
REVIEW OF FOUR LITHIUM EXPLORATION PROPERTIES IN ARGENTINA

PREPARED FOR LSC LITHIUM INC.

Report for NI 43-101



Qualified Person

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1 SUMMARY

1.1 EXECUTIVE SUMMARY

1.1.1 Introduction

Don Hains, P. Geo., President of Hains Engineering Company Limited, was retained by LSC Lithium Inc. (**LSC**), to prepare an independent technical report (the **Technical Report**) in conformance with National Instrument 43-101 – Standards of Disclosure for Mineral Projects (**NI 43-101**, Form 43-101F1 and NI 43-101CP) on four prospective lithium brine properties acquired by LSC in Argentina (the **Properties**) located on salar Rio Grande, salar Jama, salar Pastos Grandes and salar Salinas Grandes in the provinces of Salta and Jujuy, northwestern Argentina.

On October 26, 2016 LSC entered into an Amalgamation Agreement (the **Amalgamation Agreement**) with Oakham Capital Corp. (**Oakham**) under which LSC will complete a three-corner amalgamation (**Amalgamation**) pursuant to which (i) LSC will amalgamate with a subsidiary of Oakham (1093470 B.C. Ltd.) to form a new entity (**Amalco**), (ii) each outstanding common share of LSC will be exchanged for one post-consolidation common share of Oakham (the current Oakham common shares will be consolidated on a 6.5:1 basis before completion of the Amalgamation), (iii) each outstanding common share of 1093470 B.C. Ltd. will be exchanged for one common share of Amalco, and (iv) Oakham will change its name to “LSC Lithium Corporation” (**LSC Lithium**). Upon closing of the Amalgamation and satisfaction of various conditions precedent, including TSX Venture Exchange (**TSX-V**) approvals, LSC Lithium’s common shares will be listed on the TSX-V. The Amalgamation will constitute Oakham’s “**Qualifying Transaction**” under the TSX-V rules.

LSC intends to use the Properties as “Qualifying Properties” within the meaning of TSX-V Policy 1.1 to support the Qualifying Transaction of Oakham in connection with the Amalgamation. Each of LSC’s interests in the Properties on salar Rio Grande, salar Jama, salar Pastos Grandes and salar Salinas Grandes satisfies the prior expenditure requirements for Qualifying Properties as set out in Policy 2.1 – *Minimum Listing Requirements* (**Policy 2.1**) and has an associated planned non-contingent recommended work program in excess of the minimum C\$200,000 set out in Policy 2.1.

Additionally, LSC considers its interests in the Properties on salar Rio Grande, salar Jama, salar Pastos Grandes and salar Salinas Grandes as “Principal Properties” within the meaning of TSX-V Policy 1.1 based on LSC’s intention to spend more than 20% of its available funds on the Properties in the next 18 months on exploration activities on the Properties.

No resources or reserves respecting the Properties have been defined. There is no certainty that resources or reserves will be defined on the Properties as a result of any exploration activities recommended in this Technical Report. The effective date of this Technical Report is Dec. 31, 2016.

Mr. Hains visited the Qualifying Properties (and the non-material LSC properties described in section 1.1.3 below and in Table 27-1) between July 3 and July 16, 2016 and has prior knowledge of the Properties. Site visits were made to assess access and infrastructure, surface topography, surficial geology, collect independent due diligence samples (as permitted by site conditions and equipment) and to assess the general conditions for exploration and development. In addition, available geological data and historical exploration data were obtained respecting prior work on the Properties.

1.1.2 Description of LSC and the Properties

LSC is an early stage exploration company established to explore for and develop lithium brine properties, with a focus on projects in Argentina. LSC has acquired interests in various lithium brine properties in Argentina which are material to LSC totaling 51,760 ha as of the date of this Technical Report. The Properties will be held in an Argentine subsidiary of LSC, Lithium S Corporation S.A. (**Lithium Argentina**). Upon completion of the transactions described in this Technical Report, LSC will own a 100% interest in 46,760 ha and will hold options to acquire/earn into a 51% joint-venture interest for 4,999 ha on Salar Jama. Thus, upon completion of the transactions described in this Technical Report, LSC's attributable interest in the Properties will total 49,310 ha, or 95% of the total property area described herein.

The Properties which are the subject of this Technical Report are summarized in Table 1-1:

Table 1-1: LSC Properties

Salar	Total Tenement Area (ha)	Direct LSC Holdings (ha)	% Interest Attributable to LSC¹
Salar Rio Grande Tenements	20,061	20,061	100%
Salar Pastos Grandes Tenements	2,683	2,683	100%
Salar Jama Tenements	5,988	3,538	59%
Salar Salinas Grandes Tenements	23,028	23,028	100%
Total	51,760	49,310	95%

All of the Properties are located in the provinces of Salta and Jujuy in northwestern Argentina. The Properties are considered to be prospective for lithium brine mineralization

based on historic surface sampling by others and comparison to adjacent properties and can be considered as “properties of merit”. The Properties are all in the early stages of exploration and no resources or reserves have been defined on any of the Properties.

1.1.3 Non-Material Properties

LSC has also obtained ownership or option interests in several additional regional properties totaling 216,924 ha as detailed in Table 27-1 of this Technical Report. The properties identified in Table 27-1 are not yet considered “Principal Properties” or “Qualifying Properties” within the meaning of TSX-V Policy 1.1 for listing purposes, or “material properties” for the purposes of NI 43-101. The materiality thresholds of all of these projects will be reviewed on the granting of title or the completion of additional due diligence or exploration activities on these properties, as applicable.

1.1.4 Strategic Relationship with Enirgi Group Corporation

LSC has established a strategic relationship with Enirgi Group Corporation (**Enirgi**) to jointly develop various lithium brine properties (salar) in Argentina. Enirgi is a privately held company based in Canada and is a wholly -owned subsidiary of the Sentient Global Resource Funds, a Cayman Islands-based resource management company. Enirgi is the sole owner of ADY Resources Limited (**ADY**), which in turn holds significant lithium brine assets in Argentina through its registered Argentina branch, ADY Resources Limited, Sucursal Argentina (**ADY Argentina**). Its key property is the Rincón project, for which Enirgi has completed a definitive feasibility study and plans to place in to production in 2018, subject to receipt of funding and needed approvals (Enirgi, 2016a). LSC has no interest in the Rincón project.

In connection with the Amalgamation, LSC and its subsidiaries entered into or will enter into a number of definitive agreements with Enirgi and its subsidiaries, including *inter alia*:

1.1.4.1 ADY Tenement Purchase Agreement

Lithium Argentina and ADY entered into a purchase agreement (**ADY Tenement Purchase Agreement**) on December 12, 2016 pursuant to which on December 22, 2016 ADY sold, and Lithium Argentina purchased, ADY’s 100% undivided interest in certain mineral rights in the Provinces of Jujuy and Salta, Argentina including interests in salar Jama, salar Pastos Grandes, salar Rio Grande and salar Salinas Grande (the **ADY Tenements**) in consideration for 4,504,130 common shares of LSC.

1.1.4.2 Relationship Agreement

LSC entered into a relationship agreement (**Relationship Agreement**), as amended, with Enirgi on December 22, 2016. This agreement will be assigned to LSC Lithium upon completion of the Qualifying Transaction of Oakham.

Under the Relationship Agreement, Enirgi will be entitled to nominate that number of individuals equal to fifty percent (50%) of the total number of directors of LSC for appointment or election as a director of LSC. Enirgi shall also be entitled to nominate the chief executive officer of LSC for ultimate review and approval by the board of directors of LSC.

The Relationship Agreement provides for strategic cooperation between Enirgi and LSC. Affiliates of Enirgi own, license or have other rights in certain proprietary intellectual property and know-how related to Enirgi's Direct Extraction Process technology (**DEP Technology**). During the term of the Relationship Agreement:

- Enirgi and LSC will agree to work together to identify the most efficient and economic solution to purify and process the brine(s) from LSC's current and future Argentine mineral properties utilizing the DEP Technology, which may involve one or more processes or technologies, and conveying such product to Enirgi's future central processing facility for further processing by Enirgi.
- Enirgi will provide technical assistance and will manage the development and commercialization of LSC's current and future Argentine mineral properties pursuant to the Mining Management Support Agreement, including the design, construction and operation of any related modular purification plant at the applicable property, if required, at LSC's cost on industry standard terms and conditions.
- Enirgi will covenant that it will not license or otherwise grant permission to use its DEP Technology to any third party for use in Argentina, other than for (i) a mineral property that is owned or operated by Enirgi or one of its affiliates (including, without limitation, the Rincon project); (ii) any operating/production stage mineral properties that are acquired by Enirgi or one of its affiliates, and (iii) any property which is thereafter acquired for an initial acquisition price of at least US\$100 million (including as a result of a business combination with a third party).
- LSC will covenant that it will not engage any third party service provider to provide services for the development, design or construction of extraction technologies for lithium compounds or facilities, plants or equipment for the production, processing or purification of lithium compounds facilities at LSC's current and future Argentine mineral properties without the prior written approval of Enirgi or unless it has been determined that the DEP Technology cannot be utilized by LSC on a feasible economic or technical basis in connection with the purification of the lithium brines extracted from LSC's current and future Argentine mineral properties.

The rights and obligations of the parties regarding strategic cooperation will terminate on the date on which the Mining Management Support Agreement is terminated, subject to certain conditions. The Relationship Agreement terminates on the date upon which both (i) Enirgi ceases to have held a pro rata interest equal to at least 10% for 30 consecutive trading days and (ii) the date upon which the Mining Management Support Agreement is terminated.

1.1.4.3 Mining Management Support Agreement

Lithium Argentina and ADY Argentina entered into a mining management support agreement (**Mining Management Support Agreement**) on December 12, 2016, as amended. The assumption of the Mining Management Support Agreement by the LSC Lithium is subject to approval by disinterested directors of LSC Lithium.

Under the terms of the Mining Management Support Agreement, ADY Argentina may provide management support services to Lithium Argentina in Argentina relating to the management of day to day operations of Lithium Argentina, as may be mutually agreed upon by Lithium Argentina and ADY Argentina from time to time and to the extent that ADY Argentina can reasonably provide the services.

In addition, upon the determination by Lithium Argentina and ADY Argentina that the commercialization of Lithium Argentina's projects are economically and technically feasible (as supported by a feasibility study and engineering studies), ADY Argentina will agree to provide certain technical support services to Lithium Argentina, as may be mutually agreed upon by Lithium Argentina and ADY Argentina from time to time and to the extent that ADY Argentina can reasonably provide the services. The Mining Management Support Agreement has an initial term of five (5) years, subject to renewal for successive one (1) year terms, provided that it may be terminated (i) upon the expiry date of any term by either party upon at least 180 days' notice (ii) immediately if either party ceases to carry on business (iii) in the event of a material breach of the agreement or (iv) by ADY, at any time after LSC Lithium commences commercial production upon 12 months' prior written notice.

Neither LSC nor LSC Lithium will be responsible for the termination pay of any of the key employees of Enirgi or its subsidiaries whose services are provided under the Mining Management Support Agreement. In addition, the board of LSC Lithium will, on an annual basis, review the performance of officers of LSC Lithium and its subsidiaries whose services are being provided under the Mining Management Support Agreement and consider whether the compensation or cost allocation with respect to each such individual is reasonable.

1.2 CONCLUSIONS AND RECOMMENDATIONS

LSC holds significant tenement positions on various endorheic basins (“salars”) or salt lakes in the Altiplano-Puna region of northwestern Argentina, part of the so-called “Lithium Triangle” in Argentina, Chile and Bolivia. The salars in this region have proved to host the largest portion of lithium brine resources in the world.

The Properties held by LSC have been subject to exploration by prior owners. The available data indicate that the properties are prospective for lithium brine. Access to each of the properties is good.

The author of this report has considerable experience in the evaluation of lithium brine prospects and considers the available historic and published data with respect to the salars on which the Properties are located to be reasonable and sufficient to justify the advancement of exploration programs on the Properties.

Given the size of LSC’s tenement package, prioritization of exploration programs and budgets has been based on the perceived potential of various salars considering size, location, apparent lithium grades, perceived ease of permitting, and time requirements to complete the required exploration programs. The Properties are the initial exploration targets.

Exploration programs and budgets have been developed for the Properties to enable development decisions within the next 2.5-3 years. Should results on one or more of the priority targets differ significantly from expectations, re-allocation of exploration budgets may be made.

The exploration program will consist of all or some of the following components:

- **Filing of Environmental Impact Statement (EIS) Level II Reports:** to enable subsurface exploration on the selected targets;
- **Surface Brine Sampling:** Brine samples from shallow pits collected throughout the salar to obtain preliminary indications of lithium occurrence and distribution;
- **Time Domain Electro magnetic (TEM) Survey and/or CS-AMT survey:** to define fresh water/brine interfaces around the salar perimeter;
- **Vertical Electrical Sounding (VES) Survey:** to define the brine and fresh water interfaces within the salar;
- **Seismic Survey and Gravity Survey:** to define the structure and shape of the salar basin;
- **Hydrology/Hydrogeological Survey:** to define fluid inputs to the salar and develop a hydrological model of the salar;
- **RC Drilling:** to develop vertical sections of brine chemistry at depth and to provide geological and hydrogeological data;

- **Diamond Drilling/Sonic Drilling:** to collect continuous cores for geotechnical testing (RBRC, grain size and density) and geological characterization. Some of the boreholes will be completed as observation wells for brine sampling and monitoring;
- **Pumping Test Program:** Pumping and well monitoring facilities and pumping tests to estimate aquifer properties related to brine recovery;
- **Brine Processing Tests:** to evaluate the recoverability of lithium from the brines using the Enirgi DEP technology;
- **Resource Modeling:** static and dynamic (3D) resource modeling of the brine reservoir to develop estimates of lithium brine resources at inferred and indicated resource classification levels. Depending on the quality and quantity of the exploration data, estimates at the measured resource level may be possible;
- **Preliminary Economic Evaluation/Prefeasibility Study:** completion of necessary economic and technical analyses to support classification of indicated and/or measured resources as probable/proven reserves.

A phased exploration program is planned consisting of updates of the required EIS reports and selected hydrology/hydrogeological studies, geophysical work, and shallow surface sampling and brine testing (Phase 1). Phase 1 work program will take between 6 and 12 months to complete, depending on the projected level of effort for the relevant tenement package and time required to obtain the necessary permits. Based on the results of Phase 1 work, drill targets will be selected and Phase II program of drilling, pumping tests, brine testing, resource modelling and resource/reserve estimation will be completed resulting in delivery of separate NI 43-101 reports on each Qualifying Property. Should results on one or more of the exploration targets differ significantly from current expectations, reallocation of exploration budgets within the overall budget envelope may be made. The following work programs and budgets are recommended for the Qualifying Properties:

1.2.1 Salar Rio Grande Tenements

The exploration plan for the tenements held by LSC on Salar Rio Grande (the **Salar Rio Grande Tenements**) incorporates the following elements and budgets:

Work Element	Units	Budget (\$US)
Phase I		
Update EIS Level I to Level II		\$75,000
Hydrology/hydrogeological studies		\$100,000
Seismic tomography	30 km	\$300,000
TEM and VES Surveys	20 km	\$100,000
Initial brine testing		\$50,000
Sub-total		\$625,000
Phase II		
RC Drilling/monitoring wells		\$450,000
Rehabilitate existing wells	3	\$100,000
Pumping Wells (new)		\$300,000
Sample assays		\$50,000

Resource modeling, static & 3D		\$300,000
Metallurgical testing		\$150,000
Camp Operations, Project Overhead		\$300,000
NI 43-101 Report		\$125,000
Sub-total		\$1,775,000
Contingency		\$300,000
Total Budget		\$2,700,000

1.2.2 Salar Pastos Grandes Tenements

The proposed exploration program and budget for the tenements held by LSC on salar Pastos Grandes (the **Salar Pastos Grandes Tenements**) is detailed below.

Work Element	Units	Budget (\$US)
Phase I		
Update EIS Level I to Level II		\$75,000
Hydrology/hydrogeological studies		\$75,000
Seismic tomography	30 km	\$300,000
TEM and VES Surveys	10 km	\$30,000
Initial brine testing		\$50,000
Sub-total		\$530,000
Phase II		
RC Drilling/monitoring wells		\$625,000
Pumping Wells		\$350,000
Sample assays		\$50,000
Resource modeling, static & 3D		\$300,000
Metallurgical testing		\$75,000
Camp Operations, Project Overhead		\$200,000
NI 43-101 Report		\$125,000
Sub-total		\$1,725,000
Contingency		\$200,000
Total Budget		\$2,455,000

1.2.3 Salar Jama Tenements

The exploration program for the tenements held by LSC on salar Jama (the **Salar Jama Tenements**) incorporates the following elements and budgets:

Work Element	Units	Budget (\$US)
Phase I		
Update EIS Level I to Level II		\$75,000
Surface geological mapping, additional surface sampling, hydrology/hydrogeological studies		\$125,000
Seismic tomography	20 km	\$250,000
VES Survey	15 km	\$50,000
Gravity Survey		\$50,000
Sub-total		\$550,000
Phase II		
RC Drilling/monitoring wells		\$650,000
Diamond Drilling		\$750,000
Pumping Wells		\$800,000
Sample assays		\$100,000
Resource modeling, static & 3D		\$300,000
Metallurgical testing		\$150,000
Camp Operations, Project Overhead		\$350,000
NI 43-101 Report		\$125,000
Sub-total		\$3,225,000
Contingency		\$500,000
Total Budget		\$4,275,000

1.2.4 Salar Salinas Grandes Tenements

Social and community development issues in the Salinas Grandes area require that exploration and development work focus first on securing widespread community and governmental acceptance. LSC intends to initially focus on enhancing the community relations, complemented by low-impact surface and shallow auger sampling. As wider appreciation of the community benefits of exploration and development on the salar is developed, LSC will undertake more detailed work related to defining the basin geometry, hydrogeology and resource potential. No expenditures are planned to be undertaken directly affecting the Grandes V and Grandes VI tenements, which are subject to a border issue between Salta and Jujuy provinces.

The proposed exploration plan is phased to provide for non-intrusive surface sampling and geophysical exploration in Phase I, followed by drilling, sampling and pumping tests in Phase II. Both phases of the exploration program on salar Salinas Grandes are contingent upon gaining widespread community acceptance and approval prior to commencement of any field work. The exploration budget for the tenements held by LSC on salar Salinas Grandes (the **Salar Salinas Grandes Tenements**) is detailed below.

Work Element	Units	Budget (\$US)
Phase I		
Update EIS Level I to Level II		\$150,000
Enhanced community relations program		\$500,000
Surface/shallow auger sampling		\$75,000
Initial brine testing		\$50,000
TEM and VES Surveys	20 km	\$100,000
Seismic surveys	20 km	\$100,000
Sub-total		\$975,000
Phase II		
RC Drilling/monitoring wells		\$310,000
Diamond/Sonic drill program		\$375,000
Sample assays		\$75,000
Engineering design studies		\$500,000
Resource modeling, static & 3D		\$400,000
Metallurgical testing		\$100,000
Camp Operations, Project Overhead		\$350,000
NI 43-101 Report		\$200,000
Sub-total		\$2,310,000
Contingency		\$500,000
Total Budget		\$3,785,000

There is no certainty that resources or reserves will be defined on any or all of the Properties as a result of any exploration activities recommended in this report.

1.3 TECHNICAL SUMMARY

1.3.1 Introduction

LSC holds significant tenement positions on various endorheic basins (“salars”) or salt lakes in the Altiplano-Puna region of northwestern Argentina, part of the so-called “Lithium Triangle” in Argentina, Chile and Bolivia (see Figure 1-1). The salars in this region have proved to host the largest portion of lithium brine resources in the world. These basins started evolving as inland closed lakes in a basin and range structural environment generated by alternating compressional and extensional regimes over the back arc of the Andean magmatic belts. Basin evolution began almost 20 million years ago as closed basins in a relatively dry environment, resulting in gradational sediments (gravels-sands-clays) and salt concentration enriched in lithium and potassium, possibly as a consequence of metal leaching and concentration from acidic-intermediate intrusives, gneisses, schists and migmatites of Paleozoic and Precambrian basement rocks, Miocene and younger-aged ignimbrite fields; intermediate to acidic Miocene lava flows; and structurally controlled alkali rich hot-springs over the flank portions of the basins.

Alternating episodic arid and rainy periods allowed partial dissolution of salt rock packages permitting development of cavities (porosity) and concentration of saturated salt brines rich in lithium, potassium and sodium chlorides. Normally, there are several alkali rock packages along the vertical section of the salars with proven occurrences over the first 20 metres (m) from surface, as occurs at the Atacama Salar in Chile, and in deeper positions at Olaroz-Cauchari, Salinas Grandes, the salar del Hombre Muerto and other salars in Argentina.

Lithium brine deposit models have been discussed by Houston et al. (2011) wherein the salars in the Altiplano-Puna region of the Central Andes, South America are classified in terms of two end members, “immature clastic” or “mature halite”, primarily using (1) the relative amount of clastic versus evaporate sediment; (2) climatic and tectonic influences, as related to altitude and latitude; and (3) basic hydrology, which controls the influx of fresh water.

The immature classification refers to basins that generally occur at higher (wetter) elevations in the north and east of the region. This salar type contains alternating clastic and evaporite sedimentary sequences dominated by gypsum, has recycled salts, and a general low abundance of halite. Mature refers to salars in arid to hyperarid climates, which occur in the lower elevations of the region, reach halite saturation, and have intercalated clay and silt and/or volcanic deposits.

An important point made by Houston et al. (2011) is the relative significance of aquifer permeability which is controlled by the geological and geochemical composition of the aquifers. Immature salars may contain large volumes of easily extractable Li-rich brines simply because they are comprised of a mixture of clastic and evaporite aquifer materials that have higher porosity and permeability. However, variations in the porosity and permeability of the lithostratigraphic units within immature salars mean that many aquifers and aquitards are present, complicating development of wells and extraction of brine. Mature salars such as the salar de Atacama and the western side of salar Hombre Muerto typically have very porous and permeable halite zones in the upper portions but pass fairly rapidly to massive, impermeable halite at depth. Some salars possess characteristics of both mature and immature salars, typically having a halite core (nucleus) surrounded by a clastic margin.

Recent discoveries, particularly in northern Argentina, point out the importance of sedimentary sequences in the host basins. Discoveries since 2010 in the Cauchari, Olaroz and Centenario salars involved deeper, early basin in-fill coarse sediments hosting lithium and potassium-enriched brines. It appears that as the regional tectonic relaxation gave rise to pull-apart basins, the first sediments to fill these basins were coarse, higher energy sediments derived from the nearby steep terrain. These coarser sediments have more and larger pore spaces, increasing the transmissivity of the formation. As the basins filled and

the higher topography was eroded, the sediments tend to become finer. As the runoff and hydrothermal fluids concentrated in the closed basins, common salt (NaCl) tended towards saturation, while lithium, boron, potassium and other elements became more concentrated as fresh water evaporated at the surface, and in particular at the basin margins. As the trapped fluids became brackish and eventually evolved into brines containing greater than 10,000 ppm contained salts, the density increased, typically to slightly in excess of 1.2g/cm³. The more dense brine tends to separate and sink beneath fresh water and less saturated solutions, and even to start migrating outwards beneath the encroaching fresh water at the basin margins. Lithium concentrations tend to increase in a direct relationship to density, thus it is not surprising to find more consistent and higher grades at depth. The deeper, more coarse sediments at the same time tend to make higher yielding aquifers.

1.3.2 Property Description and Tenure

The Properties are summarized in Table 1-2. The tenements are located on salars combining aspects of both mature and immature structure but are predominantly of the immature, clastic type. LSC is treating its tenements on salar Rio Grande, salar Pastos Grandes, salar Jama, and salar Salinas Grandes as “Principal Properties” and “Qualifying Properties” as defined in TSX-V Policy 1.1 and 2.1 and as “material properties” as defined in NI 43-101 for the purposes of this Technical Report.

LSC has received an opinion from Holt Abogados, an Argentine law firm, (**Holts**) analyzing the situation of the rights that derive from the tenements comprising the Properties. In the opinion of Holts, LSC has effective control and management of the tenements.

Table 1-2: LSC Properties

Salar	Total Tenement Area (ha)	Direct LSC Holdings (ha)	% Attributable to LSC
Qualifying Properties			
Salar Rio Grande Tenements	20,061	20,061	100%
Salar Pastos Grandes Tenements	2,683	2,683	100%
Salar Jama Tenements	5,988	3,538	59%
Salar Salinas Grandes Tenements	23,028	23,028	100%
TOTAL	51,760	49,310	95%

Historical surface and drill sampling work by ADY or prior operators on the Properties, due diligence sampling by the author and comparison to results in published technical

reports by others indicates the Properties can be considered as prospective for lithium brine and as properties of merit.

1.3.3 Property Location and Access

The Qualifying Properties considered in this Technical Report are all located in the Puna region of northwestern Argentina within the provinces of Salta and Jujuy and within the “Lithium Triangle” (Figure 1-1).

Access to the various salars in the Puna is by major national highways such as National Route (NR) 51 and 52 from the provincial capitals, Salta and Jujuy and by various Provincial Routes (PR), primarily from the towns of San Antonio de los Cobres in the case of salars located in Salta Province and the town of Susques in the case of salars located in Jujuy province. Travel time from Salta or Jujuy to any of the LSC properties is a maximum of 8 hours (Rio Grande), and typically much less. All of the LSC properties are in close proximity to Enirgi’s proposed processing plant at Rincón, with a maximum travel time of no more than 5 hours in the case of Rio Grande and typically significantly less.

1.3.4 Physiography, Climate, Local Resources and Infrastructure

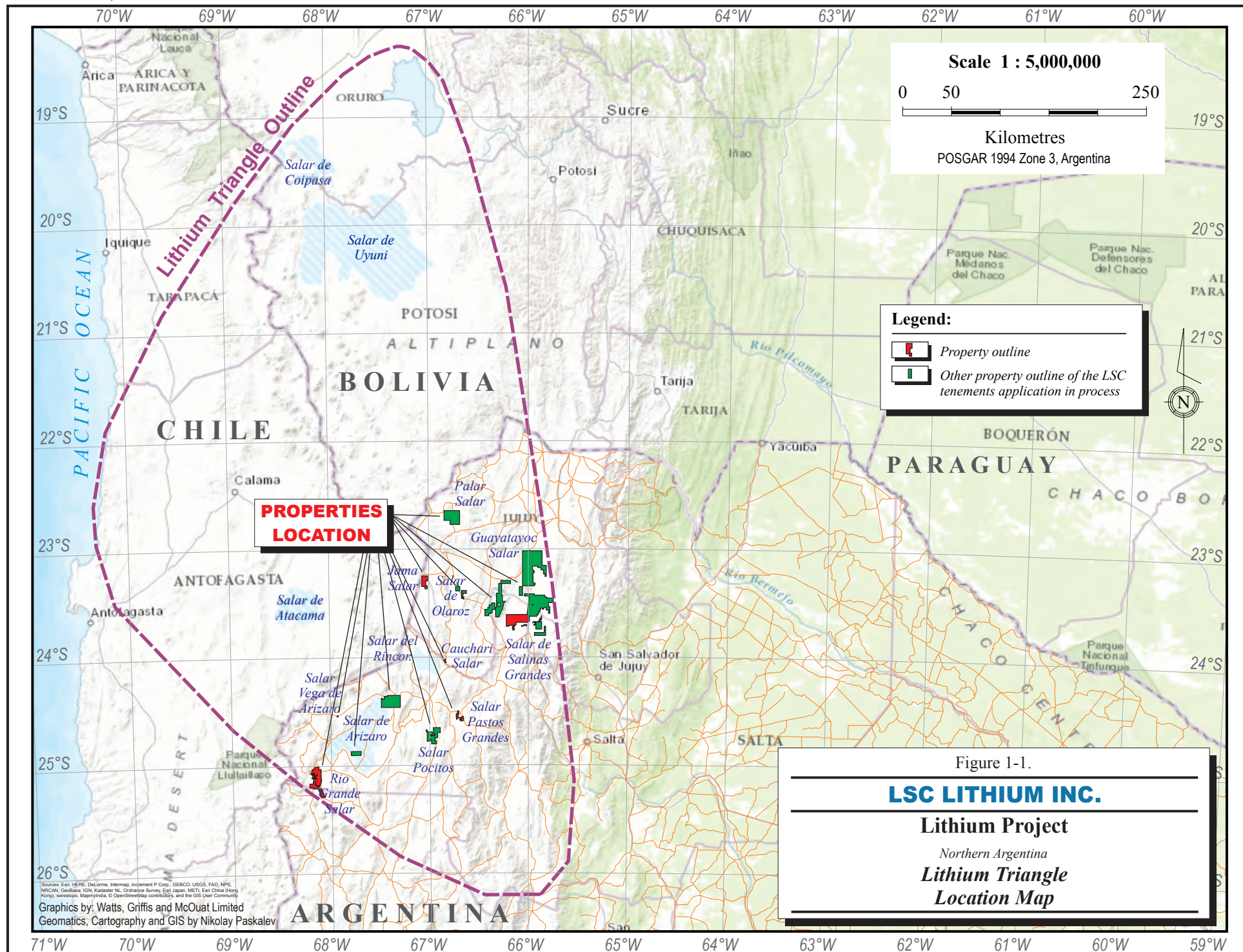
The Puna is a high altitude desert area with a basin and range type structure in which the salars are found as hydrologic depocentres at elevations from approximately 3,500 m to 4,000 m, surrounded by mountains reaching elevations exceeding 6,000 m. The Puna region is noted for the number of salars, most of which have elevated concentrations of metalliferous brines anomalous for lithium, potassium, and boron.

The salars and immediately surrounding area consist of an outer zone comprising gradual talus slopes and alluvial fans leading trending to mud flats/salt flats to salt pans on the salar proper. The salar surface can range from windblown dust combined with surface expressions of borate (ulexite), gypsum and halite to polygonal re-solution salt crusts to halite pinnacle formations; all depending on the type of salar (mature or immature), seasonal moisture patterns and the overall hydrological balance in the salar.

The climate in the Puna is one of a mid-latitude, high altitude desert with low relative humidity, low frequency and amount of precipitation and moderate to high annual temperatures with high insolation levels and moderate to high monthly temperatures. There are no seasonal limitations on exploration activity. Vegetation is relatively scarce except in the valleys of perpetual streams which receive melt water from the surrounding mountains. Plant species are adapted to an arid, environment with high prevailing winds; rocky to sandy saline soils, and significant diurnal and seasonal temperature fluctuations.

Infrastructure within the broader Puna area is generally reasonable in terms of road networks, but can be deficient at the local level. Aside from the two significant towns of San Antonio de los Cobres and Susques, population centres are quite small, generally less

than 100 persons. Only Jujuy and Salta represent significant regional centres with full services.



Two natural gas lines cross the Puna and gas is available at several of the salars (or will be) from various lateral lines. While a main line electrical power line crosses the Puna, connection to the line is difficult and mining operators are generally required to install their own power supplies.

1.3.5 History

Prior work on the Properties has been limited to surface sampling and shallow (<2 m) auger drilling and hand pitting, with the exception of the Salar Rio Grande Tenements. The Salar Rio Grande Tenements were previously in production for sodium sulphate and Enirgi completed a program of drilling and pumping tests in 2012-13 to develop a resource estimate (for internal purposes only, not NI 43-101 compliant) for sodium sulphate.

There are no current or historical resource estimates available for the Properties with respect to lithium resources.

Historical surface sample and shallow auger sample results indicate the Properties are prospective for lithium brine.

1.3.6 Geology

The Puna region represents an area that has been formed as a result of compressive shortening during the Neogene period along strike in a NNE-SSW direction and subjected to development of transversal lineament movements, followed by volcanic activity in the Cretaceous and Miocene-Pliocene eras. The end result of these tectonic events has been the development of a basin and range structure in which the basins have been hydrologically isolated from each other. The main lineament structure present in the Puna is the El Toro-Olacapato Lineament (see Figure 9-2).

Erosion and deposition of sediments in the basin, followed by or contemporary with inflow of solute-bearing waters from leaching of the volcanic rocks and geothermal hot springs, combined with an extended period of hyperarid climate and subsequent concentration of the fluids has resulted in the development of salars enriched in various salts and metals, primarily lithium, potassium, boron, halite, gypsum and sodium sulphate.

The salars are of two types – mature and immature. Mature salars are typically characterized by the development of a predominately halite structure while immature salars tend to be characterized by a more clastic structure for the sediment package. The salars where the Properties are located are of both the mature (Rio Grande) and immature (Pastos Grandes, Jama, Salinas Grandes) type.

1.3.7 Mineralization

Mineralization in the salars consists of brines saturated in sodium chloride and high in dissolved solids with an average density of about 1.25 g/cm³. The brines can be classified Na-Cl-SO₄ type or Na-Cl-SO₄-B type, depending on the particular chemistry of the brine. The chemistry of the brine controls the evaporation path as minerals precipitate from the brine.

1.3.8 Exploration and Exploration Potential

LSC has undertaken no exploration on the Properties. Based on prior work by others on the Properties and comparison to adjacent properties, the Properties are considered to be prospective for lithium brine.

1.3.9 Mineral Resources and Mineral Reserves

No mineral resources or mineral reserves have been estimated for the Properties.

1.3.10 Market Studies

Commercially available market studies and publicly available studies from various financial analysts indicate a robust market for lithium, primarily in the form of lithium carbonate or lithium hydroxide. Major market applications include use of lithium in lithium ion battery applications, lithium chemicals, glass and ceramics and a wide range of other applications. Published market projections (Exane BNP Paribas, 2016; Deutsche Bank, 2016) indicate the demand for lithium (as lithium carbonate equivalent, LCE) will increase from approximately 180,000 tonnes in 2016 to approximately 520,000 tonnes by 2025, driven largely by increases in electric vehicle and other battery and electrical storage applications.

1.3.11 Permitting and Environmental Issues

Argentina has a well-developed system for mine permitting and environmental regulation. Of most importance, especially in Jujuy Province, is development of effective community relations programs with local aboriginal groups to ensure full free prior and informed consent for any proposed development project. LSC is committed to developing a comprehensive program of community relations to ensure timely approval of all required permits for advancement of the work on the Properties.

1.3.12 Conclusions and Recommendations

The author of this report has considerable experience in the evaluation of lithium brine prospects and considers the available historic and published data with respect to the salars on which the Properties are located to be reasonable and sufficient to justify the advancement of exploration programs on the Properties.

Exploration programs are planned to advance work on the Salar Rio Grande Tenements, Salar Pastos Grandes Tenements, Salar Jama Tenements, and Salar Salinas Grandes Tenements to at least the preliminary economic assessment (PEA) stage. The work

programs will focus on defining the basin structure and hydrogeology, brine distribution and metal distribution within the brine and the porosity, permeability and pumping characteristics of the brine aquifers with the objective of classifying resources at the inferred and indicated resource level of confidence and in conformance with NI 43-101 definitions.

The exploration program will consist of all or some of the following components:

- **Filing of EIS Level II Reports:** to enable subsurface exploration on the selected targets;
- **Surface Brine Sampling:** Brine samples from shallow pits collected throughout the salar to obtain preliminary indications of lithium occurrence and distribution;
- **Time Domain Electro magnetic (TEM) Survey and/or CS-AMT survey:** to define fresh water/brine interfaces around the salar perimeter;
- **Vertical Electrical Sounding (VES) Survey:** to define the brine and fresh water interfaces within the salar;
- **Seismic Survey and Gravity Survey:** to define the structure and shape of the salar basin;
- **Hydrology/Hydrogeological Survey:** to define fluid inputs to the salar and develop a hydrological model of the salar;
- **RC Drilling:** to develop vertical sections of brine chemistry at depth and to provide geological and hydrogeological data;
- **Diamond Drilling/Sonic Drilling:** to collect continuous cores for geotechnical testing (RBRC, grain size and density) and geological characterization. Some of the boreholes will be completed as observation wells for brine sampling and monitoring;
- **Pumping Test Program:** Pumping and well monitoring facilities and pumping tests to estimate aquifer properties related to brine recovery;
- **Brine Processing Tests:** to evaluate the recoverability of lithium from the brines using the Enirgi DEP process;
- **Resource Modeling:** static and dynamic (3D) resource modeling of the brine reservoir to develop estimates of lithium brine resources at inferred and indicated resource classification levels. Depending on the quality and quantity of the exploration data, estimates at the measured resource level may be possible;
- **Preliminary Economic Evaluation/Prefeasibility Study:** completion of necessary economic and technical analyses to support classification of indicated and/or measured resources as probable/proven reserves.

1.3.13 Exploration Programs and Budget

A phased exploration program is planned consisting of updates of the required EIS reports and selected hydrology/hydrogeological studies, geophysical work, and shallow surface sampling and brine testing (Phase 1). Phase 1 work programs will take 6 to 12 months to complete, dependent on the projected level of effort for the relevant tenement package and time required to obtain the necessary permits. Based on the results of Phase 1 work, drill

targets will be selected and Phase II program of drilling, pumping tests, brine testing, resource modelling and resource/reserve estimation will be completed resulting in the delivery of separate NI 43-101 reports on each Property. Should results on one or more of the exploration targets differ significantly from current expectations, reallocation of exploration budgets within the overall budget envelope may be made. The following work programs and budgets are recommended for the Properties:

1.3.13.1 Salar Rio Grande Tenements

The proposed exploration plan for the Salar Rio Grande Tenements incorporates the following elements and budgets:

Work Element	Units	Budget (\$US)
Phase I		
Update EIS Level I to Level II		\$75,000
Hydrology/hydrogeological studies		\$100,000
Seismic tomography	30 km	\$300,000
TEM and VES Surveys	20 km	\$100,000
Initial brine testing		\$50,000
Sub-total		\$625,000
Phase II		
RC Drilling/monitoring wells		\$450,000
Rehabilitate existing wells		\$100,000
Pumping Wells (new)		\$300,000
Sample assays		\$50,000
Resource modeling, static & 3D		\$300,000
Metallurgical testing		\$150,000
Camp Operations, Project Overhead		\$300,000
NI 43-101 Report		\$125,000
Sub-total		\$1,775,000
Contingency		\$300,000
Total Budget		\$2,700,000

1.3.13.2 Salar Pastos Grandes Tenements

The proposed exploration program and budget for the Salar Pastos Grandes Tenements is detailed below.

Work Element	Units	Budget (\$US)
Phase I		
Update EIS Level I to Level II		\$75,000
Hydrology/hydrogeological studies		\$75,000
Seismic tomography	30 km	\$300,000
TEM and VES Surveys	10 km	\$30,000
Initial brine testing		\$50,000
Sub-total		\$530,000

Phase II		
RC Drilling/monitoring wells		\$625,000
Pumping Wells		\$350,000
Sample assays		\$50,000
Resource modeling, static & 3D		\$300,000
Metallurgical testing		\$75,000
Camp Operations, Project Overhead		\$200,000
NI 43-101 Report		\$125,000
Sub-total		\$1,725,000
Contingency		\$200,000
Total Budget		\$2,455,000

1.3.13.3 Salar Jama Tenements

The proposed exploration program for the Salar Jama Tenements incorporates the following elements and budgets:

Work Element	Units	Budget (\$US)
Phase I		
Update EIS Level I to Level II		\$75,000
Surface geological mapping, additional surface sampling, hydrology/hydrogeological studies		\$125,000
Seismic tomography	20 km	\$250,000
VES Survey	15 km	\$50,000
Gravity Survey		\$50,000
Sub-total		\$550,000
Phase II		
Gravity Survey		\$50,000
RC Drilling/monitoring wells		\$650,000
Diamond Drilling		\$750,000
Pumping Wells		\$800,000
Sample assays		\$100,000
Resource modeling, static & 3D		\$300,000
Metallurgical testing		\$150,000
Camp Operations, Project Overhead		\$350,000
NI 43-101 Report		\$125,000
Sub-total		\$3,225,000
Contingency		\$500,000
Total Budget		\$4,275,000

1.3.13.4 Salar Salinas Grandes Tenements

Social and community development issues in the Salinas Grandes area requires that exploration and development work focus first on securing widespread community and governmental acceptance. LSC intends to initially focus on enhancing the community

relations programs already in place, complemented by low impact surface and shallow auger sampling. As wider appreciation of the community benefits of exploration and development on the salar is developed, LSC will undertake more detailed work related to defining the basin geometry, hydrogeology and resource potential. No expenditures are planned to be undertaken directly affecting the Grandes V and Grandes VI tenements, which are subject to a border issue between Salta and Jujuy provinces.

The proposed exploration plan is phased to provide for non-intrusive surface sampling and geophysical exploration in Phase I, followed by drilling, sampling and pumping tests in Phase II. Both phases of the exploration program on the Salar Salinas Grandes Tenements are contingent upon gaining widespread community acceptance and approval prior to commencement of any field work. The proposed exploration budget for the Salar Salinas Grandes Tenements is detailed below.

Work Element	Units	Budget (\$US)
Phase I		
Update EIS Level I to Level II		\$150,000
Enhanced community relations program		\$500,000
Surface/shallow auger sampling		\$75,000
Initial brine testing		\$50,000
TEM and VES Surveys	20 km	\$100,000
Seismic surveys	20 km	\$100,000
Sub-total		\$975,000
Phase II		
RC Drilling/monitoring wells		\$310,000
Diamond/Sonic drill program		\$375,000
Sample assays		\$75,000
Engineering design studies		\$500,000
Resource modeling, static & 3D		\$400,000
Metallurgical testing		\$100,000
Camp Operations, Project Overhead		\$350,000
NI 43-101 Report		\$200,000
Sub-total		\$2,310,000
Contingency		500,000
Total Budget		\$3,785,000

There is no certainty that resources or reserves will be defined as a result of any exploration activities recommended in this Technical Report.

2 INTRODUCTION

Don Hains, P. Geo., President of Hains Engineering Company Limited, was retained by LSC Lithium Inc. (**LSC**), to prepare an independent technical report (the **Technical Report**) in conformance with National Instrument 43-101 – Standards of Disclosure for Mineral Projects (**NI 43-101**, Form 43-101F1 and NI 43-101CP) on four prospective lithium brine properties acquired and, to be, acquired by LSC in Argentina (the **Properties**) located on salar Rio Grande, salar Jama, salar Pastos Grandes and salar Salinas Grandes in the provinces of Salta and Jujuy, northwestern Argentina.

On October 26, 2016 LSC entered into an Amalgamation Agreement (the **Amalgamation Agreement**) with Oakham Capital Corp (**Oakham**) under which LSC will complete a three-corner amalgamation (**Amalgamation**) pursuant to which (i) LSC will amalgamate with a subsidiary of Oakham (1093470 B.C. Ltd.) to form a new entity (**Amalco**), (ii) each outstanding common share of LSC will be exchanged for one post-consolidation common share of Oakham (the current Oakham common shares will be consolidated on a 6.5:1 basis before completion of the Amalgamation), (iii) each outstanding common share of 1093470 B.C. Ltd. will be exchanged for one common share of Amalco, and (iv) Oakham will change its name to “LSC Lithium Corporation” (**LSC Lithium**). Upon closing of the Amalgamation and satisfaction of various conditions precedent, including TSX Venture Exchange (**TSX-V**) approvals, LSC Lithium’s common shares will be listed on the TSX-V. The Amalgamation will constitute Oakham’s “Qualifying Transaction” under the TSX-V rules.

LSC intends to use the Properties as “Qualifying Properties” within the meaning of TSX-V Policy 1.1 to support the Qualifying Transaction of Oakham in connection with the Amalgamation. Each of LSC’s interests in the Properties on salar Rio Grande, salar Jama, salar Pastos Grandes and salar Salinas Grandes satisfies the prior expenditure requirements for Qualifying Properties as set out in Policy 2.1 – *Minimum Listing Requirements* (Policy 2.1) and has an associated planned non-contingent recommended work program in excess of the minimum C\$200,000 as set out in Policy 2.1

Additionally, LSC considers its interests in the Properties on salar Rio Grande, salar Jama, salar Pastos Grandes and salar Salinas Grandes as “Principal Properties” within the meaning of TSX-V Policy 1.1 based on LSC’s intention to spend more than 20% of its available funds on the Properties in the next 18 months on exploration activities on the Properties.

No resources or reserves respecting the Properties have been defined. There is no certainty that resources or reserves will be defined on the Properties as a result of any exploration activities recommended in this report. The effective date of this report is Dec. 31, 2016.

Mr. Hains visited the Qualifying Properties (and the non-material LSC properties described in section 1.1.3 below and in Table 27-1) between July 3, 2016 and July 16, 2016 and has prior knowledge of the Properties. Site visits were made to assess access and infrastructure, surface topography, surficial geology, collect independent due diligence samples (as permitted by site conditions and equipment) and to assess the general conditions for exploration and development. In addition, available geological data and historical exploration data were obtained respecting prior work on the Properties.

2.1 Description of LSC and the Properties

LSC is an early stage exploration company established to explore for and develop lithium brine properties, with a focus on projects in Argentina. LSC has acquired interests in various lithium brine properties in Argentina which are material to LSC totaling 51,760 ha as of the date of this Technical Report. The Properties will be held in an Argentine subsidiary of LSC, Lithium S Corporation S.A. (**Lithium Argentina**). LSC owns a 100% interest in 46,760 ha and holds a 51% joint-venture interest 4,999 ha on Salar Jama. If the option is exercised, LSC's attributable interest in the Properties will total 49,310 ha, or 95% of the total property area described herein.

The Properties which are the subject of this Technical Report are summarized in Table 2-1:

Table 2-1: LSC Properties

Salar	Total Tenement Area (ha)	Direct LSC Holdings (ha)	% Interest Attributable to LSC
Salar Rio Grande Tenements	20,061	20,061	100%
Salar Pastos Grandes Tenements	2,683	2,683	100%
Salar Jama Tenements	5,988	3,538	59%
Salar Salinas Grandes Tenements	23,028	23,028	100%
Total	51,760	49,310	95%

All of the Properties are located in the provinces of Salta and Jujuy in northwestern Argentina. The properties are considered to be prospective for lithium brine mineralization based on historic surface sampling by others and comparison to adjacent properties and can be considered as "properties of merit". The Properties are all in the early stages of exploration and no resources or reserves have been defined on any of the Properties.

LSC has also obtained ownership or option interests in several additional regional properties totaling 216,924 ha as detailed in Table 27-1 of this Technical Report. The tenements identified in Table 27-1 are not yet considered “Principal Properties” or “Qualifying Properties” within the meaning of TSX-V Policy 1.1 for listing purposes, or “material properties” for the purposes of NI 43-101. The materiality thresholds of all of these projects will be reviewed on the granting of title or the completion of additional due diligence or exploration activities on these properties, as applicable.

2.2 Strategic Relationship with Enirgi Group Corporation

LSC has established a strategic relationship with Enirgi Group Corporation (**Enirgi**) to jointly develop various lithium brine properties (salars) in Argentina. Enirgi is a privately held company based in Canada and is a wholly -owned subsidiary of the Sentient Global Resource Funds, a Cayman Islands-based resource management company. Enirgi is the sole owner of ADY Resources Limited (**ADY**), which in turn holds significant lithium brine assets in Argentina through its registered Argentina branch, ADY Resources Limited, Sucursal Argentina (**ADY Argentina**). Its key property is the Rincón project, for which Enirgi has completed a definitive feasibility study and plans to place in to production in 2018, subject to receipt of funding and needed approvals (Enirgi, 2016a). LSC has no interest in the Rincón project.

In connection with the Amalgamation, LSC and its subsidiaries entered into a number of definitive agreements with Enirgi and its subsidiaries as described in Section 1, Summary, of this Technical Report.

2.3 SOURCES OF INFORMATION

Site visits were carried out by Don Hains, P. Geo., from July 3 to July 16, 2016. Site visits were conducted on the properties acquired by LSC pursuant to the ADY Tenement Purchase Agreement and on the non-material properties subject to due diligence investigation by LSC. Activities undertaken during the course of the site visits included review of access and infrastructure, observation of surface geology, confirmation of elevation, collection of due diligence samples from shallow pits (where conditions and equipment permitted) and collection and review of available published geological data and historical exploration data for each Property.

Discussions were held in Toronto or Argentina with the following individuals from LSC, ADY and LSC’s legal counsel:

- Mr. Stephen Dattels, Director, LSC
- Mr. Michael Beck, Financial Advisor, LSC
- Mr. Juan Carlos Grosso, Argentine Representative, LSC
- Mr. Carlos Galli, COO, ADY Resources Limited
- Mr. Daniel Vinante, Exploration Manager, ADY Resources Limited

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- Ms. Florencia Heredia, Holt Abogados, Argentina
 - Mr. Matias Olcese, Holt Abogados, Argentina
 - Mr. Marvin Singer, Norton Rose Fulbright Canada

The documentation reviewed, and other sources of information, are listed at the end of this Technical Report in Section 30, References.

Units of measurement used in this report conform to the metric system. All currency in this report is US dollars (\$US) unless otherwise noted. The conversion rate for Argentine pesos (AR\$) to \$US used in this report is AR\$ 15.196/\$US.

LIST OF ABBREVIATIONS

μ	micron	km^2	square kilometre
$^{\circ}\text{C}$	degree Celsius	kPa	kilopascal
$^{\circ}\text{F}$	degree Fahrenheit	kVA	kilovolt-amperes
μg	microgram	kW	kilowatt
A	ampere	kWh	kilowatt-hour
a	annum	L	litre
bbl	barrels	L/s	litres per second
Btu	British thermal units	m	metre
C\$	Canadian dollars	M	mega (million)
cal	calorie	m^2	square metre
cfm	cubic feet per minute	m^3	cubic metre
cm	centimetre	min	minute
cm^2	square centimetre	MASL	metres above sea level
d	day	mm	millimetre
dia.	diameter	mph	miles per hour
dmt	dry metric tonne	MVA	megavolt-amperes
dwt	dead-weight ton	MW	megawatt
ft	foot	MWh	megawatt-hour
ft/s	foot per second	m^3/h	cubic metres per hour
ft^2	square foot	opt, oz/st	ounce per short ton
ft^3	cubic foot	oz	Troy ounce (31.1035g)
g	gram	ppm	part per million
G	giga (billion)	psia	pound per square inch absolute
Gal	Imperial gallon	psig	pound per square inch gauge
g/L	gram per litre	RL	relative elevation
g/t	gram per tonne	s	second
gpm	Imperial gallons per minute	st	short ton
gr/ft^3	grain per cubic foot	stpa	short ton per year
gr/m^3	grain per cubic metre	stpd	short ton per day
hr	hour	t	metric tonne
ha	hectare	tpa	metric tonne per year
hp	horsepower	tpd	metric tonne per day
in	inch	US\$	United States dollar
in^2	square inch	USg	United States gallon
J	joule	USgpm	US gallon per minute
k	kilo (thousand)	V	volt
kcal	kilocalorie	W	watt
kg	kilogram	wmt	wet metric tonne
km	kilometre	yd^3	cubic yard
km/h	kilometre per hour	yr	year

3 RELIANCE ON OTHER EXPERTS

This Technical Report has been prepared by Don Hains, P. Geo, President of Hains Engineering Company Limited for LSC. The information, conclusions, opinions, and estimates contained herein are based on:

- Information available to Don Hains at the time of preparation of this report,
- Assumptions, conditions, and qualifications as set forth in this Technical Report, and
- Data, reports, and other information supplied by LSC, ADY, Enirgi and other third party sources as noted in Section 30, References.

For the purpose of this Technical Report, Don Hains has relied on title opinions by Holt Abogados (**Holts**), Argentine legal counsel to LSC, respecting property ownership and mineral title and these opinions are relied upon in Sections 4, 6, 22 and in the Summary of this Technical Report. Don Hains has not independently researched property title or mineral rights for Properties as described in this Technical Report and expresses no opinion as to the ownership status of the Properties.

Don Hains has also relied upon information prepared by Holts respecting Argentine mining law in Section 4 of this report, and environmental and indigenous matters as they apply to mineral exploration as described in Sections 4 and 22 of this Technical Report.

The relevant reports from Holts on which Don Hains has relied upon are:

- Holts Abogados: Enirgi – Legal Opinion on Mining Rights, Report to LSC Lithium Inc. dated January 25, 2017
- Holt Abogados: Cuper S.A. – Salar de Jama – Legal Opinion on Mining Rights; report to LSC Lithium Inc. dated January 25, 2017
- Holt Abogados: Pastos Grandes – Legal Opinion on Mining Rights; report to LSC Lithium Inc. dated January 25, 2017

Don Hains has relied on Holts for guidance on the canons and royalties applicable to the Properties, as detailed in Section 4 of this Technical Report and as contained in the reports noted above.

Except for the purposes legislated under provincial securities laws, any use of this Technical Report by any third party is at that party's sole risk.

4 ARGENTINE MINING LAW AND REGULATIONS

4.1 Argentine Mining Law

Argentina is a Federal Republic with three levels of government (National, Provincial and Municipal) and a tripartite system composed of Executive Branch, Legislative Branch and Judicial Branch at both the National and Provincial levels. Argentine law is based on the civil code, meaning that its courts rely on laws, mostly compiled in codes, rather than on precedent established in prior judicial decisions.

Mining law and regulations in Argentina are primarily established under the Argentine Mining Code¹ (“AMC”), with certain provisions covered by procedural Mining Codes in each province and special federal laws such as the Mining Investment Law 24.196, as amended by Law 15.161 and regulated by Administrative Order No. 2686/93. The AMC governs the rights, obligations and procedures related to exploration, exploitation and use of mineral resources and regulates the relationships between the State and miner (through an exploration permit or a mining concession); and between the miner and third parties.

Under the Argentine constitution, the Provinces are vested as the original owners of natural resources and are responsible for the granting of mineral concessions. Authority to grant concessions is given to either a Mining Direction (“*Direction de Minería*”) or a Mining Court (“*Juzgado de Minas*”), depending on the particular Province. The Mining Direction is an administrative branch of the Provincial Executive and authority to grant concessions is typically vested in the Mining Director. On the other hand, the Mining Court is part of the Provincial judicial function and granting authority is vested in the Judges of Mines.

Table 4.1 sets out the relevant granting authority, legal environment and key procedural law for the Provinces most relevant to lithium brine exploration and development.

¹ Federal Mining Code, enacted in 1884 by Federal Act No. 1919, as amended and complemented, recently reordered by Federal Decree No.457/97.

Table 4-1: Provincial Mining Approvals & Procedural Law

Province	Concession Jurisdiction	Concession Authority	Procedural Law
Salta	Judicial	Provincial Mining Court (<i>"Juzgado de Minas de la Provincia de Salta"</i>)	Provincial Law No. 7141
Jujuy	Administrative	Administrative Mining Court (<i>"Juzgado Administrativo de Minas"</i>)	Provincial Law No. 5186
Catamarca	Judicial	Provincial Mining & Electoral Court (<i>"Juzgado Electoral y de Minas de la Provincia de Catamarca"</i>)	Provincial Law No. 2233
La Rioja	Administrative	Provincial Mining Office (<i>"Dirección General de Minería"</i>)	Provincial Law No. 7277

4.2 Mining Tenure

Any individual or legal entity with capacity to legally purchase and own a real estate property may purchase and own a mine. The ownership of a mine is acquired through a legal concession granted for unlimited time and subject to the compliance of certain maintenance conditions (mainly related to the payment of mining fees and the implementation of an investment plan). Under the AMC, mines are divided into three (3) different categories:

1. Mines on which the surface land is an accessory and belong exclusively to the State² and which may only be tapped or exploited under a legal concession granted by the relevant provincial authority. Mines of the first category include: (i) gold, silver, platinum, mercury, copper, iron, lead, tin, zinc, nickel, cobalt, manganese, aluminium, lithium and potassium, among others; (ii) Fuels such as: coal, brown coal and solid hydrocarbons; (iii) arsenic, quartz, feldspar, mica, fluorspar, limestone bearing phosphates, sulphur and borates; (iv) precious stones; and (v) endogenous steam.
2. Mines which, based on their importance are preferentially licensed to the surface landowner; and mines which, as a result of the conditions of deposits, are used on a shared basis. Mines of the second category include: (i) metallic sand and precious stones which are found in the river beds, flowing waters and diggings; (ii) borrows and tailing of former mining works, provided such borrows and tailings remain unprotected, as well as borrows and tailings of abandoned or open-pit mining facilities, provided they are not recovered by their owner; (iii) saltpetre, salt and peat; (iv) any such metal which is not included in the first category; and (v) different types of mineral earths.

² According to the territory where mines are located, they are a national or provincial private property.

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3. Mines which belong solely to the surface landowner and which cannot be exploited by anybody without the owner's consent; except in case of public benefit or good. Mines of the third category comprise deposits of mineral stone and materials, which are used for construction and ornamentation.

Lithium and borates deposits are considered substances of the first category.

4.2.1 Mining Rights and Granting Process

Two tenement types exist in the Argentine mining regulations: Cateo, or Exploration Permit, and Mina, or Exploitation Concession.

4.2.1.1 Exploration Permits ("Cateo")

Cateos (Exploration Permits) are licenses that allow the owner to explore the tenement for a period of time following grant that is proportional to the size of the tenement. The time an Exploration Permit of 1 unit (500 ha) is granted for is 150 days. For each additional unit (500 ha) the period is extended by 50 days. The maximum allowed permit size is 20 units (10,000 ha), granted for a period of 1,100 days. The period begins 30 days after granting of the permit. A filing fee is charged per unit (500 ha) applied for.

4.2.1.2 Exploitation Concession ("Mina")

Minas (Mining Permits) are licenses which allow the holder to exploit the property subject to regulatory environmental approval. Mines are acquired by means of a legal concession granted by the relevant mining authority under the provisions of the AMC. Mining exploitation concessions are granted on: (i) mine discoveries; and (ii) vacant mines on account of expired licenses.

(a) Statement of Discovery

Filed by written application with pertinent details of property location, name and address of discoverer(s), name to be given to the mine, type of mineral(s), name of type of adjacent mines and name of surface land owner.

Area applied for must also indicate an area not exceeding twice the maximum possible extension of an exploitation concession, within which the exploration works shall be conducted and to which mining "Claims" ("*Pertenencias*") shall be confined. This area shall include the discovery site and will remain unavailable until the survey is duly approved and authorized.

Applications are filed with the Notary of Mines with date and time of precedence and any conflicts with other applications covering the same area noted in the file. Files are chronologically and consecutively numbered and the mining cadastral register authorities are to immediately determine whether the application refers or not to a free area³. Then, the Notary of Mines shall issue a discovery report based

³ If the area is not fully free, the applicant shall inform, within fifteen (15) days, if he/she is interested or not in the remaining free area. In case there is no express pronouncement, the petition shall be rejected.

on the information provided by the Mining Cadastral Registry. With this report, the Mining Authority -if applicable- will order the registration of the discovery and the publication of legal notices.

(b) Survey and demarcation

Any area of land within which boundaries the holder of a mining concession is allowed to conduct exploration works is called a claim (“*Claim*”). Each Claim of disseminated deposits of first category’s minerals, where the mineralization is evenly distributed and allows large-scale exploitation by non-selective methods, will be of one hundred (100) hectares.

Claims are required to be officially surveyed and demarcated. Both the request of survey filed by the applicant, and the Mining Authority’s resolution in such regard must be published in the Official Gazette and notified to the owners of adjacent mines, if known. If no opposition is filed, or opposition is finally settled, the Mining Authority orders the survey. Within twenty (20) days following the survey, the applicant must place milestones in the boundaries of the Claims. This provision is subject to a fine for non-compliance.

Once the survey and demarcation has been performed, the Claims are registered by the Mining Authority before the relevant registry, and a copy evidencing such registration shall be provided to the applicant as a definitive title of ownership.

After the completion of the foregoing proceedings, the holder of the exploitation concession owns all the in-place deposits within the boundaries of such Claim, no matter the mineral substance therein contained. That notwithstanding, the concessionaire shall, for record purposes, be obliged to report to the Mining Authority the finding of any substance different from the ones listed in the record and registration of the mine and, as the case may be, reflect any consequent effect on the royalty and the investment of capital.

(c) Concession Conditions

The mining property, though perpetual in nature, is subject to the fulfilment of certain specific conditions or obligations known as “*Amparo Minero*”, consistent, basically in: the payment of a mining fee; and the fulfilment of an investment plan.

- (i) *Mining Fee*: The AMC establishes the obligation of the titleholder to pay an annual fee (canon) per *Claim*, which is to be periodically fixed as required by National law⁴. Failure to pay the canon within two months of the expiration date results in termination of the claim.

⁴ Section 213 of the AMC.

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- (ii) The applicable fee for minerals corresponding to the first category is as of 2015 of AR\$ 320 per *Claim* or measurement unit⁵. Disseminated deposits of first category's minerals, eg. lithium, currently pay AR\$ 3,200 per 100 Hectares' Claims or unit thereof.
 - (iii) Canon fees shall accrue from the date of registration of the statement of discovery, and are to be paid in advance and in equal parts in two (2) semesters, expiring on December 31st and June 30th every year, Section 224 of the AMC also states that discoverers shall be exempted, for a three (3) year period, from paying the mining fee in connection with those mining properties that they are awarded.
 - (iv) Investments Plan: Within one (1) year from the date of request of survey (and despite the fact that the mining property has been surveyed or not), the applicant/concessionaire must submit to the Mining Authority an estimate of the plan and a mount of capital investment that it intends to perform in connection with: (i) the execution of mining works; (ii) the construction of camps, buildings, roads and other related works; and (iii) the acquisition of machinery, stations, parts and equipment, indicating its production or treatment capacity.

The investment for a particular mining property cannot be less than three hundred (300) times the annual fee that corresponds to such mining property according to its category and number of Claims provided that such investment shall be fully completed within five (5) years from its filing.

It is also required that an amount not lower than twenty percent (20%) of the estimated aggregate amount is invested in each of the first two (2) years.

Furthermore, within a term of three (3) months following the expiration of each annual period, a sworn statement on the compliance status of the investments must be submitted to the Mining Authority.

(d) Termination of the Concession

Mining concessions can be terminated upon the following events: (i) Failure to pay the mining fee; (ii) Failure to comply with the investments plan; and (iii) Inactivity of the mine⁶.

Note that these items do not have all the same origin and effect. In this regard, compliance with the obligations under (i) and (ii) are the two essential commitments that a mining concessionaire has to comply with in accordance with the AMC's structure of rights and obligations. These two obligations are considered by the AMC as the "*Amparo Minero*" conditions (old Spanish word related to the mining

⁵ Prior to the come into force of Law 27,111 in February 2015, the canon had been fixed for approximately 20 years in AR\$ 80 per Claim.

⁶ Section 225 of the AMC sets forth certain parameters to avoid inactivity in a mine. In this sense, a mine is to be considered inactive when there are no regular works of exploration or production for more than four (4) years. If such a term elapses then the authority can demand the filing of a reactivation plan.

work). Non compliance with such provides for the termination of the concession by the Mining Authority. Various remedies under the AMC are available to correct defects arising from issues related to items (ii) and (iii) above

(e) Vacant Mine

According to Section 219 of the AMC, when a mining concession is cancelled, the mining rights return to the State and the mine is declared and registered as vacant. Once a mining property is registered as vacant, any third party may apply for its concession⁷. If the former concession has been cancelled for failure in paying the mining fee, the applicant shall pay any amounts due, when submitting the application form. If such payment is not evidenced, the application will be rejected. The new concessionaire will step in the position of the former concessionaire, and will continue the procedure of the mining file according to its status. The new concessionaire will have a one-year-term to comply or complete, as applicable, the obligations referred to the committed investment plan.

4.3 Mining Regulation

4.3.1 Relevant Federal Regulation

As referred above, the Mining Code is the principal Federal regulation to be considered for conducting mining activities. As regards prospecting and exploration, the Mining Code contains regulations in connection with the general extent of concessions, technical requirements, concessionaire obligations as well as concession limitations.

The Mining Code also sets forth the guidelines to identify the limits of the rights and relationships between mining concessionaires, landowners and the community; providing specific material regulations in connection with

- (i) easements;
- (ii) guarantee bonds;
- (iii) indemnifications; and,
- (iv) environmental control of the mining prospecting and exploration activities.

Additionally, companies need to consider Federal regulations in connection with minimum environmental standards.

Federal Law No. 24,196, as amended and complemented, which created the Mining Investment Promotional Regime ("Mining Investment Law"), should also be taken into account.

⁷ The former concessionaire will not be entitled to request the concession of the vacant mine within one year following its registration as vacant mine. Recent local regulations in the Provinces of Salta and Jujuy may give priority to the provincial mining companies.

4.3.2 Relevant Provincial Regulation

Each province has its own mining procedural law, which depending on the administrative or judicial structure of the concession authority will be a mining administrative proceedings law or a mining procedural code.

4.4 Mining Investment Law

The Mining Investment Law⁸ has been a key ally to conduct mining prospecting and exploration activities in Argentina since it provides special benefits that reduce the economic burden and risk. To become a beneficiary of the Mining Investment Law, individuals or legal entities must file an application with the National Mining Secretariat.

The benefits of the Mining Investment Law relevant to the prospecting and exploration phase of a project are the following:

- Reimbursement of VAT;
- Exemption from the payment of customs duties and customs fees for capital assets used in mining activities;
- Minimum Presumed Income Tax does not apply to beneficiaries of the Promotional Regime for Mining Investments.

Additionally, the Mining Investment Law provides other benefits that are practical and specifically foreseen for the exploitation stage⁹:

- Fiscal, foreign exchange and custom-duties stability for the mining project for a 30-year term, as from the filing date of the feasibility study, exception made of VAT ("Fiscal Stability");
- Income Tax benefits such as (i) double deduction of prospecting and exploration expenses in the assessment of the Income Tax; (ii) option to choose an accelerated depreciation system of fixed assets and property, land and equipment; and (iii) exemption on profits from mines and mining rights contributed in consideration for participations in the relevant company's equity;
- Option to capitalize 50% of proved mining reserves; and,
- Royalty cap at 3% of the mine-mouth value of extracted minerals.

⁸ Federal Law No. 25,063, as amended

⁹ Resolution No. 365/05 of the Federal Ministry of Economy and Resolution "C" No. 42884 and "C" No. 44670 of the Argentine Central Bank.

The Mining Investment Law sets forth the following obligations and formalities to be observed by its beneficiaries:

- Filing of corporate, tax and mining information and documents with the application to become a beneficiary, and filing of annual updates thereafter;
- Filing of annual affidavits on forecasted investments; investments made in the concluded term; use of double deduction of expenses and accelerated depreciation for the assessment of the Income Tax;
- Creation of a special accounting provision for the prevention and mitigation of environmental damages and the filing of an annual affidavit reporting this provision;
- Use of the equipment subject to any of the above benefits only for mining purposes (i.e.: goods exempted from custom duties when imported, assets over which income-tax double deduction or accelerated depreciation was applied, etc.) However, with the authorization of the National Mining Secretariat, such goods can be transferred to other individuals and legal entities registered in the promotional regime.

4.5 Provincial Royalty Rates and Investment Participation

Under the Mining Investment Law the royalty rate is set at 3% of the mine-mouth value of the extracted mineral. In the case of lithium brine production, Salta, Catamarca and La Rioja provinces have adopted the 3% royalty rate established by the AMC. Jujuy province has also adopted the 3% royalty rate but in addition, currently imposes an 8.5% carried interest in any lithium brine project through the participation of Jujuy Energía y Minería Sociedad del Estado (**JEMSE**), the provincial mining company. Such carried interest, in the case of the Orocobre project on salar Olaroz, is funded by the project developer in the form of loans to JEMSE and repaid through withholding of one-third of any dividends paid to JEMSE. Once all initial project capital cost and loans to JEMSE are recovered by the project developer, JEMSE is required to participate pro-rata in future capital projects. No royalties are payable until the project developer has recovered all initial capital costs and loans to JEMSE have been repaid (Orocobre, 2015).

The Jujuy government has recently proposed changes to the structure of JEMSE which would result in elimination of the 8.5% carry interest but retention of the 3% royalty.

4.6 Environmental Rehabilitation Funds

Mining companies are allowed to establish funds to set aside up to 5% of extraction operating costs and profits against income tax otherwise payable as an environmental rehabilitation fund. Any amounts remaining after rehabilitation is complete are to be included in the income tax balance at the end of mine life.

5 TRANSACTIONS AND PROPOSED TRANSACTIONS

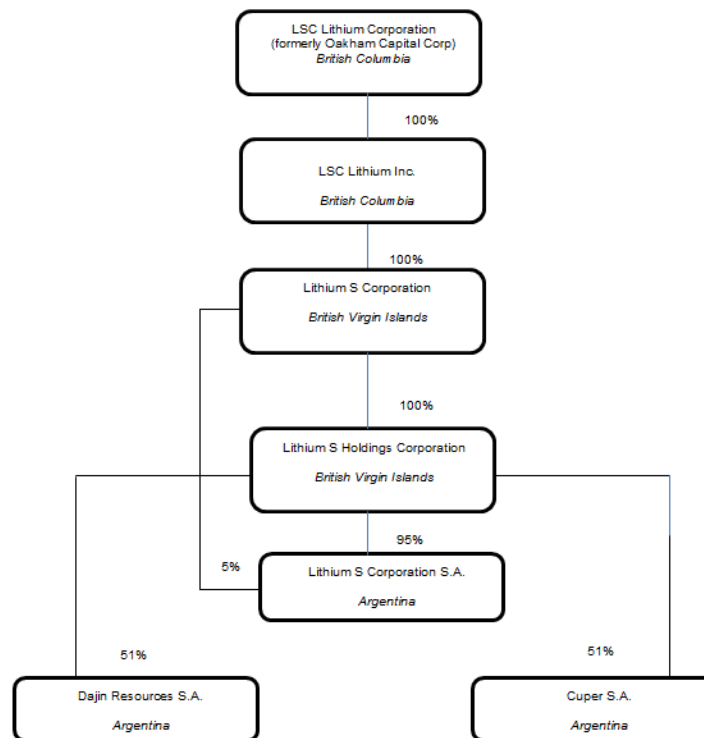
5.1 Three Corner Amalgamation

LSC was established to acquire and develop various lithium-bearing brine deposits in Argentina. On October 26, 2016 LSC entered into the Amalgamation Agreement. See Part 2 – Introduction.

LSC, through its indirect subsidiary, Lithium S Holdings Corporation (**Lithium H**), incorporated in the British Virgin Islands, and Lithium S Corporation S.A. (**Lithium Argentina**), incorporated in Argentina, has acquired interests in various lithium brine properties in Argentina. LSC intends to pursue additional lithium property acquisitions in Argentina and to advance its Properties to commercialization as soon as possible.

Figure 5-1 illustrates the LSC corporate organization structure following the completion of the Amalgamation.

Figure 5-1: LSC Lithium Corporate structure – Post Amalgamation



In support of the business objectives of LSC, LSC has acquired rights to various lithium brine containing properties in Argentina. The terms of these arrangements are as follows:

5.1.1 The Properties

In connection with the Amalgamation, LSC and its subsidiaries entered into agreements with Enirgi and its subsidiaries as detailed in Section 1, Summary, of this Technical Report, including the following:

- ADY Tenement Purchase Agreement
- Relationship Agreement
- Mining Management Support Agreement

5.1.1.2 Jama Agreement

Pursuant to a share purchase agreement (the **Jama Agreement**) dated October 27, 2016 between Lithium H (as purchaser) and Miguel Jorge Mitre (**Mitre**) and Maria Laura Alonso (as sellers), Lithium H acquired 51% of the issued shares in Cuper S. A. (**Cuper**) for a purchase price of US\$3,250,000. In connection with such agreement, Lithium H and Mitre entered into a shareholders' agreement respecting Cuper, and Lithium Argentina entered into an operating agreement with Cuper. Pursuant to the Jama Agreement, Lithium H

agreed to incur expenditures of US\$9 million on Salar Jama prior to the third anniversary of the date upon which Cuper has obtained all necessary concessions and permits to permit it to conduct exploration and development activities on Salar Jama (the **Earn-in Period**). In the event that such expenditures are not incurred prior to such deadline and Lithium H does not pay to Cuper the amount of un-incurred expenditures, the shareholding interest of Lithium H will be reduced on the basis of one percent of the issued and outstanding shares of Cuper for each US\$240,196 shortfall. Pursuant to the shareholders agreement, following completion of these expenditures, each of Mitre and Lithium H will be required to fund all exploration, development and other expenditures of Cuper on a proportionate basis based on their respective shareholdings from time to time. In the event that either shareholder fails to fund any expenditures, its shareholding interest in Cuper will be diluted on a straight-line basis. Lithium H has appointed Lithium Argentina as operator of all exploration and development programs on Salar Jama during the Earn-in Period and thereafter it will remain the operator unless a shareholder holding more than a 50% shareholding interest exercises its right to become or appoint the operator.

5.1.1.3 Stucky Agreement

Pursuant to an offer of acceptance of a Purchase Agreement of Mine dated October 24, 2016 from Federico Gaston Stucky to Erika Ebelen Stucky (the **Stucky Agreement**) and assigned by the latter to Lithium S Corporation (**Lithium S**) and by Lithium S to Lithium Argentina, Lithium Argentina has the right to acquire a 100% interest in the tenement Mina La Buscada on Salar Pastos Grandes, Province of Salta. According to the terms of the Stucky Agreement, the price for the transfer of the tenement to be paid to Federico Stucky is \$US 132,000, of which \$US 88,000 has been paid and the balance was to be paid before January 10, 2017. The price in favour of Erika Ebelen Stucky for the assignment of the Stucky Agreement was agreed at \$US 70,400, of which only \$US 23,466.67 is unpaid and outstanding. Federico Gastón Stucky retained the right to exploit the salt or sodium chloride extracted from the Mina La Buscada for a period of 15 years. The denounce of lithium regarding this tenement was filed on January 20, 2017. The deed of transfer of this tenement in favour of Lithium Argentina is expected to be granted in early February, 2017, and the related costs are to be borne by Lithium Argentina.

5.1.1.4 Ponce Agreement

Pursuant to an offer of acceptance of a Purchase Agreement of Mine dated October 12, 2016 (the **Ponce Agreement**) issued by Miguel Ignacio Ponce, Luis Orlando Ponce, Carlos Alberto Ponce, and Luis Orlonado Ponce as alleged sole heirs of Magdalena Vega – the registered titleholder of the tenement Mina Maria Luisa II – in favour of Erika Ebelen Stucky, which was assigned by her to Lithium S on October 24, 2016, and further assigned by Lithium S to Lithium Argentina on December 16, 2016, Lithium Argentina would have the right to acquire a 100% interest in the tenement Mina Maria Luisa II on Salar Pastos Grandes, Province of Salta. According to the terms of the Ponce Agreement, Lithium Argentina agreed to pay an aggregate of \$US 150,000 to the Ponce family for the

assignment and transfer of which \$US 60,000 has been paid and the balance is payable in installments, the last of which is due on May 10, 2017. The price to be paid to Erika Ebelén Stucky for the assignment of the Ponce Agreement is \$40,000, of which \$20,000 has been paid. The balance is payable in installments, the last of which is due on May 10, 2017. The deed of transfer of this tenement in favour of Lithium Argentina is expected to be granted in early February, 2017, and the related costs are to be borne by Lithium Argentina.

5.1.1.5 Viveros Agreement

On November 7, 2016 Lithium S entered into an agreement (the **Viveros Agreement**) with Martin Viveros for the acquisition of mining rights known Mina Leoncia on Salar Pastos Grandes, Province of Salta. In consideration for the acquisition, Lithium S agreed to pay \$US 216,000 for the assignment and transfer, all of which has been paid. A finder's fee of \$US 54,000 was paid to Erika Stucky and a 2.5 % Net Smelter Return (NSR) royalty was granted to Martin Viveros, who also retained the right to exploit the salt or sodium chloride extracted from the Mina Leoncia tenement for a period of 20 years. The Viveros Agreement was assigned by Lithium S to Lithium Argentina on December 16, 2016. The deed of transfer of this tenement in favour of Lithium Argentina is expected to be granted in early February, 2017 and the related costs are to be borne by Lithium Argentina.

5.1.1.6 Sosa Agreement

On September 21, 2016, Lithium S received a binding offer (the **Sosa Agreement**) from Raymundo Sosa Quintana (**Sosa**) for the acquisition of the mining rights known as Avestruz located in the Province of Salta, Argentina and made a payment of \$124,100. In consideration for the acquisition, Lithium S committed to pay a further \$200,000 on October 6, 2016 (which was paid), and three payments of \$324,100 (on December 5, 2016, which was paid, on April 28, 2017 and on September 15, 2017). The Sosa Agreement was assigned by Lithium S to Lithium Argentina on December 16, 2016. Lithium Argentina has the right to terminate the contract upon giving fifteen days' notice. In the event of termination in accordance with the foregoing, Sosa will retain any amounts previously paid under the contract as the only compensation for the termination of the agreement but retains no right to make any further claims against Lithium Argentina. Sosa retains a 1.5% Net Smelter Return on the mining properties, to be calculated in the terms and conditions detailed thereto. In the event the concession is terminated, Lithium Argentina shall pay to Sosa a US\$ 3,000,000 penalty for the loss of the royalty, plus any portion of the purchase price that may be outstanding under the agreement. Lithium Argentina has agreed to pay the ITI (transfer tax on real estate) applicable to Sosa (deductible from the last installment) and the costs related to the granting of the deed of transfer. The deed of transfer of this tenement in favour of Lithium Argentina is expected to be granted in early February, 2017.

5.1.1.7 Minera Santa Rita

On October 11, 2016, Lithium S received a binding offer (the **Minera Santa Rita Agreement**) from Minera Santa Rita S.R.L. for the acquisition of mining rights known as

San Cayetano I in the Province of Salta, Argentina. In consideration for the acquisition, Lithium S committed to make payments of (i) \$30,000 on signing the contract (which was paid), (ii) \$82,000 within 30 days of signing the contract (which was paid), (iii) \$84,000 within 180 days of signing the contract and (iv) \$84,000 within 360 days of signing the contract. In the event of termination, Minera Santa Rita S.R.L. will retain any amounts previously paid under the contract as compensation for the termination of the agreement. The deed of transfer is to be executed once the consideration for the acquisition has been paid in full. The tax on transfer of real estate and the costs related to the granting of the deed of transfer are to be paid by Lithium Argentina. The Minera Santa Rita Agreement was assigned by Lithium S to Lithium Argentina on December 16, 2016.

5.2. Non-Material Properties

The agreements described below pertain to properties held or to be held by LSC that are not considered material to LSC, as described in Table 27-1.

5.2.1 Dajin Properties

Pursuant to a share purchase agreement dated October 25, 2016 between, inter alia, Lithium H (as purchaser) and Dajin Resources Corp. (**Dajin Corp**) and Dajin Resources (US) Corp. (as sellers), Lithium H acquired 51 % of the issued shares in Dajin Resources S.A. for a purchase price of C\$1,000,000. In connection with such agreement, Lithium H and Dajin Corp entered into a shareholders' agreement respecting Dajin Resources S.A., and Lithium Argentina, as operator, entered into an operating agreement with Dajin Resources S.A. Pursuant to the share purchase agreement, Lithium H agreed to incur expenditures of C\$2,000,000 on tenements and applications for tenements held by Dajin Resources S.A., prior to the earlier of October 25, 2020 or twenty four (24) months after Dajin Resources S.A. has obtained all the necessary permits allowing access and development of onsite activities in order to start exploration work in one or more of its tenements provided the aggregate surface area granted to exploration work covers at least 2,000 adjacent hectares. If such expenditures are not incurred or funded before such deadline, Lithium H's shareholding interest will be reduced. Pursuant to the share purchase agreement, LSC issued 384,615 warrants to Dajin Corp each exercisable for one common share of LSC at an exercise price of C\$1.30 each and expiring approximately 15 days prior to the completion of the qualifying transaction of Oakham.

5.2.2 Cooperativa

On September 15, 2016, Lithium S received a binding offer from Cooperativa de Trabajo Minero Produccion Boratos Jujenos Ltda (the **seller**) for the acquisition of mining rights known as Navidad & San Jose in the Province of Jujuy, Argentina and made a payment of \$37,500. In consideration for the acquisition, Lithium S has committed to pay a further \$37,500 once consent is received from the Comunidad Originaria de Inti Killa ratifying the exploration permit issued, \$300,000 on December 9, 2016 subject to the re-opening of the Administrative Court in Mines in the Province of Jujuy, a payment of \$330,000 on June

20, 2017 and a final payment of \$470,000 on December 18, 2017. In the event Lithium S defaults on a payment and fails to correct such a default within forty five business days of the dates to which it has committed, the seller has the right to terminate the contract and the mining rights revert to the seller. The seller will retain any amounts previously paid under the contract as the only compensation for the termination of the agreement but retains no further right to make any further claims against Lithium S.

5.2.3 Olaroz Tenement Purchase Agreement

In addition to ADY Tenement Purchase Agreement, Lithium Argentina and ADY also agreed to enter into a tenement purchase agreement effective December 12, 2016 pursuant to which Lithium Argentina purchased ADY's interest in certain mineral rights located on Salar de Olaroz in the Province of Jujuy in consideration for 80,714 common shares of LSC for aggregate gross proceeds of \$US 104,929.

5.2.4 LitheA Option Agreement

Pursuant to an option agreement dated November 23, 2016 between, among others, BMC Global Limited (**BMC**) and LSC (the **LitheA Option Agreement**), LSC has been granted an option (the **LitheA Option**) to purchase from BMC all of the issued shares of LitheA Inc. (**LitheA**), a British Virgin Islands company. LitheA owns a mining portfolio of twenty-one (21) tenements covering over 30,000 hectares in Salta Province, Argentina. Its portfolio covers most of the salar de Pozuelos in the Puna region of Argentina in the western part of Salta Province primarily comprised of two main mining groups - LitheA Norte and LitheA Sur, which together cover approximately 10,787 hectares. LitheA also holds tenements in parts of salar Rio Grande, salar de Pular, salar de Incahuasi and Muñano. The tenements are all fully registered and surveyed, with all required mining investment plan and environmental approvals in place to begin immediate exploration activities.

LitheA has US\$16,219,619 of unsecured, subordinated debt owing to BMC (the **Subordinated BMC Debt**). The Subordinated BMC Debt does not bear interest, and will be repaid by LitheA in semi-annual installments calculated on the following basis: 20% of net income, plus 20% of depreciation and amortization, less 20% of capital expenditures, less 20% of net changes in working capital (excluding cash and debt), less certain other specified amounts. Upon execution of the LitheA Option Agreement, LSC issued to BMC 2,849,740 common share purchase LSC Warrants, exercisable at C\$1.50 per LSC Share until November 23, 2017. The consideration payable by LSC upon the exercise of the LitheA Option will be approximately \$44 million, of which \$38.5 million will be payable to BMC (in exchange for all of the outstanding shares of LitheA) and \$5.5 million (plus interest) will be payable to a beneficial shareholder of BMC (in exchange for a \$5 million promissory note issued by LitheA to such shareholder). The \$38.5 million payment will be satisfied, as to \$14,275,816 plus interest at the rate of 24% per annum from November 14, 2016 by a cash payment and/or the assignment of all or part of the BMC Loan and as to the

balance by the issuance of LSC common shares (valued at \$0.964 each). The payment of the \$5.5 million (plus interest at the rate of 12% per annum from November 14, 2016) will be satisfied as to cash in the amount of any accrued and unpaid interest, and the balance either in cash and/or through the issuance of LSC common shares (valued at \$0.964 each) at the option of the lender.

6 PROPERTY DESCRIPTION, LOCATION & TENURE

6.1 Introduction

The Properties which LSC considers to be “material properties” (as defined in NI 43-101) and as “Qualifying Properties” or “Principal Properties” (as defined in Exchange Policy 1.1 and 2.1), comprise interests in the following:

- 1 The Salar Rio Grande Tenements located in southwestern Salta Province of Argentina, acquired from ADY pursuant to the ADY Tenement Purchase Agreement;
- 2 The Salar Pastos Grandes Tenements located south of Salar Salinas Grandes in Salta Province of Argentina, acquired from ADY pursuant to the ADY Tenement Purchase Agreement and acquired pursuant to the Stucky Agreement, the Viveros Agreement, the Ponce Agreement, and the Minera Santa Rita Agreement;
- 3 The Salar Jama Tenements located in the Jujuy Province of Argentina at the border with Chile, acquired, in part, from Cuper pursuant to the Jama Agreement (51% interest) and acquired in part from ADY pursuant to the ADY Tenement Purchase Agreement; and
- 4 The Salar Salina Grandes Tenements located in the Salta and Jujuy Provinces of Argentina, acquired from ADY pursuant to the ADY Tenement Purchase Agreement.

The Properties are located in the Salta and Jujuy Provinces, northern Argentina (Figure 6-1). In total, current agreements cover 51,760 ha, of which LSC will have an attributable interest of 49,310 ha, or 95% of the total, as further described in Table 6-1 and disclosure below.

Table 6-1: Properties

Summary List			
Salar	Province	Area (ha)	% Attributable to LSC
Salar Rio Grande Tenements	Salta	20,061	100%
Salar Pastos Grandes Tenements	Salta	2,683	100%
Salar Jama Tenements	Jujuy	5,988	59%
Salar Salinas Grandes Tenements	Salta	21,920	100%
	Jujuy	1,108	100%
Total		51,760	95%

All of the Properties are located in relatively close proximity to each other as well as to salar del Rincón.

The Properties have similar means of access from major urban centres such as Salta, have similar geologic origin and style of mineralization, are at a similar stage of exploration and have a similar potential mode of development. For these reasons, the Properties are collectively subject to one technical report, being this Technical Report, and separate technical reports on the individual tenements are not required nor relevant at this stage of the Properties.

6.2 Property Description and Location

6.2.1 Salar Rio Grande Tenements

Pursuant to the ADY Tenement Purchase Agreement, Lithium Argentina acquired title to 109 tenements on Salar Rio Grande (the **Salar Rio Grande Tenements**) plus one servitude totaling 20,061 ha with the exception of the property “Monica” File No. 4302, for which 50% was acquired by Lithium Argentina of title is held by ADY and the remainder is held by a third party.

Salar Rio Grande is located in southwestern Salta Province and centered at 25°03'S, 68°12'W and lies at an elevation of 3,630 metres above sea level. It has a roughly oval shape and is oriented North-South. Salar Rio Grande is classified as a mature salar and is dominated by sodium sulphate. It has a surface area of approximately 180 km² and a drainage basin of approximately 1,150 km².

Salar Rio Grande has been a significant past producer of sodium sulphate. ADY operated on the salar for several years, with the last production being in 2013 when approximately 15,000 tonnes of sodium sulphate was produced from brines and 30,000 tonnes produced from hard rock (mirabilite) deposits. The sodium sulphate was used as a reagent in lithium carbonate production at salar del Rincón; however, production ceased when Enirgi decided to develop its new DEP Technology which does not require sodium sulphate as a reagent. Currently, several small operations continue to produce limited quantities of sodium sulphate.

The Salar Rio Grande Tenements have already been converted to lithium. The conversion of the registrations will result in a significant increase in annual canon fees due from the current AR\$32,230 to AR\$650,000. Included in the Salar Rio Grande Tenements are three recently acquired tenements which are currently defined as applications.

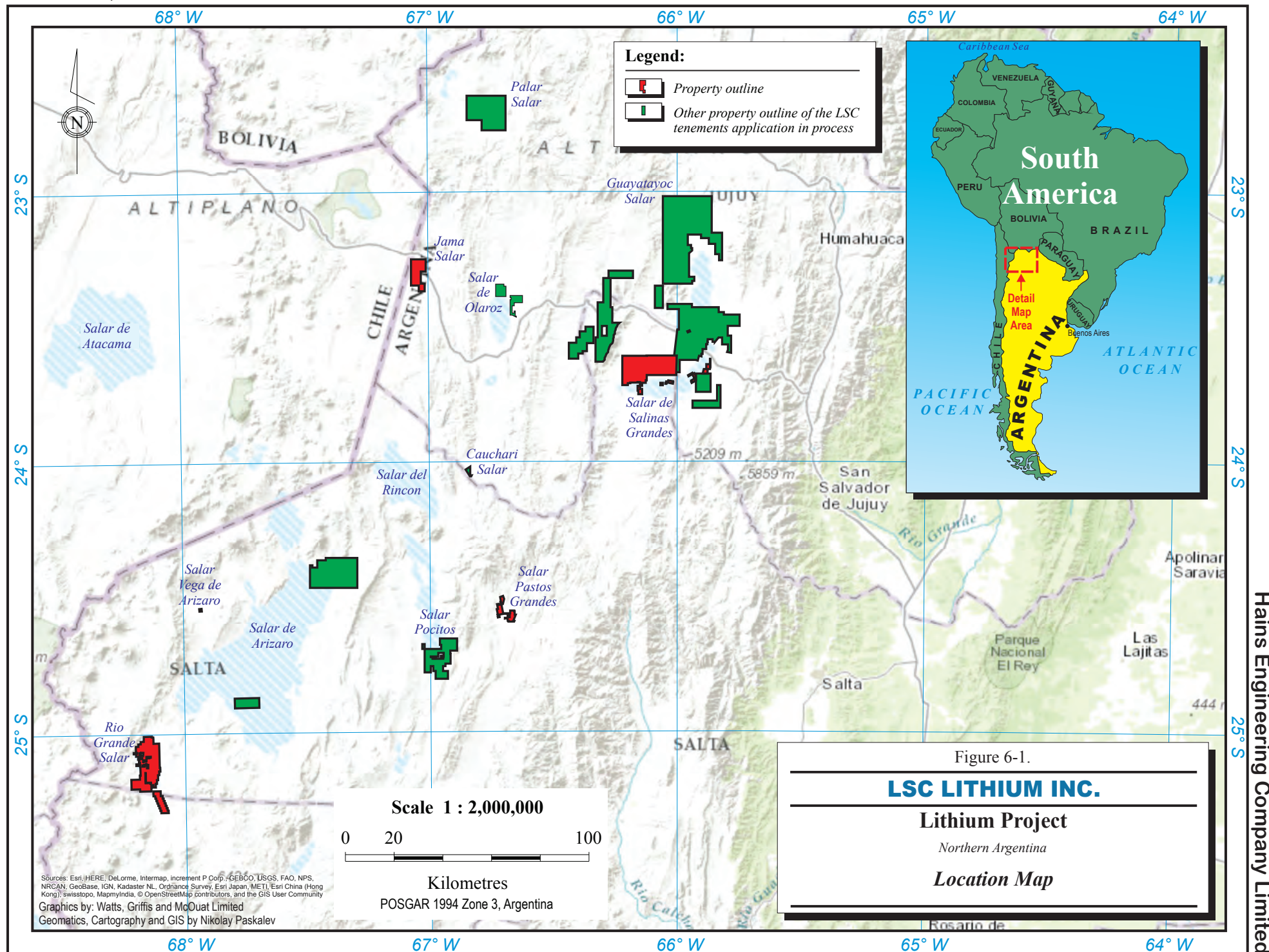
Figures 6-2 and 6-3 illustrate the location of salar Rio Grande and the disposition of the LSC tenement package.

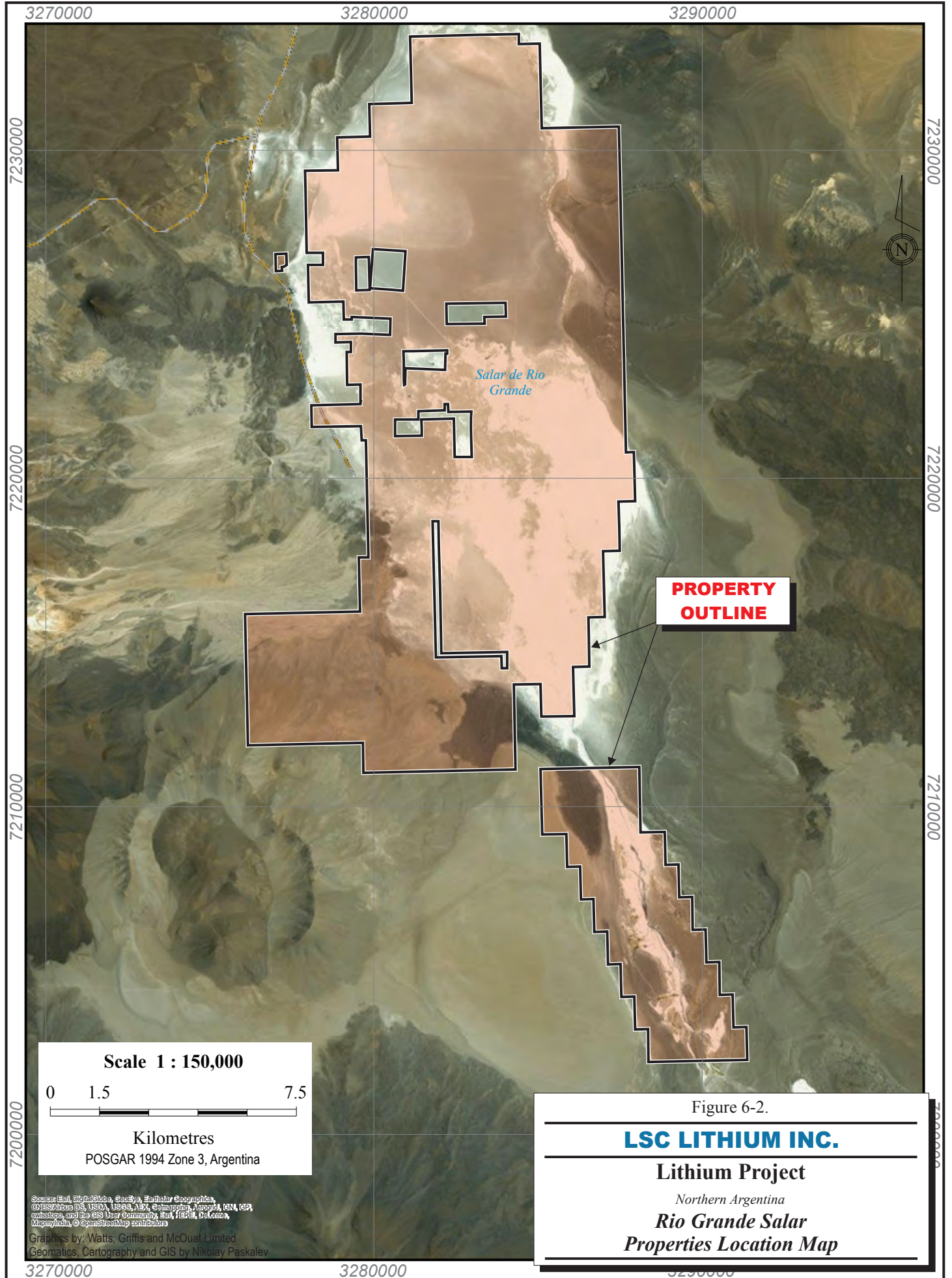
6.2.2 Salar Pastos Grandes Tenements

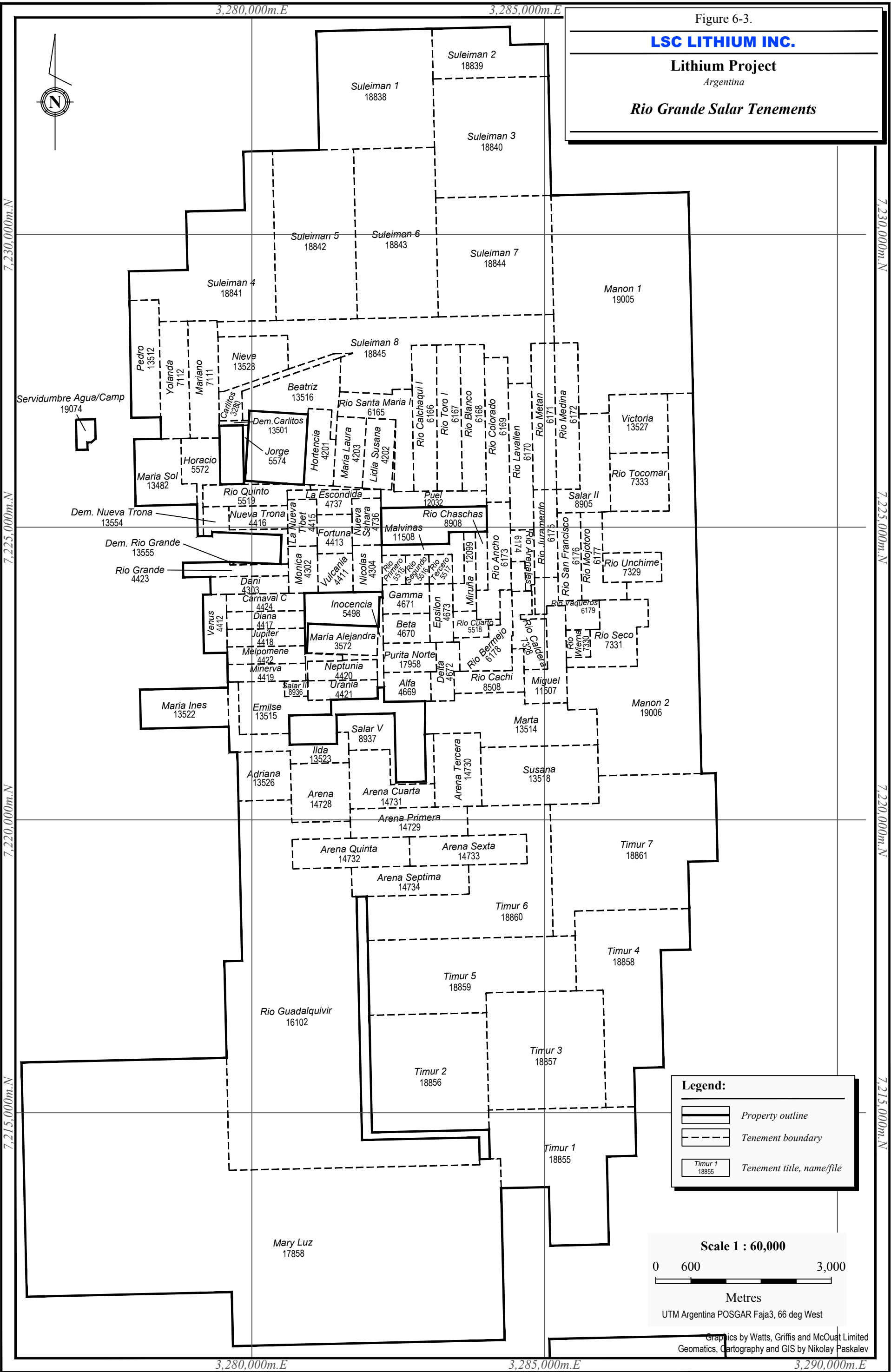
Pursuant to the ADY Tenement Purchase Agreement, Lithium Argentina acquired title to seven tenements on salar Pastos Grandes and LSC has acquired rights to five additional tenements on the salar totaling 2,683 ha (the **Salar Pastos Grandes Tenements**).

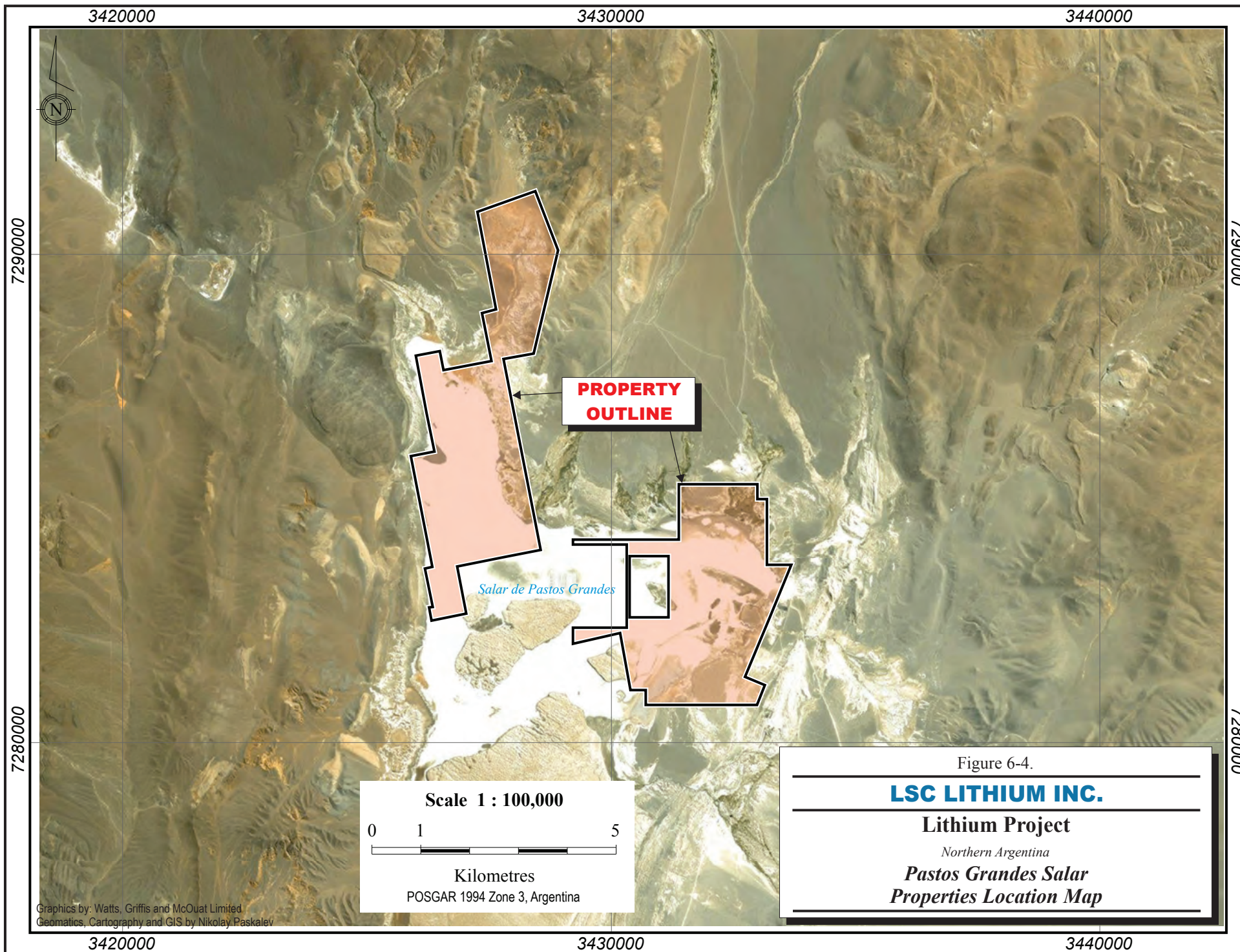
Salar Pastos Grandes is a triangular shaped salar located south of salar Salinas Grandes in the Salta Province of Argentina. It is situated immediately north of salar Pozuelos and east of salar Pocitos and is approximately a 1.5 hour drive from salar del Rincón. Salar Pastos Grandes is centered at 24°36'S, 66°44'W and sits at an elevation of 3,700 metres above sea level and occupies an area of 30 km². The overall drainage basin has an area of approximately 3,600 km² (Alonso and Sorentino, 2009).

All of the Salar Pastos Grandes Tenements are currently registered or denounced for lithium, which will allow for production of lithium. Annual canon fees are AR\$83,200.









Graphics by: Watts, Griffis and McQuat Limited
 Geomatics, Cartography and GIS by Nikolay Paskalev

6.2.3 Salar Jama Tenements

Cuper is the current titleholder of one tenement totaling 4,999 ha (the **Cuper Salar Jama Tenement**) and Daniel E. Galli is the current titleholder of one tenement totalling 988.74 ha (the **Galli Salar Jama Tenement** and, together with the Cuper Salar Jama Tenement, the **Salar Jama Tenements**). Pursuant to the Jama Agreement, on October 27, 2016, LSC, through its wholly-owned subsidiary Lithium H, acquired a 51% interest in Cuper. Additionally, LSC acquired from ADY the right to acquire title to the Galli Salar Jama Tenements, pursuant to a separate mining purchase agreement in connection with the closing of the transactions contemplated by the ADY Tenement Purchase Agreement.

Salar Jama is located in the Jujuy Province of Argentina at the border with Chile at 23° 19'S, 67°02'W. National Route 52 passes immediately east of Salar Jama and provides excellent access to it and to salar del Riñcón, which is approximately 1.5 hours away by car. Jama lies at an elevation of about 4,050 metres above sea level and has a surface area of 30 km². The drainage basin area is reported as approximately 1,350 km² (Alonso and Sorentino, 2009). Salar Jama is classified as an immature, clastic salar.

The Salar Jama Tenements consist of three parcels totaling 988.74 ha known as Nueva Illusion representing the south end of the property and 4,999 ha representing the northern section of the property. Once the Salar Jama Tenements are acquired by LSC, LSC will exercise effective control over the whole of salar Jama. The Salar Jama Tenements are currently classified as applications and no canon fees are currently due. Figure 6-7 illustrates the Salar Jama tenements.

6.2.4 Salar Salinas Grandes Tenements

Pursuant to the ADY Tenement Purchase Agreement, Lithium Argentina acquired title to 15 tenements totaling 21,176 ha (the **ADY Salar Salinas Grandes Tenements**) and also the right to acquire title to four tenements totalling 1,852 ha (the **Galli Salar Salinas Grandes Tenements**, and together with the ADY Salar Salinas Grandes Tenements, the **Salar Salinas Grandes Tenements**) pursuant to a separate mining purchase agreement in connection with the closing of the transactions under the ADY Tenement Purchase Agreement.

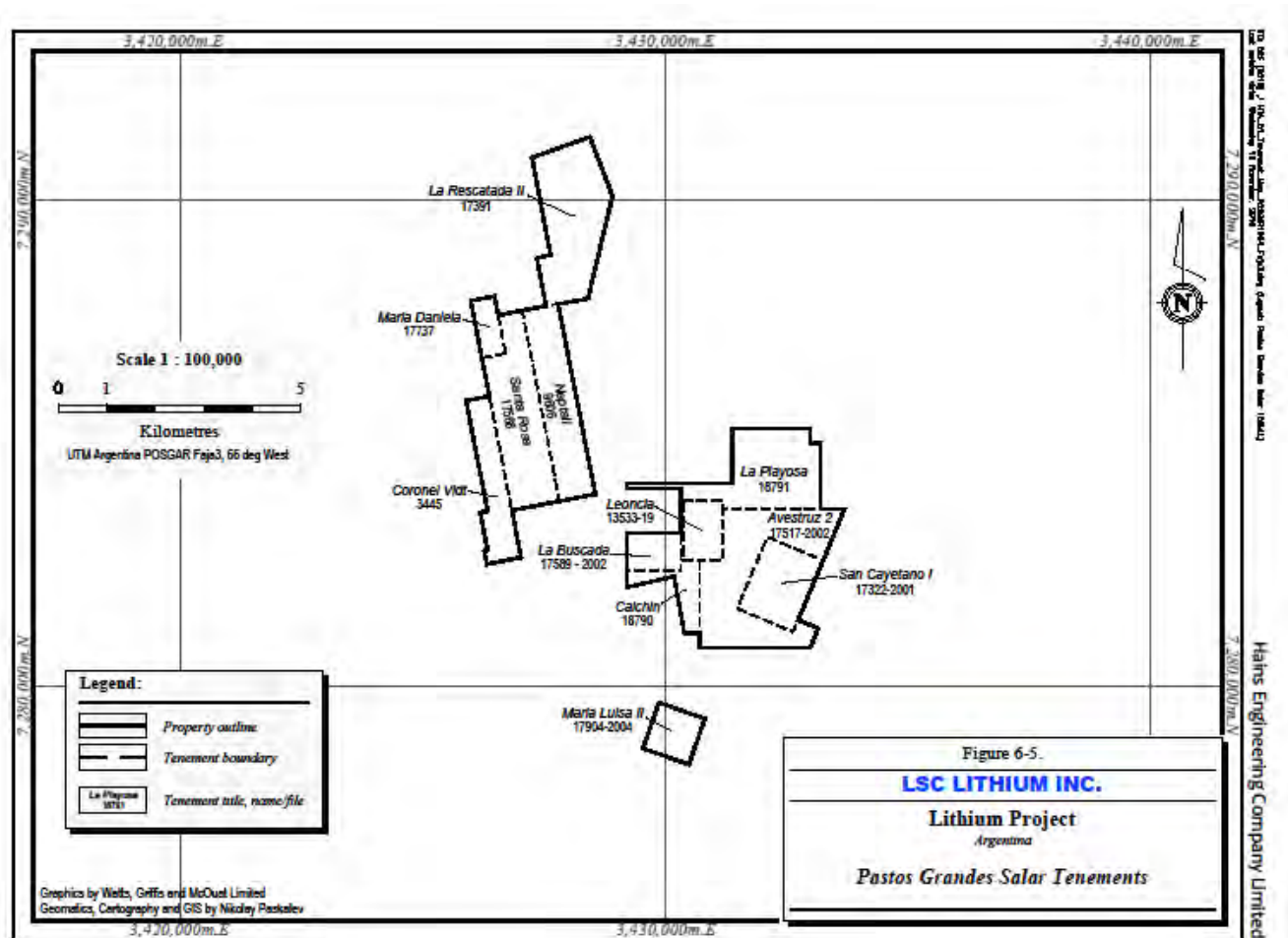
Salar Salinas Grandes is a large salar located in both the Salta and Jujuy Provinces of Argentina. It is distinct from the other salars in the Puna in that it has a West-East orientation whereas the other salars have a typical North-South to North 20° West orientation. Salar Salinas Grandes is hydraulically connected to laguna Guayatayoc in the north and the total drainage basin for salar Salinas Grandes is very extensive. Salar Salinas Grandes is centered at 23°44'S, 66°0'W and is crossed by National Route 52. Salar Salinas Grandes covers an area of approximately 220 km² and has a drainage basin extending over

4,630 km². Salar Salinas Grandes lies at an elevation of 3,520 metres above sea level (Alonso and Sorentino, 2009).

The Salar Salinas Grandes Tenements are approved for borates, salt or lithium.

Figure 6-8 illustrates the location of the salar.

Figure 6-5: Salar Pastos Grandes Tenements Map



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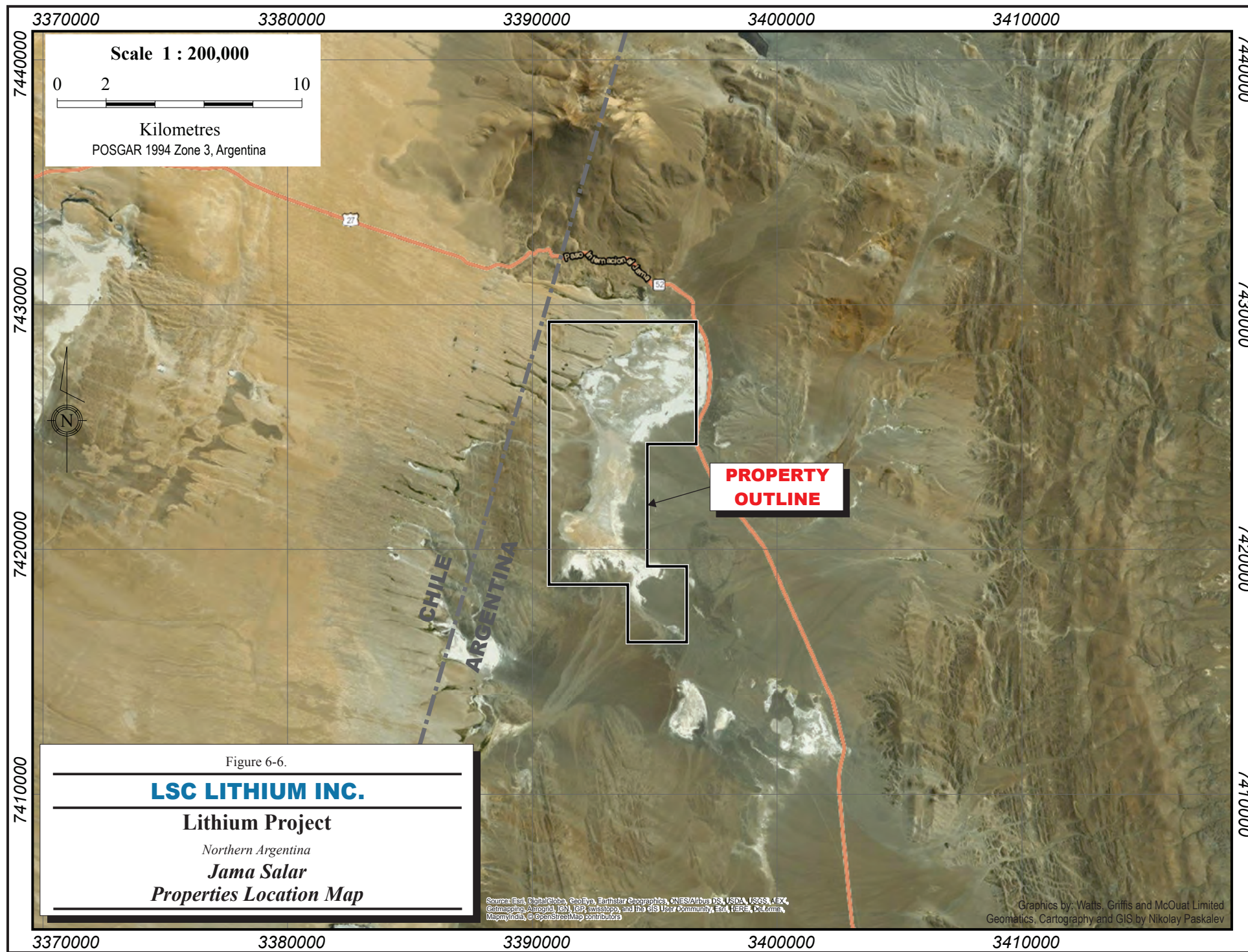


Figure 6-6.

LSC LITHIUM INC.

Lithium Project

Northern Argentina

Jama Salar

Properties Location Map

Sources: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, SGP, swisstopo, and the GIS User Community, Esri, HERE, DeLorme, MapmyIndia, © OpenStreetMap contributors

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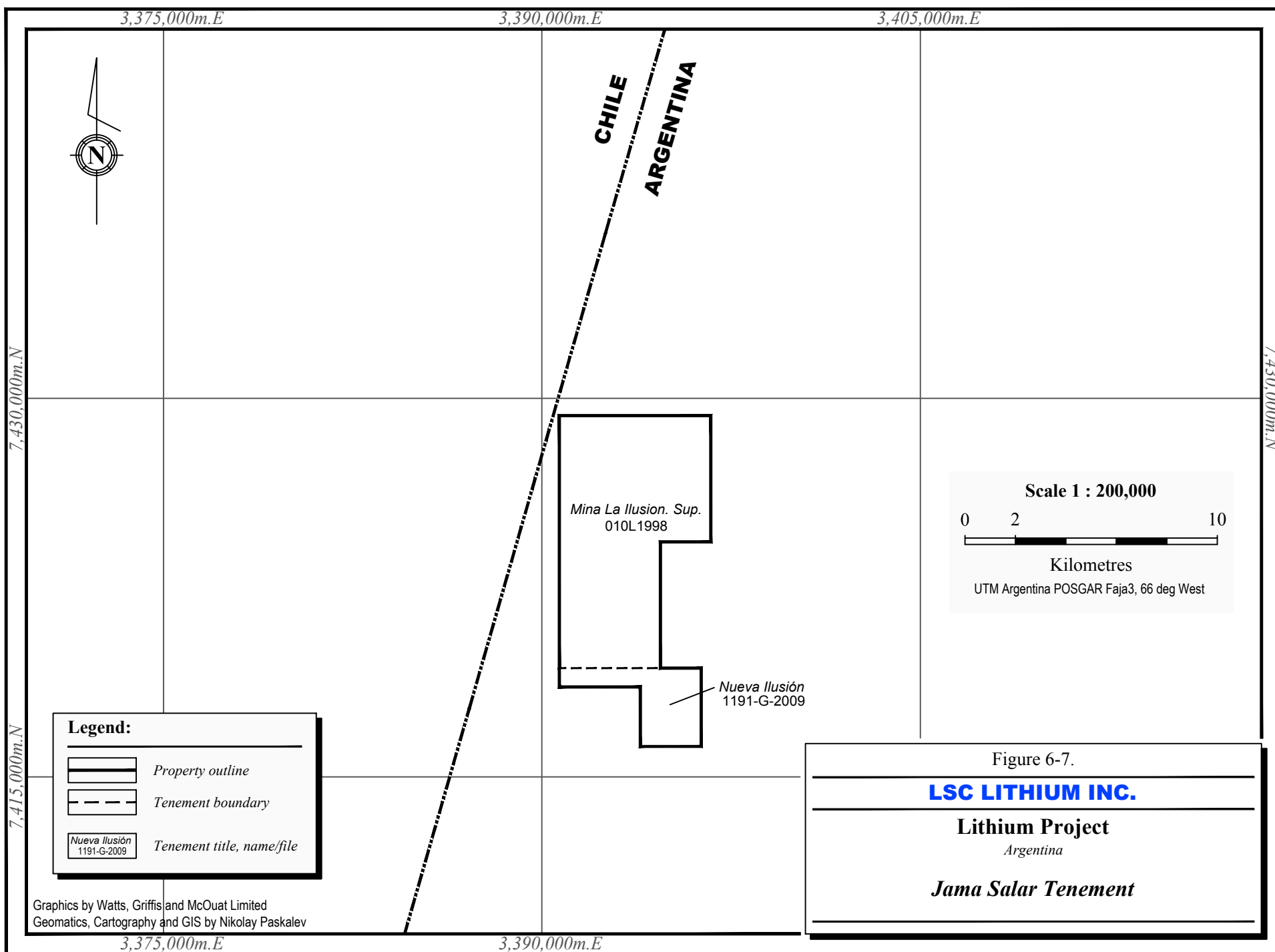
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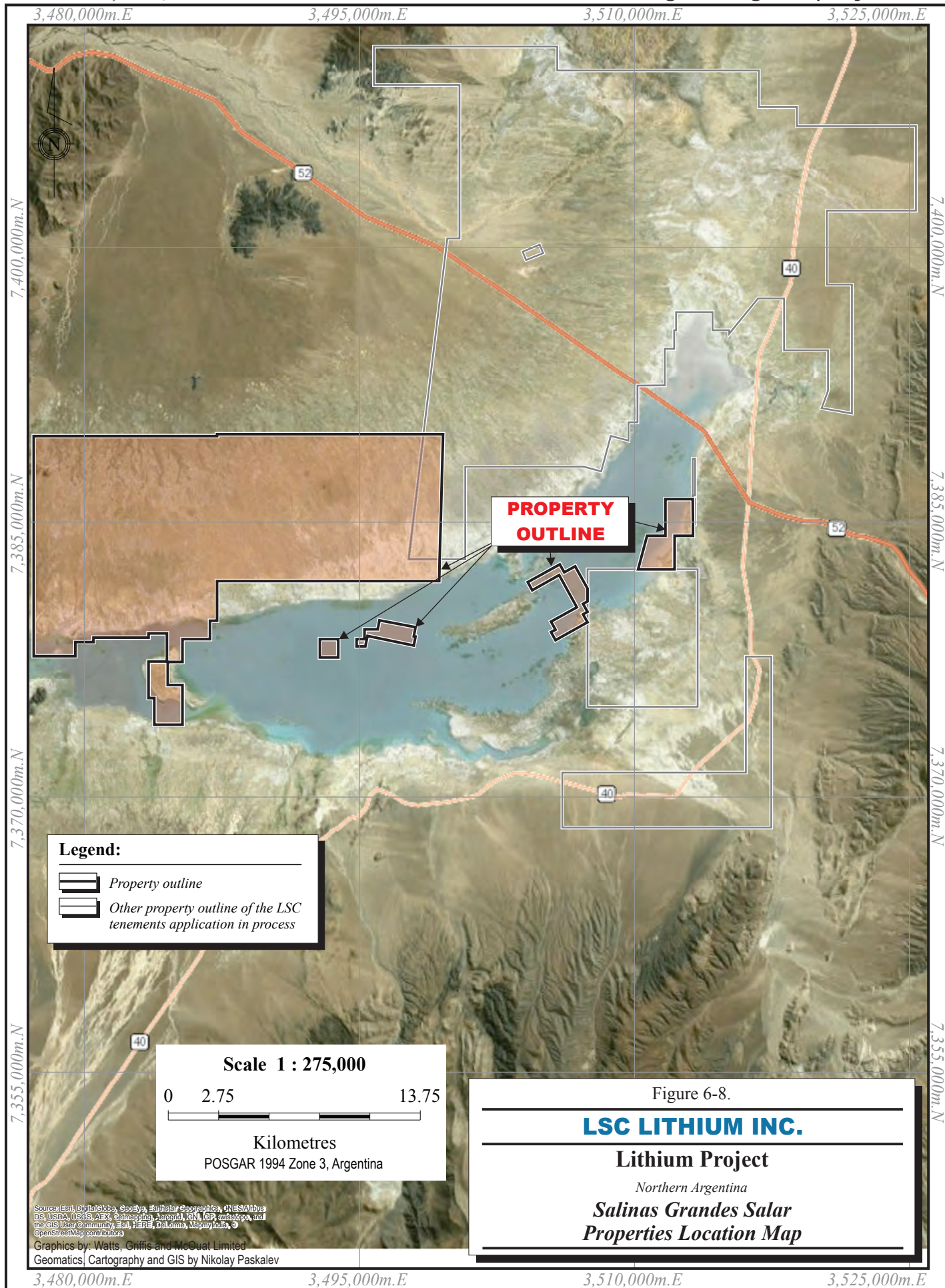
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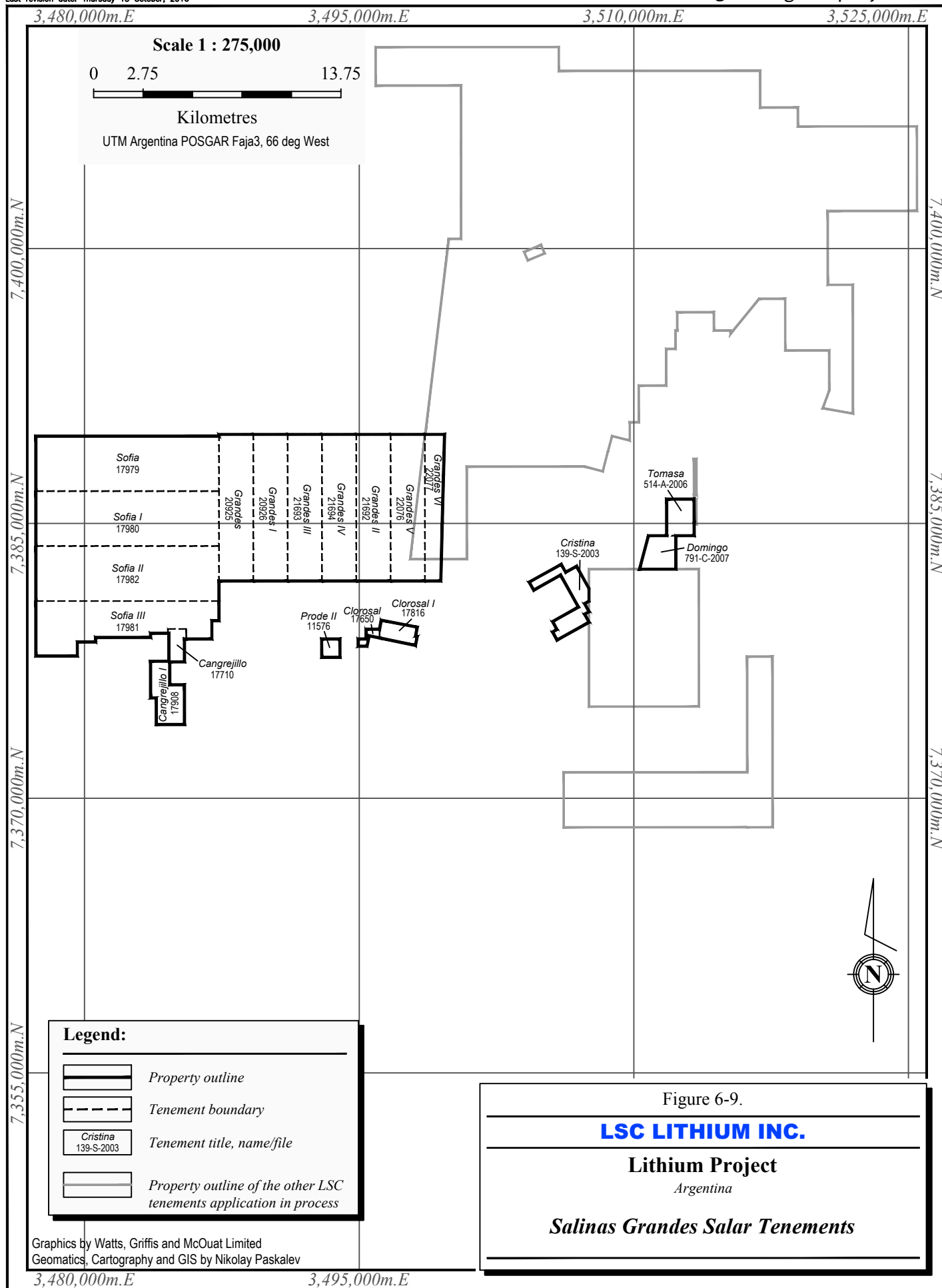
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Graphics by Watts, Griffis and McOuat Limited
 Geomatics, Cartography and GIS by Nikolay Paskalev





6.3 Nature and Status of Tenure

6.3.1 Introduction: Legal Comment on Issues Related to Title Verification

From May through October 2016 the Mining Court of the Province of Jujuy was subject to a general suspension of mining proceedings due to a review and reorganization of the cadastre and the activities of the court by the new judge and newly appointed authorities. As a result during that period no concessions were issued or transferred and concession titles could not be normally verified. Until the resulting backlog is cleared, it may be difficult to confirm the status of LSC's mineral rights in such Province.

One of the areas of concern and to reform is related to the approvals of the environmental reports and consultation proceedings of stakeholders involved in mining projects. In this regard, it is noted that consultation mechanisms are implemented in many provinces as part of the environmental licensing proceedings in general terms and not necessarily in connection with indigenous peoples. However, consultation of indigenous peoples is of relevance especially in the Province of Jujuy given the ethnic distribution of the population.

Even though legally acknowledged, this matter is in dynamic evolution in Argentina and not many relevant cases can be quoted, however, there are indeed certain precedents at the federal and provincial levels (specially related to the Province of Jujuy) that already recognize the pre-existing rights of indigenous peoples to their lands and natural resources.

It is expected that the current administration of the province will work towards the harmonization of all stakeholders' interests including the mining sector as one of the most productive sectors in the province.

There is a conflict dispute over certain areas of the border between the Province of Salta and the Province of Jujuy and this may impact on location and measures of certain tenements.

The tenure status and nature of title as reported by Holts in their title opinion letters respecting the tenements comprising the Properties acknowledge the issues described above. The title opinions supplied by Holts are summarized in the following sections.

6.3.2 Salar Rio Grande Tenements

Table 6.2 provides summary details on the tenements. All of the Salar Rio Grande Tenements have been denounced to lithium.

The legal due diligence report from Holt Abogados dated December 30, 2016 reports that Lithium Argentina has good title to the tenements on Rio Grande (Note: the title opinion excludes recently acquired tenements – Mariluz Rio Gadalquivir as well as Rio Caldera, Victoria, Dem. Nueva Trona, Dem. Rio Grande and Taba Rio Grande situated adjacent to

the actual salary for which Lithium Argentina has submitted applications and for which title opinion will be obtained upon approval of the tenement applications). The title opinion states:

- (i) Lithium Argentina is the titleholder of the salar Rio Grande Tenements acquired by Deed of Transfer No. 153 dated December 22, 2106 between ADY Argentina and Lithium Argentina. Exception is made with regards to mining property “Monica” File N° 4302, which is owned as follows: 50 % by Lithium Argentina and 50% by Contenedores y Servicios S.R.L.
- (ii) Concession of these mining properties has been granted and registered with the exception of tenements Rio Guadaquiver and Maryluz, which are awaiting approval.
- (iii) All tenements are registered for lithium and potash.
- (iv) The mining properties have been surveyed. Mining canon for the 1st semester 2017 has been paid based on 1st category mineral classification. Investment plans are filed and current plans may need to be adapted to category of minerals.
- (v) All mining properties would be located within the department of Los Andes (which is a Provincial fiscal land), all mining properties would be located in fiscal lands.
- (vi) There are no: (a) opposition filed by third parties; (b) registration of encumbrances and mortgages against the mining properties, and (c) royalty agreements registered against the mining properties.

Modifications of the current Environmental Impact Statement (**EIS**) filings will be required to permit exploration for lithium brine, including seismic work and drilling of new exploration and production wells. The required modifications are considered as straight forward amendments related to existing permits and no issues are foreseen with regard to obtaining the necessary approvals in the normal course of business.

Re-establishment and expansion of the well field will require submission of a new EIS and may require the filing of a new investment plan, as well as payment of the increased annual canon fees due to re-classification of the tenements for lithium extraction. It is planned to complete the work necessary for the new EIS as part of the exploration and development program proposed in this technical report. There are no other significant factors and risks that may affect access, title, or the right to perform work on the property.

Table 6-2: Salar Río Grande Tenements

MINES										Investment Plan	EIS Filed/Due		
N	Relationship with Salar	Tenement Name	File No.	Area (ha)	No. of Claims on Tenement	Approved for ²	Annual Canon (Ar\$)	AFIP Res. 348	Investment Plan 5 years (Ar\$)	Approved/Filed	2014	2015	2017
1	In	Carlitos	3280	44	2	Sodium Sulphate, Li, K	320	May-15	24,000	Approved	Dec.2014		17/4/17
2	In	María Alejandra	3572	60	3	Sodium Sulphate, Li, K	480	May-15	36,000	Approved	Dec.2014	July 1, 2015	17/4/17
3	In	Hortencia	4201	60	3	Sodium Sulphate, Li, K	480	May-15	36,000	Approved	Dec.2014		17/4/17
4	In	Lidia Susana	4202	60	3	Sodium Sulphate, Li, K	480	May-15	36,000	Approved	Dec.2014		17/4/17
5	In	Maria Laura	4203	60	3	Sodium Sulphate, Li, K	480	May-15	36,000	Approved	July 21, 2014		17/4/17
6	In	Monica	4302	40	2	Sodium Sulphate, Li, K	320	May-15	24,000	Approved	Dec.2014		17/4/17
7	In	Dani	4303	40	2	Sodium Sulphate, Li, K	320	May-15	24,000	Approved	Dec.2014		17/4/17
8	In	Nicolas	4304	40	2	Sodium Sulphate, Li, K	320	May-15	24,000	Approved	Dec.2014		17/4/17
9	In	Vulcania	4411	40	2	Sodium Sulphate, Li, K	320	May-15	24,000	Approved	Dec.2014		17/4/17
10	In	Venus	4412	40	2	Sodium Sulphate, Li, K	320	May-15	24,000	Approved	Dec.2014		17/4/17
11	In	Fortuna	4413	40	2	Sodium Sulphate, Li, K	320	May-15	24,000	Approved	Dec.2014		17/4/17
12	In	La Nueva Tibet	4415	40	2	Sodium Sulphate, Li, K	320	May-15	24,000	Approved	Dec.2014		17/4/17
13	In	Nueva Trona	4416	40	2	Sodium Sulphate, Li, K	320	May-15	24,000	Approved	Dec.2014		17/4/17
14	In	Diana	4417	40	2	Sodium Sulphate, Li, K	320	May-15	24,000	Approved	Dec.2014		17/4/17
15	In	Jupiter	4418	40	2	Sodium Sulphate, Li, K	320	May-15	24,000	Approved	Dec.2014		17/4/17
16	In	Minerva	4419	40	2	Sodium Sulphate, Li, K	320	May-15	24,000	Approved	Dec.2014		17/4/17
17	In	Neptunia	4420	40	2	Sodium Sulphate, Li, K	320	May-15	24,000	Approved	Dec.2014		17/4/17
18	In	Urania	4421	39	2	Sodium Sulphate, Li, K	320	May-15	24,000	Approved	Dec.2014		17/4/17
19	In	Melpomene	4422	40	2	Sodium Sulphate, Li, K	320	May-15	24,000	Approved	Dec.2014		17/4/17
20	In	Rio Grande	4423	40	2	Sodium Sulphate, Li, K	320	May-15	24,000	Approved	Dec.2014		17/4/17
21	In	Carnaval C	4424	40	2	Sodium Sulphate, Li, K	320	May-15	24,000	Approved	Dec.2014		17/4/17
22	In	Alfa	4669	40	2	Sodium Sulphate, Li, K	320	May-15	24,000	Approved	Dec.2014		17/4/17
23	In	Beta	4670	40	2	Sodium Sulphate, Li, K	320	May-15	24,000	Approved	Dec.2014		17/4/17
24	In	Gamma	4671	40	2	Sodium Sulphate, Li, K	320	May-15	24,000	Approved	Dec.2014		17/4/17
25	In	Delta	4672	40	2	Sodium Sulphate, Li, K	320	May-15	24,000	Approved	July 21, 2014		17/4/17
26	In	Epsilon	4673	40	2	Sodium Sulphate, Li, K	320	May-15	24,000	Approved	Dec.2014		17/4/17
27	In	Nueva Sahara	4736	40	2	Sodium Sulphate, Li, K	320	May-15	24,000	Approved	Dec.2014		17/4/17
28	In	La Escondida	4737	40	2	Sodium Sulphate, Li, K	320	May-15	24,000	Approved	Dec.2014		17/4/17
29	In	Inocencia	5498	19	1	Sodium Sulphate, Li, K	160	May-15	12,000	Approved	Dec.2014		17/4/17
30	In	Rio Primero	5515	20	1	Sodium Sulphate, Li, K	160	May-15	12,000	Approved	Dec.2014		17/4/17
31	In	Rio Segundo	5516	20	1	Sodium Sulphate, Li, K	160	May-15	12,000	Approved	Dec.2014		17/4/17
32	In	Rio Tercero	5517	20	1	Sodium Sulphate, Li, K	160	May-15	12,000	Approved	Dec.2014		17/4/17
33	In	Rio Cuarto	5518	26	1	Sodium Sulphate, Li, K	160	May-15	12,000	Approved	Dec.2014		17/4/17
34	In	Rio Quinto	5519	57	1	Sodium Sulphate, Li, K	160	May-15	12,000	Approved	Dec.2014		17/4/17
35	In	Horacio	5572	60	3	Sodium Sulphate, Li, K	480	May-15	36,000	Approved	Dec.2014		17/4/17
36	In	Jorge	5574	10	1	Sodium Sulphate, Li, K	160	May-15	12,000	Approved	Dec.2014		17/4/17
37	In	Rio Santa Maria I	6165	95	1	Sodium Sulphate, Li, K	160	May-15	12,000	Approved	Dec.2014		17/4/17
38	In	Rio Calchaqui I	6166	103	1	Sodium Sulphate, Li, K	160	May-15	12,000	Approved	Dec.2014		17/4/17
39	In	Rio Toro I	6167	104	1	Sodium Sulphate, Li, K	160	May-15	12,000	Approved	Dec.2014		17/4/17
40	In	Rio Blanco	6168	102	1	Sodium Sulphate, Li, K	160	May-15	12,000	Approved	Dec.2014		17/4/17
41	In	Rio Colorado	6169	99	1	Sodium Sulphate, Li, K	160	May-15	12,000	Approved	Dec.2014		17/4/17
42	In	Rio Lavallen	6170	100	1	Sodium Sulphate, Li, K	160	May-15	12,000	Approved	Dec.2014		17/4/17
43	In	Rio Metan	6171	100	1	Sodium Sulphate, Li, K	160	May-15	12,000	Approved	Dec.2014		17/4/17
44	In	Rio Medina	6172	100	1	Sodium Sulphate, Li, K	160	May-15	12,000	Approved	Dec.2014		17/4/17
45	In	Rio Ancho	6173	80	1	Sodium Sulphate, Li, K	160	May-15	12,000	Approved	Dec.2014		17/4/17
46	In	Rio Arenales	6174	29	1	Sodium Sulphate, Li, K	160	May-15	12,000	Approved	Dec.2014		17/4/17
47	In	Rio Juramento	6175	60	1	Sodium Sulphate, Li, K	160	May-15	12,000	Approved	Dec.2014		17/4/17
48	In	Rio San Francisco	6176	60	1	Sodium Sulphate, Li, K	160	May-15	12,000	Approved	Dec.2014		17/4/17
49	In	Rio Mojotoro	6177	67	1	Sodium Sulphate, Li, K	160	May-15	12,000	Approved	Dec.2014		17/4/17
50	In	Rio Bermejo	6178	73	1	Sodium Sulphate, Li, K	160	May-15	12,000	Approved	Dec.2014		17/4/17
51	In	Rio Vaqueros	6179	52	1	Sodium Sulphate, Li, K	160	May-15	12,000	Approved	Dec.2014		17/4/17
52	In	Mariano	7111	100	1	Sodium Sulphate, Li, K	160	May-15	12,000	Approved	Dec.2014		17/4/17
53	In	Yolanda	7112	99	1	Sodium Sulphate, Li, K	160	May-15	12,000	Approved	Dec.2014		17/4/17
54	In	Rio Caldera	7328	59	1	Sodium Sulphate, Li, K	160	May-15	12,000	Approved	Dec.2014		17/4/17

55	In	Rio Unchime	7329	50	1	Sodium Sulphate, Li, K	160	May-15	12,000	Approved	Dec.2014		17/4/17
56	In	Rio Wierna	7330	19	1	Sodium Sulphate, Li, K	160	May-15	12,000	Approved	Dec.2014		17/4/17
57	In	Rio Seco	7331	98	1	Sodium Sulphate, Li, K	160	May-15	12,000	Approved	Dec.2014		17/4/17
58	In	Rio Tocomar	7333	100	1	Sodium Sulphate, Li, K	160	May-15	12,000	Approved	Dec.2014		17/4/17
59	In	Salar III	8366	19	1	Sodium Sulphate, Li, K	160	May-15	12,000	Approved	Dec.2014		17/4/17
60	In	Rio Cachi	8508	52	1	Sodium Sulphate, Li, K	160	May-15	12,000	Approved	Dec.2014		17/4/17
61	In	Salar II	8905	103	1	Sodium Sulphate, Li, K	160	May-15	12,000	Approved	Dec.2014		17/4/17
62	In	Rio Chaschas	8908	20	1	Sodium Sulphate, Li, K	160	May-15	12,000	Approved	Dec.2014		17/4/17
63	In	Salar V	8937	75	1	Sodium Sulphate, Li, K	160	May-15	12,000	Approved	Dec.2014		17/4/17
64	In	Miguel	11507	96	1	Sodium Sulphate, Li, K	160	May-15	12,000	Approved	Dec.2014		17/4/17
65	In	Malvinas	11508	40	1	Sodium Sulphate, Li, K	160	May-15	12,000	Approved	Dec.2014		17/4/17
66	In	Puel	12032	59	1	Sodium Sulphate, Li, K	160	May-15	12,000	Approved	Dec.2014		17/4/17
67	In	Miruña	12099	38	1	Sodium Sulphate, Li, K	160	May-15	12,000	Approved	Dec.2014		17/4/17
68	In	Maria Sol	13482	100	1	Sodium Sulphate, Li, K	160	May-15	12,000	Approved	Dec.2014		17/4/17
69	In	Dem.Carlitos	13501	4	1	Sodium Sulphate, Li, K	160	May-15	12,000	Approved	Dec.2014		17/4/17
70	In	Pedro	13512	100	1	Sodium Sulphate, Li, K	160	May-15	12,000	Approved	Dec.2014		17/4/17
71	In	Marta	13514	213	3	Sodium Sulphate, Li, K	480	May-15	12,000	Approved	Dec.2014		17/4/17
72	In	Emilse	13515	95	1	Sodium Sulphate, Li, K	160	May-15	12,000	Approved	Dec.2014		17/4/17
73	In	Beatriz	13516	111	1	Sodium Sulphate, Li, K	160	May-15	12,000	Approved	Dec.2014		17/4/17
74	In	Susana	13518	200	2	Sodium Sulphate, Li, K	320	May-15	24,000	Approved	Dec.2014		17/4/17
75	In	Maria Ines	13522	100	1	Sodium Sulphate, Li, K	160	May-15	12,000	Approved	Dec.2014		17/4/17
76	In	Ilda	13523	84	1	Sodium Sulphate, Li, K	160	May-15	12,000	Approved	Dec.2014		17/4/17
77	In	Adriana	13526	75	1	Sodium Sulphate, Li, K	160	May-15	12,000	Approved	Dec.2014		17/4/17
78	In	Victoria	13527	100	1	Sodium Sulphate, Li, K	160	May-15	12,000	Approved	Dec.2014		17/4/17
79	In	Nieve	13528	91	1	Sodium Sulphate, Li, K	160	May-15	12,000	Approved	Dec.2014		17/4/17
80	In	Dem. Nueva Trona	13554	34	1	Sodium Sulphate, Li, K	160	May-15	12,000	Approved	Dec.2014		17/4/17
81	In	Dem. Rio Grande	13555	2	1	Sodium Sulphate, Li, K	160	May-15	12,000	Approved	Dec.2014		17/4/17
82	In	Arena	14728	100	1	Sodium Sulphate, Li, K	160	May-15	12,000	Approved	Dec.2014		17/4/17
83	In	Arena Primera	14729	100	1	Sodium Sulphate, Li, K	160	May-15	12,000	Approved	Dec.2014		17/4/17
84	In	Arena Tercera	14730	100	1	Sodium Sulphate, Li, K	160	May-15	12,000	Approved	Dec.2014		17/4/17
85	In	Arena Cuarta	14731	100	1	Sodium Sulphate, Li, K	160	May-15	12,000	Approved	Dec.2014		17/4/17
86	In	Arena Quinta	14732	100	1	Sodium Sulphate, Li, K	160	May-15	12,000	Approved	Dec.2014		17/4/17
87	In	Arena Sexta	14733	100	1	Sodium Sulphate, Li, K	160	May-15	12,000	Approved	Dec.2014		17/4/17
88	In	Arena Septima	14734	100	1	Sodium Sulphate, Li, K	160	May-15	12,000	Approved	Dec.2014		17/4/17
89	In	Purita Norte	17958	45	1	Sodium Sulphate, Li, K	160	May-15	12,000	Approved	Dec.2014		17/4/17
90	In	Suleiman 1	18838	400	4	Sodium Sulphate, Li, K	640	May-15	48,000	Approved	Dec.2014		17/4/17
91	In	Suleiman 2	18839	150	2	Sodium Sulphate, Li, K	320	May-15	24,000	Approved	Dec.2014		17/4/17
92	In	Suleiman 3	18840	400	4	Sodium Sulphate, Li, K	640	May-15	48,000	Approved	Dec.2014		17/4/17
93	In	Suleiman 4	18841	401	4	Sodium Sulphate, Li, K	640	May-15	48,000	Approved	Dec.2014		17/4/17
94	In	Suleiman 5	18842	401	4	Sodium Sulphate, Li, K	640	May-15	48,000	Approved	Dec.2014		17/4/17
95	In	Suleiman 6	18843	401	4	Sodium Sulphate, Li, K	640	May-15	48,000	Approved	Dec.2014		17/4/17
96	In	Suleiman 7	18844	400	4	Sodium Sulphate, Li, K	640	May-15	48,000	Approved	Dec.2014		17/4/17
97	In	Suleiman 8	18845	401	4	Sodium Sulphate, Li, K	640	May-15	48,000	07/11/2015	Dec.2014		17/4/17
98	In	Timur 1	18855	400	4	Sodium Sulphate, Li, K	640	May-15	48,000	Approved	Dec.2014		17/4/17
99	In	Timur 2	18856	400	4	Sodium Sulphate, Li, K	640	May-15	48,000	Approved	Dec.2014		17/4/17
100	In	Timur 3	18857	400	4	Sodium Sulphate, Li, K	640	May-15	48,000	Approved	Dec.2014		17/4/17
101	In	Timur 4	18858	400	4	Sodium Sulphate, Li, K	640	May-15	48,000	Approved	Dec.2014		17/4/17
102	In	Timur 5	18859	400	4	Sodium Sulphate, Li, K	640	May-15	48,000	Approved	Dec.2014		17/4/17
103	In	Timur 6	18860	400	4	Sodium Sulphate, Li, K	640	May-15	48,000	Approved	Dec.2014		17/4/17
104	In	Timur 7	18861	588	6	Sodium Sulphate, Li, K	960	May-15	72,000	Approved	Dec.2014		17/4/17
105	In	Manon 1	19005	785	8	Sodium Sulphate, Li, K	1280	May-15	96,000	22/06/2015	Dec.2014		17/4/17
106	In	Manon 2	19006	739	8	Sodium Sulphate, Li, K	1280	May-15	96,000	05/07/2015	Dec.2014		17/4/17
107	out	Taboriogrande	19983	2700	27	Lithium							
108	out	Mariluz ²	17858	2794	28	1st category, Cu							
109	in	Rio Gadalquivir ²	16102	1346	14	Sodium Sulphate							
20046							32,320	2,400,000					

SERVITUDES													
110	Out	Camp/Water	19074	15							Dec.2014		17/4/17

1) All initial EIS reports completed Dec. 2013 except for Maria Alejandra (completed July 1, 2015) and Maria Laura (completed July 21, 2015). All reports are current and valid. 2) under application, not yet granted

6.3.3 Salar Pastos Grandes Tenements

The title opinion of Holts dated January 25, 2017 with respect to the Salar Pastos Grandes Tenements (excluding properties acquired pursuant to the ADY Tenement Purchase Agreement) states the following:

- (i) The titleholders of the Pastos Grandes properties are the following:
 - (a) Avestruz: Sosa Quintana.
 - (b) Leoncia: Viveros.
 - (c) San Cayetano I: Minera Santa Rita.
 - (d) María Luisa II: Magdalena Vega.
 - (e) La Buscada: Federico Stucky.
- (ii) Concession of these mining properties has been granted and registered.
- (iii) The mining properties have been surveyed.
- (iv) The Pastos Grandes properties were applied and awarded for minerals of the 1st category in accordance with the AMC (as described in the chart). Exception is made to La Buscada, which originally was applied and awarded for minerals of the 2nd category in accordance with the AMC (sodium chloride). However, on January 20th, 2017 a denounce of lithium and potash regarding this property was filed and the correspondent request for such property to be awarded for minerals of the 1st category has been made. We note that in connection with the recent denouncement of 1st category minerals in La Buscada awarded for 2nd category of minerals, in accordance with the criteria of the Mining Court there may be a request to adjust the investment plan to reflect this new situation. In connection with Avestruz, María Luisa II and San Cayetano I filings to denounce lithium are expected to be made during the week of January 23rd, 2017.
- (v) The mining fee (*canon*) for the 1st semester 2017 has been paid.
- (vi) Status of compliance with the investment plans is as follows:
 - (a) San Cayetano I: investment plan has been submitted and has been complied with.
 - (b) María Luisa II: investment plan has been submitted and has been complied with. Holts lacked information on the amounts of the investment plan submitted.
 - (c) Avestruz, Leoncia and La Buscada: investment plans have been submitted and have been complied with.

Even though these plans have been approved and acknowledged as complied with by the Mining Authority, Holts noted that such plans would not meet the minimum amounts required by the AMC. We note that this situation does not affect the current good standing of the mining properties, but ever since the acts that approved the plans are contrary to law, title holder is in jeopardy of being requested to remedy such non-compliance, under penalty of title revocation.

(vii) To the knowledge of Holts, considering that all mining properties would be located within the department of Los Andes (which comprises fiscal land), all mining properties would be located in fiscal lands.

(viii) To the knowledge of Holts, based on the information arising from the files only, there are no: (a) opposition filed by third parties; (b) registration of encumbrances and mortgages against the mining properties, or (c) royalty agreements registered against the mining properties

Table 6-3 summarizes the tenure status of these Salar Pastos Grandes Tenements.

Based on the title and mining rights opinion by Holts the author is satisfied that LSC will have good title to these tenements on salar Pastos Grandes.

Updated EIS II permits will be required to undertake geophysical work and exploration drilling. There are no other known impediments to undertaking the planned exploration work.

Table 6-3: Tenement Status – Salar Pastos Grandes Tenements

			Title		Status of Proceedings		Minerals	Claims	Investment Plan		Mining fee
#	Mine	File #	Titleholder	Title Acquisition	Concession	Surveyed	(registered)	Claims	Filed	Compliance	Evid of Payment
1	Avestruz	17,513	Sosa Quintana		Granted	Approved	Borates	5		YES	YES
2	Leoncia	13,533	Martin Viveros		Granted	Approved	Sodium Sulfate, Li, K	1		YES	YES
3	San Cayetano I	17,322	Minera Santa Rita		Granted	Approved	Borates	2		YES	YES
4	María Luisa II	17,904	Magdalena Vega		Granted	Approved	Borates	1		YES	YES
5	La Buscada	17,589	Federico Stucky		Granted	Approved	Sodium Chloride ¹⁰	1		YES	YES

¹⁰ On January 20TH, 2017 a denounce of lithium and potash has been filed with respect to this property, requesting the same to be categorized as a first category mine.

6.3.4 Salar Jama Tenements

Table 6-4 provides details on the tenements from the title opinion provided by Holts dated January 25, 2017. In their title opinion, Holts noted the following:

MINING PROPERTY

- (i) As per Resolution 168-J-2016, dated December 7, 2016, of the Mining Court of the Province of Jujuy, Cuper is the holder of the concession for a vacant mine identified as “La Ilusión” File 010-L-1998, comprising 4,999.94 hectares for sodium sulfate and borates minerals, undergoing proceeding as depicted below.

It is important to note that as stated by Resolution 168-J-2016, all terms of the AMC are suspended and no works in the mine are to be conducted until the approval of the EIR filed on November 23, 2015 by the Direction of Mining and Energetic Resources in accordance with section 251 of the AMC and Decree 5772/10.

- (ii) Survey of “La Ilusion” mining right was performed in 1999, though it was never approved. Given the time elapsed, a new survey and demarcation would be required.
- (iii) The concession for the vacant mine has been granted comprising 4,999.94 hectares though the maximum size of a borates or lithium mine is 35 claims (3,500 hectares).

However, the AMC gives the applicant the right to establish in the discovery application an exclusivity area, which is an exclusive priority area which covers an area up to double the maximum area of the mine application (i.e. for a 3,500 hectares’ mine, the exclusive priority area may be of up 7,000 hectares). This area automatically lapses once the survey is approved. Even though this area has not been specifically identified in the Mining File 010-L-1998, as such, it could be construed that this large extension could correspond to an exclusivity area. Interpretation of these issues is always subject to common use and criteria of the Mining Court.

Considering that in this case the survey has not been approved, and unusual terms in the proceeding are taking place, it is not clear whether the survey could be approved for the extension granted. This notwithstanding, we note that before the exclusivity area lapses, the applicant may file any new discoveries within this exclusivity area, and create a new mine.

- (iv) The mining property was applied and awarded to La Brava S.A. for sodium sulfate and borates. Borates –as well as Lithium – are minerals of the 1st category. In accordance with the AMC, and as a general principle, mining concessions grant its titleholder the rights over all minerals comprised within the boundaries of the concession. For such purpose, the titleholder has to state and inform the authority of the new discovery of additional minerals for its registration, and eventually adjust the

canon payment and investment plan. Therefore upon the discovery of Lithium on the “La Ilusion” Mine, Cuper will be entitled to obtain rights over the Lithium contained therein.

- (v) Resolution for concession of the vacant mine sets forth payment of mining fee to be made for the second semester of 2016. Canon payment has been made.
- (vi) Cuper will have to submit an investment plan compliant with the minimum level of investments required by Section 217 of the AMC.
- (vii) To our knowledge, based on the information stated in the Mining File 010-L-1998, the mining rights would be located in fiscal lands and lands owned by the indigenous community of Olaroz Chico. There is an ongoing process of allocation of fiscal lands to indigenous communities in the Province of Jujuy, and updated information in this regard should be gathered.
- (viii) To our knowledge, based on the information contained in the Mining File 010-L - 1998, there is no: (a) opposition filed by third parties; (b) registration of encumbrances and mortgages against the mining right, and (c) royalty agreements registered against the mining property.

Formal Environmental Compliance Status

- (i) As of the date hereof, the environmental permit for “La Ilusion” File 010-L1998 is pending.
- (ii) There are many reasons for this delay, mostly related to a number of social and political issues that are impacting upon the Mining Court and the Secretariat of Mines and Hydrocarbons’ activities, causing a general suspension of the proceedings. In addition, we note that lithium is considered as a strategic mineral in accordance with Provincial Law 5674 and Provincial Decree 7592 and this involves a more extensive review of the environmental reports with the involvement of an experts committee.

La Ilusion Mine is currently granted for sodium sulfate and borates, should a lithium denounce be made in the near future, then the environmental permit shall have to be adapted and Provincial Decree 7592 will apply.

- (iii) Until the environmental permit is granted, no mining activity can be undertaken in the mining property.

-
- (iv) Based on the information in the mining file, the mining right would be located in fiscal lands and land owned by the indigenous communities of Olaroz Chico and Paso de Jama.
- (v) There are no: (a) opposition filed by third parties; (b) registration of encumbrances and mortgages against the mining right, and (c) royalty agreements registered against the mining property.

With regard to the La Nueva Ilusion tenement, Holts reported the following:

- (i) Daniel Galli is the titleholder of the “La Nueva Ilusión”.
- (ii) Pursuant to that Mining Purchase Agreement (as assigned to LSCSA under the Assignment Agreement), Daniel Galli has agreed to sell, transfer and assign to LSCSA, and LSCSA has agreed to buy from Daniel Galli, “La Nueva Ilusión”. The Mining Purchase Agreement key features with regards to this mining property is as follows:
- **Purchase price:** US\$ 188 (grossing up included) x hectare, thus an aggregate of **US\$ 185,883.12**.
 - **Term to enter into the deed of transfer: February 2017** (can be accelerated by LSCSA).

Upon the execution of the relevant deed of transfer, delivery of purchase price by LSCSA to Daniel Galli, and delivery of possession by Daniel Galli to LSCSA, LSCSA will become the sole and 100% titleholder of “La Nueva Ilusión”.

Based on the foregoing legal opinion, the author is satisfied that LSC has full and clear title to the Salar Jama Tenements.

The property lies within a large provincial natural reserve area known as Reserva Provincial Altoandina de la Chinchilla, established under Decreto Provincial N° 2213E/92. Exploration in the area is permitted, subject to provisions to maintain chinchilla habitat. The Salar Jama Tenements are not considered as chinchilla habitat.

Community agreements will be required to undertake any surface or subsurface exploration. Such agreements are currently being negotiated by LSC and no undue delays in receiving community approval are anticipated.

Table 6-4: Salar Jama Tenement Status

No.	Mina	File No.	Title		Status of Proceedings		Minerals	Area		Investment Plan		Mining Fee	
			Title Holder	Title Acquisition	Concession	Surveyed	Registered for	ha	Claims	Filed	Compliance	AR\$	Paid
1	La Ilusion	010-L-1998	Lithium Argentina	Deed of Transfer No. 5	Granted	No	Sodium sulphate, borate	5000	50	N/A	N/A	N/A	N/A
3	La Nueva Ilusion	1191-G-09	Daniel Ernesto Galli	N.A.	N.D.	No	N/D	988.74	10	N/D	N/D	N/D	

Source: Title opinion from Holt Abogados, Dec. 30, 2016; Resolucion No. 168 –J – 2016, Dec. 7, 2016, Juzgado Admnsitrativo de Minas

6.3.5 Salar Salinas Grandes Tenements

Table 6-5 provides details on the tenement status with respect to registration for mineral production, canon payments, investment plans, EIS filings and other significant factors. The title opinion received from Holts with respect to the Salar Salinas Grandes Tenements and the Galli Salar Salinas Grandes Tenements which are to be transferred to Lithium Argentina is summarized below:

6.3.5.1 Properties in Salta Province

6.3.5.1.1 Lithium Argentina Salar Salinas Grandes Tenements

- (i) Lithium Argentina is the titleholder of the Salar Salinas Grandes Tenements by way of Deed of Transfer No. 153 from ADY Argentina dated December 22, 2106
- (ii) Concession of these mining properties has been granted and registered.
- (iii) The mining properties have been surveyed.
- (iv) The mining fee (*canon*) for the 201st Semester 2017 has been paid and investment plans filed or in progress for all tenements
- (v) All mining properties are located within the department of Los Andes (which is a Provincial fiscal land), all mining properties would be located in fiscal lands.
- (vi) There are no: (a) opposition filed by third parties; (b) registration of encumbrances and mortgages against the mining properties, and (c) royalty agreements registered against the mining properties with the exception of a usufruct right for surface borate production on “Sofía III” File N° 17,981 held by the previous owner

6.3.5.1.2 Galli Salinas Grandes Tenements

- (i) Daniel E. Galli is the titleholder of the Galli Salinas Grandes Tenements.
- (ii) Pursuant to that Mining Purchase Agreement (as assigned to LSCSA under the Assignment Agreement), Daniel Galli has agreed to sell, transfer and assign to LSCSA, and LSCSA has agreed to buy from Daniel Galli, the Galli’s Salinas Grandes Properties. The Mining Purchase Agreement key features with regards to these mining properties are as follows:
 - **Purchase price:** US\$ 188 (grossing up included) x hectare, thus an aggregate of **US\$ 348,140.28**.
 - **Term to enter into the deed of transfer: February 2017** (can be accelerated by LSCSA).

Upon the execution of the relevant deed of transfer, delivery of purchase price by LSCSA to Daniel Galli, and delivery of possession by Daniel Galli to LSCSA, LSCSA will become sole and 100% titleholder of the Galli's Salinas

- (iii) Concession of these mining properties has been granted and registered.
- (iv) The mining fee (*canon*) for the 1st semester of 2017 has been paid.
- (v) Investment plans have been filed and have been complied with or are in the process of being complied with.
- (vi) All mining properties would be located within the department of Los Andes (which is a Provincial fiscal land), all mining properties would be located in fiscal lands.
- (vii) There are no: (a) oppositions filed by third parties; (b) registration of encumbrances and mortgages against the mining properties, and (c) royalty agreements registered against the mining property.

6.3.5.2 Tenements in Province of Jujuy

- (i) Lithium Argentina is the titleholder of the mining property "Cristina" File N° 139-S-03, "Domingo" File no. 791-C-07 and "Tomasita" File No. 514-C-06 by way of Deed of Transfer No. 62 from ADY Argentina dated December 22, 2016
- (ii) Concession of the mining property Christina has been granted and registered, the property surveyed, all canon paid and investment plans filed. File information on the properties Domingo and Tomasita was not available for review.
- (iii) The mining right would be located in fiscal lands and/or land owned by indigenous communities (communities of the Salinas Grandes area).
- (iv) There are no: (a) opposition filed by third parties; (b) registration of encumbrances and mortgages against the mining properties, and (c) royalty agreements registered against the mining properties.

It is noted that the provincial boundary between Salta Province and Jujuy Province is under dispute and that some overlap may exist between tenements registered in Salta Province and those registered in Jujuy Province. This situation applies in particular to the Grandes V tenement (File No. 2076) and Grandes VI tenement (File No. 22077) in Salta Province, which overlaps with a tenement in Jujuy Province acquired by LSC as part of the transaction with Dajin Resources. No significant issues are foreseen in this regard.

Based on the title opinion provided by Holts, the author is satisfied that LSC will hold good title to the Salar Salinas Grandes Tenements upon completion of the terms of the

transactions detailed in this report. The tenure status of the Salar Salinas Grandes Tenements is summarized in Table 6-5.

6.3.6 Summary Title Opinion

Based on the title opinion received from Holts and review of the available data, there are no other significant factors or risks other than what is noted in this Technical Report that may affect access, title, or the right or ability to perform work on the Properties.

Table 6-5: Status of Salar Salinas Grandes Tenements

Claim Name	Registered Owner	File No.	Area (ha)	Claims	Approved for	Concession	Surveyed	Annual Canon (AR\$)	Investment Plan, 5 Yrs (AR\$)	Investment Plan Status	EIS Filed/Due	Mining Fee Paid
Tenements in Salta												
Sofia	Lithium Argentina	17979	3000	30	Borates	Granted	Surveyed	96,000	7,200,000	Filed	15/08/2016	Yes
Sofia I	Lithium Argentina	17980	3000	30	Borates	Granted	Surveyed	96,000	7,200,000	Filed	15/08/2016	Yes
Sofia II	Lithium Argentina	17982	3000	30	Borates	Granted	Surveyed	96,000	7,200,000	Filed	15/08/2016	Yes
Sofia III	Lithium Argentina	19981	2153	23	Borates	Granted	Surveyed	73,600	5,520,000	Filed	15/08/2016	Yes
Cangrejillo	Lithium Argentina	17710	151	2	Borates	Granted	Surveyed	6,400	480,000	Filed	11/02/2018	Yes
Cangrejillo I	Lithium Argentina	17908	489	5	Borates	Granted	Surveyed	16,000	1,200,000	Filed	24/11/2015	Yes
Clorosal	Daniel Ernesto Galli	17650	53	1	Salt	Granted	Surveyed	160	12,000	Filed	7/08/2016/	Yes
Clorosal I	Daniel Ernesto Galli	17816	199	2	Salt	Granted	Surveyed	320	24,000	Filed	7/08/2016	Yes
Prode II	Daniel Ernesto Galli	11576	100	1	Salt	Granted	Surveyed	160	12,000	Filed	7/08/2016	Yes
Grandes	Lithium Argentina	20915	1500	15	Lithium	Granted	Surveyed	48,000	14,400,000	In progress	12/03/2017	Yes
Grandes I	Daniel Ernesto Gali	20926	1500	15	Lithium	Granted	Surveyed	48,000	14,400,000	In progress	12/02/2017	Yes
Grandes II	Lithium Argentina	21692	1500	15	Lithium	Granted	Surveyed	48,000	14,400,000	In progress	12/02/2017	Yes
Grandes III	Lithium Argentina	21693	1500	15	Lithium	Granted	Surveyed	48,000	14,400,000	In progress	21/10/2016	Yes
Grandes IV	Lithium Argentina	21694	1500	15	Lithium	Granted	Surveyed	48,000	14,400,000	In progress	21/10/2016	Yes
Grandes V ¹	Lithium Argentina	22076	1500	15	Lithium	Granted	Surveyed	48,000	14,400,000	In progress	3/03/2018	Yes
Grandes VI ¹	Lithium Argentina	22077	775	8	Lithium	Granted	Surveyed	25,000 (begins 2017)	7,680,000	In progress	3/03/2018	Yes
Total			21,920	222				696,640	122,928,000			
Tenements in Jujuy												
Christina	Lithium Argentina	72-S-2002	490	5	Borates	Granted	Surveyed	16,000	1,200,000	N/D	01/03/2015	Yes
Domingo	Lithium Argentina	791-C-2002	318	4	Salt	N/D	N/D	640	48,000	N/D	01/03/2015	Yes
Tomasa	Lithium Argentina	614-A-2006	300	3	Salt	N/D	N/D	480	36,000	Filed	01/03/2015	Yes
Total			1,108	12				17,120	1,284,000			

1. Subject to border overlap with Jujuy Province

7 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

7.1 PHYSIOGRAPHY AND ACCESSIBILITY

7.1.1 Physiography

The Properties are located within the provinces of Jujuy and Salta in the Puna region of Argentina. The Puna area is an arid, high altitude basin and range type region located between the Eastern Cordillera on the east and the Andes on the west. Elevations in the Puna range from approximately 3,400 m to 4,400 m for the overall plateau, with the salars typically being found at elevations ranging from approximately 3,450 m to 4,000 m. Mountain peaks separating the basins can reach elevations of over 6,500 m.

The salars are enclosed basins and are surrounded by significantly higher mountains, typically of volcanic origin. The salars and immediately surrounding area consist of an outer zone comprising gradual talus slopes and alluvial fans leading from the surrounding mountains and gradually trending from mud flats/salt flats to salt pans on the salar proper. Typically, a crust of halite combined with ulexite and/or gypsum (and occasional carbonate) and wind-blown dust is present on the salar. Polygonal salt crust formations are common, representing re-solution formation of dissolved salts during seasonal wet periods. The more mature halite-type salars generally have a central nucleus exhibiting halite pinnacles on the surface. These pinnacles can be as much as 40 cm high and pose significant problems in traversing the salar. The more immature, clastic-type salars generally have more of a thin crust comprised of various salts and dust which can be soft and sticky when moist. This surface form is termed rugose crust due to its characteristic reddish-brown colour.

7.1.2 Accessibility

Accessibility to the various salars on which the Properties are located is good. Figure 7-1 illustrates the locations of the Properties and the major access routes. The Puna region of Jujuy and Salta provinces is accessible by major national highways from Salta. The individual Properties can be accessed through existing National Route 51 and 52 and thence by various provincial routes and local roads. National Route 51 is mainly paved and is suitable for car and truck traffic. San Antonio de Los Cobres is the last town in the route with basic services. Beyond San Antonio de los Cobres, Route 51 and the various provincial routes and local roads are unpaved. National Route 52 provides for a more northerly route to the various salars. It is connected to Salta via national Route 9 and is paved throughout its extent to the international border with Chile at Paseo de Jama.

National Route 52 crosses salar Salinas Grande and is the division point between salar Olaroz and salar Cauchari. The highway borders salar Jama. At Paseo de Jama the highway continues on to the major mining center of Calama and the ports of Mejillones and Antofagasta in northern Chile, providing the major access from Antofagasta to northern Argentina.

National Route 51 is largely a paved highway to San Antonio de los Cobres, where it becomes a high quality gravel road. The highway provides access to the salars in the more southerly portion of the Puna via high quality provincial roads. National Route 51 crosses the international border at paseo Socamapa and also connects through Calama to Antofagasta.

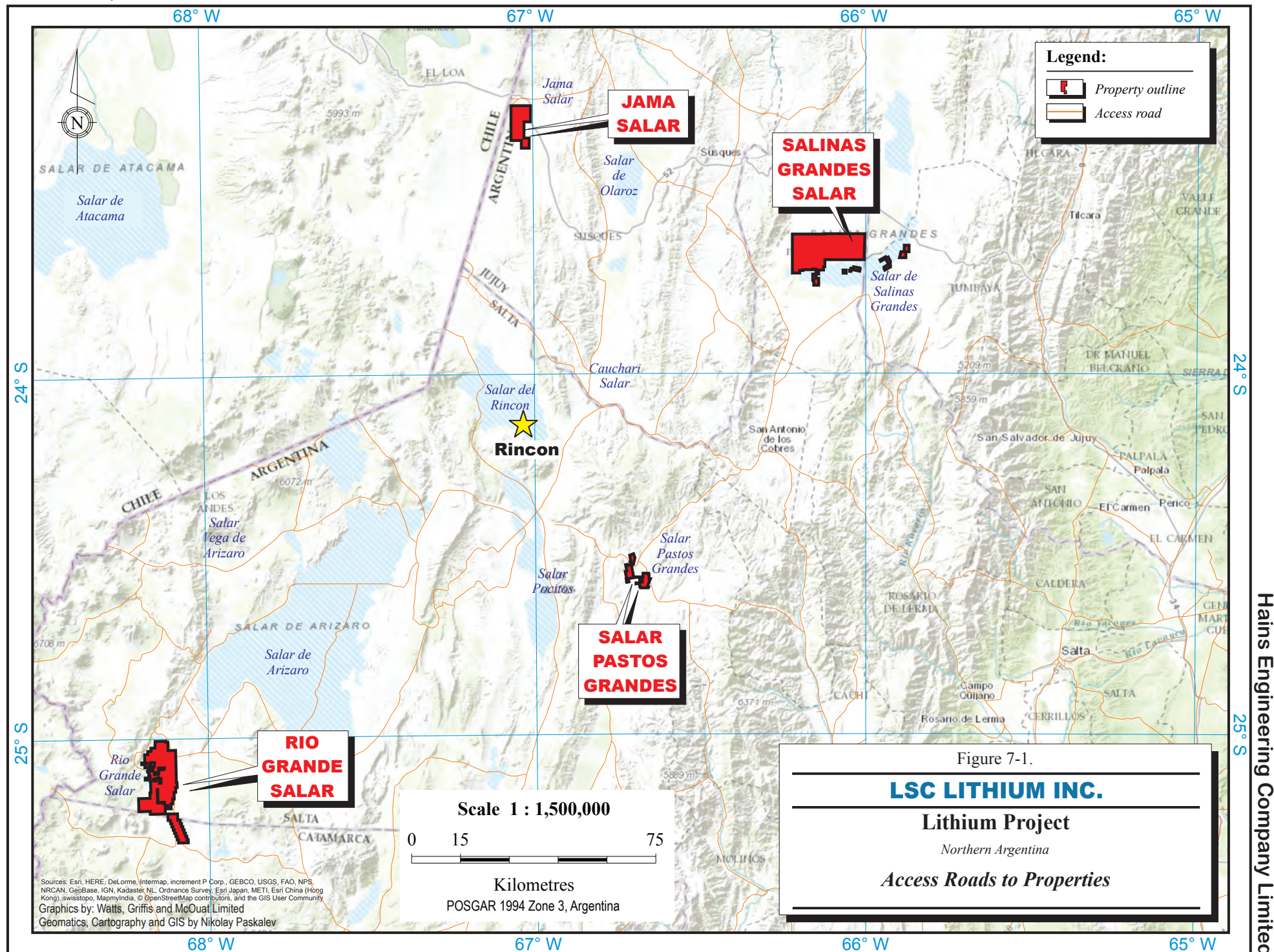
The Properties located in Salta Province are best accessed via National Route 51 and provincial roads No 27, 37 and 17 providing access to salar Pastos Grandes and salar Rio Grande. Properties in Jujuy are best accessed through National Route 52 and/or National Route 51 and various provincial routes and local roads providing access to salar Salinas Grandes and salar Jama.

All of the Properties are located within a maximum (approximately) 5 hour truck haul to Enirgi's Salar del Rincón lithium project, where final processing of any brine production from the LSC properties is proposed to take place. The maximum haul time would be from salar Rio Grande. Haul time from the other locations can typically be expected to be less than 1 - 3 hours, depending on the particular location. All truck routes are on provincially maintained roads and no access road construction is required to reach any of the properties.

Descriptions of individual properties are provided in the following sections:

7.1.2.1 Salar Rio Grande Tenements

Salar Rio Grande is located approximately 500 km from Salta at 25°03'S and 68°12'W at an elevation of 3,630 m. The salar has a surface area of approximately 180 km² and a drainage basin of approximately 1,150 km². Access is via National Route 51 for approximately 168 km to San Antonio de los Cobres. Thereafter, one follows Provincial Route 27 west for 215 km to Tolar Grande. From Tolar Grande, the travel is west-southwest to a turn at km 263 near the abandoned Mina la Casulidad and thence by local roads to the salar. Travel from the Rio Grande tenements to salar del Rincón is via the reverse route. Travel time from Rio Grande to Rincón is approximately 4 hr – 5 hr, depending on weather conditions.



7.1.2.2 Salar Pastos Grandes Tenements

Access to salar Pastos Grandes from Salta is via National Route 51 (RN-51) 170 km west and northwest to San Antonio de los Cobres. From San Antonio de los Cobres, the route is 15 km along RN-51 to the split of Provincial Route 129 (RP-127) and from there 50 km toward Santa Rosa de los Pastos Grandes village. The salar is located approximately 10 km from the village. RP 127 crosses the salar and leads to salar Pocitos and salar del Rincón. Travel time from salar Pastos Grandes to salar del Rincón is approximately 1 – 1.5 hours by heavy truck.

From Antofagasta, Chile, the access is via the Panamerican Highway 5N 70 km to Baquedano, proceeding east along Routes 365, 367 and 23 for some 300 km to the Sico international pass. From Sico, the shorter access to the project site is 130 km via routes RN-51, RP-127 and RP-129 through Cauchari and Estacion Pocitos.

7.1.2.3 Salar Jama Tenements

Salar Jama is located at an average elevation of 4,050 m. It has a surface area of approximately 30 km² and a drainage basin of approximately 1,350 km². The approximate centre of the salar is located at 23°19'S and 67°02'W. Salar Jama can be reached via National Route 52 from San Salvador de Jujuy and from salar Rincon via National Route 51 and local roads leading to a junction with National Route 52. Travel time from salar del Rincón to salar Jama is approximately 1.5 hours.

7.1.2.4 Salar Salinas Grandes Tenements

Salar Salinas Grandes is located approximately 68 km northeast of the town of San Antonio de los Cobres and 100 km west of Puramarca on Route National 52. Access to the north side of the salar from San Salvador de Jujuy, the capital of Jujuy Province, is via National Route 9 leading north 60 km north to the junction with National Route 52 at Puramarca. From there the route proceeds approximately west, crossing the salar until the junction with Provincial Route 38. Provincial Route 38 heads south to the village of Cobres. The total distance from San Salvador de Jujuy to Cobres is approximately 188 km, of which all but approximately 40 km is paved highway. Local access in the immediate area of the salar is by unpaved roads and 4x4 vehicle. Travel time from the north side of salar Salinas Grandes to salar del Rincón is approximately 1 hour.

Access to south side of salar Salinas Grandes is also possible via National Route 51 from Salta and San Antonio de los Cobres. From S.A de los Cobres, one follows National Route 40 northeast to access the south side of the salar via local roads from the villages of Cangrejillos, Ojo de Huancar and Aguadita.

7.2 CLIMATE AND VEGETATION

7.2.1 Climate

The general climate in the Puna is classified as “BSk” or “BWk” according to the Köppen classification system. In the far west of the Puna adjacent to the border with Chile the climate is classified as Eh. BSk is a mid-latitude high altitude steppe climate while BWk is a mid-latitude high altitude desert climate. Both climate types are characterized by:

- low relative humidity and cloud cover.
- low frequency and amount of precipitation.
- moderate to high annual temperature.
- moderate to high monthly temperatures.

with the BSk type receiving somewhat more moisture than the BWk climate type. The Eh climate classification represents an arid, highland climate with somewhat more seasonal moisture than the BWk climate type.

The BSk region is typically found in the central area of the Puna extending from slightly east of Guayatayoc and Salinas Grandes to slightly east of a line between Susques in the north and SA de los Cobres in the south. It encompasses the areas including Guayatayoc and Salinas Grandes. The BWk region lies generally west of the line between Susques and SA de los Cobres and encompasses the area incorporating salars Olaroz, Cauchari, Pastos Grandes, Pocitos, Arizaro and Rio Grande. The Eh climate area lies to the west and northwest of the BWk region and includes salars Jama and Palar.

The climate in the Argentine Puna is severe as a result of its geographical position bordering elevations of 4,000 m asl, and due to the effect of two high semi-permanent pressure systems. The Pacific anticyclone, which operates mainly in winter, provides very dry air to the region, and the Atlantic anticyclone which brings warm and moist air to the region, mainly in the summer. These pressure systems converge on the continent, creating the South American Continental Low that during the summer, reaches deeper in to the region and down to the salt flats with moist air generating great development of orographic clouds and precipitation.

The climate favours the recovery of some minerals such as lithium through processes that depend on the evaporation caused by the severe conditions and the large amount of solar radiation available all year.

Meteorological stations are located in several communities in the greater Puna region and provide historical records for assessing the potential variability of climate at individual salars. Site specific conditions will vary from more generalized data and weather stations

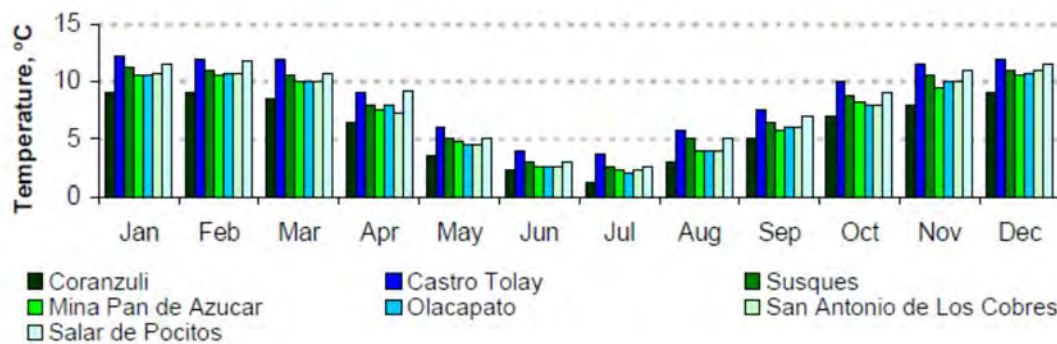
are required at specific sites to obtain suitable data to develop site-specific hydrogeological and evapotranspiration models. Data of record and location of the most representative of the regional weather conditions regional weather stations are shown in Table 7-1.

Table 7-1: Climate Records Northwest Argentina

Station	Latitude	Longitude	Elevation	Period
Coranzuli	23.03 S	66.40 W	4,100 m	1972/96
Castro Tolay	23.35 S	66.08 W	3,430 m	1972/90
Susques	23.43 S	66.50 W	3,675 m	1972/96
Mina Pan de Azucar	23.62 S	66.03 W	3,690 m	1982/90
Olacapato	24.12 S	66.72 W	3,820 m	1950/90
San Antonio de Los Cobres	24.22 S	66.32 W	3,775 m	1949/90
Salar de Pocitos	24.38 S	67.00 W	3,600 m	1950/90

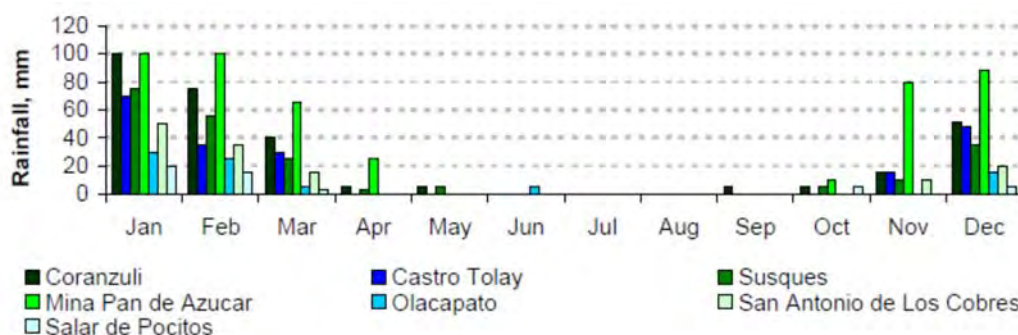
The mean temperatures recorded by the stations in Table 7-1, are shown in Figure 7-2:

Figure 7-2: Mean Temperature Representative of Conditions in Argentine Puna



Rainfall in the Puna region in the area of the Property is typically limited to less than 50 mm per year. Rainfall primarily originates during the summer season, between December and March when the South American Continental Low approaches the region of the salars, bringing hot and humid air from the Amazon and causing very active convective cloud development with abundant, intensive rains. The seasonal rainfall patterns in the region based on data from the stations listed in Table 7-1 is shown Figure 7-3.

Figure 7-3: Rainfall Representative of the Northern Argentine Puna



Variations from this general pattern specific to individual salars are common. For example, salars in the more northerly part of the Puna such as salar Jama and salar Palar receive more rainfall and winter precipitation in the form of snow than do salars located further south and east, such as salar del Rincón and salar Salinas Grandes.

Winds in the Puna region can be very strong. Wind speed is typically relatively low in the early morning but increases throughout the day, especially during winter and can reach speeds in excess of 30 m/s, although typical maximum wind speeds are in the range of 15 m/sec to 20 m/sec. The combination of high wind speeds, high solar irradiation and low relative humidity are highly conducive to high evaporation rates; thus the widespread use of solar evaporation in conventional lithium brine processing operations.

7.2.2 Vegetation

Vegetation in the Puna is typically restricted to low lying xerophytic/halophytic woody plants and shrubs. Grasses can be found bordering fresh water streams and fresh water marshy areas in protected valleys.

7.3 Infrastructure

Despite the desert environment and high altitude, infrastructure in the Puna region is reasonably well established. The road network in the Puna is good, with National Routes 51 and 52 crossing the region and connecting to Chile. Major provincial routes connect with the Routes 51 and 52 and provide good access to the salars. National Route 52, which connects San Salvador de Jujuy with Antofagasta, Chile, crosses the northern part of the Puna, while National Route 51 crosses the southern part of the Argentine Puna and also connects to the port of Antofagasta. The approximate road distance from Antofagasta to the central area of the Puna (salar del Rincón, salar Cauchari, salar Salinas Grandes) is 550 km – 650 km. Distances to alternative ports in Argentina such as Rosario and Buenos Aires are considerably greater (~1,600 – 1,800 km).

A railroad, the Salta-Antofagasta railroad, runs from Salta through the Puna to Antofagasta. The railway passes through the towns of San Antonio de Los Cobres, Olacapato Chico, Pocitos and Tolar Grande before entering Chile near Socampa. The railway is only partially operational on the Argentine side, but is fully operational on the Chilean side of the border.

Two natural gas lines cross the Puna region. The lines are 20 inch diameter. The Atacama line passes toward the south of the Puna while the Norandino line runs in a more northerly part of the Puna. A smaller line, the Puna gas line (6" dia.) starts at Rio de las Burros on the Gas Atacama pipeline and finishes at Estacion Pocitos. An extension of this line south to the FMC plant at Hombre de Muerto has recently been completed and another line servicing the Orocobre plant at salar Olaroz has also been constructed. It is anticipated that this line will be extended to connect with the proposed Lithium Americas lithium plant at

salar Cauchari. Enirgi is proposing to construct a gas pipeline to run parallel to the existing Puna line from Rio de las Burras to Pocitos and then to the Rincón plant site.

A number of major power lines cross the Puna, connecting northwestern Argentina with Chile. The major lines generally follow National Routes 52 and 51 pass into Chile at Paseo de Jama (salar Jama) in Jujuy and at the crossing of Route 51 somewhat north of salar del Rincon. Lower voltage lines service towns such as Susques, Pocitos, and San Antonio de los Cobres. Direct connection to the high voltage lines is generally not available and for the most part mineral processing operations on the salars rely on self-generated power.

Water supply in the Puna is limited and potable and process water for mineral processing operations must be obtained from drilled wells.

7.3.1 Local Services

Both Salta and San Salvador de Jujuy are serviced by scheduled domestic and international air services providing direct access to Buenos Aires, and to cities in Chile and Bolivia. Salta and San Salvador de Jujuy are major cities with universities and major hospitals and can provide a full range of services. Within the Puna itself the two largest towns are San Antonio de los Cobres (population 1,500) and Susques (population 3,757). There are a number of smaller villages in the Puna region, typically with populations of less than 100. Due to their small sizes, only limited services are available at San Antonio de los Cobres and Susques and the smaller towns. Susques and San Antonio de los Cobres have small hospitals and tourist accommodation is available in several communities as well as Susques and SA de los Cobres.

7.4 Seasonal Restrictions on Exploration

There are no seasonal restrictions on exploration activity. Surface exploration and drilling can be undertaken throughout the year, although drilling tends to be undertaken predominately during the summer months.

8 HISTORY

This section of the report provides summaries of prior ownership and exploration work on the various tenements. Details of prior exploration work include both prior work directly on the Properties as well as work by others on adjacent properties within the same salar. In such cases the distinction on the nature and location of the work is clearly noted.

Enirgi reports that historical expenditures on the total of the properties subject to the ADY Tenement Purchase Agreement are in excess of US\$ 18 million, with direct expenditures on the tenements comprising the “Qualifying Properties” being approximately US\$7.8 million since 2008.

Exploration work by prior tenement holders and ADY on the various salars has included the following:

8.1 Rio Grande

Salar Rio Grande was actively mined for sodium sulphate beginning sometime in the 1940s. From 1952 to 1975 production was undertaken by a number of small companies with total production reported as approximately 60,000 tonnes. From 1976 through 1991 various tenements, including those currently owned by ADY, were operated by Sulfo Argentina and then by Mineras Alta Cumbres, both Argentine-based companies. Total production in this period is reported as 76,000 tonnes from surface mines and shallow pits located in the south end of the salar. In approximately 1998 the operations of Mineras Alta Cumbres were purchased by SurNatron S.A., a company controlled by Daniel Galli. SurNatron operated intermittently from 1998 to 2008 when the tenements were acquired by ADY Argentina. ADY undertook a surface sampling program and a drilling and brine pumping program in 2011 in support of a sodium sulphate resource estimate.

ADY operated the Salar Rio Grande Tenements from 2009 through 2013 for sodium sulphate and produced 49,700 tonnes from brines and 34,000 tonnes from surface material. Production ceased in 2013 due to a decision by Enirgi to develop its new DEP (Direct Extraction Process) technology for the Rincon lithium project which does not require the use of sodium sulphate. The property currently has three 15” diameter production wells installed, each with a capacity of 150 m³/hr at 25 m depth. The wells are not currently operational but could be placed into production within a short period of time.

Prior exploration and development work on the Salar Rio Grande Tenements has included:

- Surface sampling and shallow auger drilling and sodium sulphate resource estimate prepared in 1998 for SurNatron S.A.;

- Report on geology and brine chemistry prepared by Mercoaguas for SurNatron in 2010;

Exploration work by ADY on the Salar Rio Grande tenements has included the following:

- Geological mapping and shallow surface sampling (142 samples to 1 m depth) in 2011;
- 33 HQ diamond drill holes (“DDH”) for 1653 m, 2 reverse circulation (“RC”) holes for piezometers, 8 pumping wells to maximum depth of 100 m (31 at 50 m, 1 at 75 m, 1 at 100 m) in 2011;
- Preparation of sodium sulphate resource estimate by SRK;
- 2015 EIS report.

Surface sampling results for Li and packer pump test results to 50 m for Li from the 2011 exploration program are detailed in Figures 8-1 and 8-2. Average assay values for the surface sampling were 42 g/L for sodium sulphate and 380 mg/L for Li. Assay values for samples from packer tests were 44 g/L for sodium sulphate and a showed a range from 220 to 420 mg/L for Li. Average Mg/Li ratios for the packer samples were in the range of 12:1 to 13:1, Mg:Li; with SO₄:Li ratios typically in the 100:1 range.

Pumping test results showed the following (Table 8-1):

Table 8-1: Pumping Test Results – Salar Rio Grande Tenements

Well	Transmissivity (m ² /d)
RGP1	354
RGP2	30454
RGP3	29760
RGP4	1170
RGP5	888
RGP6	3240
TW2	441
TW3	483

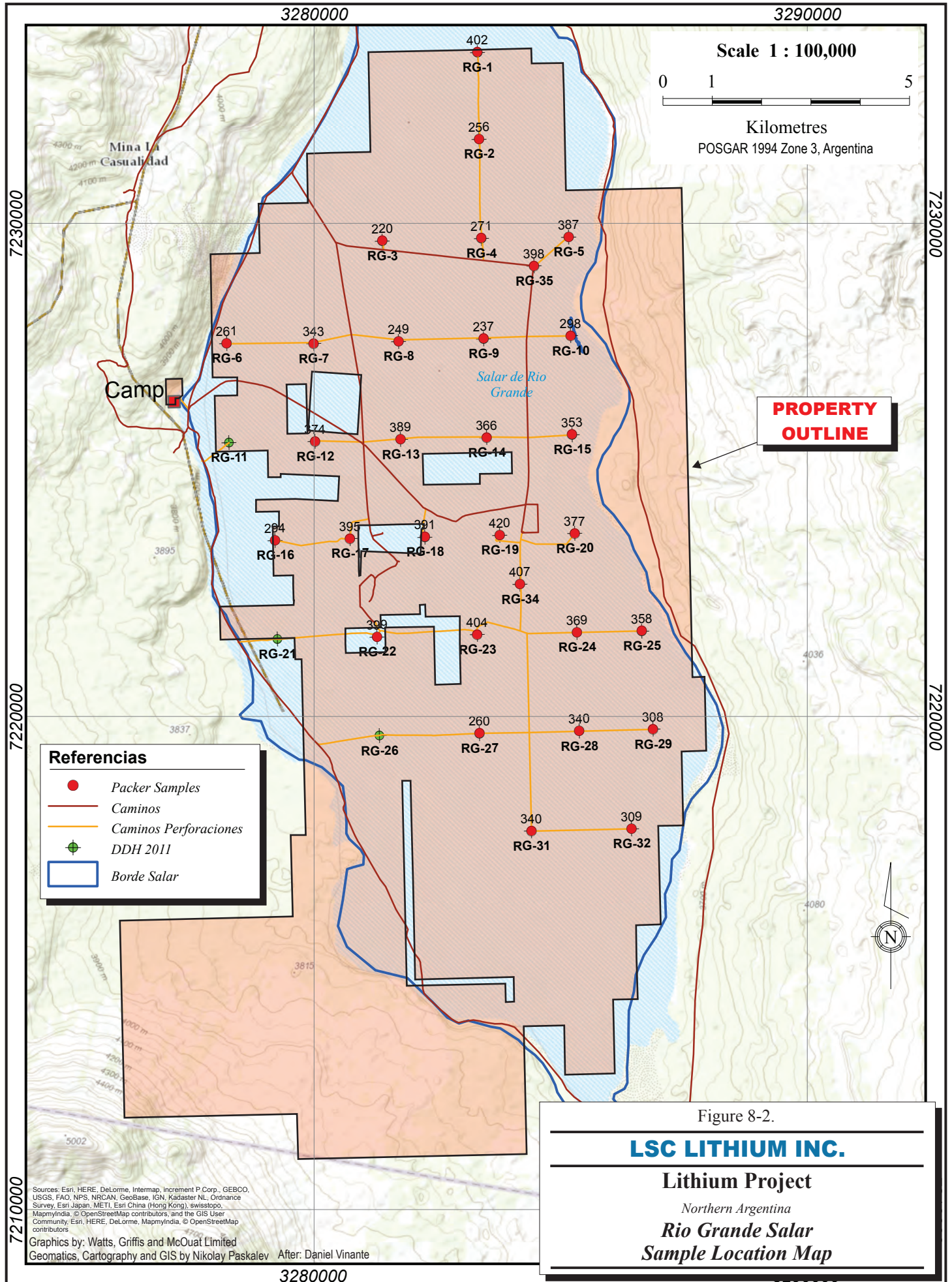
Source: Meroaguas (2011)

The estimated porosity for the tenements down to 50 m depth was 13.5%, based on analysis of drill core (Enirgi, 2011).



Source: ADY Argentina, 2011

Figure 8-1: 2011 Surface Sampling Results for Li – Salar Rio Grande Tenements



LSC is not relying on prior reports of lithium grade, brine volume or porosity. The data are being treated as historical only and are provided here for illustrative purposes only.

8.2 Salar Pastos Grandes Tenements

The prior ownership and exploration history of ADY's tenements on salar Pastos Grandes is not known. ADY has undertaken no exploration work on the Salar Pastos Grandes Tenements. Work by other companies on other tenements on salar Pastos Grandes indicates lithium grades from surface samples ranged from approximately 290 mg/L to 665 mg/L (Millennial, 2016). Alonso and Sorentino (2009) reported the following brine assays for salar Pastos Grandes (Table 8-2):

Table 8-2: Average Brine Assay Values – salar Pastos Grandes

Cl (%)	SO ₄ (%)	B ₂ O ₃ (%)	K (%)	Na (%)	Li (%)	Mg (%)	Ca (%)
15.0	0.9	0.019	0.82	9.33	0.043	0.39	0.044

These data compare to other sources showing the following average assay values (Table 8-3):

Table 8-3: Average Brine Assay Values – salar Pastos Grandes

SO ₄ (g/L)	B ₄ O ₇ (g/L)	K (g/L)	Na (g/L)	Li (g/L)	Mg (g/L)	Ca (g/L)	Cl (g/L)
7.78	1.89	3.55	121.0	0.317	2.12	0.80	192.6

Source: Lithea Inc.

Millennial Lithium (2016) disclosed in an NI 43-101 technical report (Rojas, 2016) that Eramine Sudamerica SA had undertaken exploration work at salar Pastos Grandes including six exploration wells, geophysical surveys comprising CSMAT (8 stations) and vertical electrical sounding (VES, 4 stations) and evaporation tests. Results of pumping tests conducted by Eramine Sudamerica S.A. disclosed in the 2016 Millennial technical report showed the following (Table 8-4):

Table 8-4: Average Lithium and Magnesium Grades for 2012 Eramet Drill/Pump Tests – salar Pastos Grandes

Hole Number	Total Depth (m)	Li (mg/L), avg.	Mg (mg/L), avg.	Mg:Li
DW01PG	124	558.52	n.d.	n.d.
DW03PG	50	440.69	2861.29	6.49
DW04PG	125	331.26	2506.12	7.57
DW05PG	90	565.84	4451.07	7.87

Source: Rojas, 2016

Millennial Lithium further disclosed in a press release dated August 22, 2016 that surface sampling results from various locations on its tenements showed the following (Table 8-5):

**Table 8-5: Surface Sample Results – salar Pastos Grandes
Millennial Lithium - 2016**

Tenement	Li	K	Mg	Area on salar
	mg/L			
18550-2006	665.9	6531	4753	Southwest to centre of salar
	634.6	7146	5349	
	602.2	6342	5568	
	268.3	3471	1906	
18403-2006	282.2	3605	2156	centre
18693-2007	0.32	9	9.9	Northeast on land
	0.2	7	8.18	
	0.8	10	1.5	
	9.7	369	23.79	

Source: Millennial Lithium corporate presentation dated August 22, 2016

Donald Hains, the Qualified Person responsible for this technical report, has been unable to verify the information contained in the technical report dated September 14, 2016 prepared for Millennial or in the Millennial corporate presentation dated August 22, 2016. Mineralization reported in the technical report or in the corporate presentation with respect to salar Pastos Grandes may not be representative of mineralization on the adjacent properties held or to be held by LSC discussed in this Technical Report.

8.3 Salar Jama Tenements

A vacant mine application was filed on the Salar Jama Tenements by Cooperativa Minera MTL La Barva Ltda (“Cooperativa”) on February 18, 2005. On November 23, 2011 an assignment of rights was made from Cooperativa to Daniel Ovaldo Carrera. Title was transferred to Cuper SRL by Deed of Transfer on March 15, 2013, with title officially registered on August 29, 2013 and confirmed on December 7, 2016 by judicial order. The Salar Jama Tenements cover most of the surface area of the salar.

Segemar, the Argentine Geological Survey, completed a program of geological mapping, shallow surface sampling and trenching for delineation of borate mineralization on salar Jama in 2008. Cuper completed a program of shallow surface sampling in 2015 (Figure 8-3) and engaged K-UTEC Salt Technologies to complete a conceptual scoping study for the project based on use of solar evaporation. No resource or reserve estimate was made in connection with the K-UTEC report. Cuper also completed an EIS Level I report on the Cuper Salar Jama Tenements in 2015.



Source: Cuper S.A. 2015

Figure 8-3: Surface Sample Locations Salar Jama Exploration by Cuper S.A.

The results of the surface sampling by Cuper (Table 8-6) indicate good lithium values and favourable Mg:Li ratios for the major part of salar Jama in the north.

Table 8-6: Surface Sample Results – Cuper Salar Jama Tenement

MUESTRAS LIQUIDAS	B	Ba	Ca	Fe	K	Li	Mg	Mn	Na	Sr	Mg / Li
Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	
LC	1	0,01	2	0,3	2	1	1	0,01	2	0,5	1,00
O01	203	<0.10	965	<3.0	3301	191	426	1,69	46288	18,5	2,23
O04	353	<0.10	978	<3.0	4003	186	871	0,80	52751	21,8	4,70
O06	228	<0.10	1050	<3.0	3535	167	529	0,57	39072	23,8	3,16
O07	442	<0.10	890	<3.0	4407	233	774	1,62	63732	20,0	3,32
O09	192	<0.10	794	<3.0	4190	231	473	0,50	50498	24,7	2,05
O12	288	<0.10	847	<3.0	969	56	815	<0.10	23964	20,4	14,42
O13	<10	<0.10	216	<3.0	47	<10	41	<0.10	599	10,0	0,00
O14	<10	<0.10	119	<3.0	105	<10	16	<0.10	1371	6,1	0,00
O15	105	<0.10	1261	<3.0	1811	133	687	0,41	24835	29,2	5,18
O19	95	<0.10	197	<3.0	2095	112	119	0,27	24341	8,0	1,06
O20	72	<0.10	667	<3.0	1298	55	150	<0.10	13783	17,0	2,74
O21	849	<0.10	536	<3.0	11961	660	2023	0,13	114986	29,1	3,06
O22	399	<0.10	649	<3.0	6403	360	968	0,24	86513	16,3	2,69
O25	42	<0.10	284	<3.0	517	29	82	0,17	6680	19,8	2,84
O26	238	<0.10	1081	<3.0	4221	383	1728	2,17	49639	26,9	4,52
O32	383	<0.10	984	<3.0	3815	202	688	1,57	48262	19,8	3,41
O33	954	<0.10	559	<3.0	11636	763	3435	2,12	108367	39,4	4,50
O34	392	<0.10	896	<3.0	4282	208	778	1,61	50102	21,2	3,74
DUP O12	282	<0.10	851	<3.0	965	56	820	<0.10	23581	20,6	14,69
DUP O22	393	<0.10	636	<3.0	6333	360	963	0,24	84850	16,3	2,67

Source: Cuper S.A. (2015)

Exploration by ADY on the Galli Salar Jama Tenement in the south of salar Jama has involved surface sampling. ADY collected five shallow surface samples from various locations in the Nueva Ilusion portion of the Galli Salar Jama Tenements in 2010. The assay results returned low lithium values of less than 5 mg/L (Figure 8-4) in 2010. The assay results returned low lithium values of less than 5 mg/L. (Table 8-7):



Source: ADY Argentina, 2010

Figure 8-4: Enirgi Brine sampling on Nueva Ilusion Tenement, salar Jama

Table 8-7: Historic Enirgi Sampling on Nueva Ilusion Tenement, salar Jama - 2010

Sample	Posgar 94 datum		Li ⁺	Mg ⁺⁺	Ca ⁺⁺	K ⁺	Na ⁺	SO ₄ ⁼	Cl ⁻	Boro	HCO ₃ ⁻	D	CE
	Easting	Northing	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	g/ml	mS/cm
SJ-1	3395813	7416794	1.3	1.0	3.7	36.0	261.0	233.0	198.0	14.0	116.0	1.004	1.4
SJ-2	3394187	7418213	Dry	hole	No	sample							
SJ-3	3394485	7419170	3.2	74.0	155.0	112.0	983.0	1382.0	1093.0	98.0	201.0	1.007	5.8
SJ-4	3392310	7419020	2.2	28.0	76.0	48.0	1011.0	867.0	1203.0	20.0	179.0	1.007	5.3
SJ-5	3391370	7419180	Dry	Hole	No	sample							

Source: ADY Argentina, 2010

8.4 Salar Salinas Grandes Tenements

No information is available on prior ownership of the ADY Salar Salinas Grandes Tenement, nor on the Galli Salar Salinas Grandes Tenement.

ADY completed a surface mapping and sampling program across the ADY Salar Salinas Grandes tenements on the northwestern side of salar Salinas Grandes in 2009. The tenements involved were the following (Table 8-8):

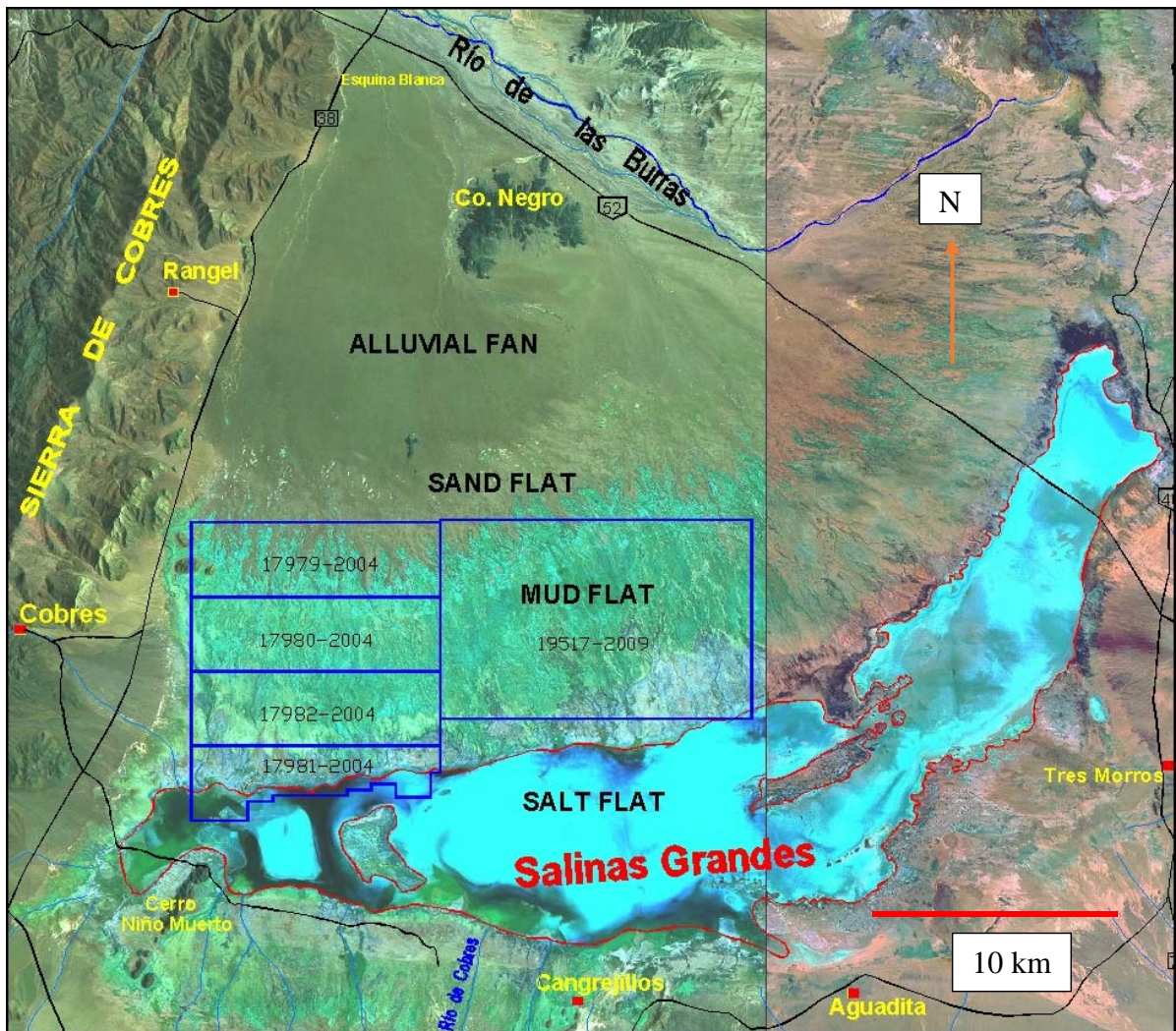
Table 8-8: Exploration by ADY Salar Salinas Grandes Tenements

File No.	Tenement Name	Area (ha)
17979	Sofia	3,000
17980	Sofia I	3,000
17982	Sofia II	3,000
17981	Sofia III	2,153
19517	Dueno ¹	10,000

1) now sub-divided into tenements Grandes I – Grandes VII

The ADY Salar Salinas Grandes Tenements on the northwestern side of salar Salinas Grandes are found primarily on mud flats with some limited extension into the salt flat in the south end for Tenement 17981 (Sofia III, see Figure 8-5).

Figure 8-5: Surficial Geology – ADY Salar Salinas Grandes Tenements, northwestern part of salar Salinas Grandes



Source: ADY Argentina, 2009

Exploration work by ADY in 2009 consisted of collection of shallow pit (1.5 m deep maximum) samples on a 2 km x 2 km grid and three shallow auger drill holes (max depth 7 m), with collection of samples at 1 m intervals.

The results of the surface sampling work indicated the phreatic level occurred between 5 cm and 80 cm below surface level and that lithium grades varied from 227 mg/L to 2090 mg/L in the evapoflat (salt flat) area and from 2 mg/L to 55 mg/L in the mud flat zones with the phreatic level varying between 15 cm to 1.3 m below surface.

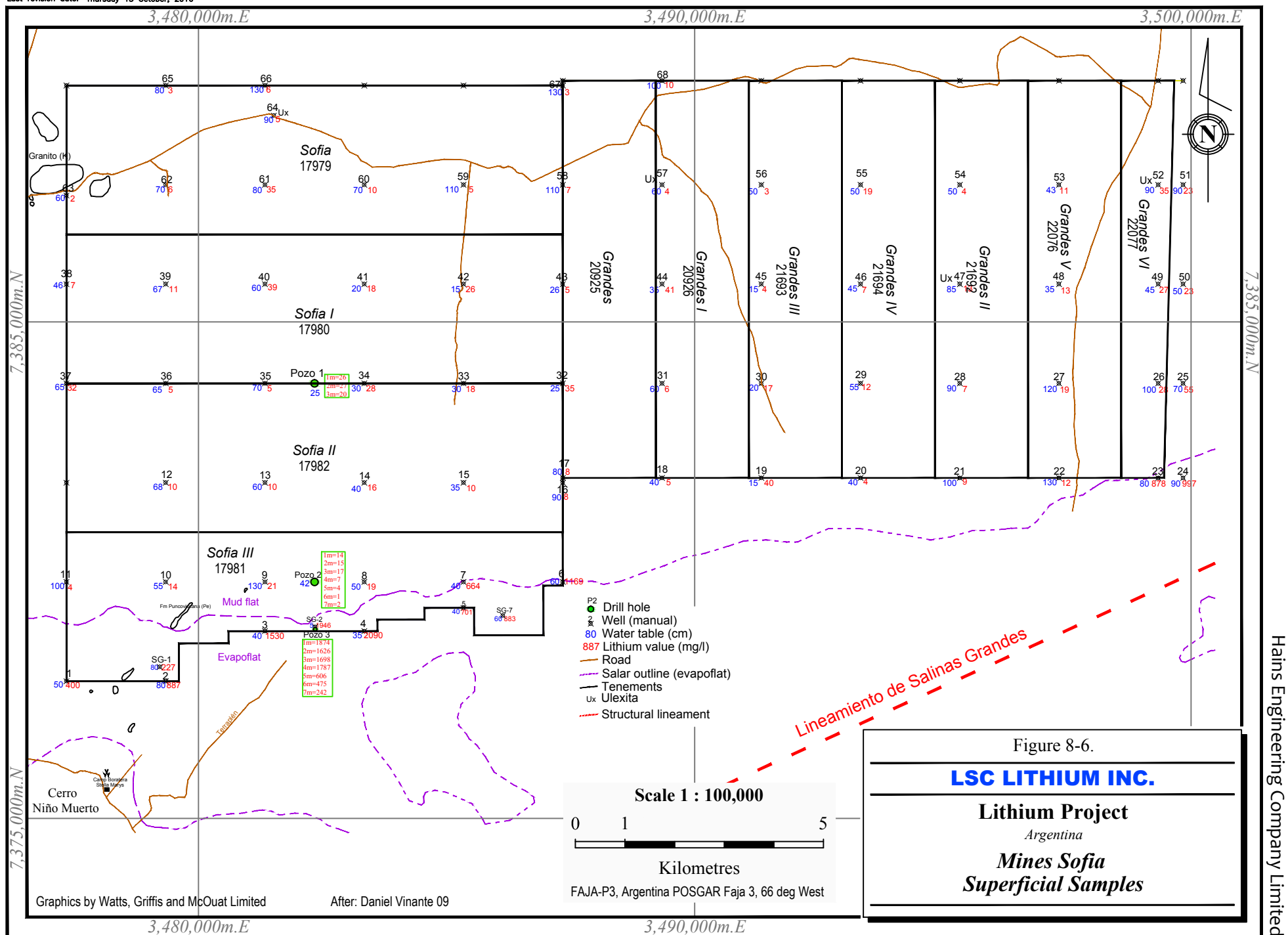
The auger drill results showed the following (Table 8-9):

Table 8-9: Auger Drill Results
ADY 2009 Sampling Program, salar Salinas Grandes

	Hole No. and Assay Result (mg/L)					
	1		2 3			
	Hole Coordinates (Gauss Kruger, Posgar 94)					
	Northing	Easting	Northing	Easting	Northing	Easting
Hole Elevation (m)	3440		3420 3416			
Depth (m)						
1	26		14		1674	
2	27		15		1626	
3	20		17		1698	
4			7		1787	
5			4		606	
6			1		475	
7			2		242	

Source: ADY Argentina, 2009

Figure 8-6 illustrates the results of the 2009 sampling program.



These results are similar to reports from others (Brooker and Ehren, 2012; Houston, 2010) that lithium grades increase moving into the salar and that lithium grades decrease rapidly with depth.

In 2010 ADY completed a surface sampling program (1 m deep pit samples) on a 250 m x 250 m or 500 m x 500 m grid pattern for the ADY Salar Salinas Grandes Tenements located in both Salta and Jujuy. The tenements covered were (Table 8-10):

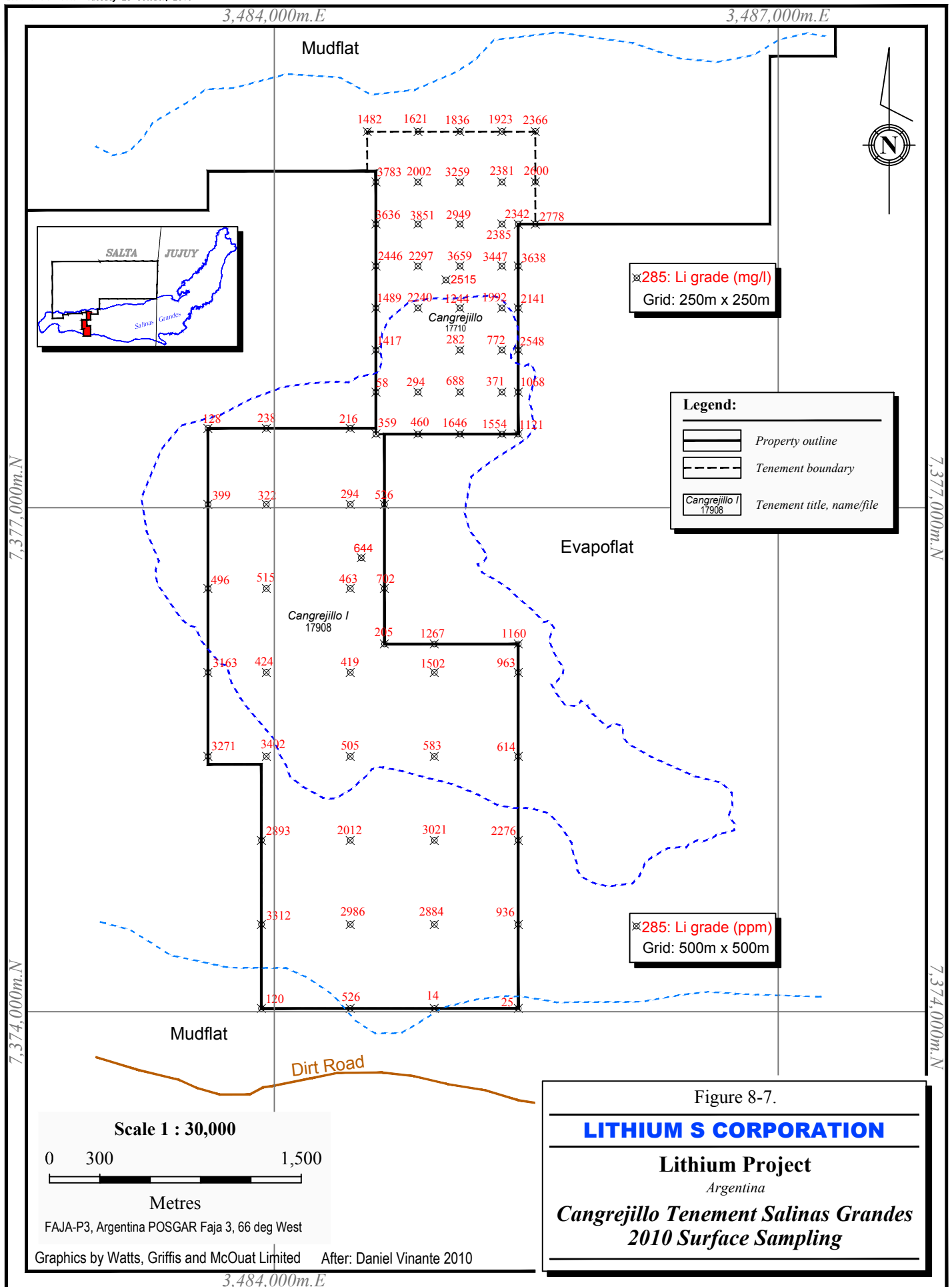
Table 8-10: ADY 2010 Surface Sampling – ADY Salinas Grandes Tenements

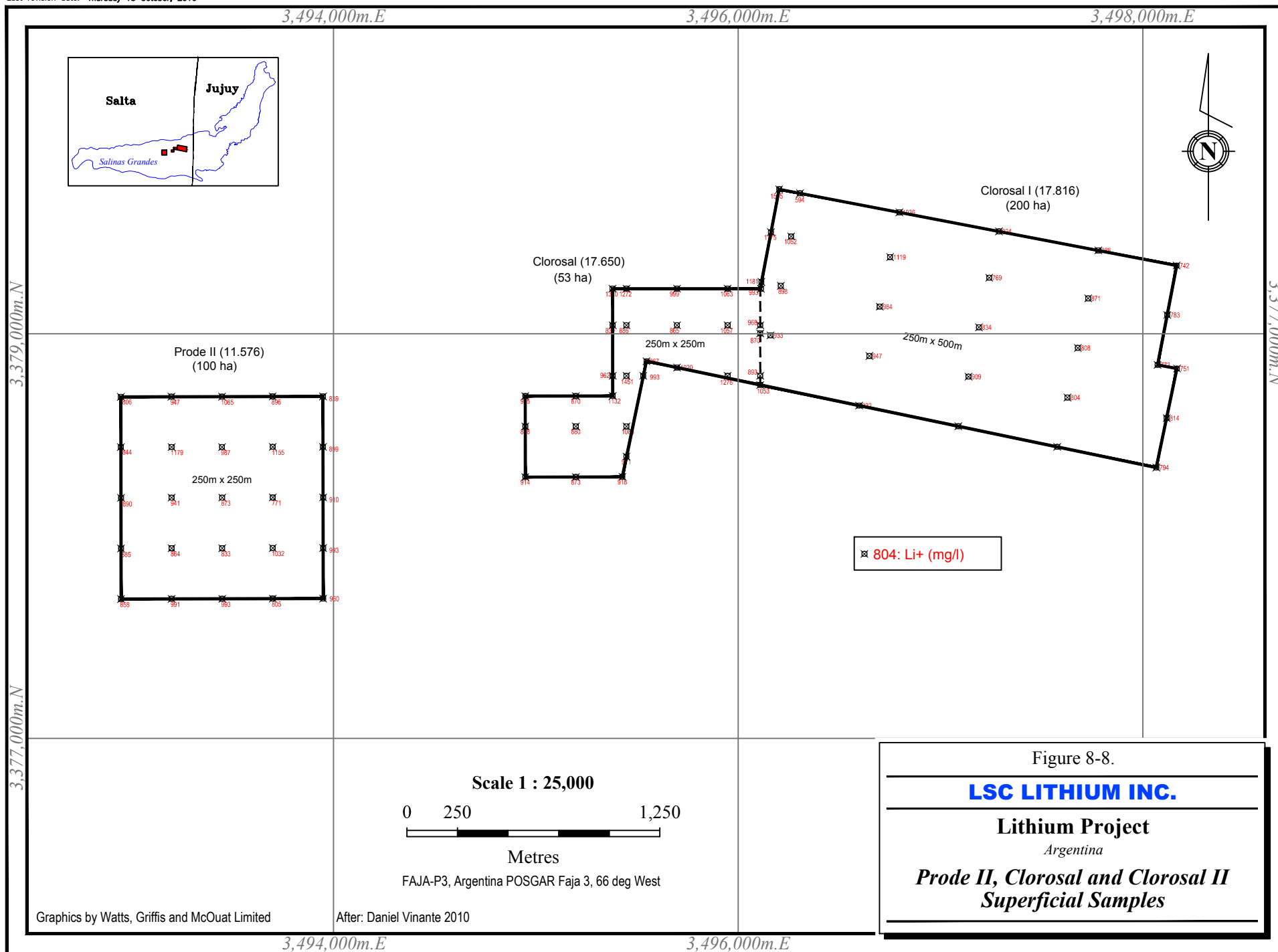
Tenement Name	File No. (Expdte)	Area (ha)	No. of Samples	Grid (m)	Max (mg/L Li)	Min (mg/L Li)	Average (mg/L Li)
Cangrejillos	17710	159	40	250 x 250	3851	14	1595
Cangrejillo I	17908	489	36	500 x 500			
Cristina	139-S-2003	490	41	500 x 500	1178	145	594
Domingo	791-C-2007	318	22	500 x 500	848	220	440
Tomasa	514-A-2006	300	19	500 x 500	595	8	265
Prode II	11576	100	25	250 x 250	1179	771	928
Clorosol	17650	53	28	250 x 250	1451	830	1026
Clorosol I	17816	200	27	250 x 500	1515	594	915
	Total	2109	237				

Source: ADY Argentina, 2010

The results of the sampling work are illustrated in Figures 8-7 through 8-10. This data is also consistent with reports from others, (Brooke r & Ehren, 2012; Houston, 2010) indicating fairly high lithium grades at su rface within th e nucleus o f the sala r and decreasing lithium grades within the margins of the salar.

LSC is treating the sampling results as historical results and is not relying on them. The data are presented for illustrative purposes only and may not be representative of future results. LSC plans to undertake a program of due diligence sampling to verify the historical results.





Graphics by Watts, Griffis and McOuat Limited

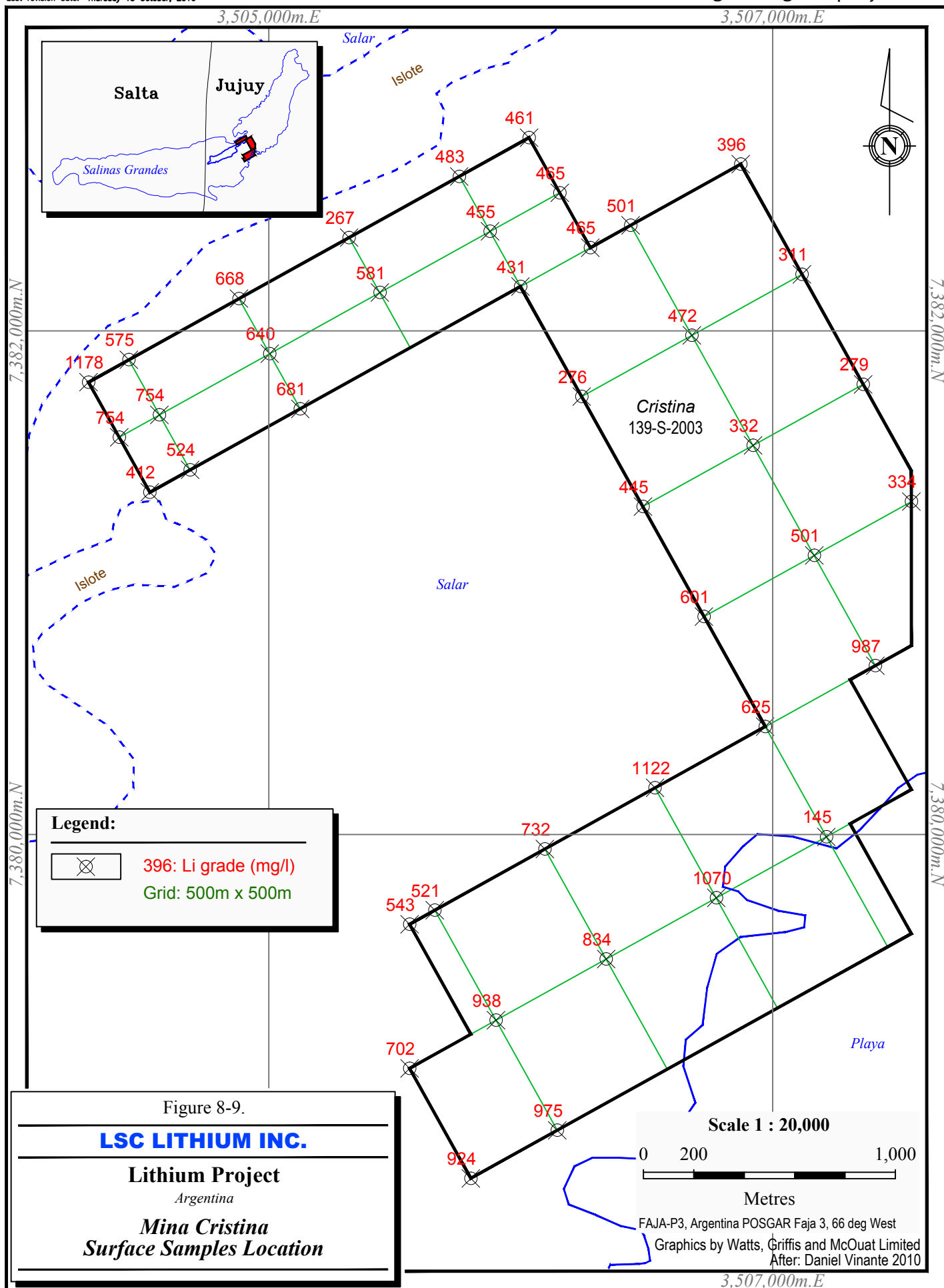
After: Daniel Vinante 2010

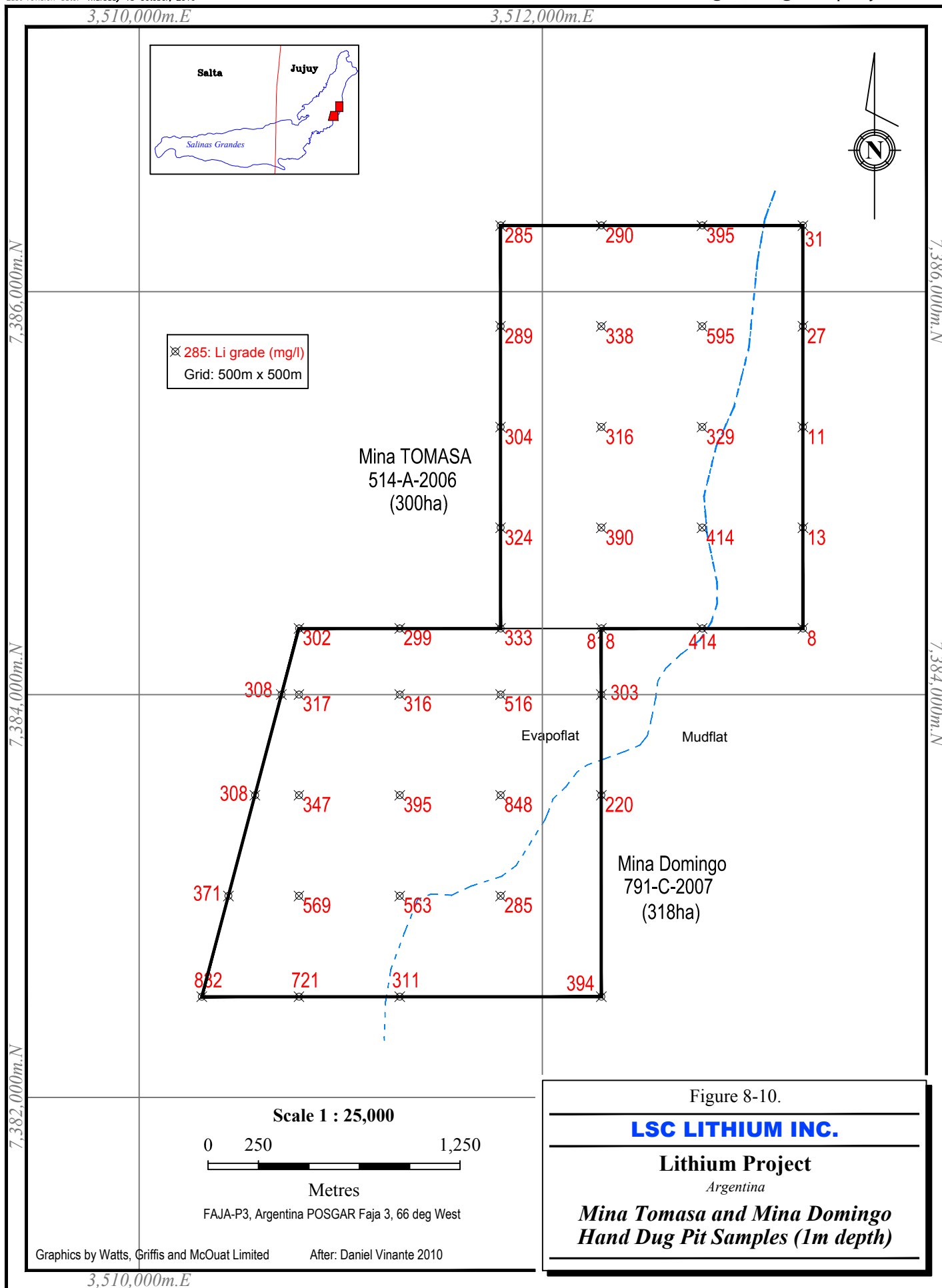
Figure 8-8.

LSC LITHIUM INC.

Lithium Project
Argentina

Prode II, Clorosal and Clorosal II
Superficial Samples





9 GEOLOGICAL SETTING AND MINERALIZATION

This chapter is largely extracted from reports prepared by others covering the regional geology of the Puna and the local geology of specific salars.

9.1 REGIONAL GEOLOGY

9.1.1 General

The Puna region of northwestern Argentina is a high altitude plateau and the location of numerous brine deposits (salars) containing elevated levels of lithium, potassium, boron and other elements. The Puna is the southern extension of that portion of the Andes between 14°S and 28°S. This area represents a zone of extensive Neogene ignimbrite formation (de Silva, 1989) that is underlain by an extremely large magma body known as the Altiplano-Puna Volcanic Complex or Altiplano-Puna Magma Body) (APVC or APMB, Figure 9-1), (Zandt et al., 2003; de Silva et al., 2006).

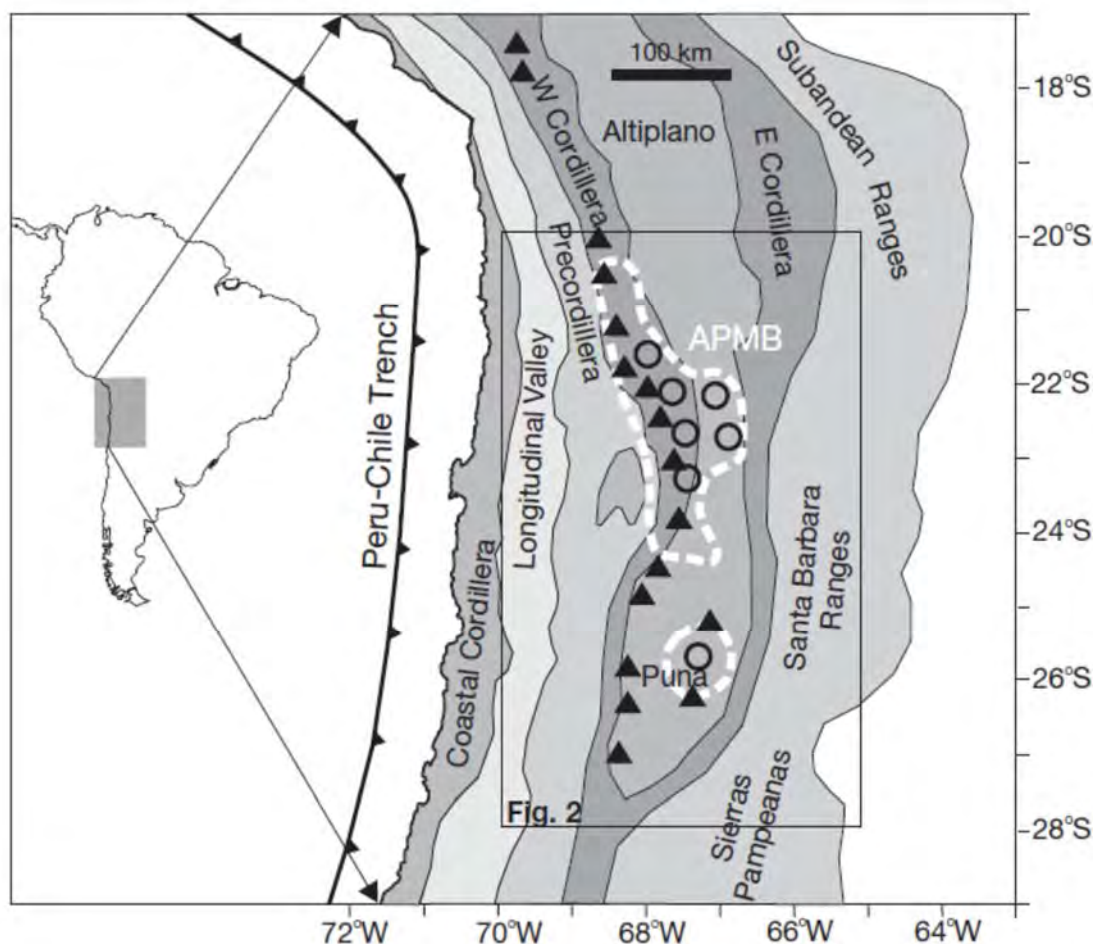


Figure 9-1: Location Map of the Altiplano-Puna

Principal physiographic features, showing Altiplano-Puna magma body of de Silva et al. (2006), (dashed white line), volcanoes (black triangles) and calderas (black circles) of the western Cordillera
Source: Houston et al (2011): *Economic Geology*, v. 106, pp. 1225–1239

The Puna occupies the central part of the Andes in northern Argentina and Chile between the latitudes 22°S and 27°S. It is a high plateau striking NNE, about 600 km long and with a surface area of 78,000 km². It has centripetal drainage networks, so its typical morphology consists of depressions partly occupied by salt flats or brackish water bodies, limited by N-S trending basement ranges elevated more than 1500 m above them. The average elevation of the valleys is 3600 m to 3700 m above sea level, although some are as high as 4000 m asl. The eastern boundary of the Puna is the watershed defined by the high mountains between the Puna and the Cordillera Oriental-Calchaquenia. The western boundary is the Volcanic Arc of the Cordillera Principal along the Argentine-Chilean frontier. To the north, it connects to Altiplano de Lipez in southwest Bolivia. The southern boundary is defined by Sierras Pampeanas Noroccidentales, at latitude approximately 27°S.

The Argentine Puna is divided into two sections, northern and southern, both limited by the El Toro-Olacapato lineament (Figure 9-2). The Puna stratigraphic column includes units from the Precambrian, Ordovician, Silurian-Devonian, Carboniferous, Permian, Jurassic, Cretaceous-Eocene, Eocene-Pliocene and Quaternary. All the units, except for the Ordovician, Tertiary and Quaternary, have comparatively small outcroppings, some of which are found at single points. Thus, the dominant stratigraphic composition of the Puna consists of the Ordovician basement made up of marine deposits and eruptive rocks, upon which Tertiary continental basins developed. The volcanic arc, including the transversal chains within the body of the Puna, developed on the western border. Finally, the extensive plains of the endorheic valleys in the Puna host fluvial deposits and Quaternary evaporites.

9.1.2 Structure of the Puna

The dominant structures in the Puna trend N-S to NNE-SSW, are mainly of compressive or transpressive nature, and originated mainly during the Neogene. Other structures are lineaments of regional magnitude, transversal to the Andean strike, trending northeast and northwest, along which there are displacements in the strike direction and changes in the orientation of the Neogene folds and faults, as well as aligned volcanic effusions of Cretaceous, Miocene-Pliocene and Quaternary ages. Some of the transversal lineaments have well-documented pre-Cenozoic history, as is the case of the El Toro-Olacapato lineament. South of this lineament, deeper crust levels are exposed in both the Puna and Calchaquenia, suggesting that the pre-Neogene deformation was dominated there by vertical movements, descending northward. Moreover, immediately north of the lineament, the western border of the Cretaceous rift basin undergoes a marked westward displacement (Gorustovich et al, 2011). Figure 9-1 illustrates the regional structural geology of the Altiplano-Puna area (Gorustovich et al, 2011).

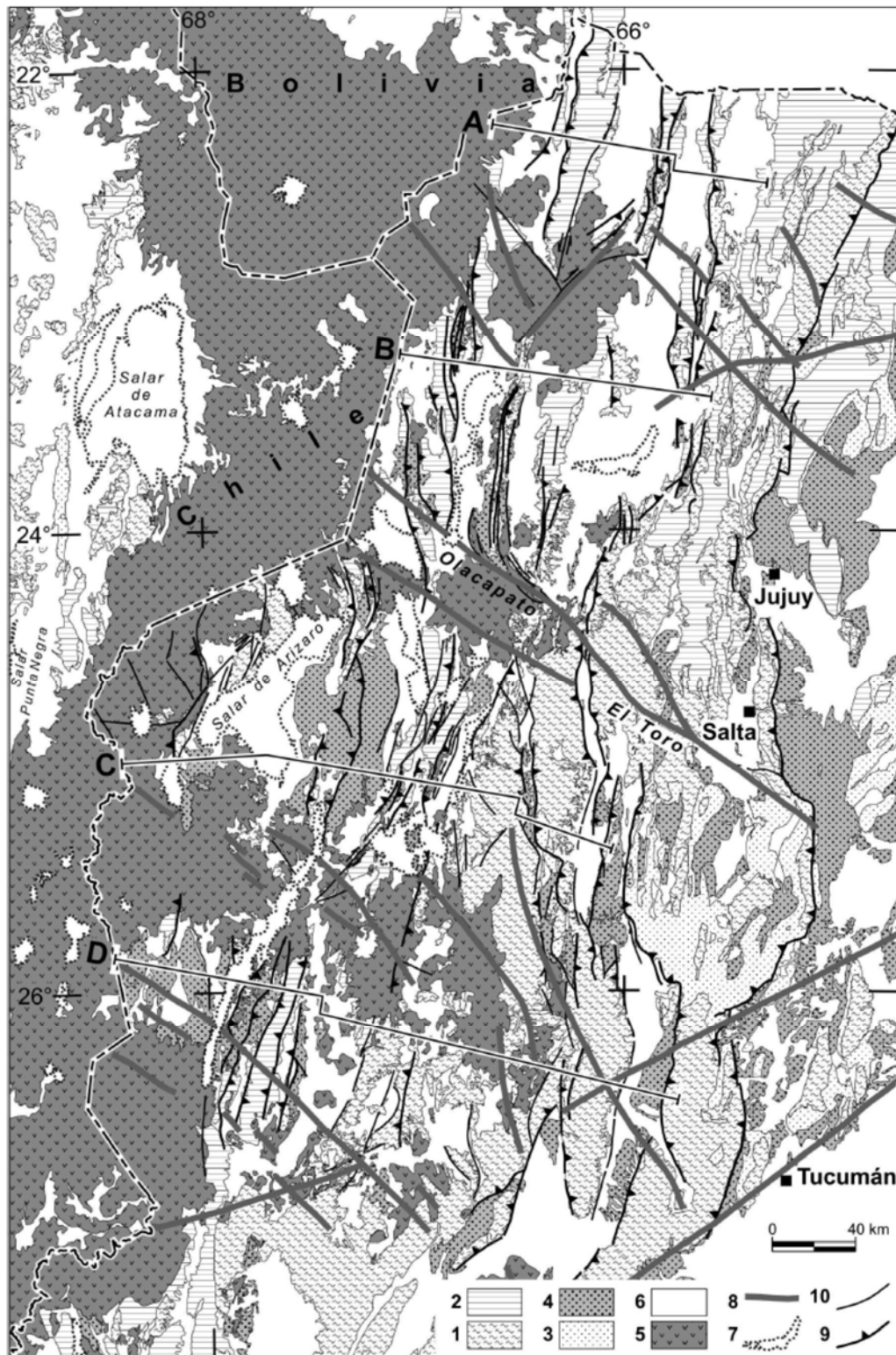


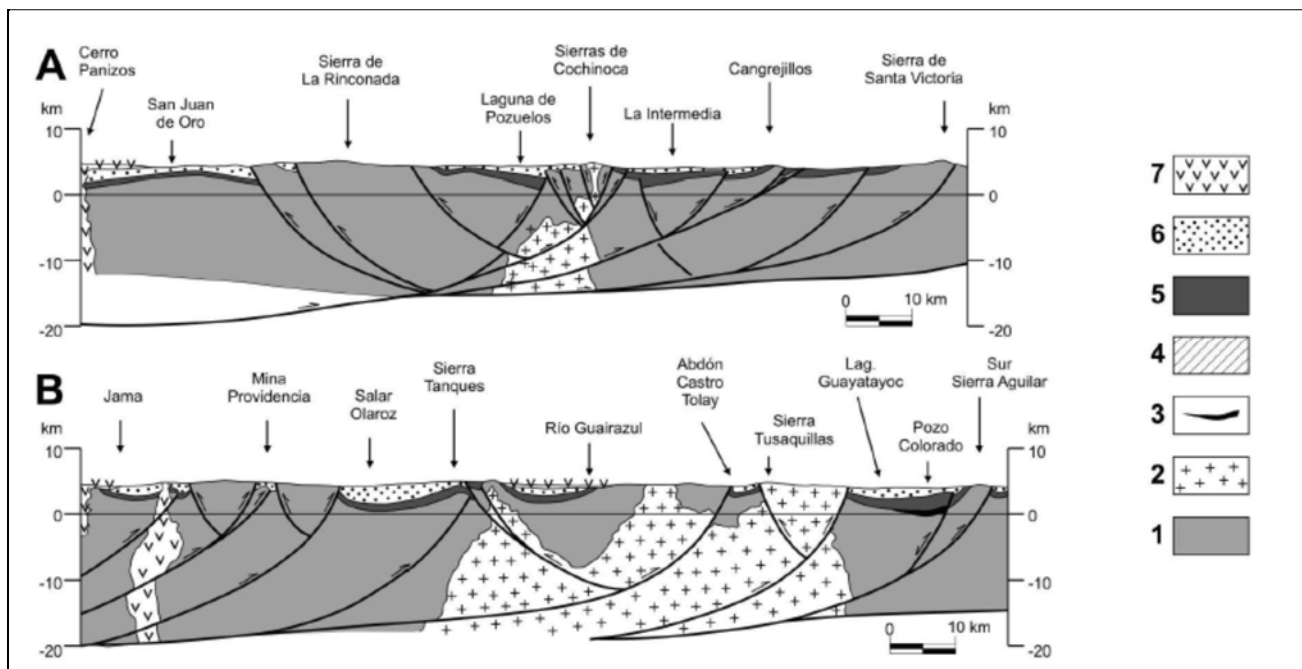
Figure 9-2: Geological Map of the Argentine Puna

Precambrian-Lower Paleozoic; 2. Lower to Upper Paleozoic; 3. Cretaceous-Eocene; 4. Post-Inca Tertiary; 5. Cenozoic volcanic arc; 6. Quaternary; 7. Salar; 8. Lineament; 9. Thrust; 10. Fault; A,B,C,D – Structural Sections (see Fig. 9-3)

Source: S. A. Gorustovich, C. R. Monaldi, and J. A. Salfity (2011)

The mountains are formed mainly by the intensely faulted and folded Precambrian-Ordovician basement, and their limbs are limited by inverse faults with high angles and opposite vergence; in other cases only one limb is faulted, while the other limb is overlapped by Neogene sedimentary rocks. The depressions between the mountains are covered by salt flats, lagoons and occasionally thick mantles of ignimbrite, and their subsurface preserves the sedimentary succession, which often crop out at the margins.

The structural sections located north of the El Toro lineament (Figs. 9-3A and 9-3B) are located in the western portion of the Cretaceous rift basin. The interpretation of available seismic data shows that there is an appreciable participation of inversion structures in the internal structure of the depressed areas; these structures originated during the Neogene by compressive reactivation of pre-existing extensive structures. It is also noticeable that the degree of inversion and deformation of the Cretaceous-Neogene deposits is much less in the subsurface of the depressions than on the limbs of the mountains (Gorustovich et al, 2011).



**Figure 9-3A and 9-3B: Structural Sections Across Northern Puna
(see Fig. 9-1 for section locations)**

1. Precambrian-Eopaleozoic; 2. Eopaleozoic granitoids; 3. Silurian-Devonian; 4. Silurian-Devonian-Carboniferous-Permian; 5. Cretaceous-Eocene; 6. Sedimentary Neogene; 7. Volcanic Neogene
- Source: S. A. Gorustovich, C. R. Monaldi, and J. A. Salfity (2011)

The sections located south of El Toro lineament (Figs. 9-3C and 9-3D) extend from the western border of the Puna to the Calchaquí-Santa María Valley, where the structures of

the western belt of the Puna can be seen to have predominantly eastern vergence, whereas the vergence of the structures of the eastern belt is opposite. The structure in the subsurface of the saline depressions is unknown due to the lack of seismic data. Towards the edges, the outcropping structures in Neogene units generally consist of folds with large wavelength, and north-south lengths of up to 35 km. Upon these structures are superimposed smaller, disharmonic folds, with evidence of detachment and plastic flow caused by massive intercalations of evaporitic bodies (Gorustovich et al, 2011).

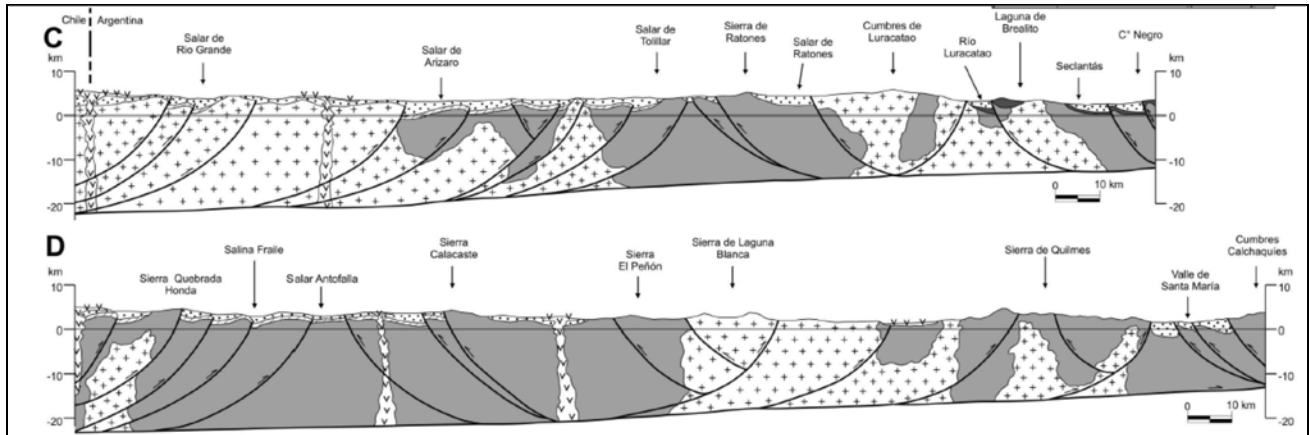


Fig. 9-3C and 9-3D: Structural Section Across Central and Southern Puna
(see Fig 9-1 for section locations)



1. Precambrian-Eopaleozoic; 2. Eopaleozoic granitoids; 3. Silurian-Devonian; 4. Silurian-Devonian-Carboniferous-Permian; 5. Cretaceous-Eocene; 6. Sedimentary Neogene; 7. Volcanic Neogene
- Source: S. A. Gorustovich, C. R. Monaldi, and J. A. Salfity (2011)

The high-angle north-south trending faults form narrow and deep horst-and-graben basin systems. The northwest-southeast trending lineaments cause displacement of the horst-and-graben basins. The El Toro Lineament and the Archibarca Lineament occur in the vicinity of salars Olaroz, Cauchari, and Rincon. The Olaroz-Cauchari Basin, which contains the Olaroz and Cauchari salars, is located north of the El Toro Lineament. Salar del Rincon, salar Salinas Grandes, salar Pocitos, salar Pastos Grandes, and salar Arizaro are located between the El Toro and Archibarca Lineaments. In this area the basin is displaced to the southeast and is known as the Centenario Basin. South of the Archibarca Lineament, the basin is displaced to the northwest and is known as the Antofalla Basin. Salar Rio Grande is located in this region.

9.1.3 Structural Evolution

The structural evolution of the Puna region and the formation of salars as described by Houston (2010) is summarized below.

9.1.3.1 Jurassic-Cretaceous

The Andes have been part of an Andean type convergent plate margin since the Jurassic period, with both a volcanic arc and associated sedimentary basins developed as a result of eastward dipping subduction. The early island arc is interpreted to have formed on the west coast of South America during the Jurassic (195-130 Ma), progressing eastward during the mid-Cretaceous (125-90 Ma) (Coira et al., 1982). An extensional tectonic regime existed through the late Cretaceous, generating back-arc rifting and grabens (Salfity & Marquillas, 1994). Marine sediments of Jurassic to Cretaceous age underlie much of the Central Andes.

9.1.3.2 Late Cretaceous to Eocene

During the late Cretaceous to the Eocene (~78-37 Ma), the volcanic arc migrated east to the position of the current Precordillera (Allmendinger et al, 1997). Significant crustal shortening occurred during the Incaic Phase (44-37 Ma), (Gregory-Wodzicki, 2000) forming a major north-south watershed, contributing to the formation of coarse clastic continental sediments. Initiation of shortening and uplift in the Eastern Cordillera of Argentina around 38 Ma, contributed to forming a second north-south watershed, with the accumulation of coarse continental sediment throughout the Puna (Allmendinger et al., 1997).

9.1.3.3 Oligocene to Miocene Volcanism

By the late Oligocene to early Miocene (20-25 Ma), the volcanic arc switched to its current location in the Western Cordillera. At the same time, significant shortening across the Puna on reverse faults led to the initiation of separated depocentres (Figures 9-4, 9-5). Major uplift of the Altiplano-Puna plateau began during the middle to late Miocene (10-15 Ma), perhaps reaching 2500 m by 10 Ma, and 3500 m by 6 Ma (Garzione et al., 2006). Coutand et. al. (2001) interpret the reverse faults as being responsible for increasing the accommodation space in the basins by uplift of mountain ranges marginal to the Puna salar basins. This is confirmed by the seismic section across salar Salinas Grandes (Figure 9.5).

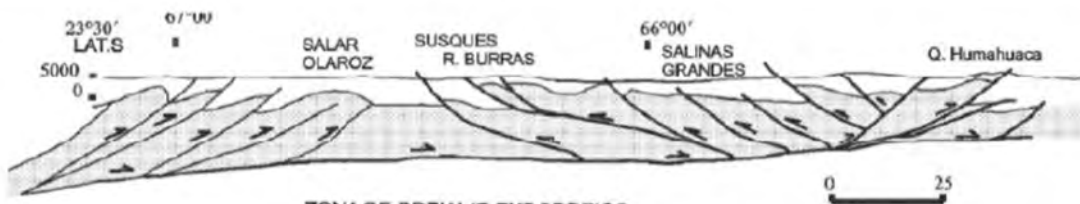


Figure 9-4: Structural cross section from the Chilean border through the Salinas Grandes salar

Note the development of a mid-crustal decollement with an east vergent, thrust fault and associated back thrusts creating the ranges bordering the salars, with Paleogene to Neogene deposits in the salar basins bordered by uplifted Ordovician to Cretaceous bedrock (from Mons, 2005)

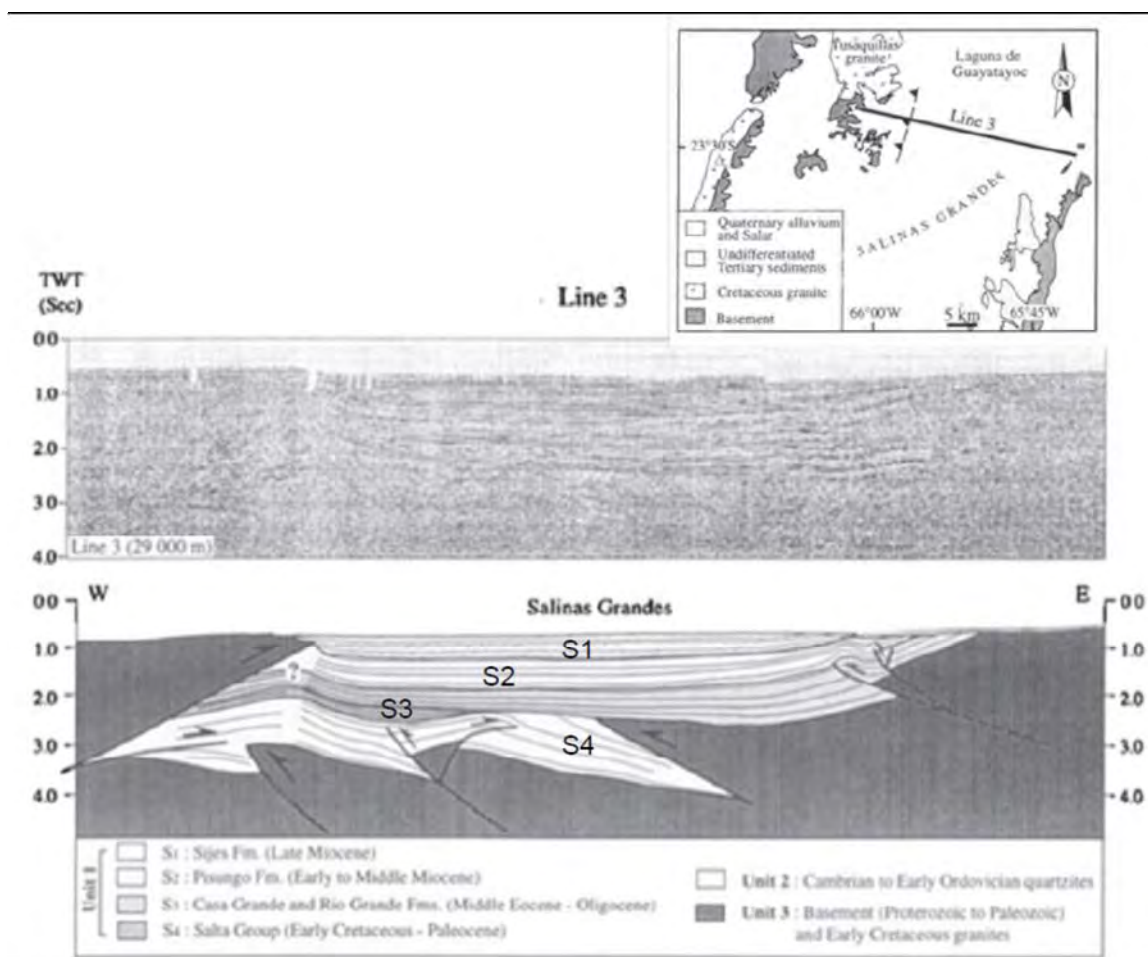


Figure 9-5: Seismic cross section through the salar Salinas Grandes/Guayatayoc junction

The upper figure shows location and the lower shows the time-migrated seismic profile and its

interpretation. Note the development of thrust faults verging inwards to the basin and creating uplifted ranges along the borders (from Kay et. al., 2008, modified from Coutand et. al., 2001).

Late Miocene volcanism at 5-10 Ma in the Altiplano-Puna Volcanic Complex (APVC) between 21°-24° S (de Silva, 1989), erupted numerous ignimbrite sheets, with associated caldera subsidence, and the formation of andesitic to dacitic stratovolcanoes. This volcanic activity was often constrained by NW -SE trending crustal megafractures, which are particularly well displayed along the Calama-Olacapato-El Toro lineament passing to the south of the Cauchari Salar (Salfity & Marquillas 1994; Chernicoff et al., 2002).

The Puna is host to numerous large ignimbrites and stratovolcanoes. Stratovolcanoes and calderas, with associated ignimbrite sheet eruptions, extend as far south as Cerro Bonete and the Incapillo caldera. De Silva et al., (2006) have shown the APVC is underlain by an extensive magma chamber at 4-8 km depth. Silicic magmas in the volcanoes Ojos de Salado (W of the Antofalla Salar), Tres Cruces and Cerro Bonete are interpreted to reflect crustal melting and melting in the thickening mantle wedge after the passage of the Juan Fernandez ridge.

It has been suggested by many authors (i.e. Gajardo and Carrasco, 2010; Kay et. al., 2008) that Cenozoic volcanism is the source of the lithium and potassium, which is released into salar basins from hot springs leaching volcanic sequences. However, little investigation has been undertaken to determine which phases of volcanism are associated with the elevated lithium levels. Volcanics of Pliocene to Quaternary age are present in the area covered by the LSC tenement packages.

A summary evolution of the Puna is shown in Figure 9-6, after Houston (2010b).

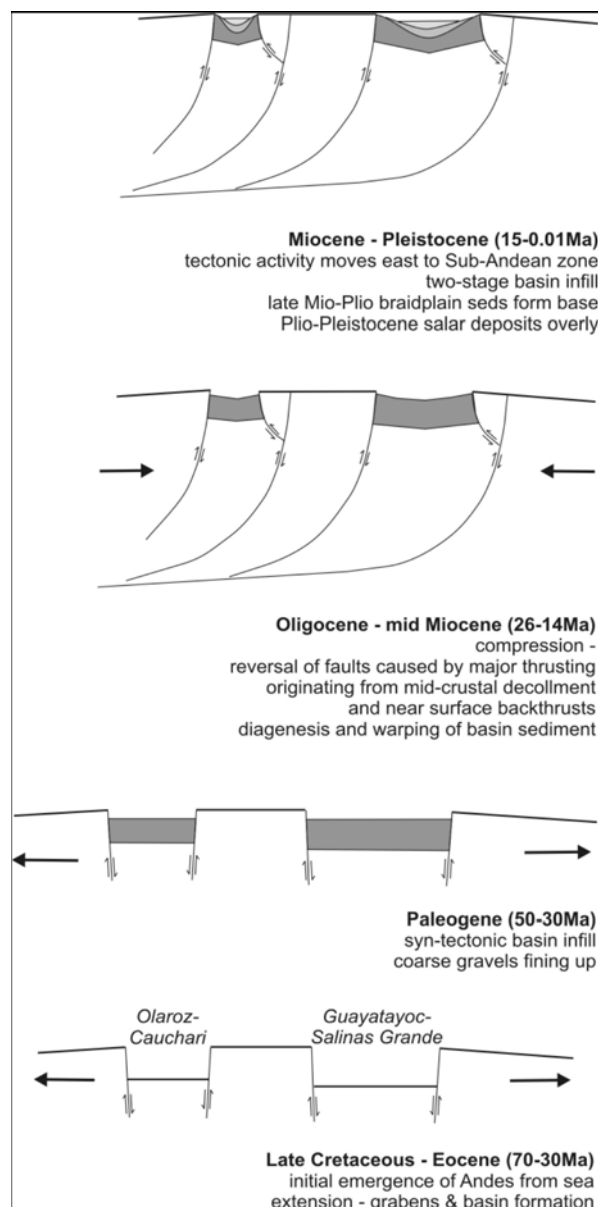


Figure 9-6: Generalized structural evolution of the Puna basins (Houston, 2010b)

9.1.3.4 Sedimentation

During the early to middle Miocene red bed sedimentation is common throughout the Puna, Altiplano and Chilean Pre-Andean Depression (Jordan & Alonso, 1987). This suggests continental sedimentation was dominant at this time. With thrust faulting, uplift and volcanism intensifying in the mid to late Miocene, sedimentary basins between the thrust sheets became isolated by the thrust bounded mountain ranges. At this stage the basins in the Puna developed internal drainages, bounded by major mountain ranges to the west and east.

Sedimentation in the basins consisted of alluvial fans forming from the uplifting ranges with progressively finer sedimentation and playa sands and mudflat sediments deposited

towards the low energy centers of the basins. Alonso et al. (1991) note there has been extensive evaporite deposition since 15 Ma, with borate deposition occurring for the past 7 to 8 Ma. Hartley et al. (2005) suggest Northern Argentina has experienced a semi-arid to arid climate since at least 150 Ma as a result of its stable location relative to the Hadley circulation (marine current). Most moisture originating in Amazonia was blocked due to Andean uplift, resulting in increased aridity in the Puna since at least 10-15 Ma.

The high evaporation level in the Puna, together with the reduced precipitation, has led to increased aridity and the deposition of evaporites in many of the Puna basins.

9.1.3.5 Pliocene-Quaternary

During the Pliocene-Pleistocene tectonic deformation took place as shortening moving east from the Puna into the Santa Barbara fault system. Coincident with this change in tectonic activity climatic fluctuation occurred, with short wetter periods alternating with drier periods. As a result of both, reduced tectonic activity in the Puna and the predominant arid conditions, reduced erosion led to reduced sediment accumulation in the isolated basins. However, both surface and groundwater inflows into the basins continued the leaching, dissolution, transportation, and concentration of minerals. Precipitation of salts and evaporites occurred in the center of basins where evaporation is the only means of water escaping from the hydrological system. Evaporite minerals (halite, gypsum) occur disseminated within clastic sequences in the salar basins and as discrete evaporite beds. In some mature salars such as the Hombre Muerto and Atacama salars thick halite sequences have formed.

9.2 LOCAL GEOLOGY

The following discussion is largely abstracted from Houston (2010). The description is generally applicable to any salar in the Puna.

Salars can be found at elevations from 1,000 m to more than 4,000 m above sea level. They typically represent the end product of a basin infill process that starts with the erosion of the surrounding relief, beginning with deposition of colluvial talus and fan gravels and grading upwards to sheet sands and playa silts and clays as the basin fills. There are numerous variations on the model and the literature provides ample discussion of the relevant tectonic and sedimentary processes involved in both general and specific terms (Hardie et al, 1978; Reading, 1996; Warren, 1999; Einsele, 2000; and specifically with regard to the Altiplano-Puna (Ericksen and Salas, 1989; Alonso et al, 1991; Chong et al., 1999; Bobst et al, 2001; Lowenstein et al., 2003; Risacher et al., 2003; Vinante and Alonso, 2006).

The Central Andes has been under a subtropical high pressure belt for at least the last 55 m.y. (Hartley et al., 2005). This climatic regime has influenced both the type of

sedimentary infill and its architecture within the basins. Basin closure is thought to have occurred frequently at about 14 Ma (Venderpoort et al., 1995), although the majority of the evaporite deposits appear to be less than 8 m.y. old (Alonso et al., 1991).

Recent evidence suggests that the Andes reached their present elevation about 6 m.y. ago (Ghosh et al., 2006) and since that time the climate has been dominated by hyperarid conditions (Hartley and Chong, 2001), allowing ample opportunity for the evaporation of the influent water. However, during the same period there have also been excursions into wetter conditions (Fritz et al., 2004, Placzek et al., 2006; Rech et al., 2010), potentially allowing salt recycling. During the course of the aquifer formation, influent groundwater and surface water have not always had the opportunity to escape from the basin, leading to the formation of temporary lakes or wetlands. Because the influent waters contained dissolved solutes as well as transported sediment load, evaporation resulted in the precipitation of salts, leading to the deposition of a wide range of evaporite deposits. Depending on the paleohydrogeological history of the basin, the deposition of evaporites may have taken place on more than one occasion, generating repeat sequences. There is a typical precipitation sequence starting with carbonate (typically calcite) as the first mineral precipitated through sulphate (typically gypsum), to chloride (halite). Of course, natural salars rarely conform to this ideal. Asymmetry, gradational and changing boundary positions due to climate change, tectonism, and sediment supply are normal.

9.2.1 Salar types

Two types of host aquifers are recognized in the Altiplano-Puna: mature halite salars and immature clastic salars (Fig. 9-7). A classification of salar types in the Altiplano-Puna is provided in Table 9-1. Immature salars may be characterized by their greater moisture regimes (higher precipitation, lower evaporation), and hence tend to be more frequent at higher elevations and toward the wetter northern and eastern parts of the region. They are characterized by an alternating sequence of fine-grained sediments and evaporitic beds of halite and/or ulexite, representing the waxing and waning of sediment supply under a variable tectonic and climatic history. The contained brines often barely reach halite saturation, suggesting that the climate during their formation was not severely hyperarid.

Table 9-1: Selected Salar Types and Brine Chemistry in the Altiplano-Puna Region

Salar	Area (km ²)	Elevation (masl)	MAP (mm)	Salar Type	Brine Type	Cl	Li	K	B
						Typical values in g/L			
Uyuni	10,000	3,653	150	Immature	Na-Cl-SO ₄	190	0.42	8.7	0.24
Atacama	2,900	2,300	25	Mature	Na-Cl-Ca/SO ₄	210	2.55	27.4	0.52
Olaroz-Cauchari	550	3,900	130	Immature	Na-Cl-SO ₄	180	0.71	5.9	1.00
Guayatayoc – Salinas Grande	2,500	3,400	180	Immature	Na-Cl-Ca/SO ₄	190	0.78	9.8	0.23
Rincon	280	3,740	63	Largely mature	Na-Cl-SO ₄	195	0.40	7.5	0.33
Arizaro	1,600	3,500	50	Immature	Na-Cl-SO ₄	190	0.08	4.0	0.12
Pocitos	435	3,660	60	Immature	Na-Cl-SO ₄	170	0.09	4.8	1.32
Antofalla	540	3,580	-	?Immature	Na-Cl-SO ₄	166	0.32	.7	10.80
Hombre Muerto W	350	3,750	77	Mature	Na-Cl-SO ₄	195	0.68	6.3	2.06
Hombre Muerto E	280	3,750	77	Immature	Na-Cl-SO ₄	140	0.78	5.9	0.62
Maricunga	90	3,700	35	Mixed	Na-Cl-Ca/SO ₄	204	1.05	5.9	0.79

MAP= Mean Annual Precipitation

Source: Houston et al. (2011)

The frequent occurrence of a thin surface halite crust in these salars may not be a good climate indicator because they are probably ephemeral and may get recycled during burial. The alternation of drier and wetter climates may lead to inertial disequilibrium between evaporation rates and the brine concentration, since an increase (decrease) in evaporation rate will take a considerable time to cause the whole brine body to increase (decrease) in concentration. The brines are normally fully saturated with respect to gypsum, leading to the widespread occurrence of gypsum (typically as selenite) throughout the sequence. Past dry climate intervals are evidenced by buried halite beds, suggesting that decreased precipitation inflow and/or increased evaporation may have led to brines saturated in halite. The presence of intercalated or underlying beds of different permeability sometimes allows the transmission of fresher waters from outside the salar margins through to the center, where there is a tendency for the density differential with the nucleus brine to augment upward flow of the brine, providing that the confining bed has sufficient permeability to allow such leakage.

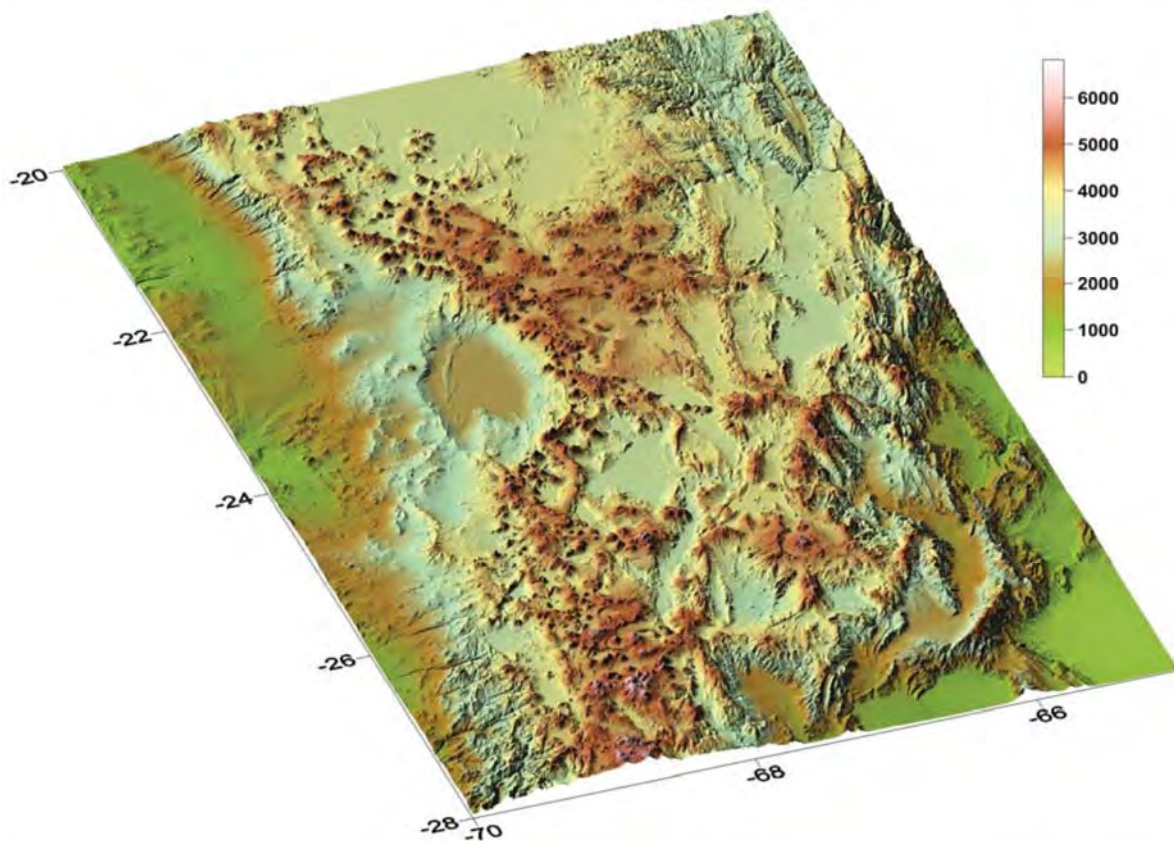
Mature salars have a lower moisture flux, and thus tend to be more common in the lower and drier parts of the region. They are characterized by a relatively uniform and thick sequence of halite deposited under varying subaqueous to subaerial conditions (Bobst et al., 2001). Nevertheless, ancient floods leading to widespread silt/clay deposits and volcanic fallout have led to thin intercalated beds that can be recognized in cores and geophysical logs. Such layers of varying permeability may lead to the formation of alternating aquifers and aquicludes that pinch out around the margins of the nucleus.

Fresh groundwater in the higher-permeability layers may be transmitted from outside the salar margins to the edge of the nucleus where, once unconfined, it flows to the surface as a result of the pressure differential with the nucleus brine. The pressure differential is composed of two elements: the imposed head and the density difference. Fresher waters

flowing to the surface dissolve halite in their ascent and lead to the formation of pipes and salt dolines at the surface, especially in the marginal zones. The contained brines are invariably halite saturated throughout the brine body, although the presence of multiple brine types, especially in the larger salars, points to the hydrochemical variation of the contributing source waters.

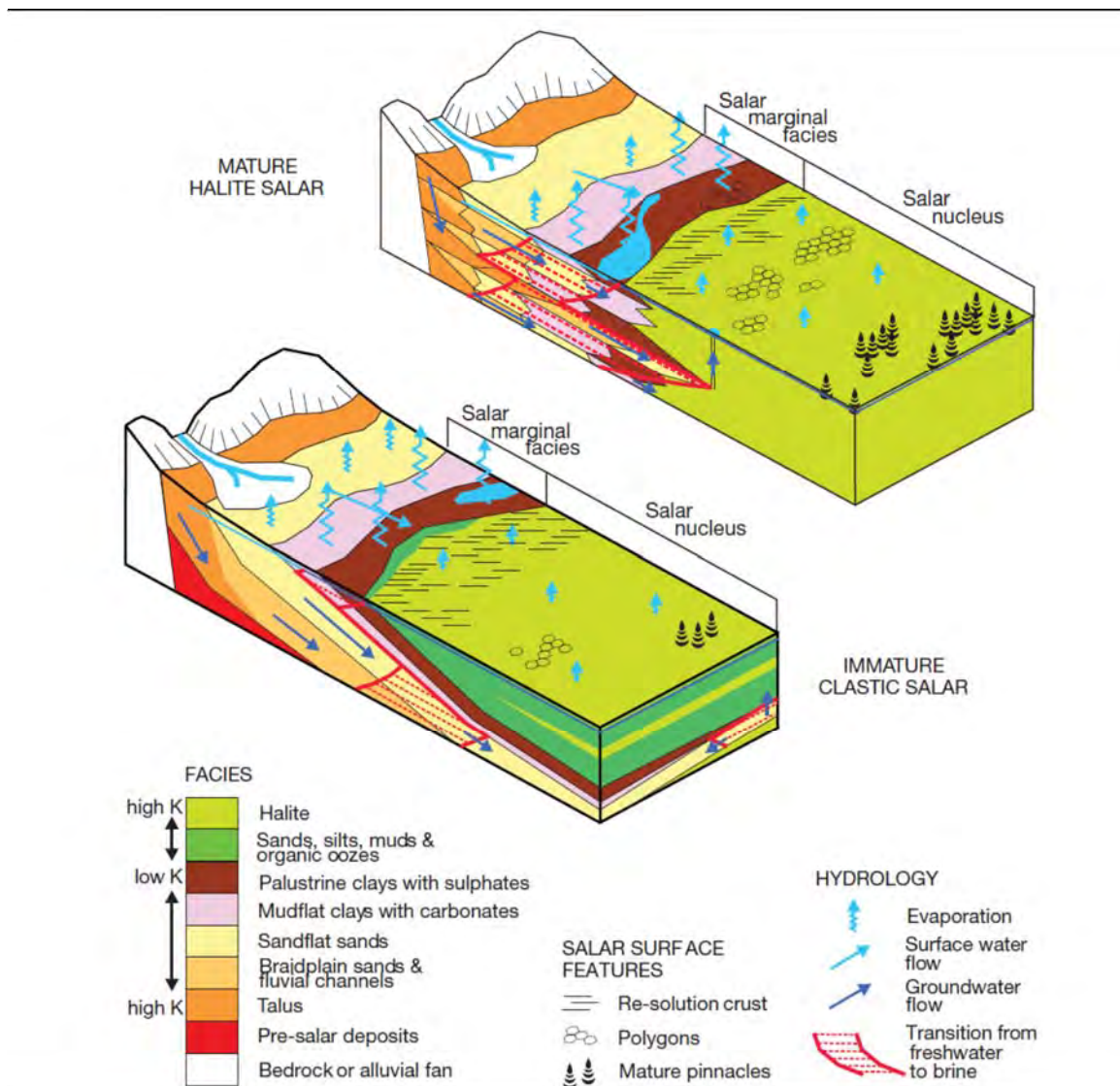
The distinction between salar types is maintained even within the same basin, as at Hombre Muerto, where a mature sub-basin exists to the west as a result of moderately evolved brines decanting from the immature eastern sub-basin over a subsurface bedrock barrier. Both types of salar may contain commercially valuable brine resources, and while it might be anticipated that mature salars contain more concentrated solutions, this is not always the case. Elements such as Li, K, and B may reach very high levels in immature salars (Table 9-1), and, of course, clastic deposits possess considerably higher porosities than halite.

The pattern and distribution of crustal types may allow the identification of salar type in the field and on satellite imagery. Both types display the same range of features, from high-reflectance re-solution crust, through salt polygons, to low-reflectance pinnacle halite, representing a progression from younger (<1 yr) to older (>10 yr) formation. However, immature salars tend to have a much larger proportion of their surface represented by re-solution crust and relatively small areas of pinnacle halite.



Source: Houston et al, 2011

Figure 9-7: Digital elevation model (SRTM-90) of the Central Andes, and the location of selected lithium-rich salars in closed-basin depressions.



Source: Houston et al (2011)

Figure 9-8: Salar Types, Facies Evolution & Hydrological Components

In the mature model, extension and recession of the marginal facies as a result of tectonism and climatic variation lead to the possibility of dilute waters being transferred to the nucleus. In the immature model, while the marginal conditions have been simplified for clarity, the transmission of dilute waters into the nucleus is also possible. K refers to the hydraulic conductivity of the different units.

9.3 PROPERTY GEOLOGY

Descriptions of the geology of the Properties which are the subject of this Technical Report are provided in the following sections.

9.3.1 Salar Rio Grande

The regional geology of salar Rio Grande is comprised of Carboniferous intrusives (granites and granodiorites) covered by Tertiary sediments or volcanic flows. The intrusive formations include the Taca-taca, Arita, Chucuaqui, Llullaillaco and la Casulidad Formations.

The Tertiary is represented by undifferentiated sediments of continental origin composed of the Pastos Grandes and Chaco Groups, and the Pena Colorado and Cerro Morado formations and consists of sandstone, siltstones (some with gypsum) and interbedded dacitic to rhyolitic volcanic rocks.

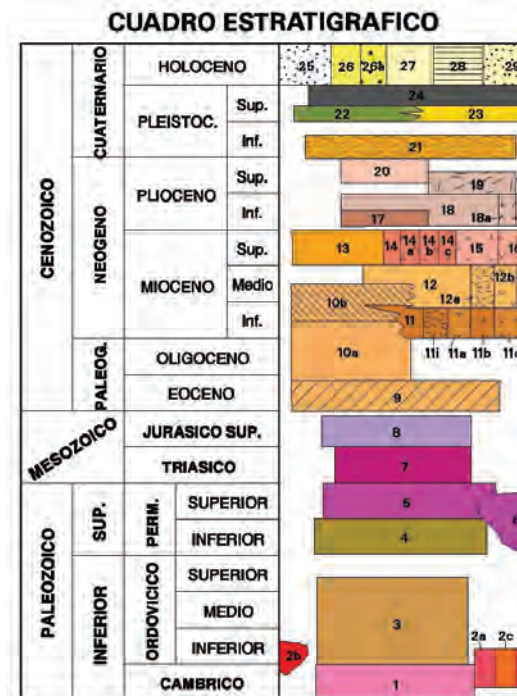
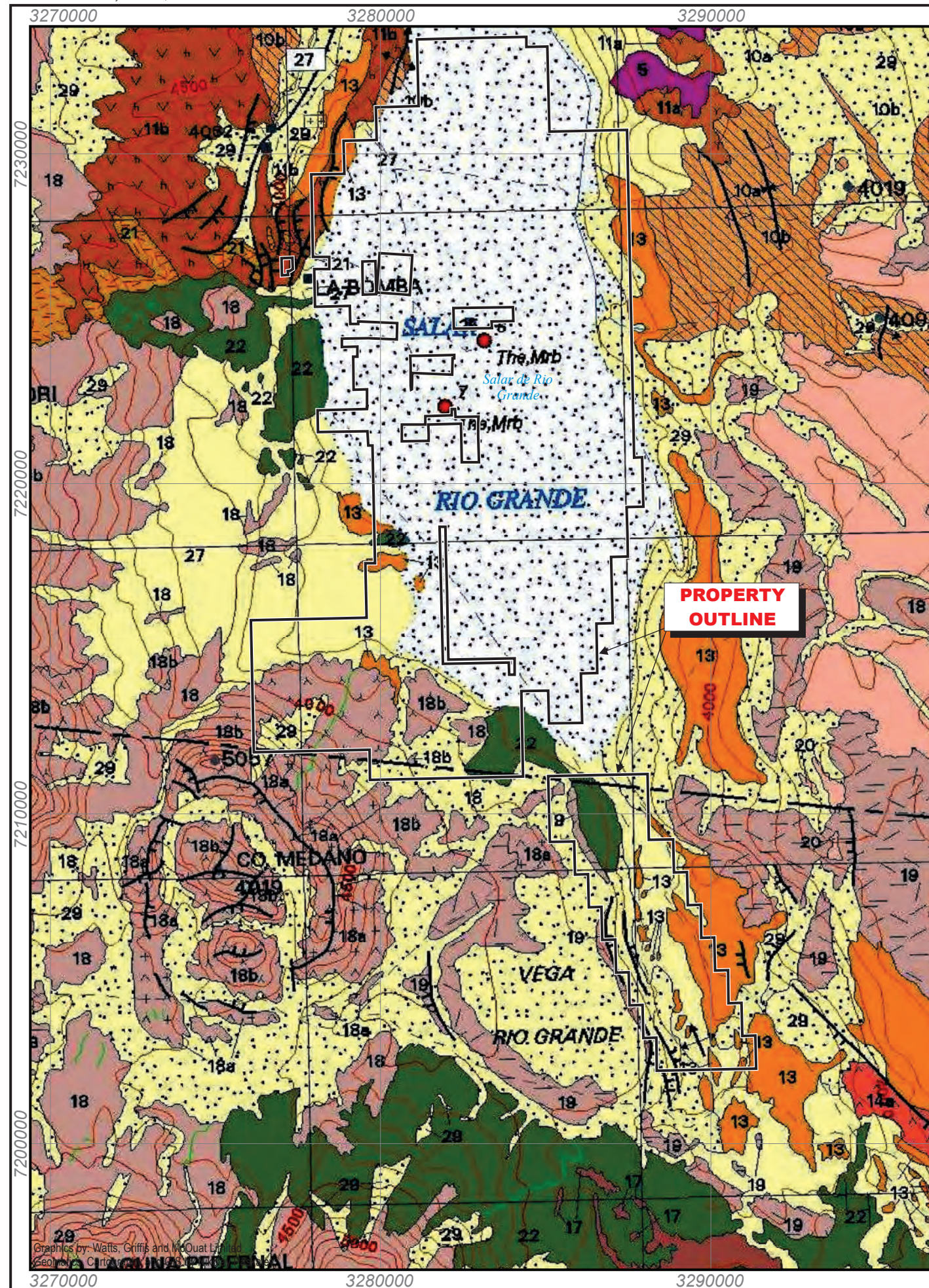
The Tertiary-Quaternary is made up of thick units of andesites, tuffs and ignimbrites that cover extensive areas.

The Quaternary is represented by phaneritic basalts of limited extent but forming important outcrops along the eastern side of the salar. Partial to unconsolidated, poorly sorted and variable granulometry detritic sediments make up the recent alluvial fans, moraines, wind blown and lake deposits.

The regional and local geology for salar Rio Grande is illustrated in Figure 9-9.

9.3.1.1 Geomorphology

The saline crust occupies the central part of the salar and runs in a general north-south direction. The central evaporite zone is approximately 9 km wide in an east-west direction and 8 km long in a north-south direction. The phreatic level in the central part is found at a depth from 0.4 m to 1 m. The surface deposits in the central portion of the salar average approximately 22% sodium sulphate decahydrate and the brine at the phreatic level is typically about 10% sodium sulphate.



- 29 DEPÓSITOS COLUVIALES. Depósitos de limo, arena y conglomerados con poco transporte, no consolidados, que se disponen en las faldas de los cerros y en planicies pedemontanas.
- 28 DEPÓSITOS LACUSTRES. Depósitos de limo y arcillas inconsolidados formados en las partes distales de abanicos aluviales o en superficies endocadas entre los mismos.
- 27 DEPÓSITOS ALUVIALES NUEVOS. Depósitos no consolidados de limo, arena y gravas, asociados a abanicos aluviales, cauces y rellenos de valles y quebradas actuales.
- 26 DEPÓSITOS ATERRAZADOS VIEJOS. 26a: DEPÓSITOS ATERRAZADOS CON TRAVERTINOS. Conglomerados muy gruesos, polimíticos, medianamente consolidados. En los alrededores de Arta está cementados por carbonatos y travertinos.
- 25 DEPÓSITOS EVAPORITICOS. Depósitos salinos de cloruros y en menor proporción sulfatos y boratos.
- 24 IGNI MBRITA VITROFÍDICA. Manto de roca muy vítrea de color gris oscuro asociada a un conjunto de cráteres de tamaños variados con domos en su interior.
- 23 DOMOS RIÓLÍTICOS. Domos y lavados rióliticos a riódacíticos de colores gris amarillentos. Al noroeste del volcán Antofalla, se encuentra parcialmente fertilizado.
- 22 BASALTOS DEL PLEISTOCENO. Basaltos olivíneos con xenolitos de cuarzo y plagioclasas dispuestos en coladas de poca extensión areal emitidas a partir de aparatos monogénicos y domos fissurales.
- 21 IGNI MBRITA CALETONES. Ignimbritas de colores de pátinas roscadas y griseas en roca fresca. Presentan abundantes pómez ricas en fenocristales bien desarrollados y etruales de cuarzo, plagioclasas, piroxenos, biotitas y anfíboles verdes.
- 20 VULCANITAS DEL PLEOCENO SUPERIOR. Lavas y domos de composición andesítica a dacítica con piroxenos, biotitas y hornblendas. Forman parte de apantos volcánicos poco erosionados.
- 19 IGNI MBRITA CABALLO MUERTO. Ignimbritas masivas, muy pumiceas con espesa mola y abundantes fragmentos líticos de lavas dacíticas muy porfíricas, areniscas rojas y granitos. Presenta niveles de surcos con estructuras internas entrecruzadas en la base.
- 18 VULCANITAS DEL PLEOCENO INFERIOR. Basaltos, andesitas y dacitas asociados a estratovolcanos y calderas de colapsos. 18a: Riódacitas; 18b: Dacitas.
- 17 IGNI MBRITA LOS PATOS. Ignimbrita riódacítica de coloración rosada. Contiene abundantes fenocristales de cuarzo, plagioclasas y biotitas etruales, fragmentos líticos, pómez blanquecinas colapsadas y fiemmes.
- 16 IGNI MBRITA LOS COLORADOS. Ignimbritas dacíticas de coloración gris clara con pátinas de tonalidad amarillenta. Presentan un elevado contenido de pómez colapsadas junto a proporciones menores de fiemmes.
- 15 IGNI MBRITA ANTOFALLA. Ignimbrita dacítica roja masiva poco solidada con abundantes pómez y fragmentos líticos.
- 14 VULCANITAS DEL MIOCENO SUPERIOR INDEFERENCIADO. Estrato volcánicos, domos y conos de escorias poco erosionados integrados por dacitas porfíricas, andesitas y basaltos andesíticos de olivino y piroxenos. Forman parte de grandes estratovolcanos como el Tebenquicho y el volcán Antofalla. 14a: Andesitas; 14b: Basaltos; 14c: Dacitas.
- 13 FORMACIÓN SUES. Facies proximales: areniscas finas a medianas, areniscas conglomerádicas medianas a gruesas y conglomerados medianos con intercalaciones de bancos piroclásticos. Facies distales: bancos evaporíticos y cuerpos salinos.
- 12 VULCANITAS DEL MIOCENO MEDIO AL MIOCENO SUPERIOR. Lavas dacíticas y andesíticas compuestas por fenocristales de cuarzo, plagioclasas, anfíboles y biotitas e ignimbritas dacíticas con abundantes fragmentos líticos. 12a: Ignimbritas; 12b: Dacitas.
- 11 VULCANITAS DEL MIOCENO INFERIOR. Estratovolcanos profundamente erosionados, lavas porfíricas, cuelllos y diques, con participación de tobas, aglomerados, ignimbritas y pórdocas dacíticas. Se incluye en esta unidad basaltos olivíneos del cerro León Muerto al oeste del cerro Plegado. 11a: Complejo Santa Inés, Cori y Caví; 11b: Facies ignimbritas. 11c: Complejo Quebrada del Agua; 11d: Vulcanitas del cerro León Muerto.
- 10 FORMACIÓN VIZCACHERA. 10a: Miembro Inferior. Areniscas conglomerádicas y conglomerados finos a medianos de colores rojizos a griseos dispuestos en estratificación mediana. Se destaca la participación de piroclastos que aumenta hacia el techo de la secuencia. 10b: Miembro Superior. Pelillas, areniscas y conglomerados rojos con intercalaciones de yeso. Las pelillas presentan rasgos de bioturbaciones y grietas de desecación. Los bancos arenosos tienen base erosiva y ondulaciones asimétricas de conchas.
- 9 FORMACIÓN GESTE. Conglomerados arenosos y escasos niveles de pelillas de color rojo medianamente estratificados.
- 8 SEDIMENTITAS Y VULCANITAS JURÁSICAS. Areniscas eólicas con estructuras internas entrecruzadas de muy alto ángulo. Apoya areniscas, calizas y margas dispuestas en estratificación tabular fina. Intercalan lavas basálticas.
- 7 INTRUSIVOS INTERMEDIOS TRIÁSICOS. Rocas máficas de coloración verde, dispuestas en forma de diques que intruyen las sedimentitas pérmicas.
- 6 GRANITO LEÓN MUERTO. Granito porfídico de color pardo anaranjado con abundantes fenocristales de feldespatos alcalinos, cuarzos, plagioclasas y anfíboles.
- 5 FORMACIÓN LA TABLA. Pórdocas, brechas y lavas de composición dacítica con abundante contenido de fenocristales de plagioclasas, anfíboles y biotitas y matriz vítrea intrudida por diques dacíticos a andesíticos de grano fino.
- 4 FORMACIÓN PATAGIA DE LA CUESTA. Secuencia granodiorítica de conglomerados y areniscas pardo rojizas oscuras medianamente estratificadas con estructuras internas entrecruzadas de bajo ángulo.
- 3 COMPLEJO SEDIMENTARIO VOLCÁNICO CORTADERA CHICA. Areniscas cuarzosas, gruesas y pelillas con intercalaciones de calizas y lavas andesíticas verdes e intrusivos ácidos a básicos. El conjunto presenta olivajo de plano axial y metamorfismo de bajo grado.
- 2a GRANITO ARCHIBARCA.
- 2b GRANITO ANTOFALLA.
- 2c GRANITO CAMPO NEGRO.
- 2d GRANITO CERRO PLEGADO. Granitos y granodioritas de textura equigranular intrudidas por venas y diques de apatitas y pognatitas.
- 1 METAMORFITAS DE MEDIANO ALTO GRADO. Esquistos micáceos, orogneises y anfíbolitas con olivajo de plano axial y ondulaciones.

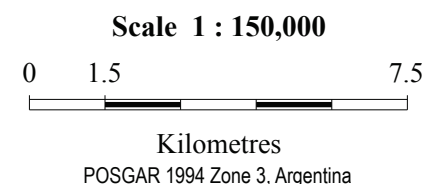


Figure 9-9.

LSC LITHIUM INC.

Lithium Project

Northern Argentina

Rio Grande Salar

Property Geology Map

The surface of the salar is composed of an approximate 0.25 m thick hard, white, sodium chloride-rich salt crust. Underlying the crust to a depth of 0.75m (0.5 m thick) is a generally greyish brown to off-white coloured, dry powdery horizon containing 20% to 30% halite. Thereafter, through to the sodium chloride content decreases to within the general range of 5% to 8% NaCl at the phreatic level. The insoluble material is composed mainly of clay, silt and sand, cemented by gypsum and sodium sulphate bearing salt minerals. The insoluble detrital material is carried into the salar, both by snow melt waters and by wind-blown material.

Figure 9-10 illustrates the geomorphology of the salar.

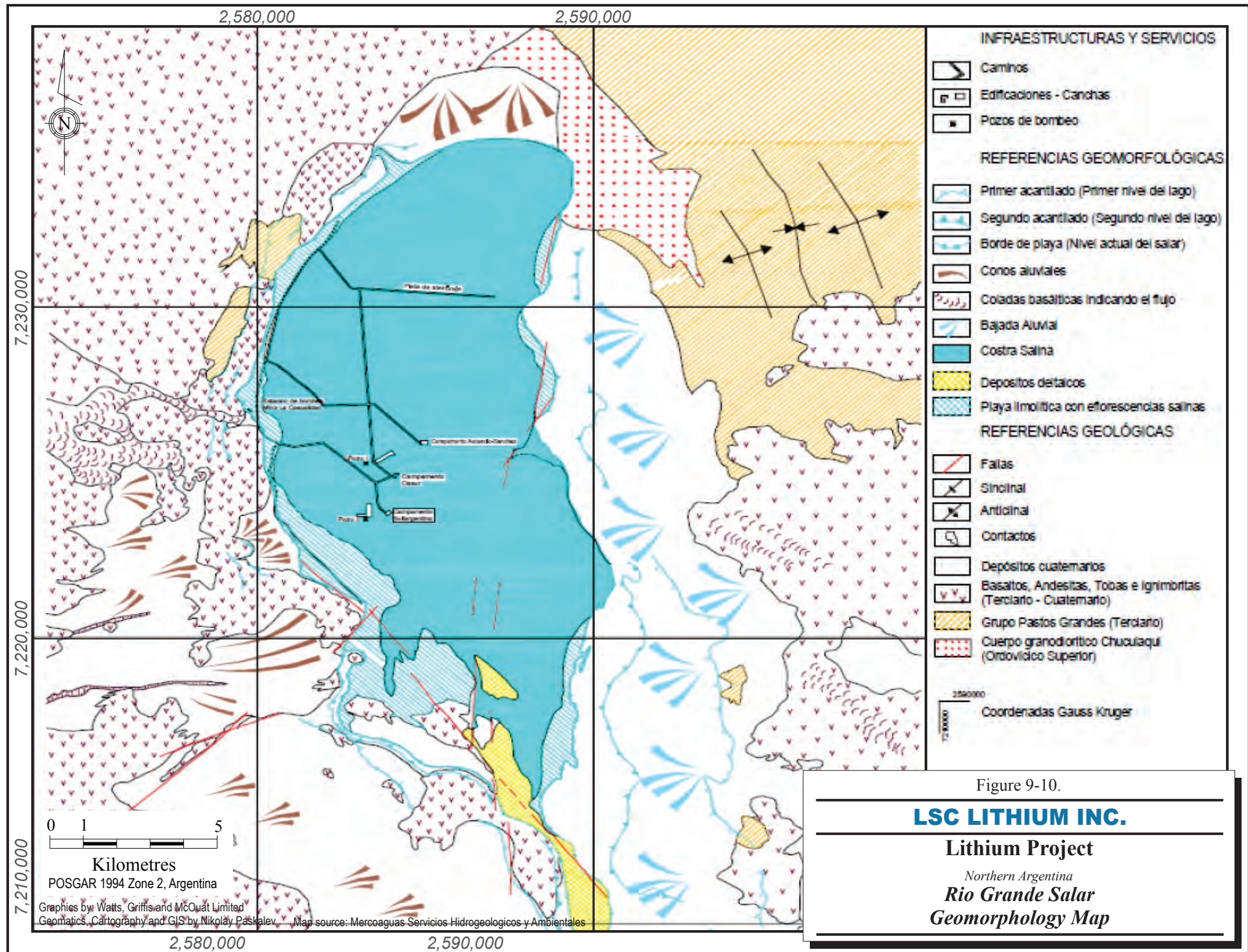


Figure 9-10.

LSC LITHIUM INC.

Lithium Project

Northern Argentina

Rio Grande Salar

Geomorphology Map

9.3.2 Salar Pastos Grandes

Salar Pastos Grandes is a triangular shaped basin with a surface area of approximately 25 km². The Pastos Grandes drainage basin occupies an area of about 1600 km². Drainage is predominately from the eastern and northern slopes of the Nevado de Palermo and Cerro Pastos Grandes. On the eastern side, the main stream is rio Ochaqui, which is fed by snowmelt from the Nevado de Palermo. This stream drains into the salar and also receives water from rio Sijes. A small delta has been built up at the outflow of rio Olchqui to the salar. To the north, the main water contributions are from rio Pastos Grandes and rio Aguas Calientes. Both of these streams are permanent, but stream flow from rio Pastos Grandes is greater. Combined, the streams have built up an extensive alluvial fan that enters the salar near Pastos Grandes lagoon, which is moderately saline. Along with the streams, there are a number of thermal springs feeding the salar and the combined input results in a near surface water table which inundates broad sectors of the salar during the wet season.

In the Pastos Grandes region several parallel north-south structures intercept the Calama-Olacapato-el Toro lineament carrying Upper Miocene-Oligocene acidic-intermediate volcanism and development of large NW to SE trending volcanic structures such as Cerros del Rincon-Tultul-Del Medio-Pocitos-El Queva- El Azufre and the Acay systems. Large ignimbrite fields, major caldera nests, surge pyroclastic fields, as well as hot spring systems have contributed to the flowing of calcium-magnesium and sodium-potassium-lithium and boron anomalous solutions that have concentrated in the basins over time and spaced at different levels and positions of the lagunas and salars from early Tertiary times.

9.3.2.1 Regional and Local Geology – Salar Pastos Grandes

The geology of the Pastos Grandes (Figure 9-11) area is comprised of Precambrian meta-sedimentary units consisting of slates and phyllite rocks of the Puncoviscana Formation and Lower Ordovician turbidites built of shales and sandstone of the Caucota and Copalayo Formations, both intruded by Late Ordovician granitoids (Complejo Eruptivo Oire and the Faja Eruptiva de la Puna, of dacitic porphyries, granites and granodiorites) and a Tertiary continental sedimentary cover (Pastos Grandes Group/Geste, Pozuelos, Sijes, Singuel Formations consisting of red-beds, tuffs, halite, borates, gypsum, upper Miocene volcanics built up of dacitic lava flows and subvolcanic intrusions (Aguas Calientes Formation), Miocene dacitic tuffs and ignimbrites of the Tajamar Formation, and Quaternary sediments covering the lower part of the salar basins and slope deposits, eolian sandstones (Jordan and Alonso, 1987).

The salar Pastos Grandes is the current expression of a larger sedimentary basin, known as the Sijes Basin, developed and deposited from the Miocene (7 - 5 Ma). The Sijes formation is represented by sandstone silt, clay, tuff and evaporite such as halite, gypsum, borate and travertine. It exhibits a thickness over 400 metres. This unit is a potential aquifer and can host brine rich in lithium. Above that, the Singuel Formation (4 - 3 Ma) has been deposited.

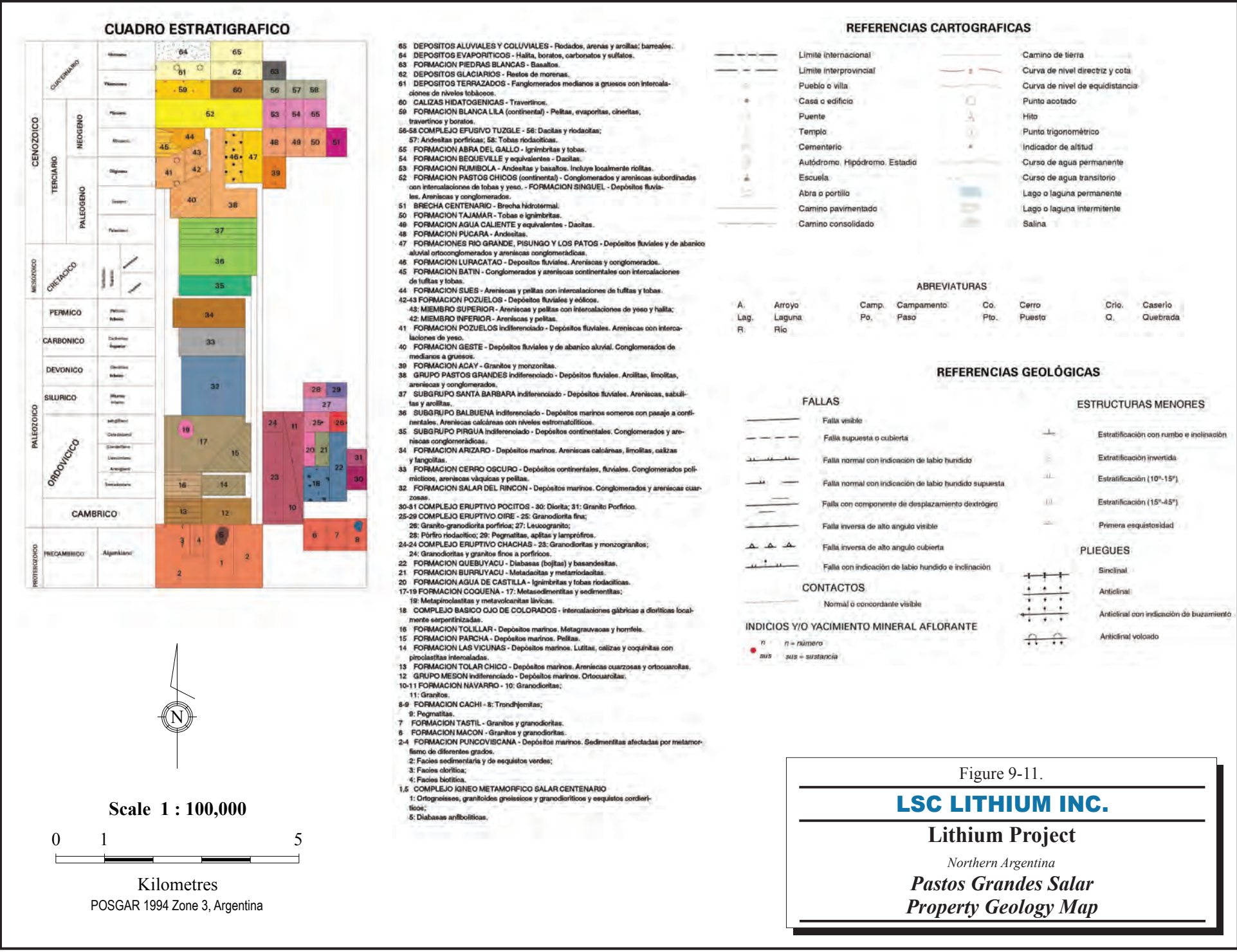
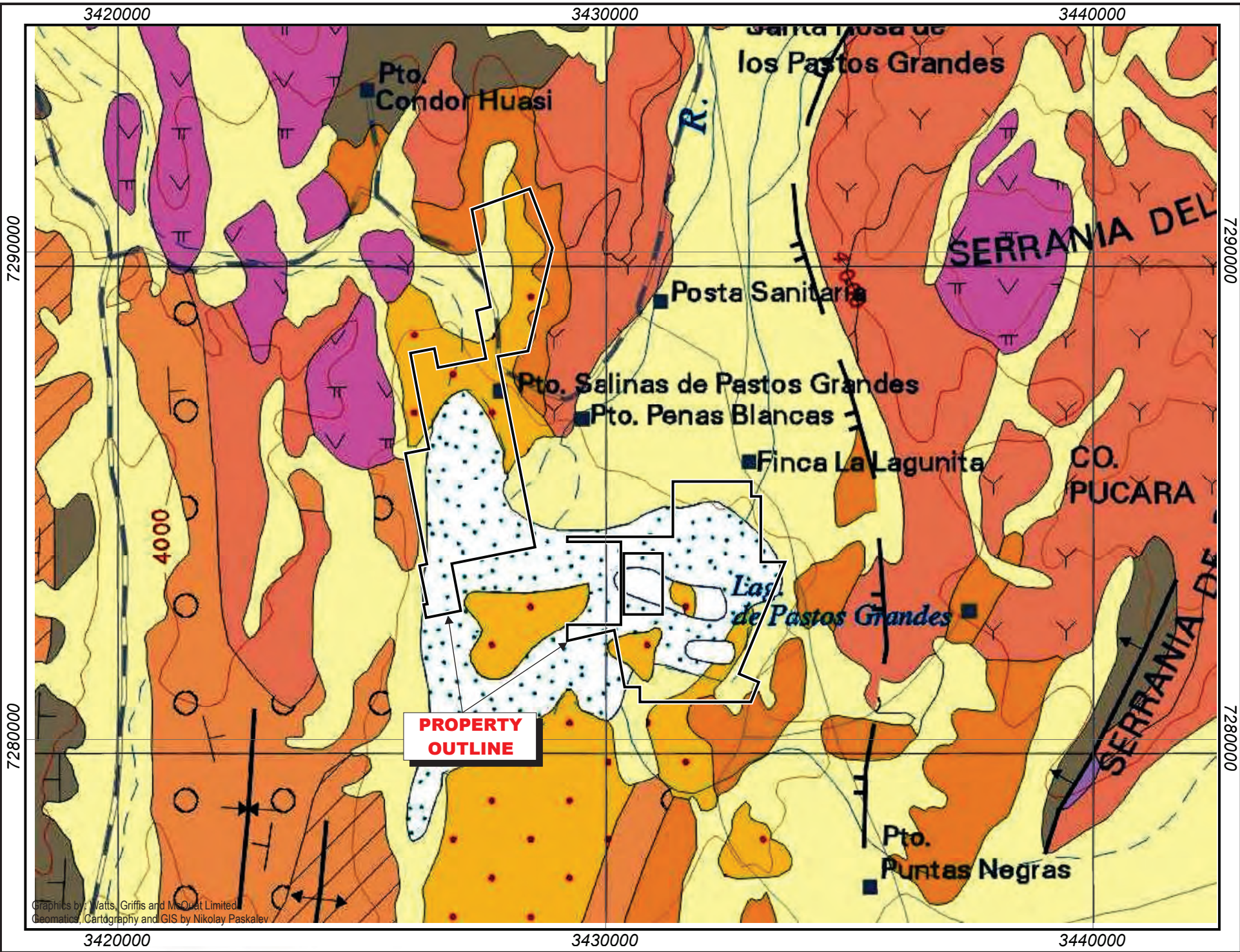
It is composed of clastic and volcanic material and crops out to the southeast of the Pastos Grandes salar. Both geological units (Sijes and Singuel formations) are folded and faulted along a NNE-SSW trending homoclinal structure, with the oldest rocks to the west and dipping east with minor locally folding (Figure 9-11).

The Blanca Lila Formation (age: <2Ma) crops out as patches within and outside the present salar outline, occupying an area of 17 km north-south by 8.5 km in an east -west direction. This unit consists of sub-horizontal terraces of clastic material (sand, silt and clay) and evaporites (halite and minor borate). Its known thickness is over 50 metres (Menegatti and Alonso, 1990; Alonso 1999; Alonso and Jordán, 1999). The Blanca Lila Formation represents an ancient salar with more extension than the recent salar and is a potential aquifer that may host lithium-rich brine.

The bedding is horizontal and covers the pre-existing formations. Geological features indicate erosion - dissolution of older rocks and subsidence of the central part of the salar. The sediments host lithium enriched brine, as demonstrated by Eramine Sudamerica S.A during their 2011 - 2012 campaign.

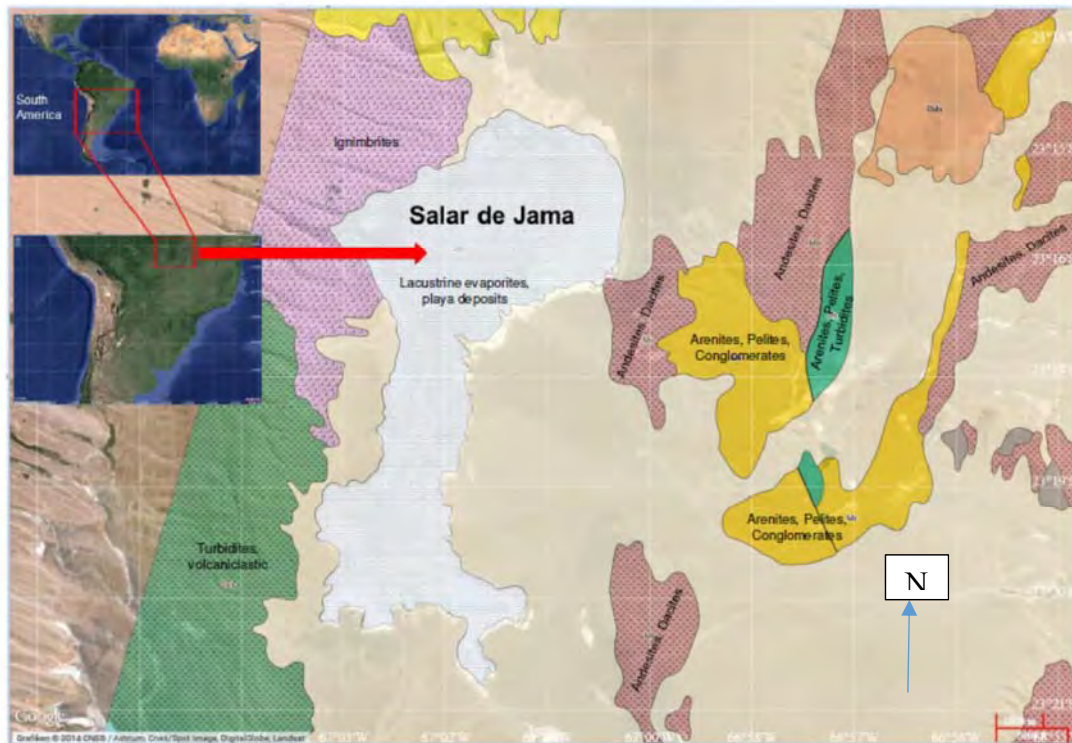
The salar Pastos Grandes is filled by clastic unconsolidated sediments (clay, sand and silt), organic material and fine-grained sediments. Evaporites are represented by halite, gypsum and ulexite. The age of these sediments is Late Quaternary to Recent and the thickness is unknown.

There are several rocky islets and lagoons within the salar. Salar de Pastos Grandes was previously connected to salar de Pozuelos by a paleochannel. This channel was broken approximately 1.5 Ma by the reverse fault on the east side of Pozuelos, which resulted in infilling of the Pozuelos basin due to the uplift of salar de Pastos Grandes by approximately 200 m above Pozuelos. The islets in the salar are the remnants of this major tectonic movement.



9.3.3 Salar Jama

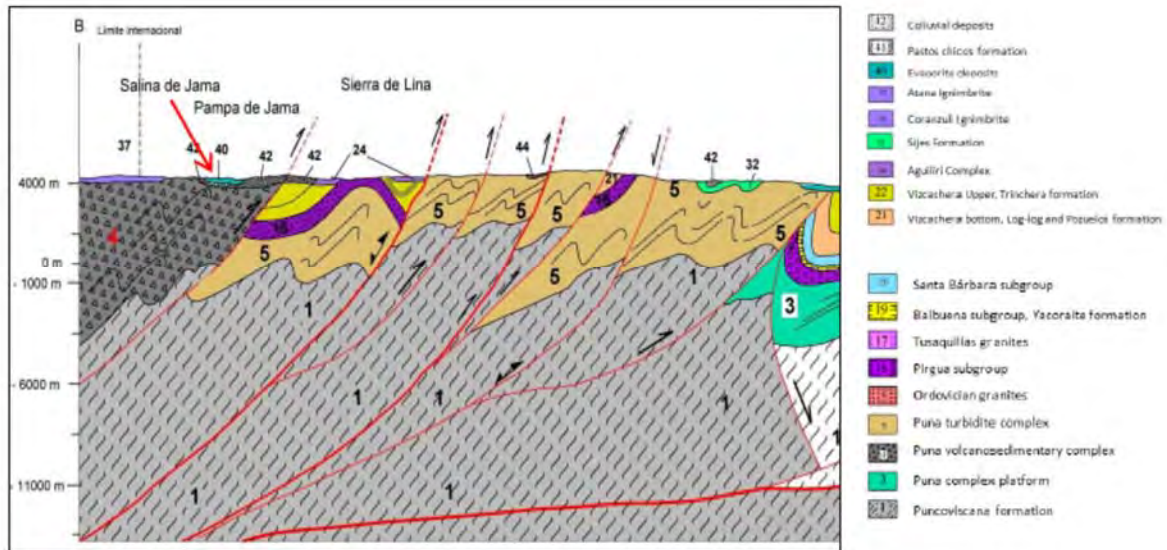
Salar Jama is a borate-sulphate salar typical of salars in the more northerly part of the Puna. The area surrounding the salar is characterized by Ordovician (volcanoclastics and turbidites) and Pliocene deposits (ignimbrites) on the west and deposits of Miocene age (andesites, dacites, clastic sediments (arenites, pelites and conglomerates) and Ordovician age arenites, pelites and turbidites in the east. The salar surface itself is characterized by lacustrine, evaporitic playa deposits (Figure 9-12).



Source: K-UTEC, 2015

Figure 9-12: Regional Geology – Salar Jama

The structural geology of the region is illustrated in Figure 9-13. It shows a number of west dipping thrust faults building to a fold and thrust belt. The available geophysical data indicate the basin for salar Jama is up to 400 m deep (Segemar, Map 3B, Puna Area).



Salar Jama indicated by red arrow

Source: K-UTEC, 2015

Figure 9-13: Geological Cross Section from Chilean Border to ca. 40 km East.

The local geology of the salar and the relationship to the Salar Jama Tenements is illustrated in Figure 9-14.

The surficial geology of the salar exhibits a typical evaporite sequence of mixed clays/silt and salts to the phreatic zone. Shallow drilling shows the following profile (K-Utec, 2015):

- Mud-saline surface crust on top of the salar
- ~ 30 cm gypsum-sand
- ~ 4 cm ulexite
- ~ 40 cm thick layer of green clay with Glaubers salt/sodium sulphate
- Dark plastic clay layer with organic materia

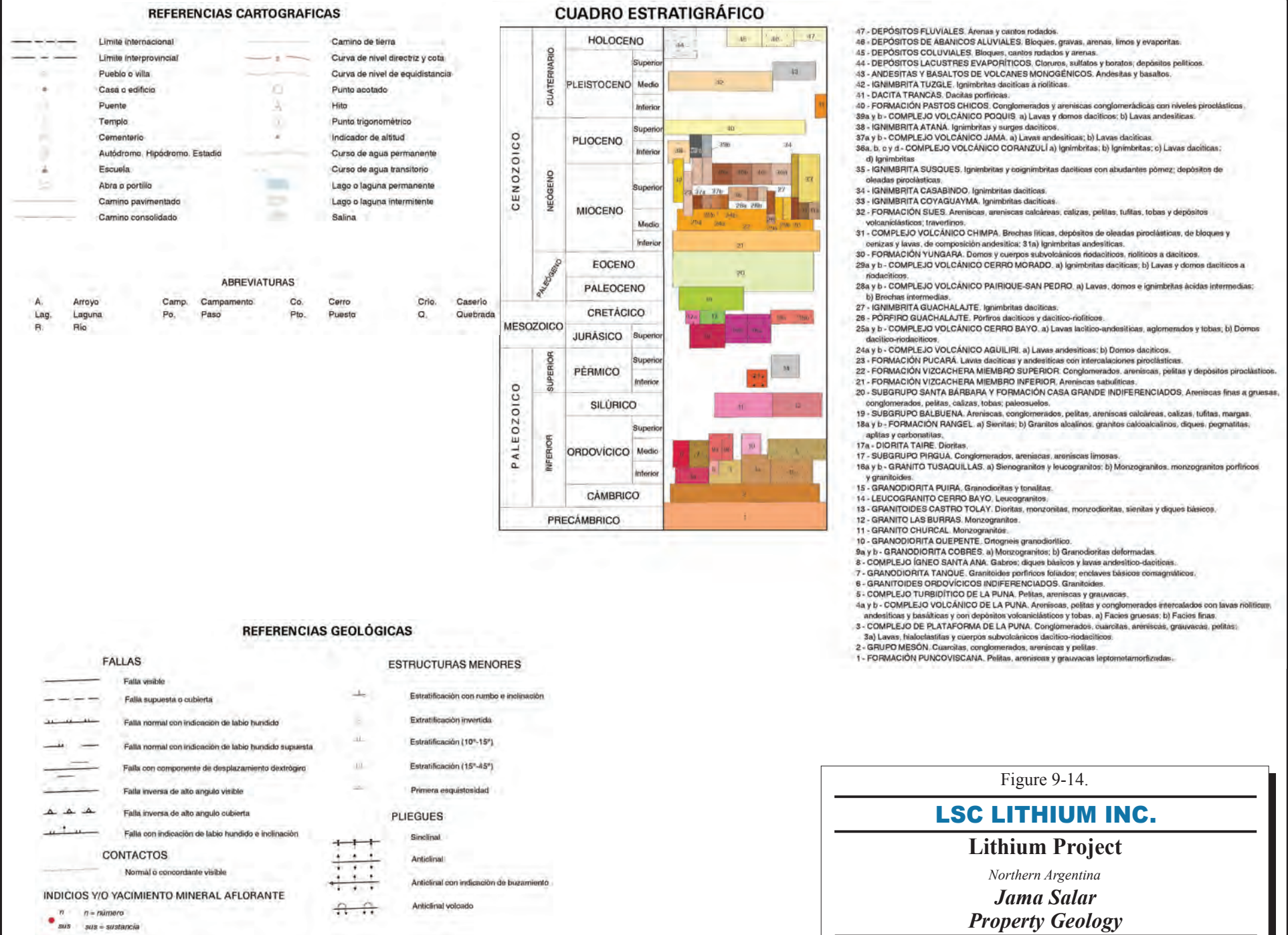
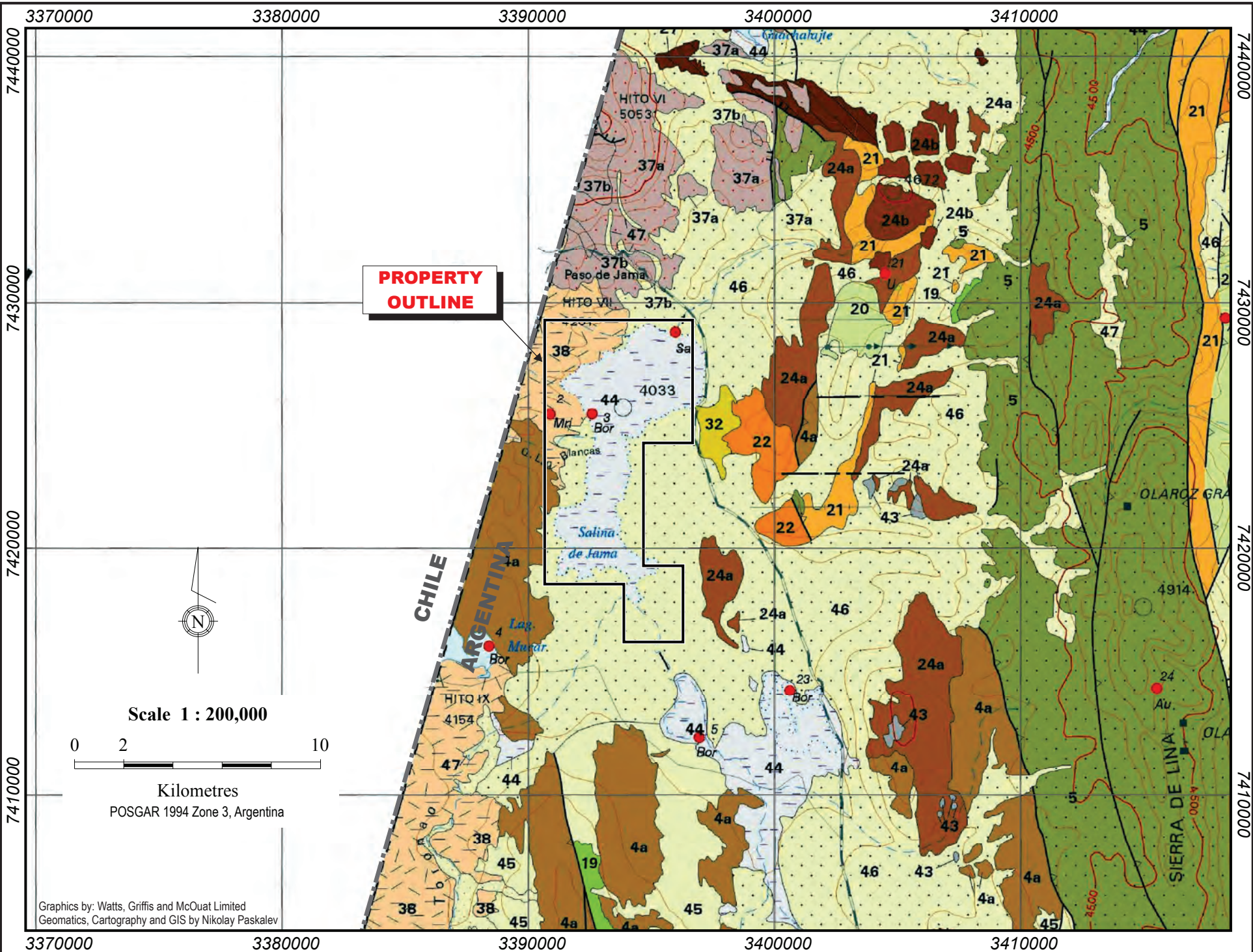


Figure 9-14.

LSC LITHIUM INC.

Lithium Project

Northern Argentina

Jama Salar

Property Geology

9.3.4 Salar Salinas Grandes

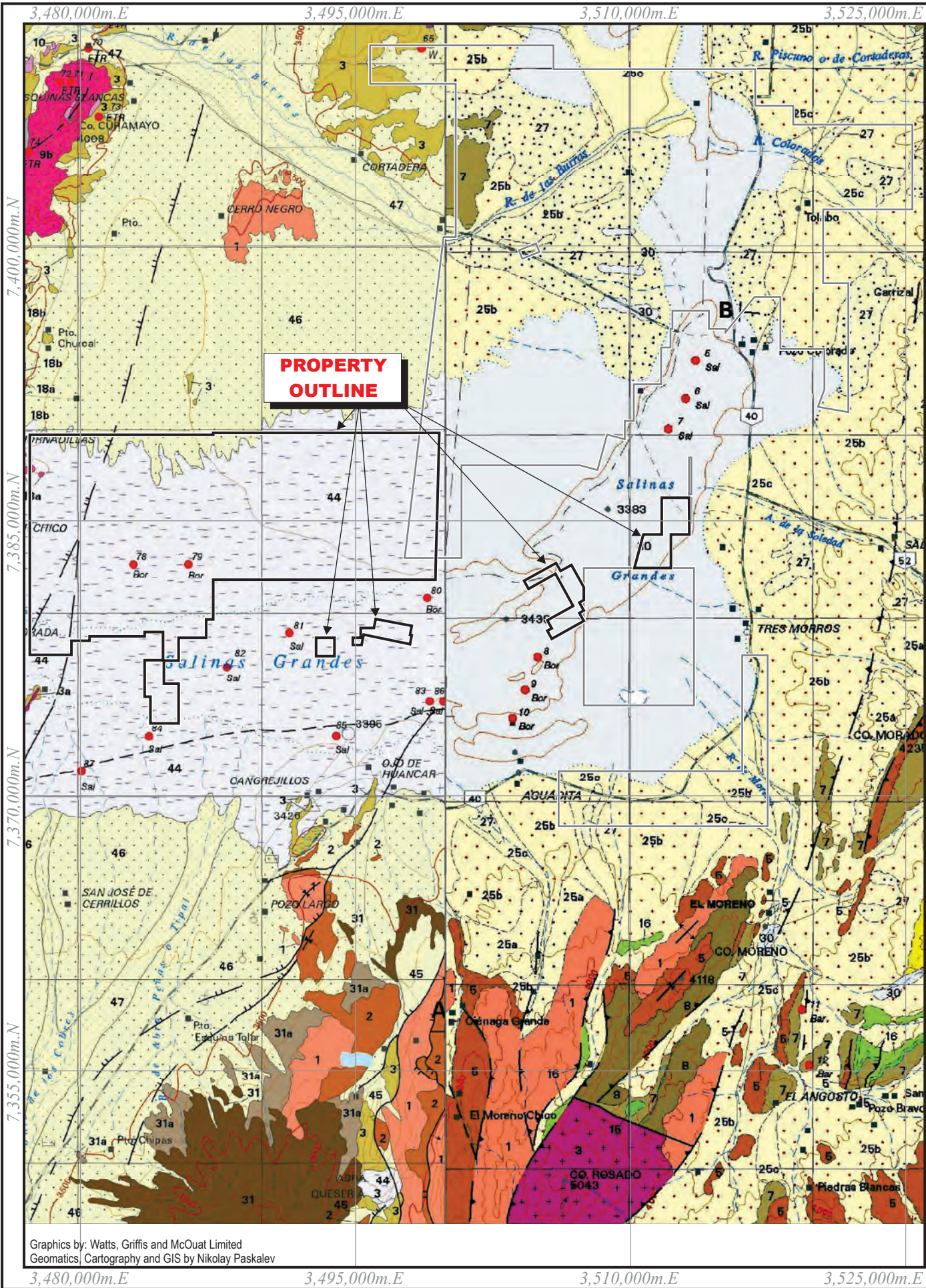
A description of the geology of the Salinas Grandes area is provided below. The description is largely abstracted from reports by Houston (2010) and Brooker and Ehren (2011).

Salinas Grandes is unusual in the Puna area in that it is aligned approximately east-west, whereas other salars, including laguna Guayatayoc, to which salar Salinas Grandes is hydraulically connected, are typically aligned north-south. This orientation suggests complex structural controls on development of the Salinas Grandes/Guayatayoc basin. The available evidence suggests that both Salinas Grandes and Guayatayoc are young clastic basins, with limited deposition of evaporite units.

Key physiographic observations regarding the Salinas Grandes/Guayatayoc basins include:

- The connection with the N-S aligned Guayatayoc Salar to the northeast, through which the River Miraflores flows before draining into salar Salinas Grandes.
- A large delta in the southwest of the Salinas Grandes salar, where the River San Antonio enters the salar basin, from the valley that extends west-southwest to the town of San Antonio de los Cobres. What are interpreted as permanent zones of seepage/springs are noted in the east of the delta, where the delta sediments are in contact with outcrops of Pre-Cambrian to Ordovician rocks which are interpreted to underlie the southern margin of the salar.
- The presence of an enormous alluvial fan in the north of the salar, immediately south of the Rio Las Burras, which enters salar Salinas Grandes where it joins with Laguna de Guayatayoc.
- Smaller alluvial fans in the southeast of salar Salinas Grandes.

Figure 9-15 shows the local geology in the Salinas Grandes area. The major stratigraphic units, their age and lithological relationships are shown in the accompanying stratigraphic column, Figure 9-16, which outlines correlations between units across the published geological maps that cover the project area.



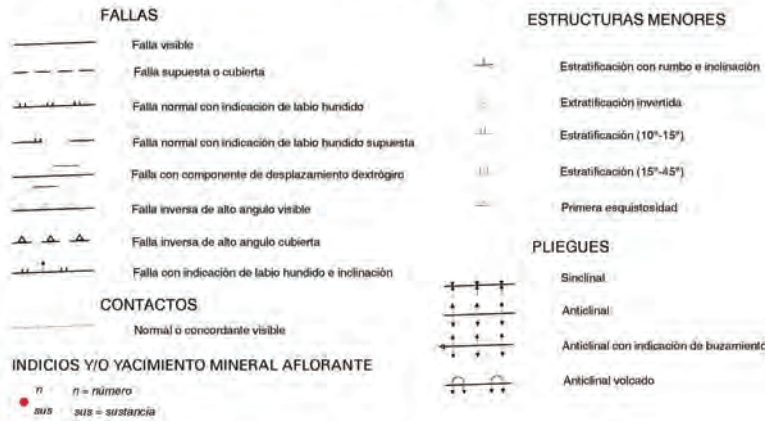
Graphics by: Watts, Griffis and McQuat Limited
Geomatics, Cartography and GIS by Nikolay Paskalev

CUADRO ESTRATIGRÁFICO

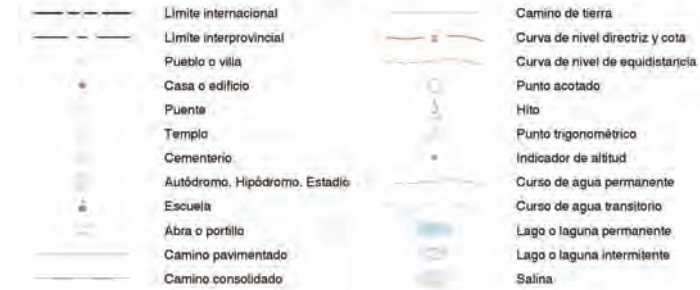


- 47 - DEPÓSITOS FLUVIALES. Arenas y cantos rodados.
48 - DEPÓSITOS DE ABANICOS ALUVIALES. Bloques, gravas, arenas, limos y evaporitas.
45 - DEPÓSITOS COLUVIALES. Bloques, cantos rodados y arenas.
44 - DEPÓSITOS LACUSTRES EVAPORÍTICOS. Cloruros, sulfatos y boratos; depósitos pelíticos.
43 - ANDESITAS Y BASALTOS DE VOLCANES MONOGENICOS. Andesitas y basaltos.
42 - IGNIIBRITA TUZGLE. Ignimbritas dacíticas a riolíticas.
41 - DACITA TRANCAS. Dacitas porfíricas.
40 - FORMACIÓN PASTOS CHICOS. Conglomerados y areniscas conglomerádicas con niveles piroclásticos.
39a y b - COMPLEJO VOLCÁNICO POCQUIS. a) Lavas y domos dacíticos; b) Lavas andesíticas.
38 - IGNIIBRITA ATANA. Ignimbritas y surcos dacíticos.
37a y b - COMPLEJO VOLCÁNICO JAMA. a) Lavas andesíticas; b) Lavas dacíticas.
36a, b, c y d - COMPLEJO VOLCÁNICO CORANZULI a) Ignimbritas; b) Ignimbritas; c) Lavas dacíticas; d) Ignimbritas.
35 - IGNIIBRITA SUSQUES. Ignimbritas y coignimbritas dacíticas con abundantes pómez; depósitos de oleadas piroclásticas.
34 - IGNIIBRITA CASABINDO. Ignimbritas dacíticas.
33 - IGNIIBRITA COYAGUAYMA. Ignimbritas dacíticas.
32 - FORMACIÓN SUES. Areniscas, areniscas calcáreas, calizas, pelitas, tufitas, tobas y depósitos volcanoclasticos; travertinos.
31 - COMPLEJO VOLCÁNICO CHIMPA. Brechas ílicas, depósitos de oleadas piroclásticas, de bloques y cenizas y lavas, de composición andesítica; 31a) Ignimbritas andesíticas.
30 - FORMACIÓN YUNGARA. Domos y cuerpos subvolcánicos riolíticos, riolíticos a dacíticos.
29a y b - COMPLEJO VOLCÁNICO CERRO MORADO. a) Ignimbritas dacíticas; b) Lavas y domos dacíticos a riolíticos.
28a y b - COMPLEJO VOLCÁNICO PAIRIQUE-SAN PEDRO. a) Lavas, domos e ignimbritas ácidas intermedias; b) Brechas intermedias.
27 - IGNIIBRITA GUACHALAITE. Ignimbritas dacíticas.
26 - PORFÍRICO GUACHALAITE. Porfíros dacíticos y dacítico-riolíticos.
25a y b - COMPLEJO VOLCÁNICO CERRO BAYO. a) Lavas ílico-andesíticas, aglomerados y tobas; b) Domos dacítico-riolíticos.
24a y b - COMPLEJO VOLCÁNICO AGUILIRI. a) Lavas andesíticas; b) Domos dacíticos.
23 - FORMACIÓN PUCARÁ. Lavas dacíticas y andesíticas con intercalaciones piroclásticas.
22 - FORMACIÓN VIZCACHERA MIEMBRO SUPERIOR. Conglomerados, areniscas, pelitas y depósitos piroclásticos.
21 - FORMACIÓN VIZCACHERA MIEMBRO INFERIOR. Areniscas subulíticas.
20 - SUBGRUPO SANTA BÁRBARA Y FORMACIÓN CASA GRANDE INDIFERENCIADOS. Areniscas finas a gruesas, conglomerados, pelitas, calizas, tobas; paleosuelos.
19 - SUBGRUPO BALBUENA. Areniscas, conglomerados, pelitas, areniscas calcáreas, calizas, tufitas, margas.
18a y b - FORMACIÓN RANGEL. a) Sierritas; b) Granitos alcalinos, granitos calcoalcalinos, diques, pegmatitas, apfites y carbonatitas.
17a - DIORITA TAIRE. Dioritas.
17 - SUBGRUPO PIRGUA. Conglomerados, areniscas, areniscas limosas.
16a y b - GRANITO TUSAQUILLAS. a) Sierritas y leucogranitos; b) Monzogranitos, monzogranitos porfíricos y granitoides.
15 - GRANODIORITA PUIRA. Granodioritas y tonalitas.
14 - LEUCOGANITO CERRO BAYO. Leucogranitos.
13 - GRANITOIDES CASTRO TOLAY. Dioritas, monzonitas, monzodioritas, sierritas y diques básicos.
12 - GRANITO LAS BARRAS. Monzogranitos.
11 - GRANITO CHURCAL. Monzogranitos.
10 - GRANODIORITA QUEPENTE. Ortogneis granodiorítico.
9a y b - GRANODIORITA COBRES. a) Monzogranitos; b) Granodioritas deformadas.
8 - COMPLEJO IGNEO SANTA ANA. Gabros, diques básicos y lavas andesítico-dacíticas.
7 - GRANODIORITA TANQUE. Granitoides porfíricos foliados; enclaves básicos comagmáticos.
6 - GRANITOIDES ORDOVICICOS INDIFERENCIADOS. Granitoides.
5 - COMPLEJO TURBIDÍTICO DE LA PUNA. Pelitas, areniscas y grauwacas.
4a y b - COMPLEJO VOLCÁNICO DE LA PUNA. Areniscas, pelitas y conglomerados intercalados con lavas riolíticas andesíticas y basálticas y con depósitos volcanoclasticos y tobas. a) Facies gruesas; b) Facies finas.
3 - COMPLEJO DE PLATAFORMA DE LA PUNA. Conglomerados, cuarcitas, areniscas, grauwacas, pelitas; 3a) Lavas, hialoclastitas y cuerpos subvolcánicos dacítico-riolíticos.
2 - GRUPO MESÓN. Cuarcitas, conglomerados, areniscas y pelitas.
1 - FORMACIÓN PUNCOVISCANA. Pelitas, areniscas y grauwacas leptometamorfizadas.

REFERENCIAS GEOLÓGICAS



REFERENCIAS CARTOGRAFICAS



- Property outline
Other property outline of the LSC
tenements application in process



Scale 1 : 275,000

0 2.75 13.75

Kilometres

POSGAR 1994 Zone 3, Argentina

Figure 9-15.

LSC LITHIUM INC.

Lithium Project

Northern Argentina

**Salinas Grandes Salar
Property Geology Map**

Figure 9-16: Stratigraphic Units In The Salinas Grandes/Guayatayoc Basin And Their Correlation Across Different Published Geological Maps

Age period		Ma	Rock types	Geological environment	Tectonic events	1:250,000 Map Sheet	
Quaternary	Holocene	0.01	Alluvial deposits, salars	Closed basins, salars	Post Quechua deformation	Salar deposits, lacustrine, colluvial and alluvial sediments (40-44)	San Martín (23664)
	Pleistocene	2.6	Alluvial, colluvial, lacustrine, ignimbrites	Closed basins, fan deposits, volcanic centres	NE-SW shortening (from 0.2 Ma) due to strike-slip faulting continuing to present day	Tuzgle ignimbrite (38-39)	Alluvial and glacial deposits (5a, 25b, 26)
Neogene	Pliocene	5.3	Continental sediments +/- ignimbrites	Some volcanic complexes developed in continental sediments	Major volcanic centres and calderas 8-8 Ma	Jama volcanic rocks (36-37). Andesite, dacite lavas, ignimbrites; Atana ignimbrite	Maimar, Uquia and Jujuy Formations. Continental sediments - sandstone, conglomerate +/- mudstone (19, 22-24)
	Miocene		Andesite to dacite volcanics	Volcanic complexes in continental sediments		Volcanic complexes (35)	Formations Orán (16 Ma - 0.25 Ma), Callegua, Formation Agua Negra. Continental sandstones, with clay interbeds (19, 20-21)
			Ignimbrites			Coyaguayma & Casabindo dacite ignimbrites (33 & 34)	
			Continental sediments & tufts	Start of thrusting, with WNW-ESE directed thrusting from 13-4 Ma	Sijes Formation (32) ~7-6.5 Ma sandstones, mudstones and tufts		
			Continental sediments, tufts, volcanic breccias	End of Quechua phase event finished by 9-15 Ma, with associated folding	Chimpa volcanic complex (31) andesites & dacites, lavas/ignimbrites, Pastos Chicos Fm ~10-7 Ma with unnamed tuff 9.5.		
			Dacite domes, pyroclastics, intrusives		Yungara dacite domes (30) & subvolcanics (SE side Olaroz)		
			Rhyolitic, dacite volcanic complexes, continental sediments		Volcanic complexes (23-29), Cerro Morado, San Pedro, Pairique, Cerro Bayo and Aguilón, Pucara Formation. Andesite to dacite lavas, domes and ignimbrites. Susques ignimbrite ~10 Ma		
			Continental sediments		Vichacera Superior (22b). Sandstones and conglomerates, with tufts & ignimbrites		
		23.8			Vichacera Inferior (22a). Sandstones and interbedded claystones		
	Paleogene	Oligocene	33.9	Continental sediments	Red bed sequences	Incaic Phase II - Compression, resulting in folding	Rio Grande Fm Superior (21b). Red aeolian sandstones
Eocene		55.8	Continental sediments, locally marine and limey	Local limestone development, local marine sequences	Rio Grande Fm Interior (21a). Alternating coarse conglomerates and red sandstones		
					Santa Barbara subgroup (20). Fluvial and aeolian alternating conglomerates and red sandstones		Santa Barbara subgroup. (17) continental limy sandstones, siltstones, claystones
BASEMENT - PRE-TERTIARY UNITS (MARINE)							
Mesozoic	Cretaceous		Continental sediments, locally marine and limey	Peruvian phase - extension and deposition of marine sediments		Balbuena Subgroup (19). Sandstones, calcareous sandstones, limestones, mudstones (Marine).	Balbuena subgroup (16). Continental/marine calcareous sandstones
			Continental sediments			Piruga Subgroup (16). Alluvial and fluvial sandstone & conglomerate	
						Granites, syenites, granodiorite (15, 17, 18)	
Paleozoic	Carboniferous-Silurian		Marine sediments	Marine platform and turbidite deposits	Isoclinal folding on NW/SE trending axes, extending to early Cretaceous	Upper Paleozoic marine sediments (14)	Machareti and Manduyuti Groups (10). Sandstones, conglomeratic sandstones, siltstones and diamictites. Silurian Lipeón & Barite Formations (9). claystones and diamictites
						Multiple Paleozoic intrusive suites (6-13)	El Moreno Formation (8). Porphyritic dacite
	Ordovician		Marine sediments	Marine delta and volcanic deposits/domes	Ordovician sandstones (3-5), volcanoclastic sediments & Ordovician turbidites	Guayoco Chico Group (7) & Santa Victoria Groups (6). Marine sandstones, mudstones and limey units	
	Cambrian	540		Marine sediments	Marine sediments	Meson Group (2). sandstones and mudstones	Meson Group (5). Marine sandstones
Pre-Cambrian			Schists, slate, phyllite	Metamorphosed turbidites		Puncoviscana Formation (1) turbidites	Puncoviscana Formation (1) turbidites - metamorphosed and intruded by plutons

Source: Brooker & Ehren, 2013

The oldest rocks in the Salinas Grandes basin consist of Precambrian to Cambrian metamorphosed sediments of the Puncoviscana Formation, siliclastic sandstones of the Meson Group, and sandstones and mudstones of the Santa Victoria Group. Cambrian intrusives of the Formation Queesera intrude these sediments. These units are exposed in the mountain ranges to the south and east of the salar, where a series of reverse fault bounded blocks generally have up-to-the-east movement against Holocene sediments of the salar basin.

The Cambrian intrusives of the Formation Queesera are spatially associated with a large magnetic high which underlies all of the Salinas Grandes salar. The magnetic body has a shape which is broadly mirrored by the shape of the salar itself. Other intrusives in the surrounding area (such as the Cretaceous granites and monzonites, located east and west of the Guayatayoc salar) are differentiated from this magnetic body by their more subdued magnetic signature.

Continental sandstones, siltstones, marls and carbonates of Cretaceous to Paleocene age (Pirgua, Balbuena, and Santa Barbara Subgroups and Oran Group) are in fault contact with the older Cambrian to Pre-Cambrian units in the mountains east of the salar.

Cambrian to Ordovician marine sediments, lavas and subvolcanic units outcrop in the mountain ranges to the west of the salar. These units are overlain by the sandstones of the Oligocene-Miocene Vizcachera Formation and clastic, evaporitic, and pyroclastic sequences of the Miocene Pastos Chicos Formation.

Quaternary clastic sediments – sands, gravels and siltstones – fill the topographic low of the salar basin, with the salar occupying the central part of the basin.

A number of seismic lines have been completed across the Guayatayoc and Salinas Grandes basin by YPF, the Argentine national petroleum company in an attempt to understand the structure and unusual east-west orientation of the salar. Limited information available from these seismic lines suggests the basin at the junction of salar Salinas Grandes and Guayatayoc is bounded on the east and west by thrusts, with the salar sequence developed over the late Miocene Sijes Formation. A structural interpretation of the Salinas Grandes area by Segemar, based on the 1 km spaced Puna aeromagnetic survey and surface geology, is shown in Figure 9-17.

Precambrian to Cambrian metamorphosed sediments outcrop on the south and north of Salinas Grandes. These units are interpreted by Segemar to be deformed along NE and EW trending faults. In contact with these metamorphosed sediments and underlying most of salar Salinas Grandes are interpreted Cretaceous to Tertiary sediments of the Pirgua and Balbuena subgroup, which outcrop east of the salar.

The Puna aeromagnetic survey shows a large (85 km long NE axis x 40 km long NW axis) magnetic body (magnetic high – shown as a blue unit in Figure 9-17) underlying salar Salinas Grandes, intruding the Precambrian to Cambrian sediments. Smaller bodies of Cretaceous intrusives are mapped outcropping immediately west of the salar. The magnetic body is interpreted to have an important influence on the structural deformation of this area and the consequent shape of the Salinas Grandes salar. The magnetic body is likely to form a large rigid block, relative to the sediments and metasediments in which it is emplaced. The overall NE to ENE orientation of the complex is thought to have influenced the development of faulting through Salinas Grandes.

The regional system of N-S to 20° trending faults undergoes an eastward deflection through Salinas Grandes, before resuming a N-S to 20° orientation in the Guayatayoc area to the north. This deflection is essentially a jog in the broad fault network through the intrusive complex. A complex network of E-W to ENE and NNE faults is interpreted by Segemar underlying the salar. These faults may compartmentalize the salar basement into different blocks, with different thicknesses of the overlying salar sequence.

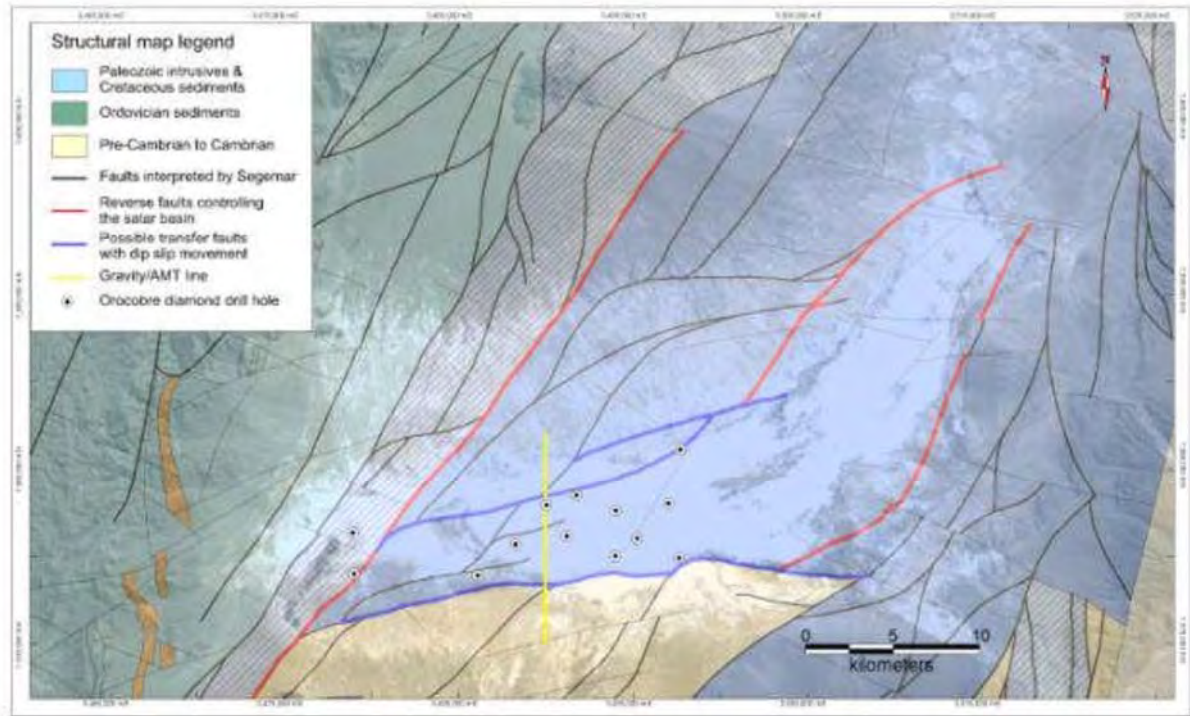
Of particular importance is the interpreted fault contact between the Cambrian/Precambrian units and the Cretaceous to Tertiary sediments. This E-W trending contact is interpreted along the actual edge of the current salar (southern blue line in Figure 9-17), suggesting this is an active fault contributing to salar formation, with a down to the north movement sense. The orientation and movement sense on this fault is not clear. The presence of a fault along the southern margin of the salar is supported by the observation that stratigraphic units within the salar dip shallowly towards the south and the presence of the major organic-rich clay unit depocentre close to the southern boundary of the salar.

The northern boundary of the western part of the salar is also approximately EW trending. This boundary is defined by the base of the large alluvial fan extending from the salar to the Rio Burras in the north (parallel to the international road to Salar de Olaroz and the Jama Pass). The Segemar structural interpretation suggests this may also be a fault contact (blue lines Figure 9-17), although the movement sense of this possible fault is also unclear. Further east in the Salinas Grandes salar, crossing the border into the province of Jujuy, faults are interpreted to have the more regional NNE trend.

Orocobre (Brooker and Ehren, 2013) completed one gravity and AMT line across the salar. The gravity line is interpreted to show an asymmetric nature to the basin, with a possible steeply dipping northern side to the basin (interpreted to coincide with a fault) and a shallowly dipping southern margin to the basin suggesting a half graben geometry.

Geological and seismic surveys of the Salinas Grandes salar basin suggest it is structurally controlled on the east and west by bounding reverse faults. Gravity and AMT data (Brooker and Ehren, 2013) from one north-south line across the salar suggests the large alluvial fan

in the north of the salar contributed coarse sediment to the salar basin, which may be >400 m thick. Drilling subsequent to the initial pit sampling has been completed to a depth of 180 m, without intersecting the salar basement (Brooker and Ehren, 2013).



Source: Brooker & Ehren, 2013, after Segemar

Figure 9-17: Structural map of Salinas Grandes/Guayatayoc Basin

The following Post Miocene units are noted in Figure 9-18:

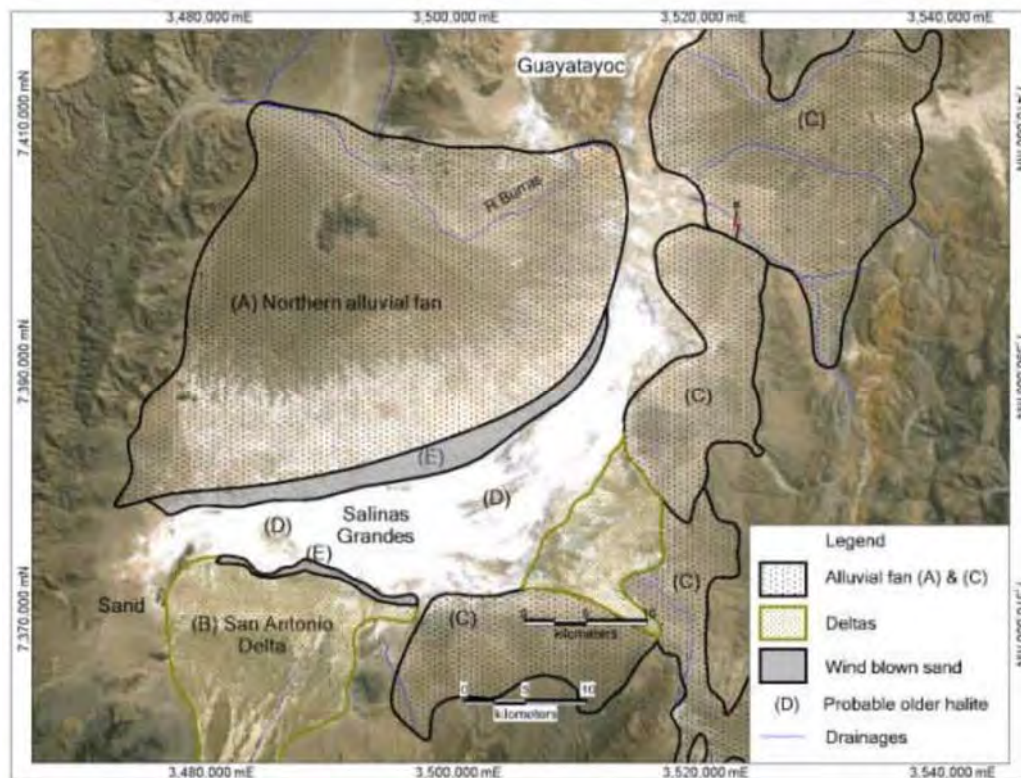
- A very large low angle alluvial fan (black stipple) on the northern margin of and possibly pro-grading over the salar basin (A). The Burras River crosses the alluvial fan north of the salar, entering the salar where Salinas Grandes and Guayatayoc join.
- A large delta where the San Antonio River (B) enters the south of the salar basin.
- Smaller alluvial fan deposits (C) are present in the south and east of the salar.
- Within the salar there are several areas of slightly elevated topography (D), which correspond to probable older salt crust.
- Wind-blown sand is present on the borders of the salar, forming hummocky mounds less than half a metre tall (E).

The alluvial fan north of the salar covers an area of ~ 900 km². The large area of the fan and the sandy surface texture suggests this area is a major source of inflow to the salar from shallow groundwater flow. Satellite imagery shows the southern border of the fan has a high reflectance, indicating precipitation of salts. Immediately north of the high reflectance areas high moisture content is detected in the fan sediments (in satellite images). The

seasonally wettest part of the salar is the western part of the northern margin of the salar, where areas of high moisture content are shown closest to the salar margin.

The delta to the south of the salar is developed where the San Antonio River enters the salar basin. This river drains the catchment from the vicinity of the town of San Antonio de los Cobres 60 km to the south-southwest of the salar. In the vicinity of the town water is seasonally observed flowing in the river channel. However, closer to salar Salinas Grandes the river channel broadens and surface flow is not generally observed.

Dry weather satellite imagery suggests there may be other dispersed springs along the southern margin of the salar in the vicinity of the E-W salar boundary fault. Drilling on the southern limit of the salar intersected silts and clays, with some interbedded fine to medium sands, with sand and fine gravel in the upper 5 metres (Ehren & Booker, 2011).



Source: Brooker & Ehren, 2013

Figure 9-18: Salinas Grandes geomorphology

Brooker & Ehren (2013) reported the following salar stratigraphy:

- Unit A - A thin surficial halite layer less than 0.5 m thick
- Unit B - An upper gypsiferous sand, and brown to red sand/silt/clay unit – This is the primary host of the shallow brine unit
- Unit C - A major black organic mottled green/grey clay and silt unit
- Unit D - A red/brown unit with fine sand, silt and clay with artesian pressures and brackish water intervals
- Unit E - Green to brown silt and clay with minor sand
- Unit F - Fine to coarse sand and gravel, encountered in the deeper drill holes.

Brooker & Ehren (2013) concluded that salar Sa linas Grandes can be characterized as an overlying shallow (15 m – 20 m) salar with elevated (> 600 mg/L) lithium values in the brine and a deeper lying (>150 m bgs), lower grade (<200 mg/L lithium) bearing aquifer. Between the two units was a thick zone of varying low permeability, low porosity clays and silts.

9.4 MINERALIZATION

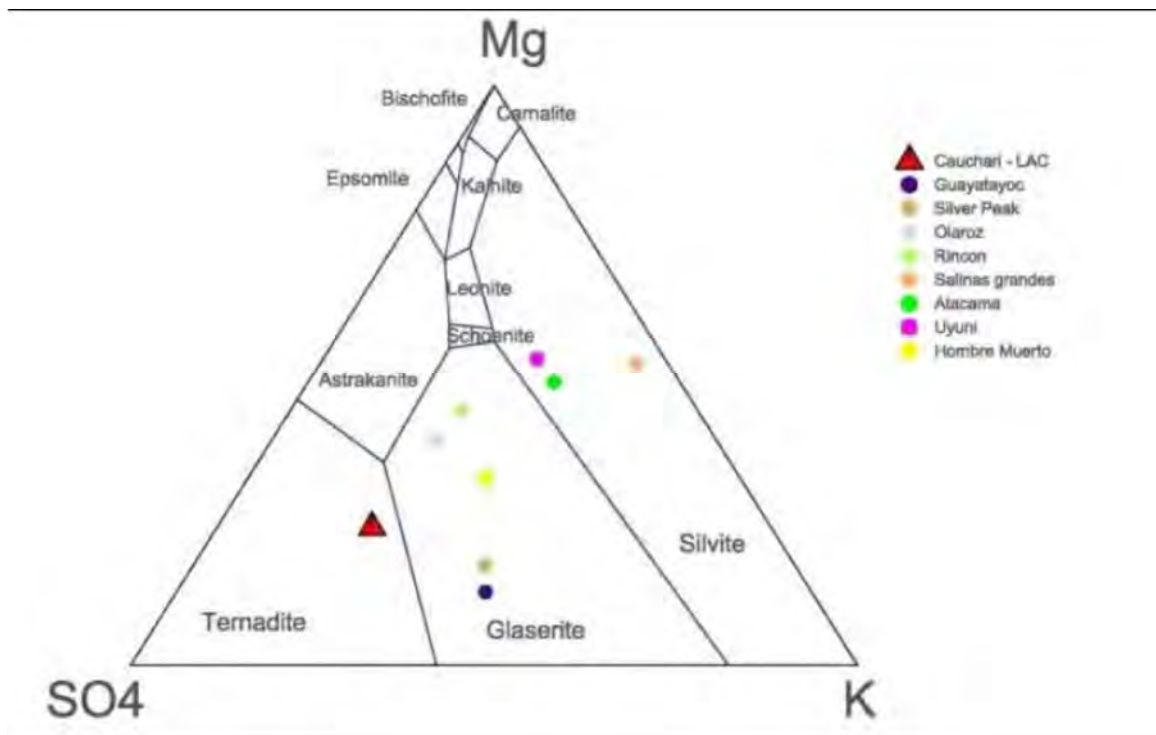
Mineralization in the salars of the Puna consists of brines saturated in sodium chloride and high in total dissolved solids and with an average density of about 1.25 g/cm^3 . The other primary components of salar brines in the Puna include potassium, lithium, magnesium, calcium, sulphate, HCO_3 and boron as borates and free H_3BO_3 . Salars are classified as Na-Cl- SO_4 , Na-Cl-Ca/ SO_4 or Na-Cl- SO_4 -B types depending on the particular chemistry of the brine. Broadly speaking, the salars in the more northerly and easterly portion of the Puna tend to be Na-Cl- SO_4 -B with lithium while the salars in the more southerly and western regions of the Puna tend to be of the Na-Cl—Ca/ SO_4 type and somewhat more enriched in lithium than the former.

A Janecke Projection comparing the chemistry of several brine deposits is shown in Figure 9-19. This type of figure can be used as a visualization tool for mineral crystallization. The diagram represents an aqueous five-component system (Na^+ , K^+ , Mg^{++} , SO_4^{--} , and Cl^-) saturated in sodium chloride. The aqueous system can be represented in this simplified manner, due to the higher content of the ions Cl , SO_4^{--} , K^+ , Mg^{++} , Na^+ compared with other elements (e.g., Li, B, Ca). In Figure 10-1, each corner of the triangle represents one of three pure components (Mg, SO_4 and 2 K, in mol%). The sides of the triangle represent sodium chloride-saturated solutions, with two reciprocal salt pairs ($\text{MgCl}_2 + \text{Na}_2\text{SO}_4$), ($\text{Na}_2\text{SO}_4 + \text{KCl}$) and a quaternary system with a common ion ($\text{MgCl}_2 + \text{KCl} + \text{NaCl}$).

The inner regions of the diagram show expected crystallization fields for minerals precipitating from the brine. Since the brines are saturated in NaCl, halite precipitates

during evaporation in all the cases. Brines of the type found in Salar Cauchari will initially precipitate thenardite (Na_2SO_4). The brines of the Guayatayoc, Silver Peak, Hombre Muerto, Olaroz, and Rincon salars would initially precipitate glaserite ($\text{K}_3\text{Na}(\text{SO}_4)_2$). Salar Atacama, Uyuni, and Salinas Grandes brines would initially precipitate silvite (KCl).

In addition to the primary minerals indicated in the diagram, a wide range of secondary salts may precipitate from these brines, depending on various factors including temperature and dissolved ions. The additional salts could include: astrakanite ($\text{Na}_2\text{Mg}(\text{SO}_4)_2 \cdot 4\text{H}_2\text{O}$), schoenite ($\text{K}_2\text{Mg}(\text{SO}_4)_2 \cdot 6\text{H}_2\text{O}$), leonite ($\text{K}_2\text{Mg}(\text{SO}_4)_2 \cdot 4\text{H}_2\text{O}$), kainite ($\text{MgSO}_4 \cdot \text{KCl} \cdot 3\text{H}_2\text{O}$), carnalite ($\text{MgCl}_2 \cdot \text{KCl} \cdot 6\text{H}_2\text{O}$), epsomite ($\text{MgSO}_4 \cdot 7\text{H}_2\text{O}$), and bischofite ($\text{MgCl}_2 \cdot 6\text{H}_2\text{O}$).



Source: King et al., 2012

Figure 9-19: Janecke Projection Diagram

10 DEPOSIT TYPES

The properties described in this Technical Report are classified as salars. Salar is a brine formation containing elevated levels of metals in solution, typically as salts. As discussed in the introduction to this report, lithium brine projects differ significantly from hard rock mining projects, due to their fluid nature. The important elements of a brine deposit are the contained elements and chemistry of the brine and the characteristics of the host aquifer, such as aquifer extent, thickness, internal variations/heterogeneity and the physical aquifer properties, particularly porosity.

Lithium brine projects can be subdivided into two broad ‘deposit types’, depending on the salar characteristics (Houston et. al., 2011):

- Mature salars (those containing extensive thicknesses – often hundreds of meters - of halite, such as the Salar de Atacama, and the FMC Hombre Muerto operation), and;
- Immature salars, which are dominated by clastic sediments, with limited thicknesses of halite. Examples are Salar Pastos Grandes, Salar Pucallanca and Salar Olaroz/Cauchari.

The two different salar types reflect the different characteristics of these salars and the brine resources they contain. Individual salars may also contain immature and mature areas within the same salar basin (such as at Hombre Muerto).

Mature salt dominated salars are characterized by having:

- high permeabilities and specific yields (to a maximum of ~ 15% Sy) near surface, with the porosity and permeability decreasing rapidly with depth;
- the brine resource is essentially between surface and 50 m below surface, as below this depth there is typically limited permeability in the salt due to salt recrystallization and cementation of fractures.

Immature salars conversely have porosity and permeability controlled by individual layers within the salar sequence. In immature salars

- the porosity and permeability may continue to depths of hundreds of meters in clastic salars (such as at Silver Peak in Nevada);
- however, the porosity and permeability characteristics may be highly variable, due to differences between sand and gravel units and finer grained silts and clays.

The presence of different stratigraphic units in clastic salars typically results in differences in the distribution of the contained brine. It is very important to consider the characteristics of the host aquifer in each salar, together with the geometry and physical properties, particularly porosity.

Based on the typical architecture of the Puna salar basins, the salars typically have a zonation consisting of:

- Coarser grained sediments on the margins of the basin, with successive inner shells of finer grained clastic units;
- In the centre of salars, where evaporation is generally highest, deposits consist of carbonate, sulphate and finally chloride evaporites;
- The general model for salars consists of an inner nucleus of halite surrounded by marginal deposits of mixed carbonate and sulphate evaporites with fine grained clastic sediments.

Rio Grande is classified as a mature salar based on its known hydrogeological characteristics. Chemically, it is of the Na-Cl-SO₄-B type. Jama, Pastos Grandes and Salinas Grandes are classified as immature salars. Chemically, they are of the Na-Cl-SO₄-B type (Jama) and the Na-Cl-Ca/SO₄ type (Pastos Grandes and Salinas Grandes).

Understanding the nature of the salar matrix (halite or clastic sediments, the distribution of the matrix and the correlation between matrix type and brine distribution, grade and matrix porosity is fundamental to any exploration program and governs the type and amount of geophysical, drilling, and hydrogeological investigations.

11 EXPLORATION

Exploration work on the Properties report is described in Section 8, History. LSC has not undertaken any exploration activity on any of the Properties.

12.1 Exploration Potential

The Properties are presumed to have exploration potential for lithium based on published data from others and the results of surface sampling by the author and previous sample results available from ADY. No estimate of the resource potential of any of the Properties can be made at this time.

12 DRILLING

Except for the exploration work detailed in Section 8, History, no drilling has been undertaken on any of the Properties.

13 SAMPLE PREPARATION, ANALYSES AND SAMPLE SECURITY

LSC has not undertaken any sample work on the Qualifying Properties. ADY, on behalf of LSC and under the direction of the author of the Technical Report, has collected due diligence samples on the Salar Jama Tenements and the Salar Pastos Grandes Tenements. These samples complemented the due diligence samples collected by the author during the initial site visit in early July, 2016.

All samples collected were from hand dug pits. Samples were collected in a graduated measuring cup and transferred to 500 ml plastic bottles, which were rinsed with brine several times before filling to the top of the neck and then sealed. Sample bottles were marked with a sample number and safely stored prior to shipment to the assay lab.

The sample collection procedures were standard for point samples collected from hand dug pits. The author observed sample collection during the initial site visit and is satisfied that the same procedures were followed during subsequent sample collection when he was not present. Figure 13-1 illustrates the typical sample collection procedure.



SAMPLE PIT

POURING

SAMPLE INTO BOTTLE

Figure 13-1: Typical Sample Collection

The samples collected by the author were assayed at Alex Stewart Laboratories in Mendoza, Argentina. Samples collected by ADY personnel were assayed at Norlab in Jujuy. Both laboratories have significant experience in assaying brine samples and both maintain recognized QA/QC procedures meeting ISO 17025 QA/QC requirements. Both laboratories are independent of LSC and the author. Norlab was previously owned by ADY but is now independent of ADY.

13.1 QP Opinion on Adequacy of Sample Preparation, Analysis and Security

In the opinion of the author, the sample collection, sample security and sample assay procedures were suitable for the purposes of due diligence sampling and appropriate for the current stage of the project.

14 DATA VERIFICATION

The author of this Technical Report undertook site visits to all of the Properties and conducted a limited program of due diligence sampling at the Salar Pastos Grandes Tenements, Salar Jama Tenements and Salar Salinas Grandes Tenements. Due diligence samples were spot samples and are not necessarily representative of samples which would be collected during a systematic brine sampling program, however the due diligence samples fell within the range of expected values for the Properties.

Samples were collected from the following salar locations (Table 14-1):

Table 14-1: Due Diligence Samples

Salar	Zone	Easting (WGS 84 datum)	Northing (WGS 84 datum)	Type of sample
Pastos Grandes	19J	731051	7282145	point
Pocitos	19J	708240	7265945	
Jama #1	19K	703688	7425193	
Jama #2	19K	703978	7425269	
Olaroz	19K	733342	7412165	
S. Grandes #1	19K	787670	7374435	
S. Grandes #2	19K	787663	7374420	

Note: No samples at Arizaro or Rio Grande due to equipment limitations

Equipment and time limitations limited the number of samples collected and the depth of sampling from several locations as the surface crust was either too thick and hard to construct hand dug pits, or the phreatic level was below the level which could be reached by manual methods.

Samples were analysed at Alex Stewart Argentina in Mendoza for selected cations and anions. Assays methods used are detailed in the table. Two blanks were inserted in the sample batch. The results of the sample assays are detailed in Table 14-2.

Table 14-2: Due Diligence Sample Results

Analyte	Li	K	Mg	Ca	Na	B	Ba	SO ₄	Density	TDS
Method	LMMT03 ICP-OES	LMMT03 ICP-OES	LMMT03 ICP-OES	LMMT03 ICP-OES	LMMT03 ICP-OES	LMMT03 ICP-OES	LMMT03 ICP-OES	LMC122 Grav.	LMFQ19 Grav.	LMFQ08 Grav.
Units	mg/L								g/ml	mg/L
P. Grande	730	8547	6148	439	111517	831	<0.10	15353	1.2157	340240
Pocitos	40	936	284	1024	54324	113	0.52	15987	1.1076	156200
Jama #1	39	614	220 565		11024	110	<0.10	10971	1.0286	37720
Jama #2	55	757	262 676		13674	99	0.54	6163	1.0333	45410
Olaroz	266	2549	740	425	75099 359		0.15	5046	1.1435	220520
S. Grandes #1	2962	29643	9571	2076	83511	734	0.23	3103	1.2131	349720
S. Grandes #2	1161	14840	3538	2038	52839	287	0.88	3235	1.1243	197640

Alex Stewart Argentina has extensive experience in the analysis of brine samples and is ISO17025 certified. Alex Stewart Argentina is independent of LSC and the author.

ADY personnel, at the request of the author, collected samples from the Salar Pastos Grandes Tenements on two occasions subsequent to the site visit by the author. Details of the sample locations are provided in Table 15-3 and sample assay results in Table 14-4. The samples were assayed at Norlab in Jujuy. Norlab has extensive experience in analysis of brine samples. The laboratory is currently undergoing certification to ISO 17025 standards. Norlab is independent of the author and LSC. Norlab was previously owned by ADY but is now independent of ADY.

Table 14-3: Salar Pastos Grandes Tenement Samples – 2016 Due Diligence Program

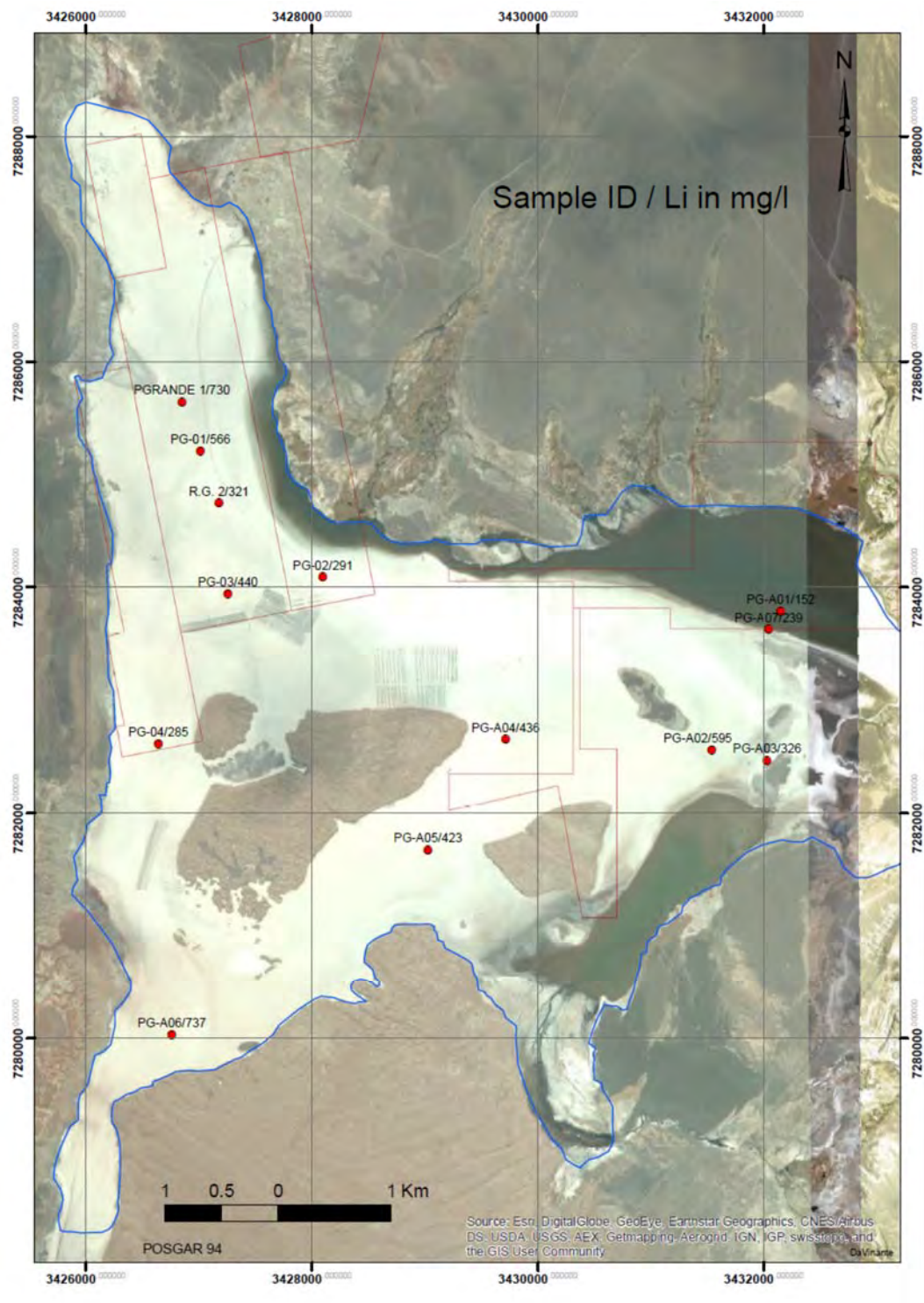
Gaus-Kruger Posgar 94 datum				
Sample No.	Easting	Northing	Tenement	Type
PG-01	3427014	7285207	Santa Rosa	Hand dug pit
PG-02	3428096	7284091	Neptali	Hand dug pit
PG-03	3427257	7283942	Santa Rosa	Hand dug pit
PG-04	3426639	7282616	Coronel Vidt	Hand dug pit
PG-A01	3432147	7283790	La Playosa	From lake
PG-A02	3431536	7282562	Avestruz 2	Hand dug pit
PG-A03	3432026	7282469	San Cayetano I	Hand dug pit
PG-A04	3429715	7282658	La Buscada	Hand dug pit
PG-A05	3429028	7281676	Papadopulos XXXII	Hand dug pit
PG-A06	3426758	7280036	Vacante Remsa	Hand dug pit
PG-A07	3432040	7283632	Avestruz 2	Hand dug pit

Table 14-4: Sample Assays – Salar Pastos Grandes Tenements, 2016 Due Diligence Program

Sample	Li ⁺ (mg/l)	Mg ⁺⁺ (mg/l)	Ca ⁺⁺ (mg/l)	K (mg/l)	Na ⁺ (mg/l)	SO ₄ ⁼ (mg/l)	Cl ⁻ (mg/l)	B (mg/l)	HCO ₃ ⁻ (mg/l)	Density (g/ml)	Hardnes s (mg/l) CaCO ₃
Method	LMMT03					LMC122	LMC101	LMM T03	LMFQ1 7	LMFQ1 9	LMFQ1 3
PG-01	566	4146	586	741	112042			741	885		
PG-02	291	2274	832	737	114540			737	702		
PG-03	440	3161	678	619	113541			619	768		
PG-04	285	2046	786	454	115429			454	653		
PG-A01	152	1041	964	1989	113232	5774	180650	252	680	1.209	7142
PG-A02	595	4036	466	6763	111873	13290	187593	681	931	1.227	19113
PG-A03	326	2254	686	4191	113137	8651	188895	545	775	1.222	13398
PG-A04	436	2952	587	5124	114482	10376	186580	539	750	1.229	13436
PG-A05	423	3023	589	4963	115045	10409	189762	572	702	1.222	14896
PG-A06	737	5186	444	6728	107663	13492	187014	772	1017	1.225	24037
PG-A07	239	1662	913	2779	115641	7310	190052	390	882	1.217	9788

The assay values are in accordance with results from others. The sample locations are illustrated in Figure 14-1.

**Figure 14 1: salar Pastos Grandes Tenements 2016
Due Diligence Surface Sample Locations**



LSC, under the direction of the author, also completed an initial program of due diligence surface sampling on the Salar Jama Tenements in early September, 2016. The sampling program was designed to duplicate the surface sampling program undertaken by Cuper. The samples were assayed at Norlab in Jujuy. Norlab is independent of LSC and the author. Norlab was previously owned by ADY but is now independent of ADY.

Results of the initial due diligence sampling are provided in Figure 14-2 and Table 14-5. The assay data indicate good correspondence between the Cuper and LSC samples. It is concluded that the Cuper surface sample results are indicative of lithium mineralization at the Salar Jama tenements.

**Table 14-5: Comparison of LSC and Cuper Surface Samples – Salar Jama Tenements
2016 Due Diligence Sample Program
(Li, mg/L)**

Sample Point	LSC	Cuper	Rel. Percent Difference (RPD) LSC vs Cuper
Ja 004	<1	186	n.a.
Ja 022	342	360	-3.42%
Ja 033	354	763	-115.5%
Ja 034	257	208	+19%
Ja 007	229	233	-1.75%
Ja 036	114	n.a.	n.a.
Ja 019	72	112	-56%
Ja 09A	291	231	+21%
Ja 037	26	n.a.	n.a.
Ja 025	14	29	-107%
Ja 038	38	n.a.	n.a.
Ja 026	278	383	-38%
Ja 012	57	56	+2%
Ja 013	5	<10	-100%
Ja 014	5	<10	-100%
Ja 015	108	133	-23%
SJ 2	55	n.a.	n.a.

14.1 QP Opinion on Adequacy of Data Verification

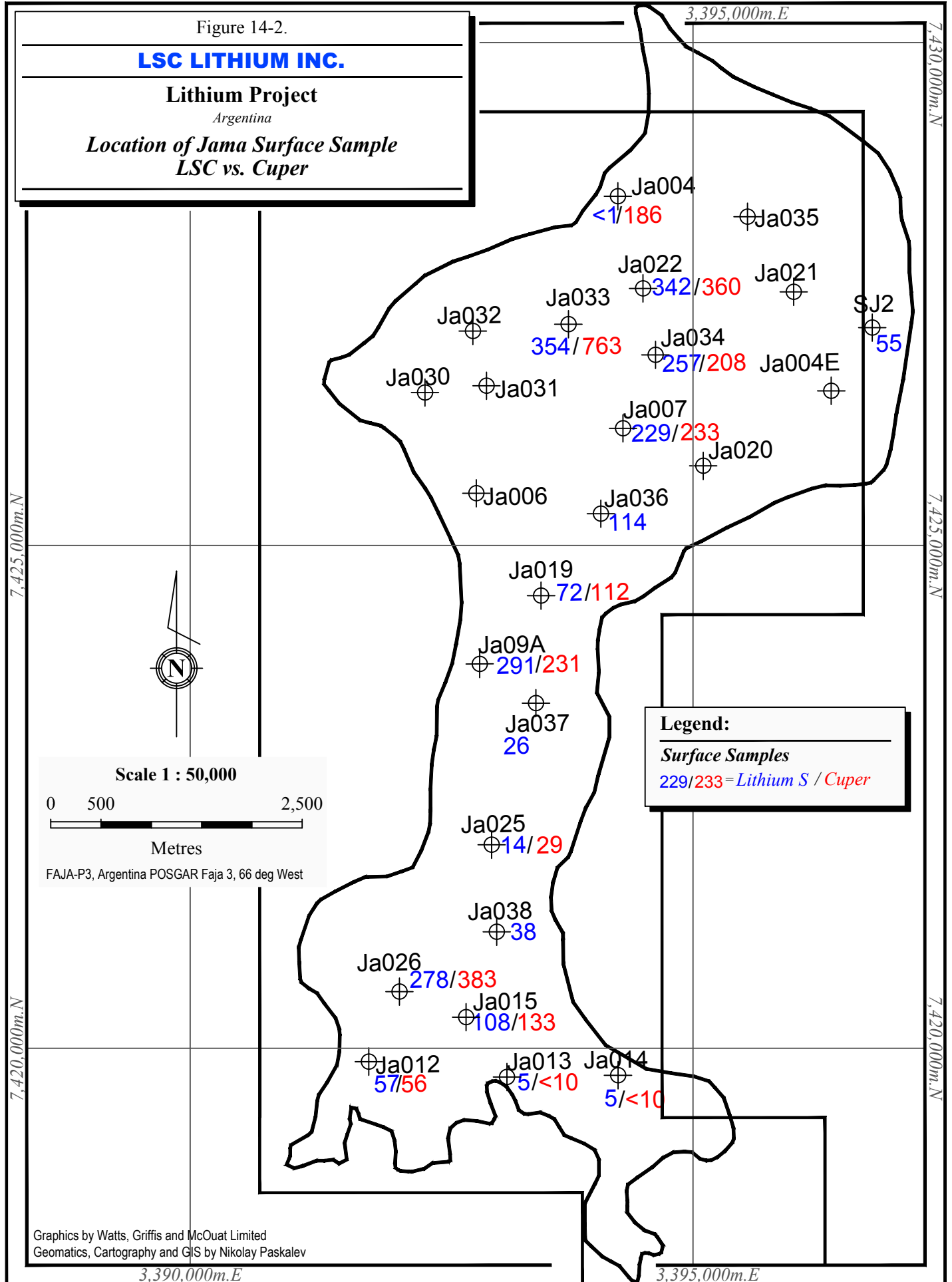
In the opinion of the QP, the due diligence samples fall within the range of expected values for the sampled properties and the sample data are adequate and suitable to confirm the potential for lithium brine mineralization on the Properties.

Figure 14-2.

LSC LITHIUM INC.

Lithium Project
Argentina

Location of Jama Surface Sample
LSC vs. Cuper



15 MINING METHOD

The Properties are all exploration properties and no work to evaluate possible mining methods has been undertaken.

It is anticipated that any brines would be recovered using conventional well field and pumping systems as is practiced at other lithium salar operations in Argentina and Chile. No additional information is available at this time.

16 MINERAL PROCESSING AND METALLURGICAL TESTING

This section is not applicable to this Technical Report.

17 MINERAL RESOURCE ESTIMATE

No mineral resource estimates have been prepared for the Properties.

18 MINERAL RESERVE ESTIMATE

This section is not applicable to this Technical Report.

19 RECOVERY METHODS

This section is not applicable to this Technical Report.

20 PROJECT INFRASTRUCTURE

LSC is an exploration stage company. Infrastructure requirements for project development have yet to be established. The project development concept calls for the establishment of satellite processing plants at selected salars. The satellite plants will process brine recovered by pumping from wells. It is expected that the satellite plants will concentrate and purify the brines using technology licensed from Enirgi.

Operation of the satellite plants will require electrical power provided by diesel generators and heat, recovered from the generator exhaust.

Camp facilities for plant operators will be required. As the satellite plant is highly automated, labour requirements and associated camp facilities are anticipated to be modest.

Facilities will be required for storage of processed brine prior to transport by tanker truck to Enirgi's planned processing plant at salar del Rincón. It is anticipated the local road network will be sufficient.

21 MARKET STUDIES AND CONTRACTS

Lithium finds application in a diverse range of uses from glass and ceramics to chemicals to batteries to aluminum alloys. In recent years, the focus on lithium supply and demand has been on use of lithium in various battery applications, especially portable electronics and electric vehicles.

21.1 Lithium Supply

Lithium is commercially extracted from two primary deposit types: as a hard rock mineral and in natural evaporative saline brines. Lithium minerals, in the form of spodumene or petalite concentrate, find primary application in glass and ceramics products. Lithium recovered from brine deposits is primarily produced as lithium carbonate (Li_2CO_3) or lithium hydroxide ($\text{LiOH}\cdot\text{H}_2\text{O}$) and is used in a wide variety of chemical and (especially) battery applications. Lithium brine deposits are estimated to account for 90% of global lithium reserves and approximately 50% of global production. Lithium brine operations are confined to Chile, Argentina, the USA and China, with South America hosting the largest producers. Lithium mineral concentrates can be converted to lithium chemicals such as lithium carbonate and used in similar applications as lithium recovered from brines, but at higher production cost than brine derived lithium chemicals. The major producers of lithium minerals are located in Australia, China and Zimbabwe, with emerging producers in Canada (Roskill 2016).

Global supply of lithium minerals has been historically dominated by hard-rock mineral sources, however development of large-scale lithium brine operations in South America commenced in the early 1980's. Global lithium supply has increased at a 7% compound annual growth rate ("CAGR") from 1995 to 2015 to meet increased demand from mobile phones and other electronics. Today, global lithium supply is around 171 kt lithium carbonate equivalent ("LCE"), split roughly 50:50 between hard-rock and brines (Deutsche Bank, 2016). Figure 21-1 illustrates recent changes in global lithium supply by country and projected changes in supply through 2025. Key aspects of lithium supply from brine and hard rock deposits are summarized in Table 21-1:

Table 21-1: Key Attributes of Brine and Hard Rock Lithium Deposits

Characteristic or Property	Salt Lake Brines	Hard Rock Deposits
Resource approachable	Abundant but low recoveries	Very few high grade deposits
High-technology required	Yes	No
Scalable	Yes	Yes
Processing time	Long ¹	Short
Weather dependent	Yes ²	No
Capital intensity	High	Moderate
Operating costs	Low	High
As % of global lithium supply	50%	50%

Source: Deutsche Bank, 2016

1. New non-solar evaporation technology can substantially reduce time frame
2. Not for new, non-solar evaporation technology

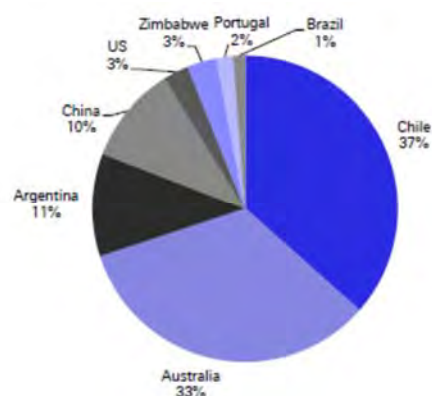
Brine deposits are anticipated to account for an increasing share of production due to the relative availability of brines, their lower operating costs, and changes in brine processing technology resulting in significant capital cost reduction on a tonne LCE produced basis.

Lithium is sold and consumed as a number of different mineral and chemical compounds, depending upon the desired end product. Given the numerous types of lithium products, to standardize supply and demand, lithium statistics are typically expressed either on a contained lithium basis or, more commonly as LCE, as lithium carbonate currently holds the largest share of the overall lithium market. For conversion purposes, lithium comprises approximately 18.8% of total mass in lithium carbonate (conversion ratio of 5.323 kg LCE to 1.0 kg Li).

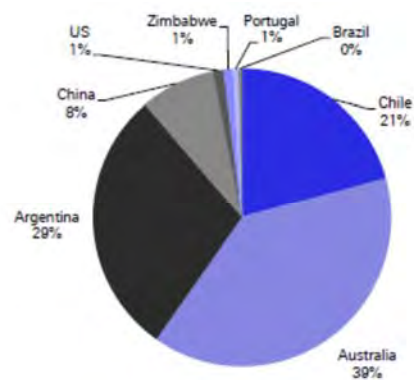
The type of lithium compound produced and sold by a mining operation is partially dependent upon the type of deposit. For example, a lithium brine project cannot produce lithium mineral compounds but its direct product can be lithium carbonate whereas a hard rock lithium project requires an additional conversion step to take its lithium mineral concentrate to lithium carbonate. Therefore lithium brines cannot supply certain lithium mineral demand and lithium brines can have a cost advantage for lithium carbonate markets (e.g. batteries).

Generally accepted industry specifications for lithium carbonate and lithium hydroxide products are as follows:

- Lithium carbonate – battery grade is minimum 99.5% Li_2CO_3
- Lithium carbonate – technical grade is minimum 99% Li_2CO_3 ; and
- Lithium hydroxide – minimum 56% LiOH .



**Lithium Supply by Country – 2015
LCE Basis**



**Lithium Supply by Country – 2025
LCE Basis**

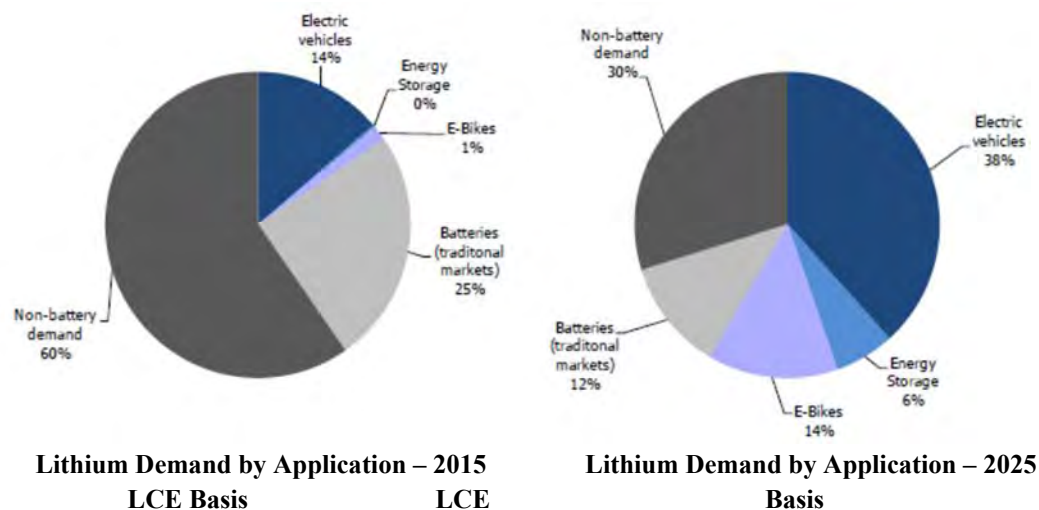


Source: Deutsche Bank, 2016

Figure 21-1: Lithium Supply by Country and Forecast Supply to 2025

21.2 Lithium Demand

Global lithium demand is estimated to be approximately 184 kt LCE in 2015. Demand has been growing at a compound annual rate of approximately 6.6% since 1995, driven primarily by increases in battery applications. Battery applications accounted for an estimated 40% of total lithium demand in 2015 and are forecast to account for 70% of total demand in 2025. By 2025, total lithium demand is forecast to be approximately 525kt on an LCE basis (Figure 21-2).



Source: Deutsche Bank, 2016

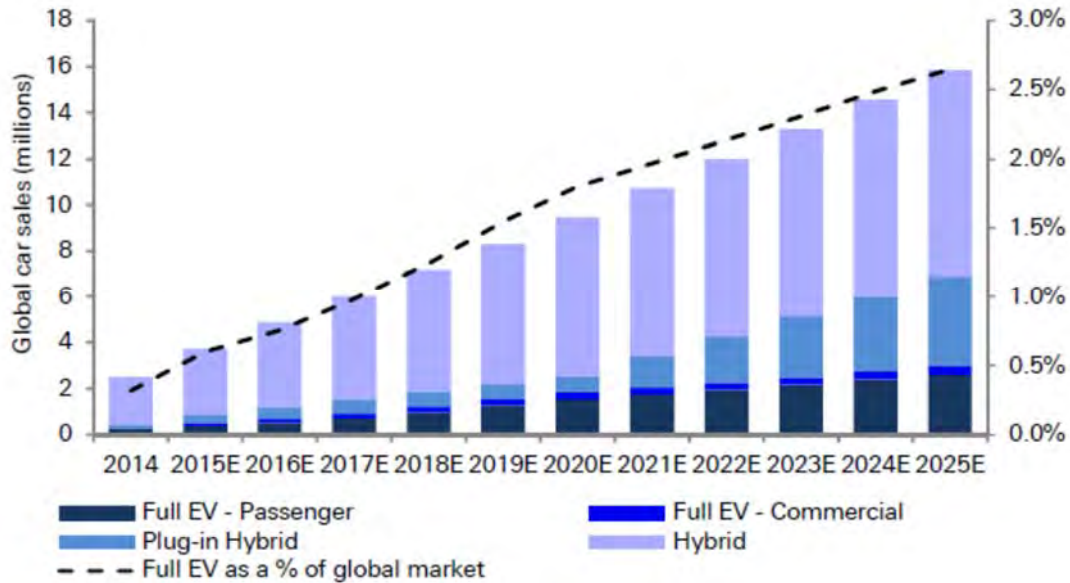
Figure 21-2: Global Lithium Demand – 2013 – 2025

Forecast lithium consumption rates are heavily influenced by assumptions around rechargeable battery demand. Rechargeable lithium batteries have in the past been used primarily in the portable consumable electronics sector but in recent years this has been overtaken by use in electric vehicles and grid/off-grid energy storage systems. South Korea and China are the dominant rechargeable battery and battery material producers. Roskill notes that growth rates for non-battery sectors have slowed significantly since 2012.

Forecasts for electric vehicle uptake, either as hybrids, plug-in hybrids or full electric vehicles have recently been revised significantly upward by several industry observers (Deutsche Bank, 2016; Exane BNP Paribas, 2016) based on rapidly decreasing battery production costs, regulatory requirements in Europe and China, and most importantly, significantly improved battery technology permitting greater range and higher power. Many industry observers expect full electric battery vehicle production costs to equal internal combustion engine vehicle production costs between 2020 to 2025 (Exane BNP

Paribas, 2016). At that point, demand for full electric vehicles will increase significantly as there will no longer be a major price premium between EVs and standard vehicles and the operating costs savings for EVs compared to IC vehicles will drive demand.

Deutsche Bank's forecast of electric vehicle demand is shown in Figure 21-3. BNP Paribas has a more robust forecast, as illustrated in Table 21-2.



Source: Deutsche Bank, 2016

Figure 21-3: Electric Vehicle Demand to 2025

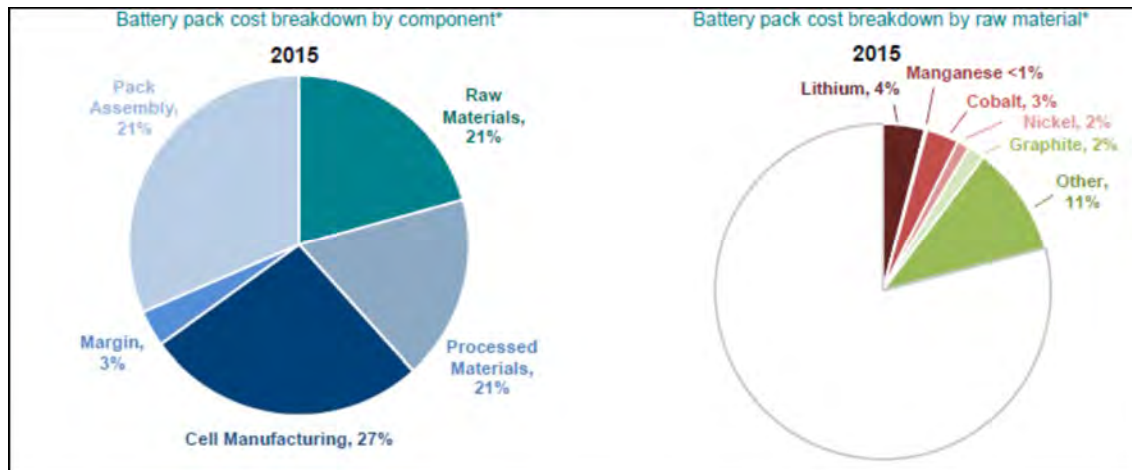
Table 21-2: New Vehicle Build by Engine Type

Engine Type	2015	2020e	2025e	2030e
ICE	94%	84%	57%	29%
Mild Hybrid	0%	4%	14%	23%
Full Hybrid (HEV & PHEV)	3%	7%	15%	20%
Full EV	0%	2%	11%	26%
Diesel	18%	16%	11%	9%

Source: Exane BNP Paribas, 2016

New large scale lithium battery factories currently under development are attempting to reduce the cost of lithium batteries based on economies of scale in production to encourage more rapid uptake of electric vehicles as well as open new market sectors to lithium batteries. If these new battery mega-factories are successful and drive further increases in lithium battery demand, overall lithium demand will also be likely to accelerate. Roskill (2015) forecasts demand growth to be 9.8% p.a. for lithium carbonate and 15.1% per annum for lithium hydroxide through 2025. Under these forecasts, by 2025, battery grade lithium carbonate and battery grade lithium hydroxide will be 43% and 14% respectively of total lithium demand.

It is important to recognize that lithium represents a very small component on electric vehicle battery production costs, typically less than 3% of total cost, depending on the battery chemistry. The majority of battery production costs is represented by pack assembly, cell manufacturing and processed materials. Raw materials account for about 21% of total manufacturing costs, but lithium represents only about 4% of the 21% for raw material costs based on NMC (Nickel-Manganese-Cobalt) battery chemistry, which uses lithium carbonate (Figure 21-4).



Source: Exane BNP Paribas (2016), * assumes NMC battery chemistry

Figure 21-4: Battery Pack Production Costs

As a consequence, lithium prices do not have a significant impact on total battery production costs and the total vehicle selling prices and thus lithium demand in battery applications will not be significantly impacted by increased prices for the raw material. This is illustrated in Table 21-3 which shows the impact of lithium carbonate pricing on selected electric vehicle manufacturers. It is seen that even a doubling of the lithium carbonate price will have only a very modest impact on the average vehicle selling price.

Global lithium production is dominated by four companies: Talison Lithium in Australia, SQM in Chile, Albemarle in Chile and the USA and FMC Lithium in Argentina. Together, the “Big 4” produced about 87% of the lithium supply in 2015 (Table 21-4).

Table 21-3: Lithium Carbonate Price Impact on Electric Vehicle Selling Price

OEM & Model	Battery	List Price (\$US)	Lithium Cost*	Lithium Carbonate Price (\$US/t)						
				7,500	10,000	12,500	15,000	17,500	20,000	22,500
Tesla Model S	90 kWh	90,000	Lithium Cost	\$987	\$1,317	\$1,646	\$1,975	\$2,304	\$2,633	\$2,962
			% of Cathode	33%	39%	45%	49%	53%	56%	59%
			% ASP	1.1%	1.5%	1.8%	2.2%	2.6%	2.9%	3.3%
Nissan Leaf	30 kWh	34,000	Lithium Cost	\$329	\$439	\$549	\$658	\$768	\$878	\$987
			% of Cathode	33%	39%	45%	49%	53%	56%	59%
			% ASP	1.0%	1.3%	1.6%	1.9%	2.3%	2.6%	2.9%
BMW i3	33 kWh	39,900	Lithium Cost	\$362	\$483	\$603	\$724	\$845	\$965	\$1,086
			% of Cathode	33%	39%	45%	49%	53%	56%	59%
			% ASP	0.9%	1.2%	1.5%	1.8%	2.1%	2.4%	2.7%

Source: Exane BNP Paribas (2016); *Assumes NMC cathode technology

**Table 21-4: Global Mine Production of Lithium by Company - 2015
(t LCE)**

Company	Location	2009	2010	2011	2012	2013	2014	2015p
Talison	Greenbushes, WA, Australia	33,300	47,100	51,800	62,000	54,500	65,600	70,000
SQM	Atacama, Chile	21,300	32,400	40,700	45,700	36,100	39,500	37,000
Albemarle	Atacama, Chile & Silver Peak, NV, USA	13,305	21,229	22,950	24,000	28,400	26,915	28,500
FMC	Hombre Muerto, Argentina	12,634	17,537	13,398	13,200	13,015	18,020	15,000
China Mineral	See table below	3,900	4,100	6,250	6,200	6,700	6,050	6,550
China Brine	See table below	5,500	4,510	5,025	3,830	5,530	6,030	6,100
Other Mineral	See table below	9,521	8,188	8,136	8,230	8,220	8,200	8,200
Orocobre	Olaroz, Argentina	-	-	-	-	-	-	1,700
Galaxy Resources	Mt. Cattlin, WA, Australia	-	244	9,471	8,914	- ¹	-	-
RB Energy	Val d'Or, QC, Canada	-	-	-	-	5,000	- ¹	-
Total		99,461	135,308	157,730	172,074	156,465	168,315	171,050

Note 1: placed on care and maintenance

Source: Roskill, 2015

To date, lithium production has kept up with rapid increases in demand, largely through production increases at higher cost swing producers such as Talison's Greenbushes hard rock mineral operation and production increases at Chinese brines. Future production increases to meet continued increases in consumption are still possible from these producers, especially Talison, but new, lowercost producers will be needed in the medium-term and could displace these high cost swing producers in the short term.

Enirgi's salar del Rincón project is targeting initial production of 50,000 tpa LCE for late 2019 start-up. Brine supply for this production will come from the salar del Rincón. In a press release dated July, 2016, Enirgi disclosed that it anticipates total production costs at its salar del Rincon project will approximate \$US 2,070/t LCE, delivered to Antofagasta. This cost estimate is considerably below the estimated production costs for the existing producers (Roskill, 2015), even after allowance for by-product KCl credits.

Enirgi has also announced plans to expand production beyond the initial target of 50,000 tpa LCE. In support of this, LSC and Enirgi have entered into the Relationship Agreement which provides for LSC's exclusive use in Argentina of Enirgi's proprietary DEP Technology. It is anticipated that the DEP Technology would be employed at LSC projects to supply a lithium brine concentrate as feed to Enirgi's salar del Rincón plant.

22 ENVIRONMENTAL STUDIES, PERMITTING, AND SOCIAL OR COMMUNITY IMPACT

22.1 ENVIRONMENTAL STUDIES

LSC will be required to complete environmental impact studies to advance work on the Properties. EIS Level I studies are required to be able to undertake initial geological mapping, surface sampling, hydrology, meteorological and flora and fauna studies that have no significant impact on the surface of the salts. Applications for and approval of such studies is typically a straight-forward administrative procedure. However, community consultations are required as part of the process.

EIS Level II studies are required to undertake subsurface exploration such as drilling and also for geophysical surveys which utilize heavy equipment. These studies are more involved than Level I studies and require a longer time to prepare, especially when extensive community consultations are required, as is the case in Jujuy Province.

22.1.1 Overview of Regulations

Environmental permitting is mainly a Provincial responsibility and there are various national and provincial laws and regulations governing the permitting process. Key aspects of the laws and regulations are noted in the following section.

The following are the main environmental minimum protection standards law applicable to the mining industry. The information is abstracted from a more extensive analysis of environmental rules and regulations provided by Holts.

22.1.1.1 General Environmental Law

The General Environmental Law 25,675 was enacted in 2002, and regulates the minimum environmental protection standards for the adequate and sustainable management of the environment, the preservation and protection of biological diversity and the implementation of sustainable development. It applies in the whole Argentinean territory; its provisions are mandatory, operational and shall be used for the interpretation and application of specific legislation on the matter, which remain in force, if they are not contrary to the principles and provisions contained in the law.

Its main features include:

- It makes the environment a legally protected interest;

-
- It establishes certain basic conditions for a sustainable and adequate management of the environment and biological diversity;
 - It gives local provincial courts the power to administer the Law, while federal courts will become involved whenever a breach of the Law is inter-jurisdictional in nature;
 - It embodies the National Environmental Policy;
 - It imposes mandatory EIRs;
 - It proposes a Public Hearing System to evaluate the environmental impact of projects;
 - It provides for project proponents to maintain a rehabilitation fund, and it creates the Environmental Remediation Fund.
 - It mandates an environmental insurance

22.2 General Environmental Provincial Regulations

Provincial environmental laws and regulations that impact mining activities include the following:

22.2.1 Province of Salta

- Provincial Environment Protection Law 7,070
- Provincial Decree 3,097 and Resolution 224/2009
- Provincial Water Code Law 7,017
- Provincial Law 6,649 Historical, Archeological and Paleontological Monuments and Museums
- Provincial Law 7,107 of Provincial System of Protected Areas

22.2.2 Province of Jujuy

- Provincial Hazardous Wastes Law 5,011 (Decree 6,002/2006)
- Provincial General Environmental Law 5,063
- Provincial Law 3,866 Protection of Archeological, Paleontological, Paleoanthropological and Historical Heritage
- Provincial Water Code Law 161 (as amended by Laws 2,427 and 5,114)
- Provincial Glaciers Law 5,647
- Provincial Law 4,090 Water resources
- Provincial Law 5674 and Provincial Decree 7592 (both related to lithium as a strategic mineral)

22.3 Specific Mining Environmental Regulations

22.3.1 Argentine Mining Code – Law 24,585

Section 251 of the AMC, as amended by **National Law 24,585 of Environmental Protection for Mining Activity**¹¹, provides that prior to the commencement of any mineral exploration or development activity an EIR (Environmental Impact Report) must be submitted to the Enforcement Authority that, as set forth under such legislation, is the authority that each province determines within the scope of its jurisdiction¹².

The EIR is required to be updated every two (2) years –maximum– through the filing of a new report containing the results of executed environmental actions, as well as the new facts that have been generated.

Finally, it should be mentioned that in 1996, in order to ensure unified regulation and uniform standards across the country, the Federal Mining Council –COFEMIN– approved the “Supplementary Rules” establishing the minimum mandatory content for an EIR as minimum standard for the application of Law 24,585.

22.3.2 Provincial Regulation

22.3.2.1 Province of Salta

Within the Province of Salta, the process to obtain the environmental permit required by the AMC is regulated by Provincial Decrees 1,342/1997, Section 34 of the Mining Procedural Code of the Province Law 7,141, Resolutions 130/2009 and 448/2009 of the Secretariat of Mining¹³, and Resolution 343/2015 of the Ministry of Environment and Sustainable Production.

Provincial Decree 1,342/1997 adopted COFEMIN’s “Supplementary Rules” and appointed the Provincial Secretariat of Mining as the enforcement authority.

In addition, Section 174 of Provincial Decree 3,097/2000¹⁴ established that during the exploitation stage of a mining project, in order to grant the relevant environmental permit, the previous intervention of the provincial environmental authority is mandatory¹⁵.

¹¹ National Law 24,585 makes all persons performing mining activities liable for any environmental damage caused due to the non-fulfillment of its regulations, whether the damage is caused directly or by his/her employees, or by contractors or subcontractors, or if caused by risk or defect associated to an object. The owner of a mining right is jointly liable in the same cases for the damage caused by persons authorized by him/her for the exercise of such right. Moreover, and notwithstanding administrative and criminal sanctions that may correspond, anyone causing present or residual damage to the environmental heritage, shall be obliged to mitigate, rehabilitate, restore or recompose it, as may correspond.

¹² Section 250 of the AMC establishes that each province in its corresponding jurisdiction, shall appoint the enforcement authority, and also that such authorities shall either approve or reject the EIRs submitted to them and see that the applicants comply with the approved program.

¹³ As ratified by Resolutions 201/2009 and 172/2010 of the Ministry of Economic Development, respectively.

¹⁴ It regulates the Provincial Environment Protection Law 7,070.

¹⁵ It also provides that those environment related rules contained in the AMC, shall be considered as a minimum standard, being the enforcement authority of Law 7,070 authorized to enact complementary technical regulations.

Resolution 130/2009 approved zoning rules for the prospection, exploration and exploitation of metalliferous mining, established supplementary studies and requirements to be considered while elaborating the corresponding EIRs, applicable in particular to each of the three zones in which the provincial territory was divided.

Resolution 448/2009 approved an instruction manual for the preparation of an EIR.

Finally, Resolution 343/2015 approved a number of new requirements that need to be fulfilled when submitting for approval each update of the EIR or when the enforcement authority demands it. It is important to point out that these new requirements include a number of studies and information related to social aspects.

22.3.2.2 Province of Jujuy

Within the Province of Jujuy, the process to obtain the environmental permit required by the AMC is regulated by Provincial Decrees 5,772-P-2010, 1,927-E-1996¹⁶, 724-E-1996 and 2,881-E-1997.

The enforcement authority of Decree 5,772-P-2010 is the Provincial Direction of Mining and Energetic Resources; though it must coordinate its activities with the provincial environmental authority. In addition, the Provincial Mining Environmental Management Unit -UGAMP¹⁷- created by Decree 2,881-E-97, advises the enforcement authority on the approval, rejection or extension of the EIS submitted by the titleholders of mining rights.

Reports are required to be prepared by specialists, duly registered in the Register of Environmental Consultants. The minimum standards to be met by the EIS are established under Annexes I “Prospection Stage”, II “Exploration¹⁸ Stage”, III “Exploitation¹⁹ Stage”²⁰ of the above referred Decree 5,772-P-2010.

Provincial authorities have sixty (60) business days to approve reports. Approval requires notification of the indigenous communities existing within the project area, the surface land owners and to the corresponding municipal authority. EIS reports must be updated every two years and approved in the same procedure as applied for the initial EIS and in accordance with the standards for the stage of the project. In accordance with Provincial Law 5674 and Provincial Decree 7592, environmental reports are also subject to a special experts committee on lithium.

¹⁶ Adopted COFEMIN’s “Supplementary Rules”.

¹⁷ In Spanish, the “*Unidad de Gestión Ambiental Minera Provincial*”.

¹⁸ Exploration: operations or works conducted to evaluate qualitatively and quantitatively the mineral resource in order to define the technical and economic feasibility of the deposit exploitation.

¹⁹ The exploitation stage starts with the beginning of the construction of the infrastructure for mining production.

²⁰ The report shall include the closure mechanism and the proposed post-closure monitoring.

22.4 PROJECT PERMITTING

LSC is in the exploration stage for of its Properties. Approvals for drilling programs are a component of the EIS Level II studies. Such approvals typically include permits for drilling both brine exploration wells and fresh water exploration wells.

22.5 SOCIAL OR COMMUNITY REQUIREMENTS

Indigenous rights issues have become more prominent in Argentina in recent years, especially in Jujuy Province. In particular, both National and Provincial governments are seeking to establish that any development affecting indigenous lands and communities receives the free prior and informed consent of the affected community. This requirement imposes a significant requirement for project developers to develop extensive community consultation programs. LSC has committed substantial expenditures in its proposed exploration budget to ensuring the success of these programs (see Section 29, Recommendations).

Key aspects of laws and regulations governing the rights of aboriginal communities as provided by Holts are detailed in the following section.

The **Argentine National Constitution** (as amended in 1994) foresees the indigenous peoples' rights under Article 75, paragraph 17 which recognizes the ethnic and cultural pre-existence of indigenous peoples of Argentina and their legal capacity of their communities, and the community possession and ownership of the lands they traditionally occupy. According to the National Supreme Court the provisions in the Article 75 are prescriptive in nature and give effect to the rights contained in that article, even in the absence of specific national or provincial legislation²¹.

Previous to the amendment of the National Constitution, in 1985, the **Indigenous Policy Law 23,302**²²:

- Acknowledged the indigenous communities as legal entities²³;
- Established the **National Institute of Indigenous Affairs** –INAI-, which is responsible for establishing and keeping updated the **National Registry of Indigenous Communities** -Re.Na.C.I.-, as well as for designing and implementing other policy related matters; and
- Provided for the award of lands to registered indigenous communities and the creation of a plan for the exploitation of these lands.

²¹ CSJN, Case "Comunidad Indígena Hoktek T'Oi Pueblo Wichi c/ Secretaría de Medio Ambiente y Desarrollo Sustentable s/ amparo", September 8, 2003.

²² Law 23,302 was regulated by Decree 155/1989, and amended in 2003 by Law 25,799.

²³ This status is acquired by means of registration in the Re.Na.C.I.

In 2006, the Federal Congress enacted:

- (i) **Law 26,160**²⁴, which suspended evictions of indigenous communities and charged INAI with the task of conducting a technical-legal cadastral survey of the situation regarding ownership of the land occupied by indigenous communities; and
- (ii) **Law 26,206**, which established intercultural bilingual education in order to guarantee the constitutional right of indigenous peoples to an education that promotes indigenous cultures and languages.

In October 2014, a new **Civil and Commercial National Code** was approved by Law 26,994, which, in accordance to Article 75, paragraph 17 of the National Constitution, foresees:

Article 18:

“The recognized indigenous communities have the right to possession and ownership of the lands that they traditionally occupied and those other suitable and sufficient for human development as provided by law, in accordance with the provisions of Article 75, paragraph 17 of the National Constitution.”

Finally, in May 2016, the National Executive Power established -by Decree 672/2016²⁵- the **Consultative and Participatory Council of the Indigenous Communities of Argentina**, within the ambit of the Ministry of Human Rights and Cultural Pluralism of the National Ministry of Justice and Human Rights.

Of particular importance in securing approval for mining projects in Jujuy, especially in the Salinas Grande-Guayatayoc areas, is the protocol known as Kachi Yupi. This protocol, according to the most recent criteria, governs the manner of consultation between the various indigenous groups and project developers. A brief summary follows:

(i) **“Kachi Yupi – Traces of Salt”**

The document “Kachi Yupi” was elaborated by the Kolla and Atacama Peoples of the basin of Salinas Grandes and Guayatayoc lagoon (Provinces of Salta and Jujuy) and approved by the General Assembly of these communities on August 22, 2015.

It is intended to regulate the procedure for the implementation of the indigenous communities’ right to consultation and prior, free and informed consent in that area of the provincial territories.

According to this protocol:

²⁴ Law 26,160 was regulated by Decree 1,122/2007 and amended by Laws 26,554 and 26,894, which extended the time limit set out in Law 26,160 until November 23, 2017.

²⁵ The Plurinational Indigenous Council and various organizations of Indigenous Peoples objected the decree.

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- The government, at all levels, is obliged to carry out this procedure for consultation on any legislative or administrative measure involving indigenous communities' rights, territories or interests.
 - The procedure must be complied with in all administrative or legislative acts of general or particular nature, whether national, provincial or municipal, involving one or more jurisdictions, in all its phases, related to activities affecting interests of all kinds of one or all these indigenous communities.
 - The procedure must be performed before the approval and/or implementation of the measure in order to obtain the free, prior and informed consent; including all preliminary work, research, studies, exploration, etc.
 - In the case of having given free, prior and informed consent for a particular project or administrative or legislative measure, the indigenous communities have the right to share any obtained benefit. The benefits should be agreed as part of the consultation process and in no way will involve conditioning, disclaimers, restrictions or limitations on rights.
 - The decisions that arrive as a result of the consultation procedure shall be binding and mandatory for the government and private interested parties.
 - Any activity related to the measure or project can't be started until reached the relevant consent. Community consent given at a stage of the consultation process does not imply compliance with the following stages of the project or administrative or legislative measure.
 - It shall be considered void any legislative or administrative measure adopted omitting this prior consultation procedure.

It is noted that by means of **Resolution 25/2016**, the National Ombudsman recognized that this document is in accordance with the guidelines of ILO Convention 169 and the 61/295 United Nations Declaration on the Rights of Indigenous Peoples; and it was recommended to respect the process of consultation and prior, free and informed consent defined therein. However, from a legal point of view, this protocol will not be binding unless a provincial or national government decides to formally adopt it as applicable legal framework within its jurisdiction. To date, this has not been done.

23 MINE CLOSURE REQUIREMENTS

This section is not applicable to this Technical Report.

24 CAPITAL AND OPERATING COSTS

This section is not applicable to this Technical Report.

25 ECONOMIC ANALYSIS

This section is not applicable to this Technical Report.

26 ADJACENT PROPERTIES

Several of the Properties are adjacent to properties held by others that are currently in production or are under exploration for production of lithium brines.

In particular, the following are noted:

26.1 Salinas Grandes

The Salar Salinas Grandes Tenements are in proximity to tenements held by Orocobre Ltd. and other lithium project developers.

Orocobre Ltd. issued an initial NI 43-101 technical report on its tenements on salar Salinas Grandes and Laguna Guayatayoc on April 30, 2010 (Orocobre, 2010). The report was entitled:

Technical Report on the Salinas Grandes-Guayatayoc Project
Jujuy-Salta Provinces, Argentina
Report for NI 43-101
Prepared on Behalf of Orocobre Ltd. by John Houston, Consulting Hydrologist

No resources were estimated in the report. However, the report concluded that:

“The data suggest that the Project is underlain by a structurally-controlled sedimentary basin that forms an aquifer probably over 2,500 km² in area, and over 400 m deep. No effective porosity determinations have yet been made on the aquifer matrix, but by analogy with similar aquifers may be in the region of 10-20%. Surface pitting and sampling suggest that the nucleus of Salinas Grandes, covering an area of approximately 60 km² has lithium concentrations over 2000 mg L⁻¹, reaching a maximum of 3117 mg L⁻¹. In addition potassium values of >20,000 mg L⁻¹ occur over an area of approximately 40 km², and boron values >500 mg L⁻¹ occur over more than 50 km².”

In a subsequent NI 43-101 technical report filed on SEDAR on its salar Salinas Grandes and Laguna Guayatayoc tenements, Orocobre Ltd. (Orocobre, 2012) disclosed an Inferred Resource for its tenements on salar Salinas Grandes. The report is entitled:

Technical Report on the Salinas Grandes Lithium Project,
Salta Province; Argentina
Report for NI 43-101
Prepared for Orocobre Ltd.
Prepared by:
Murray R Brooker and Peter Ehren
Effective 16th April, 2012
Amended 12th August 2012

In this report, Orocobre reported an Inferred Resource as detailed in Table 26-1:

Table 26-1: Inferred Resources – Orocobre Salar Salinas Grandes Project

Resource Category	Brine body parameters				Average resource concentrations			Tonnes contained metal		
	Area km ²	Average thickness m	Mean specific yield %	Brine volume Million m ³	Lithium mg/l	Potassium mg/l	Boron mg/l	Lithium	Potassium	Boron
Inferred resource	116.2	13.3	4.1%	56.5	795	9,547	283	44,960	539,850	12,100

Source: Technical Report on the Salinas Grandes Lithium Project, Brooker & Ehren (2012)

Donald Hains, the Qualified Person responsible for this Technical Report, has been unable to verify the information contained in the Orocobre technical reports dated April 30, 2010 and April 16, 2012 (amended August 12, 2012) with respect to lithium resources and reserves on its salar Salinas Grandes and Guayatayoc properties. Mineralization reported in the Orocobre technical reports with respect to salar Salinas Grandes and Guayatayoc may not be representative of mineralization on the adjacent properties held or to be held by LSC.

26.2 Pastos Grandes

The Salar Pastos Grandes Tenements are adjacent to tenements held by others. In a NI 43-101 technical report prepared for Millennial Lithium by Nivaldo Rojas of Rojas y Asociados filed on SEDAR and dated September 14, 2016, Millennial disclosed that the company had acquired various tenements on salar Pastos Grandes. The technical report disclosed historic exploration work by Eramine Sudamerica SA (see Section 8, History, for details) that indicated lithium brine mineralization was present on the salar. Millennial further disclosed in a corporate presentation dated August 22, 2016 that surface sampling results from various locations on its tenements showed good lithium values.

Donald Hains, the Qualified Person responsible for this Technical Report, has been unable to verify the information contained in the Millennial technical report dated Sept. 14, 2016, with respect to lithium mineralization on its salar Pastos Grandes property. Mineralization reported in the Millennial technical report with respect to salar Pastos Grandes may not be representative of mineralization on the adjacent property held or to be held by LSC.

27 OTHER RELEVANT DATA AND INFORMATION

LSC holds other tenements in various salars acquired by way of the ADY Argentina Tenement Purchase Agreement and other agreements described in Section 5.2 herein, representing a significant property area for future exploration. These additional property areas are not considered “material properties” within the meaning of NI 43-101, nor are they considered Principal Properties or Qualifying Properties within the meaning of TSX-V Policy 1.1. Table 27-1 summarizes LSC’s interest in these other properties. The materiality thresholds of these properties will be reviewed on the granting of title or completion of additional exploration activity on the properties, as applicable.

Table 27-1: Non-Material Properties

Salar	Tenement Area (ha)	Attributable to LSC¹	% Attributable to LSC^{1,2}
Salinas Grandes	50,152	25,577	51%
Guayatoyoc	44,967	22,934	51%
Western Claim Block	27,375	13,961	51%
Pocitos	12,968	12,968	100%
Olaroz	3,821	3,821	100%
Arizaro & Vega de Arizaro	26,476	26,476	100%
Cauchari	407	407	100%
Laguna Palar	19,993	10,196	51%
Sub-Total	186,159	116,340	62%
Properties Under Option²			
Pozuelos	21,425	21,425	100%
Rio Grande	5,959	5,959	100%
Pular	1,346	1,346	100%
Incahusai	2,000	2,000	100%
Munano	35	35	100%
Sub-Total	30,765	30,765	100%
Grand Total	216,924	147,105	68%

1. Upon completion of all terms of proposed transactions

2. Option from LithA Inc.

28 INTERPRETATION AND CONCLUSIONS

LSC holds significant tenement positions on various salars in the Puna region of northwestern Argentina. Basins in this region have proved to host the largest portion of lithium brine resources in the world. These basins started evolving as inland closed lakes in a basin and range structural environment generated by alternating compressional and extensional regimes over the back arc of the Andean magmatic belts. Basin evolution began almost 20 million years ago as closed basins in a relatively dry environment, resulting in gradational sediments (gravels-sands-clays) and salt concentration enriched in lithium and potassium, possibly as a consequence of metal leaching and concentration from acidic-intermediate intrusive, gneisses, schists and migmatites of Paleozoic and Precambrian basement rocks, locally well-developed pegmatite lithium anomalies, Miocene-age and younger ignimbrite fields, intermediate to acidic Miocene lava flows, and structurally controlled alkali rich hot-springs over the flank portions of the basins.

Alternating episodic arid and rainy periods allowed partial dissolution of salt rock packages permitting development of cavities (porosity) and concentration of saturated salt brines rich in lithium, potassium and sodium chlorides. Normally, there are several alkali rock packages along the vertical section of the salars with proven occurrences over the first 20 metres from surface, as occurs at the Atacama Salar in Chile, and in deeper positions at Olaroz-Cauchari, salar Salinas Grandes, the Salar del Hombre Muerto and others in Argentina.

Lithium brine deposit models have been discussed by Houston et al (2011), Bradley et al. (2013) and more extensively by Munk et al (in press). Houston et al (2011) classified the salars in the Altiplano-Puna region of the Central Andes, South America in terms of two end members, “immature clastic” or “mature halite”, primarily using (1) the relative amount of clastic versus evaporate sediment; (2) climatic and tectonic influences, as related to altitude and latitude; and (3) basin hydrology, which controls the influx of fresh water.

The immature classification refers to basins that generally occur at higher (wetter) elevations in the north and east of the region, contain alternating clastic and evaporite sedimentary sequences dominated by gypsum, have recycled salts, and a general low abundance of halite. Mature refers to salars in arid to hyperarid climates, which occur in the lower elevations of the region, reach halite saturation, and have intercalated clay and silt and/or volcanic deposits.

An important point made by Houston et al. (2011) is the relative significance of aquifer permeability which is controlled by the geological and geochemical composition of the aquifers. For example, immature salars may contain large volumes of easily extractable Li-

rich brines simply because they are comprised of a mixture of clastic and evaporite aquifer materials that have higher porosity and permeability. For example, the salar de Atacama and the western side of salar Hombre Muerto could be classified as mature salars, as could salar Rio Grande and perhaps salar Arizaro, whereas salar Jama, salar Pastos Grandes, salar Pocitos and salar Olaroz-Cauchari, have characteristics more like an immature salar.

Recent discoveries, particularly in northern Argentina, point out the importance of sedimentary sequences in the host basins. Discoveries since 2010 in the Cauchari, Olaroz and Centenario salars involved deeper, early basin in-fill coarse sediments hosting lithium and potassium-enriched brines. It appears that as the regional tectonic relaxation gave rise to pull-apart basins, the first sediments to fill these basins were coarse, higher energy sediments derived from the nearby steep terrain. These coarser sediments have more and larger pore spaces, increasing the transmissivity of the formation. As the basins filled and the higher topography was eroded, the sediments tend to become finer. As the runoff and hydrothermal fluids concentrated in the closed basins, common salt (NaCl) tended towards saturation, while lithium, boron, potassium and other elements became more concentrated as fresh water evaporated at the surface, and in particular at the basin margins. As the trapped fluids became brackish and eventually evolved into brines containing greater than 10,000 ppm contained salts, the density increased, typically to slightly in excess of 1.2g/cm³. The more dense brine tends to separate and sink beneath fresh water and less saturated solutions, and even to start migrating outwards beneath the encroaching fresh water at the basin margins. Lithium concentrations tend to increase in a direct relationship to density, thus it is not surprising to find more consistent and higher grades at depth. The deeper, more coarse sediments at the same time tend to make higher yielding aquifers.

The Properties are summarized in Table 28- 1. The tenements are located on salars combining aspects of both mature and immature structure but are predominantly of the immature, clastic type.

Table 28-1: Properties¹

Salar	Total Tenement Area (ha)	Direct LSC Holdings (ha)	% Attributable to LSC¹
QUALIFYING OR MATERIAL PROPERTIES			
Salar Rio Grande Tenements	20,061	20,061	100%
Salar Pastos Grandes Tenements	2,683	2,683	100%
Salar Jama Tenements	5,988	3,538	59%
Salar Salinas Grandes Tenements	23,028	23,028	100%
TOTAL	51,760	49,310	95%

1. Upon completion of all transactions described in this report

Historical surface and drill sampling work by ADY and others on several of the tenements, due diligence sampling by the auth or and comparison to results in published technical reports from others on m any of the salars indicates the Properties can be considered as prospective for lithium brine and properties of merit.

The author of this Technical Report has considerable experience in the evaluation of lithium brine prospects and considers the available historic and published data with respect to the salars on which the Properties are located to be reasonable and sufficient to justify advancement of an exploration program on selected salars by LSC. Of the Properties, the most immediately promising in terms of currently available data and ability to quickly undertake exploration work are the Salar Rio Grande Tenements, Salar Jama Tenements, and Salar Pastos Grandes Tenements. The Salar Salinas Grandes Tenements are also considered to be highly prospective based on available data from others (Brooker and Ehren, 2012, Houston, 2011) but also have a longer development cycle in terms of community relations.

Exploration programs are planned to advance selected targets to at least the preliminary economic assessment (PEA) stage. The work programs will focus on defining the basin structure and hydrogeology, brine distribution and metal distribution within the brine and the porosity, permeability and pumping characteristics of the brine aquifers with the objective of classifying resources at the inferred and indicated resource level of confidence and in conformance with NI 43-101 definitions.

The exploration program will consist of all or some of the following components:

- **Filing of EIS Level II Reports:** to enable subsurface exploration on the selected targets;

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- **Surface Brine Sampling:** Brine samples from shallow pits collected throughout the salar to obtain preliminary indications of lithium occurrence and distribution;
 - **Time Domain Electro magnetic (TEM) Survey and/or CS-AMT survey:** to define fresh water/brine interfaces around the salar perimeter;
 - **Vertical Electrical Sounding (VES) Survey:** to define the brine and fresh water interfaces within the salar;
 - **Seismic Survey and Gravity Survey:** to define the structure and shape of the salar basin;
 - **Hydrology/Hydrogeological Survey:** to define fluid inputs to the salar and develop a hydrological model of the salar;
 - **RC Drilling:** to develop vertical sections of brine chemistry at depth and to provide geological and hydrogeological data;
 - **Diamond Drilling/Sonic Drilling:** to collect continuous cores for geotechnical testing (RBRC, grain size and density) and geological characterization. Some of the boreholes will be completed as observation wells for brine sampling and monitoring;
 - **Pumping Test Program:** Pumping and well monitoring facilities and pumping tests to estimate aquifer properties related to brine recovery;
 - **Brine Processing Tests:** to evaluate the recoverability of lithium from the brines using the Enirgi DEP technology;
 - **Resource Modeling:** static and dynamic (3D) resource modeling of the brine reservoir to develop estimates of lithium brine resources at inferred and indicated resource classification levels. Depending on the quality and quantity of the exploration data, estimates at the measured resource level may be possible;
 - **Preliminary Economic Evaluation/Prefeasibility Study:** completion of necessary economic and technical analyses to support classification of indicated and/or measured resources as probable/proven reserves.

The exploration program will be divided in two phases, with Phase I consisting of updating of EIS filings to EIS level II and completion of non-invasive surface work such as geophysical surveys, hydrology/hydrogeological studies, shallow surface sampling and brine chemistry studies, and community relations programs. The results of the Phase I work will guide decisions for the Phase II work related to drill hole location and number, pumping and brine sampling test work, and processing test work with the objective of developing resource/reserve estimates for each Property.

29 RECOMMENDATIONS

Given the size of the LSC tenement package, prioritization of exploration programs and budgets has been based on the perceived potential of the Properties considering size, location, apparent lithium grades, perceived ease of permitting, and time requirements to complete exploration the required exploration programs. The initial exploration targets are the Salar Jama Tenements, the Salar Rio Grande Tenements, the Salar Pastos Grandes Tenements, and the Salar Salinas Grandes Tenements.

Exploration programs and budgets have been developed for these targets to enable development decisions with respect to the Properties within the next 2.5 - 3 years. A phased exploration program is planned consisting of updates and preparation of the required EIS reports and selected hydrology/hydrogeological studies, geophysical work, and shallow surface sampling and additional brine testing (Phase 1). Phase 1 work programs will take 6 to 12 months to complete, dependent on the projected level of effort for the relevant tenement package and time required to obtain the necessary permits. Based on the results of Phase 1 work, drill targets will be selected and Phase II program of drilling, pumping tests, brine testing, resource modelling and resource/reserve estimation will be completed resulting in delivery of a new NI 43-101 report on each Property.

29.1 Salar Rio Grande Tenements

The exploration plan for the Salar Rio Grande Tenements incorporates the following elements and budgets:

Work Element	Units	Budget (\$US)
Phase I		
Update EIS Level I to Level II		\$75,000
Hydrology/hydrogeological studies		\$100,000
Seismic tomography	30 km	\$300,000
TEM and VES Surveys	20 km	\$100,000
Initial brine testing		\$50,000
Sub-total		\$625,000
Phase II		
RC Drilling/monitoring wells		\$450,000
Rehabilitate existing wells		\$100,000
Pumping Wells (new)		\$300,000
Sample assays		\$50,000
Resource modeling, static & 3D		\$300,000
Metallurgical testing		\$150,000
Camp Operations, Project Overhead		\$300,000
NI 43-101 Report		\$125,000
Sub-total		\$1,775,000
Contingency		\$300,000
Total Budget		\$2,700,000

29.2 Salar Pastos Grandes Tenements

The proposed exploration program and budget for the Salar Pastos Grandes Tenements is detailed below.

Work Element	Units	Budget (\$US)
Phase I		
Update EIS Level I to Level II		\$75,000
Hydrology/hydrogeological studies		\$75,000
Seismic tomography	30 km	\$300,000
TEM and VES Surveys	10 km	\$30,000
Initial brine testing		\$50,000
Sub-total		\$530,000
Phase II		
RC Drilling/monitoring wells		\$625,000
Pumping Wells		\$350,000
Sample assays		\$50,000
Resource modeling, static & 3D		\$300,000
Metallurgical testing		\$75,000
Camp Operations, Project Overhead		\$200,000
NI 43-101 Report		\$125,000
Sub-total		\$1,725,000
Contingency		\$200,000
Total Budget		\$2,455,000

30.3 Salar Jama Tenements

The exploration program for the Salar Jama Tenements incorporates the following elements and budgets:

Work Element	Units	Budget (\$US)
Phase I		
Update EIS Level I to Level II		\$75,000
Surface geological mapping, additional surface sampling, hydrology/hydrogeological studies		\$125,000
Seismic tomography	20 km	\$250,000
VES Survey	15 km	\$50,000
Gravity Survey		\$50,000
Sub-total		\$550,000
Phase II		
RC Drilling/monitoring wells		\$650,000
Diamond Drilling		\$750,000
Pumping Wells		\$800,000
Sample assays		\$100,000
Resource modeling, static & 3D		\$300,000
Metallurgical testing		\$150,000
Camp Operations, Project Overhead		\$350,000
NI 43-101 Report		\$125,000
Sub-total		\$3,225,000
Contingency		\$500,000
Total Budget		\$4,275,000

29.4 Salar Salinas Grandes Tenements

Social and community development issues in the salar Salinas Grandes area require that exploration and development work focus first on securing widespread community and governmental acceptance. LSC intends to initially focus on enhancing the community relations programs already in place, complemented by low impact surface and shallow auger sampling. As wider appreciation of the community benefits of exploration and development on the tenements is developed, LSC will undertake more detailed work related to defining the basin geometry, hydrogeology and resource potential. No expenditures are planned to be undertaken directly affecting the Grandes V and Grandes VI tenements, which are subject to a border issue between Salta and Jujuy provinces.

The proposed exploration plan and budget for the Salar Salinas Grandes Tenements is detailed below.

Work Element	Units	Budget (\$US)
Phase I		
Update EIS Level I to Level II		\$150,000
Enhanced community relations program		\$500,000
Surface/shallow auger sampling		\$75,000
Initial brine testing		\$50,000
TEM and VES Surveys	20 km	\$100,000
Seismic surveys	20 km	\$100,000
Sub-total		\$975,000
Phase II		
RC Drilling/monitoring wells		\$310,000
Diamond/Sonic drill program		\$375,000
Sample assays		\$75,000
Engineering design studies		\$500,000
Resource modeling, static & 3D		\$400,000
Metallurgical testing		\$100,000
Camp Operations, Project Overhead		\$350,000
NI 43-101 Report		\$200,000
Sub-total		\$2,310,000
Contingency		500,000
Total Budget		\$3,785,000

30 REFERENCES

ADY Resources Limited (2015): Renovacion Bi annual Informe de Impacto Ambiental Etapa de Explotacion y Servidumbre de campamento, Proyecto Rio Grande, January, 2015

ADY Resources Limited (2012): Informe Final, Bateria de Pozos Salar de Rio Grande; prepared by Conhidro S.R.L., May, 2012

Allmendinger, R.W., Jordan, T.E., Kay, S.M., and Isacks, B.L., (1997): The Evolution of the Altiplano-Puna Plateau of the Central Andes: Annual Review of Earth and Planetary Science, v. 25, p. 139-174

Alonso, R. N., (1999): Los salares de la Puna y sus recursos evaporíticos, Jujuy, Salta y Catamarca. En Recursos Minerales de la República Argentina (Ed. E. O. Zappettini), Instituto de Geología y Recursos Minerales. SEGEMAR, Anales 35: 1907-1921, Buenos Aires

Alonso, R.N., Jordan, T.E., Tabbutt, K.T. and Vandervoort, D.S. (1991): Giant evaporite belts of the Neogene central Andes. *Geology*, 19: 401-404

Alonso, R.N. and Sorentino, Carlos M.R. (2009): Los Salares de la Puna Argentina, Geologia, Geomorphologia y Recursos Evaporiticos, Fundacion Yala

Alonso, R.N. and Viramonte, J.G. (1987): Geología Y Metalogenia de la Puna, Estudios Geol., Vo. 43, pp 393 – 407

Alonso, R., J. G. Viramonte y R. Gutiérrez. (1984): Puna Austral bases para el subprovincialismo geológico de la Puna Argentina. Actas IX Congreso Geológico Argentino, Actas1: 43-63, Bariloche, Argentina

Alonso, R.N. (1992): Estratigrafía del Cenozoico de la Cuenca de Pastos Grandes (Puna Salteña) con énfasis en la Formación Sijes y sus boratos; Revista de la Asociación Geológica Argentina, Vol. 47, No. 2, pp. 189-199

Alonso, R.N. (2006): Ambientes Evaporiticos Continentales de Argentina; INSUGEO, Serie Correlacion Geologica, Vol. 21, pp. 155-170, Tucuman, Argentina

Artieda, O., Davia, A., Wierzbos, J., Buhler, P., and Rodriguez-Ochoa, R. (2015): Surface evolution of salt-encrusted playas under extreme and continued dryness, Earth Surface Processes and Landforms, 12 pp; accessed at <http://digitalcommons.unl.edu/nasapub/152>

Barnes, J.B. and Ehlers, T.A. (2009): End member models for Andean Plateau uplift; Earth Science Reviews, Vo. 97, pp. 117-144

Brooker, M. R. and Ehren, P. (2013): Technical Report on the Salinas Grandes Lithium Project; NI 43-101 Report prepared for Orcobre Ltd., effective date April 16, 2012, amended Aug. 12, 2013

Carrapa, B. and DeCelles, P.G. (2008): Eocene exhumation and basin development in the Puna of northwestern Argentina; *Tectonics*, Vol. 27, TC1015, pp. 19

Chernicoff, C.J., Richards, J.P., and Zappettini, E.O., (2002): Crustal lineament control on magmatism and mineralization in northwestern Argentina: geological, geophysical, and remote sensing evidence: *Ore Geology Reviews*, v. 21, p. 127-155.

Coira, B., Davidson, J., Mpodozis, C., and Ramos, V., (1982): Tectonic and Magmatic Evolution of the Andes of Northern Argentina and Chile: *Earth Science Reviews*, v. 18, p. 303-332

Coutand, I., Cobbold, P.R., Urreiztieta, M., Gautier, P., Chauvin, A., Gapais, D., Rossello, E.A. and Lopez, O. (2001): Style and history of Andean deformation, Puna Plateau, NW Argentina. *Tectonics*, 20: 210-234.

DeCelles, P.G., Carrapa, B., Horton, B.K., McNab, J., Geherd, G.E., and Boyd, J. (2015): The Miocene Arizaro Basin, central Andean hinterland: Response to partial lithosphere removal, in DeCelles, P.G., Ducea, M.N., Carrapa, B., and Kapp, P.A. (eds.), *Geodynamics of a Cordilleran Orogenic System: The Central Andes of Argentina and Northern Chile*; Geological Society of America Memoir 212, p. 359-386

de Silva, S.L., (1989): Altiplano-Puna volcanic complex of the central Andes: *Geology*, v. 17, p. 1102-1106.

de Silva, S.L., Zandt, G., Trunball, R., Viramonte, J.G., Salas, G., and Jiménez, N., (2006): Large ignimbrite eruptions and volcano-tectonic depressions in the Central Andes: a thermomechanical perspective, *in* Troise, C., De Natale, G., and Kilburn, C.R.J., eds., 2006, *Mechanisms of Activity and Unrest at Large Calderas*: Geological Society, London, Special Publication 269, p. 47-63

Deutsche Bank 2016): Lithium 101, Research Report, May 9, 2016

Enirgi Group Corporation (2016): Press release, Rincon Project Definitive Feasibility Study, July, 2016

Ericksen, G.E., Salas, O. Raul, (1987): *Geology and Resources of salars in the Central Andes*; U.S. Geological Survey Open File report 88-210

Exane BNP Paribas (2016): Electric Shock, The Truth about EVs, Research Report, Sept. 12, 2016

Garrett, D. (2004): *Handbook of lithium and natural calcium chloride: their deposits, processing, uses and properties*. 1st ed. Elsevier Ltd, Amsterdam, San Diego, Oxford, London

Garzione, C.N., Molnar, P., Libarkin, J.C., and MacFadden, B.J., (2006): Rapid late Miocene rise of the Bolivian Altiplano: Evidence for removal of mantle lithosphere: Earth and Planetary Science Letters, v. 241, p. 543-556

Gorustovich, S., Monaldi, C.R. and Salfity, J.A. (2011): Geology and metal ore deposits in the Argentine Puna; Cenozoic Geology of the Central Andes of Argentina, pp. 169-187, accessed at <https://www.researchgate.net/publication/262006153>

Gregory-Wodzicki, K.M., (2000): Uplift history of the Central and Northern Andes: A review: Geological Society of America Bulletin, v. 112, p. 1091-1105

Groundwater Insight and others, 2012 NI 43-101 Technical Report Feasibility Study: Reserve Estimation and Lithium Carbonate and Potash Production at the Cauchari-Olaroz Salars, Jujuy Province, Argentina, prepared for Lithium Americas Corp. by Mark King, Roger Kelley and Daron Abbey and dated 21 July 2012

Hartley, A.J., Chong, G., Houston, J. and Mather, A. (2005): 150 million years of climatic stability: evidence from the Atacama Desert, northern Chile. Journal of the Geological Society, London, 162: 421-424

Helvacı, C. and Alonso, R.N. (2000): Borate Deposits of Turkey and Argentina: A summary and geological comparison; Turkish Journal of Earth Science, Vol. 9, pp. 1-27

Holt Abogados (2017): Legal Opinion on Mining Rights- Enirgi;
Legal Opinion on Mining Right - Cuper S.A.;
Legal Opinion on Mining Rights – Pastos Grandes
Opinions prepared for LSC Lithium Inc., January 25, 2017

Houston, J. (2006a): Variability of Precipitation in the Atacama Desert: Its Causes and Hydrological Impact. International Journal of Climatology 26: 2181-2189

Houston, J. (2006b): Evaporation in the Atacama desert: An empirical study of spatio-temporal variations and their causes. Journal of Hydrology, 330: 402-412

Houston, J. (2010): Technical Report on the Cauchari project, Jujuy Province, Argentina, NI 43-101 report prepared for Orocobre Ltd, April 30, 2010

Houston, J and Ehren, P. (2010a): Technical Report on the Olaroz Project, Jujuy Province, Argentina. NI 43-101 report prepared for Orocobre Ltd, April 30, 2010

Houston, J. (2010b): Technical Report on the Salinas Grandes-Guayatayoc Project, Jujuy-Salta Provinces, Argentina. NI 43-101 report prepared for Orocobre Ltd, April 30, 2010

Houston, J. and Gunn, M. (2011): Technical report on the Salar de Olaroz Lithium-Potash Project, Jujuy Province, Argentina,; NI 43-101 report prepared for Orocobre Ltd., May 13, 2011

Houston, J., Butcher, A., Ehren, P., Evans, K., and Godfrey, L. (2011): The Evaluation of Brine Prospects and the Requirement for Modifications to Filing Standards. *Economic Geology*. V 106, p 1225-1239

Igarzábal, A. P. (1984): Estudio geológico de los recursos mineros en salares del NOA (Puna Argentina). Proyecto de Investigación. Consejo de Investigación. Universidad Nacional de Salta

INTA (2009): Caracterización de las cuencas hídricas de las provincias de Salta y Jujuy; SIGCSSJ, V.1

Jordan, T.E., Alonso, R.N. (1987): Cenozoic stratigraphy and basin tectonics of the Andes Mountains, 20-28°S latitude. *American Association of Petroleum Geologists Bulletin*, 71:49-64.

Kasemann, S., (1999): The geochemistry of boron in the Puna Plateau of the Central Andes, NW Argentina. A geochemical and isotope study of whole-rocks, tourmalines, borates, and hydrothermal fluids: The significance of boron isotopes for recycling processes in continental crust. Doctoral thesis, University of Berlin, Germany

Kay, S.M., Coira, B., Madoz, C. (2008): Field trip guide: Neogene evolution of the central Andean Puna plateau and southern Central Volcanic Zone. in Kay, S.M. and Ramos, V.A. (eds) Field trip guides to the Backbone of the Americas in the southern and central Andes: Ridge collision, shallow subduction, and plateau uplift. *Geological Society of America Field Guide* 13: 117-181.

Kraemer, B., Adelman, D., Alten, M., Schnurr, W., Erpenstein, K., Kiefer, E., van den Bogaard, P. and Gorler, K. (1999): Incorporation of the Palaeogene foreland into the Neogene Puna plateau: The Salar de Antofalla area, NW Argentina. *Journal of South American Earth Sciences*, 12: 157-182

K-Utec (2014): Scoping Study for Utilization of Brine from Salar Jamá, Argentina to recover Potash, Borate and Lithium Carbonate; prepared for Cuper S.A., August, 2014

Lamb, S., Hoke, L., Kennan, L., and Dewey, J., (1997): Cenozoic evolution of the Central Andes in Bolivia and northern Chile in Burg, J.P., and Ford, M., eds., *Orogeny Through Time: Geological Society, London, Special Publication* 121, p. 237-264

Lithium Americas Corp (LAC). NI43-101 report dated 6th December, 2010. Measured, Indicated and Inferred Resource Estimation of Lithium and Potassium at the Cauchari and Olaroz Salars, Jujuy Province, Argentina

Lopez Steinmetz R.L. (2013): Genesis y Evolución de la Laguna de Guayatayoc, Borde Oriental de la Puna de Jujuy, Argentina, Ph.D. Thesis, Universidad Nacional de Salta

Lopez Steinmetz, R.L. and Galli, C.I. (2015); Hydrological change during the Pleistocene-Holocene transition associated with the last Glacial Maximum-Altithermal in the eastern border of northern Puna; *Andean Geology*, Vol. 42, No. 1, 21 pp.

Lopez Steinmetz, R.L. and Galli, C.I. (2015); Basin development at the eastern border of the Northern Puna and its relationship with the plateau evolution; Journal of South American Earth Science, Vol. 63, pp. 244-259

Lowenstein, T. (2000): 80 ka Paleoclimate Record from Salar de Hombre Muerto, Argentina, www.geol.binghamton.edu/faculty/lowenstein/hm/hombremuerto.html

Lowenstein, T., Hein, M.C., Bobst, A.L., Jordan, T.E., Godfrey, L.V., Ku, T.L. and Luo, S. (2001): A 106Kyr paleoclimate record from the Salar de Atacama, Chile: Evidence for wet Late Glacial climates. in: Betancourt, J., Quade, J. and Seidlitz, G. (editors) Paleoclimatology of the Central Andes. PEPIUSGS Workshop Abstracts, Tucson, Arizona

Mercoaguas (2010): Evaluación de Salmuera para la Obtención de Sulfato de Sodio en el salar de Rio Grande, Departamento Los Andes, Salta; Agosto, 2010

Mercoaguas (2007): Cubicación de Sulfato de Sodio Anhidro y Evaluación de su Concentración en la salmuera en el extremo sur del salar de Pocitos, Departamento Los Andes, Provincia de Salta

Millennial Lithium (2016): Press release, Update on Argentine Acquisition, August 15, 2016

Mon, R. (2005): Control tectónico de la red de drenaje de los Andes del norte argentino. Revista de la Asociación Geológica Argentina, 60: 461-466.

Morris, D.A., Johnson, A.I. (1967): Summary of hydrologic and physical properties of rock and soil material, as analyzed by the Hydrologic Laboratory of the U.S.G.S. 1948-1960. Water Supply Paper 1839-D, USGS, Washington, DC.

Nicoll, H.B., Suriano, J.M., Kimball, J.F., and Brodtkorb, A. (1982): Geochemical characteristics of brines in evaporitic basins, Argentinian Puna; Academia Nacional de Ciencias, Miscelanea No. 64, Cordoba, Argentina

Ramos, V.A. (1999): Los depósitos sinorogénicos terciarios de la región Andina. En: Caminos, R. (Ed.), Geología Argentina, Instituto de Geología y Recursos Minerales, Anales 29 (22): 651-682, Buenos Aires

Richards, J.P., Jourdan, F., Creaser, R.A., Maldonado, G., DuFrane, S.A (2013): Geology, geochemistry, geochronology and economic potential of Neogene volcanic rocks in the Laguna Pedernal and Salar de Aguas Calientes segments of the Archibarca lineament, northwest Argentina; Journal of Volcanology and Geothermal Research, Vol. 258, pp. 47 – 73

Richard Kleinwort Consultancy Group (2003): A Pre-feasibility Study on SurNatron S.A.'s Sodium Sulphate & Sodium Carbonate Projects at salar de Pocitos, Salta Province, Argentina

Rojas, N. (2016): Technical Report on the Pastos Grandes Projuect, salta Province, Argentina; prepared by Rojas y Asociados for Millennial Lithium, effective date September 4, 2016

Salifty, J.A. (1985): Lineamientos transversales al rumbo Andino en el noroeste de Argentino. IV Congreso Geológico Chileno – Antofagasta, 2: 119-137

Salifty, J.A., and Marquillas, R.A. (1994): Tectonic and sedimentary evolution of the Cretaceous-Eocene Salta Group basin, Argentina. In Salifty, J.A. (ed) Cretaceous tectonics of the Andes, Earth Evolution Series, Vieweg, Weisbaden.

Salifty, J.A., Gorustovich, S.A., Gonzalez, R.F., Monaldi, C.R., Marquillas, R.A., Galli, C.I. and Alonso, R.N. (1996): Post-Eocene Basins of the Argentine Central Andes, Third ISAG, St.Malo, France, pp. 485-488; accessed at <https://www.researchgate.net/publication/32970953>

Scotese, C.R. (2002): Atlas of Earth History. PALEOMAP Project website, <http://www.scotese.com>

SEGEMAR, 2008.

Hoja Geologica Susques, 2366-III, 1:250,000

Hoja Geologica Mian Pirquitas, 2366-I, 1:250,000

Hoja Geologica Cachi, 2566-III, 1:250,000

Hoja Geologica San Antonia de los Cobres, 2566-I, 1:250,000

Hoja Geologica Sierra de Aguilar, 2366-22, 1:250,000

Hoja Geologica Ciudad de Libertador General San Martin, 2366-IV, 1:250,000

Hoja Geologica Antofalla, 2569-IV, 1:250,000

Hoja Geologica Socampa, 2569-II, 1:250,000

Hoja Geologica Metan, 2566-IV, 1:250,000

Smyth, R.C. and Sharp, J.M. (2006): The Hydrology of Tuffs, in Heiken, G. (ed). Tuffs – Their properties, uses hydrology, and resources; Geological Society of America Special Paper 408, p. 91 – 111

SRK Consulting (2012): Letter Report: Resource estimate for Sodium Sulfate (Brine), Salar Rio Grande; prepared for The Sentient Group

Stormont, J.C., Hines, J.S., O'Dowd, D., Kelsy, J.A., and Pease, R.E. (2011): A Method to Measure the Relative Brine Release Capacity of Geologic Material; Geotechnical Testing Journal, Vol. 34, No. 5, 7 pp.

Sullivan, S. (1998): Salar de Rio Grande Sodium Sulphate Project, Mineral resource Report, November

Vandervoort, D.S., Jordan, T.E., Zeitler, P.K. and Alonso, R.N. (1995): Chronology of internal drainage development and uplift, southern Puna plateau, Argentine central Andes. Geology, 23: 145-148

Voss, R. (2002): Cenozoic stratigraphy of the northern Salar de Antofalla region, northwestern Argentina; Revista Geologica de Chile, Vol. 29, No. 2, pp. 151 - 165

Ware, M.D. (2000): Report of Investigations, Salar del Rio Grande

31 DATE AND SIGNATURE PAGE

This report titled *“Review of Four Lithium Exploration Properties in Argentina, Prepared for LSC Lithium Inc., Report for NI 43-101”* dated January 27, 2017 and with an effective date of December 31, 2016 was prepared and signed by the following author:

Effective date of this report: December 31, 2016.



(Signed & Sealed) “Donald H. Hains”

Donald H Hains, P.Geo

Dated at Toronto, Ont., January 27 , 2017

32 CERTIFICATE OF QUALIFIED PERSON

DONALD H. HAINS

I, Donald H. Hains, P.Geo., as author of this report entitled “ **Review of Four Lithium Exploration Properties in Argentina** ” prepared for LSC Lithium Inc. (“LSC”) and dated January 27, 2017 (the “Technical Report”), with an effective date of December 31, 2016, do hereby certify that:

1. I am President of Hains Engineering Company Limited, a company duly authorized by Professional Engineers of Ontario, with offices at 2275 Lakeshore Blvd. West, Suite 515, Toronto, ON M8V 3Y3.

2. I am a graduate of Queen’s University, Kingston, ON with a degree in Chemistry (1974) and a graduate of Dalhousie University, Halifax, NS with a MBA (1976).

3. I am registered as a Professional Geoscientist in the Province of Ontario (Reg. # 0494). I have worked as a geologist and minerals economist since graduating from university. I am a member of the following professional and technical associations:

- Canadian Institute of Mining, Metallurgy and Petroleum
- Society for Mining, Metallurgy and Exploration (#4175075)
- The Metallurgical Society, AIME
- American Ceramics Society
- Prospectors and Developers Association of Canada

4. My relevant experience for the purpose of the Technical Report is:

- NI 43-101 technical report on the Maricunga Lithium brine project, Salar de Maricunga, Chile (2012)
- NI 43-101 technical Report on the Maricunga brine project, Salar de Maricunga (2011)
- Due diligence review of Maricunga brine project, Salar de Maricunga (2010)
- Due diligence review of Lithium Americas Salar de Cauchari lithium brine project (2014, 2016)
- Due diligence reviews of various lithium brine projects in Nevada, USA (2014 – 2016)
- Due diligence reviews of projects on the following salars in Argentina:
 - Salar de Hombre Muerto (2010, 2011)
 - Salar de Pozuelos (2009)
 - Salar de Pocitos (2010, 2011)
 - Salar de Ratones/Salar Centenario (2014)
 - Salar del Rincón (2009)
 - Salar Arizaro (2010)
- Due diligence reviews of selected sabkha brine projects in Saudi Arabia

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- General reviews of lithium brine development opportunities in Argentina and Chile (2008 – 2016)
 - Author of CIM Best Practice Guidelines for Estimation of Lithium Brine Resources and Reserves (2014)
 - Numerous presentations on exploration best practice and role of QP in lithium brine resource/reserve estimation at Industrial Minerals Lithium Supply & Markets conference (2011, 2012, 2013, 2014).

5. I have read the definition of "qualified person" set out in National Instrument 43-101 ("NI 43-101") and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a "qualified person" for the purposes of NI 43-101.

6. My most recent personal inspection of each of the properties which are the subject of the Technical Report began on July 3, 2016 and ended on July 16, 2016.

7. I am responsible for overall preparation of the Technical Report. I am directly responsible for sections 1,2,3,5,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,24,25,26,27, 28 and 29. I have relied upon Holt Abogados, Argentine legal counsel to LSC for matters related to property tenure, Argentine mining and environmental law and regulation, Argentine mining taxes and fees, and Argentine indigenous affairs regulations affecting mining as detailed in Sections 4, 6 and 22 of this report.

8. I am independent of LSC based on the description in section 1.5 of NI 43-101.

9. I have had no prior involvement with the properties that are the subject of the Technical Report aside from general reviews of salars in Argentina.

10. As at the effective date of the Technical Report, to the best of my knowledge, information, and belief, this Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

11. I have read NI 43-101, Form 43-101F1, and 43-101CP and the Technical Report has been prepared in compliance with that Instrument and form.

12. I consent to the filing of the Technical Report with any stock exchange and other regulatory authority and any publication by them for regulatory purposes, including electronic publication in the public company files on their websites accessible by the public, of the Technical Report.

Dated 27th day of January, 2017



Signed and sealed

Donald H. Hains, P. Geo