provide funding to LAC to cover its share of anticipated capital contributions for the development of Stage 1 of the Cauchari-Olaroz Project, as well as support working capital requirements of LAC during the project development stage. Pursuant to these agreements, each of Ganfeng and BCP agreed to co-invest in LAC through a mixture of equity subscriptions and debt financing.

The Cauchari Financing Transactions consisted of four key components:

- An equity financing by each of Ganfeng and BCP, whereby Ganfeng subscribed for 15,000,000 Common Shares while BCP subscribed for 10,000,000 Common Shares at a price of \$4.25 per Common Share, for gross proceeds of approximately \$106,000,000.
- A US\$205,000,000 syndicated credit facility, represented by the Amended Credit Facility. Under
  this agreement, each of Ganfeng and BCP have committed to advance US\$125,000,000 and
  US\$80,000,000, respectively, with proceeds to be used to fund LAC's share of project development
  contributions for Stage 1 of the Cauchari-Olaroz Project. For further information see "Material
  Contracts Amended Credit Facility".
- Off-take entitlements with each of Ganfeng and BCP for the purchase of up to 80% and 20%, respectively, of LAC's share of Cauchari-Olaroz Stage 1 lithium carbonate production at market prices. The off-take agreements each have a term of 20 years following commencement of commercial production.



 An investor rights agreement with each of Ganfeng and BCP. Pursuant to these agreements, Ganfeng and BCP each have the right to nominate one individual to the Board so long as they maintain a 15% or more interest, respectively, in LAC's issued share capital, a participation right that remains valid until March 31, 2019, and registration rights. For further information see "Material Contracts – Ganfeng Investor Rights Agreement" and "– BCP Investor Rights Agreement".

The parties settled relevant agreements and satisfied all conditions over the course of the first half of 2017, and on July 14, 2017 completed the remaining equity subscriptions and entered into definitive agreements.

In May 2017, the Company announced filing of a detailed feasibility study for the Cauchari-Olaroz Project.

On November 8, 2017, the Company completed the Consolidation.

#### Fiscal 2018

On January 25, 2018, the Company's Common Shares began trading on the NYSE.

In February 2018, the Company filed a short form base shelf prospectus to qualify for distribution, from time to time over a 25-month period, up to US\$500 million of the Company's debt and equity securities. The Company also filed a corresponding shelf registration statement with the SEC on Form F-10 under the Multijurisdictional Disclosure System.

In May 2018, the Company announced filing of an updated NI 43-101 technical report on its core Nevada property, which report also re-named it the Thacker Pass Project and constituted it hosting a reduced land package compared to prior technical reports. In the report, the authors included an updated Mineral Resource estimate on the Thacker Pass deposit (formerly the "Stage 1 Lens", or "Zone 1"). For further information, please see "Overview of Mineral Projects – The Thacker Pass Project".

In August 2018, the Company announced filing of the Thacker Pass TR. The Thacker Pass TR summarizes a preliminary feasibility study on the Thacker Pass Project. For further information, please see "Overview of Mineral Projects – The Thacker Pass Project".

In August 2018, the Company entered into agreements to implement the Joint Venture Transactions, which were completed in October 2018. In connection therewith: (a) a subsidiary of SQM sold its 50% interest in Exar to a subsidiary of Ganfeng; (b) the Company converted prior funding contributions to Exar into equity of Exar, thereby increasing its interest in Exar from 50% to 62.5%, with Ganfeng holding the remaining 37.5% interest; (c) the Company and Ganfeng invested in Exar Capital (the joint venture company through which the Company and Ganfeng have agreed to fund the Cauchari-Olaroz Project) such that the Company obtained a 62.5% interest and Ganfeng a 37.5% interest; (d) Ganfeng provided the Company with the Limited Recourse Loan Facility, a US\$100 million unsecured, limited recourse, subordinated loan facility; and (e) Ganfeng provided a loan to Exar to permit Exar to repay US\$25 million of its outstanding indebtedness to the Company. The parties' interests in Exar (and in Exar Capital) are governed by the Joint Venture Shareholder Agreement. For further information, please see "Material Contracts – Joint Venture Shareholder Agreement".

In August 2018, the Company and Ganfeng entered into the Strategic Agreement to explore for opportunities and to collaborate on the development of lithium resources, with a focus on technical and financial collaboration with the objective of identifying and developing lithium resource projects in North and South America.



#### **DESCRIPTION OF THE BUSINESS**

#### **Overview of Mineral Projects**

The Company is advancing two significant lithium development projects, the Cauchari-Olaroz Project, located in the Province of Jujuy in Argentina, and the Thacker Pass Project (formerly "Stage 1" of the Lithium Nevada Project), located in north-western Nevada, USA.

## **Cauchari-Olaroz Project**

## Current Status of the Project

The Cauchari-Olaroz Project is owned and operated as to 62.5% by LAC and 37.5% by Ganfeng, each holding their interest through shareholdings in Exar. Ganfeng acquired its interest from SQM pursuant to completion of the Joint Venture Transactions in October 2018.

In March 2017, LAC and SQM (the Company's former joint venture partner) completed a mine plan and feasibility study on the Cauchari-Olaroz Project for a mining operation producing 25,000 TPA of lithium carbonate over a 40 year mine life, following which, Exar initiated detailed engineering work. The current construction schedule targets first production in 2020. Activities at site remain on track in accordance with this schedule.

LAC and Ganfeng have been working to refine development parameters and design of the 25,000 TPA development plan to increase efficiency of operations and remain committed to ensuring the Cauchari-Olaroz Project remains on schedule for production. Following the release of the Cauchari TR, LAC and GFL have directed Exar to advance permitting, design and other development planning activities at Cauchari-Olaroz to target an increase in the initial stated capacity of the project from 25,000 TPA to an aggregate of 40,000 TPA of lithium carbonate. The 25,000 tpa capital cost estimate of \$425 million, on a 100% basis and before value-added taxes ("VAT"), remains unchanged. GFL and LAC intend, in the event the current budget allows, to continue to incorporate infrastructure and other equipment in the current plan to provide scalability for the Project. This includes the current 12 km2 pond design under construction where no change is expected. Further updates to the development plan may occur from time to time as work progresses.

On April 1, 2018 the Company entered into a definitive transaction agreement whereby Ganfeng Lithium Co., Ltd. ("Ganfeng"), has agreed to subscribe, through a wholly-owned subsidiary, for 141,016,944 newly issued shares of Minera Exar in consideration for cash consideration of US\$160 million (such transactions, the "Project Investment"). As a result, Ganfeng will increase its direct and indirect interest in Cauchari-Olaroz project from 37.5% to 50%, with Lithium Americas holding the remaining 50% interest (each subject to the rights of JEMSE to acquire an 8.5% interest in Minera Exar). Closing of the transaction remains subject to Ganfeng regulatory approvals and shareholder approval, the consent of BCP Innovation Pte. Ltd. in its capacity as lender pursuant to Company's senior credit facility, the Company's shareholder approval and other customary closing conditions

## Construction Update

Engineering is well advanced to support procurement and construction activities in accordance with the current schedule. Development activities are on schedule with the advancement of detailed engineering, ponds construction, production wells drilling, camp construction, plant design and supply purchases to support the start of Stage 1 production in 2020.

Currently Exar has 516 people working in Argentina (476 at site and the remainder in the Jujuy office), including direct employees and contractors. The construction camp was completed and Exar has capacity to accommodate 554 people at site. Modules for an additional 128 beds were contracted and are expected to be available during April 2019 to support the construction activities in accordance with the current



schedule. In addition to this, proposals for the operations camp were received and are expected to be awarded to provide additional camp space during 2019.

Pond construction activities continue as planned, with two ponds completed and four ponds under construction. In October 2018, Exar started filling ponds with brine and currently there are seven wells which are pumping brine to the first pond. The transfer of brine to the second pond is expected to begin shortly. Engineering is continuing and is on track to support Exar's procurement and construction activities. Requests-for-quotations for most of the long-lead equipment items were issued and firm proposals are under evaluation. The first construction package was awarded, and the contractor mobilized to perform the work. Roads and platforms activities continue in accordance with the schedule to support the production wells program.

Exar commenced an exploration program on the Cauchari-Olaroz Project in the fall of 2017. Exar is currently focused on the production wells program. Two drilling companies are currently mobilized to the site and a third is scheduled to be mobilized in Q2 2019. Three drilling rigs for production wells are currently operative at site and three more will be added during March and April, with a seventh drilling rig available if needed. By April, a total of six drilling rigs are scheduled to be at site to support the production program in place. Seven production wells are completed and three are under construction.

In the near term, the current development plan at Cuachari-Olaroz includes the following principal activities:

- Evaporation Ponds As of the date hereof, two ponds are complete, four ponds are under construction, with the remaining ponds to follow, with a completion target in late Q1 2020. Production wells are pumping brine to the first pond and the filling of the remaining ponds will follow in due course. Ponds will begin to be filled with brine from the production wells as they are completed.
- Production Wells Construction of production wells is underway, and by mid-Q2 2019, the Company expects to have six drill rigs mobilized at site, with a seventh available if needed.
- Civil Contracts have been awarded for earthworks (plant and operations camp), concrete supply
  and other key items. Construction of the plant and operations camp continue as planned, with
  construction of the plant expected to begin in early Q2 2019.
- Procurement Exar is in the process of reviewing proposals for long lead items and expects to finalize such awards in due course, including liner supply contracts for the remaining ponds.

#### Resource Update

In March 2019, the Company published the Cauchari TR. Included in the Cauchari TR is an updated Mineral Resource estimate for the Cauchari-Olaroz Project as summarized in the table below, reported on a 100% project equity basis. LAC no longer reports a potassium Mineral Resource on the project.

#### Mineral Resources

The Mineral Resource estimate below is expressed relative to a lithium grade cut-off of greater than or equal to 300 mg/L.

Updated Mineral Resource Estimate for Lithium							
Category	Average Lithium Grade (mg/L)	Brine (m³)	Lithium Metal	LCE (tonnes)			
Measured	587	1.11E+09	651,100	3,465,700			
Indicated	580	4.70E+09	2,726,300	14,511,500			
Measured + Indicated	581	5.81E+09	3,377,400	17,977,200			
Inferred	602	1.59E+09	957,400	5,096,000			

#### Notes:

- (1) The Mineral Resource estimate has an effective date of February 13, 2019.
- (2) Mineral Resources have a cut-off grade of 300 mg/L of lithium.
- (3) Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability. There is no certainty that all or any part of the Mineral Resource will be converted to Mineral Reserves.
- (4) LCE is calculated based the following conversion factor: mass of LCE = 5.322785 x mass of lithium metal.

The updated resource provided above constitutes a change of -1% for total average lithium concentration of Measured + Indicated (585 mg/L vs. 581mg/L) and a change of +53% for total LCE Measured + Indicated (11,752,000 tonnes LCE vs. 17,977,200 tonnes LCE). The increase in overall mass can be attributed to the expansion and deepening of the Resource Evaluation Area based on exploration results obtained in 2017 and 2018. The decline in total average concentration can be attributed to the updated Resource estimate affected by the 2017 and 2018 range of samples collected in SdO and Archibarca areas of the Cauchari-Olaroz Project. When spatially averaged with the lithium concentration of SdC samples, which essentially dominated the prior estimate, the updated estimate has a relatively small percentage decrease in the overall concentration of lithium.

#### Technical Information

Detailed scientific and technical information on the Cauchari-Olaroz Project can be found in the Cauchari TR that was filed with the securities regulatory authorities in each of the provinces of Canada on April 1, 2019. The Cauchari TR has an effective date of March 1, 2019 and was prepared by Ernest Burga, P.Eng., David Burga, P.Geo., Wayne Genck, P.Eng. and Daniel Weber, P.G., RM-SME, each of whom is a "qualified person" for the purposes of NI 43-101.

A more detailed summary of the Cauchari-Olaroz Project and the Cauchari TR is set forth below under the heading "The Cauchari-Olaroz Project".

#### Exar Joint Venture

In October 2018, LAC, Ganfeng and SQM completed the Joint Venture Transactions, which resulted in a substantial restructuring of the joint ownership and shareholder financing arrangements on the Cauchari-



Olaroz Project. As a result of the Joint Venture Transactions, LAC increased its interest in Exar from 50% to 62.5%, with Ganfeng holding the remaining 37.5% interest.

The Exar Joint Venture includes the following components:

- LAC and Ganfeng have established Exar Capital as a vehicle to fund the development of the Cauchari-Olaroz Project;
- LAC and Ganfeng entered into the Joint Venture Shareholder Agreement to govern the conduct of business by Exar and Exar Capital. The Joint Venture Shareholder Agreement contains customary provisions for agreements of this nature, including provisions governing the following:
  - the Exar Management Committee vested with the authority to approve all business decisions of Exar, Exar Capital and the Cauchari-Olaroz Project. Voting authority for each party is equal to equity ownership interest, although the minority holder has veto rights over several substantive decisions and for substantive changes;
  - o provisions to continue developing a stand-alone management team for the Project;
  - o provisions for the parties to provide technical support on a cost-recovery basis;
  - an entitlement by each party to take a pro rata portion of off-take from the Cauchari-Olaroz Project (subject to LAC's obligations under the Cauchari Financing Transaction to allocate off-take from Stage 1 to Ganfeng and BCP); and
  - provisions governing budgets, funding and cash calls, buy-out rights, transfer restrictions, and other related terms.

The Joint Venture Transactions also provided LAC with increased flexibility to support development funding of Stage 1 development on the Cauchari-Olaroz Project. Ganfeng committed to advancing to LAC up to US\$100 million pursuant to the Limited Recourse Loan Facility. This source of financing, combined with the funding made available under the Amended Credit Facility, provided LAC with an aggregate US\$305 million in funding commitments (excluding draw-downs to date), which is expected to be sufficient to cover its pro rata contributions to development of Stage 1 based on the current mine plan.

A more detailed summary of the Cauchari-Olaroz Project and the Cauchari TR is set forth below under the heading "The Cauchari-Olaroz Project".

#### **Thacker Pass Project**

The Thacker Pass Project hosts a large clay-based lithium Mineral Resource, as well as significant additional clay-based lithium mineralization that has not yet been subject to sufficient exploration or analysis to undertake Mineral Resource estimation.



In 2017, the Company commenced a program to assess the mine development potential of the Thacker Pass deposit (known then as the "Stage 1 Lens", or "Zone 1" area), which hosts the primary Mineral Resource estimate on the project. The Company engaged Advisian WorleyParsons Group to prepare the Thacker Pass TR for a lithium mining and production operation, assembled an experienced management and technical team for the project, conducted process testing and related analysis in support of the Thacker Pass TR and conducted a drilling program with an objective of expanding the Mineral Resource and increasing confidence levels. The Thacker Pass TR was completed in June 2018.

The Thacker Pass TR contemplates initial Phase 1 production capacity of 30,000 TPA of battery-grade Li2CO3 commencing in 2022 and increasing in Phase 2 to 60,000 TPA in 2026. The Project is expected to be developed as an open-pit mining operation using conventional continuous mining equipment. Given the soft nature of the deposit, minimal blasting and crushing is anticipated. The ore will then be processed in a leaching circuit using sulfuric acid to liberate the lithium from the claystone. Following the leaching process, the lithium bearing solution is expected to be purified using crystallizers and reagents to produce battery-grade Li2CO3.

With the reliance on sulfuric acid, the Company anticipates constructing a conventional sulfuric acid plant at site. The sulfuric acid plant will convert molten sulfur into low-cost sulfuric acid, which is expected to reduce transportation costs and provide a low-cost source of electricity. The Thacker Pass TR contemplates selling excess acid to the local market in Nevada. In addition, the Thacker Pass TR contemplates a cogeneration facility at the sulfuric acid plant, providing enough carbon-free electricity to power the entire Thacker Pass Project with excess electricity expected to be conveyed to market via the proximal 115 kV transmission line.

In early 2018, the Company began the permitting process for the Thacker Pass Project by commencing environmental and cultural baseline data collection. The baseline data collection was substantially completed by December 2018, and has since been fully completed. In Q4 2018, the Company submitted a conceptual Mine Plan of Operations ("MPO") to the BLM. It is anticipated that final baseline reports, an environmental report and final MPO will be submitted to the BLM in H2 2019, which will trigger the commencement of a draft Environmental Impact Statement.

A new pilot plant and laboratory has been constructed and commissioned in Reno, Nevada to optimize the process (predominantly to reduce the consumption of sulfuric acid), prepare tailings samples for stability and geochemical analyses, and to provide feed samples to crystallizer vendors who will design the equipment and are expected to provide performance guarantees. The results of the pilot plant test work will be used to finalize the design of the front-end of the process where lithium is extracted (dissolved) from the ore. In accordance with the Thacker Pass TR, this portion of the flowsheet currently represents nearly 40% of OPEX and additional test work will be conducted with the objective of optimizing the efficiency of sulfuric acid while minimizing the dissolution of other elements. The designer of the crystallizer will receive several bulk samples of lithium sulfate brine produced by the pilot plant in Reno. The crystallizer designer will produce lithium carbonate and lithium hydroxide from the lithium sulfate samples and is expected to provide a performance guarantee for the plant-scale facility based on the results obtained on these bulk samples.

In Q2 2018, Lithium Americas commenced exploration drilling in the northwest of the pit area and in the southwest basin (located south of Route 293 and ~2 km southwest of the proposed processing plant). Drilling was completed in Q4 2018. The preliminary results confirm that lithium-bearing claystone extends laterally northwest of the pit area and occurs throughout the southwest Basin within LNC's mineral rights. The Company anticipates using the exploration results as the basis for a NI 43-101 technical report to update the resource estimate feasibility in due course.

Lithium Americas is conducting geotechnical drilling at the plant and tailings storage facility locations in Q1 2019.

Detailed scientific and technical information on the Thacker Pass Project can be found in the Thacker Pass TR that was filed with the securities regulatory authorities in each of the provinces of Canada on August 2, 2018. The Thacker Pass TR has an effective date of August 1, 2018, and was prepared by Reza Ehsani, P.Eng., Louis Fourie, P.Geo., Andrew Hutson, FAusIMM, BE (Mining), Daniel Peldiak, P.Eng., Rob

Spiering, P.Eng., John Young, B.Sc., SME-RM and Ken Armstrong, P.Eng., each of whom is a "qualified person" for the purposes of NI 43-101.

A more detailed summary of the Thacker Pass Project and the Thacker Pass TR is set forth below under the heading "The Thacker Pass Project".

#### **Risk Factors**

An investment in the Company's securities is highly speculative and subject to a number of risks at any given time. The following is a description of the principal risk factors affecting the Company.

Risks related to resource development

### The Cauchari-Olaroz Project and the Thacker Pass Project may not be developed as planned.

The Company's business strategy depends in large part on developing the Cauchari-Olaroz Project and the Thacker Pass Project into one or more commercially viable mines. Whether a mineral deposit will be commercially viable depends on numerous factors, including: (i) the particular attributes of the deposit, such as size, grade and proximity to infrastructure; (ii) commodity prices, which are highly volatile; and (iii) government regulations, including regulations relating to prices, taxes, royalties, land tenure, land use, importing and exporting of Mineral Resources and Mineral Reserves, environmental protection and capital and operating cost requirements. Exar has completed a feasibility study for a 25,000 TPA lithium carbonate production operation at the fully-permitted Cauchari-Olaroz Project. Development activities in respect of the Cauchari-Olaroz Project are in progress, with the advancement of detailed engineering, ponds construction. production wells drilling, infrastructure construction, plant design and purchases of construction equipment and materials, in accordance with the Cauchari-Olaroz Project schedule. LAC has also secured funding that it believes will be sufficient to cover its share of capital expenditure obligations for the first stage of development of the Cauchari-Olaroz Project, and believes that Ganfeng has the financial resources necessary to cover its share. In addition, Lithium Americas has completed a preliminary feasibility study for a 60,000 TPA lithium carbonate production operation to be developed at the Thacker Pass Project, with initial production capacity of 30,000 TPA in Phase 1 and increasing to 60,000 TPA in Phase 2. While the Company began the permitting process for the Thacker Pass Project in early 2018, the permitting process is not yet complete. In addition, development of the Thacker Pass Project is subject to LAC securing any necessary funding and other resources. The projects are also subject to the development and operational risks described elsewhere in this AIF. Accordingly, there can be no assurance that the Company will ever develop either one of these projects. If the Company is unable to develop all or any of its projects into a commercial operating mine, its business and financial condition will be materially adversely affected.

# Market prices for key end-use products will greatly affect the value of the Company and the ability of the Company to develop the Cauchari-Olaroz Project and the Thacker Pass Project.

The ability of the Company to develop the Cauchari-Olaroz Project and the Thacker Pass Project will be significantly affected by changes in the market price of lithium-based end products, such as lithium carbonate. The market price of these commodity-based products fluctuates widely and is affected by numerous factors beyond LAC's control, including world supply and demand, pricing characteristics for alternate energy sources such as oil and gas, the level of interest rates, the rate of inflation and the stability of currency exchange rates. Such external economic factors are influenced by changes in international investment patterns, various political developments and macro-economic circumstances. In addition, the price of lithium products is determined by their purity and performance. The Company may not be able to effectively mitigate against such fluctuations. A fluctuation in these product prices may affect the value of the Company and the potential value of its properties. In addition, as a key component to the mine plan and financial performance of Thacker Pass is the sale of power produced from the proposed sulphuric acid plant, operational pricing and sales of such power will also have a substantial effect on Thacker Pass economics.



### There are risks associated with co-ownership arrangements.

The Company and Ganfeng share ownership of the Cauchari-Olaroz Project. This arrangement is subject to the risks normally associated with the conduct of co-ownership structures. The existence or occurrence of one or more of the following circumstances and events could have a material adverse impact on the Company and the viability of its interest in Exar, the joint venture holding company that owns the Cauchari-Olaroz Project (and in Exar Capital, the joint venture company through which the Company and Ganfeng have agreed to fund the Cauchari-Olaroz Project), which could have a material adverse impact on the Company's business prospects, results of operations and financial condition: (i) disagreements with Ganfeng on how to conduct development and operations; (ii) inability of the parties to meet their obligations under the relevant agreements or to third parties; and (iii) disputes or litigation between the parties regarding budgets, development activities, reporting requirements and other matters.

## There is risk to the growth of lithium markets.

The development of lithium operations at the Cauchari-Olaroz Project and the Thacker Pass Project is almost entirely dependent on the adoption of lithium-ion batteries for electric vehicles and other large format batteries that currently have limited market share and whose projected adoption rates are not assured. To the extent that such markets do not develop in the manner contemplated by the Company, particularly if the rate of adoption or timeline for adoption differs from the Company's current forecasts, then the long-term growth in the market for lithium products will be adversely affected, which would inhibit the potential for development of the projects, their potential commercial viability and would otherwise have a negative effect on the business and financial condition of the Company.

# There is a risk that LAC will not obtain required government permits and operations will be limited by government-imposed limitations.

Government regulations relating to mineral rights tenure, permission to disturb areas and the right to operate can adversely affect LAC. The Company may not be able to obtain all necessary licenses and permits that may be required to carry out exploration or mining at the Cauchari-Olaroz Project and the Thacker Pass Project, in each case, as the Company's development plans for the projects evolve. Obtaining the necessary governmental permits is a complex, time-consuming and costly process. The duration and success of efforts to obtain permits are contingent upon many variables not within the Company's control. While LAC holds permits to construct and operate the contemplated Stage 1 of the Cauchari-Olaroz Project at a production rate of 25,000 TPA, any amendments to this mine plan or an increase in production, including a Stage 2 expansion, would need to be approved by regulatory authorities in Argentina. At the Thacker Pass Project, the permitting process for lithium mining operations is in process at this time. There can be no assurance that all necessary approvals and permits will be obtained and, if obtained, that the costs involved will not exceed the Company's prior estimates. It is possible that the costs and delays associated with the compliance with such standards and regulations could become such that the Company would not proceed with the development of the Cauchari-Olaroz Project or the Thacker Pass Project.



There are also habitat conservation laws that affect the Thacker Pass Project. In 2015, the U.S Fish and Wildlife Service determined not to list the Greater Sage-grouse under the Endangered Species Act. The BLM does consider the Greater Sage-grouse to be a special status species, and the BLM is taking steps to conserve Greater Sage-grouse habitat. BLM has designated lands involving the Thacker Pass Project as a Greater Sage-grouse Priority Habitat Management Area (PHMA) for containing quality Greater Sage-grouse habitat. Public lands immediately north of the Thacker Pass area were withdrawn temporarily from mineral entry in 2015, pending further review. On October 11, 2017, BLM published a Notice stating that the mineral-entry withdrawal had expired. At the same time, BLM published notice that it intended to consider amending the land use plan amendment adopted in 2015 and initiated a public comment period.

Lands involving the Thacker Pass Project are currently governed by the 2015 BLM Winnemucca District Resource Management Plan and the 2015 BLM Approved Resource Management Plan (ARMP) for Nevada and Northeastern California. In late 2018, an ARMP Amendment and related Environmental Impact Statement were finalized and are pending final decision. The stated objectives of the ARMP Amendment, which would supersede the 2015 ARMP, are to better align with the State of Nevada's Plan for conserving sage-grouse populations and to allow the BLM more flexibility in approving projects within Greater Sage-grouse habitat. The Proposed ARMP Amendment and EIS also confirm the elimination of focal areas that were subject to mineral-entry withdrawals.

LAC anticipates that it will be required by BLM to implement varying stages of mitigation measures for sage-grouse habitat throughout any development of its Thacker Pass Project. LAC understands that the BLM can impose conditions on access, project design and periods of use where needed to limit impacts to sage-grouse habitat. There is a risk that development may be subject to time delays or restrictions or mitigation measures in order to address sage-grouse habitat protection that could compromise the economic viability of future development of the Thacker Pass Project. LAC is working with the State of Nevada's Sagebrush Ecosystem Program to quantify the Greater Sage grouse habitat function and develop a program for compliance.

# There is technology risk to the development of the Cauchari-Olaroz Project and the Thacker Pass Project.

To the Company's knowledge, lithium carbonate has never been commercially produced from a smectite hectorite clay resource. While the Company has conducted extensive testing that has produced high quality lithium carbonate using known industry processes and equipment, the processes contemplated by LAC for production of lithium at the Thacker Pass Project have not yet been demonstrated at commercial scale and there is a risk that the Company will not be able to do so. With respect to the Cauchari-Olaroz Project, similar to solid rock deposits, production from brine-recovery projects may be less than in situ volume/grade-based estimates. In the case of brine-recovery projects, the primary extractability limitations are related to low permeability zones, from which brine does not readily flow. A possible analogy in solid rock deposits may be high grade zones for which recovery is not economically feasible due to surrounding lower grade materials, therefore actual production from brine-recovery projects may be less than in situ grades or quantities.

#### The Company may not be able to achieve and manage its expected growth.

The Cauchari-Olaroz Project is in a development stage, which will require a substantial increase in personnel and business operations, and the Company additionally plans to continue to advance the Thacker Pass Project. The transition of a mineral project to a development and operating stage, may place a strain on managerial, financial and human resources. The Company's ability to succeed in these endeavours will depend on a number of factors, including the availability of working capital, existing and emerging competition and the ability to recruit and train additional qualified personnel.



## There are political risks associated with the Company's foreign operations.

The Company's properties are located in Argentina and the United States, exposing it to the laws governing the mining industry in those countries (including recent changes to laws in the United States related to strategic minerals, and the effect thereof on the Company's ability to develop and finance the Thacker Pass project), and the Company co-owns the Cauchari-Olaroz Project with Ganfeng, exposing it to the laws, regulations, policies and other directives governing investments, capital lending and other financial activities by Chinese entities. In particular, there is a general trend towards increasing restrictions on capital outflows from China, including restrictions that impact private companies, such as Ganfeng. To the extent that capital outflows from China are restricted, this could negatively impact the Company's ability to obtain capital funding from Ganfeng required to support development of the Cauchari-Olaroz Project. Changes, if any, in mining, investment or other applicable policies or shifts in political attitude in any of the jurisdictions in which the Company (and in respect of Cauchari-Olaroz, Ganfeng) operates may adversely affect the Company's operations or profitability and may affect the Company's ability to fund its ongoing expenditures at its projects. Regardless of the economic viability of the Company's interest in the Company's properties, and despite being beyond the Company's control, such political changes could have a substantive impact on the Company that may prevent or restrict mining of some or all of any deposits on the Company's properties, including the financial results therefrom.

### Risk associated with an emerging and developing market.

The Company actively operates in Argentina, which is considered an emerging market. Emerging market investments generally pose a greater degree of risk than investment in more mature market economies because the economies in the developing world are more susceptible to destabilization resulting from domestic and international developments. The Company's operations in Argentina expose LAC to heightened risks relating to prevailing political and socioeconomic conditions which have historically included, but are not limited to: high rates of inflation; military repression; social and labour unrest; violent crime; civil disturbance; extreme fluctuations in currency exchange rates; expropriation and nationalization; renegotiation or nullification of existing concessions, licenses, permits and contracts; changes in taxation policies: underdeveloped industrial and economic infrastructure: unenforceability of contractual rights: restrictions on foreign exchange and repatriation; and changing political norms, currency controls and governmental regulations that favour or require the Company to award contracts in, employ citizens of, or purchase supplies from, a particular jurisdiction. As an example, in May 2012, the previous government of Argentina re-nationalized YPF, the country's largest oil and gas company. There can be no assurance that the government of Argentina will not nationalize other businesses operating in the country, including the business of the Company. The Company has not purchased any "political risk" insurance coverage and currently has no plans to do so.

Argentinean regulators have broad authority to shut down and/or levy fines against operations that do not comply with regulations or standards. In addition to factors such as those listed above, the Company's mineral exploration and potential future mining activities in Argentina may also be affected in varying degrees by government regulations with respect to restrictions on production, price controls, foreign exchange controls, export controls, taxes, royalties, environmental legislation and mine safety. Regardless of the economic viability of the Company's interest in the Company's properties, and despite being beyond the Company's control, such factors may prevent or restrict mining of some or all of any deposits which the Company may find on the Company's properties.

Government authorities in emerging market countries often have a high degree of discretion and at times appear to act selectively or arbitrarily, without hearing or prior notice, and sometimes in a manner that may not be in full accordance with the law or that may be influenced by political or commercial considerations. Unlawful, selective or arbitrary governmental actions could include denial or withdrawal of licences, sudden and unexpected tax audits, forced liquidation, criminal prosecutions and civil actions. Although unlawful, selective or arbitrary government action may be challenged in court, such action, if directed at the Company or its shareholders, could have a material adverse effect on the Company's business, results of operations, financial condition and future prospects.



Companies operating in emerging markets are subject from time to time to the illegal activities of others, corruption or claims of illegal activities. Often in these markets the bribery of officials remains common, relative to developed markets. Social instability caused by criminal activity and corruption could increase support for renewed central authority, nationalism or violence and thus materially adversely affect the Company's ability to conduct its business effectively. Such activities have not had a significant effect on the Company's operations; however, there can be no assurance that they will not in the future, in which case they could restrict the Company's operations, business, financial condition, results of operations and future prospects, and the value of the Company could be adversely affected by illegal activities by others, corruption or by claims, even if groundless, implicating the Company in illegal activities.

Investors in emerging markets should be aware that these markets are subject to greater risk than more developed markets, including in some cases significant legal, fiscal, economic and political risks. Accordingly, investors should exercise particular care in evaluating the risks involved in an investment in the Company and must decide for themselves whether, in the light of those risks, their investment is appropriate. Generally, investment in emerging and developing markets is suitable only for sophisticated investors who fully appreciate the significance of the risks involved.

## The Company does not have any experience in putting a mining project into production.

The Company has never completed a mining development project. The future development of properties found to be economically feasible will require the construction and operation of mines, processing plants and related infrastructure and the Company does not have any experience in taking a mining project to production. As a result of these factors, it is difficult to evaluate the Company's prospects, and the Company's future success is more uncertain than if it had a more proven history. In addition, the Company is and will continue to be subject to all the risks associated with establishing new mining operations, including: the timing and cost, which can be considerable, of the construction of mining and processing facilities; the availability and cost of skilled labour and mining equipment; the need to obtain necessary environmental and other governmental approvals and permits and the timing of the receipt of those approvals and permits; the availability of funds to finance construction and development activities; potential opposition from non-governmental organizations, indigenous peoples, environmental groups or local groups which may delay or prevent development activities; and potential increases in construction and operating costs due to changes in the costs of fuel, power, materials and supplies.

It is common in new mining operations to experience unexpected costs, problems and delays during construction, development and mine start-up. In addition, delays in the early stages of mineral production often occur. Accordingly, the Company cannot provide assurance that its activities will result in profitable mining operations at its mineral properties.

## The Company may experience delays and construction cost overruns.

Delays and cost overruns may occur in completing the development and construction of the Company's mineral projects. A number of factors which could cause such delays or cost overruns include, without limitation, permitting delays, construction pricing escalation, changing engineering and design requirements, the performance of contractors, labour disruptions, adverse weather conditions and the availability of financing. Even if commercial production is achieved at one of the Company's mineral properties, equipment and facilities may not operate as planned due to design or manufacturing flaws, which may not all be covered by warranty. Mechanical breakdown could occur in equipment after the period of warranty has expired, resulting in loss of production as well as the cost of repair. Any delay, or cost overrun, may adversely impact the Company's ability to fully fund its required expenditures, or alternatively, may require the Company to consider less attractive financing solutions.

#### Risks related to cost estimates and negative operating cash flow.

Capital costs, operating costs, production and economic returns, and other estimates may differ significantly from those anticipated by the Company's current estimates, and there can be no assurance



that the Company's actual capital, operating and other costs will not be higher than currently anticipated. The Company's actual costs and production may vary from estimates for a variety of reasons, including, but not limited to: lack of availability of resources or necessary equipment; unexpected construction or operating problems; cost overruns, realized lithium prices; revisions to construction plans; risks and hazards associated with mineral production; natural phenomena; floods; unexpected labour shortages or strikes; general inflationary pressures (such as adverse changes in the exchange rate of Argentinian pesos to US dollars, which would reduce the effective return of VAT-related payments previously made by the Company) and interest and currency exchange rates. Many of these factors are beyond the Company's control and could have a material effect on the Company's operating cash flow, including the Company's ability to service its indebtedness.

### Mineral development projects are subject to operational risks.

The Company's operations are subject to all of the risks normally incidental to the exploration for, and the development and operation of, mineral properties. The Company has implemented comprehensive safety and environmental measures designed to comply with or exceed government regulations and ensure safe, reliable and efficient operations in all phases of its business. Nevertheless, mineral exploration and exploitation involves a high degree of risk, which even a combination of experience, knowledge and careful evaluation may not be able to overcome. Unusual or unexpected formations, formation pressures, fires, power outages, shutdowns due to equipment breakdown or failure, aging of equipment or facilities, unexpected maintenance and replacement expenditures, human error, labour disruptions or disputes, inclement weather, higher than forecast precipitation, flooding, explosions, releases of hazardous materials, tailings impoundment failures, cave-ins, landslides, earthquakes and the inability to obtain adequate machinery, equipment or labour are some of the risks involved in mineral exploration and exploitation activities, which may, if as either a significant occurrence or a sustained occurrence over a significant period of time, result in a material adverse effect. The Company expects to rely on third-party owned infrastructure in order to successfully develop and operate its projects, such as power, utility and transportation infrastructure. Any failure of this infrastructure without adequate replacement or alternatives may have a material impact on the Company.

# Changes in government regulations may affect the Company's development of the Cauchari-Olaroz Project and the Thacker Pass Project.

Changes to government laws and regulations may affect the development of the Cauchari-Olaroz Project and the Thacker Pass Project. Such changes could include laws relating to taxation, royalties, the repatriation of profits, restrictions on production, export controls, environmental and ecological compliance, mine safety and numerous other aspects of the business.

Provincial governments of Argentina have considerable authority over exploration and mining in their province, and there are Argentinean provinces where the provincial government has taken an anti-mining stance by passing laws to curtail or ban mining in those provinces. The Fraser Institutes', *Annual Survey of Mining Companies: 2017*, demonstrated a significant improvement of the Province of Jujuy among mining jurisdictions on several of its measurement indices. Although the Province of Jujuy had placed slightly lower on said indices in the 2018 version of the report, it was still significantly improved from previous periods. LAC believes the current provincial government of Jujuy Province, where the Cauchari-Olaroz Project is situated, is supportive of the exploration and mining industry generally, and the project in particular, and the Company and JEMSE, the Jujuy government's mining Company, have entered into a letter of intent whereby JEMSE will receive an 8.5% equity interest in Exar and is to pay for this interest from dividends from future profits from operations. Nevertheless, the political climate for mineral development can change quickly, and there is no assurance that such sentiment will be maintained.

# Changes to environmental requirements could significantly increase the Company's costs.

LAC must comply with stringent environmental regulation in carrying out work on the Cauchari-Olaroz Project and the Thacker Pass Project. Environmental regulations are evolving in a manner that is expected



to require stricter standards and enforcement, increased fines and penalties for non-compliance, more stringent environmental assessments of proposed projects and a heightened degree of responsibility for companies and their officers, directors and employees. Applicable environmental laws and regulations may require public disclosure and consultation. It is possible that a legal protest could be triggered through one of these requirements or processes that could delay development activities. No assurance can be given that new environmental laws and regulations will not be enacted or that existing environmental laws and regulations will not be applied in a manner that could limit or curtail the Company's development programs. Such changes in environmental laws and regulations and associated agency requirements could delay and/or increase the cost of exploration and development of the Cauchari-Olaroz Project and the Thacker Pass Project.

### The Company may not be insured against all risks involved in its business operations.

In the course of exploration, development and production of mineral properties, certain risks, and in particular, unexpected or unusual geological operating conditions and other environmental occurrences may occur. It is not always possible to fully insure against such risks and, even where such insurance is available, the Company may decide to not take out insurance against such risks. 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 Company. The Company maintains liability insurance in accordance with industry standards, however, the nature of these types of risks is such that liabilities could exceed policy limits and the Company could incur significant costs that could have a material adverse effect on its business, results of operations and financial condition.

#### Mineral tenure risk.

The Mining Act governs the Company's ability to develop and mine the minerals on the claims that form the Thacker Pass Project which are locatable under the Mining Act. There can be no assurance of title to any of the Company's property interests, or that such title will ultimately be secured. No assurance can be given that applicable governments will not revoke or significantly alter the conditions of the applicable exploration and mining authorizations nor that such exploration and mining authorizations will not be challenged or impugned by third parties. The Company's property interests may also be subject to prior unregistered agreements or transfers or other land claims, and title may be affected by undetected defects and adverse laws and regulations.

The Company cannot guarantee that title to its properties will not be challenged. A successful challenge to the precise area and location of the Company's mineral claims could result in the Company being unable to develop its mineral properties or being unable to enforce its rights with respect to its mineral properties.

The Mining Act authorizes the Company to develop and mine the minerals on the claims that form the Thacker Pass Project which are locatable under the Mining Act. The Mining Act does not explicitly authorize the owner of an unpatented mining claim to sell minerals that are leasable under the Leasing Act. Leasable minerals include potassium and sodium. The Interior Board of Land Appeals of the Department of the Interior has held that, under certain circumstances, the owner of an unpatented mining claim has the authority and right to process and sell minerals governed by the Leasing Act, particularly when they are byproducts of the processing of minerals which are locatable under the Mining Act. This matter has not yet been definitively determined in respect of the Thacker Pass Project.

## The Company operates in a highly competitive mining industry.

The mining industry is competitive in all of its phases and requires significant capital, technical resources, personnel and operational experience to effectively compete. Because of the high costs associated with exploration, the expertise required to analyse a project's potential and the capital required to develop a mine, larger companies with significant resources may have a competitive advantage over LAC. The Company faces strong competition from other mining companies, some with greater financial resources, operational experience and technical capabilities than LAC possesses.



The Company also plans to purchase certain supplies and retain the services of various companies in Argentina to meet its future business plans. It may be difficult to find or hire qualified people in the mining industry who are situated in Argentina or to obtain all of the necessary services or expertise in Argentina or to conduct operations on its projects at reasonable rates. If qualified people and services or expertise cannot be obtained in Argentina, the Company may need to seek and obtain those services from people located outside of Argentina, which will require work permits and compliance with applicable laws, and could result in delays and higher costs to the Company to conduct its operations in Argentina.

As a result of this competition, the Company may be unable to maintain or acquire financing, personnel, technical resources or attractive mining properties on terms it considers acceptable.

## Health and safety risks.

The mineral exploration, development and production business carries an inherent risk of liability related to worker health and safety, including the risk of government-imposed orders to remedy unsafe conditions, potential penalties for contravention of health and safety laws, licences, permits and other approvals, and potential civil liability. Compliance with health and safety laws (and any future changes) and the requirements of licences, permits and other approvals remain material to the Company's business. The Company may become subject to government orders, investigations, inquiries or other proceedings (including civil claims) relating to health and safety matters. The occurrence of any of these events or any changes, additions to or more rigorous enforcement of health and safety laws, licences, permits or other approvals could have a significant impact on operations and/or result in additional material expenditures. As a consequence, no assurances can be given that additional workers' health and safety issues relating to presently known or unknown matters will not require unanticipated expenditures, or result in fines, penalties or other consequences (including changes to operations) material to its business and operations.

#### There is market risk associated with the RheoMinerals Business.

The success of RheoMinerals will depend upon its current and proposed products meeting acceptable cost and performance criteria in the marketplace. There can be no assurances that the Company's products will meet applicable price or performance objectives or that unanticipated technical, regulatory or other problems will not occur which would result in increased costs or material delays. The use of RheoMinerals' organoclay products also depends in large part on the state of deep well and directional drilling to access deposits of oil and gas. In the case of certain product applications, RheoMinerals' products compete with a number of other materials, such as polymers and other competitors of organophilic clay products. Improvements in the technology, production, pricing or acceptance of these competitive materials relative to RheoMinerals' products, or other changes in the industries for these competitive materials, could have a negative effect on the Company's business, results of operations and financial condition. In 2018, the Company recognized a non-cash impairment on the value of RheoMinerals. There can be no certainty that the Company will not need to recognize further impairments on the value of RheoMinerals.

#### Mineral Resources and Mineral Reserves are only estimates.

The Mineral Resources and Mineral Reserves estimates included in this AIF are estimates only. No assurance can be given that any particular level of recovery of minerals will in fact be realized or that identified Mineral Resources or Mineral Reserves will ever qualify as a commercially mineable (or viable) deposit which can be legally and economically exploited. In addition, the grade of mineralization which may ultimately be mined may differ from that indicated by drilling results and such differences could be material. Production can be affected by such factors as permitting regulations and requirements, weather, environmental factors, unforeseen technical difficulties, unusual or unexpected geological formations and work interruptions. By their nature, mineral resource estimates are imprecise and depend, to a certain extent, upon analysis of drilling results and statistical inferences that may ultimately prove to be inaccurate. The estimated Mineral Resources and Mineral Reserves described in this AIF should not be interpreted as



assurances of commercial viability or potential or of the profitability of any future operations. Investors are cautioned not to place undue reliance on these estimates.

In addition, Inferred Mineral Resources are quoted in the Thacker Pass TR. Inferred Mineral Resources have a great amount of uncertainty as to their existence, and economic and legal feasibility. Accordingly, there is no assurance that Inferred Mineral Resources will ever be upgraded to a higher category. Investors are cautioned not to assume that part or all of an Inferred Mineral Resource exists, or is economically or legally mineable.

## The Company may face opposition to mining projects.

The Cauchari-Olaroz Project and the Thacker Pass Project, like many mining projects, may have opponents. Opponents of other mining projects have, in some cases, been successful in bringing public and political pressure against mining projects. In the event there is opposition to the Cauchari-Olaroz Project and/or the Thacker Pass Project, the Company's development of such properties may be delayed or prevented, even if such development is found to be economically viable and legally permissible.

## The Cauchari and Olaroz salt lakes are not subject to reservoir management rules.

There are no general unitization or reservoir management rules governing the salt lakes on which the Company's Cauchari-Olaroz Project is situated or on any of the other salt lakes at which the Company holds mining or exploration permits. Unitization is the joint, coordinated operation of a reservoir by all the owners of rights in the separate tracts overlying the reservoir. Without unitized operation of the reservoir, the "rule of capture" results in competitive drilling, extraction and production with consequent economic and physical waste, as each separate owner attempts to secure his or her "fair share" of the underground resource by drilling more and pumping faster than its neighbour. As a result, the lack of unitization and reservoir management rules on the salt lakes on which the Company operates may materially adversely affect the Company's operations and production. Exar and Sales de Jujuy S.A. (an Orocobre subsidiary) have entered into a Joint Operation Protocol for the Olaroz and Cauchari Salt Flats designed to coordinate their activities in the area, which protocol has since been submitted to the Province of Jujuy authority, particularly in respect of the tenements adjacent to, and between those held by each company, in accordance to the current environmental permit that each company has been granted by the Province of Jujuy authority.

# The aboriginal communities located on the Cauchari-Olaroz Project may not honour the current surface access agreements with Exar.

Exar has entered into six agreements for surface access with the aboriginal communities located on the exploitation area of the Cauchari-Olaroz Project. Should any of the aboriginal communities decide not to honour such agreements, Exar would be required to enforce its statutory access rights under the provisions of the Argentine Mining Code; however this would be a disruptive and potentially costly process. To date, there are settled agreements covering construction and development of the Cauchari-Olaroz Project with all communities in the exploitation area, with one additional community agreement remaining to be settled that will be necessary for the gas pipeline. A failure to settle these agreements could disrupt the development timetable for the Cauchari-Olaroz Project. In addition, lack of surface access agreements with local communities could affect the renewal of the EIS.

Risks related to our business and securities

# The Company has not yet achieved profitable operations and expects to incur further losses in the development of its business.

The Company's ability to continue as a going concern is dependent upon the ability to generate future profitable operations and/or to obtain the necessary financing to meet its obligations and repay its liabilities arising from normal business operations when they come due. The Company has reported net losses and comprehensive losses for the financial year ended December 31, 2018. The Company's business does not



currently operate on a self-sustaining basis and until it is successfully able to fund its expenditures from its revenues, its ability to continue as a going concern is dependent on raising additional funds.

# The Amended Credit Facility and the Limited Recourse Loan Facility contain covenants which the Company could fail to meet.

The Amended Credit Facility and the Limited Recourse Loan Facility contain operating and reporting covenants, and compliance with those covenants may increase the Company's administrative, legal and financial costs, make some activities more difficult, time-consuming or costly and increase demand on the Company's system and resources.

The failure of the Company to comply with restrictions and covenants under its indebtedness, which may be affected by events beyond the Company's control, could result in a default under such indebtedness, which could result in acceleration thereunder and the Company being required to repay amounts owing thereunder. If the Company's indebtedness is accelerated, the Company may not be able to repay its indebtedness or borrow sufficient funds to refinance it, and any such prepayment or refinancing could adversely affect the Company's financial condition. Even if the Company is able to obtain new financing, it may not be on commercially reasonable terms or terms that are acceptable to the Company.

The Company currently has no source of cash flow to service its debt obligations and will need to secure such funding either through transition to successful production on the Cauchari-Olaroz Project or through alternative financing. If the Company is unable to repay amounts owing, the lenders under its indebtedness could proceed to realize upon the security, as applicable, granted to them to secure the indebtedness. The Amended Credit Facility is secured against collateral of the Company, and a realization by the lenders thereunder of any or all of the security will have a material adverse effect on the Company's business, financial condition, results of operations, cash flows and prospects and may result in a substantial reduction or elimination entirely of assets available for distribution to equity holders on a dissolution or wind-up of the Company.

The acceleration of the Company's indebtedness under one agreement may permit acceleration of indebtedness under other agreements that contain cross default or cross-acceleration provisions. Even if the Company is able to comply with all applicable covenants, restrictions on its ability to manage its business in its sole discretion could adversely affect its business by, among other things, limiting its ability to take advantage of financings, mergers, acquisitions and other corporate opportunities that the Company believes may be beneficial to it.

Indebtedness owing under the Amended Credit Facility and the Limited Recourse Loan Facility could have other significant consequences on the Company, including: (i) increasing the Company's vulnerability to general adverse economic and industry conditions; (ii) requiring the Company to dedicate a substantial portion of its expected cash flow from expected operations to making interest and principal payments on its indebtedness, reducing the availability of the Company's cash flow to fund capital expenditures, working capital and other general corporate purposes; (iii) limiting the Company's flexibility in planning for, or reacting to, changes in its business; (iv) placing the Company at a competitive disadvantage compared with its competitors that have less debt or greater financial resources; and (v) limiting, including pursuant to any financial and other restrictive covenants in such indebtedness, the Company's ability to, among other things, borrow additional funds or raise capital on commercially reasonable terms, if at all, enter into a reorganization, amalgamation, arrangement, merger or other similar transaction, make an investment in or otherwise acquire the property of another person, and materially amend or provide waivers or consents with respect to material contracts.

# The Company will require additional funding, potentially diluting the holdings of existing shareholders or increasing financial risk through debt issuance.

The Company has limited financial resources and is subject to significant capital requirements associated with its projects. There is no assurance that the Company will be able to obtain sufficient financing in the future on terms acceptable to it. The ability of the Company to arrange additional financing in the future will



depend, in part, on prevailing capital market conditions as well as the business performance of the Company. Failure to obtain additional financing on a timely basis may cause the Company to postpone, abandon, reduce or terminate its operations and could have a material adverse effect on the Company's business, results of operations and financial condition.

A likely source of future financing is the sale of additional Common Shares, which would mean that each existing shareholder would own a smaller percentage of the Common Shares then outstanding. Alternatively, the Company may rely on debt financing and assume debt obligations that require it to make substantial interest and principal payments. Also, the Company may issue or grant warrants or options in the future pursuant to which additional Common Shares may be issued. Exercise of such warrants or options will result in dilution of equity ownership to the Company's existing shareholders.

The Company may also sell a further interest in the Cauchari-Olaroz Project, or all or a portion of the Thacker Pass Project or an additional royalty therein, or may also sell an interest in RheoMinerals, any of which would mean that each existing shareholder would own a smaller percentage of the Cauchari-Olaroz Project, Thacker Pass Project or RheoMinerals, respectively.

# The Company relies on intellectual property and confidentiality agreements to project our rights and confidential information.

The Company relies on the ability to protect its intellectual property rights and depends on patent, trademark and trade secret legislation to protect its proprietary know-how. There is no assurance that the Company has adequately protected or will be able to adequately protect its valuable intellectual property rights, or will at all times have access to all intellectual property rights that are required to conduct its business or pursue its strategies, or that the Company will be able to adequately protect itself against any intellectual property infringement claims. There is also no assurance that competitors of LAC will not be able to develop similar technology, processes or know how independently, that the Company's trade secrets will not be revealed, that the claims allowed with respect to any current or future patents pending, or patents now held, will be broad enough to protect the Company's intellectual property rights, or that foreign intellectual property laws will adequately protect such rights. Failure of any intellectual property rights to provide protection to the Company could result in its competitors offering similar products to RheoMinerals' organophilic clay-based products or utilizing its lithium extraction process. Any adverse outcome that the Company may experience whilst attempting to obtain, maintain or enforce its intellectual property rights could have a material adverse effect on the Company's business, results of operations and financial condition.

We also rely on confidentiality agreements with certain employees, consultants and other third parties to protect, in part, trade secrets and other proprietary information. These agreements could be breached and we may not have adequate remedies for such a breach. In addition, others could independently develop substantially equivalent proprietary information or gain access to our trade secrets or proprietary information.

#### The Company is dependent on the expertise of consultants.

The Company has relied on, and may continue to rely on, consultants and others for mineral exploration and exploitation expertise. The Company believes that those consultants are competent and that they have carried out their work in accordance with internationally recognized industry standards. However, if the work conducted by those consultants is ultimately found to be incorrect or inadequate in any material respect, the Company may experience delays or increased costs in developing its properties.

## The Company has no history of paying dividends.

LAC has not paid dividends on its Common Shares since incorporation and presently has no ability to generate earnings as its mineral properties are in the exploration and development stage. If the Thacker Pass Project or the Cauchari-Olaroz Project is successfully developed, the Company anticipates that it will retain future earnings and other cash resources for the future operation and development of its business.



The Company does not intend to declare or pay any cash dividends in the foreseeable future. Payment of any future dividends is solely at the discretion of the Board, which will take into account many factors including the Company's operating results, financial condition and anticipated cash needs. For these reasons, LAC may never pay dividends.

### The success of the Company is largely dependent on a few key individuals.

The success of the Company will be largely dependent upon the performance of its key officers, consultants and employees. Failure to retain key individuals or to attract, and, if attracted, retain additional key individuals with necessary skills could have a materially adverse impact upon the Company's success. The Company has not purchased any "key-man" insurance with respect to any of its directors, officers or key employees and has no current plans to do so.

### The Company's business is affected by fluctuations in currency exchange rates.

Business is transacted by the Company primarily in Canadian, U.S. and Argentinean currencies. Fluctuations in exchange rates may have a significant effect on the cash flows of the Company. The Argentinean peso has been subject to large devaluations and revaluations in the past and may be subject to significant fluctuations in the future. Future changes in exchange rates could materially affect the Company's results in either a positive or negative direction. The Company's Thacker Pass Project and its RheoMinerals business are located in Nevada, and most of the property related expenditures, exploration and development costs are denominated in U.S. dollars. The Company's Cauchari-Olaroz Project is located in Argentina, where certain costs are denominated in the Argentinean peso and certain costs are denominated in U.S. dollars. Appreciation of U.S. or Argentinean currency compared to Canadian currency could make property expenditures more expensive for the Company. While the Company does not engage in foreign exchange hedging, it holds a significant portion of its cash balance in U.S. currency in order to meet its US currency obligations.

## Risks related to legal proceedings.

Due to the nature of the Company's business and status as a publicly traded entity, we may be subject to a variety of regulatory investigations, claims, lawsuits and other proceedings in the ordinary course of the Company's business. The results of these legal proceedings cannot be predicted with certainty due to the uncertainty inherent in litigation, including the effects of discovery of new evidence or advancement of new legal theories, the difficulty of predicting decisions of judges and juries and the possibility that decisions may be reversed on appeal. Defense and settlement costs of legal claims can be substantial, even with respect to claims that have no merit.

Litigation may be costly and time-consuming and can divert the attention of management and key personnel from our business operations. If we are unsuccessful in our defense of claims or unable to settle claims in a manner satisfactory to us, we may be faced with significant monetary damages or injunctive relief against us that could have a material adverse effect on our business and financial condition. To the extent the Company is involved in any active litigation, the outcome of such matters may not be currently determinable nor is it possible to accurately predict the outcome or quantum of any such proceedings at this time.

## Conflicts of interest may arise for certain directors and officers of the Company.

Certain directors and officers of the Company are, or may become, associated with other natural resource companies which may give rise to conflicts of interest. In accordance with the BCBCA, directors who have a material interest in any person who is a party to a material contract or a proposed material contract with the Company are required, subject to certain exceptions, to disclose that interest and generally abstain from voting on any resolution to approve the contract. In addition, directors and the officers are required to act honestly and in good faith with a view to the best interests of the Company.



## The Company's share price is subject to market volatility.

The market price of a publicly traded stock, especially a resource issuer such as LAC, is affected by many variables in addition to those directly related to exploration successes or failures, some of which are outside of the Company's control. Such factors include the general condition of markets for resource stocks, the strength of the economy generally, the availability and attractiveness of alternative investments, analysts' recommendations and their estimates of financial performance, investor perception and reactions to disclosure made by the Company and by the Company's competitors, and the breadth of the public markets for the stock. Therefore, investors could suffer significant losses if the Company's Common Shares are depressed or illiquid when an investor seeks liquidity.

# We will have broad discretion in the use of the net proceeds of any future offerings and may not use them to effectively manage our business.

If the Company requires additional financing by offerings of its equity securities, management of the Company will have certain discretion over the use of proceeds of any offering of securities as well as the timing of expenditures. As a result, investors will be relying on the judgment of management as to the specific application of the proceeds of any offering of securities. Management may use the net proceeds of any offering of securities in ways that an investor may not consider optimal. The results and effectiveness of the application of the net proceeds of any offering of securities are uncertain. If the proceeds are not applied effectively, the Company's operations may suffer.

# Enforcement of judgments or bringing actions outside the United States against us and our directors, officers and the experts named herein may be difficult.

We are organized under the laws of, and headquartered in, British Columbia, Canada, and a majority of our directors, officers and the experts named in this AIF are not citizens or residents of the United States. In addition, a substantial part of our assets are located outside the United States. As a result, it may be difficult or impossible for an investor to (i) enforce in courts outside the United States judgments against us and our directors, officers and the experts named in this AIF obtained in U.S. courts based upon the civil liability provisions of U.S. federal securities laws or (ii) bring in courts outside the United States an original action against us and our directors, officers and the experts named in this AIF to enforce liabilities based upon such U.S. securities laws.

# Significant shareholders of the Company could influence our business operations and sales of our common shares by such significant shareholders could influence our common share price.

To our knowledge, as of the date hereof, GFL Lithium Co., Ltd. and BCP Innovation Pte Ltd. beneficially hold approximately 16.9% and 15.8% of our outstanding common shares, respectively. For as long as these persons directly or indirectly maintain a significant interest in the Company, they may be in a position to affect our governance and operations. In addition, such persons may have significant influence over the passage of any resolution of our shareholders (such as would be required, to amend our constating documents or take certain other corporate actions) and may, for all practical purposes, be able to ensure the passage of any such resolution by voting for it or prevent the passage of any such resolution by voting against it. The effect of this influence may be to limit the price that investors are willing to pay for our common shares. In addition, the potential that such persons may sell their common shares in the public market (commonly referred to as "market overhang"), as well as any actual sales of such common shares in the public market, could adversely affect the market price of our common shares.

## The Company may face cyber-security risks and threats.

Threats to information technology systems associated with cyber-security risks and cyber incidents or attacks continue to grow. It is possible that the business, financial and other systems of the Company or the companies in which it has invested could be compromised, which might not be noticed for some period



of time. Risks associated with these threats include, among other things, loss of intellectual property, disruption of business operations and safety procedures, loss or damage to worksite data delivery systems, and increased costs to prevent, respond to or mitigate cyber-security events.

If we were to lose our foreign private issuer status under U.S. federal securities laws, we would likely incur additional expenses associated with compliance with the U.S. securities laws applicable to U.S. domestic issuers.

As a foreign private issuer, as defined under the *Securities Exchange Act of 1934*, we are exempt from certain of the provisions of the U.S. federal securities laws. However, if we were to lose our status as a foreign private issuer, we may become subject to more onerous regulatory and reporting requirements in the United States. Compliance with these additional regulatory and reporting requirements under U.S. securities laws would likely result in increased expenses and would require our management to devote substantial time and resources to comply with new regulatory requirements. Further, to the extent that we were to offer or sell our securities outside of the United States, we would have to comply with the more restrictive Regulation S requirements that apply to U.S. companies, and we would no longer be able to utilize the multijurisdictional disclosure system forms for registered offerings by Canadian companies in the United States, which could limit our ability to access the capital markets in the future.

## Forward-Looking Information and FOFI may prove inaccurate.

Readers are cautioned not to place undue reliance on forward-looking information. By their nature forward-looking information and FOFI involve numerous assumptions and known and unknown risks and uncertainties, of both a general and specific nature, that could cause actual results to differ materially from those suggested by the forward-looking information and/or FOFI or contribute to the possibility that predictions, forecasts or projections will prove to be materially inaccurate.

#### The Cauchari-Olaroz Project

The scientific and technical information regarding the Cauchari-Olaroz Project is derived, in part, from the Cauchari TR. A copy of the Cauchari TR is available on the Company's website at www.lithiumamericas.com and on the Company's SEDAR profile at www.sedar.com.

## **Property Description, Location and Access**

The Cauchari and Olaroz Salars are located in the Department of Susques in the Province of Jujuy in northwestern Argentina, approximately 250 km northwest of San Salvador de Jujuy, the provincial capital. The nearest port is Antofagasta (Chile), located 530 km to the west. Access is via paved National Highways 9 and 52, which connect the site to San Salvador de Jujuy and Salta in Argentina. The midpoint between the Olaroz and Cauchari Salars is located on Highway 52, 55 km west of the Town of Susques. In addition, Highway 52 connects to Paso Jama, a national border crossing between Chile and Argentina, providing connection to Chilean Route 27 and granting convenient access to Antofagasta and Mejillones, likely embarkation ports for the product. Access is possible through a gravel road (Route 70) which skirts the west side of the salars, this road is approximately one km from the plant site.

LAC holds its interest in the Cauchari-Olaroz Project through a 62.5% interest in Exar and Exar Capital, with Ganfeng holding the remaining 37.5% interest. Exar acquired title to the project through direct staking or entering into exploration and exploitation contracts with third party property owners. The claims are contiguous and cover most of the Cauchari Salar and the eastern portion of the Olaroz Salar. The area that contains the Mineral Resource and Mineral Reserve estimate is covered by mining concessions which grants the holder a perpetual mining right, subject to the payment of a fee and an agreed upon investment in accordance with the Argentine Mining Code.



On September 11, 2018 Exar exercised its option pursuant to the Los Boros Option Agreement for the transfer of title to Exar of certain mining properties that comprised a portion of the Cauchari-Olaroz Project. Under the terms of the Los Boros Option Agreement, Exar paid US\$100,000 upon signing and exercised the purchase option for the total consideration of US\$12,000,000, to be paid in 60 quarterly instalments of US\$200,000. The first installment becomes due upon occurrence of one of the following two conditions, whichever comes first: (i) the third anniversary of the purchase option exercise date; or (ii) the beginning of commercial exploitation with a minimum production of 20,000 tonnes of LCE. As security for the transfer of title to the mining properties under the Los Boros Option Agreement, Los Boros granted to Exar a mortgage for US\$12,000,000.

In accordance with the Los Boros Option Agreement, on November 27, 2018 Exar paid Los Boras a US\$300,000 royalty which was due within 10 days of the commercial plant construction start date.

According to the Los Boros Option Agreement, a 3% net profit interest royalty will have to be paid to Los Boros by Exar for 40 years, payable in Argentinian pesos, annually within the 10 business days after each calendar year end.

Exar can cancel the first 20 years of net profit royalty interest in exchange for a one-time payment of US\$7,000,000 and the next 20 years for an additional payment of US\$7,000,000.

In October 2012, Exar entered into a letter of intent with JEMSE, an entity controlled by the Province of Jujuy, whereby JEMSE has a right, subject to certain conditions, to acquire an 8.5% equity interest in the Cauchari-Olaroz Project in consideration for US\$1.00 and providing management services as required to develop the project. These management services include liaisons with the national customs authorities, with the governing bodies of the Province of Jujuy and the municipality of Susques, with the authorities of Argentina's Central Bank to facilitate the import and export of currency, and the sourcing of local service providers and other providers for project-related matters. This right becomes operative once financing is secured to develop the project and a definitive agreement is reached. If the conditions are met and it exercises its right, JEMSE would be required to provide its pro rata (8.5%) share of the financing requirements for the construction of the Cauchari-Olaroz project. These funds would be loaned to JEMSE by the shareholders of Exar and would be repayable out of one-third of the dividends to be received by JEMSE over future years from the project. The distribution of dividends to JEMSE and other shareholders in the project will only commence once approved by Exar and all annual commitments related to the project's debt have been met.

JEMSE would be required to cover its pro rata share of financing requirements for the construction of the Cauchari-Olaroz Project. These funds would be loaned to JEMSE by the other shareholders of Exar and would be repayable out of one-third of the dividends to be received by JEMSE from Exar over future years of the Cauchari-Olaroz Project.

The surface rights of the area subject to exploitation are owned by local aboriginal communities. Exar signed contracts with each aboriginal community to have the right to explore the property and for surface use, water use, transit, and building ponds and facilities. Most of these contracts also cover development and mining operations by Exar. For those contracts in which development and mining are not specifically addressed, Exar is working with the relevant community to extend the coverage of the contract to those areas. LAC has also agreed to support local communities through a number of infrastructure and education programs.

BCP and Ganfeng completed the Cauchari Financing Transactions in 2017, and the Company and Ganfeng completed the Joint Venture Transactions in 2018.

## History

Historically, Rio Tinto has mined borates on the western side of Cauchari, at Yacimiento de Borato El Porvenir. Grupo Minero Los Boros S.A. mines a few thousand TPA of ulexite on the east side of the Olaroz Salar. No other mining activity (including lithium production) has been recorded at the properties comprising



the Cauchari-Olaroz Project. LAC acquired mining and exploration permits across the Cauchari and Olaroz Salars during 2009 and 2010 and initiated lithium exploration activities over these claims during 2009.

## Geological Setting, Mineralization and Deposit Types

#### Geology

There are two dominant structural features in the region of the Cauchari and Olaroz Salars: north-south trending high-angle normal faults and northwest-southeast trending lineaments. The high-angle north-south trending faults form narrow and deep horst-and-graben basins which are accumulation sites for numerous salars, including Olaroz and Cauchari. Basement rock in this area is composed of lower ordovician turbidites (shale and sandstone) intruded by late ordovician granitoids. It is exposed to the east, west and south of the two salars, and generally along the eastern boundary of the Puna Region.

The salars are in-filled with laminar deposits, dominated by the following five primary informal lithological units that have been identified in drill cores: (i) red silts with minor clay and sand; (ii) banded halite beds with clay, silt and minor sand; (iii) fine sands with minor silt and salt beds; (iv) massive halite and banded halite beds with minor sand; and (v) medium and fine sands.

Alluvial deposits intrude into these salar deposits to varying degrees, depending on location. The alluvium surfaces slope into the salar from outside the basin perimeter. Raised bedrock exposures occur outside the salar basin. The most extensive intrusion of alluvium into the basin is the Archibarca Fan, which partially separates the Olaroz and Cauchari Salars. Route 52 is constructed across this alluvial fan. In addition to this major fan, much of the perimeter zone of both salars exhibits encroachments of alluvial material associated with fans of varying sizes.

#### Mineralization

The brines from Cauchari are saturated in sodium chloride with total dissolved solids on the order of 27% (324 to 335 grams per litre) and an average density of about 1.215 grams per cubic centimetre. The other primary components of these brines include: potassium, lithium, magnesium, calcium, sulphate, bicarbonate, and boron as borates and free boric acid. Since the brine is saturated in NaCl, halite is expected to precipitate during evaporation. In addition, the Cauchari brine is predicted to initially precipitate ternadite as well as a wide range of secondary salts that could include: astrakanite, schoenite, leonite, kainite, carnalite, epsomite and bischofite.

#### Deposit Type

The Cauchari and Olaroz Salars are classified as "Silver Peak, Nevada" type terrigenous salars. Silver Peak, Nevada in the United States was the first lithium-bearing brine deposit in the world to be exploited. These deposits are characterized by restricted basins within deep structural depressions in-filled with sediments differentiated as inter-bedded units of clays, salt (halite), sands and gravels. In the Cauchari and Olaroz Salars, a lithium-bearing aquifer has developed during arid climatic periods. On the surface, the salars are presently covered by carbonate, borax, sulphate, clay and sodium chloride facies. Cauchari and Olaroz have relatively high sulphate contents and therefore both salars can be further classified as "sulphate type brine deposits".

## Exploration

Other than drilling, the exploration programs conducted on the Cauchari-Olaroz Project area included the following:

• Seismic Geophysical Program – Seismic surveying was conducted to support delineation of basin geometry, mapping of basin-fill sequences and siting borehole locations.



- TEM Survey TEM surveying was conducted to attempt to define fresh water and brine interfaces
  within the salar. The TEM survey results indicate that the method can be used to determine
  resistivity contrasts within the salar.
- VES Survey A VES survey was conducted to attempt to identify fresh water and brine interfaces, and extensive fresh water occurrences. The VES results enabled the differential of the five zones on the Archibarca Fan and salar perimeter locations. The VES results are also useful for general delineation of the fresh water/brine interface on the salar boundary.
- Surface Water Sampling Program An ongoing program is conducted to monitor the flow and chemistry of surface water entering the salars. Data acquired from this program supported the water balance calibration and numerical groundwater modelling.
- Pumping Test Program Pumping and monitoring wells were installed and pumping tests were conducted at five locations to estimate aquifer properties related to brine recovery and fresh water supply.

The above exploration initiatives along with several other programs such as surface sampling, a gravity survey, airlift testing program and the drill programs were used to support the Mineral Resource and Mineral Reserve estimates at the Cauchari-Olaroz Project as set out herein.

## Drilling

#### RC Borehole Drilling

In September 2009 and August 2010, LAC conducted dual tube RC drilling to develop vertical profiles of brine chemistry at depth in the salars and to provide geological and hydrogeological data. The program included installation of 24 boreholes and collection of 1,487 field brine samples (and additional quality control samples). The sampled brines had a relatively low Mg/Li ratio, indicating that the brines would be amenable to a conventional lithium recovery process.

#### DD Borehole Program

Diamond drilling at the Cauchari-Olaroz Project was conducted between October 2009 and August 2010. This program was conducted to collect continuous cores for geotechnical testing and geological characterization. The program included 29 boreholes, some of which were completed as observation wells for future brine sampling and monitoring, and collection of 127 field brine samples (and additional quality control samples).

### DDH Diamond Drilling

In 2017-2018, LAC conducted a diamond drilling exploration program at Cauchari-Olaroz. The program included drilling 50m, 200m and 450-600m deep, smaller diameter wells from the same drilling platform. Shallow and intermediate depth boreholes were completed in the same borehole. The objectives of the program were to collect: 1) continuous cores for mapping and characterization of the shallow, intermediate and deeper parts of the aquifer; 2) geologic samples for geotechnical testing and grain size analysis; 3) brine samples using a bailer; and 4) information for the construction of observation wells for future sampling and monitoring.



## Sampling, Analysis and Data Verification

## Sampling Method

During RC drilling, rock chips and brine were directed from the drill cyclone into a plastic bag, over a one meter interval. After the field measurements were taken, the brine sample was split into three, one-litre, clean plastic sample bottles. Two samples were mixed to form one sample, which was shipped to ASA. During diamond drilling PQ or HQ diameter cores were collected through a triple tube sampler. The cores were taken directly from the triple tube and placed in wooden core boxes for geologic logging, sample collection, and storage. Undisturbed samples were shipped to D.B. Stephens & Associates Laboratory in the United States for analysis of geotechnical parameters. Brine sampling was conducted in selected DD program borehole locations. A two-valve low-flow pump was used to extract brine samples from the subsurface. After analysis of field and filed laboratory parameters, brine samples were split into three, one-litre, clean, plastic sample bottles. Two samples were mixed to form one sample, which was shipped to ASA.

## Security

Samples were taken daily from the drill sites and stored at the Susques field office of Exar. All brine samples were stored inside a locked office, and all drill cores were stored inside a locked warehouse adjacent to the office. Brine samples were picked up from the Susques field office by the analytical laboratory every Friday and transported to Mendoza in a laboratory truck. Solid samples were periodically driven to Jujuy which is approximately three hours from the site. In Jujuy, solid samples were delivered to a courier for immediate shipment to the appropriate analytical laboratory.

## Assaying and analytical procedure

Brine samples were analyzed by ASA, a laboratory independent from the Company. For the first six RC boreholes, sulphate was assayed using the turbidimetric method, with checking of 20% of samples using the gravimetric method. Subsequent samples were analyzed using only the gravimetric method. The argentometric method was used for assaying chloride and volumetric analysis was used for carbonates. Laboratory measurements were conducted to total dissolved solids, density and pH. D.B. Stephens and Associates Laboratory carried out selected geotechnical analyses on undisturbed samples from the geologic cores. Specific gravity was conducted for four formation samples as well as the relative brine release capacity method which is used to predict the volume of solution that can readily be extracted from an unstressed geologic sample.

## QA/QC

Brine samples were bottled directly from the pumping test weirs and assayed at ASA, with some confirmatory assays done at Acme Santiago and the University of Antofagasta. Exar ran a quality control program to monitor the quality of assays from ASA, which includes the insertion of a field blank, a field duplicate, and one of two remaining standards that appear to be relatively stable. These data were compiled by Exar staff and then sent to Smee and Associates Consulting Ltd. for confirmation of the accuracy and precision of the analysis.

#### Data verification

The QP's responsible for the preparation of the Cauchari TR, conducted the following forms of data verification: visits to the Cauchari-Olaroz Project site; review of Exar sampling procedures, although it is noted that actual brine sampling was not viewed due to the nature of the geologic units encountered by the RC drill at the time of the site visits; inspection of original laboratory results forms for the Exar brine dataset; inspection of electronic copies of the Exar brine dataset and comparison with corresponding stratigraphic logs; review and inspection of Exar field and laboratory QA/QC results; review of publicly available



information from an adjacent exploration property in Olaroz Salar; inspection of borehole logs; inspection of the Cauchari-Olaroz Project database; review of all data handling methods and procedures; and inspection of original laboratory results forms for the Exar brine dataset and the Cauchari-Olaroz Project database.

### Mineral Processing and Metallurgical Testing

Exar conducted process testing in connection with historical technical reports. Much of this testing was conducted at qualified laboratories and pilot facilities located at the Cauchari-Olaroz Project. In late 2010 and early 2011, Universidad de Antofagasta (Chile) determined the brine evaporation sequence. Tests conducted on a straight, CaO-treated, and CaCl<sub>2</sub>-treated brine led to the conclusion to treat brine with CaO to reduce Mg and sulfate levels.

Evaporation pan testing at the Salar de Cauchari pilot facility provided additional data utilized in mathematical and thermodynamic models. Optimization testing of the Mg-liming process in Exar's laboratory enhanced the accuracy of lime consumption, solids settling rate and brine purity assumptions.

Boron solvent extraction bench testing performed on terminal brine from the evaporation ponds showed that the extraction process should be performed at pH 4 using hydrochloric acid, and re-extraction at basic pH using a solution of sodium hydroxide.

At the Salar de Cauchari pilot facility, an entire sequence of ponds simulated evaporation and liming at a larger scale. Optimum manganese and sulfate reduction performance was obtained from liming midway in the evaporation process with 10% excess lime. This proved to have the lowest brine entrapment and LiKSO<sub>4</sub>-related lithium losses.

In the LCE pilot plant, final polishing of manganese, calcium and sulfate was tested. LCE yields higher than 85% were obtained from purified brine. Carbonation temperature and reagent dose optimization testing was also performed.

Sylvinite flotation tests conducted at the Saskatchewan Research Counsel, Mining and Minerals division, established a process for the recovery of potash for commercial grade fertilizer.

#### Mineral Resource and Reserve Estimates

A Mineral Resource and Mineral Reserve estimate for the Cauchari-Olaroz Project is summarized in the tables below for LCE. Both Mineral Resources and Mineral Reserves are reported on a 100% project equity basis. LAC no longer reports a potassium Mineral Resource on the project.



#### Mineral Resources

The Mineral Resource estimate below is expressed relative to a lithium grade cut-off of greater than or equal to 300 mg/L.

Updated Mineral Resource Estimate for Lithium				
Category	Average Lithium Grade (mg/L)	Brine (m³)	Lithium Metal	LCE (tonnes)
Measured	587	1.11E+09	651,100	3,465,700
Indicated	580	4.70E+09	2,726,300	14,511,500
Measured + Indicated	581	5.81E+09	3,377,400	17,977,200
Inferred	602	1.59E+09	957,400	5,096,000

#### Notes:

- (1) The Mineral Resource estimate has an effective date of February 13, 2019.
- (2) Mineral Resources have a cut-off grade of 300 mg/L of lithium.
- (3) Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability. There is no certainty that all or any part of the Mineral Resource will be converted to Mineral Reserves.
- (4) LCE is calculated based the following conversion factor: mass of LCE = 5.322785 x mass of lithium metal.

## Mineral Reserve

The Cauchari TR did not update the Company's existing Mineral Reserve estimates for the Cauchari-Olaroz Project. These Mineral Reserve estimates are the estimates which underpin the Company's feasibility study and accompanying financial projections (including those related to capital costs). There can be no certainty that the updated Mineral Resource estimate will ever be converted into Mineral Reserves. A description of the existing Mineral Reserve estimate follows.

In 2017, Montgomery & Associates Inc. was engaged to update the Mineral Reserves in brine for various areas within the Salar de Cauchari and Salar de Olaroz in accordance with the guidelines for lithium brines set forth by CIM. The Mineral Reserve estimate was based on numerical model simulations that demonstrated a sustainable maximum production rate of over 25,000 TPA of LCE for 40 years. The Proven Mineral Reserves include brines sourced entirely within the project's property boundaries, while 99.9% of the Probable Mineral Reserves are sourced within the project boundary. Simulated well field pumping was constrained by restricting drawdown to a maximum of 100 m at any given production well. A minimum cutoff value was not required in the Mineral Reserve estimate because average lithium concentrations after 40 years of simulated pumping decreased marginally from 713 mg/L to 695 mg/L, which is significantly above economic mineral cut-off criteria. Mineral Reserves are inclusive of reported Mineral Resources.

# Proven and Probable Mineral Reserves (March 5, 2017)

Category	Time Period	Average Lithium Grade (mg/L)	Brine (m³)	Lithium Metal (tonnes)	LCE (tonnes)
Proven	1 - 5	712	$4.9 \times 10^7$	35,159	187,000
Probable	6 - 40	695	$3.5 \times 10^8$	246,474	1,312,000
Total	40	698	4.0 x 10 <sup>8</sup>	281,633	1,499,000

#### Notes:

(1) Ratios of lithium to other metals include: K:Li of 8.2, Mg:Li of 2.4, B:Li of 1.6, SO<sub>4</sub>:Li of 28.5.



- (2) LCE is calculated based the following conversion factor: mass of LCE = 5.323 x mass of lithium metal.
- (3) The conversion is direct and does not account for estimated processing losses.
- (4) The values in the columns on "Lithium Metal" and "LCE" above are expressed as total contained metals.

The Mineral Resources reported above are inclusive of the Mineral Reserves, and not in addition to the Mineral Reserves. The Mineral Reserves of lithium described above occur in subsurface brine. The brine is contained within the pore space of salar deposits that have accumulated in a structural basin. A numerical groundwater model was developed for the central area of the basin, to support the Mineral Reserve estimate. The model simulates long term brine recovery and is based on a rigorous assembly of groundwater flow and solute transport parameters.

# Overview of Mining and Production Operations

The mine plan outlined in the Cauchari TR is based on using a conventional, commercially-proven brine processing technology to produce high quality battery-grade lithium carbonate that can be used directly by battery material producers in manufacturing cathode and electrolyte for lithium-ion batteries.

The production process involves two distinct steps and is generally consistent with other established brine operations. The first step uses a solar evaporation process to concentrate lithium in the brine and precipitate competing salts in large-scale ponds. The ponds at Cauchari-Olaroz are based on SQM's pond design criteria used in their existing Atacama operation and involve the use of shallow ponds where the precipitated salt is annually harvested from the flat pond base. The second step uses the processing facilities that transform the concentrated lithium brine into battery-grade lithium carbonate while ensuring the removal of impurities from the end-product.

The Cauchari TR sets out a production operation consisting of 25,000 TPA of battery-grade lithium carbonate for a project life of 40 years with production starting in 2020.

#### Mineral Extraction

In the Cauchari TR, it is contemplated that brine will be extracted from 38 production wells situated across the reserve area. A pumping rate of at least 259 m³ per day is estimated from all wells. Drawdown of the brine will amount to 100 m or less at all production wells, based on the current extraction plan. The brine extracted from the salar wells is subjected to solar evaporation in pre-concentration ponds, allowing the removal of sulphates and other unwanted salts. Next, lime is added to remove magnesium and most of the sulphates and after another concentration stage at the corresponding ponds, the concentrated lithium-rich brine is fed to the lithium carbonate plant.

Per the Cauchari TR, the pond system is to consist of 29 evaporation ponds segregated into the following types: (i) 18 pre-concentration ponds; (ii) 6 ponds used as Halite ponds; (iii) 2 ponds used as Sylvinite ponds; (iv) 1 pond used as a precipitates pond; and (v) 2 ponds used for lithium control. An evaporation rate of 2.52 mm per day (920 mm/year) was used as criterion to design the pond system. This rate corresponds to measured evaporation at the site where the ponds will be located. The pond orientation and placement were based on predominant wind patterns observed in the area.

Assuming the above-mentioned evaporation rate, the total evaporation area required for the production of 25,000 TPA of lithium carbonate is 1,100 ha. The ponds will be lined with a polymer-based material laid over a protective geosynthetic material and engineered granular bedding. The configuration of the ponds will include provision for uninterrupted production during salt harvesting and maintenance work. Brine will be transferred between the successive evaporation ponds using self-priming pumps.

The ponds have been designed for the efficient annual removal of salt deposits formed at the bottom of the ponds. Salt removal will be conducted using typical earthmoving machinery, such as bulldozers, front end loaders and dump trucks.



Along with lithium, the pumped brine is projected to contain significant quantities of potassium, magnesium, sulfate and boron. These constituents will be removed from the brine during the extraction and evaporation process to enable effective retrieval of the lithium.

# Processing and Recovery Operations

Exar and its consultants subjected the brine chemistry of the deposits to a process simulation, using physicochemical properties estimation methods and process simulation techniques for phase equilibrium of solids in electrolytes (brine), specially prepared for this project. This work has been supported by the results of laboratory evaporation test work and test work at both the pilot plant and the pilot ponds.

The process route simulated for the production of lithium carbonate from Cauchari brines is outlined in a flowsheet in the Cauchari TR. Primary process inputs include water, lime, soda ash, HCl, NaOH, steam, and natural gas. The evaporation ponds produce salt tailings composed of Na, Mg, Ca, K, and borate salts. The brine concentrate from the terminal evaporation pond is further processed, through a series of polishing and impurity removal steps. Soda ash is then added with the purified brine concentrate to produce a lithium carbonate precipitate, that is dried, compacted/micronized and packaged for shipping.

The Cauchari TR includes an operating assumption that 28 wells will be constructed and tested prior to initiation of operations, which is sufficient to allow Exar to meet production goals. Storage ponds and the recovery plant were also assumed to be fully operational at the start of the production. As a result, ramp up of pumping was not necessary and pumping at rates needed to achieve production goals was initiated at the start of production.

Operating criteria for the lithium carbonate plant is presented in the table below:

Lithium Carbonate Plant Operating Criteria				
Description	Unit	Value		
Lithium carbonate production	TPA	25,000		
Annual operation days	days	330		
Annual operation hours	hours	7,700		
Availability	%	90.4		
Utilization (22 hours/day)	%	97.2		
Plant Overall Efficiency	%	71		

# Infrastructure, Permitting and Compliance Activities

Site Infrastructure and Support Systems

Natural gas will be obtained from the Rosario gas compression station, which is on the Gas Atacama pipeline, 52 km north of the project site. This pipeline is expected to be capable of supplying natural gas at capacities that are sufficient for a 25,000 TPA LCE facility, and beyond.

In the Cauchari TR, it is assumed that electricity will be provided by a new 138 kV transmission line that will interconnect with an existing 345 kV transmission line located approximately 60 km south of the Cauchari-Olaroz Project. The interconnection will require construction of a sub-station with a voltage transformer (345/138 kV) and associated switchgear. Another substation at the Cauchari-Olaroz Project site will consist of a voltage transformer (132/23 kV) and electrical room with associated switchgear and auxiliary equipment for a 23 kV local distribution system.



The 23 kV local electrical distribution system will provide power to the plant, camp, PDA brine homogenizing pools/lime pumps, wells and ponds. In general, all distribution is aerial unless there are major restrictions, in which case underground distribution is adopted. The estimated load for the Cauchari-Olaroz Project is approximately 53,700 MWh/y or 8 MW/h. The Company is investigating an alternate plan in which Exar would install a power plant at site that would generate power through a combination of gas and solar energy.

The construction and permanent camps will be located south of National Highway 52 and the evaporation ponds. The permanent camp is modelled as a full habitation and administrative complex to support all workforce activities, with a capacity for approximately 300 people. The permanent camp covers a footprint of 15,000 m<sup>2</sup> of buildings and 35,700 m<sup>2</sup> of external facilities.

Exar will need to allocate land to host waste salt deposits, which are expected to reach up to 10 m in height and cover 390 ha over a 40 year mine life. These deposits are inert, with sodium chloride and sulphate making up approximately 87% of the material, and do not introduce foreign compounds to the environment. Exar will also need to establish an evaporation pond for the plant's industrial liquid waste, and a 20 ha area is allocated for this purpose.

The Cauchari TR also includes a description of additional infrastructure to address other essential support facilities, including fuel storage, security, access roads and water supply.

## Mining and Environmental Permits

Argentina has a provincial system to manage natural resources. Therefore, the Province of Jujuy has the responsibility of providing social and environmental permits, through the Provincial Department of Mines and Energy under the Secretariat of Mining and Hydrocarbons. Other entities involved in the permitting process are Jujuy's Provincial Department of Water Resources, the Department of Environmental Management, which has supervisory authority for environmental and natural resources and the Secretariat of Tourism and Culture, which regulates operating permits in areas of potential archaeological and paleontological interest. The Cauchari-Olaroz Salar is a Protected Area for Multiple Use (Law No. 3820/81), which allows mining activities, but has a specifically designed control system that aims to protect the local vicuña population.

Exar has completed numerous environmental studies to support the establishment of Cauchari-Olaroz's environmental baseline. This evaluation was performed for each stage of the project: construction, operation and closure.

The update to the Environmental Impacts Report for Exploitation for the Cauchari-Olaroz Project based on a 25,000 TPA rate of production and in the manner contemplated in the Cauchari TR, was approved by the relevant provincial regulatory authorities in the latter half of 2017. Exar has also received approval for the construction of the Cauchari-Olaroz Project from the agency in Jujuy tasked with assessing the impact and benefits to the province of any proposed lithium project.



# **Operating Costs**

The operating and capital cost estimates have been reviewed and confirmed by Andeburg Consulting Services Inc. The Cauchari-Olaroz Project cost estimates are based on an exchange rate of 16:1 Argentine pesos to the U.S. dollar. The average operating costs were calculated for a facility with production of 25,000 TPA of battery-grade lithium carbonate. Additional work through engineering refinements and contract negotiation will continue in an effort to reduce the operating expenditures.

Operating Costs			
Category	Operating Cost (US\$/t Lithium Carbonate)	% of Total	
Reagents	991	40	
Pond Harvesting & Tailing Management	345	14	
Maintenance	210	8	
Electric Power	187	7	
Labour	166	7	
Product Transportation	135	5	
Catering, Security & Third Party Services	97	4	
Natural Gas	85	3	
G & A	76	3	
Diesel	69	3	
Consumables	51	2	
Water Treatment System	38	2	
Bus-In / Bus-Out Transportation	35	1	
E&C	10	<1	
Total Operating Costs	2,495	100	



# Capital Costs

The construction capital cost estimates are based on current Argentine costs for labor and materials. The Cauchari TR construction capital cost is estimated at US\$425 million inclusive of a 15% contingency. Construction and commissioning will take approximately two years. Detailed capital cost estimates are presented in the table below and are exclusive of VAT and working capital. During construction, VAT and working capital are expected to total US\$51.1 million and US\$12.5 million, respectively. The Cauchari TE assumes that VAT is refundable with an average repayment period of 2 years. Please see discussion elsewhere herein, and in the Company's other public disclosure documents for consideration relating to the risks and uncertainties around such VAT refund.

Capital Costs		
Category	Capital Costs (US\$ millions)	
Direct Costs		
Evaporation ponds	129	
Lithium carbonate plant	121	
On site infrastructure	26	
Offsite infrastructure	41	
Brine extraction wells and piping	15	
Total Direct Cost	<u>333</u>	
Total Indirect Cost	37	
Contingency (15%)	55	
Total Capital Costs	425	

The sustaining capital requirement is estimated at an average of US\$4.7 million per year (approximately US\$190/tonne of lithium carbonate produced). The Cauchari TR assumes that LAC will be responsible for contributing 50% of capital expenditures for development of the project, amounting to approximately US\$212.5 million, which is proportionate with LAC's interest in Exar as of the date of such report. Since the date of the Cauchari TR, LAC has increased its interest in Exar to 62.5%, and consequently will be responsible for the proportionate increase in such costs.

# **Project Economics**

The financial results are derived from inputs based on an annual production schedule included in the Cauchari TR and reported on a 100% equity project basis. The engineering and construction period is estimated at two years, while the life of mine is estimated to be 40 years. Pricing assumptions were obtained from a market study, supported by the off-take entitlements arising in favour of Ganfeng and BCP. Production of LCE is estimated at 25,000 TPA, commencing in the third year of operations assuming a ramp up rate of 24% for the first year of operations and 56% for the second year of operations. The exchange rate assumed is AR\$15.9/US\$.

In addition to capital and operating cost expenses as set forth above, project economics are based on additional expenses and cash flow items including: Argentinean transaction tax, Jujuy and private royalties, licenses and permits, export retentions and refunds, easement rights, equipment depreciation, sustaining capital, exploration expenses amortization and remediation allowances.

#### Production schedule

The production model outlines lithium carbonate production totalling 1,499,130 tonnes over the 40 year project term. Overall efficiency of brine processing to produce lithium carbonate is reported to be 71%. The



net amount of lithium carbonate produced was computed by multiplying the lithium carbonate extracted from the well field by 71%. The resulting values were then summed for each production year to determine the predicted annual lithium carbonate production. The predicted average annual production rate over the 40-year period is 26,609 TPA.

In the production model, it is assumed that there is no revenue for the first two years of operation, with revenue growing to US\$72,000,000 in year 3, US\$168,000,000 in year 4 and US\$300,000,000 in each year thereafter until the end of the 40 year production period, in reliance on the base case assumptions.

## NPV and IRR

After tax NPV in reliance on base case assumptions and a 10% discount rate amounts to US\$803,000,000, while IRR is 28.4%. Set forth below is a table that illustrates sensitivity of project economics based on lithium carbonate pricing and discount rates.

After-Tax NPV and IRR Sensitivity Analysis				
Discount Rate (%)	Low Case NPV US\$10,000/t Lithium carbonate (US\$ millions)	Base Case NPV US\$12,000/t Lithium carbonate (US\$ millions)	High Case NPV US\$14,000/t Lithium carbonate (US\$ millions)	
6	1,204	1,609	2,015	
8	807	1,113	1,420	
10	564	803	1,042	
IRR (%)	23.5	28.4	33.0	

# Cash Flow and Earnings

Net cash flow is negative in the first three years of operation, but thereafter increases sharply to approximately US\$127,238,000 after taxes in year four. Thereafter, net cash flow (undiscounted) after taxes amounts to approximately US\$155,000,000 in reliance on the base case assumptions. The estimated payback period is three years and four months before tax, and three years and five months after tax, in reliance on base case assumptions.

Set forth below is a sensitivity analysis of EBITDA over the life of the project based on lithium carbonate pricing, and otherwise in reliance on base case assumptions.

EBITDA Sensitivity Analysis		
Lithium Carbonate Price (US\$ 000's)	Average Annual EBITDA <sup>(1)</sup> (US\$ millions)	
6	86	
8	135	
10	184	
12	233	
14	282	
16	331	

Note:



(1) EBITDA, earnings before interest, taxes, depreciation and amortization, is a non-IFRS financial measure which is used in the Cauchari TR to indicate the impact that changes in lithium carbonate prices would have on the cash flow of the Cauchari-Olaroz Project based on certain assumptions. The Cauchari TR does not present a corresponding sensitivity analysis based on an IFRS measure, or identify the amounts of the adjustments that would have to be made to EBITDA to reconcile it to an IFRS measure. Accordingly, a reconciliation of EBITDA to the most closely comparable IFRS measure is not available without unreasonable efforts. The future IFRS financial results for the Cauchari-Olaroz Project may vary significantly from the EBITDA amounts presented in this sensitivity analysis.

## **Exploration and Development**

A more detailed summary of the current status of the Cauchari-Olaroz Project is set forth above under the heading "Cauchari-Olaroz Project".

## The Thacker Pass Project

The scientific and technical information regarding the Thacker Pass Project is derived, in part, from the Thacker Pass TR. A copy of the Thacker Pass TR is available on the Company's website at www.lithiumamericas.com and on the Company's SEDAR profile at www.sedar.com.

## **Property Description and Location**

The Thacker Pass Project (which refers to the mineral claims that were formerly referred to as "Stage 1" of the Lithium Nevada project) comprises an area of approximately 3,367 ha within Humboldt County, Nevada, that is approximately 100 km north-northwest of Winnemucca, 33 km west-northwest of Orovada, Nevada and 33 km due south of the Oregon border. The area is sparsely populated and used primarily for ranching and farming. The Thacker Pass Project is situated at the southern end of the 16.3 million-year-old McDermitt Caldera. LAC holds the claims indirectly through Lithium Nevada Corp., a wholly owned subsidiary of LAC. In 2018, the Company reorganized its project holdings and designated the claims hosting "Stage 1" of the Lithium Nevada Project as a standalone project named the Thacker Pass Project, which excludes the mining claims in the Montana Mountains.

In connection with the Royalty Purchase Agreement, as amended by the Royalty Amending Agreement, Orion holds a gross revenue royalty on the Thacker Pass Project, which entitles Orion to receive 8% gross of revenue until royalty payments equal to the aggregate purchase price of US\$22 million have been paid, after which time the royalty will decrease to 4.0% on all minerals mined, produced or otherwise recovered, subject to the Company's right to reduce the royalty rate to 1.75% at anytime on payment to Orion of US\$22 million.

The Company holds all necessary federal and state permits and approvals to conduct mineral exploration activities (exclusive of mineral exploitation activities) within active target areas of the Thacker Pass Project site.

A PoO was submitted to the BLM in May 2008 for mineral exploration activities, including drilling and trenching for bulk sampling. The PoO was analyzed by an environmental assessment and was subsequently approved by the BLM in January 2010. As requested by the BLM, appropriate baseline studies that included a cultural resource assessment were completed to support the finalization of the environmental assessment process and the approval of the PoO.

The Nevada authorities issued concurrent approval for the exploration PoO, including the approval of the reclamation financial guarantee, and issued a reclamation permit for the exploration project. The Company has initiated the process to obtain all necessary federal, state, and local regulatory agency permits and approvals for further advancement of the Thacker Pass Project.

The Company has reclamation obligations for a small hectorite clay mine located within the project area in the amount of US\$572,590. The Company's other environmental liabilities from existing mineral exploration projects in the vicinity of the project area have a reclamation obligation totaling approximately US\$364,159. The Company currently holds a US\$1,007,520 reclamation bond with the BLM Nevada State Office.



# Summary of Mineral Title Regime

The underlying title to the Thacker Pass Project is held through a series of claims. LAC holds its interests in the claims indirectly through Lithium Nevada. A claim provides the holder with the rights to all locatable minerals on the relevant property, which includes lithium; however, this interest remains subject to the paramount title of the United States federal government who maintains fee simple title on the land.

The holder of a claim maintains an entitlement to the claim, provided it meets the obligations for claims as required by the Mining Act. At this time, the principal obligation imposed on the holders of claims is to pay an annual fee, which represents payment in lieu of assessment work required under the Mining Act. The annual fee of US\$155.00 per claim is payable to the BLM in addition to a fee of US\$10.50 per claim paid to the county recorder of the relevant county in Nevada where the claim is located.

A claim does not, on its own, give the holder the right to extract and sell locatable minerals, as there are numerous other regulatory approvals and permits required as part of this process. In Nevada, such approvals and permits include approval of a plan of operations by the BLM and environmental approvals. The Mining Act also does not explicitly authorize the owner of a claim to sell minerals that are leasable under the Leasing Act. The BLM is vested with discretion in the management of the right to sell minerals governed by the Leasing Act, particularly where they represent a potential by-product to an economically viable mineral deposit governed by the Mining Act. Currently, the only mineral contemplated for mining and processing is lithium.

# Accessibility, Climate, Local Resources, Infrastructure and Physiography

Access to the Thacker Pass Project is via a paved highway running approximately 70 km north from Winnemucca to Orovada and then west-northwest for 33 km on a paved highway to the Thacker Pass project site entrance. On-site access is via numerous gravel and dirt roads. These roads are all season and in generally good repair, but may be closed for short periods due to extreme weather in the winter. The nearest railroad access is in Winnemucca.

Northern Nevada has a high desert climate with cold winters (average minimum -3°C in January) and hot summers (up to 35-40°C). Snow can occur from October to May, although it often melts quickly. Nearby mining operations operate continuously throughout the winter. Elevation at the project site is approximately 1,500 m above sea level. Vegetation consists of low-lying sagebrush and grasslands.

Due to the long-established mining industry in the Winnemucca area, local resources include all of the facilities and services required for large-scale mining. There are several gold and copper mines in the area, which rely on the experienced work force and support for mining operations. Most of the workers for any future mining operations are expected to be sourced from Winnemucca's population.

In accordance with the Thacker Pass TR, there is sufficient space within the project area to accommodate a proposed processing plant and mine support facilities, overburden placement site, tailings storage facility, water diversions and containments. There is currently a 115 kV power line that passes through the project area. The project plan in the Thacker Pass TR includes the potential construction of a large cogeneration power facility with a capacity expected to exceed the project's electricity requirements.

The Company has existing water rights within the Quinn River Valley. In 2018, the Company obtained additional water rights expected to be sufficient for Phase 1 of the operations and a portion of Phase 2 (as defined in the Thacker Pass TR). These water rights are subject to a defined regulatory process to change both the point of diversion and the manner of use (from irrigation to mining and milling) prior to their use for production. There is no guarantee the proposed changes to these water rights will be approved by the regulatory agency. Additional water rights, if required, may be obtained through land acquisition (with appurtenant water rights) and/or outright water rights purchases in nearby Quinn Valley.

A test well was drilled in 2017 and indicated sufficient flow rates for the process water requirements. A production well with a flow capacity in excess of process water requirements for Phase 1 and 2 (as defined in the Thacker Pass TR) production was constructed adjacent to the test well in 2018.



An independent groundwater study was completed by Schlumberger Water Services in 2012. An updated study is expected to be completed in 2019 by Piteau and Associates, which includes the data collected from the new water supply well, additional groundwater monitoring wells and piezometers, and additional creek/spring monitoring gauges.

## History

The claims constituting the lithium project were previously held by Chevron, which began exploration for uranium in the McDermitt caldera area in 1975. Early in Chevron's program the USGS alerted Chevron to the presence of anomalous concentrations of lithium associated with the caldera. Chevron added lithium to its assays in 1978 and 1979, began a clay analysis program and obtained samples for engineering work. Results confirmed the lithium concentrations contained in clays. From 1980 to 1987, Chevron completed a drill program that focused on lithium targets and conducted extensive metallurgical testing of the hectorite deposits to determine amenability of the deposits to extraction of lithium. In 1985, Chevron undertook a resource estimate for a 0.25% lithium cut-off, however, the estimate was not prepared in accordance with NI 43-101.

Chevron leased many of the claims that comprise the lithium project to J.M. Huber Corporation in 1986. In 1991, Chevron sold its interest in the claims to Cyprus Gold Exploration Corporation. In 1992, J.M. Huber Corporation terminated the lease and it appears that Cyprus Gold Exploration Corporation allowed the claims to lapse and provided much of the exploration data to Jim LaBret, one of the claim owners from which they had leased claims.

WEDC leased Mr. LaBret's claims in 2005, at which time he provided WEDC access to the Chevron data and to core and other samples that were available. On December 20, 2007, the Company entered into a lease with WEDC. Commencing in 2007, the Company conducted an exploration drill program focused in the southern portion of the caldera. The Company completed an initial Mineral Resource estimate on the property, followed by completion of a preliminary assessment on the project that was disclosed in January 2010.

On March 11, 2011, the Company acquired title to the royalties and titles constituting substantially all of the then-named Kings Valley claims, pursuant to a purchase and sale agreement with WEDC.

On December 14, 2011, the Company announced the results of the 2012 PFS for the mining of the thennamed "Stage 1 Lens" production of lithium carbonate. Two scenarios were evaluated: a start-up scenario based on mining and processing ore at a design throughput rate of 2,100 tonnes per day (13,000 TPA lithium carbonate), and a full production scenario to double production four years after start-up (26,000 TPA lithium carbonate).

In 2016, the Company completed a pilot plant program at its demonstration plant in Germany. This work increased the Company's understanding of the processing and engineering requirements for the production of lithium products from the project. Considering the results, the Company determined that additional specific engineering work was required to optimize the front end of the process to produce lithium hydroxide monohydrate on a commercial scale. In addition, the Company became aware of technological advancements in producing lithium compounds from brines and believed that these innovative and sustainable technologies warranted further review for potential incorporation into the Nevada processing plant design. As a result of these additional reviews, the Company determined that the 2012 PFS was no longer current, and in June, 2016, the Company completed a technical report disclosing only Mineral Resource estimates on the then-named "Stage I Lens and "Stage II Lens" of the property. In 2017, Lithium Nevada conducted an exploration program. In May 2018, the Company completed a technical report on the Thacker Pass deposit disclosing an updated Mineral Resource estimate and in August 2018, the Company completed the preliminary feasibility study in the Thacker Pass TR.

# **Geological Setting**

The regional geology of the Thacker Pass Project is the McDermitt volcanic field, a volcanic complex with four large rhyolitic calderas that formed in the middle Miocene era. Volcanic activity in the McDermitt



volcanic field occurred simultaneously with voluminous outflow of the earliest stages of the approximately 16.6 million to 15 million year old Columbia River flood basalt lavas. This volcanic activity was associated with impingement of the Yellowstone plume head. Plume head expansion underneath the lithosphere resulted in crustal melting and surficial volcanism along four distinct radial swarms. The McDermitt volcanic field is located within the southeastern-propagating swarm of volcanism from Steens Mountain into north-central Nevada.

The Thacker Pass Project is located in the McDermitt caldera, an extinct supervolcano that is 30 km by 45 km (and straddles the Oregon-Nevada border) that was formed approximately 16.3 million years ago. The stratigraphy of the McDermitt caldera is a singular ignimbrite referred to as the McDermitt tuff. Following an initial eruption of the McDermitt tuff, water leached lithium from nearby volcanic rocks and deposited it in the caldera basin over hundreds of thousands of years. A large caldera lake formed, and captured sediments that were eroded from the surrounding drainage areas; a thick sequence of associated lacustrine deposits settled. Renewed volcanic activity uplifted the center of the caldera, draining the lake and bringing the lithium-rich sediments to the surface of the earth in the vicinity of the present-day Montana Mountains. The result of these geological processes is the Thacker Pass Project, a large and near-surface lithium deposit.

The Thacker Pass deposit sits sub-horizontally beneath a thin alluvial cover at Thacker Pass and is partially exposed at the surface. It lies at relatively low elevations (between 1,500 m and 1,300 m) in moat caldera lake sediments that have been separated from the topographically higher deposits to the north. Exposures of the sedimentary rocks at Thacker Pass are limited to a few drainages and isolated road cuts. As a result, the stratigraphic sequence in the deposit is primarily derived from core drilling.

The sedimentary section, which has a maximum drilled thickness of about 160 m, consists of alternating layers of thick claystone and thin volcanic ash. The claystone comprises 40% to 90% of the section. Surficial oxidation persists to depths of 15 m to 30 m in the moat sedimentary rock. There is no obvious change in lithium content across the boundary between oxidized and unoxidized rock. The highest lithium grades generally occur in the middle and lower parts of the sedimentary rock section.

Clay in the Thacker Pass deposit includes two distinctly different mineral types, smectite and illite. Clay that is indicative of smectite occurs at relatively shallow depths (less than 30 m). The presence of hectorite clay, a subtype of smectite, has been documented elsewhere in the McDermitt caldera. Drill intervals with high lithium contents (commonly >4,000 ppm) contain clay that yields x-ray diffraction spectra more typical for illite than smectite. An illite-type clay occurs at relative moderate to deep depths in the moat sedimentary section and sporadically occurs in intervals that contain higher levels of lithium.

# Lithium Mineralization

Lithium enrichment in the Thacker Pass deposit occurs in the lowest portions of the caldera lake sedimentary sequence, just above the intra-caldera tuff. The Thacker Pass deposit has minimal overburden and the lithium enriched interval in the proposed pit area generally occurs close to the surface. The minimal overburden present is the result of post-caldera magmatic resurgence that forced lakebed sediments upwards, combined with significant subsequent erosion over the past 16 million years. Along the southern and eastern margins of the Montana Mountains, caldera lake sediments dip at a shallow angle away from the center of resurgence.

The historic and 2017 drilling results show a continuous lithium grade ranging from 2,000 ppm to 8,000 ppm lithium over great lateral extents. There is a continuous high grade sub-horizontal clay horizon that exceeds 5,000 ppm lithium across the project area. This horizon averages 1.47 m thick, with an average depth of 56 m below ground surface. The lithium grade for several meters above and below the horizon typically ranges from 3,000 ppm to 5,000 ppm. The bottom of the deposit is well defined by a hydrothermally altered oxidized ash, with less than 500 ppm lithium and sometimes less than 100 ppm lithium. All drill holes, except WLC-058 and LNC-083, are vertical which represent the down hole lithium grades as true-thickness.



# **Exploration**

Prior to the 2010 drilling campaign, exploration on the Thacker Pass Project has focused on geological mapping to delineate the limits of the McDermitt caldera moat sedimentary rocks and drilling to determine the grade and location of mineralization. Claim surveying, using theodolites and laser-source electronic distance meter, was completed prior to 1980 under Chevron's exploration program. Much of the project area was covered by airborne gamma ray spectrometry, in search of minerals such as uranium. Lithium became the primary focus of exploration from 2007 onward.

LAC used a Trimble differential GPS to survey collar locations for the 2007-2008 drill program. The topographic surface of the project area was mapped by aerial photography in 2010 using third party consultants. This information was obtained by MXS, Inc. for LAC. The flyover resolution was 0.35 m. Ground control and field surveys of drill hole collars, spot-heights and ground-truthing were obtained using Trimble equipment.

In August 2013, the Company announced that it had completed the excavation of a bulk sampling site to produce and test RheoMinerals' organoclay products at its Fernley Facility. The target clay lens was encountered, as expected, at a depth of approximately three m below an alluvial surface layer comprised primarily of silt, sand and gravel. The clay lens measured approximately two to three m in thickness and was continuous across the approximate 25 by 30 m area of excavation. The viscosity gel results (overnight Fann test) indicated good gelling characteristics in order to meet American Petroleum Institute guidelines. The clay was of high purity and amenable to producing an organoclay using a dry processing method.

Collar surveying for the 2017 drilling campaign was conducted using a handheld Garmin 62S GPS. In 2017, a high-resolution LiDAR (a surveying method that works on the principle of radar, but uses light from a laser) and aerial photo survey of Thacker Pass was conducted by a third party. The collar elevations of the 2017 drill holes were then corrected in the drill hole database to the surveyed surface elevation. The average change was an increased elevation of 0.286 m.

In 2017, LNC also conducted five seismic survey lines. A seismic test line was completed in July 2017 along a series of historic drill holes to test the survey method's accuracy and resolution in identifying clay interfaces. The seismic results compared favorably with drill logs. Four more seismic survey lines were commissioned in the Thacker Pass Project area, which helped to provide a more complete picture of the distribution, depth, and dip of clay horizons around the edge and center of the moat basin.

## **Drilling**

LAC drilled 54 core holes on the project area between 2007 and 2009 to expand on Chevron's drilling work, followed by an additional 139 holes in 2010. These holes were drilled with the primary aim of defining lithium occurrences within the deposit. LAC drilled 37 core holes for assay and lithologic information and eight RC holes to compare drilling techniques. The RC method produced biased assay results so the method was abandoned. Seven PQ-sized holes were drilled to support metallurgical test work. Two sonic holes were drilled to test the drilling procedure, however this method of drilling was abandoned as the lithologic sample quality was not comparable to traditional core drilling. Of the exploration drill holes, 198 cores were assayed (20,000 m of core), the results of which analysis supported the presence of a high grade lithium deposit.

Optimal drill hole spacing for Inferred, Indicated, and Measured Resource categories was determined by geostatistical methods based on the results of the first 37 drill holes completed in 2007-2008 (WLC-001 through WLC-037). The Chevron drill holes were excluded from consideration in the grade model due to unknown sample quality controls at the time of drilling.

From January 2010 and through October 2011 LAC conducted definition grid drilling within the Thacker Pass resource (formally known as the Zone 1 resource) using the 2009 geostatistically derived drill spacing. To increase resource estimation confidence from inferred to measured and indicated, a total of 169 holes (WLC-040 through WLC-208) were drilled (16,000 meters).



From June 2017 through December 2017, the Company conducted a drilling campaign. A total of 77 exploration holes totaling 6,653 m, of which 22 were widely spaced HQ core holes. Results of this work helped to expand the known Mineral Resources to the northwest of the 2009-2010 drilling, identify a target south of the highway in an area designated the Southwest Basin, and further understand the local geology across Thacker Pass.

In 2017, three drill holes were drilled to collect geotechnical information. The majority of the drill holes were drilled using normal HQ core drilling practices. The geotechnical samples were not assayed for lithium, but samples were sent to Solum Consultants Ltd. for geotechnical testing. The results of their work assisted in determining the safety factors to use on the proposed mine pit wall slopes. In April 2017, two auger holes were drilled down 15 m to characterize the ground strength for infrastructure support. The geotechnical samples were sent to Solum Consultants ltd. for geotechnical characterization. No samples were collected for assay.

In 2018, additional exploration and definition drilling was completed. A total of 49 drill holes were completed totaling 4,968 m of drilling. In addition, 9 piezometer/monitoring well holes were drilled totalling 1,454 m. A total of sixteen holes were drilled in the Southwest Basin, which was first identified in 2017 as an exploration target. The Company anticipates preparing a NI 43-101 technical report detailing the outcomes of the 2018 exploration program, an updated resource estimate, results of the pilot plant testing/flow sheet design and permitting progress in due course.

Additional geotechnical drilling is being conducted in Q1 2019 at the proposed plant site and tailings storage facility site to collect stability data used for detailed engineering.

# Sampling, Analysis and Data Verification

Drilled core was brought to the logging and sampling facility in Orovada, Nevada; the boxes of core were lithologically logged, photographed, cut and sampled by Company employees and consultants. The length of the assay samples was determined by the geologist based on lithology and averaged 1.52 m. The core was cut in half with diamond blade saws and fresh water, and half bagged for sampling. For duplicate samples, one half of the core was cut in half again and the two halves were bagged and sampled separately to test sampling and assay precision. Each sample was assigned a unique identification number to ensure security and anonymity. The core samples were primarily sent to ALS of Reno, Nevada; they were either picked up by ALS in trucks or delivered to ALS by LAC employees. At ALS, the samples were dried at a maximum temperature of 60 °C and the entire sample was then crushed with a jaw crusher to 90% passing a ten-mesh screen. Nominal 250 gram splits were taken for each sample using a rifle splitter. This split was pulverized using a ring mill to 90% passing a 150-mesh screen.

ALS' analysis included four-acid digestion followed by an atomic emission plasma spectroscopy analysis to ensure that elevation metal concentrations would not interfere with a conventional inductively coupled plasma mass spectroscopy.

In 2010, a QA/QC program was developed that included inserting blank, standards and duplicate samples into the drill core sample assay sets. For every 34 half core samples, the Company randomly inserted two standard samples, one duplicate sample, and one blank sample. The 2017 QA/QC program was slightly modified to include a random blank or standard sample within every 30.48 m interval and taking a duplicate split of the core (1/4 core) every 30.48 m. The total number of blank, duplicate, and standard samples analyzed by the laboratory during the Company's 2010 drilling campaign was 12% of the total samples assayed, and during the Company's 2017 drilling campaign was 10.1% of the total samples assayed. The 2018 drill program used the same QA/QC procedures as the 2017 program with a total of 12% of the total samples sent for assays being check and duplicates.

Approximately 6% of the QA/QC samples from the 2010 sampling program did not conform to the established criteria. The Company re-assayed the highest 16 lithium values for drill holes WLC-001 through WLC-037 and WLC-040 through WLC-200. Following this re-testing, it was concluded that the overall deposit estimates may be lower by at most 2-3%, which is considered within industry standards. In the 2017



sampling program, duplicate samples indicated a high-level of precision in the sampling and laboratory techniques and confirmed the validity of QA/QC protocols and the blank and standards sample quality programs indicated that the accuracy and precision of the analytical process provides results that are in accordance with industry standards.

The Company security's measures included collecting core from the drill site daily and placing the core in a lockable and secure core logging/sampling facility (steel-clad building) for processing. All logging and sampling was conducted in the secured facility. The facilities were locked when no one was present.

In 2016, the Company compiled a fully digitized geological database from the original paper drill logs, assay certificates and relevant archived data, in spreadsheet format. LAC maintains a tracking chart (Excel spreadsheets) that is used to match analytical data from ALS (provided electronically in the form of both Excel spreadsheets, and secured PDF assay certificates) to the intervals logged by the geologists, and referenced to duplicate sample tags stapled into the core boxes. LAC also maintains a master chart to track and manage QA/QC samples.

The Company's senior geologist and Qualified Person as defined by NI 43-101 maintains the master blinded sample identification spreadsheet. Blinded sample numbers are paired up with the original assay samples identifications (using Excel). Both the drill hole samples and QA/QC samples were decoded and paired with the digital assay certificates provided by ALS. No inconsistency in the assay data was found and only a small number of inconsistencies with lithologic coding was found. These differences were well below 1% of the total interval data reviewed; however, all differences were corrected.

# Mineral Processing and Metallurgical Testing

The previous process flow sheet in the 2012 PFS adopted an approach that is based on conventional lithium hard rock processing. Hard rock lithium ore behaves very differently than lithium claystone, primarily because of its genesis. Lithium hard rock ores, such as pegmatite, are formed deep in the Earth's crust under high temperature and pressure, and therefore high temperature and strong reagents are required to liberate the lithium. In 2017, LAC decided to pursue an alternative approach intended to reduce overall operational and capital costs and leverage the physical properties of the soft claystone. A new process flow sheet that uses conventional leaching and purification technology is described in the Thacker Pass TR.

Metallurgical test work was carried out at production facilities owned and operated by Jiangxi Ganfeng Lithium Co., Ltd. in Jiangxi Province, China and with Saskatchewan Research Council. LAC provided four statistically representative composites of ore from the deposit that characterize the different grades of ore in the proposed pit area. These samples were based on the mass weighted average of the deposit and were assembled from different depths and locations to ensure a representative testing campaign. Aspen Technology, Inc. was used to simulate the full process. The results of this model were compared to the laboratory studies, and a final bench-scale confirmation test was completed at Jiangxi Ganfeng Lithium Co., Ltd.'s facilities to confirm the results of the model.

Tooth roll sizer followed by an attrition scrubber was found to be effective in reducing particle size and preparing the ore for sulfuric acid leaching. Sulfuric acid leaching is employed to remove lithium, along with other constituents, from the claystone ore. Testing looked at various acid concentrations, ratio of acid to ore, slurry densities, leaching temperatures, and leaching times. After leaching, the properties of the claystone show acceptable settling and filtration rates. Washing of the spent clay showed high lithium recoveries.

Crystallization was also examined for the removal of by-products such as magnesium sulfate. Process variables such as lithium-magnesium concentration ratio, boiling temperature, crystallization temperature, and final liquor concentrations were identified. A three-step purification process (neutralization, crystallization and precipitation) was also examined. The series of test results showed that a process could be used to isolate a pure lithium sulfate product at approximately 88% recovery and served as a basis for the process design. Testing was also conducted to identify reagent consumption and kinetic



information. The results demonstrated optimum neutralization conditions, such as reagent addition, temperature and residence times. These conditions are aimed at permitting a higher recovery of lithium and reducing the capital and operating cost.

#### Mineral Resource Estimates

A block model was created by the Company's geologists based on assay data received as of December 21, 2017. The blocks are tagged through nearest-neighbor interpolation with the relevant lithology and are 30 m by 30 m by 5 m in size. The block model is not rotated. Due to the complex nature of the horizontal interlayering features, especially in the shallower areas of the deposit (such as crater sediments, alluvium and basalt), no wireframes were utilized in the model construction. This block model was imported into Geovia GEMS® and examined by the QPs responsible for the Thacker Pass TR, who determined that it was representative of the logged lithology.

After examination of strike and dip of the sediments, six major fault blocks (Blocks A-E) were identified. All modelling was subsequently confined and limited to the fault blocks. Only the core area of the deposit has been modeled, the outer limits of the deposit being undefined.

The Mineral Resources have been classified as "Measured Mineral Resources", "Indicated Mineral Resources" and "Inferred Mineral Resources" as defined by CIM Definition Standards. The Mineral Resources are presented in the table below in accordance with the following criteria:

- Measured Mineral Resources are in blocks estimated using at least three drill holes and five to sixteen samples within a 262.5 m x 262.5 m search radius in the horizontal plane and 15 m in the vertical direction:
- Indicated Mineral Resources are in blocks estimated using at least two drill holes and three to sixteen samples within a 393.75 m x 393.75 m search radius in the horizontal plane and 22.5 m in the vertical direction; and
- Inferred Mineral Resources are blocks estimated with at least one drill hold and two to sixteen samples within a search radius of 525 m x 525 m in the horizontal plane and 30 m in the vertical plane.

Measured, Indicated and Inferred Resources (Effective Date: February 15, 2018)						
Category Tonnage (000's t) Avg. Li (ppm) LCE Quantity (000's t)						
Measured	242,150	2,948	3,800			
Indicated	143,110	2,864	2,182			
Measured and Indicated	385,260	2,917	5,982			
Inferred	Inferred 147,440 2,932 2,301					

#### Notes:

- 1. Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability. There is no certainty that all or any part of the Mineral Resource will be converted into Mineral Reserves.
- 2. Mineral Resources presented at a 2,000 ppm Li cut-off grade.
- 3. The conversion factor for lithium metal (100%) to LCE is 5.323.
- 4. Applied density is 1.79.
- 5. Rounding errors may exist.



# Mineral Reserve Estimates

The Mineral Reserve estimate relies on the resource block model described above. Dassault Systèmes Geovia Lerchs-Grossman Whittle software was used to produce a series of pit optimization shells based on particular input parameters. A cut-off grade of 2,500 ppm was applied to the pit optimization to ensure consistency with the processing test work. An ultimate pit shell, number 39, was chosen to define the Mineral Reserves. The resource model is a regular block model with block sized 30 m by 30 m by 5 m. Due to the regular block model and the block size, dilution is considered inherent in the block model. The mining recovery is expected to vary depending on the machine extracting the ore (e.g. surface miner versus excavator). An average life of mine recovery of 93% was applied for the Mineral Reserves estimate. The Mineral Reserves reported above are inclusive of the Mineral Reserves, and not in addition to the Mineral Reserves. The Mineral Reserve estimate excludes the Inferred Mineral Resource.

Proven and Probable Mineral Reserves (Effective Date: August 1, 2018)				
Category Tonnage (000's t) Avg. Li (ppm) LCE Quantity (000's t)				
Proven	133,944	3,308	2,358	
Probable	45,478	3,210	777	
Proven and Probable	179,422	3,283	3,125	

#### Notes:

- 1. Mineral Reserves are defined at the point where the ore is delivered to the processing plant. Reductions attributed to plant losses have not been included.
- 2. Mineral Reserves presented at a 2,500 ppm Li cut-off grade.
- 3. The conversion factor for lithium metal (100%) to LCE is 5.323.
- 4. Applied density is 1.79.
- 5. All tonnages are presented on a dry basis.
- 6. Rounding errors may exist.

#### **Mining Operations**

The mining method chosen for the proposed mine plan outlined in the Thacker Pass TR is a modified panel mining method which employs excavators and surface miners. In this method, a section along the length of the pit is mined to the entire width and depth before moving to the next section of the pit.

The proposed mine plan contemplates mining 510 million total tonnes of material, consisting of 330 million dry tonnes of waste rock and 179 million dry tonnes of ore (delivered to plant) over a 46 year mine life. The average strip ratio for the project is 1.6:1 waste-to-ore mined, with an average strip ratio of 1.5:1 during the first four years of the mine plan. The proposed mine plan contemplates a pre-production period of two years, and two phases of production over the 46 year life of mine, as follows: 3.5 years of Phase 1 production at 30,000 tonnes LCE per year; and 42.5 years of Phase 2 production at 60,000 tonnes LCE per year.

Waste removal will be completed by means of an excavator and haul truck operation. Once the ore has been exposed and a running surface prepared to a relatively consistent profile, the excavator will move to the next panel section. Following the waste removal, the surface miner will mine the exposed ore and load the haul trucks directly. The ore will be hauled to the head of an overland ore conveyor or to nearby short-term stockpiles. Mine waste will primarily be backfilled directly into the mined-out pits. In-pit waste backfill is expected to total approximately 285 million tonnes, with only 2.2 million tonnes being transferred by truck to a nearby waste rock dump. Mine waste will also be used for construction fill material as well as construction of the tailings embankment. The mine plan includes a waste dump near the pit limit for excess mine waste during the beginning of the mine life.



## **Recovery Methods**

The recovery process proposed in the Thacker Pass TR is based on the metallurgical test work described above and consists of the following major components: ore preparation and leaching and lithium processing. The ore preparation will prime the ore for lithium extraction in a leaching circuit. Ore will be delivered to the ROM stockpile from the mining operation. The ore in the ROM stockpile will be sized using toothed roll crusher (sizer) prior to being mixed with filter wash solution in attrition scrubbers. After ore preparation, the ore will be transferred as a slurry to the leaching circuit. Sulfuric acid will be mixed in with the slurry to liberate the lithium from the clay. The lithium bearing solution, i.e. "lithium brine", will be separated from the leach residue by filtration. The filtered residue will be washed to recover any remaining free lithium, and then conveyed to the clay tailings facility.

To prepare the lithium brine for subsequent processing, pH-neutralization will be required. Waste solid compounds will precipitate from the neutralization step and will be filtered from the lithium brine. The filter residue will be washed with process water to recover any residual lithium. The wash solution and lithium brine will be combined and processed in the lithium processing plant, which results in a sulfate solution dominated by lithium, magnesium, potassium, and sodium cations. The lithium processing plant will then take the lithium brine and separate out lithium from the remaining salts in the brine, i.e. magnesium, potassium and sodium. The first step in lithium separation involves purifying the lithium brine through crystallization of magnesium sulfate, followed by removal of residual magnesium with the addition of quicklime. Soda ash will then be added to the brine to precipitate out lithium as a carbonate solid.

#### Infrastructure

Site roads will be designed for operational and maintenance traffic for the eventual 60,000 TPA Phase 2 production rate. All site roads will be classified as private roads, with the main loop around the services buildings. Utility roads have also been planned. Movement of material in Phase 1 will be by truck. A rail system will be constructed as part of Phase 2, and will be used to move raw materials and finished products.

The ore stockpile pad is proposed to be constructed in Phase 1, but is designed to accommodate the full 60,000 TPA production rate during Phase 2. The limestone stockpile will be stored near the limestone crushing and storage facility for easy access by truck.

The tailings strategy is based on the adoption of filtered stack method of clay tailings disposal. The salt storage will be comprised of fully contained lined cells for mineral salts for separate storage. The cells will be constructed from mine waste placed in lifts and compacted under the action of the haul trucks and grading equipment. The proposed mine plan contemplates surface water management to minimize water entering the tailings area and contain any meteoric waters and utilization of mine waste rock to provide supplemental perimeter containment of the tailings on the downslope sides.

Raw water is expected to be supplied to the plant site via a raw water pipeline from a well or series of wells in the Quinn River Valley to the east of the site. The fire water supply for the permanent fire protection will be provided from the raw water tank located within the plant.

A 115 kV transmission line runs directly through the site and has sufficient capacity for the proposed Phase 2 operations. The mine plan contemplates construction of a large cogeneration power facility with a capacity that is expected to exceed the projects electricity requirements; excess electricity may be sold via the 115kV transmission line. The main substation is proposed to be installed during Phase 1. Steam produced by the acid plant will be used to generate electricity. Fuel for the start-up package boilers will be supplied from an on-site fuel bunker that will be resupplied by truck.

Infrastructure is planned to allow the sulfuric acid plant to continue operation through the processing plant downtime, producing excess sulfuric acid that may be sold to regional consumers.



## Environmental, Permitting and Social Factors

A multi-agency regulatory process will need to be completed to obtain all required Federal, State and local agency permits and approvals necessary to construct, operate and ultimately reclaim and close the Thacker Pass Project, including all mining, ore processing, and transportation related operations.

The BLM will be the lead agency for issuing federal approval under the Mining Act, implementing surface management regulations and the preparation of an Environmental Impact Statement as part of the NEPA environmental documentation process. The BLM permit application process consists of three parts: Mine Plan of Operations that describes the proposed mining and ore processing/fluid management system operations, along with reclamation and closure activities; a baseline study program to collect and report data for environmental, natural and socio-economic resources that will be used to support the permitting, impact assessment, and the subsequent approvals process; and an environmental documentation process.

Lithium Americas began the permitting process in Q1 2018 by commencing baseline data collection and to date has performed more than 40 environmental baseline studies within the project area. By December 2018, LAC substantially completed the environmental and natural resource baseline studies required to support the permitting and approval program and the NEPA environmental documentation process for the Thacker Pass Project. A conceptual Mine Plan of Operations (MPO) was submitted to the BLM in Q3 2018 for review and comment. Final baseline reports, final MPO and a consolidated Environmental Report will be submitted to allow the BLM to prepare a Draft Environmental Impact Statement ("EIS") in H2 2019. Approvals, if granted, would be issued following the regulatory conclusion of the Final EIS.

The BLM will also require the placement of a financial guarantee (reclamation bond) to ensure that all disturbances from the mine and process site are reclaimed. The post-mining land use requirements will also require the establishment of a sage-brush vegetation type to restore the area to the pre-mining land uses of wildlife habitat, grazing, and recreation.

The Company has developed a community engagement plan and has held numerous agency, stakeholder, and other public meetings. Future public open houses are planned as the project advances to ensure the community is fully engaged. Additional meetings with regulatory agencies and elected officials are included in the engagement plan.

## **Operating Costs**

The operating costs are estimated based on an operation achieving average annual production of approximately 30,000 TPA in Phase 1 and rising to 60,000 TPA in Phase 2. The operating costs exclude credits from electricity and sulfuric acid sales.

Operating Costs				
Category	Operating Cost (US\$/t Lithium Carbonate)	% of Total		
Mining	488	12.0		
Lithium processing	1,649	40.0		
Sulfuric acid plant	1,780	44.0		
General and administrative	156	3.6		
Electricity delivery (wheeling charge)	15	0.4		
Total Operating Costs	4,088	100.0		



# **Capital Costs**

Total initial Phase 1 capital expenditures are estimated at US\$581 million and a total of US\$1,059 million at the completion of Phase 2. The capital cost estimate excludes the life of mine sustaining capital cost of US\$623 million.

Category	Phase 1 US\$ millions	Phase 2 US\$ millions	Total US\$ millions
Direct Costs			
Lithium Carbonate Plant	218	96	314
Sulfuric acid plant	134	158	293
Mine	46	1	47
Railroad and yards	3	81	84
Total Direct Cost	401	336	737
Total Indirect Cost	89	65	154
Contingency (18.8%)	91	77	168
Total Capital Costs	581	478	1,059

## **Economic Analysis**

The financial results are derived from inputs based on an annual production schedule included in the Thacker Pass TR and reported on a 100% equity project basis.

The life of mine is estimated to be 46 years. Projected sales are based on three revenue streams: LCE, electricity generated by the acid plant and excess sulfuric acid. Lithium carbonate pricing assumptions were obtained from a market study. Electrical and sulfuric acid pricing were estimated based on expert analysis of the local markets.

In addition to capital and operating cost expenses as set forth above, project economics are based on additional expenses and cash flow items such as: taxes, royalty obligations and sustaining capital.

#### Production schedule

Production of LCE is estimated at 30,000 TPA in Phase 1 (commencing in 2022), and 60,000 TPA in Phase 2. Phase 1 is projected to operate for 3.5 years, and Phase 2 is projected to run for 42.5 years. A discount rate of 8% per year was applied to the model. The production model estimates lithium carbonate production totalling 2,602,805 tonnes over the 46 year project term. The production model also estimates electricity totalling 28,018,835 MW/h and sulfuric acid totalling 20,364,430 tonnes, both over the 46 year project term.

## NPV and IRR

After tax NPV in reliance on base case assumptions and an 8% discount rate amounts to an estimated US\$2,590,970, while IRR is 29.3%. Set forth below is a table that illustrates sensitivity of project economics based on lithium carbonate pricing and discount rates.

After-Tax NPV and IRR Sensitivity Analysis				
Discount Rate (%)	Low Case NPV US\$10,000/t Lithium carbonate (US\$ millions)	Base Case NPV US\$12,000/t Lithium carbonate (US\$ millions)	High Case NPV US\$14,000/t Lithium carbonate (US\$ millions)	
6	2,790	3,800	4,811	
8	1,856	2,591	3,327	
10	1,259	1,816	2,373	
IRR (%)	24.0	29.3	34.3	

#### Cash Flow

Average annual EBITDA,<sup>(1)</sup> based on a lithium carbonate price of US\$12,000 per tonne and otherwise in reliance on base case assumptions, is estimated to be US\$520 million (Phase 1 - US\$246 million). The estimated pay-back period, which is based on years of operation, is 4.6 years (or 5.2 years discounted) after tax, in reliance on base case assumptions.

## Note:

(1) EBITDA, earnings before interest, taxes, depreciation and amortization, is a non-IFRS financial measure which is used in the Thacker Pass TR to indicate the cash flow of the Thacker Pass Project based on certain assumptions. The Thacker Pass TR does not present a corresponding cash flow based on an IFRS measure, or identify the amounts of the adjustments that would have to be made to EBITDA to reconcile it to an IFRS measure. Accordingly, a reconciliation of EBITDA to the most closely comparable IFRS measure is not available without unreasonable efforts. The future IFRS financial results for the Thacker Pass Project may vary significantly from the EBITDA amounts presented in the Thacker Pass TR.

## **Exploration and Development**

A more detailed summary of the current status of the Thacker Pass Project is set forth above under the heading "Thacker Pass Project".

## The RheoMinerals Business

#### History of the Business

LAC's wholly-owned subsidiary, RheoMinerals, began operation in 2011 with the goal of producing specialty drilling fluids used in horizontal drilling in the oil and gas industry. Between 2011 and 2015 the Company financed and built RheoMinerals' organophilic clay product manufacturing plant, the Fernley Facility. In 2014, the oil and gas industry went through a steep decline, and RheoMinerals shifted its focus to non-oilfield market opportunities, while maintaining sales and marketing activity within the oilfield service sector. In 2015, RheoMinerals initiated a product development program that focused on four markets: environmental, animal feed, industrial coatings and alternative drilling fluid additives for the oilfield market.

RheoMinerals now has an established product line across multiple product sectors and has established key sales and distribution relationships for its business.



# Fernley Facility

The Fernley Facility is an organophilic clay product manufacturing plant located in Fernley, Nevada, approximately 190 miles from the Thacker Pass Project and approximately 30 miles from Reno, Nevada. The property encompasses 5.47 acres with three structures totalling 59,300 square feet, including a warehouse, a covered metal storage area that houses the organoclay process plant and an office/laboratory. The plant has a production capacity of approximately 24,000 TPA.

# Management

RheoMinerals has assembled a management team with experience and knowledge in the manufacture, sale & marketing as well as product development and technical support for organophilic clays. The Fernley Facility has a team of experienced plant operating and maintenance personnel that oversee the manufacture of organophilic clay products.

## Sales and Marketing

RheoMinerals works with customers in the oilfield, industrial coatings, environmental and animal feed markets in North America, Europe, South America, and China.

RheoMinerals has a strategic alliance to collectively pursue growth opportunities in the global clay minerals markets with TOLSA, a global leader in the specialized clay sectors. RheoMinerals has also entered into the Delmon Agreement with Delmon Co Ltd., part of Delmon in Saudi Arabia. Under the Delmon Agreement, RheoMinerals agreed to collaborate with Delmon in the design and construction of the Delmon Plant, a manufacturing facility for specialty additives used in oil-based drilling fluids. The Company is entitled to net profit and gross profit royalties from the future Delmon Plant production. The manufacturing plant has been successfully commissioned and product sales from the plant by Delmon are expected to commence in 2019.

Most of RheoMinerals' sales during the year ended December 31, 2018 were to oil and gas service sector customers located in North America.

## Trends and Outlook

RheoMinerals is pursuing commercial sales arrangements for its organophilic clay products, as well as expanding the range of the potential applications for its organophilic clay products. RheoMinerals launched four new products in 2018 and aims to expand the customer base and sales volumes for these products in 2019. As a result of lower than expected sales and continued losses by RheoMinerals, the Company recognized a one-time non-cash impairment of US\$11,580,000 in RheoMinerals' long-lived assets as at December 31, 2018. The Company is reviewing RheoMinerals' business plan with the aim to make the business profitable.

# **Competitive Conditions**

Lithium currently has many end uses, including ceramics and glass, batteries, greases, air treatment and pharmaceuticals. However, it is the battery industry that is expected to predominantly drive future demand growth for lithium. This is expected to come from several areas: (i) the continued growth of small format batteries for cell phones, laptops, digital cameras and hand held power tools, (ii) the transportation industry's electrification of automobiles, buses, delivery vehicles, motorcycles, bicycles and boats using lithium-ion battery technology, and (iii) large format batteries for utility grid-scale storage.

The global supply of lithium is currently dominated by a small group of companies. Four companies (SQM, Albemarle Corporation, FMC Corporation and Ganfeng) supply lithium from brines. SQM, FMC Corporation and Albemarle Corporation have brine operations in the "Puna Plateau". In addition, Albemarle Corporation has a brine operation in the United States and a spodumene (hard rock) operation in Australia. Another



company, Sichuan Tianqi Lithium Industries, produces lithium from a spodumene deposit jointly owned by it and Albemarle Corporation.

LAC believes that although the supply of lithium carbonate is expected to increase in the next 12 to 24 months from a previously completed expansion in South America and an increase of hard rock feedstock (from Australia's feeding conversion capacity in China), demand may grow faster than new supply.

## Specialized Skills and Knowledge

All aspects of the Company's business require specialized skills and knowledge. Such skills and knowledge include the areas of geology, drilling, logistical planning and implementation of exploration programs and regulatory, finance and accounting. The Company relies upon its management, employees and various consultants for such expertise.

# **Mineral Price and Economic Cycles**

The mining business is subject to mineral price cycles. The marketability of minerals and mineral concentrates is also affected by worldwide economic cycles. Lithium markets are affected by demands for lithium batteries and global economic conditions. Fluctuations in supply and demand in various regions throughout the world are common.

## **Economic Dependence**

The Company's business is dependent on the exploration, development and operation of lithium properties. Although the Company entered into offtake agreements with Ganfeng and BCP as part of the Cauchari Financing Transactions, the Company is not dependent on any sole contract to sell the major part of the Company's products or services or to purchase the major part of the Company's requirements for goods, services or raw materials, or on any franchise or licence or other agreement to use a patent, formula, trade secret, process or trade name upon which the Company's business depends.

# **Bankruptcy and Similar Procedures**

There are no bankruptcies, receivership or similar proceedings against the Company, nor is the Company aware of any such pending or threatened proceedings. The Company has not commenced any bankruptcy, receivership or similar proceedings during the Company's history.

# Reorganizations

There have been no corporate reorganizations of the Company within the three most recently completed financial years.

# **Foreign Operations**

The Company's properties are located in Argentina and the United States. In particular, the Cauchari-Olaroz Project in Argentina exposes the Company to various degrees of political, economic and other risks and uncertainties. See "Risk Factors" and "Emerging Market Disclosure."

The Argentine economy underwent significant positive changes in late 2015, 2016 and 2017 as a result of measures that the new government took reduce or remove controls and restrictions on capital flows. Since taking office in December 2015, President Mauricio Macri has moved swiftly to appoint a business-friendly cabinet and implement a series of major fiscal, political and regulatory policy measures. President Macri lifted foreign exchange controls that had been in place since 2011, and abolished export taxes on many agricultural and industrial goods, including lithium. Additionally, the Province of Jujuy, where the project is located, is very supportive of the development of the project.



Argentina enacted the Argentine Tax Law that introduces amendments to corporate income tax, personal income tax, value added tax, tax procedural law, criminal tax law, social security contributions, excise tax, tax on fuels, and tax on the transfer of real estate. It also establishes a special regime comprising an optional revaluation of assets for income tax purposes. The reform, coupled with an agreement with Argentina's provinces to reduce regional sales taxes, should reduce the tax burden and improve the efficiency of the taxation system in Argentina.

2018 has been challenging for Argentina's economy with a drought negatively affecting agricultural sector revenues and exports, the devaluation of the peso and high inflation. The country sought financial support from the International Monetary Fund to help provide stability to the currency. On September 4, 2018, the Argentinian authorities issued Executive Order No. 793/2018 establishing an export tax of 12% over all goods exported from Argentina, applicable from September 4, 2018, to December 31, 2020. The tax is capped at 4 Argentinian pesos per U.S. dollar for primary products, including agricultural goods, and 3 pesos per dollar on other exports. This action was part of a larger plan that included other austerity measures and invoking an International Monetary Fund assistance loan.

#### **Employees**

As at December 31, 2018, the Company had 62 employees and 5 part time and/or consultants working at various locations. As at December 31, 2018, the Cauchari Joint Venture had over 516 employees and contract workers working at the Cauchari-Olaroz Project in Argentina.

## **Environmental Protection**

The Company's operations are subject to various government laws and regulations concerning safety and environmental protection. The EIS has been approved by the authorities in Argentina for the Cauchari-Olaroz Project and all permits required to start mine construction have been issued to the Company based on its current mine plan, as described in the Cauchari TR. Within the United States, the Company has received approvals, including environmental approvals by local, State and Federal authorities to commence the mining of hectorite clay in support of RheoMinerals' business and continues to advance the permitting process for the Thacker Pass Project, as discussed herein.

#### Social or Environmental Policies

The Company aims to minimize the impact of its operations on both local communities and the environment. At the Cauchari-Olaroz Project, the Social Responsibility plan was developed to incorporate best practices on these matters. The Social Responsibility Plan was prepared in accordance with the Argentina Principles. The Company has, in accordance with the principles in its Social Responsibility Plan, entered into agreements with the aboriginal communities located proximate to the Cauchari-Olaroz Project that aim to promote social development through high quality job creation, training, access to medical assistance and other infrastructure. LAC is also committed to developing the Thacker Pass Project in a responsible and sustainable manner. The Company takes its responsibilities seriously to protect the environment, to conduct business based on high ethical standards and to make a positive difference in the communities in which it operates.

## **Emerging Market Disclosure**

The Company's Cauchari-Olaroz Project is located in Argentina, an emerging market, and the Company's interest in the project is held indirectly through subsidiaries and joint venture entities which are locally incorporated or established for the purposes of compliance with local laws. Operating in an emerging market exposes the Company to risks and uncertainties that do not exist or are significantly less likely to occur in other jurisdictions where the Company operates, such as the United States or Canada. In order to manage and mitigate these risks, the Company has designed a system of corporate governance for itself and its subsidiaries and joint ventures that include internal controls over financial reporting and disclosure



controls. These systems are coordinated by the Company's senior management and overseen by its Board in order to monitor the Company's operating subsidiaries and joint ventures.

# Board and Management Experience and Oversight

Key members of the Company's management team have experience running business operations in emerging markets, including Argentina. Gabriel Rubacha, a director and the President of South American Operations, is an Argentinean national and has held senior positions in large, multinational corporations operating throughout South America. Franco Mignacco, a director of the Company and the President of Exar, is also an Argentinean national and has substantial business operating experience in Jujuy Province where the Cauchari-Olaroz Project is located.

In addition, senior officers of the Company, including the CEO and President, regularly visit the Company's operations and properties in Argentina. During these visits, they interact with local employees, government officials and business persons; such interactions enhance the visiting directors' and officers' knowledge of local culture and business practices. The Board has undertaken a site visit of the Cauchari-Olaroz Project and held a Board meeting in Argentina in each of the past two years.

The Board, through its corporate governance practices, regularly receives management and technical updates, risk assessments and progress reports in connection with its operations in Argentina. Through these updates, assessments and reports, the Board gains familiarity with the operations, laws and risks associated with operations in that jurisdiction. The Board also has access to head office management in Canada who: (a) work directly with local management in Argentina and are familiar with the laws, business culture and standard practices of Argentina; (b) have Spanish language proficiency; (c) are experienced in working in Argentina and in dealing with the Argentine government authorities; and (d) have experience and knowledge of the local banking systems and treasury requirements of Argentina.

#### Communication

While the reporting language with the head office of the Company is English, the primary operating language in Argentina is Spanish. Messrs. Mignacco and Rubacha are native Spanish speakers and various members of head office management are proficient in Spanish. Additionally, the majority of operational management in Argentina are fluent in both Spanish and English.

The Company maintains open communication with its operations in Argentina through management team members who are fluent in Spanish and are proficient in English, removing language barriers between the Company's head office and the local management team in Argentina. The primary language used in meetings with head office management and Board meetings is English and material documents relating to the Company's operations that are provided to the Board are in English. Material documents relating to the Company's material operations in Argentina are either in English or, where in Spanish, are translated into or summarized in English.

#### Controls Relating to Corporate Structure Risk

The Company has implemented a system of corporate governance, internal controls over financial reporting and disclosure controls and procedures that apply to the Company, its subsidiaries and the Cauchari Joint Venture. These systems are overseen by the Board and implemented by the Company's senior management. The relevant features of these systems include:

(a) The Company's Control Over Subsidiaries and Joint Ventures. The Company's corporate structure has been designed to ensure that the Company has a measure of direct oversight over the operations of its subsidiaries and the Cauchari Joint Venture. The Cauchari Joint Venture is governed by the Joint Venture Shareholder Agreement (please see "Material Contracts – Joint Venture Shareholder Agreement") which provides for, among other things: (i) the formation of the Exar Management Committee comprised of three representatives of the Company and two representatives of Ganfeng; (ii) the composition of the board of directors of Exar and Exar Capital, being three representatives of the Company and two representatives of

Ganfeng; (iii) the review and approval by the Exar Management Committee of programs and budgets and other key decisions; and (iv) the right of each party to purchase its pro rata share of the production. The Cauchari Joint Venture is overseen by the Exar Management Committee, which meets regularly to make decisions relating to project development. The Company works closely and is in constant communication with Exar's management, including Exar's CFO. Under the Company's supervision, in July 2017 Exar implemented SAP's accounting and reporting system and adopted best practice internal controls as part of the SAP implementation. In addition, Exar established a Compliance Department which oversees the operations and financial reporting from compliance perspective. The Company reviews Exar's financial reporting as part of preparing its consolidated financial reporting. The Company's internal and independent auditors review the results of the audit of Exar's financial statements by Exar's independent auditors as part of the audit of the Company's consolidated financial statements and the results are reported to the Company's Audit Committee. The Company has adopted a simple structure for its Argentina business operations, with the principal Argentine operating company for LAC's assets in Argentina being held as to a nominal amount by a wholly-owned Ontario company (which was originally established to meet Argentine corporate law requirements to have two shareholders) and the balance held directly by the parent company, while funding for project development comes from Exar Capital.

- (b) Signing Officers for Foreign Subsidiary Bank Accounts. The establishment of any new banking relationships and/or new bank accounts requires approval from the Company. Monetary authorization limits are established by the Company and put in place with the respective banking institutions. Signatories and authorization limits for bank accounts are reviewed and revised as necessary, with changes being communicated to the appropriate banking institutions. Each payment requires approvals from two authorised signatories. Cash calls, equity contributions and loans to subsidiaries and the Cauchari Joint Venture are provided within the approved budgets and require the necessary authorisations from the Company's officers to be processed. Exar's controls over payments are subject to review and testing by the Company and findings are reviewed by the Company's Audit Committee.
- (c) Strategic Direction. The Board is responsible for the overall stewardship of the Company and, as such, supervises the management of the business and affairs of the Company. More specifically, the Board is responsible for reviewing the strategic business plans and corporate objectives, and approving acquisitions, dispositions, investments, capital expenditures and other transactions and matters that are material to the Company including those of its material subsidiaries and the Cauchari Joint Venture.
- (d) Internal Control Over Financial Reporting. The Company prepares its consolidated financial statements on a quarterly and annual basis, using IFRS. The Company implements internal controls over the preparation of its financial statements and other financial disclosures, including its MD&A, to provide reasonable assurance that its financial reporting is reliable and that the quarterly and annual financial statements are being prepared in accordance with IFRS and other financial disclosures, including its MD&A, are being prepared in accordance with relevant securities legislation. These systems of internal control over financial reporting and disclosure controls and procedures are designed to ensure that, among other things, the Company has access to material information about its subsidiaries.
- (e) Disclosure Controls and Procedures. The Company has a disclosure policy that establishes the protocol for the preparation, review and dissemination of information about the Company. This policy provides for multiple points of contact in the review of important disclosure matters, which includes input from key members of management located in Argentina.
- (f) CEO and CFO Certifications. In order for the Company's CEO and CFO to be in a position to attest to the matters addressed in the quarterly and annual certifications required by NI 52-109 and United States securities laws, the Company has developed internal procedures and responsibilities throughout the organization for its regular periodic and special situation reporting, in order to provide assurances that information that may constitute material information will reach the appropriate individuals who review public documents and statements relating to the Company and its subsidiaries containing material information, is prepared with input from the responsible officers and employees, and is available for review by the CEO and CFO in a timely manner.

# Fund Transfers between the Company and the Company's Subsidiaries and Joint Ventures

Differences in banking systems and controls between Canada, the Netherlands and Argentina are addressed by having stringent controls over cash kept in the jurisdiction, especially with respect to access to cash, cash disbursements, appropriate authorization levels, performing and reviewing bank reconciliations on at least a monthly basis and the segregation of duties. In executing certain normal course monetary transactions, funds are transferred between the Company and its subsidiaries by way of wire transfer. These transactions would typically include the payment of applicable fees for services; reimbursement of costs incurred by the Company on behalf of the subsidiaries and joint ventures; advances in the form of intercompany loans or equity contributions to subsidiaries and joint ventures; repayment of interest and/or principal on intercompany loans; and the return of capital or payment of dividends from subsidiaries and joint ventures. Capital structure and funding arrangements are established between the Company and the subsidiaries and joint ventures, and intercompany loan agreements are established with defined terms and conditions. Where regulatory conditions exist in the form of exchange controls, all necessary approvals are obtained in advance of the proposed transactions.

# Managing Cultural Differences

Differences in cultures and practices between Canada and Argentina are addressed by employing competent staff in Canada and Argentina who are familiar with the local laws, business culture and standard practices, have local language proficiency, are experienced in working in that jurisdiction and in dealing with the relevant government authorities and have experience and knowledge of the local banking systems and treasury requirements.

#### Transactions with Related Parties

In addition to the Cauchari Joint Venture with Ganfeng, LAC has one substantive related party relationship in respect of its Argentina business operations, being the Los Boros Option Agreement in which the counterparty is a company in which Franco Mignacco holds a material interest. The current business arrangements with that entity were negotiated in 2016 by the Company and SQM on an arm's length basis. For further information see "The Cauchari-Olaroz Project – Property Description, Location and Access" and "Interest of Management and Others in Material Transactions". Exar has also retained a company, Magna Construcciones S.R.L., in which Franco Mignacco holds an interest to conduct certain construction services on the Cauchari-Olaroz Project.

# Records Management of the Company's Subsidiaries

The original minute books and corporate records of each of the Company's subsidiaries are kept at each subsidiary's respective registered office. Company management and the Board have complete access to these records.

## **DESCRIPTION OF CAPITAL STRUCTURE**

## **Common Shares**

The Company is authorized to issue an unlimited number of Common Shares without par value of which, as of the date of this AIF, 88,735,887 Common Shares are issued and outstanding. All rights and restrictions in respect of the Common Shares of the Company are set out in the Company's notice of articles and the BCBCA and its regulations. The Common Shares have no pre-emptive, redemption, purchase or conversion rights. Neither the BCBCA nor the constating documents of the Company impose restrictions on the transfer of Common Shares on the register of the Company, provided that the Company receives the certificate representing the Common Shares to be transferred together with a duly endorsed instrument of transfer and payment of any fees and taxes which may be prescribed by the Board from time to time. There are no sinking fund provisions in relation to the Common Shares and they are not liable to further calls or assessment by the Company. The BCBCA and the Company's articles provides that the rights and restrictions attached to any class of shares may not be modified, amended or varied unless consented to



by special resolution passed by not less than two-thirds of the votes cast in person or by proxy by holders of shares of that class.

The holders of the Common Shares are entitled to: (i) notice of and to attend any meetings of shareholders and shall have one vote per Common Share at any meeting of shareholders of the Company; (ii) dividends, if as and when declared by the Board; and (iii) upon liquidation, dissolution or winding up of the Company, on a pro rata basis, the net assets of the Company after payment of debts and other liabilities.

#### **DIVIDENDS AND DISTRIBUTIONS**

The Company has no fixed dividend policy and the Company has not declared any dividends on its Common Shares since its incorporation. The Company anticipates that all available funds will be used to undertake exploration and development programs on its mineral properties as well as for the acquisition of additional mineral properties. The payment of dividends in the future will depend, among other things, upon the Company's earnings, capital requirements and operating and financial condition. Generally, dividends can only be paid if a corporation has retained earnings. There can be no assurance that the Company will generate sufficient earnings to allow it to pay dividends. See also "General Development of the Business."

#### MARKET FOR SECURITIES

#### Market

The Common Shares of the Company are traded in Canada on the Exchange under the symbol "**LAC**". On January 25, 2018 LAC's Common Shares also commenced trading on the NYSE under the same symbol. The closing price of the Company's Common Shares on the Exchange on March 29, 2019 was \$5.19, and on the NYSE was US\$3.78.

# **Trading Price and Volume**

The following sets forth the high and low market prices and the volume of the Common Shares traded on the Exchange during the periods indicated:

Month	High \$	Low \$	Volume
January, 2018	12.94	7.86	14,669,315
February, 2018	9.88	7.19	8,965,249
March, 2018	8.80	6.12	6,556,273
April, 2018	7.44	6.07	5,581,233
May, 2018	8.85	6.40	5,360,186
June, 2018	7.76	6.60	3,587,970
July, 2018	7.13	4.58	2,729,314
August, 2018	6.69	4.63	4,326,992
September, 2018	6.62	4.94	4,526,497
October, 2018	6.35	4.00	3,818,019
November, 2018	6.12	4.31	3,375,967
December, 2018	5.30	3.74	2,570,247



# **DIRECTORS AND OFFICERS**

# Name and Occupation

The name, province or state of residence, position with and principal occupation within the five preceding years for each of the directors and executive officers of the Company are set out in the following table:

Name, Province or State and Country of Residence and Position with the Company <sup>(1)</sup>	Principal Occupation or Employment for the Last Five Years <sup>(1)</sup>	Director Since <sup>(2)</sup>
DIRECTORS:		
George Ireland Massachusetts, USA Non-Executive Chairman and Director	Founder, Chief Investment Officer and CEO of Geologic Resources Partners LLP (investment fund).	Nov 2015
Wang Xiaoshen Shanghai, China Director	Vice-Chairman and Executive Vice President of Ganfeng Lithium Corporation (resource development company).	June 2017
Chaiwat Kovavisarach Bangkok, Thailand <i>Director</i>	President and Chief Executive Officer of Bangchak Corporation Public Company Limited (resource development company) from January 2015 to Present; advisor to Avantgarde Capital Company Limited from 2007 to 2014.	August 2017
Gary Cohn Ontario, Canada <i>Director</i>	Consultant on corporate development matters since July 2015; Vice-President, Mergers and Acquisitions of Magna International Inc. (auto parts manufacturer) from May 2009 to June 2015.	June 2017
<b>Jean Fraser</b> Ontario, Canada <i>Director</i>	Retired partner at Osler, Hoskin & Harcourt LLP <sup>(3)</sup> (law firm).	Nov 2017
Franco Mignacco Jujuy, Argentina <i>Director</i>	President of Exar since June 2013; President of Los Boros S.A. (construction and property development company) since January 2006.	Sep 2015



Name, Province or State and Country of Residence and Position with the Company <sup>(1)</sup>	Principal Occupation or Employment for the Last Five Years <sup>(1)</sup>	Director Since <sup>(2)</sup>
OFFICERS:		
<b>Tom Hodgson</b> Ontario, Canada <i>Director</i> and Chief Executive Officer	CEO of the Company since November 2015; Executive Chairman of Former LAC from 2010 to September 2015.	Sep 2015
John Kanellitsas Idaho, USA Director and Executive Vice Chairman	President of the Company, March 2016 to August, 2018; Vice-Chairman of the Company since November 2015; Interim CEO of Former LAC from June 2013 to June 2014; CEO of Former LAC from June 2014 to September 2015; Chief Operating Officer and Chief Compliance Officer of Geologic Resource Partners LLC (investment fund) from June 2004 to January 2015.	Sep 2015
Jonathan Evans Georgia, USA President and Chief Operating Officer	President and Chief Operating Officer of the Company, August, 2018 to present; Chief Operating Officer of DiversiTech Corporation (technology company) March 2016 to August, 2018; EVP Global Operations/Supply Chain of Arysta LifeScience (biotech company) from June 2013 to March 2016 and Interim CEO from July 2015 to February 2016; Vice President and General Manager CE Minerals of Imerys SA (resource development company) from January to June 2013; Vice President and General Manager of the Lithium Division of FMC Corporation (resource development company) from August 2008 to January 2013.	N/A
<b>Gabriel Rubacha</b> Buenos Aires, Argentina Director, President of South American Operations	President of South American Operations of the Company since May 2017; Commercial Director of Techint Engineering & Construction (engineering and development company) 2016 to April 2017; Managing Director of Southern Cone, Techint Engineering & Construction from 2012 to 2016. General Manager Chile, 2008 to 2012, Techint Engineering & Construction	March 2016
Alexi Zawadzki British Columbia, Canada President of North American Operations	President of North American Operations of the Company from August 2017 to present; VP Programs Development of Lithium Nevada Corp. from August 2016 to August 2017; VP Business Development of Pure Energy Minerals from October 2014 to June 2016; VP Business Development of Veresen Inc. from 2010 to Oct 2013.	N/A
<b>Eduard Epshtein</b> British Columbia, Canada Chief Financial Officer	Chief Financial Officer of the Company since May 2008.	N/A
Rene LeBlanc Nevada, USA Chief Technical Officer	Chief Technical Officer of the Company since August 2018, Senior Process Development Manager for Lithium Nevada Corp. from June 2017 to August 2018, Staff Process Development Engineer for Tesla Motors from January 2016 to June 2017, Senior Process Development Engineer for FMC Corporation, Lithium Division from March 2011 to January 2016	N/A
Alec Meikle		
British Columbia, Canada Vice President, Corporate Development	Institutional equity research analyst at Cormark Securities from 2013 to 2016. Alec joined the Company in 2016.	N/A

Notes:



- (1) The information as to country of residence and principal occupation has been furnished by the respective directors and executive officers individually.
- (2) Appointments relate to LAC only and do not cover directors who served on Former LAC that combined with, and became a subsidiary of, LAC in September 2015. Certain of the current directors of LAC served as directors of Former LAC prior to September 2015.
- (3) Ms. Fraser was a Partner at Osler, Hoskin & Harcourt LLP until her retirement in 2015.

Each director's term of office expires at the next annual general meeting of the Company.

# **Shareholdings of Directors and Officers**

As of the date of this AIF, the directors and executive officers of the Company, as a group, beneficially owned, directly or indirectly, or exercised control or direction over 39,910,215 Common Shares representing approximately 45% of the issued and outstanding Common Shares, and held equity incentives to acquire from 5,385,923 to 6,586,849 Common Shares. The number of shares exercisable from the equity incentives into the common shares upon vesting of the rewards varies based on the PSUs ratio. The ratio depends on the performance of the Company's shares compared to the peer group of companies and can vary from zero to up to two times the number of PSUs granted.

## Cease Trade Orders, Bankruptcies, Penalties or Sanctions

No director or executive officer of the Company is, as at the date of this AIF, or was, within ten years before the date of this AIF, a director, chief executive officer or chief financial officer of any company (including the Company), that (a) was subject to a cease trade or similar order or an order that denied the relevant company access to any exemption under the securities legislation, for a period of more than 30 consecutive days, 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.

No director or executive officer of the Company, or a shareholder holding a sufficient number of securities of the Company to affect materially the control of the Company (a) is, as at the date of this AIF, or has been within the 10 years before the date of this AIF, a director or executive officer of any company (including the Company) 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 of this AIF, 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.

No director, or executive officer of the Company, or a shareholder holding a sufficient number of securities of the Company to affect materially the control of the Company, has been subject to (a) 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 (b) 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.

#### Committees of the Board

The committees of the Board consist of an Audit Committee, Compensation and Benefits Committee, Nominating and Corporate Governance Committee and a Health, Safety and Environmental Committee. The members of the Compensation and Benefits Committee are Jean Fraser (chair), Gary Cohn, and Wang Xiaoshen. The members of the Nominating and Corporate Governance Committee are George Ireland



(chair), Jean Fraser, Chaiwat Kovavisarach and Gary Cohn. The members of the Health, Safety and Environmental Committee are Gabriel Rubacha (chair), Franco Mignacco and George Ireland. The members of the Audit Committee are Gary Cohn (chair), George Ireland and Jean Fraser. Information concerning the Audit Committee is provided under "Audit Committee Information" below.

#### **Conflicts of Interest**

To the best of the Company's knowledge, except as otherwise noted in the Company's public disclosure documents, there are no existing or potential conflicts of interest among the Company, its directors, officers, or other members of management of the Company except that certain of the directors, officers and other members of management serve as directors, officers and members of management of other public companies and therefore it is possible that a conflict may arise between their duties as a director, officer or member of management of such other companies and their duties as a director, officer or member of management of the Company.

The directors and officers of the Company are aware of the existence of laws governing accountability of directors and officers for corporate opportunity and requiring disclosure by directors of conflicts of interest. The Company relies upon its directors and officers to disclose any such conflicts or other aspects of accountability in accordance with the BCBCA.

The Company has adopted a Code of Business Conduct and Ethics that applies to all directors, officers, employees and consultants of the Company and its subsidiaries. A copy of the Company's Code of Business Conduct and Ethics may be found on SEDAR at www.sedar.com.

#### **AUDIT COMMITTEE INFORMATION**

#### **Audit Committee Charter**

The charter of the Audit Committee is attached as Schedule "B" to this AIF.

# **Composition of the Audit Committee and Independence**

The Company's Audit Committee consists of Gary Cohn (chair), George Ireland and Jean Fraser. NI 52-110 provides that 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 the member's independent judgment. The Board has determined that all members of the Audit Committee are "independent" directors.

#### **Relevant Education and Experience**

NI 52-110 provides that an individual is "financially literate" if he or she has the ability to read and understand a set of financial statements that present a breadth and level 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. The Company has determined that all of the members of the Audit Committee are "financially literate".

Based on their business and educational experiences, each Audit Committee member has a reasonable understanding of the accounting principles used by the Company; an ability to assess the general application of such principles in connection with the accounting for estimates, accruals and reserves; experience preparing, auditing, analyzing or evaluating financial statements that present a breadth and level of complexity of issues that can reasonably be expected to be raised by the Company's financial statements, or experience actively supervising one or more individuals engaged in such activities; and an understanding of internal controls and procedures for financial reporting.



## **Audit Committee Oversight**

Since the commencement of the Company's most recently completed financial year, the Audit Committee has not made any recommendations to nominate or compensate an external auditor which were not adopted by the Board.

# **Reliance on Certain Exemptions**

Since the commencement of the Company's most recently completed financial year, the Company has not relied on the exemptions in section 2.4 (*De Minimis Non-audit Services*), section 3.2 (*Initial Public Offerings*), section 3.4 (*Events Outside Control of Member*) or section 3.5 (*Death, Disability or Resignation of Audit Committee Member*) of NI 52-110, or an exemption from NI 52-110, in whole or in part, granted under Part 8 (*Exemptions*).

Since the commencement of the Company's most recently completed financial year, the Company has not relied on the exemption in subsection 3.3(2) (*Controlled Companies*), section 3.6 (*Temporary Exemption for Limited and Exceptional Circumstances*) or the exemption in section 3.8 (*Acquisition of Financial Literacy*) of NI 52-110.

# **Pre-Approval Policies and Procedures**

The Audit Committee Chair is authorized to pre-approve all non-audit services to be provided to the Company or its subsidiary entities by the Company's external auditor, subject to the Audit Committee Chair reporting the pre-approval(s) to the Audit Committee at the Committee's meeting subsequent to the said approval(s).

#### **Audit Fees**

The following table sets forth the fees billed to the Company and its subsidiaries by PwC for services rendered during the periods ended December 31, 2018 and 2017:

	12 months ended Dec. 31, 2018	12 months ended Dec. 31, 2017
Audit fees <sup>(1)</sup>	\$243,933	\$145,529
Audit-related fees	-	-
Tax fees <sup>(2)</sup>	\$259,500	\$26,130
All other fees <sup>(3)</sup>	\$9,000	\$9,000
Total	\$512,433	\$180,659

#### Notes:

- (1) The aggregate audit fees billed by the Company's auditor.
- (2) The aggregate fees billed (or accrued) for professional services provided by the auditor rendered for tax compliance, tax advice and tax planning.
- (3) All other fees represent fees for audit of the Company's report prepared pursuant to the Extractive Sector Transparency Measure Act in Canada.



## LEGAL PROCEEDINGS AND REGULATORY ACTIONS

The Company is not a party to, nor are any of the Company's properties subject to, any pending legal proceedings or regulatory actions the outcome of which would have a material adverse effect on the Company. The management of the Company is not aware of any material legal proceedings in which the Company may be a party which are contemplated by governmental authorities or otherwise.

#### INTEREST OF MANAGEMENT AND OTHERS IN MATERIAL TRANSACTIONS

Management of the Company is not aware of any material interest, direct or indirect, of any insider of the Company, or any associate or affiliate of any such person, in any transaction within the Company's three most recently completed financial years, or during the current financial year that has materially affected or is reasonably expected to materially affect the Company.

In August 2018, the Company entered into agreements to implement the Joint Venture Transactions, which were completed in October 2018. In connection therewith, among other things, the Company and Ganfeng became partners in the Cauchari Joint Venture, with the Company holding a 62.5% interest, and Ganfeng holding the remaining 37.5% interest. For further information, please see "Material Contracts – Joint Venture Shareholder Agreement".

On September 11, 2018, the Cauchari Joint Venture exercised its option pursuant to the Los Boros Option Agreement with Los Boros, a company controlled by the family of Franco Mignacco, Director of the Company and President of Exar, and of which Franco Mignacco is Vice-President, for the transfer of title to the Cauchari Joint Venture for certain mining properties that comprised a portion of the Cauchari-Olaroz Project.

#### TRANSFER AGENTS AND REGISTRARS

The Company's registrar and transfer agent is Computershare Investor Services Inc. located at its principal offices in Vancouver, British Columbia.

#### **MATERIAL CONTRACTS**

Other than contracts entered into in the ordinary course of business, and except as described below, the Company has not entered into any material contracts within the most recently completed financial year or previous to the most recently completed financial year, that are still in effect.

# **Ganfeng Investor Rights Agreement**

On July 14, 2017 LAC and Ganfeng entered into the Ganfeng Investor Rights Agreement, pursuant to which Ganfeng has the following rights, provided that it continues to hold not less than 15% of the Common Shares: (a) the right to add a nominee to the Board; (b) participation rights allowing it to maintain its equity ownership interest in LAC at 17.5%, or such other percentage as determined in accordance with the terms and conditions of the Ganfeng Investor Rights Agreement, until March 31, 2019; and (c) a registration right for the sale of its Common Shares. In accordance with the nomination right, the Company appointed Wang Xiaoshen, the Vice-Chairman and Executive Vice President of Ganfeng Lithium Corporation, to the Board.



# **BCP Investor Rights Agreement**

On July 14, 2017 LAC and BCP entered into the BCP Investor Rights Agreement, pursuant to which BCP has the following rights, provided that it continues to hold not less than 15% of the Common Shares: (a) the right to add a nominee to the Board; (b) participation rights allowing it to maintain its equity ownership interest in LAC at 16.4%, or such other percentage as determined in accordance with the terms and conditions of the BCP Investor Rights Agreement, until March 31, 2019; and (c) a registration right for the sale of its Common Shares. In accordance with the nomination right, the Company appointed Chaiwat Kovavisarach, the CEO of Bangchak, to the Board.

## **Amended Credit Facility**

On July 14, 2017 the Company (as borrower) and 2265866 Ontario Inc., Lithium Nevada and KV Project LLC (as guarantors), Ganfeng and BCP (as Lenders), BNY Trust Company of Canada (as the administrative agent for the lenders) and The Bank of New York Mellon (as the U.S. Collateral Agent for the Lenders) entered into the Amended Credit Facility. Under the Amended Credit Facility, Ganfeng agreed to lend the Company US\$125 million and BCP agreed to loan the Company US\$80 million to fund a portion of the Company's share of Cauchari-Olaroz's construction costs. The credit facility has a six-year term, carries an 8.0% interest rate for the first three years, 8.5% in year four, 9.0% in year five and 9.5% in year six on the principal amount drawn. As of December 31, 2018, the Company had drawn US\$17.5 million on the credit facility.

As security for the indebtedness, LAC granted to the lenders a first priority security interest in all assets except those that represent its ownership interest in the Cauchari-Olaroz Project.

# **Transaction Agreements**

On August 13, 2018, in connection with the Joint Venture Transactions, the Company, SQM, SQM Potasio S.A., Ganfeng, Exar and 2265866 Ontario Inc. entered into the Transaction Agreement, pursuant to which, among other things, SQM sold its 50% equity interest in Exar to Ganfeng in exchange for US\$87.5 million in cash (which such amount includes repayment of certain outstanding indebtedness owing from Exar to SQM, as well as certain other costs), plus a deferred payment of US\$50 million, which is payable upon satisfaction of certain production milestones following commencement of commercial production.

In addition, on August 13, 2018, the Company and Ganfeng entered into the Supplemental Transaction Agreement, pursuant to which, among other things, the Company and Ganfeng agreed to complete certain corporate transactions to reorganize the equity and debt composition of Exar (and to form Exar Capital) to reflect the Company's 62.5% interest, and Ganfeng's 37.5% interest. The parties also agreed to enter into the Joint Venture Shareholder Agreement and the US\$100 million Limited Recourse Loan Facility.

# Joint Venture Shareholder Agreement

On October 25, 2018, the Company, 2265866 Ontario Inc., Ganfeng, Ganfeng Lithium Netherlands Co., B.V., Exar and Exar Capital entered into the Joint Venture Shareholder Agreement to govern the Company's 62.5% and Ganfeng's 37.5% interests in Exar and Exar Capital. The Joint Venture Shareholder Agreement provides for, among other things, (i) the formation of the Exar Management Committee comprised of three representatives of the Company and two representatives of Ganfeng; (ii) the composition of the board of directors of Exar Capital and Exar, being three representatives of the Company and two representatives of Ganfeng; (iii) the review and approval by the Exar Management Committee of programs and budgets; and (iv) the right of each party to purchase its pro rata share of the production.



## **Limited Recourse Loan Facility**

On October 30, 2018, the Company (as borrower) and Ganfeng (as lender) entered into the Limited Recourse Loan Facility, pursuant to which Ganfeng agreed to lend to the Company US\$100 million. The Limited Recourse Loan Facility is unsecured and subordinated to the senior credit facilities and is to be repaid from the proceeds of 50% of the Company's share of future distributions from the Cauchari-Olaroz Project. Draws may be made under the Limited Recourse Loan Facility until December 31, 2025, and the Company has the right to prepay the Limited Recourse Loan Facility without penalty. The Limited Recourse Loan Facility carries an interest rate equal to 6-month LIBOR +5.5% per annum, subject to a maximum of 10% per annum, and the interest is payable annually from 50% of the distributions paid directly and indirectly by Exar to the Company, subject to compliance with the Company's senior credit facilities and to receipt of distributions from Exar.

#### **INTERESTS OF EXPERTS**

Ernest Burga, P.Eng., and David Burga, P.Geo., Wayne Genck, P.Eng., and Daniel Weber P.G., RM-SME prepared the Cauchari TR.

Reza Ehsani, P.Eng., Daniel Peldiak, P.Eng., and Rob Spiering, P.Eng., Andrew Hutson, FAusIMM, BE (Mining), Louis F. Fourie, P. Geo., Pri.Sci.Nat, John Young, B.Sc., SME-RM, and Ken Armstrong, P.Eng., prepared the Thacker Pass TR.

All technical and scientific information contained in this AIF has been reviewed and approved by Rene LeBlanc, Chief Technical Officer of the Company, and a QP for the purposes of NI 43-101.

As at the date of this AIF, Ernest Burga, P.Eng., David Burga, P.Geo., Wayne Genck, P.Eng., Daniel Weber P.G., RM-SME, Reza Ehsani, P.Eng., Daniel Peldiak, P.Eng., Rob Spiering, P.Eng., Louis Fourie, P.Geo., Andrew Hutson, FAusIMM, BE (Mining), John Young, B.Sc., SME-RM, and Ken Armstrong, P.Eng., collectively hold less than one percent of the Company's outstanding securities of the Company or of any of the Company's associates or affiliates.

The Company's auditors are PwC, Chartered Professional Accountants, who have prepared an independent auditor's report dated April 1, 2019 in respect of the Company's consolidated financial statements as at December 31, 2018 and December 31, 2017 and for the years ended December 31, 2018 and December 31, 2017. PwC has advised that they are independent with respect to the Company within the meaning of the Chartered Professional Accountants of British Columbia Code of Professional Conduct.

### **ADDITIONAL INFORMATION**

Additional information including directors' and officers' remuneration and indebtedness, principal holders of the Company's securities and options to purchase Common Shares of the Company and securities authorized for issuance under equity compensation plans is contained in the management proxy circular dated May 14, 2018 for the annual general meeting of the Company held on June 21, 2018, which is available on SEDAR at www.sedar.com. Additional financial information is contained in the Company's comparative financial statements and MD&A as at and for the years ended December 31, 2018 and 2017 and the interim periods ending March 31, 2018, June 30, 2018 and September 30, 2018, which are available on SEDAR at www.sedar.com. Additional information relating to the Company may be found on SEDAR at www.sedar.com.



# SCHEDULE "A" DEFINITIONS

## **Definitions**

The abbreviations set forth below have the following meanings in this AIF, or in documents incorporated by reference in this AIF:

**"2017 Feasibility Study"** means the NI 43-101 technical report filed by LAC in 2017 containing a feasibility study and mineral reserve estimate.

"2012 PFS" means the technical report dated January 27, 2012 entitled "Preliminary Feasibility Study, Kings Valley Lithium Project, Humboldt County, Nevada";

"°C" means degrees Celsius;

"AIF" means Annual Information Form;

"ALS" means ALS Chemex Labs Ltd. and its affiliates;

"Amended Credit Facility" means the amended and restated credit and guarantee agreement dated July 14, 2017 between the Company (as borrower), 2265866 Ontario Inc., Lithium Nevada and KV Project LLC (as guarantors), Ganfeng and BCP (as lenders), BNY Trust Company of Canada (as the administrative agent for the lenders) and The Bank of New York Mellon (as the U.S. collateral agent for the lenders);

"Arrangement" means the statutory plan of arrangement between the Company and Former LAC, which resulted in shareholders of Former LAC receiving Common Shares on the basis of 0.159 of a Common Share for each common share of Former LAC:

"Argentina Principles" means the guidelines of the Camara Argentina of Empresarios Mineros that have adopted the Towards Sustainable Mining, a corporate social responsibility program developed by the Mining Association of Canada to improve environmental and social practice in the mining industry;

"Argentine Mining Code" means the Código de Minería, the principle legislation that regulates the mining industry in Argentina;

"Argentine Tax Law" means the comprehensive tax reform enacted in Argentina in December 2017 and became effective as of January 1, 2018;

"ASA" means Alex Stewart Argentina;

"B" means boron;

"BCBCA" means the Business Corporations Act (British Columbia);

"BCP" means BCP Innovation PTE. Ltd., an affiliate of the Bangchak;

"BCP Investment Agreement" means the investment agreement entered into between LAC and BCP dated January 19, 2017, as subsequently amended;

**BCP Investor Rights Agreement** means the investor rights agreement between LAC and BCP dated January 19, 2017;

**"BCP SR Private Placement"** means the non-brokered private placement of 9,214,211 subscription receipts to BCP at a price of US\$0.54264 per subscription receipt (pre-consolidation);

"BLM" means the U.S. Department of the Interior Bureau of Land Management;

"Board" means the board of directors of the Company;



"Ca" means calcium;

"CaCl2" means calcium chloride;

"CaO" means calcium oxide;

"Cauchari Financing Transactions" means, collectively, the financings and related transactions and agreements contemplated by both the BCP Investment Agreement and the Ganfeng Investment Agreement;

"Cauchari Joint Venture" means the 62.5/37.5 ownership venture between the Company and Ganfeng on the Cauchari-Olaroz Project, operated through shareholdings in Exar, Exar Capital and related agreements;

"Cauchari-Olaroz Project" means the Company's Cauchari-Olaroz brine lithium project located in the Province of Jujuy in Northwest Argentina;

"Cauchari TR" means the technical report dated March 31, 2019, with an effective date of March 1, 2019, entitled "NI 43-101 Technical Report Updated Mineral Resource Estimate for the Cauchari-Olaroz Project, Jujuy Province, Argentina". The Cauchari TR reproduced certain information from the 2017 Feasibility Study, and for the purposes of this AIF, such information is reported as derived from the Cauchari TR in summary form;

"CEO" means Chief Executive Officer;

"CFO" means Chief Financial Officer;

"Chevron" means Chevron Resources Company;

"CIM" means Canadian Institute of Mining, Metallurgy and Petroleum;

"CIM Definition Standards" means the CIM Definition Standards on Mineral Resources and Reserves;

"claims" means unpatented mining claims granted pursuant to the Mining Act;

"Common Shares" means the common shares of the Company;

"Company" or "LAC" means Lithium Americas Corp., formerly Western Lithium USA Corporation and, as the context requires, its subsidiaries;

"Consolidation" means the share consolidation effected on November 8, 2017, pursuant to which the Common Shares were consolidated on the basis of one Common Share for every five previously-outstanding Common Shares;

"Convertible Security Funding Agreement" means the convertible security funding agreement between the Company and an entity managed by Lind dated April 30, 2015;

"DD" means diamond drill;

"Delmon" means The Delmon Group of Companies;

"**Delmon Agreement**" means the technical assistance and royalty agreement entered into between Delmon Co Ltd. and RheoMinerals on November 17, 2017;

"Delmon Plant" means the manufacturing facility for specialty additives used in oil-based drilling fluids, the design of which was a collaboration between RheoMinerals and Delmon;

"EBITDA" means earnings before interest, taxes, depreciation and amortization;

"EIS" means the Environmental Impact Statement prepared for the Cauchari-Olaroz Project;



**"Exar"** means Minera Exar S.A., the Company's 62.5% joint venture subsidiary incorporated under the laws of Argentina through which it holds its interest in the Cauchari-Olaroz Project;

**"Exar Capital"** means Exar Capital, B.V., the Company's 62.5% joint venture subsidiary incorporated under the laws of the Netherlands through which it funds the development of the Cauchari-Olaroz Project;

"Exar Management Committee" means the management committee of Exar, which is responsible for the oversight of Exar and which currently has five members (three from LAC and two from Ganfeng);

"Exchange" means the Toronto Stock Exchange;

"Fernley Facility" means the manufacturing facility based in Fernley, Nevada that manufactures RheoMinerals' organoclay products;

"FOFI" means future-orientated financial information and financial outlook information;

"Former LAC" means Lithium Americas Corp. which company became a wholly owned subsidiary of the Company pursuant to the Arrangement that closed in September 2015;

"Ganfeng" means GFL International Co., Ltd.;

"Ganfeng Investment Agreement" means the agreement entered into between LAC and Ganfeng dated January 17, 2017 and subsequently amended;

"Ganfeng Investor Rights Agreement" means the amended and restated investor rights agreement between LAC and Ganfeng dated July 14, 2017;

"ha" means hectares;

"HCI" hydrochloride;

"**IFRS**" means the International Financial Reporting Standards, a set of international accounting standards stating how particular types of transactions and other events should be reported in financial statements;

"IRR" means internal rate of return;

"**JEMSE**" means Jujuy Energia y Mineria Sociedad del Estado, the government of Jujuy's mining investment company, involved in the development and regulations of mining projects in the Argentinean province of Jujuy;

"JEMSE LOI" means the letter of intent between JEMSE and LAC dated November 2012 whereby JEMSE may acquire an equity interest in the Cauchari-Olaroz Project in exchange for providing management services to develop the Cauchari-Olaroz Project;

"Joint Venture Shareholder Agreement" means the shareholder agreement between the Company, 2265866 Ontario Inc., Ganfeng Lithium Netherlands Co., B.V., Exar and Exar Capital dated October 25, 2018;

"Joint Venture Transactions" means the transactions pursuant to which, among other things, the Company and Ganfeng become partners in the Cauchari Joint Venture;

"K" means potassium;

"km" means kilometre;

"kV" means kilovolt;

"LCE" means lithium carbonate equivalent. Lithium is converted to lithium carbonate (Li2CO3) by multiplying lithium by 5.323;



"Leasing Act" means the Mineral Lands Leasing Act of 1920, USA, as amended;

"Li" means lithium;

"Limited Recourse Loan Facility" means the limited recourse loan facility dated October 30, 2018, between the Company (as borrower) and Ganfeng (as lender).

"LiKSO4" means pyroelectric lithium potassium sulphate;

"Lind" means The Lind Partners LLC, a New York based asset management firm;

"Lithium Nevada" means Lithium Nevada Corporation, formerly Western Lithium Corporation, a wholly-owned subsidiary of the Company;

"Los Boros" means Grupo Minero Los Boros S.A.;

"Los Boros Option Agreement" means the option agreement between Exar and Los Boros entered into on March 28, 2016;

"m" means metre;

"m3" means cubic metre;

"MD&A" means management discussion and analysis;

"mm" means millimetre;

"Mg" means magnesium;

"mg/L" means milligrams per litre;

"Mining Act" means the *U.S. General Mining Act of 1872*, also known as the Mining Law of 1872, as amended;

"MW/h" means Megawatts per hour;

"Na" means sodium;

"NaCI" means sodium chloride;

"NaOH" means sodium hydroxide;

"NEPA" means National Environmental Policy Act;

"NI 43-101" means National Instrument 43-101 – Standards of Disclosure for Mineral Projects of the Canadian Securities Administrators;

"NI 52-109" means National Instrument 52-109 – Certification of Disclosure in Issuers' Annual and Interim Filings;

"NI 52-110" means National Instrument 52-110 – Audit Committees of the Canadian Securities Administrators;

"NPV" means net present value;

"NYSE" means the New York Stock Exchange;

"Orion" means Orion Mine Finance Fund I, formerly RK Mine Finance (Master) Fund II L.P.;



"pH" means the measure of acidity/alkalinity of an aqueous solution;

"ppm" means parts per million;

**"PoO"** means a plan of operation submitted to the BLM and the Nevada Division of Environmental Protection in respect of a proposed mineral project;

"PFS" means a pre-feasibility study;

"Phase 1" means the initial 30,000 TPA of lithium carbonate covered in the Thacker Pass TR;

"Phase 2" means the ramp up to 60,000 TPA of lithium carbonate covered in the Thacker Pass TR;

"PwC" means PricewaterhouseCoopers LLP;

"QA/QC" means quality assurance and quality control;

"QP" means a qualified person as defined under NI 43-101;

"RC" means reverse circulation;

"Reserva" means Reserva International LLC;

"RheoMinerals" means RheoMinerals Inc., a subsidiary of the Company that develops and manufactures organophilic clay-based products;

"ROM" means run of time;

"SEC" means U.S. Securities and Exchange Commission;

"SO<sub>4</sub>" means sulfate;

"Social Responsibility Plan" means the social responsibility plan developed to incorporate best practices on these matters and prepared in accordance with the Argentina Principles, at the Cauchari-Olaroz Project;

"SQM" means Sociedad Química y Minera de Chile S.A.;

**"Stage 1"** means the initial 25,000 TPA of lithium carbonate production capacity covered in the Cauchari TR:

"Strategic Agreement" means the strategic collaboration agreement between the Company and Ganfeng dated August 13, 2018;

"Supplemental Transaction Agreement" means the supplemental transaction agreement between the Company and Ganfeng dated August 13, 2018;

"t" means tonne;

"TEM" means Time Domain Electromagnetic Survey;

"Thacker Pass Project" means the Company's lithium project property located in Humboldt County, Nevada:

"Thacker Pass TR" means the technical report dated August 1, 2018 entitled "Technical Report on the Pre-Feasibility Study for the Thacker Pass Project, Humboldt County, Nevada, USA";



"TOLSA" means TOLSA, S.A.;

"TPA" means tonnes per annum;

"Transaction Agreement" means the transaction agreement entered into between the Company, SQM, SQM Potasio S. A., Ganfeng, Exar and 2265866 Ontario Inc., dated August 13, 2018;

"USBM" means the US Bureau of Mines;

"USGS" means the U.S. Geological Survey;

"VAT" means value added tax;

"VES" means a Vertical Electrical Sounding Survey; and

"WEDC" means Western Energy Development Corporation, a subsidiary of Western Uranium Corporation.

# SCHEDULE "B" AUDIT COMMITTEE CHARTER

The audit committee is a committee of the board of directors to which the board delegates its responsibilities for the oversight of the accounting and financial reporting process and financial statement audits.

#### The audit committee will:

- (a) review and report to the board of directors of the Company on the following before they are published:
  - (i) the financial statements and MD&A (management discussion and analysis) (as defined in National Instrument 51-102) of the Company,
  - (ii) the auditor's report, if any, prepared in relation to those financial statements;
- (b) review the Company's annual and interim earnings press releases before the Company publicly discloses this information;
- (c) satisfy itself that adequate procedures are in place for the review of the Company's public disclosure of financial information extracted or derived from the Company's financial statements and periodically assess the adequacy of those procedures;
- (d) recommend to the board of directors:
  - (i) the external auditor to be nominated for the purpose of preparing or issuing an auditor's report or performing other audit, review or attest services for the Company, and
  - (ii) the compensation of the external auditor;
- (e) oversee the work of the external auditor engaged for the purpose of preparing or issuing an auditor's report or performing other audit, review or attest services for the Company, including the resolution of disagreements between management and the external auditor regarding financial reporting;`
- (f) monitor, evaluate and report to the board of directors on the integrity of the financial reporting process and the system of internal controls that management and the board of directors have established;
- (g) monitor the management of the principal risks that could impact the financial reporting of the Company;
- (h) establish procedures for:
  - (i) the receipt, retention and treatment of complaints received by the Company regarding accounting, internal accounting controls, or auditing matters, and
  - (ii) the confidential, anonymous submission by employees of the Company of concerns regarding questionable accounting or auditing matters;
- (i) authorize the committee Chair to pre-approve all non-audit services to be provided to the Company or its subsidiary entities by the Company's external auditor, subject to the committee Chair reporting the pre-approval(s) to the committee at the committee meeting subsequent to the said approval(s);
- review and approve the Company's hiring policies regarding partners, employees and former partners and employees of the present and former external auditor of the Company;
   and
- (k) with respect to ensuring the integrity of disclosure controls and internal controls over financial reporting, understand the process utilized by the Chief Executive Officer and Chief Financial Officer to comply with Multilateral Instrument 52-109.



# **Composition of the Committee**

The committee will be composed of three directors from the Company's board of directors, all of whom are independent.

All members of the committee will be financially literate as defined by applicable legislation. If, upon appointment, a member of the committee is not financially literate as required, the person will be provided a three month period in which to achieve the required level of literacy.

# **Authority**

The committee has the authority to engage independent counsel and other advisors as it deems necessary to carry out its duties and the committee will set the compensation for such advisors.

The committee has the authority to communicate directly with and to meet with the external auditors and the internal auditor, without management involvement. This extends to requiring the external auditor to report directly to the committee.

# Reporting

The reporting obligations of the committee will include:

- 1. reporting to the board of directors on the proceedings of each committee meeting and on the committee's recommendations at the next regularly scheduled directors' meeting; and
- 2. reviewing, and reporting to the board of directors on its concurrence with, the disclosure required by Form 52-110F2 in any management information circular prepared by the Company.

