

TECHNICAL REPORT ON PASTOS GRANDES LITHIUM PROJECT

PREPARED FOR LSC LITHIUM CORPORATION

Report for NI 43-101

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October 25, 2018



Effective Date: October 19, 2018

Report Control Form**Document Title**

Technical Report on Pastos Grandes Lithium Project

Client Name & Address

LSC Lithium Corporation

Document Reference

Project #

**Status &
Issue No.**

Version

4**Issue Date**

October 25, 2018

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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 Corporation (“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 LSC’s Pastos Grandes lithium brine project in Salta Province, Argentina.

The Pastos Grandes project is a lithium brine (salar) property consisting of 2,683 ha located at salar de Pastos Grandes, Salta Province, Argentina. LSC has been exploring the property through a program of surface sampling, drilling and geophysics with the objective of defining a lithium brine resource for eventual lithium brine production. LSC’s Pastos Grandes project, hereinafter referred to as the PG Project or PG, is being explored and developed in conjunction with LSC’s nearby Pozuelos lithium project. The combined project, the PPG Project, is the subject of an on-going Preliminary Economic Analysis (PEA) study being undertaken by GHD Engineering (LSC press release dated Aug. 7, 2018).

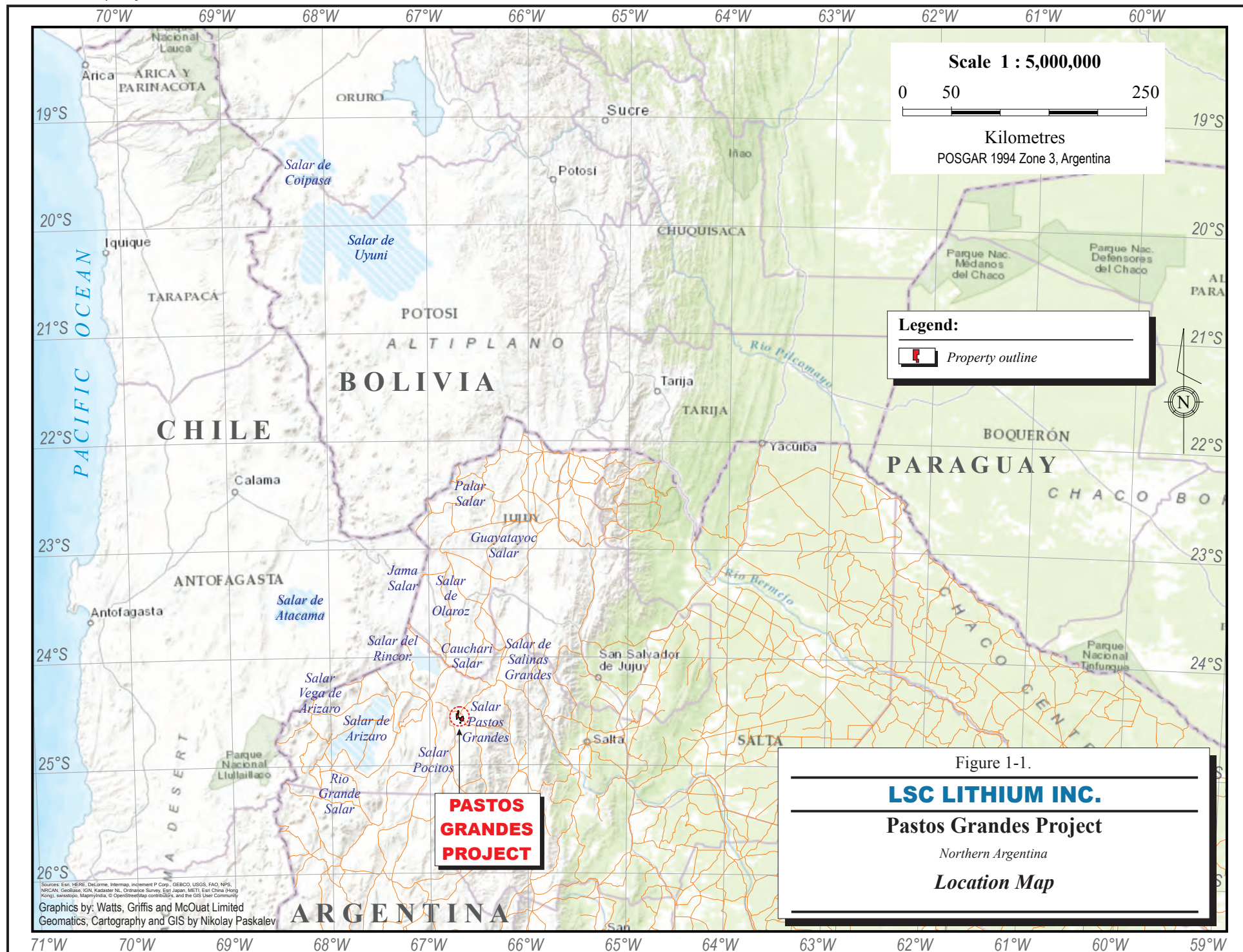
Mr. Hains has visited the PG property on numerous occasions since initial acquisition of tenements by LSC in 2016 (Hains, 2017a). His last visit was on June 16-17, 2018.

LSC holds a 100% interest in the PG property. The property is located in Salta Province, northwestern Argentina (Figure 1-1). The Pastos Grandes property is considered to be prospective for lithium brine. Millennial Lithium holds tenements immediately adjacent to LSC’s tenements on salar de Pastos Grandes and is undertaking a feasibility study for development of its tenements for lithium brine production (Millennial Lithium corporate presentation dated May, 2018).

1.2 CONCLUSIONS AND RECOMMENDATIONS

LSC holds 2,683 ha of tenements located on the east and west sides of salar de Pastos Grandes. The tenements are prospective for lithium brine. Salar de Pastos Grandes is classified as an immature salar comprised of thick sequences mixed halite-sand-silt and sand/gravels. The salar brine is of the Na-Cl-Ca/SO₄ type. Brine sample assay data show consistent values down hole and across the LSC tenements.

The mixed halite-sand-silt sequences vary considerably in terms of the proportions of the matrix. Geophysical exploration (seismic, SEV, TEM) and brine sampling indicates brine is present in the salar to depths of at least 600 m. While Relative Brine Release Capacity (RBRC) values, a proxy for Specific Yield, (S_y) values vary widely; all sampled lithologies returned brine samples, indicating all lithologies can be productive for brine.



The estimated brine resources contained within the LSC tenements total 939,080 tonnes Measured and Indicated LCE (lithium carbonate equivalent) at 464 mg/L lithium and 307,500 tonnes Inferred LCE at 467 mg/L lithium.

The resource estimate is detailed in Table 1-1 and summarized in Table 1-2.

**TABLE 1-2: SUMMARY RESOURCE ESTIMATE AND AVERAGE BRINE
ASSAY CHEMICAL RATIOS
LSC TENEMENTS
Salar de Pastos Grandes**

Resource Category	Lithium Grade (mg/L)	Lithium (tonnes)	Lithium Carbonate Equivalent (LCE)	Mg:Li	K:Li	SO ₄ :Li	SO ₄ :Ca
Measured	465	168,090	894,720	6.65	10.29	21.18	14.44
Indicated	452	8,335	44,360	6.63	10.13	21.59	13.03
M&I	464	176,425	939,080	6.65	10.28	21.20	14.35
Inferred	467	57,760	307,500	6.61	10.23	21.16	14.50

The brine chemistry is amenable to lithium carbonate production using conventional lithium brine processing technologies for brine concentration such as solar evaporation, followed by precipitation of lithium carbonate.

LSC is proposing to develop its Pastos Grandes tenements in conjunction with development of its salar de Pozuelos lithium brine project. The brine chemistry at Pastos Grandes is complementary to the brine chemistry at salar de Pozuelos (Hains 2017b). LSC is proposing to pump raw brine from Pastos Grandes to a potential processing plant at Pozuelos.

TABLE 1-1: MINERAL RESOURCE ESTIMATE – SALAR DE PASTOS GRANDES PROJECT
LSC Lithium Corporation
October 19, 2018

Measured												
Horizon	Total Volume	# Assay Samples*	Li	Ca	Mg	B	K	SO ₄ ²⁻	RBRC	Available Brine	Li (tons)	LCE Equivalent
	million m ³		mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	%	Million m ³	Metric tonnes	Metric tonnes
Upper Halite	62.47	5	463	664	3555	676	2220	10570	9.02	5.63	2600	13840
Upper Sand	191.81	0	463	664	3555	676	2220	10570	4.32	8.28	3830	20390
Halite	3349.79	122	446	728	2918	844	4679	9588	2.43	81.35	36260	193000
Sand	2051.48	39	486	625	3293	711	5273	9887	8.30	170.30	82700	440200
Gravel	1697.63	39	478	663	3126	621	4781	10202	5.26	89.37	42700	227290
Total Measured	7353.18	205	465	682	3093	750	4783	9847	4.83	354.94	168090	894720
Indicated												
Upper Halite	5.66	5	463	664	3555	676	2220	10570	6.01	0.34	160	850
Upper Sand	19.39	0	463	664	3555	676	2220	10570	4.60	0.89	410	2180
Halite	375.77	105	439	731	2874	836	4603	9476	2.39	8.98	3950	21025
Sand	95.13	24	502	731	2874	836	4603	9476	7.63	7.26	3640	19375
Gravel	12.42	39	458	701	2945	610	4342	9637	3.10	0.38	175	930
Total Indicated	508.38	173	452	727	2909	822	4479	9533	3.51	17.85	8335	44360
Total M&I	7861.55	205	464	685	3081	754	4763	9827	4.74	372.79	176425	939080

Inferred												
Horizon	Total Volume	# Assay Samples*	Li	Ca	Mg	B	K	SO ₄ ²⁻	RBRC	Available Brine	Li (tons)	LCE Equivalent
	million m ³		mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	%	Million m ³	Metric tonnes	Metric tonnes
Upper Halite	11.96	5	463	664	3555	676	2220	10570	6.67	0.80	370	1960
Upper Sand	40.05	0	463	664	3555	676	2220	10570	4.55	1.82	840	4480
Halite	852.72	105	441	731	2888	841	4629	9515	2.39	20.39	9000	47900
Sand	661.41	24	497	619	3359	727	5443	10201	8.71	57.64	28660	152600
Gravel	948.54	39	469	680	3044	616	4581	9945	4.25	40.32	18890	100550
Total Indicated	2514.68	173	467	681	3084	723	4775	9879	4.81	120.97	57760	307500
Note: data are rounded and may not sum												

Notes:

1. Brine volumes are before application of Relative Brine Release Capacity (RBRC) factor
2. RBRC value is the weighted average for the lithological unit within each resource category
3. Resources have been classified in accordance with CIM mineral resource definitions, May 25, 2014 and the CIM Best Practice Guidelines for Estimation of Lithium Brine Resources and Reserves
4. Resources have been estimated by Louis Fourie, P. Geo., Pr.Nat. Sci., under the direction of D. Hains, P. Geo.
5. The effective date of this mineral resource estimate is October 19, 2018
6. Resources have been estimated using a cut-off grade of 100 mg/L lithium.
7. Mineral resources which are not Mineral Reserves do not have demonstrated economic value. There is no assurance that additional exploration will result in the conversion of Mineral Resources to Mineral Reserves.
8. Inferred Mineral Resources are considered as too speculative to have economic criteria applied to them. There is no assurance that additional exploration will result in the conversion of Inferred Mineral Resources to Indicated or Measured Mineral Resources.
9. A conversion factor of 5.323 has been used to convert Li metal to Lithium Carbonate Equivalent (LCE). Totals for M&I and Inferred Resources have been rounded.

The following recommendations are made:

1. Develop Holes PG18-01 and SPG-2017-04 as pumping wells to obtain pumping data on the tenements on the east side of Pastos Grandes.
2. Drill a pumping well on the west side of Pastos Grandes near hole SPG-2017-2b to develop pumping data on the west side of Pastos Grandes.
3. Drill an exploration hole on the south end the Coronal Vidt tenement to develop additional data on brine grade and salar lithology on the western tenements.
4. Drill an exploration hole on the La Rescatada II tenement on the NW side of Pastos Grandes to explore for deep lying brine off of the salar.
5. Drill an exploration hole on the north side of the La Playosa tenement to confirm the presence of brine below the overlying fresh water, as noted by Millennial Lithium for its tenement located north of the La Playosa tenement.
6. Obtain additional brine volume from various holes sufficient to undertake pilot scale brine evaporation and concentration studies in support of a combined Pastos Grande-Pozuelos (PPG) Preliminary Economic Analysis (PEA) report.
7. Undertake additional environmental impact assessment work in support of a PEA for a combined PPG PEA report.
8. Update the resource estimate for Pastos Grandes based on the results of the pumping tests and additional drilling.

The budget for the work noted above is detailed in Table 1-3.

**TABLE 1-3: PROPOSED EXPLORATION BUDGET
LSC Pastos Grandes Project**

Activity	Budget Estimate (\$US)
Pumping Wells (2), east side Pastos Grandes, 600 m	\$750,000
Pumping Well (1), west side Pastos Grandes, 600 m	\$250,000
Exploration holes (3), DDH/Tricone, HQ, 600 m each	\$750,000
Brine testing	\$75,000
Environmental Impact Studies for PEA	\$250,000
Resource Estimate Update	\$50,000
General Support, Project Admin	\$500,000
Total	\$2,625,000

1.3 TECHNICAL SUMMARY

1.3.1 Introduction

Don Hains, P. Geo., President of Hains Engineering Company Limited, was retained by Mr. Ian Stalker, CEO of LSC Lithium Corporation (“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 LSC’s salar de Pastos Grandes property. The Pastos Grandes property is being developed in conjunction with LSC’s salar de Pozuelos project. The combined project, termed the PPG Project, is the subject of a Preliminary Economic Analysis being undertaken by GHD Engineering. Brine production from Pastos Grandes will supplement brine production from Pozuelos, with processing proposed to take place at salar de Pozuelos.

LSC’s Salar de Pastos Grandes property is one of several lithium brine projects under exploration and development by the company. Other significant projects being explored by LSC include the adjacent salar de Pozuelos property, salar de Rio Grande, salar Salinas Grandes and salar Jama. The Pozuelos and Pastos Grandes projects are the most advanced in terms of exploration and development. The two salars are located close to each other and have complementary brine chemistry, thus permitting potential cost-effective development of the combined salars.

LSC acquired its tenements on Pastos Grandes in 2016 (Hains, 2017a) and commenced exploration on Pastos Grandes in late 2016 with an initial surface sampling program. This was followed up by a Vertical Electrical Sounding (VES) geophysical survey to identify brine horizons and by a drilling program in 2017-18, and additional geophysical survey work in 2018. The current report is an initial resource estimate based on the results of exploration through to August 31, 2018.

1.3.2 Property Description and Tenure

Salar de Pastos Grandes is a triangular shaped salar centered at 24°34’S, 66°42’W and sits at an average elevation of 3,815 metres above sea level (masl) and occupies a basin area of approximately 36 km² in the Los Andes Department, Salta Province, within the Puna physiographic area of northwestern Argentina. The overall drainage basin has an area of approximately 3,600 km² (Alonso and Sorentino, 2009).

The salar is located 56 km southwest of the town of San Antonio de los Cobres (SA Los Cobres), the largest community in the Puna. The village of Sta Rosa de Pastos Grandes is located 13 km north-northeast of the salar. LSC’s salar de Pozuelos project is located approximately 0.5 hour drive south-southwest of Pastos Grandes. (Figure 4-1).

The actual salar surface is approximately 9 km north-south and 7 km east-west at its widest points. The surface is essentially flat with the exception of the remains of clastic deposits forming “islands” approximately 15 m in height. This formation, the Blanca Lila, extends to the north of the salar as a series of ridges.

LSC controls 2,683 ha on the salar and immediately adjacent area as mining concessions (Figure 4-2). The tenements held by LSC are located on the east and west sides of the salar. All tenements are in good standing and all are registered for lithium production. Tenements held by Millennial Lithium and others are located between the LSC tenements and on either side of the LSC tenements.

1.3.3 Property Access

Access to the property from Salta is via National Route 51 (RN51) 170 km west and northwest to San Antonio de los Cobres. From there, the route goes 15 km to the junction with Provincial Route 129 (PR129) and from there 50 km toward Sta Rosa de Pastos Grandes and then south approximately 11 km to salar de Pastos Grandes (Figure 5-1).

Access from Antofagasta, Chile is via the Pan-American Highway 5N 70 km to Baquedano, proceeding east along Routes 365, 367, and 23 for approximately 300 km to the international crossing at Paseo Sico. From Sico the shortest route to Pastos Grandes is 130 km via routes RN51, RP127 and RP129 through Cauchari and Pocitos. Access from Chile is also possible via Paseo Jama on NR52 and then via RN40 to Cauchari and RN 51, RP127 and RP129.

1.3.4 Physiography, Climate, Local Resources and Infrastructure

Salar de Pastos Grandes occupies an area of approximately 36 km² comprised mostly of flat sandy-silty salt crust. Several remnants of outcropping sand-silt-clay sediments are present in the central portion of the salar and represent approximately 15% of the salar surface (Millennial Lithium, 2018). These outcrops, the Blanca Lila Formation, form “islands”. They are, however, hydraulically connected to the salar (Millennial Lithium, 2018).

LSC’s properties are located on the east and west sides of the salar and extend into a zone of tuffs, ignimbrites and recent alluvial sediments to the north on the west side of the salar. A portion of the LSC tenements on the east side borders alluvial fan sediments subject to surface inflow of fresh water, and shallow open pools of brackish water overlying halite-bearing sediments may be present at various times in this restricted zone.

The general elevation of the salar surface is 3,773 masl, with the “islands” having a typical elevation of approximately 3,785 - 3790 masl. The surrounding hills range in elevation from approximately 3,825 masl on the south, east and northeast sides of the salar and increase rapidly on the west side to approximately 3,990 masl. Figure 5-4 illustrates the general topography of the Pastos Grandes area.

The climate in the Puna region and at Pastos Grandes is that of a high altitude desert characterized by high solar radiation, low relative humidity, very low precipitation, high diurnal temperature fluctuations, and strong winds. These conditions promote significant net evaporation.

Local resources are limited. The closest significant population centre is San Antonio de los Cobres (population ~ 5,500). The town offers basic accommodation and supplies, primary and secondary schools, a clinic and other basis services. Major equipment and supplies are sourced from Salta.

There is limited infrastructure within the immediate area of Pastos Grandes. The village of Pocitos, population approximately 100, is located about 36 km northwest of the property. Pocitos is a station on the Antofagasta-Salta Railway and commercial train service is available 3 times per week between Pocitos and Antofagasta. Pocitos is the terminus of the Gasoducto de Puna (Puna gas pipeline) which has an extension running to the Mina Fenix

lithium operation operated by FMC Inc. at salar de Hombre Muerto. A 375 KV transmission line running from Argentina to Chile is located approximately 53 km north of salar de Pastos Grandes.

National Route 51 passes through SA de los Cobres and connects Salta city with Antofagasta, Chile via the Paseo de Sico. This road is largely paved from Salta to SA de los Cobres and is a well maintained gravel road from SA de los Cobres to the border with Chile. Provincial roads such as PR 129 and PR 127 are well maintained gravel roads.

1.3.5 History

LSC acquired its original tenements on Pastos Grandes by way of transfer from ADY Resources Ltd. in 2016. Additional tenements were purchased by LSC in 2016. The transactions are described in detail in Hains (2017a).

Prior exploration on the LSC tenements has been limited to surface sampling by ADY (Hains, 2017a) and by Eramine Sudamerica (Eramet, 2016). Millennial Lithium has been exploring for lithium on its tenements at Pastos Grandes since mid-2016 (Rosko, 2018).

1.3.6 Geology

Salar de Pastos Grandes is an endorheic basin. The geology of the greater Pastos Grandes (Figure 7-4) 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, 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 deposit eolian sandstones (Jordan and Alonso, 1987). Figure 7-5 illustrates the regional stratigraphic column for the greater Pastos Grandes area.

1.3.7 Mineralization

Mineralization at salar de Pastos Grandes consists of brine saturated in sodium chloride and high in total dissolved solids and with an average density of about 1.215 g/cm³. The other primary components of the brine include potassium, lithium, magnesium, calcium, sulphate, HCO₃ and boron as borates and free H₃BO₃. Salar de Pastos Grandes is classified as a Na-Cl-Ca/SO₄ type salar.

1.3.8 Exploration and Exploration Potential

LSC has completed a program of surface sampling, geophysical exploration (SEV, seismic), and drilling (2,627.5 m) with collection of brine packer samples and RBRC (Relative Brine Release Capacity) samples across its tenements. The exploration data indicates the lithology in the salar is comprised of a shallow (~10 m – 15 m) mixed porous halite; followed by a thick sequence of halite mixed with varying proportions of sand and sand-silt clay and massive halite. These sequences can extend for over 200 m depth. This is followed by thick sequences of sand/halite of varying composition and some gravels

down to a depth of at least 600 m. The deposit is open at depth, with geophysical data suggesting an extension to approximately 800 m depth.

There is exploration potential on the LSC tenements which have not been drilled. These tenements, La Rescatada II in the northwest and Maria Luis II in the southeast, have not been tested. However, based on data disclosed by Millennial Lithium in a 2018 NI 43-101 report (Rosko, 2018), lithium brine may be present.

1.3.9 Mineral Resources and Mineral Reserves

Mineral resources have been estimated as detailed in Table 1-1. No mineral reserves have been estimated

1.3.10 Market Studies

Publicly available market studies project a rapidly growing market for lithium chemicals for use in electric vehicles, energy storage systems and other applications. The overall market for lithium is projected to increase from approximately 220,000 tonnes LCE basis in 2018 to over 750,000 tonnes LCE by 2025 (Roskill, 2018).

1.3.11 Permitting and Environmental Issues

LSC is fully permitted for exploration at salar de Pastos Grandes. LSC is undertaking the required environmental studies to advance the project. This work is being undertaken in conjunction with LSC's development of its salar de Pozuelos project. LSC intends to develop the projects as a combined project, the PPG project, and anticipates completing a Preliminary Economic Assessment (PEA) report on the combined project in late 2018 (LSC press release dated Aug. 7, 2018).

1.3.12 Conclusions and Recommendations

LSC holds 2,683 ha of tenements located on the east and west sides of salar de Pastos Grandes. The tenements are prospective for lithium brine. Salar de Pastos Grandes is classified as an immature salar comprised of thick sequences mixed halite-sand-silt and sand/gravels. The salar brine is of the Na-Cl-Ca/SO₄ type. Brine sample assay data show consistent values down hole and across the LSC tenements.

The mixed halite-sand-silt sequences vary considerably in terms of the proportions of the matrix. Geophysical exploration (seismic, SEV, TEM) and sampling indicates brine is present in the salar to depths of at least 600 m. While RBRC (S_v) values vary widely, all sampled lithologies returned brine samples, indicating all lithologies can be productive for brine.

The average brine chemistry ratios are noted in Table 1-2. The brine chemistry is amenable to lithium carbonate production using conventional lithium brine processing technologies for brine concentration such as solar evaporation, followed by precipitation of lithium carbonate.

LSC is proposing to develop its Pastos Grandes tenements in conjunction with development of its salar de Pozuelos lithium brine project. The brine chemistry at Pastos Grandes is complementary to the brine chemistry at salar de Pozuelos (Hains 2017b). LSC is proposing to pump raw brine from Pastos Grandes to a potential processing plant at

Pozuelos. Such a concept could significantly reduce the capital and operating costs associated with development of the tenements at Pastos Grandes.

The following recommendations are made:

1. Develop Holes PG18-01 and SPG-2017-04 as pumping wells to obtain pumping data on the tenements on the east side of Pastos Grandes.
2. Drill a pumping well on the west side of Pastos Grandes near hole SPG-2017-2b to develop pumping data on the west side of Pastos Grandes.
3. Drill an exploration hole on the south end the Coronal Vidt tenement to develop additional data on brine grade and salar lithology on the western tenements.
4. Drill an exploration hole on the La Rescatada II tenement on the NW side of Pastos Grandes to explore for deep lying brine off of the salar.
5. Drill an exploration hole on the north side of the La Playosa tenement to confirm the presence of brine below the overlying fresh water, as noted by Millennial Lithium for its tenement located north of the La Playosa tenement.
6. Obtain additional brine volume from various holes sufficient to undertake pilot scale brine evaporation and concentration studies in support of a combined Pastos Grande-Pozuelos (PPG) Preliminary Economic Analysis (PEA) report.
7. Undertake additional environmental impact assessment work in support of a PEA for a combined PPG PEA report.
8. Update the resource estimate for Pastos Grandes based on the results of the pumping tests and additional drilling.

1.3.13 Exploration Programs and Budget

The budget for the work noted above is detailed in Table 1-3.

2 INTRODUCTION

Don Hains, P. Geo., President of Hains Engineering Company Limited, was retained by Mr. Ian Stalker, CEO of LSC Lithium Corporation (“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 LSC’s salar de Pastos Grandes property. The Pastos Grandes property is being developed in conjunction with LSC’s salar de Pozuelos project. The combined project, termed the PPG Project, is the subject of a Preliminary Economic Analysis being undertaken by GHD Engineering. Brine production from Pastos Grandes will supplement brine production from Pozuelos, with processing proposed to take place at salar de Pozuelos (LSC press release dated Aug. 7, 2018).

LSC’s Salar de Pastos Grandes property is one of several lithium brine projects under exploration and development by the company. Other significant projects being explored by LSC include the adjacent salar de Pozuelos property, salar de Rio Grande, salar Salinas Grandes and salar Jama. The Pozuelos and Pastos Grandes projects are the most advanced in terms of exploration and development. The two salars are located close to each other and have complementary brine chemistry, thus permitting potential cost-effective development of the combined salars.

LSC acquired its tenements on Pastos Grandes in 2016 (Hains, 2017a) and commenced exploration on Pastos Grandes in late 2016 with an initial surface sampling program. This was followed up by a Vertical Electrical Sounding (VES) geophysical survey to identify brine horizons and by a drilling program in 2017-18, and additional geophysical survey work in 2018. The current report is an initial resource estimate based on the results of exploration through to October 19, 2018.

Don Hains, P. Geo., has been acting as the independent Qualified Person (QP) for LSC since formation of LSC in mid-2016. He has visited the salar de Pastos Grandes property and the other LSC properties on numerous occasions since that time, the last visit being on June 16-17, 2018.

2.3 SOURCES OF INFORMATION

The documentation reviewed, and other sources of information, are listed at the end of this Technical Report in Section 27, 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\$ 37.4/\$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 Hains Engineering Company Limited (Hains) for LSC. The information, conclusions, opinions, and estimates contained herein are based on:

- Information available to 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 and other third party sources as noted in Section 27, References.

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.

Hains has not researched property title or ownership for the Pastos Grandes tenements and has relied on LSC for information on property ownership, annual canon fees and required filings of environmental reports.

Hains has relied on technical reports filed on SEDAR by Millennial Lithium related to certain geophysical and other exploration data on adjacent properties held by Millennial Lithium as such information may extend to the tenements held by LSC. Hains has not independently verified the information contained in the technical reports filed by Millennial Lithium and notes that mineralization on the Millennial Lithium tenements may not necessarily be comparable to mineralization on the tenements held by LSC at salar de Pastos Grandes.

4 PROPERTY DESCRIPTION AND LOCATION

Salar de Pastos Grandes is a triangular shaped salar centered at 24°34'S, 66°42'W and sits at an average elevation of 3,815 metres above sea level (masl) and occupies an area of 36 km² in the Los Andes Department, Salta Province, within the Puna area of northwestern Argentina. The overall drainage basin has an area of approximately 3,600 km² (Alonso and Sorentino, 2009).

The salar is located 56 km southwest of San Antonio de Los Cobres (SA los Cobres), the largest community in the Puna. The village of Sta Rosa de Pastos Grandes is located 13 km north-northeast of the salar. LSC's salar de Pozuelos project is located approximately 0.5 hour drive south-southwest of Pastos Grandes. (Figure 4-1).

The salar surface is approximately 9 km north-south and 7 km east-west. The surface is essentially flat with the exception of the remains of clastic deposits forming "islands" approximately 15 m in height. This formation, the Blanca Lila, extends to the north of the salar as a series of ridges.

LSC controls 2,683 ha on the salar and immediately adjacent area as mining concessions (Figure 4-2). The tenements held by LSC are located on the east and west sides of the salar. Tenements held by Millennial Lithium and others are located between the LSC tenements and on either side of the LSC tenements.

LSC acquired its Pastos Grandes tenements via a series of property transfers and purchases as follows:

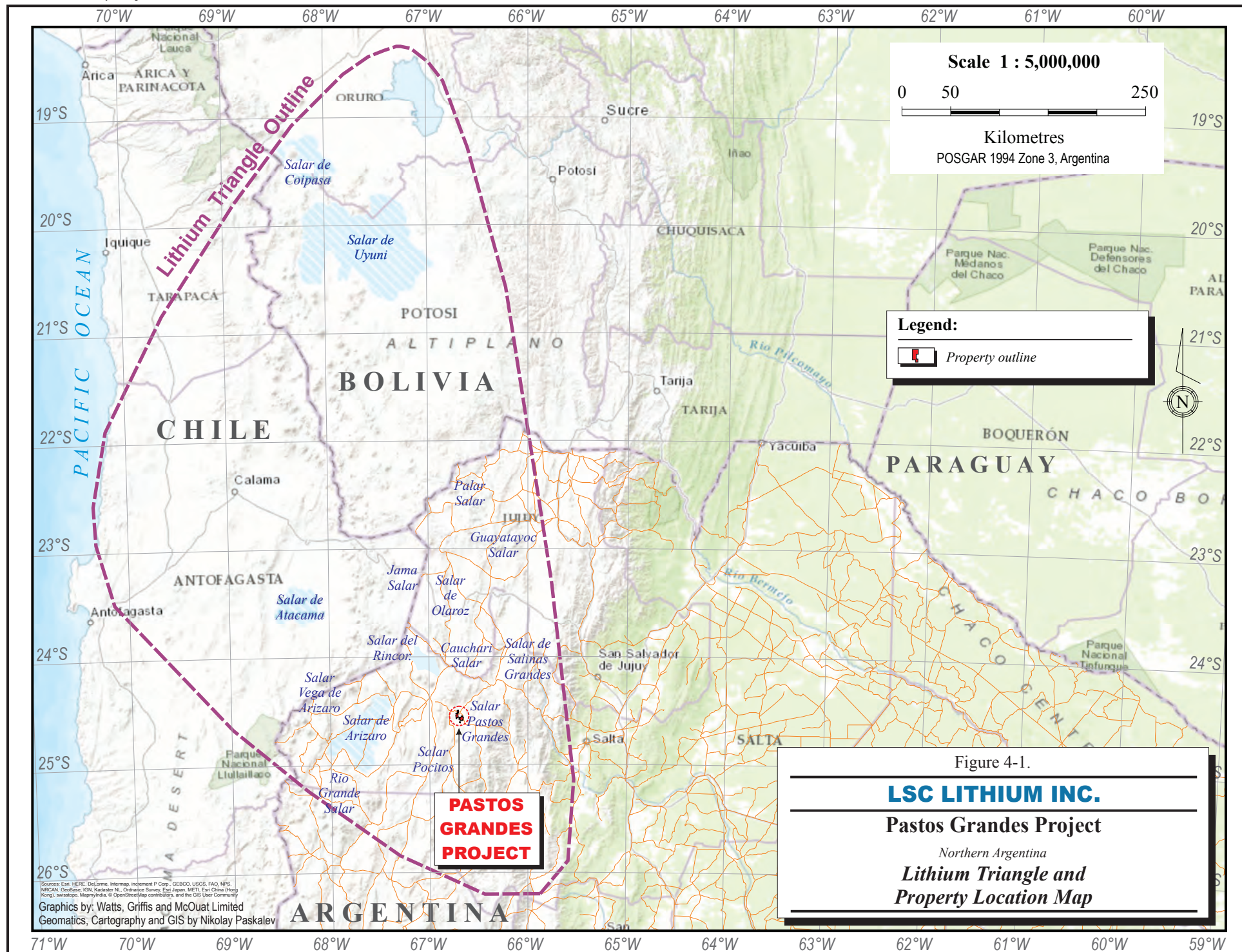
- Acquisition of a 100% interest in certain tenements on salar de Pastos Grandes held by ADY Resources on December 22, 2016 as part of the ADY Purchase Agreement, as detailed in (Hains, 2017a);
- Purchase by Lithium S Corporation, a subsidiary of LSC of a 100% interest in the tenement Mina La Buscada on Salar de Pastos Grandes, Province of Salta on October 24, 2016, as detailed in (Hains, 2017a);
- Purchase by Lithium S Corporation on October 25, 2016 of a 100% interest in the tenement Mina Maria Luisa II on Salar de Pastos Grandes, Province of Salta, as detailed in (Hains, 2017a);
- Purchase by Lithium S Corporation on November 7, 2016 of mining rights known Mina Leoncia on Salar de Pastos Grandes, Province of Salta. The vendor retained a 2.5% Net Smelter Return (NSR) royalty on production from the tenement. Details of the transaction are noted in (Hains, 2017a);
- Purchase by Lithium S Corporation on September 21, 2016 of mining rights known as Estrus located at salar de Pastos Grandes in the Province of Salta, Argentina. The vendor retained a 1.5% Net Smelter Return on production from the property. Details of the transaction are noted in (Hains, 2017a);
- Purchase by Lithium S Corporation on October 11, 2016 of the tenement known as San Cayetano I located at salar de Pastos Grandes in the Province of Salta, Argentina. Details of the transaction are noted in (Hains, 2017a)

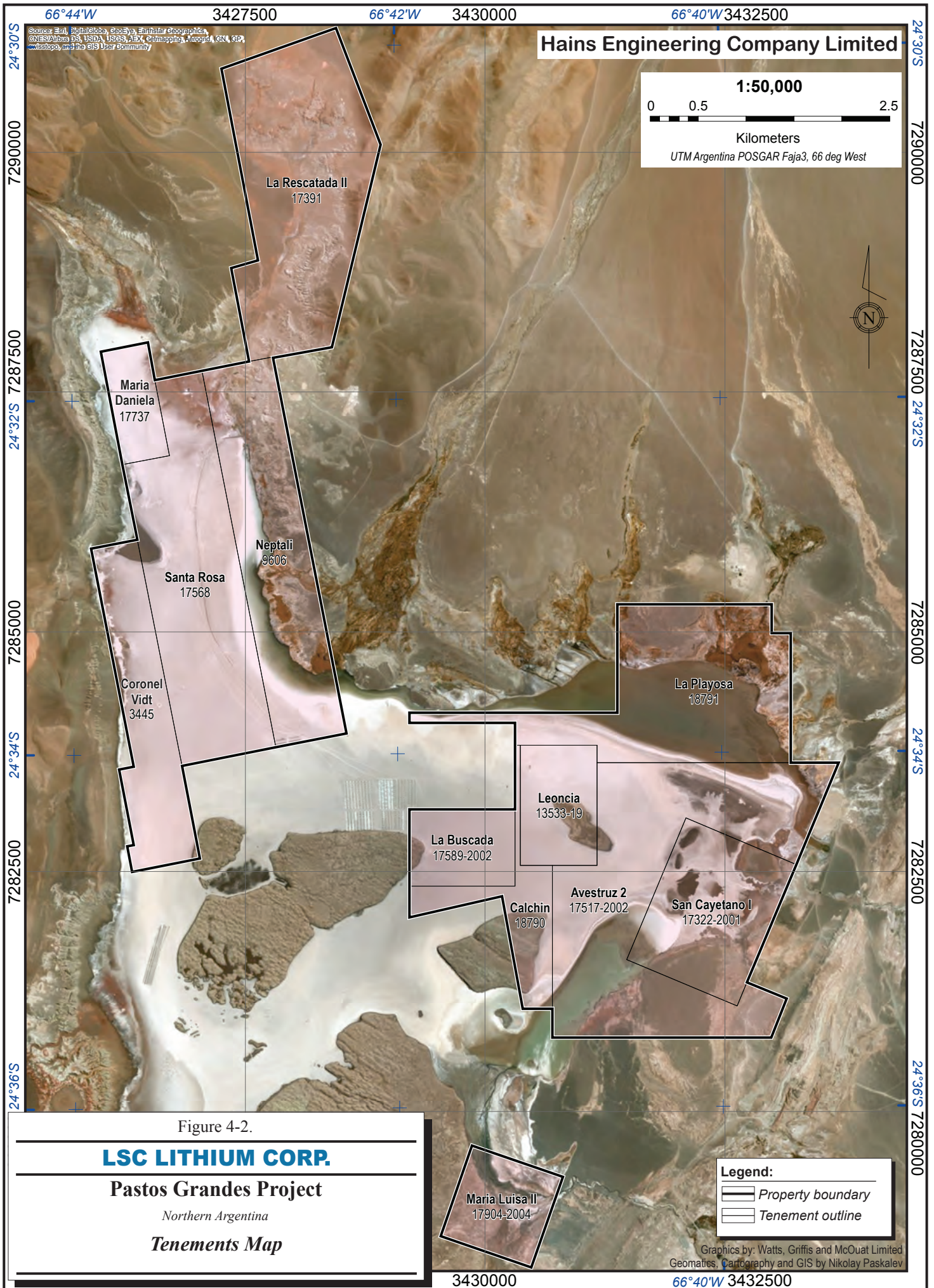
All of the LSC tenements are registered as Exploitation Concessions (“Minas”) that have an unlimited duration provided all cañon fees are paid on time and all required environmental reports and other obligations set out in the National Mining Code are met by the title holder. All the LSC tenements are in good standing.

All of the LSC tenements are registered for lithium, with some tenements also being registered for sodium chloride (salt) and or borate production. Table 4-1 provides details on the status of each tenement. Semi-annual cañon fees are AR\$ 40,880.

Royalties on lithium brine production are due on several tenements as indicated in Table 4-1. In addition, a “mine mouth” royalty of 3% is due the Salta government on lithium brine production from all the tenements. The Salta provincial government royalty is calculated as the value of the lithium brine after deduction for all production, processing, sales and transportation expenses.

No other significant factors and risks are known that may affect access, title or right or ability to perform work on the property.





**Table 4-1: LSC Tenements
Salar de Pastos Grandes Project**

PROVINCE OF SALTA																								
				Title		Status of Proceedings		Minerals	Claims	Investment Plan				Mining fee			Surface Properties			Enoumbrances			Environmental Reports	
Project	#	Tenement Name	File #	Titleholder	Title Acquisition	Concession	Surveyed	(registered)	Claims	Filed	Compliance	Period	Debt	Period	Evidence	Canon/year-Pesos	Aboriginal communities	Registered Owner	Surface Extension - hectares	Liens	Royalties	Original	Renewal Date	
Pastos Grandes	1	Avestruz	17,517	LSCSA	Deed of Transfer Nr. 57 (03.02.2017)	Granted	Approved	Borates, Li, K	5	Yes	YES		N/A	1° 2018	YES	\$ 8,000.00	N/A	FISCAL LAND OF SALTA	460	NO	Mr. Sosa Quintana, has the right to a royalty over the net smelter return of the 1.5% of the amounts effectively received by the person exploiting Avestruz for the sale of any mineral extracted		APPROVED	
Pastos Grandes	2	Leonida	13,533	LSCSA	Deed of Transfer Nr. 9 (09.02.17)	Granted	Approved	Sodium, Sulfate, Li, K	1	Yes	YES		N/A	1° 2018	YES	\$ 1,600.00	N/A	FISCAL LAND OF SALTA	100	NO	Mr. Viveros had a royalty over the net smelter return of the 2.5% of the amounts effectively received from the exploitation of Leonida for the sale of any mineral extracted		PENDING APPROVAL	
Pastos Grandes	3	San Cayetano I	17,322	LSCA	Deed of Transfer	Granted	Approved	Borates, Li, K	2	Yes	YES		N/A	1° 2018	YES	\$ 3,200.00	N/A	FISCAL LAND OF SALTA	200	NO	NO		PENDING APPROVAL	
Pastos Grandes	4	María Luisa II	17,904	LSCSA	Deed of Transfer Nr. 12 (17.02.17)	Granted	Approved	Borates, Li, K	1	Yes	YES		N/A	1° 2018	YES	\$ 1,600.00	N/A	FISCAL LAND OF SALTA	100	NO	NO		PENDING APPROVAL	
Pastos Grandes	5	La Buscada	17,589	LSCSA	Deed of Transfer Nr. 8 (08.02.17)	Granted	Approved	Sodium, Chloride, Li, K	1	Yes	YES		N/A	1° 2018	YES	\$ 80.00	N/A	FISCAL LAND OF SALTA	88	NO	Mr. Federico Stucky, has the right to exploit the salt or sodium chloride extracted from La Buscada for a period of 15 years as from the date of acceptance the offer		PENDING APPROVAL	
Pastos Grandes	6	Calchin	18,790	LSCSA	Deed of Transfer Nr. 153 (22.12.16)	Granted	Approved	Salt, Li, K	1	Yes	YES		N/A	1° 2018	YES	\$ 1,600.00	N/A	FISCAL LAND OF SALTA	90	NO	NO		PENDING APPROVAL	
Pastos Grandes	7	La Playosa	18,791	LSCSA		Granted	Approved	Salt, Li, K	4	Yes	YES		N/A	1° 2018	YES	\$ 6,400.00	N/A	FISCAL LAND OF SALTA	344	NO	NO		PENDING APPROVAL	
Pastos Grandes	8	Coronel Vidt	3,445	LSCSA		Granted	Approved	Salt, Li, K	2	Yes	YES		N/A	1° 2018	YES	\$ 3,200.00	N/A	FISCAL LAND OF SALTA	185	NO	NO		APPROVED	
Pastos Grandes	9	María Daniela	17,737	LSCSA		Granted	Approved	Sodium, Sulfate, Li, K	1	Yes	YES		N/A	1° 2018	YES	\$ 1,600.00	N/A	FISCAL LAND OF SALTA	60	NO	NO		PENDING APPROVAL	
Pastos Grandes	10	La Rescatada II	17,391	LSCSA		Granted	Approved	Borates, Li, K	4	Yes	YES		N/A	1° 2018	Yes	\$ 6,400.00	N/A	FISCAL LAND OF SALTA	396	NO	NO		PENDING APPROVAL	
Pastos Grandes	11	Neptali I	9,606	LSCSA		Granted	Approved	Salt, Borates, Li, K	3	Yes	YES		N/A	1° 2018	YES	\$ 4,800.00	N/A	FISCAL LAND OF SALTA	300	NO	NO		PENDING APPROVAL	
Pastos Grandes	12	Santa Rosa	17,568	LSCSA		Granted	Approved	Salt, Li, K	4	Yes	YES		N/A	1° 2018	YES	\$ 6,400.00	N/A	FISCAL LAND OF SALTA	360	NO	NO		APPROVED	
									29							\$ 44,880.00						2683		

Source: LSC

5 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

5.1 ACCESSIBILITY

Access to the property from Salta is via National Route 51 (RN51) 170 km west and northwest to San Antonio de los Cobres. From there, the route goes 15 km to the junction with Provincial Route 129 (PR129) and from there 50 km toward Sta Rosa de Pastos Grandes and then south approximately 11 km to salar de Pastos Grandes (Figure 5-1).

Access from Antofagasta, Chile is via the Pan-American Highway 5N 70 km to Baquedano, proceeding east along Routes 365, 367, and 23 for approximately 300 km to the international crossing at Paseo Sico. From Sico the shortest route to Pastos Grandes is 130 km via routes RN51, RP127 and RP129 through Cauchari and Pocitos. Access from Chile is also possible via Paseo Jama on NR52 and then via RN40 to Cauchari and RN 51, RP127 and RP129.

5.2 CLIMATE

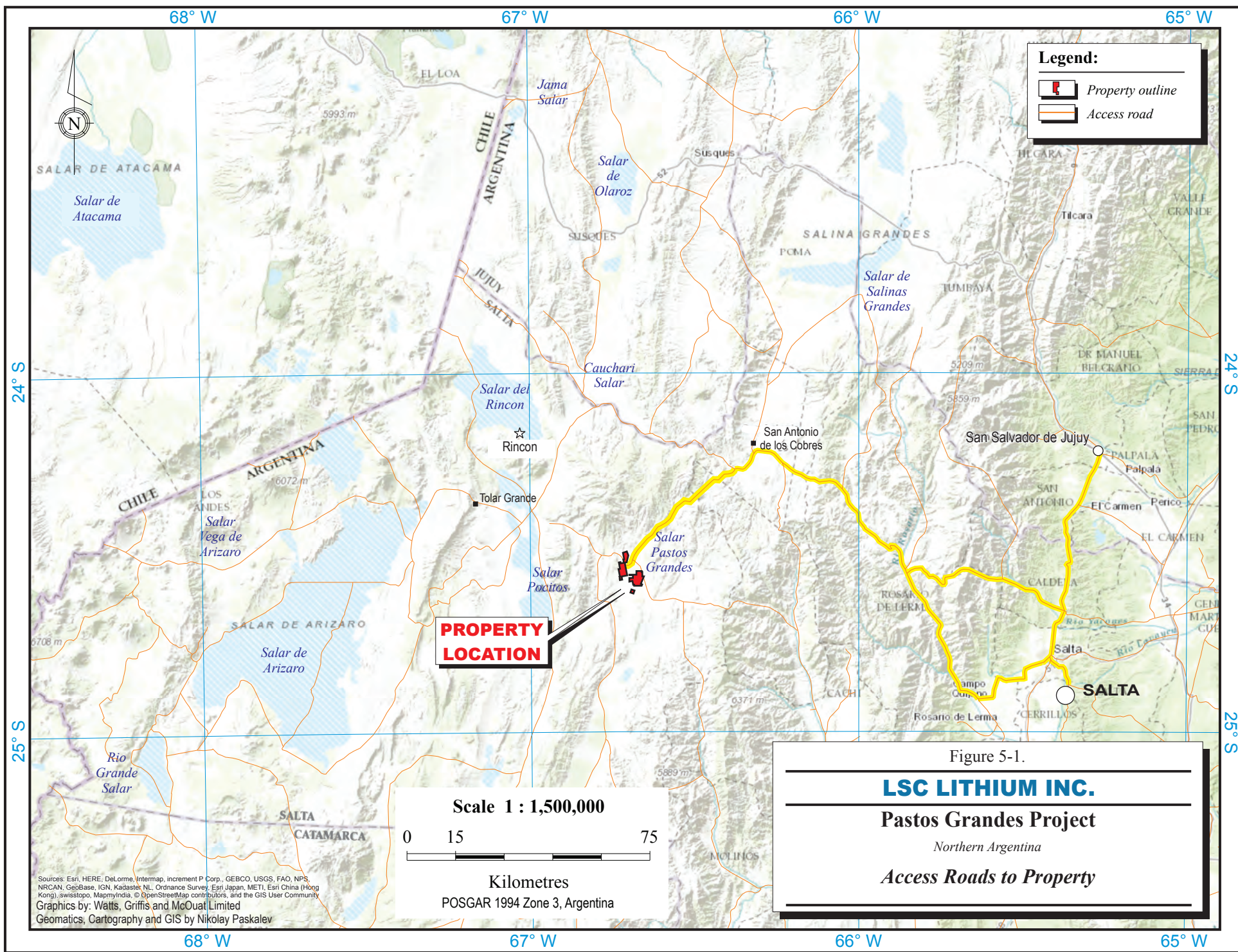
The general climate in the Puna is classified as “BSk” or “BWk” according to the Köppen classification system. In the far west of the Puna adjacent to the border with Chile the climate is classified as Eh. BSk is a mid-latitude high altitude steppe climate while BWk is a mid-latitude high altitude desert 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 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 climate in the Argentine Puna is severe as a result of its geographical position bordering elevations of 4,000 masl, 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 into 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.

Pastos Grandes is located between isohyets for 100 mm/yr and 50 mm/yr (Figure 5-2). 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 stations are shown in Table 5-1.

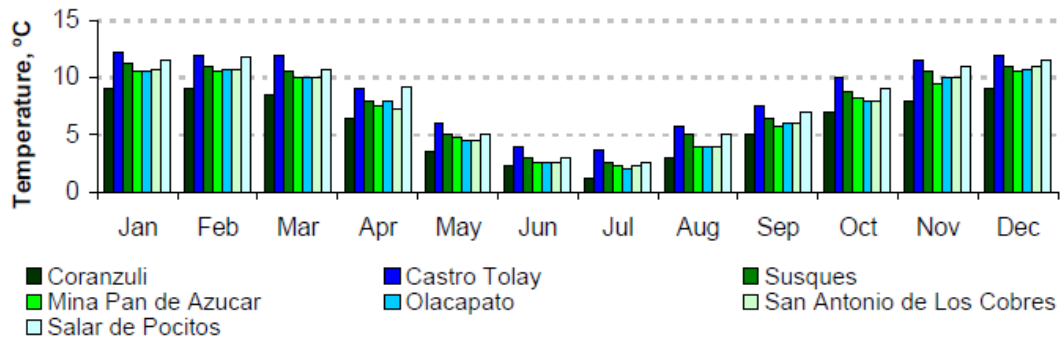
Table 5-1: Climate Records Northwest Argentina

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

Source: Hains, 2017a

The mean temperatures recorded by the stations in Table 5-1, are shown in Figure 5-3:

FIGURE 5-3: MEAN TEMPERATURE REPRESENTATIVE OF CONDITIONS IN ARGENTINE PUNA



Source: Hains, 2017a



LSC Lithium Corp. – Pastos Grandes Technical Report
Effective Date: October 19, 2018

TABLE 5-2: 2012 CLIMATE DATA – PASTOS GRANDES

	Apr 2012	May 2012	Jun 2012	Jul 2012	Aug 2012	Sep 2012	Oct 2012	Nov 2012	Dec 2012
Temperature Average (°C)	6.8	3.6	1.1	nd	3.8	7.3	7.8	10.7	13.6
Temperature Min (°C)	-6.7	-8	-12.5	nd	-11.4	-8.6	-6.4	-2.7	-0.4
Temperature Max (°C)	20.1	17.4	14.9	nd	18.2	20.2	22.7	23.9	26.2
Wind Velocity Avg. (kph)	13.9	10.7	13.3	nd	18.1	16.9	18.5	14.6	12.5
Wind Velocity Min. (kph)	0	0	0	nd	0	0	0	0	0
Wind Velocity Max. (kph)	69.2	53.1	67.6	nd	70.8	78.9	61.2	51.5	54.7
Atmos. Pressure Avg. (bar)	955.1	961.1	964	nd	969	965	962.5	959	953.3
Atmos. Pressure Min. (bar)	946.9	951.2	949	nd	959	953	953.5	951.4	944.2
Atmos. Pressure Max. (bar)	964.5	967.8	974	nd	977	972	970	965	963.2
Humidity Average (%)	42.7	47.6	48.5	nd	13.5	11.5	9	9.3	22.4
Humidity Minimum (%)	14	24	17	nd	3	1	1	0	4
Humidity Maximum (%)	72	65	68	nd	42	36	40	39	56
Rainfall Average (mm)	0	0	0	nd	0	0	0	0	0
Rainfall Minimum (mm)	0	0	0	nd	0	0	0	0	0
Rainfall Maximum (mm)	0.8	0	0	nd	0	0	0	0	0.8

Source: Eramine Sudamerica, 2016

TABLE 5-3: 2013 CLIMATE DATA – PASTOS GRANDES

	Jan 2013	Feb 2013	Mar 2013	Apr 2013	May 2013	Jun 2013	Jul 2013	Aug 2013	Sept 2013
Wind Velocity Max. (kph)	11.2	12.9	10.3	6.1	3.4	0.6	0.2	2.2	5.2
Atmos. Pressure Avg. (bar)	-1.2	3.3	-4.2	-6.9	-10.3	-12.6	-14.2	-14.0	-9.3
Atmos. Pressure Min. (bar)	23.2	24.7	25.3	18.3	17.3	12.9	14.2	17.4	19.1
Atmos. Pressure Max. (bar)	11.6	10.6	13.7	10.3	13.2	12.0	8.8	13.9	21.5
Humidity Average (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Humidity Minimum (%)	53.1	46.7	46.7	54.7	56.3	59.5	61.2	75.6	70.8
Humidity Maximum (%)	959.1	955.9	959.7	967.1	969.7	973	974	970.5	966.2
Rainfall Average (mm)	948.7	946.2	948.8	957.6	962.6	964.4	965.3	958.1	955.4
Rainfall Minimum (mm)	965.9	961.9	968.2	973.5	979.3	981.5	981.1	983	975.9
Rainfall Maximum (mm)	33.6	31.1	17.43	14.8	21.7	27.6	20.5	12.6	10.9
Wind Velocity Max. (kph)	4	7	5	6	6	7	9	3	3
Atmos. Pressure Avg. (bar)	73	64	44	36	59	58	44	41	37
Atmos. Pressure Min. (bar)	0	0	0	0	0	0	0	0	0
Atmos. Pressure Max. (bar)	0	0	0	0	0	0	0	0	0
Humidity Average (%)	1.3	0.8	0	0	0.3	2.8	0	0	0

Source: Eramine Sudamerica, 2016

The data show the following:

- average annual temperature is 6.3⁰C, with a summer peak (December) of 13.6⁰C and a winter minimum (July) of 0.2⁰C. Maximum and minimum temperatures were 26.2⁰C and -14.2⁰C,
- wind speeds average 13.8 kph, with a maximum recorded speed of 75.6 kph,
- atmospheric pressure averages 963.8 mbars, with a minimum recorded of 944.2 mbars and a maximum of 983 mbars,
- average annual humidity is 23.2%, with a minimum of 3% in August and September and a maximum of 64% in February.

While the climate does not impose significant restrictions on exploration, it is normal procedure to not undertake drilling during the peak of the summer rain period in January and February due to problems associated with surficial flooding of the salar. Extremely flat salt pans such as are found at Pastos Grandes are more prone to flooding than other types of salars. The presence of water on the surface weakens the salt crust, preventing movement of heavy vehicles.

5.3 LOCAL RESOURCES

There are no significant local resources at the property. Basic first aid, accommodation and food can be obtained at the village of Sta Rosa de Pastos Grande (population 120). The town of SA de los Cobres, with a population of approximately 5,500, is the regional centre of the Puna and offers more extensive but still somewhat limited services in the form of accommodations, restaurants, basic equipment supplies and repairs, a clinic, primary and secondary schools and communications.

5.4 INFRASTRUCTURE

There is limited infrastructure within the immediate area of Pastos Grandes. The village of Pocitos, population approximately 100, is located about 36 km northwest of the property. Pocitos is a station on the Antofagasta-Salta Railway and commercial train service is available 3 times per week between Pocitos and Antofagasta. Pocitos is the terminus of the Gasoducto de Puna (Puna gas pipeline) which has an extension running to the Mina Fenix lithium operation operated by FMC Inc. at salar de Hombre Muerto. A 375 KV transmission line running from Argentina to Chile is located approximately 53 km north of salar de Pastos Grandes.

National Route 51 passes through SA de los Cobres and connects Salta city with Antofagasta, Chile via the Paseo de Sico. This road is largely paved from Salta to SA de los Cobres and is a well maintained gravel road from SA de los Cobres to the border with Chile. Provincial roads such as PR 129 and PR 127 are well maintained gravel roads.

5.5 PHYSIOGRAPHY

Salar de Pastos Grandes occupies an area of approximately 36 km² comprised mostly of flat sandy-silty salt crust. Several remnants of outcropping sand-silt-clay sediments are present in the central portion of the salar and represent approximately 15% of the salar surface (Millennial Lithium, 2018). These outcrops, the Blanca Lila Formation, form “islands”. They are, however, hydraulically connected to the salar (Millennial Lithium, 2018).

LSC’s properties are located on the east and west sides of the salar and extend into a zone of tuffs, ignimbrites and recent alluvial sediments to the north on the west side of the salar. A portion of the LSC tenements on the east side borders alluvial fan sediments subject to surface inflow of fresh water, and open pools of brackish water overlying halite-bearing sediments may be present at various times in this restricted zone.

The general elevation of the salar surface is 3,773 masl, with the “islands” having a typical elevation of approximately 3,785 - 3,790 masl. The surrounding hills range in elevation from approximately 3,825 masl on the south, east and northeast sides of the salar and

increase rapidly on the west side to approximately 3,990 masl. Figure 5-4 illustrates the general topography of the Pastos Grandes area.

5.5.1 Soils

Soils in the Pastos Grandes area are of the ardisol type, with high salt content, very low organic content, low fertility and having a relatively coarse texture. SEGEMAR, the Argentine geological survey, classifies the salar itself as having a saline soil type “La”, with the immediately surrounding area containing the dunes and wetlands classified as DGtc-7 soil type and the higher elevations consisting of consolidated rock outcrops and natural elevations as EKtc-14 and Eni-6 soils.

5.5.2 Flora

Vegetation in the Puna consists of sparse, low shrub steppe-type zerophile and holophile plants. In more humid areas of the Puna such as salar de Pastos Grandes the dominant grass types are *stipa* and *fescue dolihophila*. Drier parts are represented by scattered grasses and low shrubs including: *Fabiana sp*, *Adesmia sp*, *Parastrephia sp*, *Bacharis sp*, *Maihuenopsis* and *Polylepis sp*, *tomentela* (endangered), *Ferozerable Prosopis* (used as firewood), *Trichosereus pascana* (endangered and used in construction), *Larrea divaricata* ("Jarilla hembra"), *Artemisia vulgaris* ("Ajenjo"), *Haplopapus rigidus* (locally "Bailabuena" and endangered due to medicinal use), *Alcantholippia deserticola phil* (locally "rica rica" and endangered due to medicinal use), *Baccharis incarum* ("Tola"), and *Senecio eriophyton* or *Escalonia Resinosa* ("Chachacoma"). Currently, these plant communities are altered due to the use by local inhabitants and overgrazing by domestic cattle (Millennial Lithium, 2018).

5.5.3 Fauna

Fauna in the Puna are adapted to the extreme living conditions of high aridity, intense sunlight during the day and very low nighttime temperatures. Many animals are nocturnal or have acquired certain physiological features and behaviours that allow them to survive in the harsh environment. The most significant mammals in the region are the vicuña (*Vicugna vicugna*), a camelid species, and llama (*Lama glama*), which is domesticated. Fox (*Dusicyon*, *Lycalopex*) are presenta and prey on small rodents such as the mole known as Oculito or Tuco-Tuco (*Ctenomys opimus*) and the Puna mouse (*Auliscomys sublimis*).

Birds in the region include the Parina or Andean flamingo, living in moist and salty lagoons, and known as the Cerceta de la Puna (*Anas Puna*), and the Andean Goose, Guayata or Huallata (*Chloephaga melanoptera*). The queu or quevo (*Tinamotis pentlandi*) inhabits the highlands and is similar to a large partridge. The Nandu enano (Rhea) comparable with the species *Pterocnemis pennata* inhabits the lower plains of the region. Small parrots, pigeons and owls also exist as sporadic inhabitants. The donkey (*donequus africanus asinuskey*) is a feral species introduced by inhabitants of the area (Rosko, 2018).

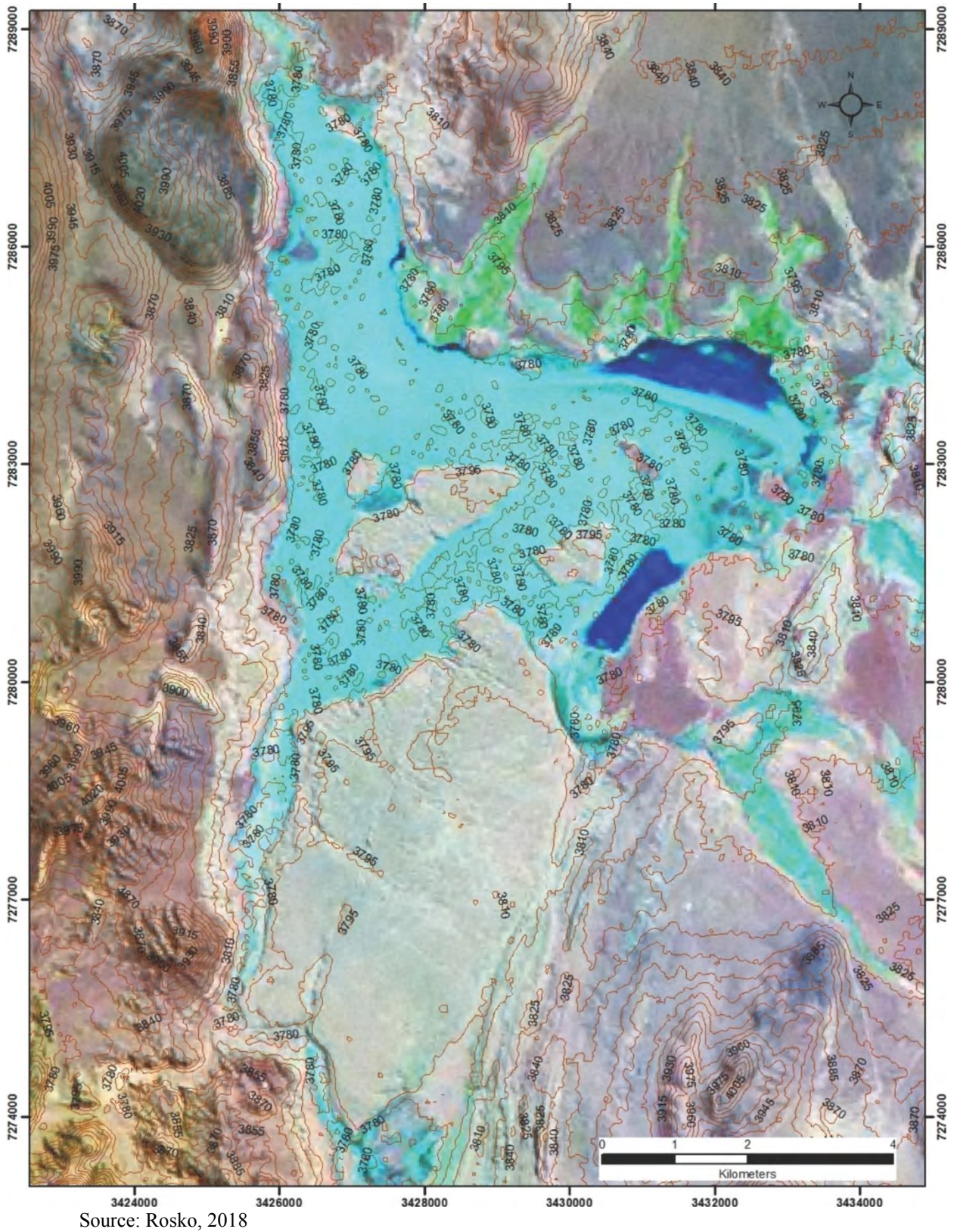


FIGURE 5-4: GENERAL TOPOGRAPHY OF SALAR DE PASTOS GRANDES

6 HISTORY

Mining for borates has been conducted in the Pastos Grandes area since the early 1960s. Borax Argentina, a subsidiary of Orocobre Limited, mines colemanite, hydroboracite and ulexite from the Sijes Formation on tenements located on the southern and eastern margins of the Pastos Grandes basin. The minerals are processed at the Sijes borates plant.

In 1987 Ulex started borate mining operations on the southeastern extension of the Pastos Grandes basin at the Sol de Mañana mine, producing approximately 1,000 tonnes per annum of colemanite-hydroboracite-ulexite. Tramo SRL has mined colemanite on an intermittent basis at the Quebracho property on the southern border of the Pastos Grandes salar and common salt on the salar surface since 2006. Various other mining groups have recovered salt from the salar using solar evaporation on various properties across the salar.

Initial exploration for lithium at Pastos Grandes was undertaken by the Direccion Generale Fabricaciones Militares (DGFM), an agency of the Argentine government, in 1979 when a program to explore for lithium in many of the salars in the Puna was started (Nicolli et al, 1982). Work at Pastos Grandes included geological mapping and surface sampling, with six brine samples from surface and eight from hand-dug pits and four from stream samples. The reported sample assays (Nicolli et al, 1982) were anomalous for lithium and potassium for both surface and pit samples.

In 2011 and 2012 Eramine Sudamerica SA, a subsidiary of Eramet SA, carried out surface mapping and sampling, drilling and pump testing at locations across the salar. Drilling was limited to a maximum depth of 160 m. In addition, Eramine also completed a program of geophysical surveys, including TEM, CS-AMT and VES (Eramine, 2016). The work by Eramine was summarized in an NI 43-101 technical report filed by Millennial Lithium in 2016 (Rojas, 2016) and updated in 2017 (Rosko, 2017).

LSC, as part of its initial due diligence exploration program related to acquisition of tenements on salar de Pastos Grandes, completed a program of surface sampling under the supervision of the author. The results of this program are detailed below in Tables 6-1 and 6-2. The sample locations are illustrated in Figure 6-1.

Assays were undertaken at Norlab in Jujuy, Argentina. Norlab has extensive experience in analysis of brine samples and at the time of sampling was certified to Argentine national laboratory QA/QC standards. Norlab is independent of the author and LSC (Hains, 2017a).

Table 6-1: Salar de Pastos Grandes Tenement Samples – LSC 2016 Due Diligence Program

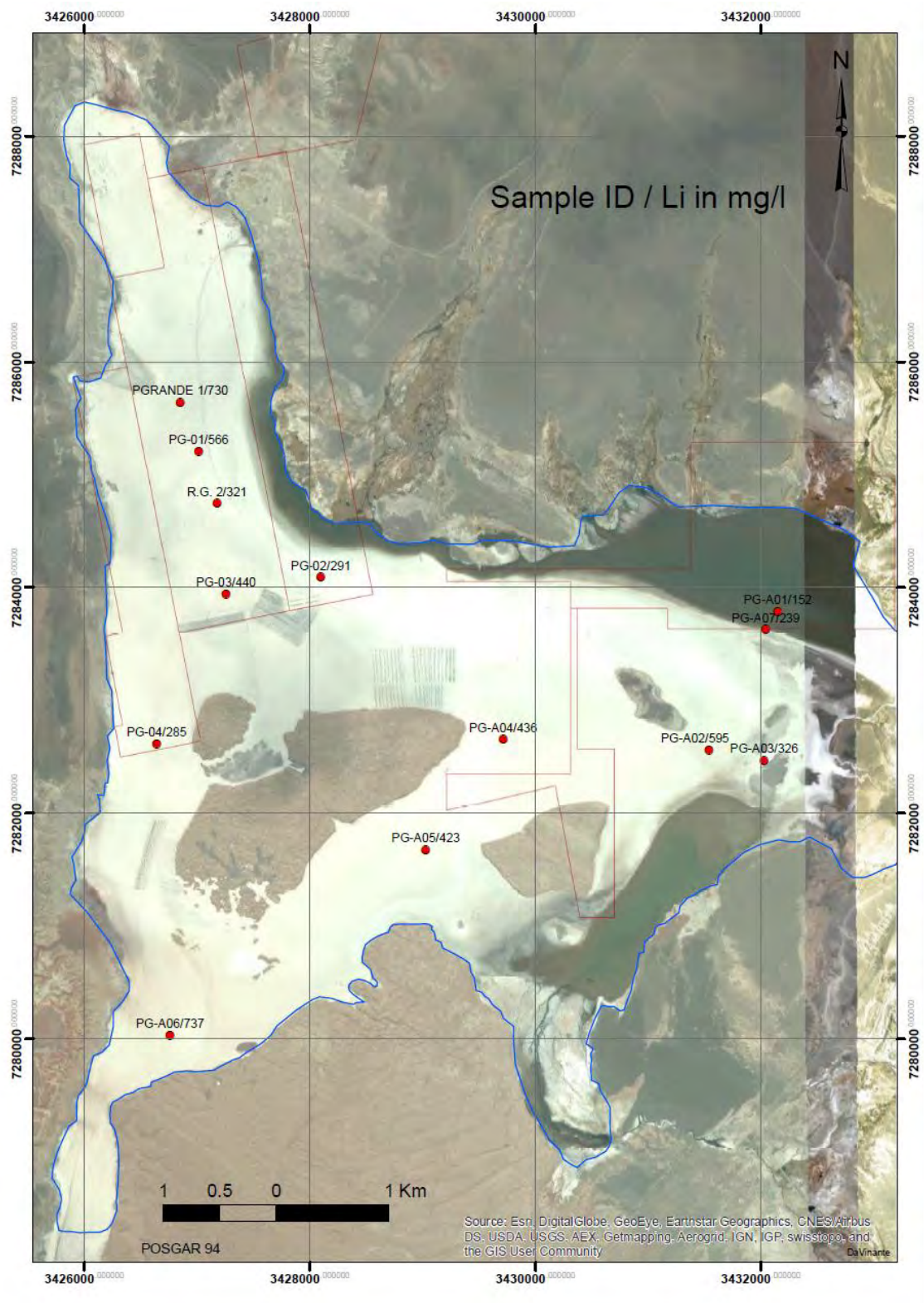
Gauss-Kruger POSGAR 94 datum				
Sample No.	Easting	Northing	Tenement	Type
PG-01	3427014	7285207	Santa Rosa	Hand dug pit
PG-02	3428096	7284091	Neptali	Hand dug pit
PG-03	3427257	7283942	Santa Rosa	Hand dug pit
PG-04	3426639	7282616	Coronel Vidt	Hand dug pit
PG-A01	3432147	7283790	La Playosa	From lake
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	Papadopoulos XXXII	Hand dug pit
PG-A06	3426758	7280036	Vacante Remsa	Hand dug pit
PG-A07	3432040	7283632	Avestruz 2	Hand dug pit

Source: Hains, 2017a

Table 6-2: Sample Assays – Salar de Pastos Grandes Tenements, LSC 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)	Hardness (mg/l) CaCO ₃
Method	LMMT03					LMC122	LMC101	LMM T03	LMFQ1 7	LMFQ1 9	LMFQ13
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

Source: Hains, 2017a



Source: Hains, 2017a

FIGURE 6-1: LSC DUE DILIGENCE SURFACE SAMPLE LOCATIONS 2016

7 GEOLOGICAL SETTING AND MINERALIZATION

7.1 REGIONAL GEOLOGY

7.1.1 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 7-1), (Zandt et al., 2003; de Silva et al., 2006).

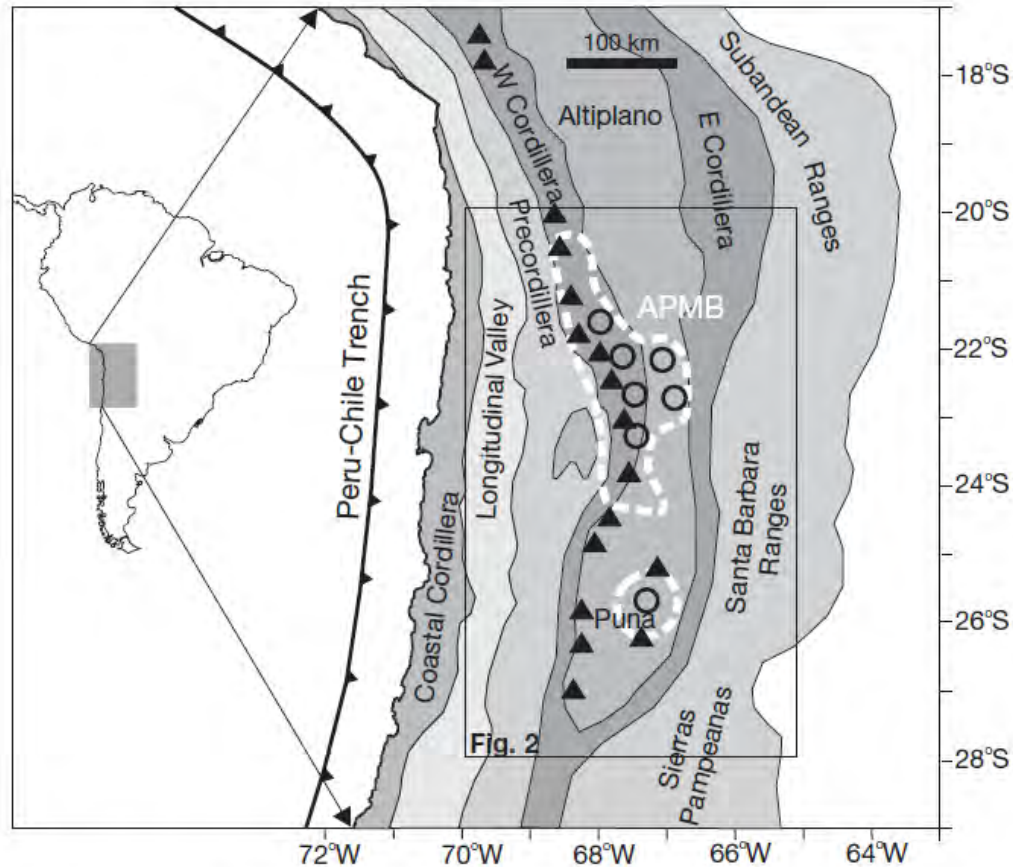


FIGURE 7-1: LOCATION MAP OF THE ALTIPLANO-PUNA

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

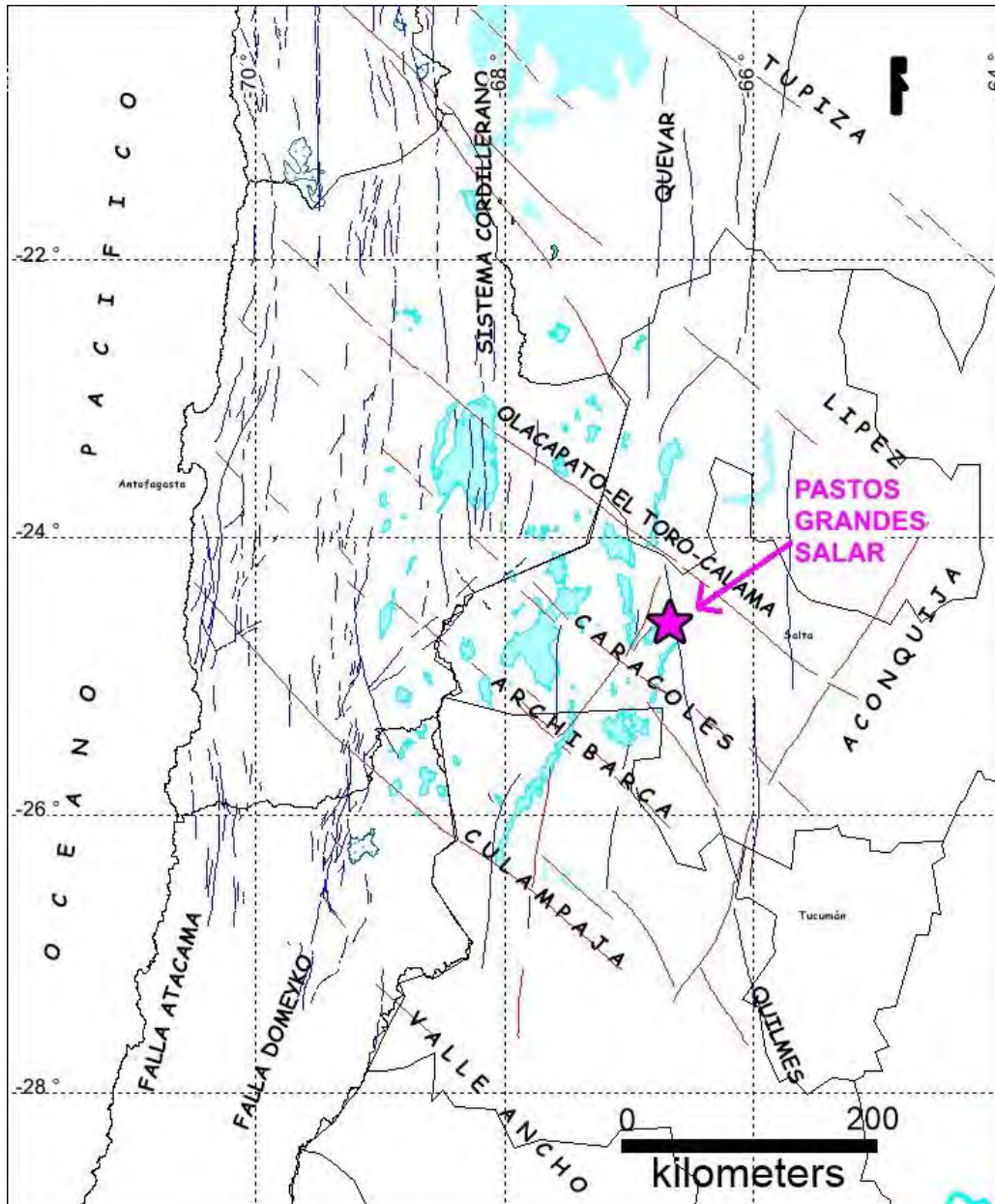
The Puna occupies the central part of the Andes in northern Argentina and Chile between the latitudes 22°S and 27°S. It is a high plateau striking NNE, about 600 km long and with

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 masl. 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 L pez 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 7-2). 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.

7.1.2 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 7-2 illustrates the regional structural geology of the Altiplano-Puna area. Additional information on the regional structure of the Puna is to be found in Hains (2017a).



Source: Rosko, 2018

FIGURE 7-2: STRUCTURAL SETTING OF THE ARGENTINE PUNA

7.1.3 Structural Evolution

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

7.1.3.1 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.

7.1.3.2 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).

7.1.3.3 Oligocene to Miocene Volcanism

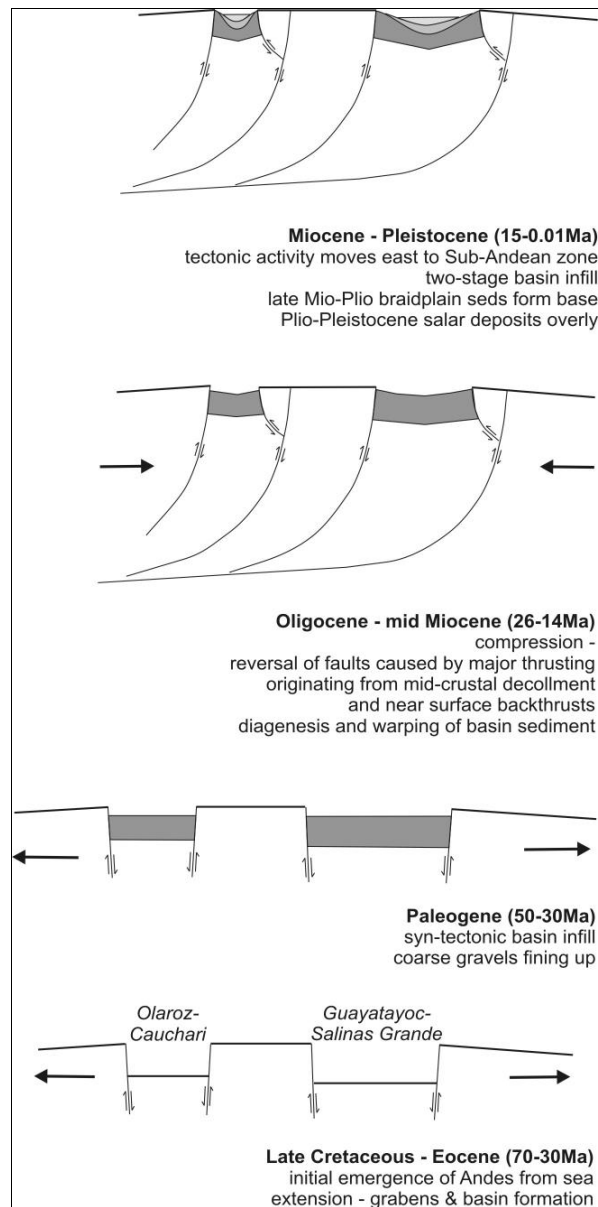
By the late Oligocene to early Miocene (20-25 Ma), the volcanic arc switched to its current location in the Western Cordillera. At the same time, significant shortening across the Puna on reverse faults led to the initiation of separated depocentres. Major uplift of the Altiplano-Puna plateau began during the middle to late Miocene (10-15 Ma), perhaps reaching 2500 m by 10 Ma, and 3500 m by 6 Ma (Garzzone 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.

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.

A summary evolution of the Puna is shown in Figure 7-3, after Houston (2010b).



Source: Houston (2010b)

FIGURE 7-3: GENERALIZED STRUCTURAL EVOLUTION OF THE PUNA BASINS

7.1.3.4 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.

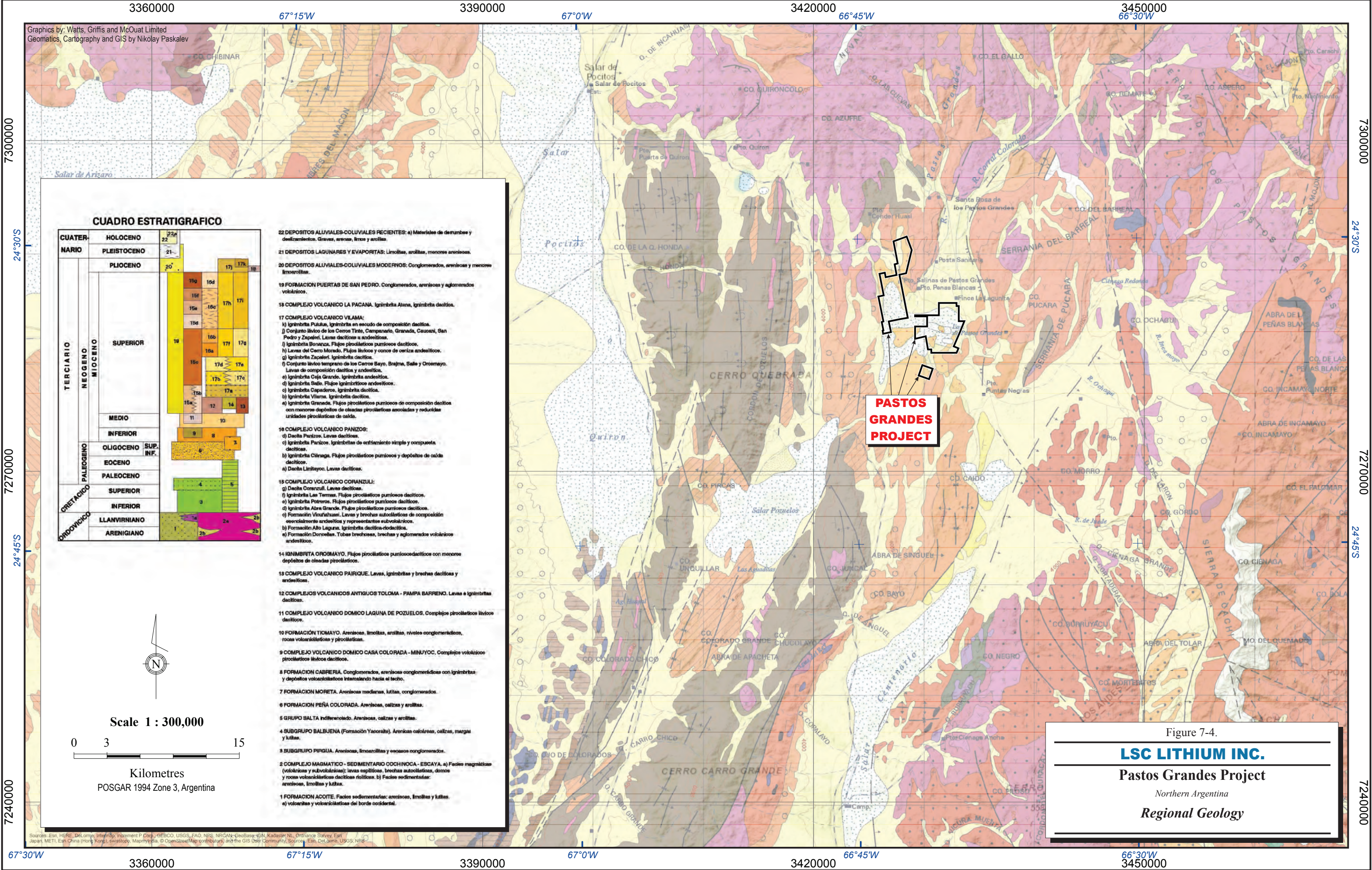
7.1.3.5 Pliocene-Quaternary

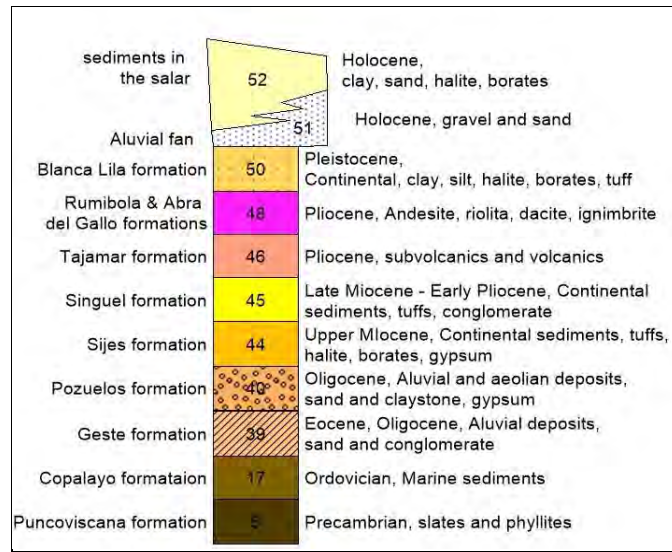
During the Pliocene-Pleistocene tectonic deformation took place as shortening moving east from the Puna into the Santa Barbara fault system. Coincident with this change in tectonic activity climatic fluctuation occurred, with short wetter periods alternating with drier periods. As a result of both, reduced 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.

7.2 LOCAL and PROPERTY GEOLOGY

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.

The geology of the greater Pozuelos-Pastos Grandes (Figure 7-4) 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, 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 and eolian sandstones (Jordan and Alonso, 1987). Figure 7-5 illustrates the regional stratigraphic column for the greater Pastos Grandes area.





Source: Lopez (2016)

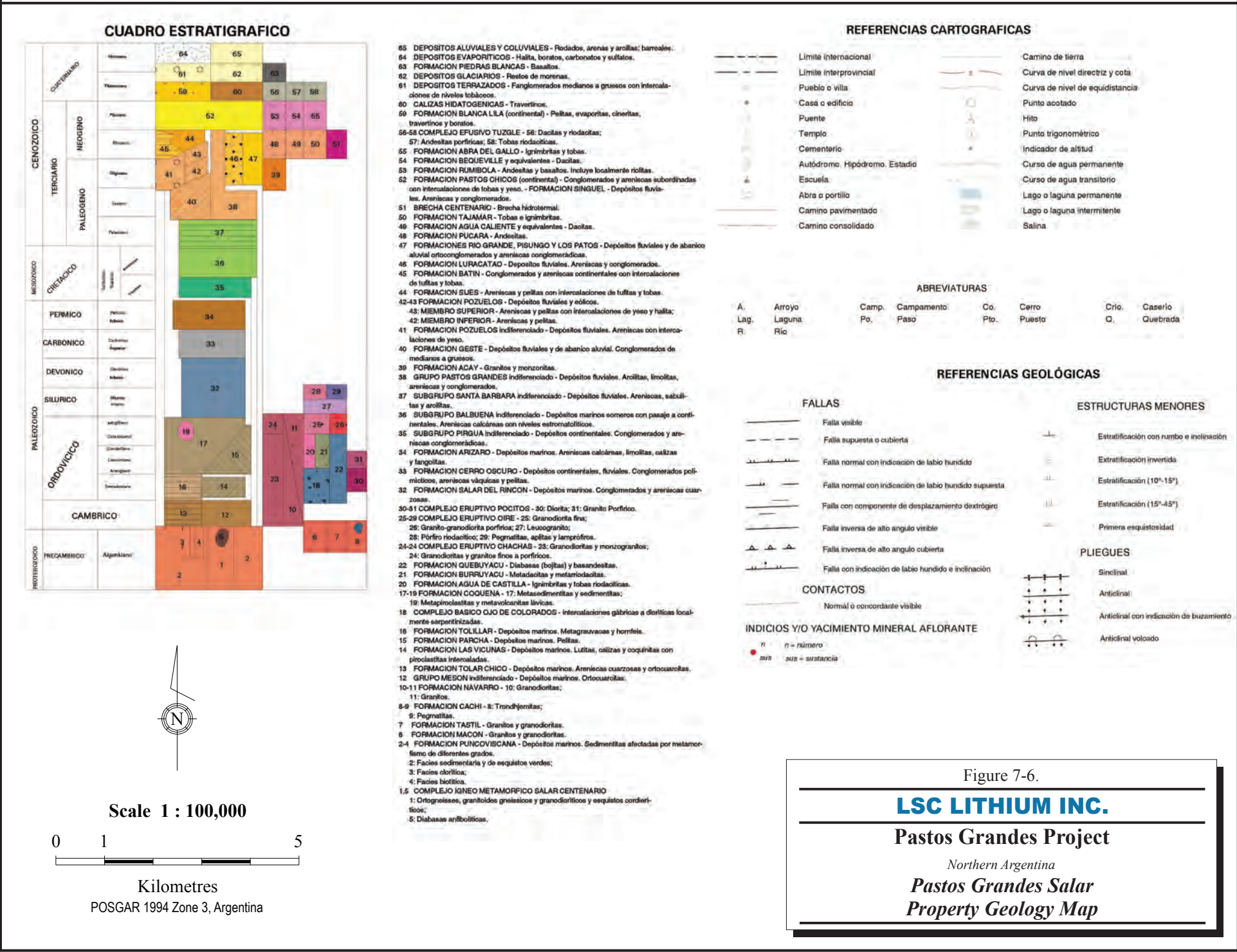
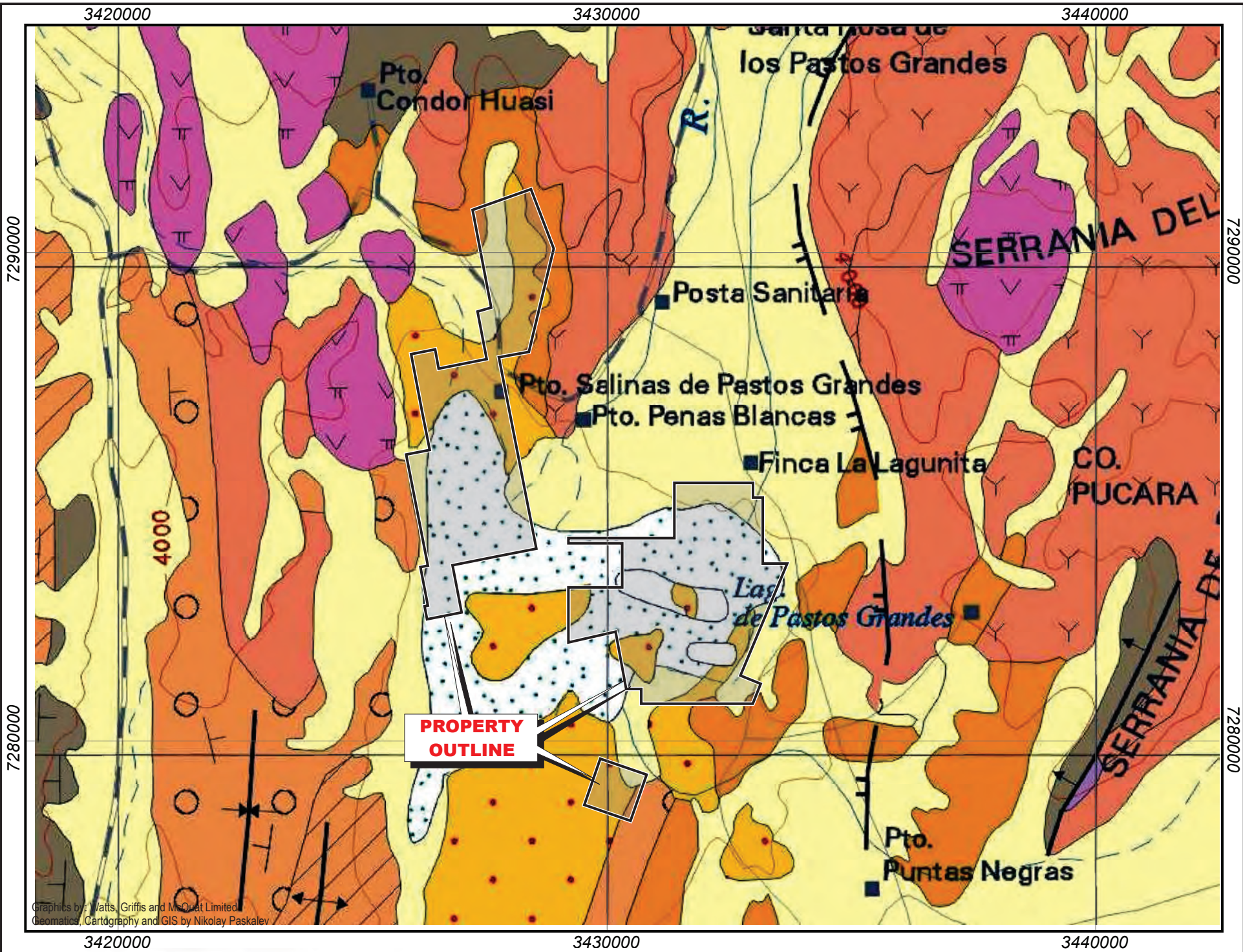
FIGURE 7-5: STRATIGRAPHIC COLUMN FOR SALAR DE PASTOS GRANDES DISTRICT

The salar de 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 local geology of salar de Pastos Grandes is illustrated in Figure 7-6. The Sijes formation is represented by sandstone, silt, clay, tuff and evaporites 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.

The Blanca Lila Formation (<2Ma) crops out as patches (“islands”) 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 Jordan, 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 de 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.

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 above salar de Pozuelos.

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 0.75 m (0.5 m thick) is a generally greyish brown to off-white coloured, dry powdery horizon containing 20% to 30% halite. The phreatic level in the salar is typically positioned about 10 cm – 15 cm below the surface. Drill logs indicate the salar sediment is composed of layers of halite, halite/sand/clay, sand/clay and clay. These intervals are of varying thicknesses; a result of varying periods and intensity of sedimentation and evaporation.

Geomorphologically, the salar presents as a flat salt surface covering most of the central portion, with minor polygonal salt crust formation associated with silt and sand on the periphery, especially in the southwest and southeast. Shallow (<20 cm) open water pools of brackish to fresh water overlying mixed halite/sand/silt sediments are present in the northeast and southeast bordering the alluvial fan. Figure 7-7 illustrates the geomorphology of the salar.

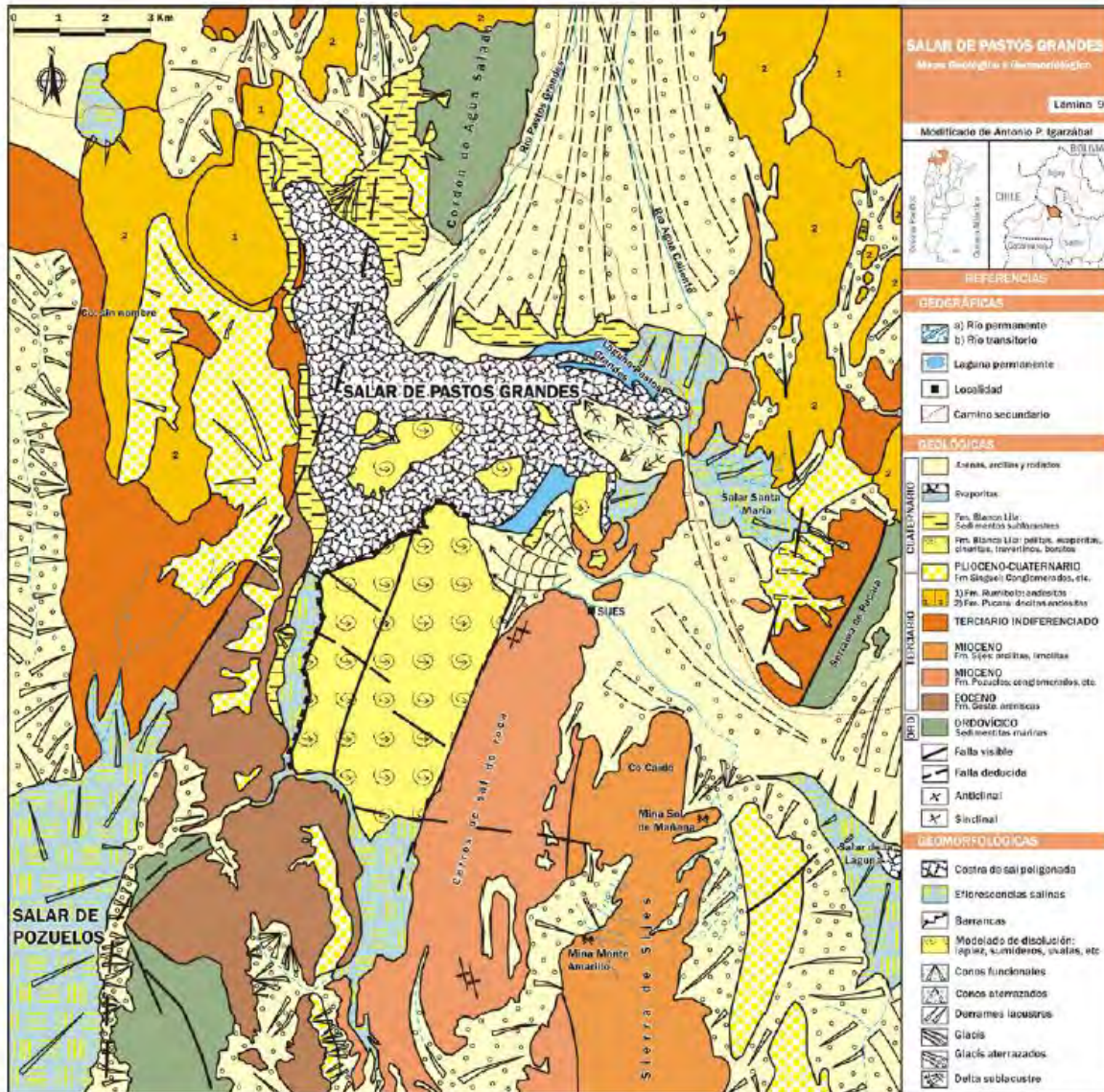
7.3 MINERALIZATION

Mineralization at salars in the Puna and at salar de Pastos Grandes consists of brines saturated in sodium chloride and high in total dissolved solids and with an average density of about 1.215 g/cm³. The other primary components of the brine include potassium, lithium, magnesium, calcium, sulphate, HCO₃ and boron as borates and free H₃BO₃. Salars are classified as Na-Cl-SO₄, Na-Cl-Ca/SO₄ or Na-Cl-SO₄-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-SO₄-B with lithium while the salars in the more southerly and western regions of the Puna tend to be of the Na-Cl—Ca/SO₄ type and somewhat more enriched in lithium than the former.

A Janecke Projection comparing the chemistry of several brine deposits is shown in Figure 7-8. 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⁺⁺, SO₄⁼, 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⁻, SO₄⁼, 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, SO₄ and 2 K, in mol%). The sides of the triangle represent sodium chloride-saturated solutions, with two reciprocal salt pairs (MgCl₂ + Na₂SO₄), (Na₂SO₄+KCl) and a quaternary system with a common ion (MgCl₂+KCl+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

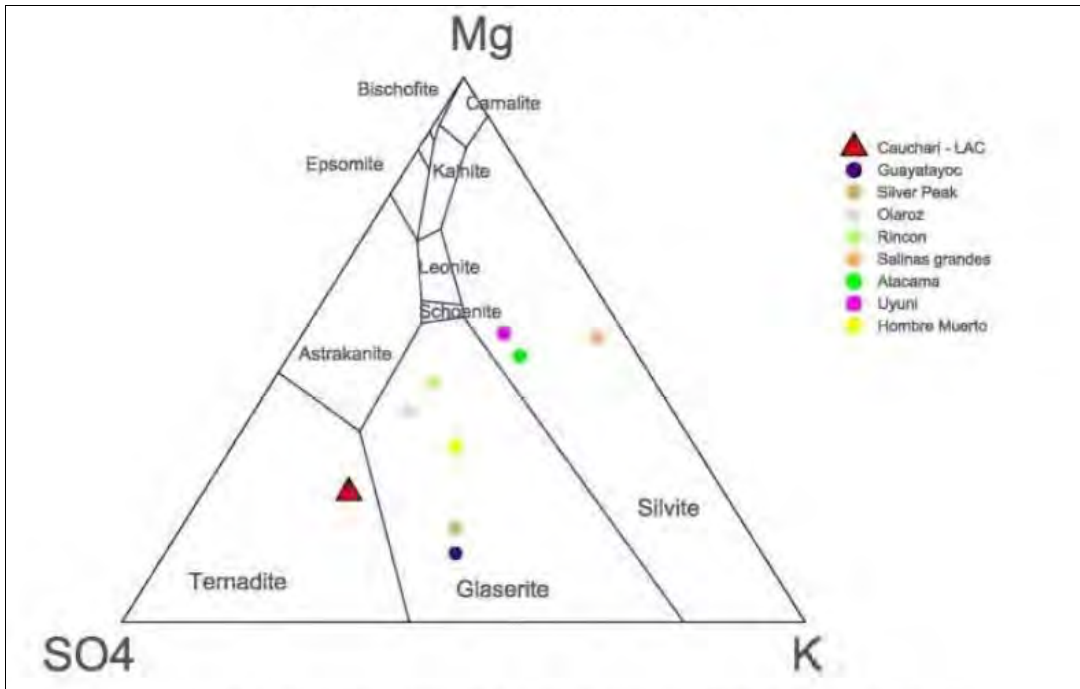
precipitate thernadite (Na_2SO_4). The brines of the Guayatayoc, Silver Peak, Hombre Muerto, Olaroz, and Rincon salars would initially precipitate glaserite ($\text{K}_3\text{Na}(\text{SO}_4)_2$). Salar Atacama, Uyuni, and Salinas Grandes brines would initially precipitate silvite (KCl).



Source: Igazarbal (1980)

FIGURE 7-7: GEOMORPHOLOGY OF SALAR DE PASTOS GRANDES

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 7-8: JANECKE PROJECTION DIAGRAM

8 DEPOSIT TYPES

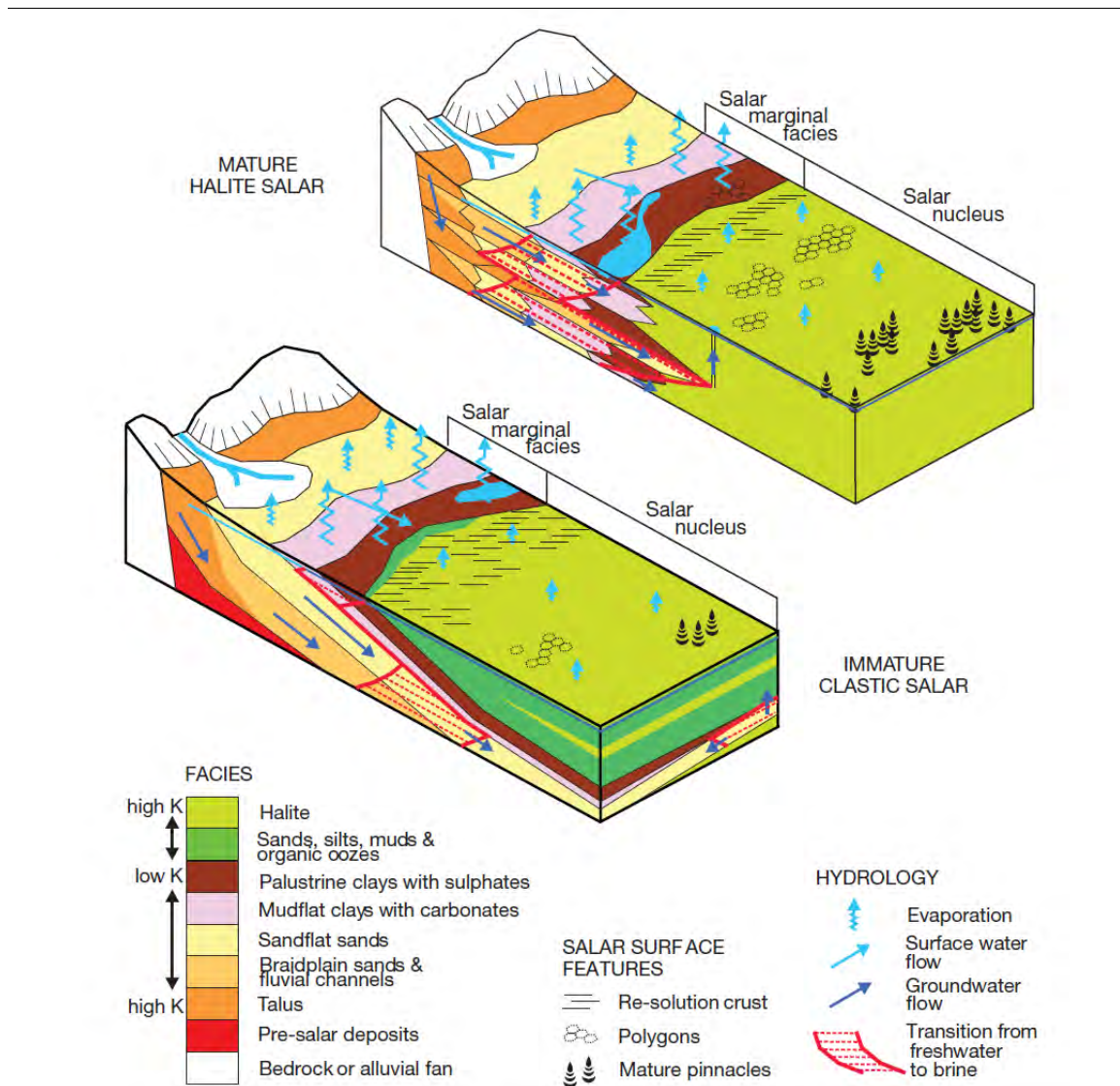
Pastos Grandes is classified as a salar. Salar are brine hosting formations containing elevated levels of metals in solution, typically as salts. Salar can be found at elevations from 1,000 m to more than 4,000 m above sea level. They typically represent the end product of a basin infill process that 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).

Lithium brine projects differ significantly from hard rock mining projects due to their fluid nature. The important considerations 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 (usually) limited thicknesses of halite. Examples are salar de Pastos Grandes, salar Pocitos and salar Olaroz/Cauchari.

The two types are illustrated in Figure 8-1.



Source: Houston et al (2011)

FIGURE 8-1: 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.

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 near surface, with the porosity and permeability decreasing rapidly with depth;

- the brine resource is generally 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.

Salars can also be classified in terms of brine type (Table 8-1). The brine chemistry is a function of the relative elemental composition source rocks and associated evaporation pathways.

Table 8-1: 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)

Pastos Grandes is classified as an immature salar. Chemically, it is of the Na-Cl-Ca/SO₄ type.

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 required geophysical, drilling, and hydrogeological investigations.

9 EXPLORATION

9.1 PRIOR EXPLORATION

Section 6, History, provides information on very early exploration at Pastos Grandes. Work by Eramine in 2011 and 2012 across salar de Pastos Grandes, including extension to areas covered by tenements now owned by LSC, is described in the section below.

9.1.1 Eramine Exploration

The Eramine exploration program incorporated the following work:

- Surface brine sampling from shallow pits, primarily in the south-southwest and north-northeast sectors of the salar,
- Transient Electromagnetic (TEM) survey to define the fresh water/brine interface around the salar perimeter,
- Vertical Electrical Sounding (VES) survey to define the brine and fresh water interface in the salar,
- Closed Source Audio-Magnetotelluric (CS-AMT) survey to define the brine-freshwater interface and identify lithological units,
- Refraction Seismic survey to define basin lithological structure.

9.1.1.1 Surface Sample Results

Surface brine sampling involved nine samples collected from shallow hand dug auger pits. The locations of the pits and sample assay results are detailed in Table 9-1. The assay results indicated good lithium values in the southern part of the salar surface, with poor values being recorded in the north off of the actual salt pan. The assay results are in general agreement with those obtained by LSC during its due diligence sampling program.

SampleID	Date	East	North	Altitude (meters)	Sample	Depth _p (meters)	Cond. _p (mS/cm)	Temp _p °C	K (mg/L)	Li (mg/L)	Mg (mg/L)	Mg/Li	K/Li
59-T-0008	31/10/2011	3428669	7285644	3780	auger	0.1	460	7.8	9	0.3	10	30.15	26.07
59-T-0010	31/10/2011	3430109	7285051	3780	auger	0.1	428	6.2	7	0.2	8	37.66	30.68
59-T-0012	31/10/2011	3430865	7284996	3780	auger	0.1	744	14.3	10	0.8	2	1.86	12.36
59-T-0014	31/10/2011	3431148	7285124	3780	auger	0.1	10.03	10.3	369	9.7	24	2.45	37.93
000113	30/03/2012	3428134	7280945	3780	auger	2	205	17.4	3471	268.32	1906	7.10	12.94
22-T-0001	28/03/2011	3426449	7280690	3780	auger	0.3	211	26.8	6531	666	5568	8.36	9.81
22-T-0002	28/03/2011	3426436	7282563	3780	auger	0.3	216	26.8	6342	602	4753	7.89	10.53
22-T-0003	28/03/2011	3428239	7283358	3780	auger	0.3	220.6	26.8	3605	288	2156	7.48	12.51
22-T-0004	28/03/2011	3426392	7281687	3780	auger	0.3	160	8.7	7146	635	5349	8.43	11.26

Source: Rosko, 2018

Table 9-1: Eramine Surface Sample Assay Results

9.1.1.2 TEM Survey Results

Eramine completed a TEM survey comprising five stations across the central portion of the salar. The survey results indicated brine could extend to a depth of at least 1,000 m.

9.1.1.3 VES Survey Results

A five station VES survey was completed to determine the distribution of brine and fresh water at depth and to compare the VES results with the TEM survey. Results for two stations located in the southwest of the salar are illustrated and reported by Rosko (Rosko, 2018), while results for the other stations are only reported (Rosko, 2018). The data indicated the presence of relatively shallow, thick bodies of halite.

9.1.1.4 CS-AMT Survey Results

A CS-AMT survey was undertaken by Eramine to provide a comparison with the TEM and VES results. CS-AMT is typically a more discriminating geophysical method for salar deposits than TEM or VES. The survey results were transformed to 2D sections to illustrate the relative distribution of brine and the various lithologies present in the salar. In general, the CS-AMT results corresponded with the VES results but with a greater depth penetration and more discrimination in terms of lithologies. The overall conclusion from the work was that Pastos Grandes demonstrated the presence of brine bodies across the salar but that there were variations in resistivity and thus lithological complexity both laterally and vertically throughout the salar.

9.1.1.5 Seismic Refraction Survey Results

Eramine contracted GEC (Geophysical Exploration and Consulting S.A.) to undertake a refraction seismic survey in the southwest portion of the salar. The survey comprised two lines running NNW-SSE and NE-SW for a total of 3.5 km. The results of the survey indicated the salar was composed of compacted clay and till and weathered, sheared fractured rocks and sandstone, greywacke conglomerate across the salar in a SE-NW direction.

9.2 MILLENNIAL LITHIUM EXPLORATION

Millennial Lithium holds tenements located between tenements held by LSC. Millennial completed a program of VES survey work on the northern alluvial fan area located to the north and west of LSC's tenement area on the east side of Pastos Grandes. The results of the work, reported in Rosko (2018) indicated that the northern alluvial fan area comprised a zone of fresh to brackish water ranging from 50m depth to approximately 200m depth moving in a south to north direction and also from west to east, with a zone of weakly to highly conductive brine underlying the freshwater, with the highly conductive brine typically lying below a depth of 200m from surface. Such an interpretation is consistent with the known density gradient behaviour of fresh water and brine and consistent with observations of deep seated brines flowing into salars. Thus, it may be presumed that highly conductive brine is present at depths in excess of 200m in the alluvial fan portion of the LSC tenements located to the immediate southeast of the Millennial tenements on the northern alluvial fan at Pastos Grandes.

9.3 LSC EXPLORATION

9.3.1 SEV Survey

LSC contracted Conhidro srl to undertake a program of geological sampling, brine sampling and SEV work in 2016. The SEV survey coverage was directed in a South to North pattern in the western tenements and west-east and SW-NE directions in the eastern tenements (Figure 9-1). The results of the work indicated the following:



Source: Conhidro (2016)

FIGURE 9-1: SEV SURVEY – 2016 LSC EXPLORATION

- Three units of varying conductivity can be identified on the west side, running in a general South to North pattern from SEV 5 to SEV 10, with a slope decreasing from the NE to the SW and running approximately 7.4 km:

1) a highly conductive (low resistivity) unit having an average thickness of 100 m and wedged toward the North. The unit is interpreted to be composed of evaporitic facies with intercalations of clastic facies, all saturated with brine,

2) a semi-conductive zone with a variable thickness of 100 m to 140 m and a depocentre between SEV 8 to SEV 10. The resistivity values are interpreted to represent fines facies (silts and clays) and/or evaporites (halite, gypsum, borates) with intercalations of fine clastic layers. This may represent levels of the Blanca Lila Formation or other Tertiary deposits that are present in the salar,

3) a resistive zone identified between SEV 8, 9 and 10 and between 20 m and 100 m deep, interpreted as belonging to mainly thick clastic facies (conglomerates) and/or facies of volcanic rocks (andesites) that emerge in the periphery of the salar.

It is notable that SEV 4 shows a very deep, highly conductive zone (>170 m) that does not appear in the other SEV results. Figure 9-2 illustrates the SEV results.

In the central and eastern SEV survey points, one can make the following interpretations:

SEV 11: This shows four resistivity layers; the first an evaporite facies with conductive clastics saturated in brine down to approximately 5 m depth. This is followed by a zone of interspersed facies of silts, clays, sands and halites saturated in brine to approximately 64 m depth. Underlying this are zones interpreted as facies belonging to the Blanca Lila Formation and Tertiary sequences of conglomerates of the Singuel Formation

SEV 12: Presents a sequence of four conductive layers, with an upper zone of modern gravels and sands extending to a depth of approximately 20 m. This is followed by facies interpreted as belonging to the Blanca Lila Formation to a depth of 31m. Underlying this zone is a highly conductive zone of alternating evaporite and clastic facies saturated with brine. The bottom of this zone could not be determined from the SEV results.

SEV 13: This station detected five distinct geoelectric layers. The upper-most layer is assigned as evaporite facies saturated in brine and having a thickness of approximately 0.5 m. This is followed by a zone of layered evaporites and mixed halite/clastics (silts, sands and clays) saturated in brine to a depth of approximately 85 m. Underlying this is a zone of mixed halite and clastics, again saturated in brine, to a depth of approximately 134 m. A more resistive layer is found below, possibly representing the Blanc Lila Formation or Tertiary sequences that emerge in the margins of the salar and extending to a depth of approximately 287 m, where the resistivity again decreases, indicating a change to a more conductive zone similar in facies composition to the mixed halite/clastic zone present from 85 m to 134 m.

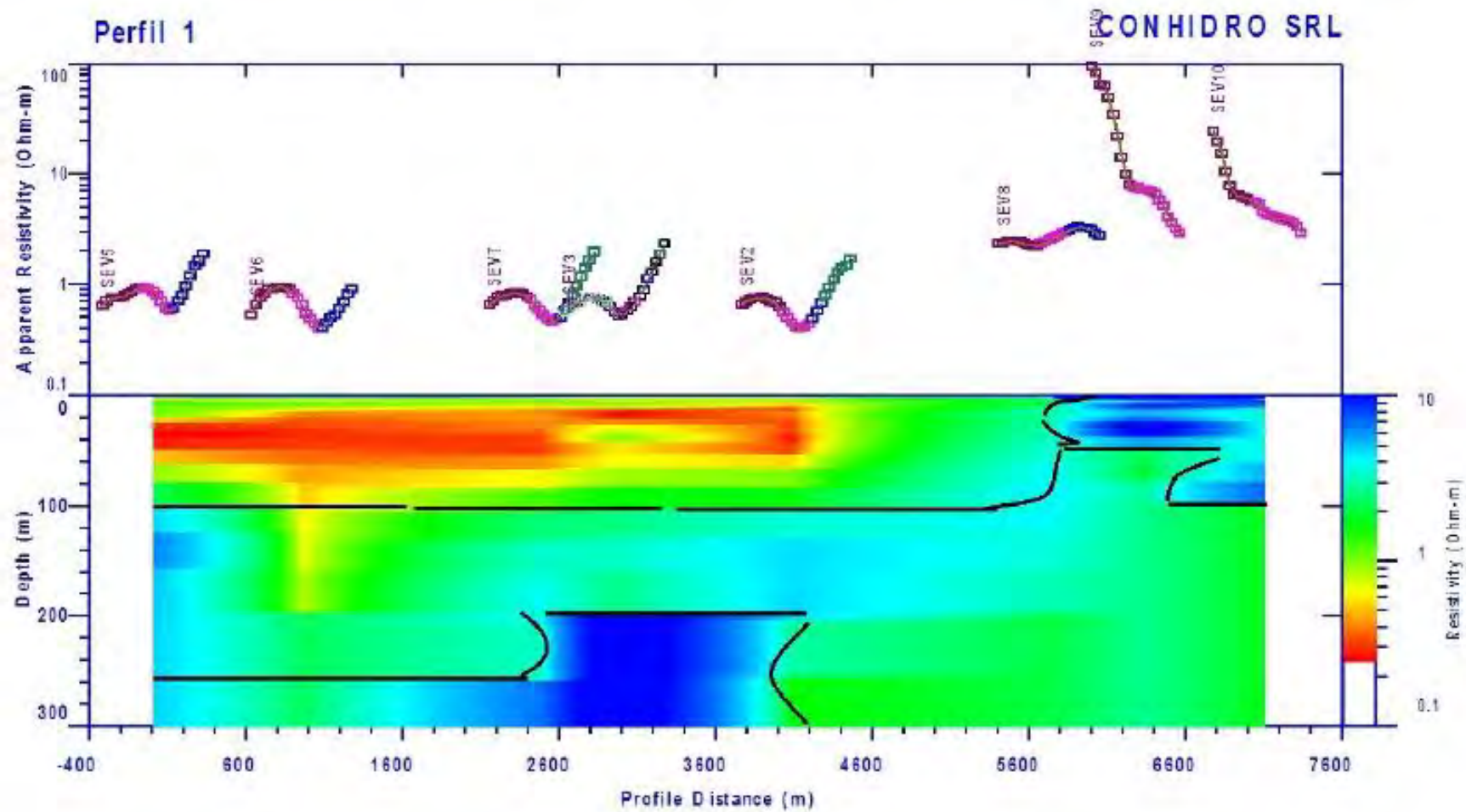


FIGURE 9-2: SEV RESULTS, 2016 LSC EXPLORATION

9.3.2 Refraction Seismic Survey

LSC contracted GEC (Geophysical Exploration and Consulting S.A.) in 2018 to undertake a seismic tomography refraction survey over the LSC tenements at Pastos Grandes. The survey comprised six seismic lines for a total of 15,372 m (Figure 9-3 and Table 9-2). The survey was undertaken using a 24-bit GEODE Acquisition System with data processing using Geometrics software (MGOS). The system provides for 20kHz bandwidth (8 to 0.2 ms sampling), low noise and high stacking accuracy. Specifications for the survey were as follows:

Geophone spacing:	6 m
Source spacing:	36 m inline
Outline offsets:	180, 360, 540, 920 m (both ends)
Geophone type:	8 Hz Geospace (single) geophones with spike
Spread layout:	96 active channels
Seismic source:	150 kg trailer mounted dropweight
Recording length:	250 – 1,000 ms
Sample rate:	0.25 ms
Gain factor:	Automatic gain control

Raw data were processed using tomography inversion using RAYFRAC software (Delta TV and WET (Wave Eikonal Traveltime) tomography processing) to enable high quality data interpretation and visualisation.



Source: GEC, 2018

FIGURE 9-3: SEISMIC SURVEY LINES – LSC 2018 EXPLORATION PASTOS GRANDES

Seismic Line ID	Line Length	Spreads	Total Shots
1	4.026 m	9	183
2	1.146 m	3	42
3	1.434 m	3	51
4	3.594 m	8	150
5	2.298 m	5	93
6	2.874 m	7	125

Source: GEC, 2018

**TABLE 9-2: SUMMARY OF LINE LENGTHS, SPREAD AND SHOT NUMBERS
2018 SEISMIC SURVEY – PASTOS GRANDES**

Lithologies were assigned based on standard seismic literature values/distributions for seismic velocities, the regional geologic information and correlated to the lithologies for two drill holes, SPG-2017-02B in the NW zone and SPG-2017-04A in the SE zone. The maximum depth of the seismic survey was approximately 600 m below surface. The interpretations of the seismic results for each zone are noted below:

9.3.2.1 Seismic Lines 1-3 (NW Zone)

Interpreted as comprising 7 units:

- Unit I (thin surface layer): Dry to partial saturated sediments and alluvial material with V_p velocities in a range from $400 \text{ m/s} < V_p < 1.200 \text{ m/s}$. This unit mainly consists of loose Sands, Gravels, Clays, Salts and / or organic material.
- Unit II (Halite Crust (HC) / Surface Halite Layer (HCL)): $1.200 \text{ m/s} < V_p < 1.600 \text{ m/s}$.
- Unit III (Probable surficial aquifer sediment formation): $1.600 \text{ m/s} < V_p < 2.100 \text{ m/s}$. This unit contains mainly Sand, Clay, Silt and / or organic Material.
- Unit IV (Halite (HCL)): $2.100 \text{ m/s} < V_p < 2.400 \text{ ms}$. The fourth unit consists mainly of crystalline Halite.
- Unit V (Probable aquifer sediment formation): $2.400 \text{ m/s} < V_p < 2.800 \text{ ms}$. This unit contains mainly Sand, Clay, Silt and / or organic Material.
- Unit VI (Sediment formation): $2.800 \text{ m/s} < V_p < 4.600 \text{ ms}$. This unit contains mainly Gravel.
- Unit VII (Breccia): $V_p > 4.600 \text{ ms}$. This unit contains mainly Breccia.

No structural features such as faults were detected on seismic lines 1 -3.

9.3.2.2 Seismic Lines 4-6 (SE Zone)

Interpreted as comprising 11 units:

- Unit I (thin surface layer): Dry to partial saturated sediments and alluvial material with V_p velocities in a range from $400 \text{ m/s} < V_p < 1.200 \text{ m/s}$. This unit mainly consists of loose Sands, Gravels, Clays, Salts and/or organic material.

- Unit II (Halite Crust (HC) / Surface Halite Layer (HCL)): $1.200 \text{ m/s} < V_p < 1.600 \text{ m/s}$.
- Unit III (Probable surficial aquifer sediment formation): $1.600 \text{ m/s} < V_p < 2.100 \text{ m/s}$. This unit contains mainly Sand, Clay, Silt and / or organic material.
- Unit IV (Halite with scarce matrix (HSM)): $2.100 \text{ m/s} < V_p < 2.400 \text{ ms}$. The fourth unit consists mainly of Halite with scarce matrix.
- Unit V (Halite with abundant matrix (HAM)): $2.400 \text{ m/s} < V_p < 3.400 \text{ ms}$. This unit contains mainly Halite with abundant matrix.
- Unit VI (Halite with scarce matrix (HSM)): $3.400 \text{ m/s} < V_p < 3.900 \text{ ms}$. The sixth unit consists mainly of Halite with scarce matrix.
- Unit VII (Probable aquifer sediment formation): $3.900 \text{ m/s} < V_p < 4.100 \text{ m/s}$. This unit contains mainly Sand.
- Unit VIII (Halite with interbedded Sand): $4.100 \text{ m/s} < V_p < 4.600 \text{ ms}$. This unit is characterized by an alternation of Halite and Sand bands.
- Unit IX (Probable aquifer sediment formation): $4.600 \text{ m/s} < V_p < 4.800 \text{ m/s}$. This unit contains Gravel, Sand and / or Clay.
- Unit X (Halite with interbedded Sand): $4.800 \text{ m/s} < V_p < 5.600 \text{ ms}$. This unit is characterized by an alternation of Halite and Sand bands.
- Unit XI (Probable aquifer sediment formation): $V_p > 5.600 \text{ m/s}$. This unit contains Gravel and / or Sand.

No structural features such as faults were detected on seismic lines 4-6.

The final WET interpretations of the seismic results are summarized in Figure 9-4 and detailed in Appendix 1.

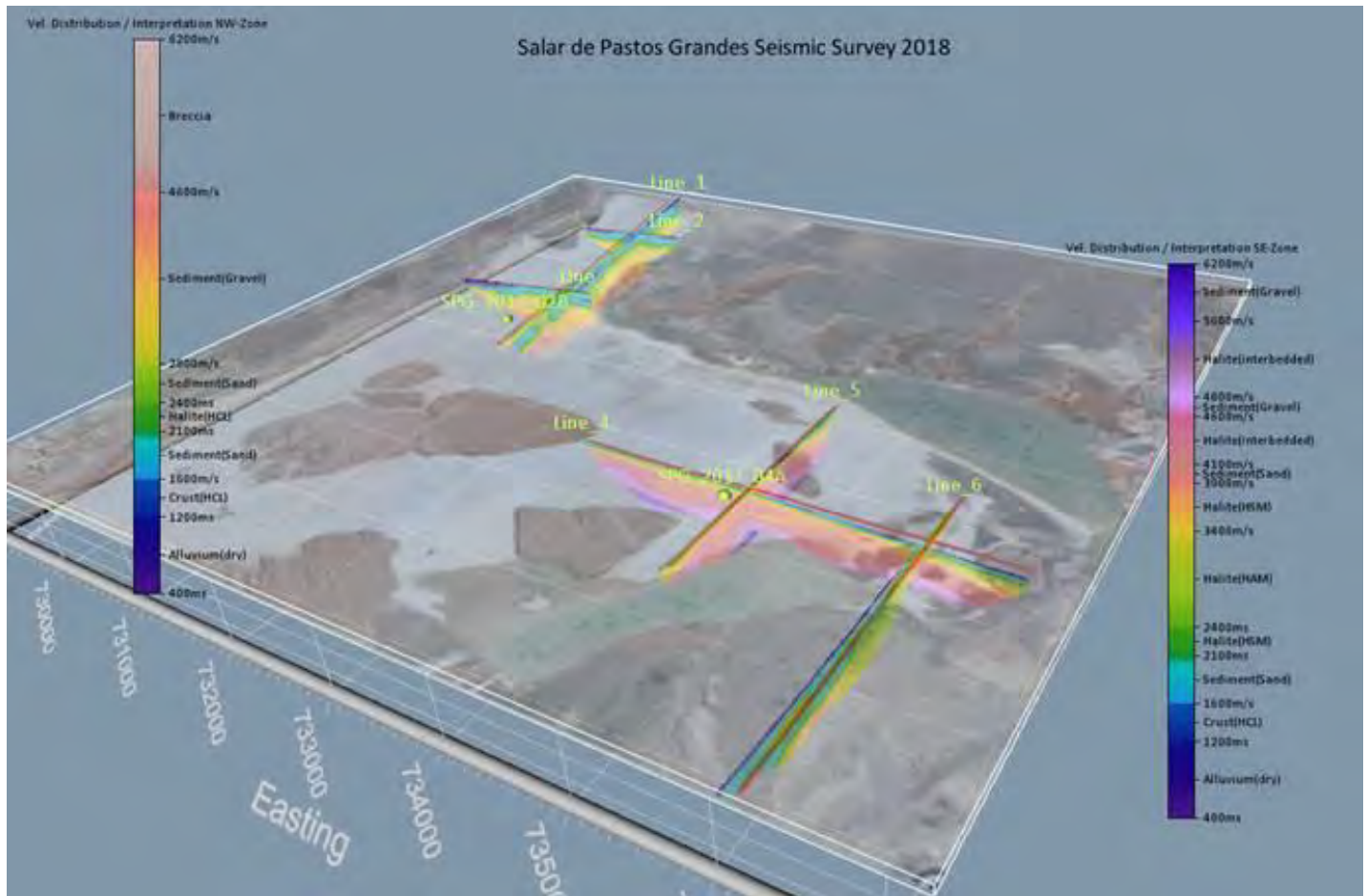
The seismic data are interpreted as follows:

Line 1 – NW Zone

Thin surface layers of halite mixed with sediment material in the north, intersecting a thicker halite zone (~25 m thick) at Line 2 and then reverting to a sediment zone composed of clay, sand and silt, with a zone of compact halite lying north of Line 2 extending from approximately 50 m depth to approximately 125 m depth. A halite dominant clastic band forms an undulating seam of varying thickness (~25 m – 50 m) throughout the length of the survey line. A clastic zone composed of sand/silt/clay present at approximately 175 m – 225 m below surface overlies a deeper lying sediment zone composed mainly of gravels from approximately 225 m to 450 m depth below surface), which sits on top of a breccia zone.

Line 2

Line 2 is a cross section across Line 1 and located in the northern sector of Line 1. The interpreted section shows thick sand/clay and silt sediments overlying an approximate 25 m – 40 m thick halite horizon, followed by another sequence of sand/clay/silt sediments which overly a thick sequence of sediments interpreted primarily as gravels.



Source: GEC, 2018

FIGURE 9-4: INTERPRETED SEISMIC RESULTS – PASTOS GRANDES

Line 3

Line 3 is a cross section located toward the southern end of line 1. The interpreted seismic data show a similar, but somewhat more complex distribution of sediment and halite layered sequences to Line 2.

Line 4: SE Zone

Line 4 is a W-E line located in the SE part of Pastos Grandes cutting both Lines 5 and 6. The seismic data show a series of wave-like, somewhat intercalated sequences of halite mixed with sediment, sand/clay/silt sediments, and halite with minor sediment.

Line 5

Line 5 runs N-S and is located in the central part of LSC's tenements on the east side of Pastos Grandes. The interpreted section has the same pattern of distribution of sediments as Line 4.

Line 6

Line 6 is a North-South line located on the eastern side of the LSC tenements and extending into the foreland on the southeast side. The interpreted data indicates an upper sequence of mixed halite-sediment to a depth of 175 m below surface. The sequence increases in depth,

with mixed halite sediment predominating, gradually becoming more clastic dominated moving to the south.

The overall seismic results are consistent with the SEV results and indicate the LSC tenements on both the west and east sides of Pastos Grandes demonstrate lithological and geo-electrical characteristics consistent with the presence of brines within a thick permeable matrix of varying composition.

10 DRILLING

10.1 INTRODUCTION

This section describes both drilling by others at Pastos Grandes, especially Eramine and Millennial Lithium, as well as current exploration drilling by LSC. The drilling by others is included as the data from relevant drill holes provides useful comparative data to that obtained during the current LSC drill program, thus supporting the geological interpretation of the salar and the basis for the resource estimate detailed in Chapter 14 of this Technical Report.

10.1.1 Eramine Drilling

Eramine Sudamerica drilled 11 shallow exploration wells, two diamond drill holes (DW01PGDDH and DW02PGDDH), four shallow exploration holes constructed as monitoring wells and three exploration wells (6" dia.) of varying depth (DW03PG, DW04PG and DW05PG). The locations of these holes are noted in Table 10-1.

TABLE 10-1: ERAMINE DRILL HOLE LOCATIONS – 2011/12 EXPLORATION

<i>Pozo</i>	<i>Este</i>	<i>Norte</i>	<i>Cota</i>	<i>Profundidad (m)</i>	<i>Metodo de Perforación</i>	<i>Habilitación</i>
DW01PG	3428138.6	7280938.2	3780	150	Diamantina	PVC ciego y ranurado 2"
DW03PG	3426473.0	7282492.0	3780	60	Rotacion	PVC ciego y ranurado 6"
DW04PG	3430268.0	7283388.0	3780	170	Rotacion	PVC ciego y ranurado 6"
DW05PG	3427431.0	7280824.0	3780	40	Rotacion	PVC ciego y ranurado 6"
PMPG01	3428155.0	7280934.0	3780	40	Rotacion	PVC ciego y ranurado 6"
PMPG02	3429370.0	7281021.0	3780	40	Rotacion	PVC ciego y ranurado 6"
PMPG03	3429355.0	7281634.0	3780	40	Rotacion	PVC ciego y ranurado 6"
PMPG04	3428135.0	7281634.0	3780	40	Rotacion	PVC ciego y ranurado 6"
SW01PG	3426106.2	7288015.1	3780	30	Rotacion	PVC ciego y ranurado 2"
SW02PG	3427586.3	7283338.7	3780	30	Rotacion	PVC ciego y ranurado 2"
SW03PG	3429198.7	7283374.2	3780	40	Rotacion	PVC ciego y ranurado 2"
SW03BPG	3429231.0	7283682.0	3780	10	Rotacion	PVC ciego y ranurado 2"
SW04PG	3430278.4	7283388.4	3780	48	Rotacion	PVC ciego y ranurado 2"
SW04BPG	3430264.0	7283393.0	3780	9	Rotacion	PVC ciego y ranurado 2"
SW04CPG	3430279.0	7283388.0	3780	20	Rotacion	PVC ciego y ranurado 2"
SW05PG	3432194.0	7282655.0	3780	39	Rotacion	PVC ciego y ranurado 2"
SW06PG	3428712.0	7281334.0	3780	35	Rotacion	PVC ciego y ranurado 2"
SW07PG	3429935.0	7281186.0	3780	28	Rotacion	PVC ciego y ranurado 2"
SW08PG	3427415.8	7280824.1	3780	30	Rotacion	PVC ciego y ranurado 2"
SW09PG	3426577.6	7281335.6	3780	35	Rotacion	PVC ciego y ranurado 2"
SW10PG	3426471.0	7282408.2	3780	30	Rotacion	PVC ciego y ranurado 2"
SW11PG	3429127.7	7282344.2	3780	32	Rotacion	PVC ciego y ranurado 2"
VSW2PG	3426042.0	7288146.0	3780	1	Ahoyadora	PVC ciego y ranurado 2"
VSW4PG	3426482.0	7282474.0	3780	2	Ahoyadora	PVC ciego y ranurado 2"
VSW5PG	3426039.0	7279192.0	3780	1	Ahoyadora	PVC ciego y ranurado 2"
VSW6PG	3428134.0	7280945.0	3780	1	Ahoyadora	PVC ciego y ranurado 2"
VSW9PG	3429188.0	7283680.0	3780	1	Ahoyadora	PVC ciego y ranurado 2"

Source: Eramine, 2016

Holes SW10PG, DW03PG and VSW4PG are located to the immediate south of LSC's Coronel Vidt tenement on the west side of Pastos Grandes and approximately 200 m SW of LSC's proposed hole PG-2017-03, which has not yet been drilled.

Holes SW01PG, VSW2PG and SW01BPG are located immediately north of LSC's Maria Daniela tenement and thus provide useful information on the salar lithology and brine chemistry in this area.

Hole SW05PG is located on LSC's San Cayetano I tenement. Holes SW04PG, DW04PG, SW04BPG are located immediately adjacent to the boundary with LSC's Leoncia tenement, while Hole SW11PG is located immediately adjacent to the boundary with LSC's La Buscada tenement on the eastern side of Pastos Grandes.

Hole SW02PG is located approximately 813m southeast of LSC hole SPG-2017-2B and approximately 500m from the southern boundary of LSC's Santa Rosa tenement on the west side of Pastos Grandes.

Drill log data for the relevant Eramine holes are summarized below.

Well DW03PG

Well DW03PG was drilled to a depth of 60 m. The drill log shows layers of halite and halite/sand/clay down to approximately 20 m depth, followed by layers of sand and sand/clay to the bottom of the hole. Brine density is reported as >1.2 g/cc for the whole drill interval. Reported brine assay values from bailer samples are:

5m	407 mg/L Li
30m	457 mg/L Li
40m	454 mg/L Li
50m	445 mg/L Li

Source: Eramine, 2016

A 77 hr pump test, with the pump set at 55m and a flow rate of 1.7 L/sec (6.12 m³/hr) yielded brine with an average assay of 442 mg/L Li over the duration of the test.

Hole SW01PG

This hole was drilled to a depth of 30m. The drill log records halite and halite/organic material to a depth of 2 m, followed by layers of sand and sand/clay or sand/organic material to 16m. A 2m interval of organic material/gypsum/clay is found between 16m and 18m, where the matrix transitions to a clay or clay/organic material mix and then to halite at 28m. Brine density values are reported as consistently greater than 1.21 gm/cc, with the interval between 16 and 30 m having a brine density of 1.29 gm/cc (Eramine, 2016).

Hole SW05PG

This hole was drilled to 39 m and used as a monitoring well. The drill logs shows halite down to 2 m depth, followed by mixed halite/sand with some borates(ulexite) to 4.2 m and then sand/gravel to 10m. Mixtures of clay and organic material follow to a depth of 33.5 m, when the matrix transitions to a halite/clay mix to the bottom of the hole. Reported brine

densities are consistently greater than 1.2 gm/cc, with the intervals from 4 m-9 m and 13.5 m - 38 m having brines densities of 1.3gm/cc (Eramine, 2016).

Well DW04PG

This well was drilled to a depth of 170 m. The drill log shows a complex mix of lithologies beginning with a surface zone of halite to approximately 5 m depth, followed by layers of mixed clay/sand/thin halite bands and some ulexite down to 50 m. Beginning at approximately 50 m the lithology changes to halite mixed with sand, clay and minor ulexite to approximately 100 m where another interval of sand and clay extends to approximately 115 m. The lithology then transitions to a mix of halite/sand or halite/clay with minor ulexite and/or organic material to the bottom of the hole. Brine density values are consistently above 1.21 gm/cc. Brine sample assay data show the following:

5m	327 mg/L Li
41m	327 mg/L Li
50m	334 mg/L Li
103m	335 mg/L Li
125m	333 mg/L Li

Source: Eramine (2016)

Hole SW02PG

This hole was drilled to a depth of 30 m. The drill log shows a zone of mixed halite/clay or halite/ulexite with minor organic material down to 20 m, followed by a zone of massive halite with clay from 20 m to 23 m, which transitions back to a halite/clay to the bottom of the hole. Brine densities are reported as being consistently above 1.21 gm/cc. No brine assay data are available (Eramine, 2016).

The Eramine drill log information are consistent with the SEV and seismic data obtained by LSC during its exploration program. The Eramine brine assay data are also consistent with LSC's surface sampling data and LSC brine assay data for the LSC holes located in reasonably close proximity to the Eramine drill holes. Combined, the historic Eramine data demonstrate that brine mineralization is present across the whole of salar de Pastos Grandes and that the lithologies and lithological depth intervals interpreted from the seismic and SEV data are in general agreement with the LSC data.

10.1.2 Millennial Lithium Drilling

Millennial Lithium is exploring on its tenements in the central part of Pastos Grandes located between LSC's tenements located on the eastern and western sides of the salar. Some of Millennial's exploration holes are located in relative close proximity to the LSC tenements, and as with the results for historic Eramine holes located on or near the LSC tenements, can provide useful comparative information for analysis of the brine potential in the adjacent LSC tenements.

The relevant Millennial drill holes for comparative purposes are detailed in Table 10-2.

TABLE 10-2: COMPARATIVE MILLENNIAL LITHIUM DRILL HOLES
(Posgar 94 datum, hand held GPS)

Hole Number	Depth (m)	Easting	Northing
PGMW17-03	154	3428367	7283805
PGMW17-07, 07B ¹	203.3	3426888	7282228
PGMW17-08	425.5	3429941	7281596
PGMW17-08B ²	446	3429941	7281596
PGMW17-10	601	3429822	7283569

1) extension of hole PGMW17-07

2) twin hole located approximately 2 m from original hole

Source: Rosko, 2018

The Millennial drill log data (Rosko, 2018) show the holes are for the most part dominated by sandy-clayey halite, although Hole PGMW17-10 is dominated by fine to medium sand from 160 m to the bottom of the hole at 600 m depth. Millennial reported brine samples from the holes regardless of lithology, indicating that holes should generally be productive for brine through most of the drilled intervals. Reported brine assays taken at depth specific intervals showed good lithium values and favourable overall brine chemistry (Table 10-3), similar to the results obtained by LSC, as discussed in subsequent sections of this report.

**TABLE 10-3: BRINE ASSAY RESULTS – SELECTED MILLENNIAL
EXPLORATION HOLES, PASTOS GRANDES**
(values in mg/L unless otherwise noted)
(data rounded to nearest whole value)

Hole No.	Interval (from – to, m)	Li	Mg	K	B	Mg/Li
PGMW17-03	127 - 128	308	2141	3489	518	6.96
	148 - 149	247	1557	2783	368	6.30
PGMW17-07	44.3 – 44.7	333	2302	3865	451	6.90
	49.3-50.3	394	2746	3913	597	6.97
	77.3 – 78.3	406	2947	3949	645	7.25
	106.3 – 107.3	395	2850	3712	610	7.21
	125.3 – 126.3	359	2488	3993	475	6.93
	137.3 – 138.3	340	2365	3880	456	6.96
PGMW17-07B	165.5 – 166.5	340	2543	3771	552	7.49
	186.5 – 187.5	364	2609	4130	492	7.17
PGWM17-08B	344.0 – 346.0	427	2820	5290	938	6.60
	356.0 – 358.0	465	3160	5560	919	6.80
PGWM17-10	130.0 – 131.7	334	2200	3750	480	6.59
	148.0 – 149.7	351	2380	4020	508	6.78
	166.0 – 167.7	362	2520	4200	525	6.96
	184.0 – 185.7	401	2930	4740	589	7.31
	202.0 – 203.7	304	2140	3700	600	7.04
	220.0 – 221.7	399	2620	4590	706	6.57
	238.0 – 239.7	501	2880	5350	668	5.75
	256.0 – 257.0	476	2800	5140	619	5.88
	274.0 – 275.7	384	2440	4250	578	6.35
	423.0 – 424.7	482	2750	5130	604	5.71
	453.0 - 454.7	475	2830	5110	606	5.96
	483.0 – 484.7	500	2760	5130	590	5.52
	507.0 – 508.7	455	2810	4810	571	6.18
	555.0 – 556.7	505	2810	5010	574	5.56
	573.0 – 574.7	450	2840	4810	561	6.31
	591.0 – 592.7	399	2860	4580	528	7.17

Source: Rosko, 2018

10.2 LSC DRILLING

LSC has completed six drill holes at Pastos Grandes for a total of 2,672.5 m as of October 19, 2018 (Table 10-4). Drilling was completed by Hidrotec using a Christensen CS-14 rig (Holes 2, 2B, 4A, 5, 5B) and AGV, also using a Christensen CS-14 rig (Hole 18-01). Holes were drilled using a combination of diamond bit and tri-cone at HQ diameter. Due to the difficult drilling conditions the typical drilling practice was to drill 50 m with diamond bit to recover core samples and take brine samples using a packer system followed by 50 m of drilling with a tri-cone bit and taking brine packer samples, with chips recovered on per

meter meter interval basis for lithological determination. Some holes were twinned or moved to another location due to drilling problems. Such holes are noted with the suffix B.

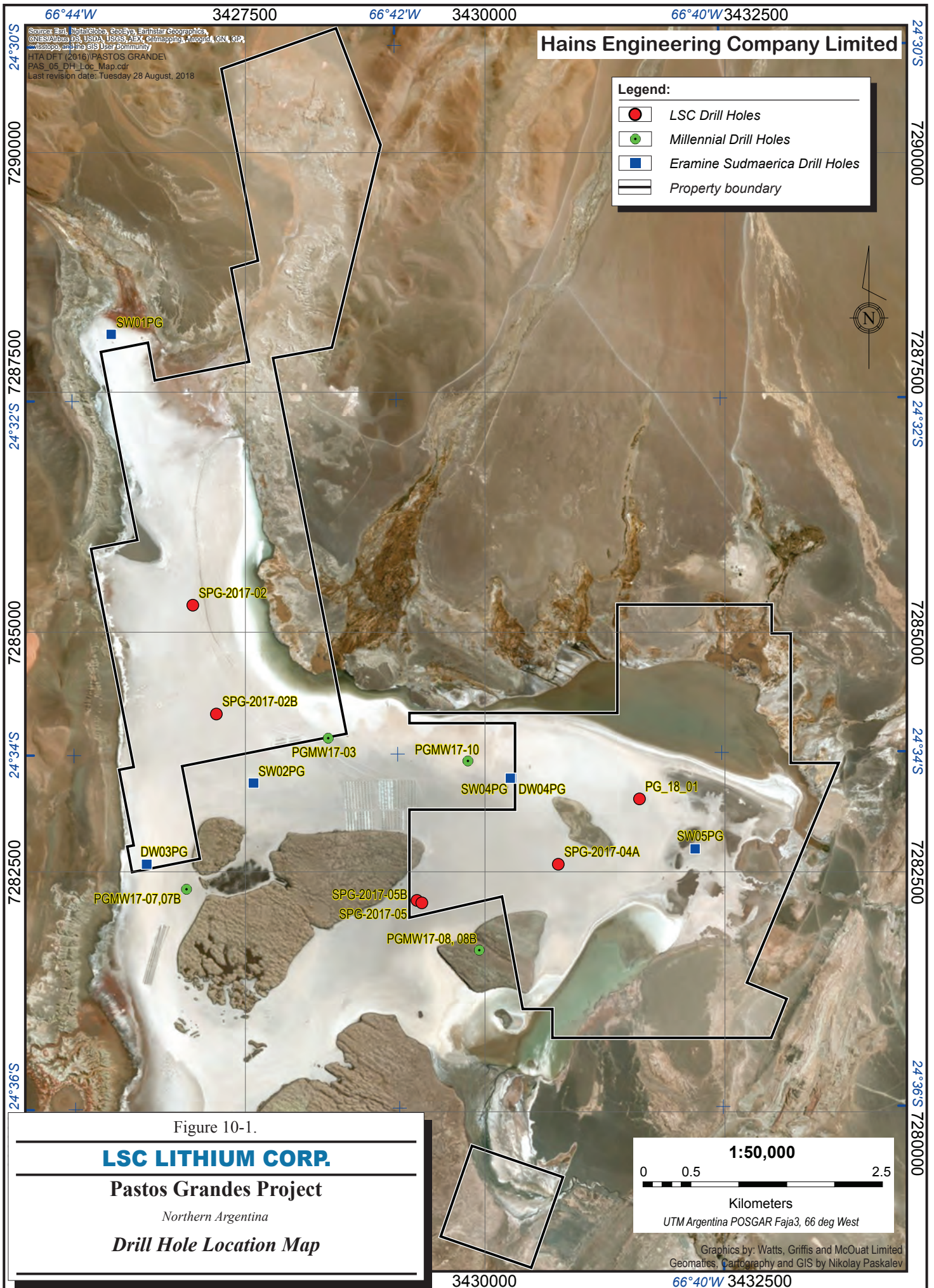
Hole positions were professionally surveyed by Andes Mining Consulting (Aminco) using a SOUTH Model GI Plus Digital GPS with RTK correction and the Pasma 02-PR54 geodetic bench mark as base station reference point.

TABLE 10-4: LSC EXPLORATION DRILLING – SALAR DE PASTOS GRANDES
(2017-2018)
(POSGAR 94 Zone 3 Datum, AR-16 geoid)

Hole	Easting	Northing	Collar Elevation (m)	Location Device	Hole Depth (m)	Az	Dip	Drill Method	Bit Size	Casing
SPG-2017-02	3426954.96	7285188.82	3773.652	DGPS	121.0	0°	90°	DDH	HQ	HW
SPG-2017-02B	3427202.59	7284054.64	3773.663	DGPS	572.5	0°	90°	DDH- Tricone	HQ	No
SPG-2017-04A	32430767.88	7282489.38	3773.712	DGPS	553.0	0°	90°	Tricone	HQ	No
SPG-2017-05	3429294.10	7282107.11	3773.560	DGPS	279.5	0°	90°	DDH	HQ	No
SPG-2017-05B	3429343.92	7282088.25	3773.570	DGPS	500.5	0°	90°	DDH	HQ	No
SPG-2018-01	3431608.58	7283171.43	3773.739	DGPS	601	0°	90°	DDH- Tricone	HQ	No
Total					2,627.5					

Drill logs for the holes are provided as Appendix 2 and summarized in Table 10-5. It is notable that the halite intersections typically returned brine in packer samples even in cases where no visible pores could be observed.

The LSC drilling results are consistent with the results obtained by Eramine and Millennial for holes in close proximity to the LSC drill holes and are consistent with the SEV and seismic geophysical survey results obtained by LSC. The data show the LSC tenements are underlain by thick intersections of mixed halite-sand with varying porosity, complemented by thick intersections of porous sand and mixed intersections of halite/sand/clay with varying porosity. Pure halite intersections tend to be restricted to the upper 20m – 30m of the salar. The data also indicate that salar Pasto Grandes is deep and that brine productive horizons are present to depths of at least 600 m. Figure 10-1 illustrates the locations of the drill holes discussed in this report.



**TABLE 10-5: DRILLING SUMMARY – LSC EXPLORATION
SALAR DE PASTOS GRANDES**

Hole No.	From (m)	To (m)	Major Lithology	Observations	Brine samples (No.), Interval and average Li assay (mg/L)	RBRC ¹ Samples (No.)
SPG2017-02	0.0	77.0	Halite mixed with clay, silt and sand. Some organic material	Intervals of halite with macropores, visible mesopores. No recovery for some minor intervals in upper 25 m.	1 (artesian conditions)	18
	77	106	Volcanic ash mixed with halite, sand and clay intervals	Mixed zones of no visible pores and visible mesopores, Visible pores more prevalent in halite rich intervals		
	106	121	Gravel and breccia with occasional halite intervals/intercalations	Visible pores		
SPG2017-2B	0	7.5	No recovery		42 57 m to 524 m 450 mg/L	69
	7.5	10.5	Halite	Macropores visible		
	11	17.5	No recovery			
	17.5	19.5	Halite	Visible pores		
	19.5	22.5	No recovery			
	22.5	27	Volcanic ash	Visible mesopores		
	27	30	No recovery			
	30	34	Volcanic ash	Visible mesopores		
	34	40	No recovery			
	40	43	Clay			
	43	44.5	Volcanic ash	Visible mesopores		
	44.5	46	No recovery			
	46	50.5	Clay			
	50.5	72.5	Halite	Visible fractures and channels		
	72.5	85	Silt			
	85	163	Tuff and volcanic ash	Visible mesopores		
	163	542.5	Gravels mixed with halite	Visible macropores and mesopores		
	532.5	572	Sand with halite	Visible micropores from 545m		
SPG2017-04/4A	0	5.5	Halite	Visible macropores	21 9 m to 404 m 402 mg/L	0
	5.5	27	Sand/silt			
	27	80	Halite	Visible mesopores		
	80	86	Sand			
	86	310	Halite	Visible micropores		
	310	349	Sand			
	349	366	Halite	Visible micropores		
	366	522	Sand			
SPG2017-05	0	9.5	Halite	Visible macropores	0	28
	9.5	11	Sand			
	11	14.5	No recovery			
	14.5	15.5	Halite	Visible macropores		
	15.5	31	Silt			
	31	277.5	Halite	Sequences of varying thickness exhibiting visible pores or no visible pores. Visible pore sequences dominate intervals		
	277.5	280	Sand			

SPG2017-05B	0	7.5	Halite	Visible mesopore	30	6
	7.5	36	Sand	Visible micropores		
	36	112.5	Halite	No visible pores		
	112.5	113.5	No recovery			
	113.5	117.5	Sand	Visible mesopores		
	117.5	282.5	Halite	No visible pores 117.5m – 275m, Visible micropores 275m – 282.5m		
	282.5	290	Organic matter			
	290	305	Halite	Visible mesopores		
	305	500	Clay and sand intervals	Sand fom 321m to 500m		
SPG2018-01	0	3.6	Halite with organic material		104 16.62 m – 601 m 495 mg/L	70
	3.6	87	Fine sand, minor ulexite & halite	Varying porosity		
	87	134	Halite with minor sand or clay	Varying porosity		
	134	159	Fine sand			
	159	186.6	Halite with sand	Moderate porosity		
	186.6	200	Halite with fine sand	No visible pores		
	200	236.7	Halite	No visible pores		
	236.7	245	Halite	Visible mesopores		
	245	305.8	Halite mixed with sand or clay	Varying porosity		
	305.8	324	Clay with halite	No visible pores		
	325	329	Sand and clay with halite	Varying porosity		
	329	385	Sand, clay mixes with halite	Varying porosity		
	385	426.6	Clay	No visible pores		
	426.6	441	Fine sand			
	441	601	Fine sand with minor clay lenses	Free-flowing black sand predominates from approx.. 500 m to 601 m		
Total					198	191

1) RBRC = Relative Brine Release Capacity, a measure of Specific Yield (S_y), drainable porosity under gravity

The drill logs for the LSC drill holes are consistent with the drill logs for the Eramine and Millennial Lithium drill holes located in reasonable proximity to each other. As such, the general lithology of the salar is consistent both latterly and vertically. The LSC drill logs show a general pattern of a relatively thin halite zone near surface, followed by thick sequences of variable halite-sand-clay intervals of varying thickness and porosity, followed by relatively thick zones of sand and sand/silt/clay, with coarser sands or gravels in the deepest lying intervals. The salar is open at depth below 600 m. Available geophysical data suggests a basin depth of at least 800 m.

11 SAMPLE PREPARATION, ANALYSES AND SECURITY

11.1 BRINE SAMPLE PREPARATION

Sampling procedures for collection of surface brine samples are described in Hains (2017a, b) and involve collection of 1 litre samples from shallow pits. Sample bottles are sealed, labelled with the sample number and shipped to the assay laboratory on a regular basis in batches of 20 to 40.

Brine samples from drill holes are collected using a double packer system to isolate specific intervals. Intervals for packer samples are selected by the site geologist based on inspection of drill core or at predetermined intervals. Sample intervals are normally 3 m, but may vary depending on the circumstances of a particular hole or interval in terms of whole stability. Samples are collected after allowing the sample interval to be flushed out several times prior to collection of the actual sample. Flushed brine is recovered in a barrel and the time to fill the barrel is recorded.

The actual sample is collected in a 20 litre container which has been previously washed out with distilled water and then rinsed with brine several times before filling. Sample bottles are flushed with brine from the 20 L container several times prior to filling and filled to the top and sealed with a positive screw top to prevent leakage. Four 1 litre (on occasion 500 milliliter size) samples are collected, one as the main sample, one as a duplicate, one as a check sample to be assayed at a second laboratory, and one as a reserve sample.

Brine samples are checked in the field using a multimeter for pH, conductivity, temperature and TSS (total suspended solids) and a densitometer for density. These data are recorded in a tablet notebook containing predefined fields for hole number, holes collar data, sample number, date and time, and other relevant information which are uploaded to the project database.

Brine samples remain in the possession of the site geologist until delivered to the LSC office for shipment to the assay laboratory. Duplicates, blanks and standards are inserted in the assay batches at the LSC office and the samples sent to the assay laboratory. All samples are maintained under controlled temperature conditions prior to shipment to the assay laboratory. It is normal practice to ship in batches of 40 samples.

11.1.1 BRINE SAMPLE ASSAYS

Brine assays for the main samples are undertaken at Alex Stewart Argentina (“ASA”) S.A. in Jujuy, Argentina. ASA is independent of LSC and has significant experience in assaying lithium brines and is certified to ISO17025 standards for lithium brine assays. Brine assays are undertaken using the methods shown in Table 11-1.

Check assays of brine samples are undertaken at SGS in Buenos Aires, Argentina. SGS is certified to ISO 9001:2008 and ISO 14001:2004 standards for geochemical analysis of

numerous sample types, including brines. The analytical methods employed SGS are similar to those employed by ASA. SGS is independent of LSC.

TABLE 11-1: METHODS FOR BRINE ASSAYS

Analyte	Method	ASA Method Name	Limit of Detection
Li	ICP	LMMT03	0.05 mg/L
Ca	ICP	LMMT03	0.025 mg/L
Mg	ICP	LMMT03	0.05 mg/L
B	ICP	LMMT03	0.05 mg/L
Na	ICP	LMMT03	0.1 mg/L
K	ICP	LMMT03	0.25 mg/L
Ba	ICP	LMMT03	0.01 mg/L
Sr	ICP	LMMT03	0.005 mg/L
Fe	ICP	LMMT03	0.01 mg/L
Mn	ICP	LMMT03	0.05 mg/L
Cl ⁻	Argentometric	LMC101	250 mg/L
PO ₄ ³⁻	Colorometric	LMC107	1 mg/L
SO ₄ ²⁻	Gravimetric	LMC122	10 mg/L
Alkalinity	Volumetric	LMFQ15	20 mg/L
CO ₃ ²⁻	Volumetric	LMFQ16	10 mg/L
HCO ₃ ⁻	Volumetric	LMFQ17	10 mg/L
Density	Pycnometer	LMFQ19	
Hardness	Volumetric	LMFQ13	20 mgCaCO ₃ /L
pH	Potentiometric	LMC128	
Conductivity	Potentiometric	LMFQ01	
TDS	Gravimetric	LMFQ08	

Source: Alex Stewart Argentina

Key brine assay results are detailed in Table 11-2.

TABLE 11-2: SUMMARY BRINE ASSAY RESULTS – DRILL HOLES

LSC Exploration – Salar de Pastos Grandes – 2017/18

Hole No.	From (m)	To (m)		Assay Results					
				Li mg/L	Ca mg/L	Mg mg/L	B mg/L	SO ₄ ²⁻ mg/L	Mg:Li
2B	57	524	Average	450	697	2929	600	9428	6.5
			Range	344 - 511	605 - 732	2524 - 3348	430 - 651	6256 - 11031	6.2 – 7.9
4A	9	404	Average	402	752	2606	684	8473	6.5
			Range	307 – 546	572 – 808	1900 – 3652	385 – 734	4831 – 11434	6.1 – 7.1
5B	53.95	484.55	Average	569	662	3823	809	11199	6.7
			Range	470 – 637	555 – 853	3060 – 4546	730 – 851	8067 – 13146	5.4 – 7.2
18-01	16.62	520.4	Average	494	714	3181	935	10295	6.5
			Range	347 – 680	578 – 984	2370 – 3822	643 – 1225	8512 – 12306	5.4 – 6.9

Source: LSC

11.2 RBRC SAMPLE PREPARATION

Samples for Relative Brine Release Capacity (RBRC) testing are collected from diamond drill core. Sample selection is designed to provide examples of each observed lithology/texture in the drill core, as permitted by sample integrity, on a weighted basis; i.e. number of samples is weighted to the % lithology/texture observed in the drill core.

RBRC samples are cut from drill core in 10 cm – 20 cm lengths, wrapped in clear plastic wrap to prevent leakage and then bubble wrap and sealed inside PVC tubing. Samples are labelled with the sample number, with the sample number, whole number, interval and other relevant data recorded on tablet in the sample database. RBRC samples are shipped to Daniel B. Stevens and Associates (DBSA) in Albuquerque, New Mexico, USA for analysis using a DBSA proprietary procedure (see Geotechnical Testing Journal, Vol. 34, No. 5. Paper available at www.astm.org), which has become the industry norm for analysis. Brine from the same hole as the RBRC samples is shipped to provide matrix specific re-saturation fluid. DBSA is a recognized authority on testing for core samples for determination of RBRC values and is independent of LSC. Check samples for RBRC testing are taken from immediately adjacent core intervals or other areas exhibiting the same lithology/texture as the main sample and tested at CoreLabs in Houston, Texas, USA using Core Labs test procedure, which is similar to the DBSA procedure.

During the exploration program at Pastos Grandes, LSC determined that results from CoreLabs could not be reliably compared to results from DBSA and it was decided toward the end of the exploration program to ship duplicate samples to DBSA in place of check samples sent to CoreLabs.

11.2.1 RBRC SAMPLE RESULTS

As of the date of this Technical Report, 190 RBRC sample assay results have been received. These samples represent core from Holes 2, 2B, 5, 5B and 18-01 as detailed in Table 11-3.

TABLE 11-3: RBRC SAMPLES
LSC Exploration – Salar de Pastos Grandes – 2017/18

Hole No.	From (m)	To (m)	No. of Samples	Min RBRC Value (%)	Max RBRC Value (%)
2	6.76	108.60	18	0.55 (dense halite)	5.83 (halite with macropores)
2B	8.40	529.45	69	0.20 (claystone with silt)	13.18 (siltstone with halite, large crystals with sand, gravel & clay)
5	22.10	278.52	28	0.6 (sandstone, dense)	10.5 (sand core, soft, with silt and halite)
5B	303.65	329.81	6	1.0 (clay core with gypsum & sand)	9.2 (sand core, loose, with halite)
18-01	3.37	473.71	70	0.23 (halite core, dense, small crystals, minor sand and gypsum)	7.33 (sand core with silt and some halite)
Total			191		

Source: LSC

Appendix 3 provides a complete listing of the RBRC sample results and the associated descriptive lithologies of the samples.

Relative brine release capacity is a function of lithology, with average, salar-wide values by lithology being as follows (Table 11-4):

TABLE 11-4: RBRC VALUES BY LITHOLOGY
LSC Exploration – Salar de Pastos Grandes – 2017/18

Lithology	RBRC % (average)	Min RBRC %	Max RBRC %
Sand core, loose to brittle, with salt/gravel/silt	4.94	2.26	10.5
Halite core, medium to large crystals, with meso-to macropores	3.91	1.47	11.29
Halite, small to medium crystals, mixed with sand/silt/clay	1.93	0.5	6.6
Other halite core, typically with micropores to no visible pores	3.59	0.51	5.94
Clay or silt core, with halite or gypsum in matrix	3.59	0.57	8.5
Sandstone core, with halite or other material in matrix	1.90	0.5	5.40
Claystone or siltstone core, with silt, sand, halite	1.84	0.2	2.40
Gravel (breccia), with or without accessory minerals in matrix	3.07	1.60	5.37

It is noted that the RBRC values for some lithologies may be understated due to difficulties in obtaining suitable samples, especially for sand dominated samples. The test method requires samples with reasonable structural competence. Analysis of core photos indicates that RBRC samples within the affected lithologies were generally more competent than the majority of the core within the same overall lithological zone and thus the RBRC results may understate the true effective porosity of the interval. The degree to which the reported RBRC values may be understated is unknown but estimated to remain within the reported maximum for a given lithology.

11.3 QA/QC ANALYSIS

11.3.1 Brine Sample QA/QC

Brine sample QA/QC incorporated a program of duplicate samples, check samples, blanks and standards to monitor laboratory precision and accuracy. Duplicate samples were assayed at the main assay laboratory, ASA, while check samples were assayed at SGS. Insertion rates for duplicates, blanks, standards and check samples were as detailed in Table 11-5. The QA/QC sampling rate in excess of 10% was selected to ensure adequate coverage of all key QA/QC parameters given the inherent difficulties in reliably assaying brines near saturation limits.

TABLE 11-5: BRINE ASSAY QA/QC PROTOCOL

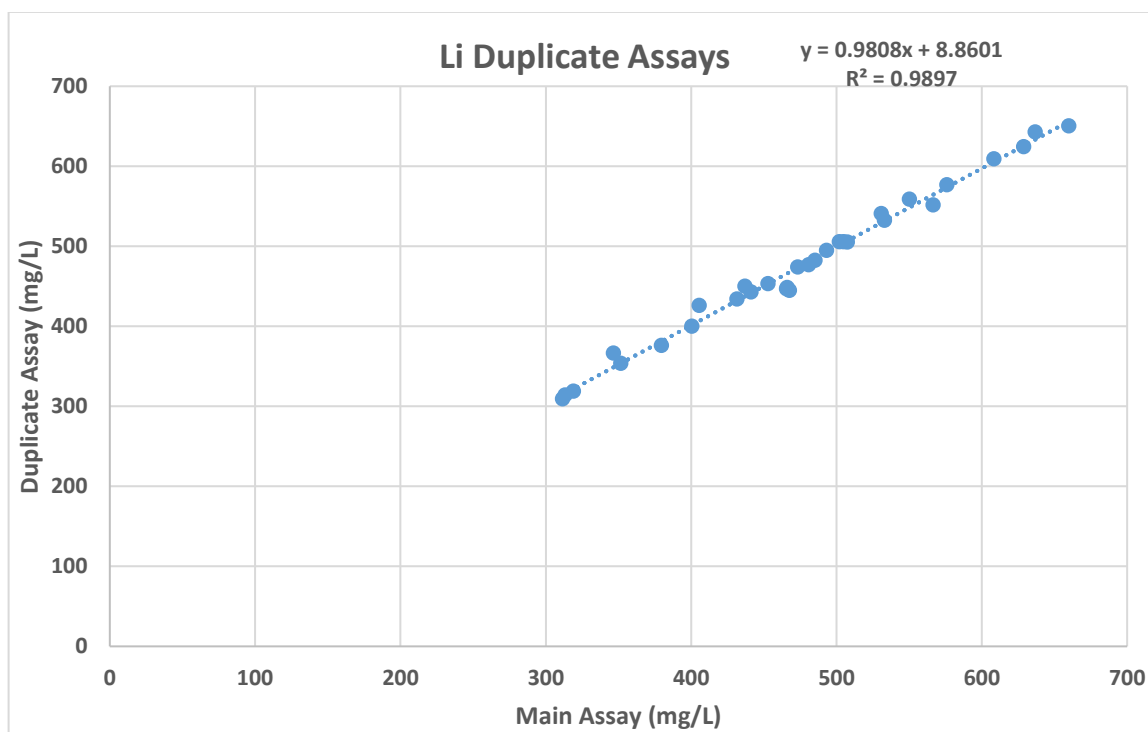
LSC Exploration – Salar de Pastos Grandes – 2017/18

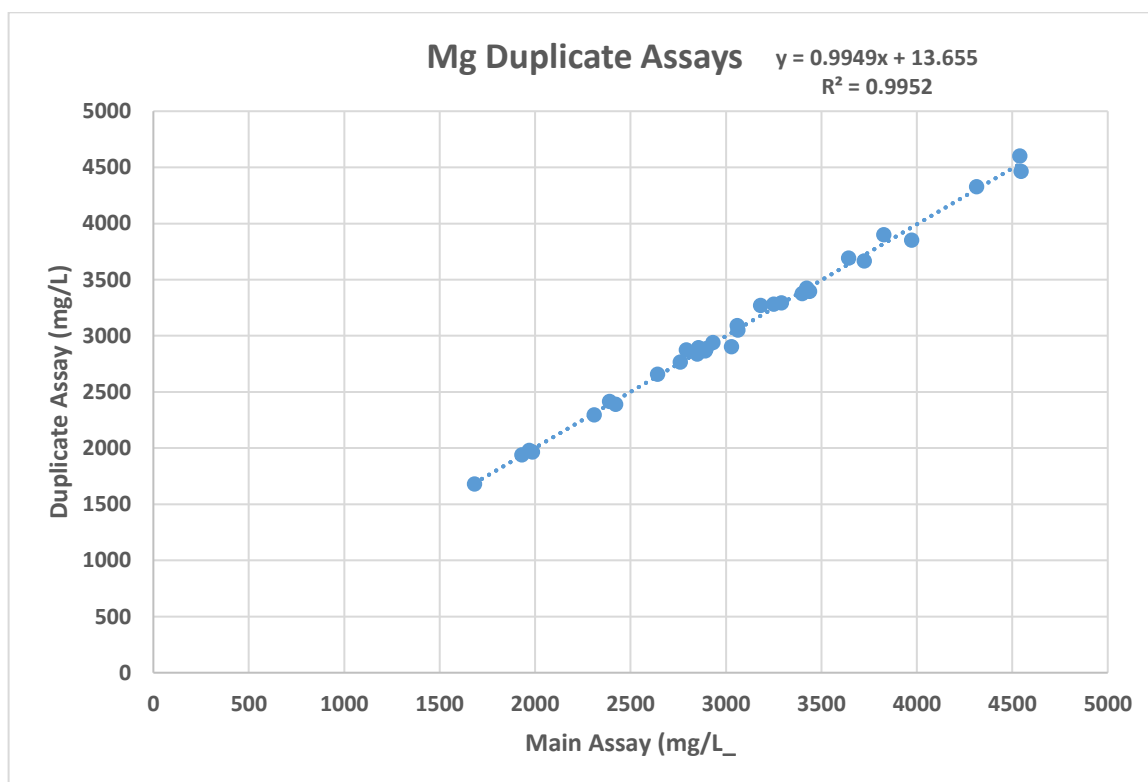
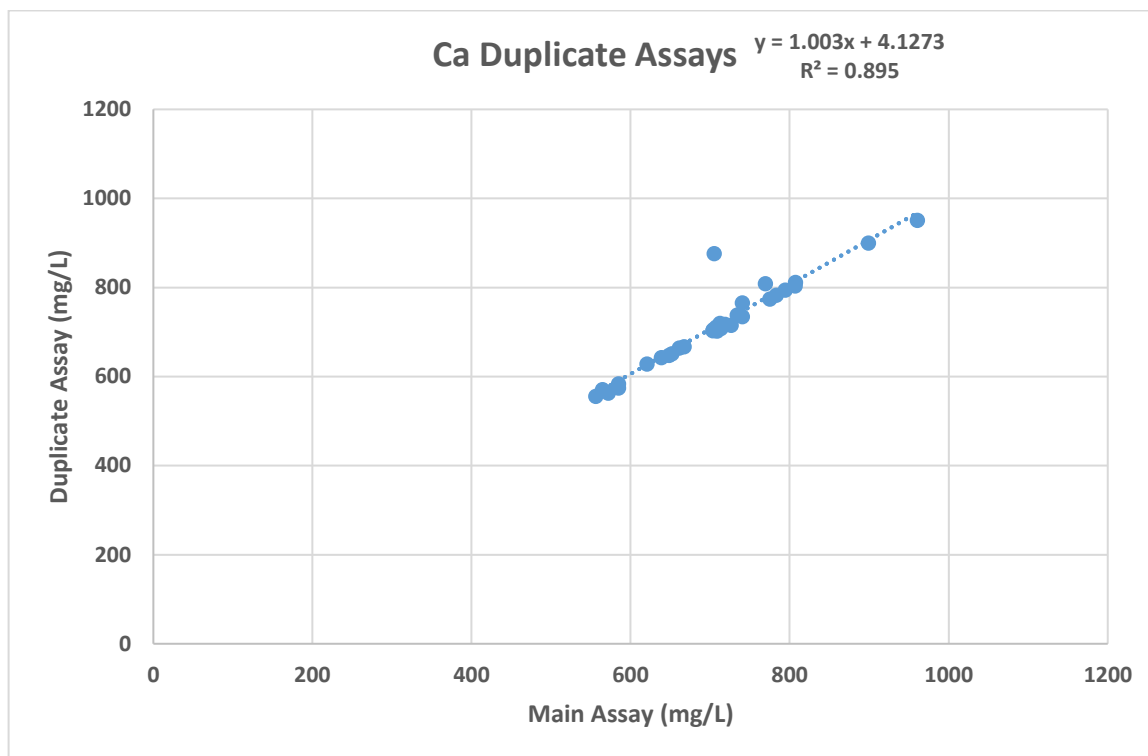
Type of Sample	Total No.	% of Main Samples	% of Total Samples
Main Assay	198	100%	64%
Duplicates	31	16%	10%
Standards	28	14%	9%
Blanks	28	14%	9%
Check Sample	22	11%	7%
Total	307		100%

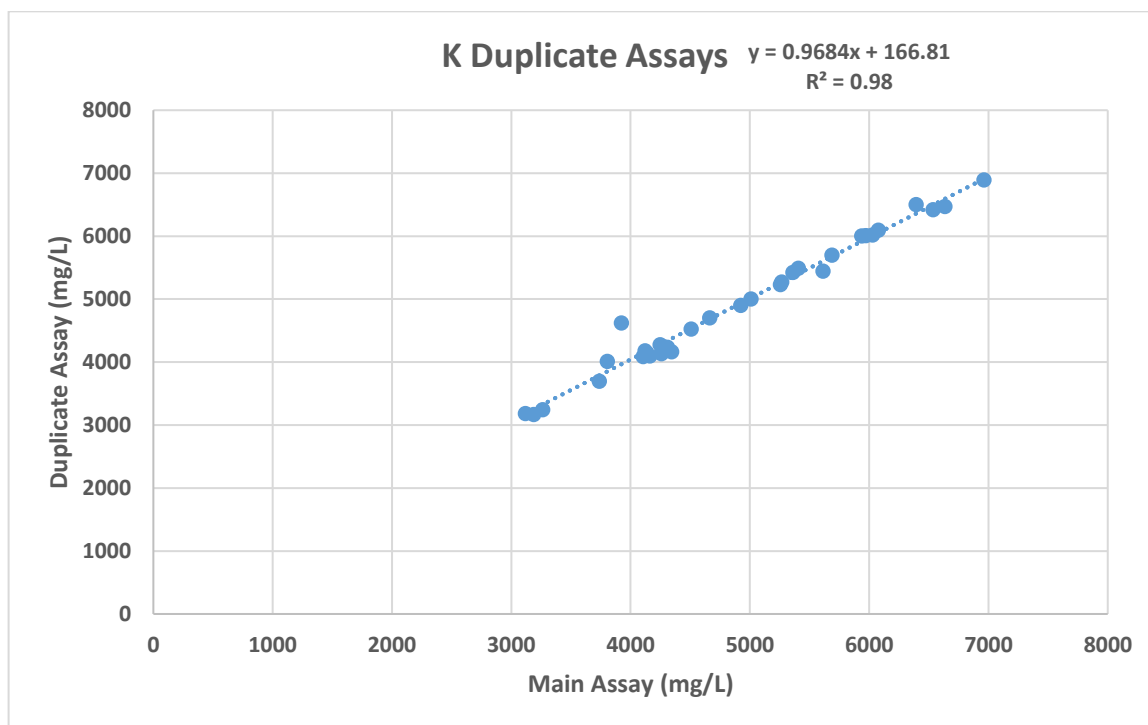
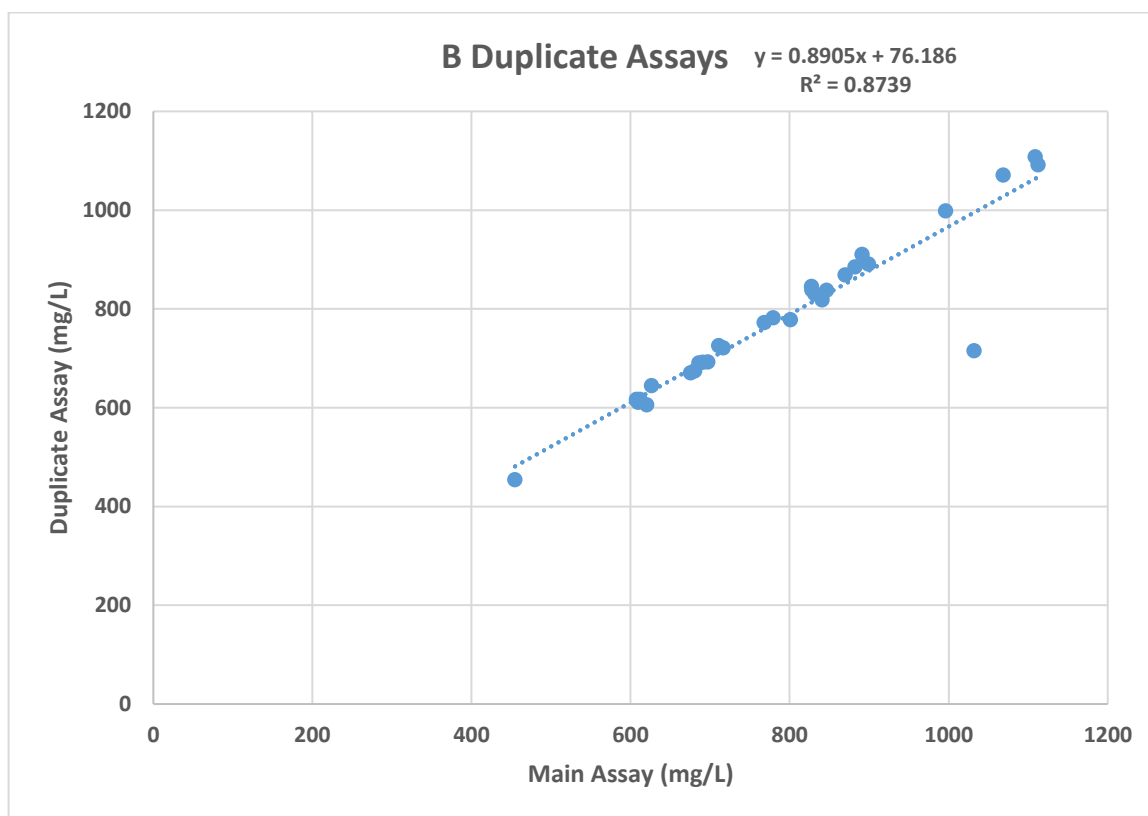
Source: LSC

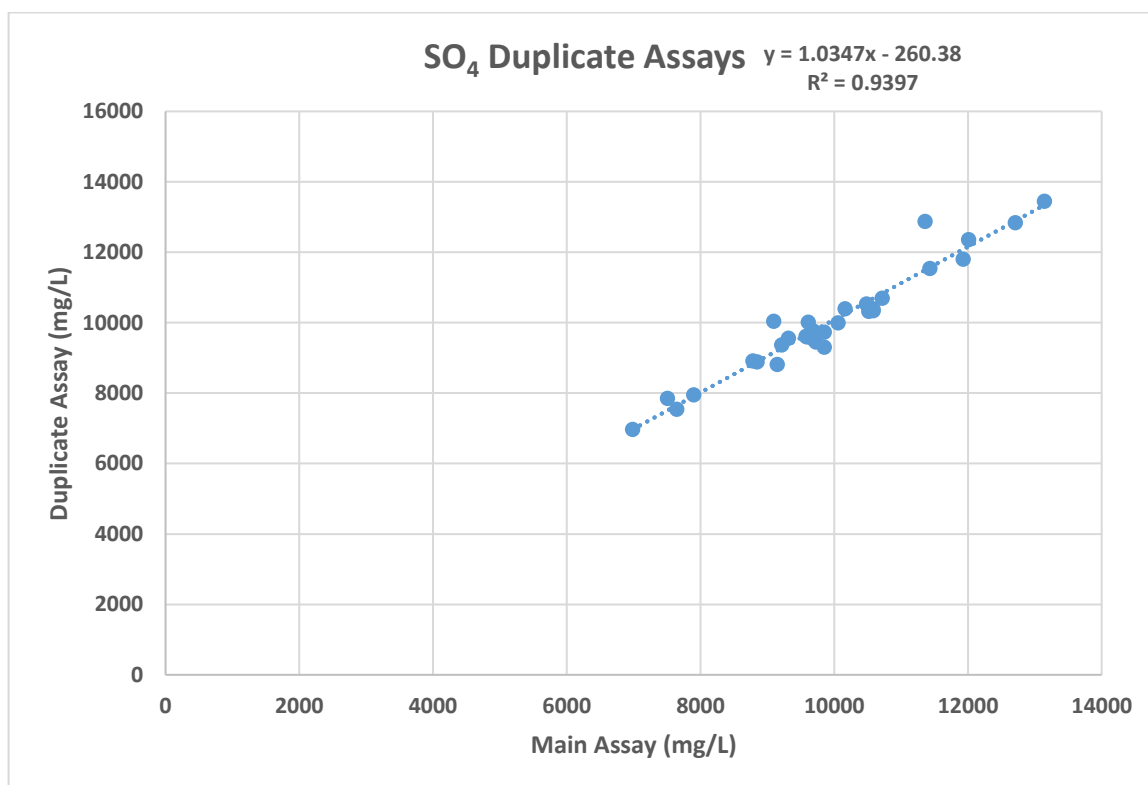
11.3.1.1 Duplicate Samples

Graphical analysis of regression curves for duplicate assays for Li, Ca, Mg, K, B and SO₄ show high correlation coefficients (Figure 11-1) with only a few minor outlying assay exceptions. Analysis of the data indicate the Relative % Std. Dev. (%RSD) for all duplicate pairs is well within the accepted limit of 3% considered as excellent precision. In fact, the calculated %RSD differences for Li, Ca, Mg, K, B and SO₄ duplicate pairs were all less than ±1%, indicating a very high degree of precision for the assays.

**FIGURE 11-1: DUPLICATE SAMPLE ANALYSIS – PASTOS GRANDES
LSC EXPLORATION 2017/18**



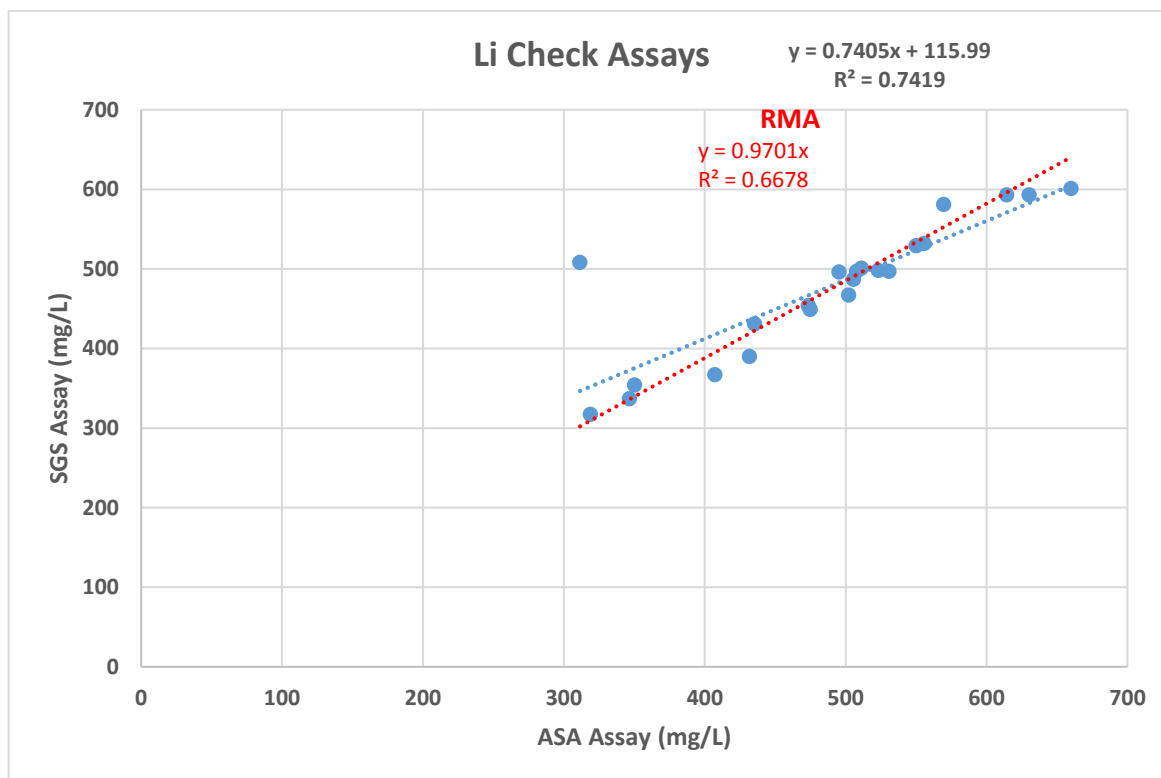




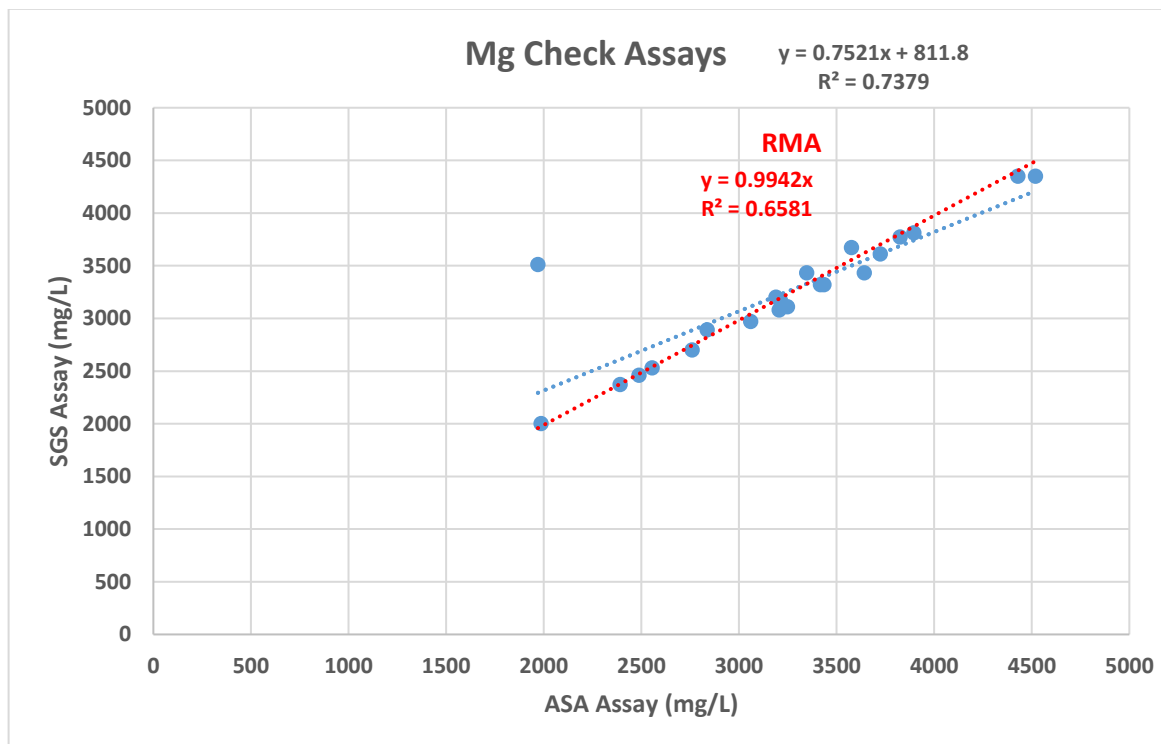
11.3.1.2 Check Samples

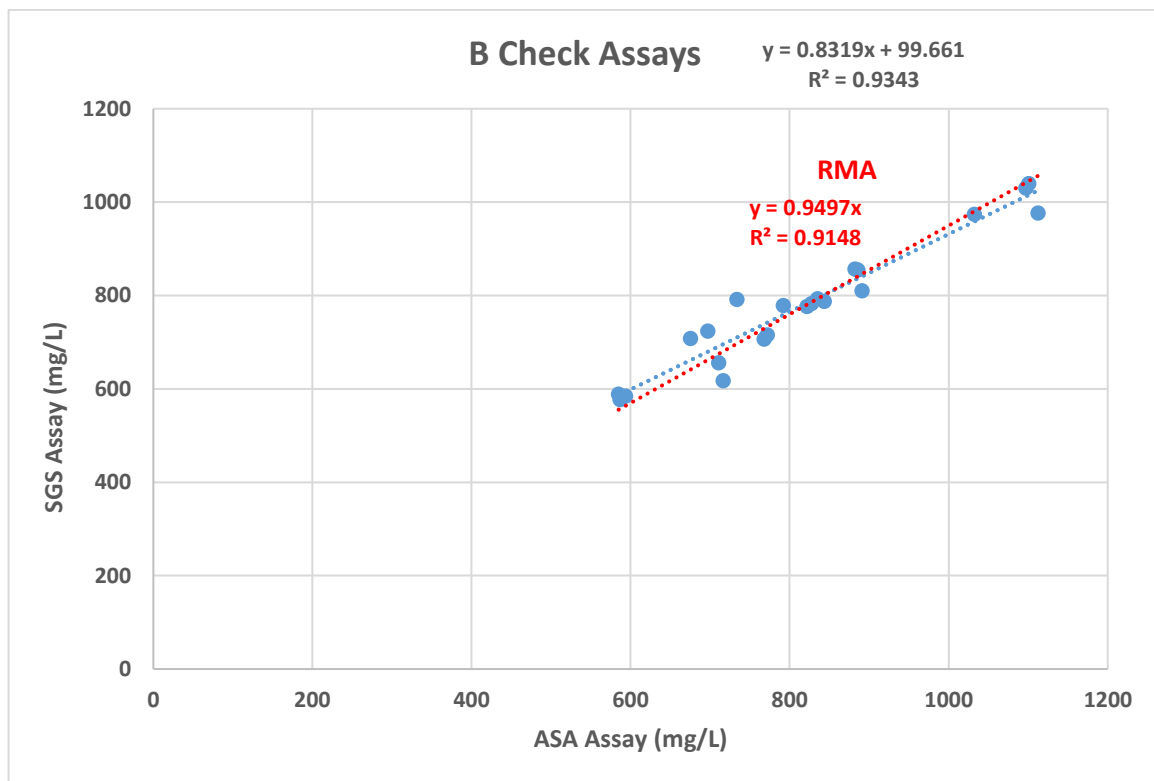
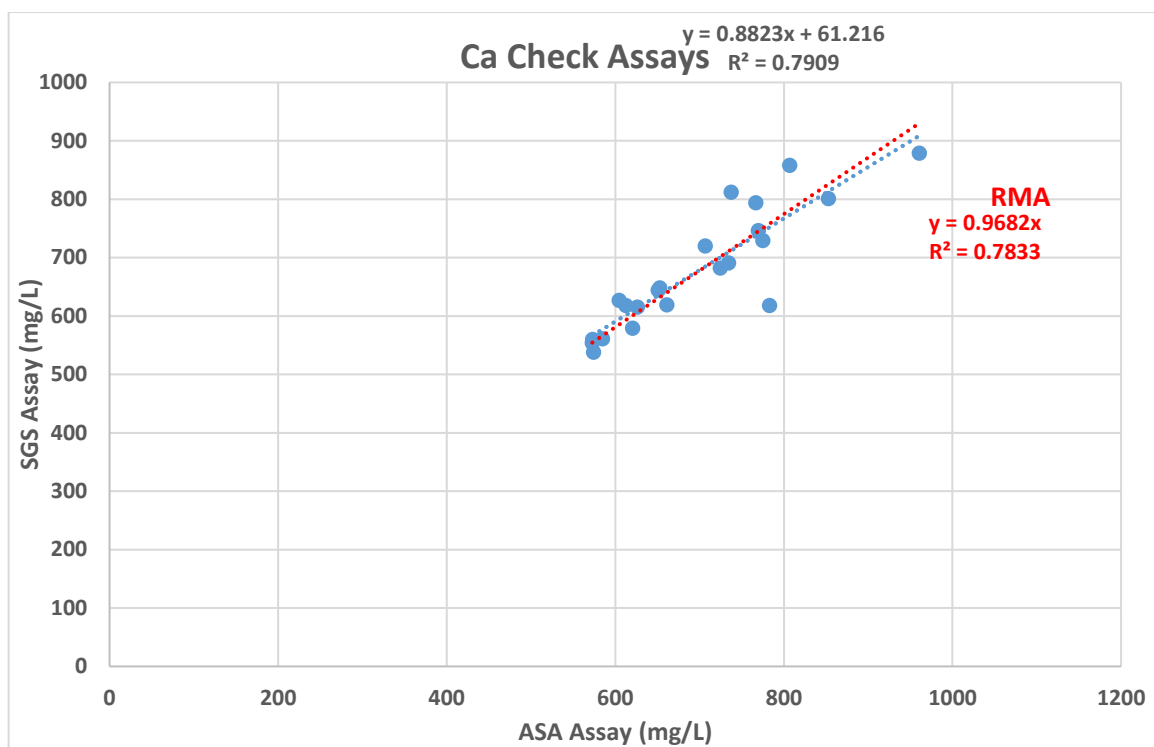
Check samples were assayed at SGS Argentina and results of the assays compared to results for the main assays completed at Alex Stewart Argentina. A regression analysis for assays for Li, Ca, Mg, K, B and SO₄ indicates fair correlation, with an upward bias for the SGS results, as indicated by the Reduced to Major Axis (RMA) regression results. Analysis of the data in terms of %RSD for the sample pairs indicates a high level of precision, with values all within $\pm 3\%$. Figure 11-2 illustrates the regression analyses for the check samples.

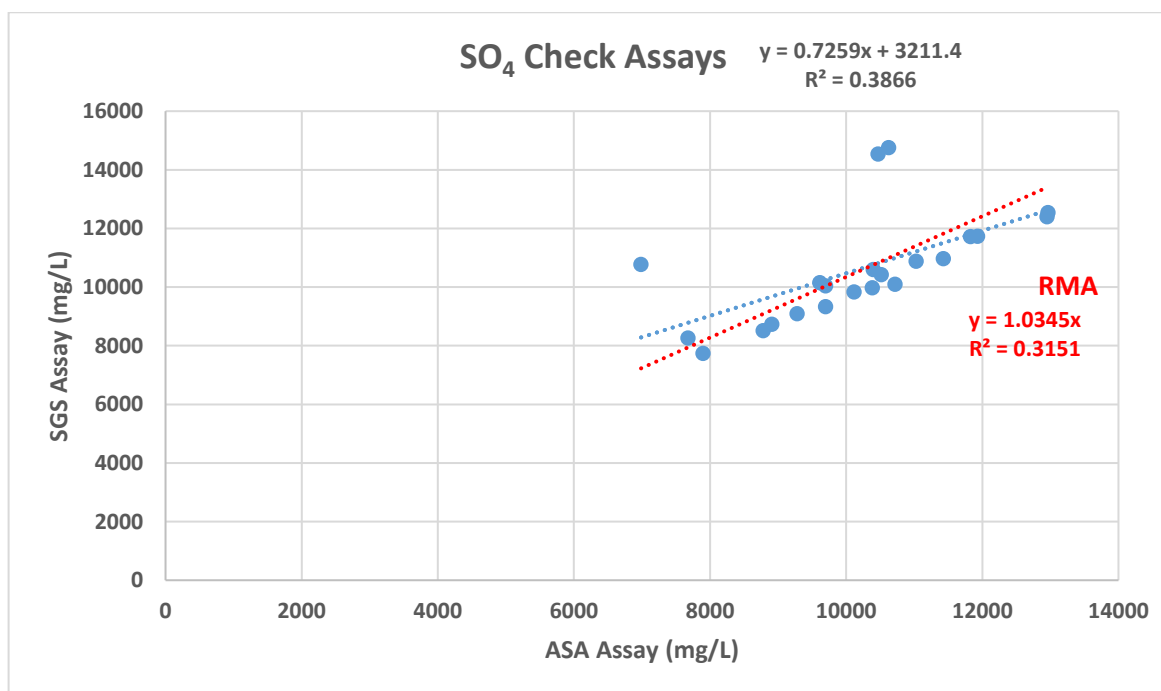
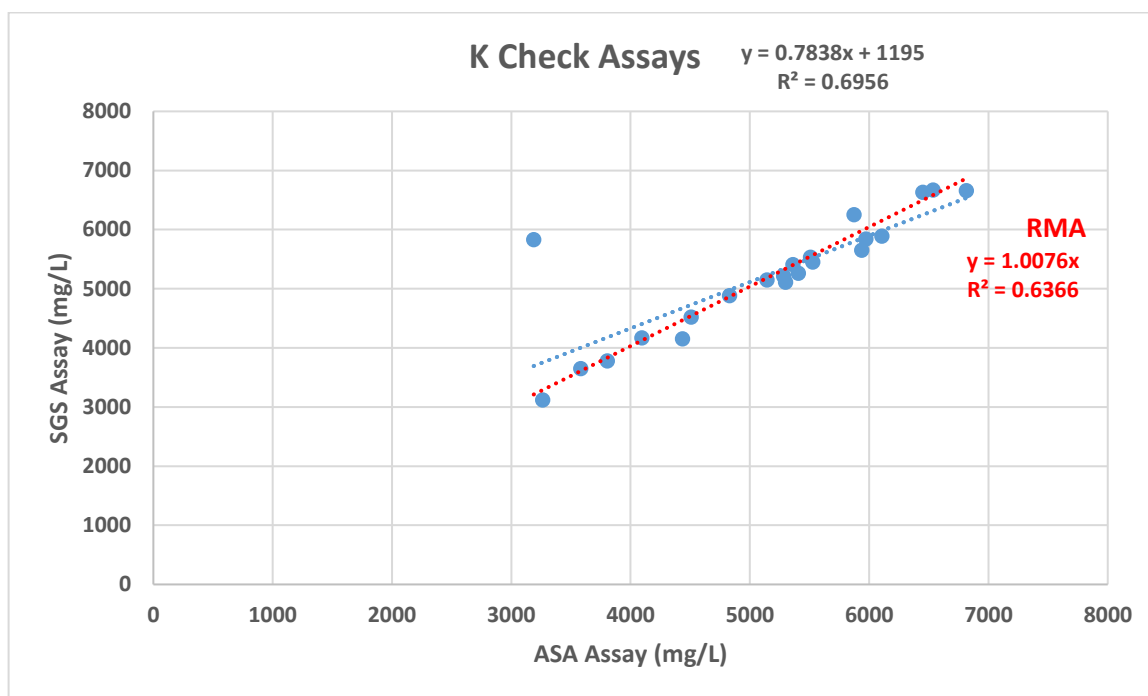
**FIGURE 11-2: CHECK SAMPLE REGRESSION ANALYSIS
LSC EXPLORATION 2017/18 – PASTOS GRANDES**



RMA = Reduced to Major Axis







11.3.1.3 Standards

LSC used four different standards as part of the QA/QC program. Three standards, LSC-001, 002 and 003, were initially used. The standards were designed to represent high, medium and low Li values with corresponding values for other major cations and anions. These standards were synthetic standards produced by Alex Stewart Argentina and certified by a round robin testing program. Full details of the design of the standards and

the certification protocol are to be found in Hains (2017b). The assay results for these standards for Li, Ca, Mg, B, K and SO₄ are detailed in Table 11-6.

TABLE 11-6: STANDARDS ASSAY RESULTS
LSC-001, LSC-002 AND LSC-003
LSC EXPLORATION 2017/18 – PASTOS GRANDES

LSC-001						
Accepted Value	Li mg/L	Ca mg/L	Mg mg/L	B mg/L	K mg/L	SO ₄ mg/L
Mean	157	1962	1422	352	2519	4858.4
95% CI	9.1301	72.0054	103.186	14.75	107.4224	69.74
St. Dev.	20.833	164.298	235.443	33.656	245.1104	159.13
Variance	434	26993.8	55433.6	1132.7	60079.09	25322
+1SD	178	2126	1657	385	2764	5017
-1SD	136	1798	1187	318	2274	4699
+2SD	198	2291	1893	419	3009	5177
-2SD	115	1633	951	285	2029	4540
+3SD	219	2455	2128	453	3254	5336
-3SD	94	1469	715	251	1783	4381

Reported Value	Li	Ca	Mg	B	K	SO ₄
SPG-044	147	2013	1461	337	2399	4974
all values within $\pm 1SD$						

LSC-002						
	Li	Ca	Mg	B	K	SO4
Accepted Value	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Mean	540	2037	2115	429	3508	4564
95% CI	18.838	93.0017	151.26	27.017	137.9081	54.013
St. Dev.	42.98	212.21	345.14	61.65	314.67	123.24
Variance	1847.5	45031.5	119119	3800.3	99017.84	15189
+1SD	583	2249	2460	490	3823	4687
-1SD	497	1825	1770	367	3193	4441
+2SD	626	2461	2805	553	4137	4810
-2SD	454	1612	1425	306	2879	4318
+3SD	669	2673	3150	614	4452	4934
-3SD	411	1400	1080	245	2564	4194

Reported Values	Li	Ca	Mg	B	K	SO4
SPG-006	458	2071	2206	396	3452	4766
SPG-018	500	2090	2212	387	3436	4834
SPG-077	502	2085	2152	380	3415	4787
SPG-091	499	2027	2167	366	3405	4651
SPG-098	486	2002	2047	361	3464	4828
SPG-108	501	2048	2011	380	3448	4798
SPG-122	497	2034	2053	377	3454	4790
SPG-147	493	2031	2000	385	3231	4810
	All values $\pm 1SD$	All values $\pm 2SD$	All values $\pm 1SD$	All values $\pm 2SD$	All values $\pm 1SD$	All values $\pm 2SD$

LSC-003						
	Li	Ca	Mg	B	K	SO4
Accepted Value	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Mean	874	1402	2577	438	4072	3010
95% CI	41.68	78.35	193.44	28.16	219.53	35.815
St. Dev.	95.1	178.77	441.37	64.25	500.92	81.72
Variance	9044.4	31958.9	194807	4128.1	250919.3	6678.1
+1SD	969	1581	3018	502	4573	3092
-1SD	779	1223	2136	374	3571	2928
+2SD	1065	1759	3460	567	5073	3173
-2SD	684	1044	1694	310	3070	2847
+3SD	1159	1938	3,901	630.75	5575	3255

-3SD 589 866 1,253 245.25 2569 2765

Reported Value	Li	Ca	Mg	B	K	SO4
SPG-034	798	1392	2595	398	3915	3076
SPG-115	782	1387	2488	393	3894	3109
SPG-132	798	1455	2454	406	3846	3066
	All values ±1SD	All values ±1SD	All values ±1SD	All values ±1SD	All values ±1SD	All values ±2SD

After exhausting the supply of the LSC-001, LSC-002 and LSC-003 standards, a synthetic standard developed by ASA was purchased. This standard, D3003 (LSC-2018-2), was a mid-grade (~500 mg/L) lithium brine which had been subject to extensive certification analysis to establish values for mean, standard deviation, 95% confidence interval, variance and other statistical parameters. LSC also evaluated the standard by conducting independent analysis at SGS Argentina, University of Antofagasta and ALS Argentina. Table 11-7 provides details on the certified values for the standard.

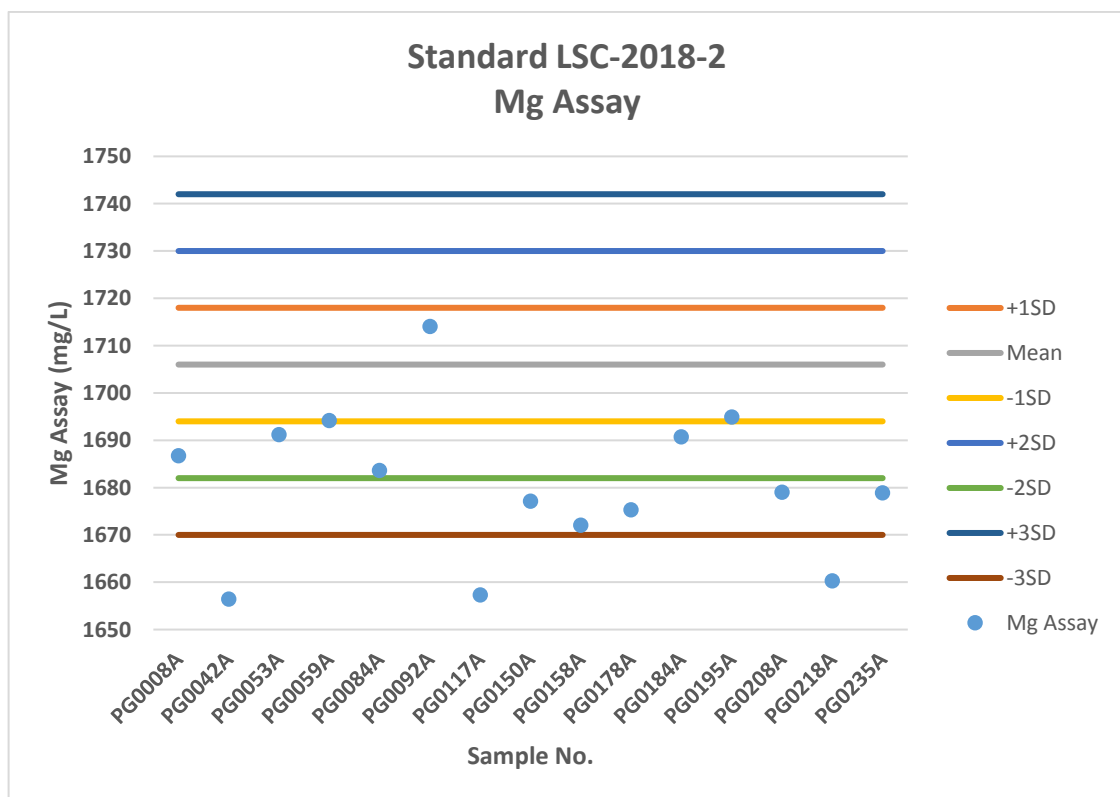
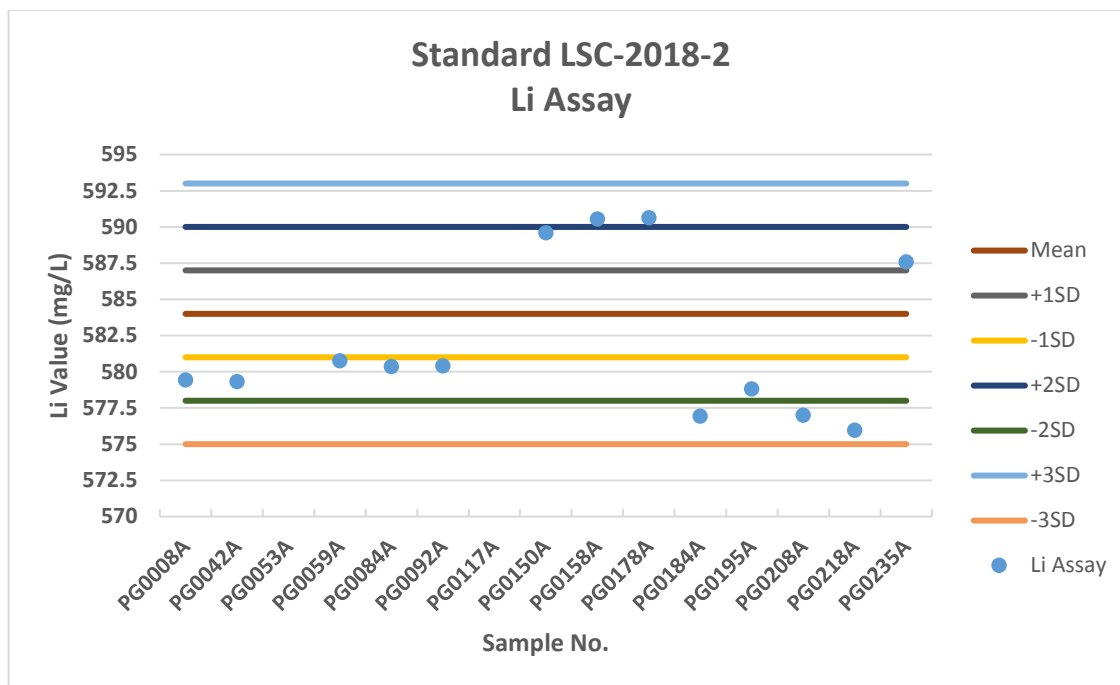
**TABLE 11-7: CERTIFIED VALUES
LSC-2018-2 STANDARD**

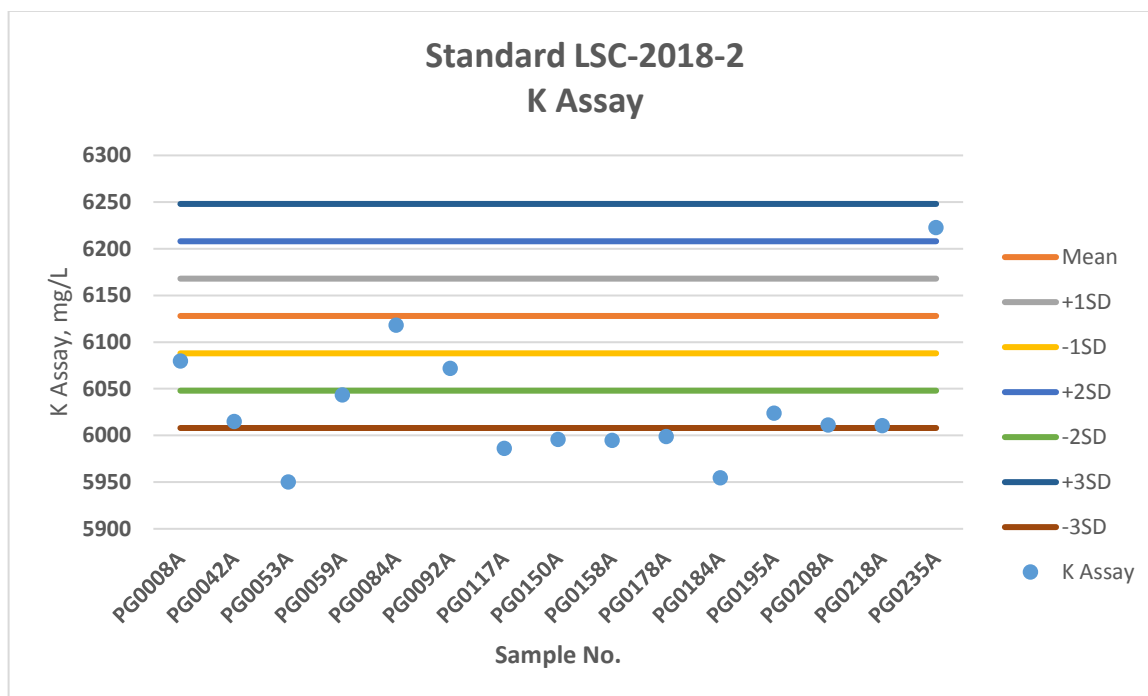
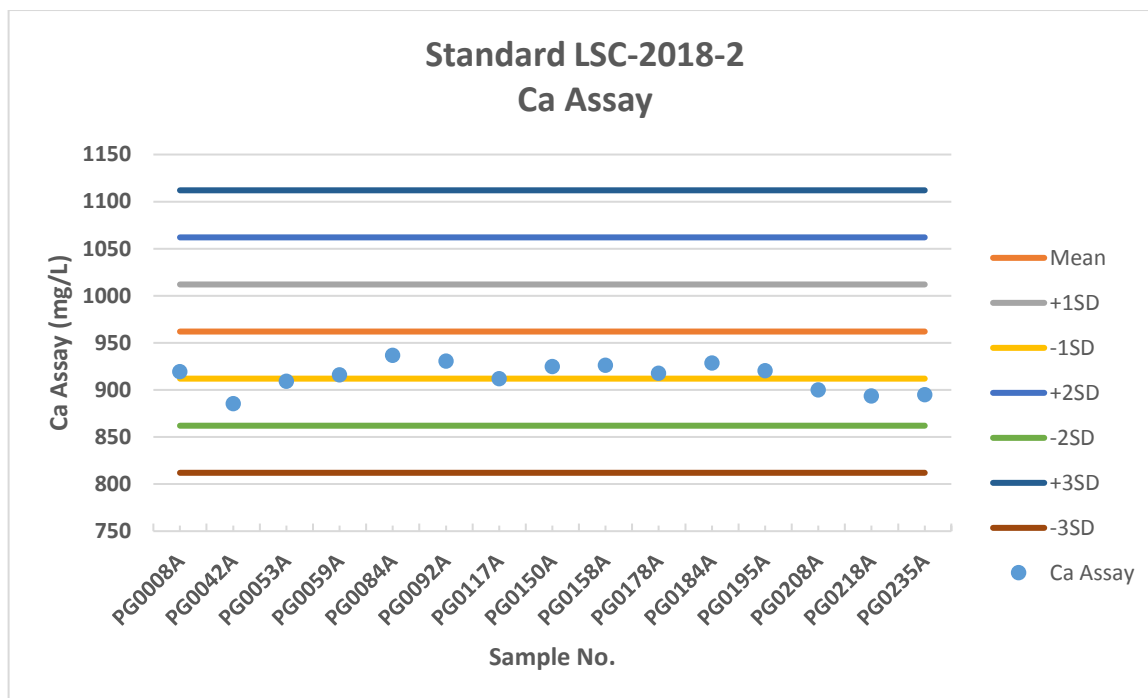
LSC-2018-2					
	Li	Ca	Mg	B	K
Accepted Value	mg/L	mg/L	mg/L	mg/L	mg/L
Mean	584	962	1706	457	6128
95% CI	4	35	8	4	28
St. Dev.	3	50	12	7	40
Variance	9	2509	132	44	1629
+1SD	587	1012	1718	464	6168
-1SD	581	912	1694	450	6088
+2SD	590	1062	1730	471	6208
-2SD	578	862	1682	443	6048
+3SD	593	1112	1742	478	6248
-3SD	575	812	1670	436	6008

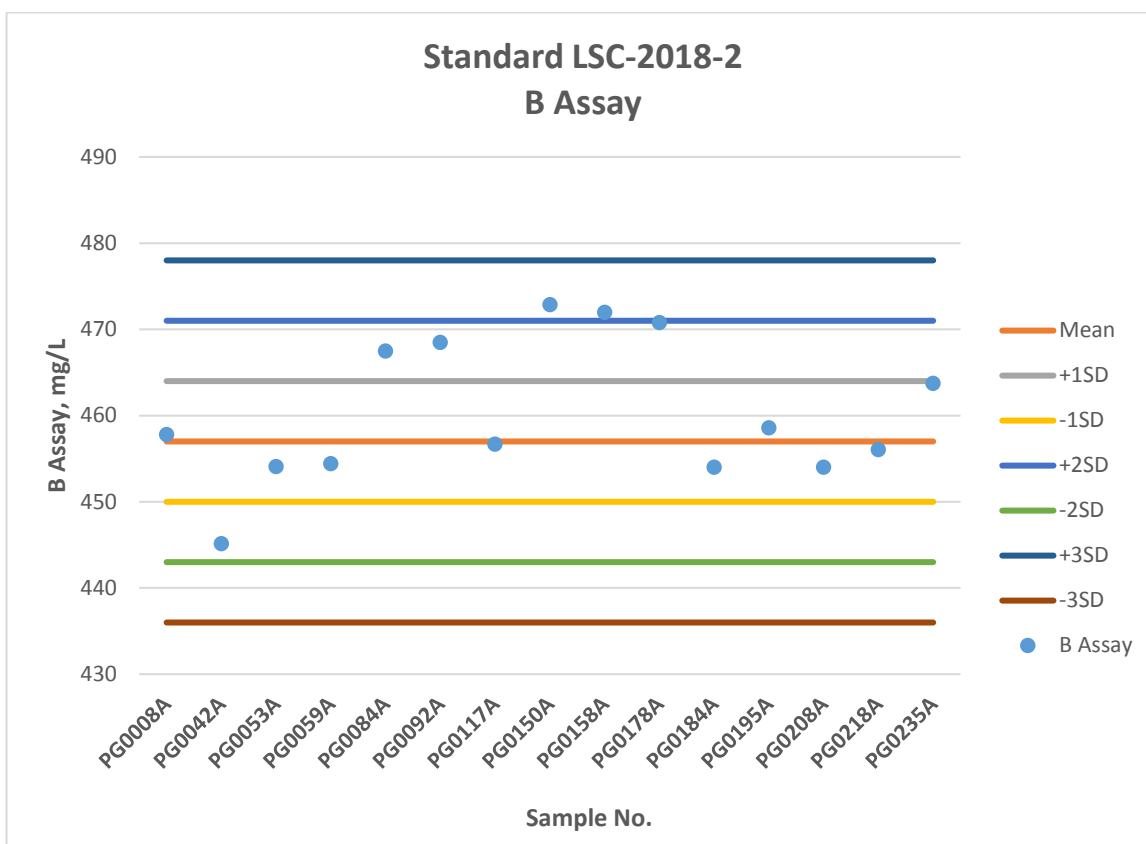
Source: ASA, 2018,

Graphical analysis for the assay results for samples using the standard are provided in Figure 11-3. It is noted that some individual assays reported values slightly below the -3SD control limit, but within the limit after accounting for the 95% confidence interval of the mean. Five samples, three for Mg and two for K, fell slightly outside the ±3SD limit after considering the 95% confidence interval. The differences are very minor and the outlying results are not considered to be significant. However, re-assay of the affected samples is warranted. A bias check for the assay results indicated a negative bias ranging of -0.61% for Li, -1.48% for Mg, -1.55% for K, and -4.96% for Ca, indicating a potential need for re-calibration of the analytical equipment.

FIGURE 11-3: STANDARDS ASSAY RESULTS
STANDARD LSC-2018-2
LSC EXPLORATION 2017/18 – PASTOS GRANDES





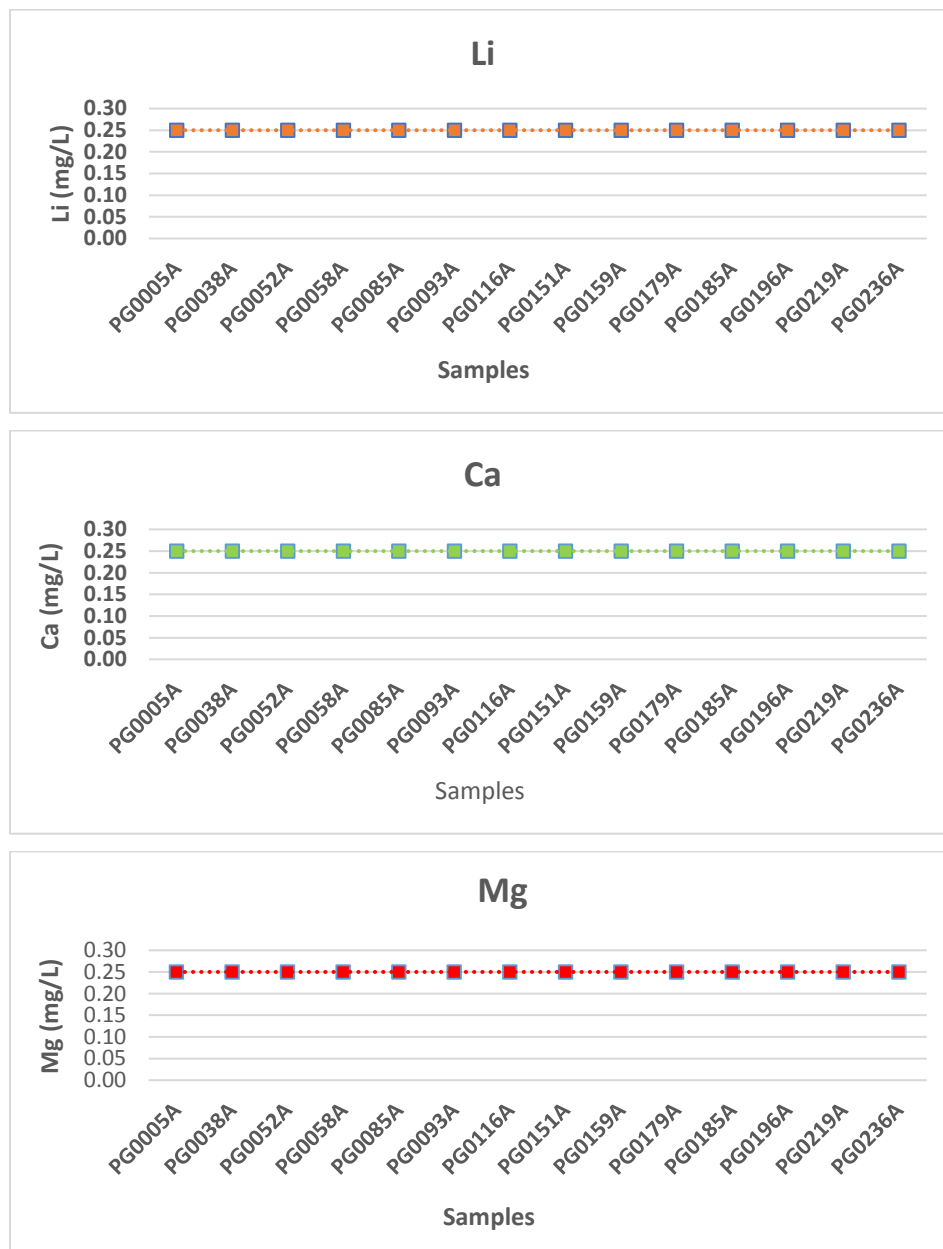


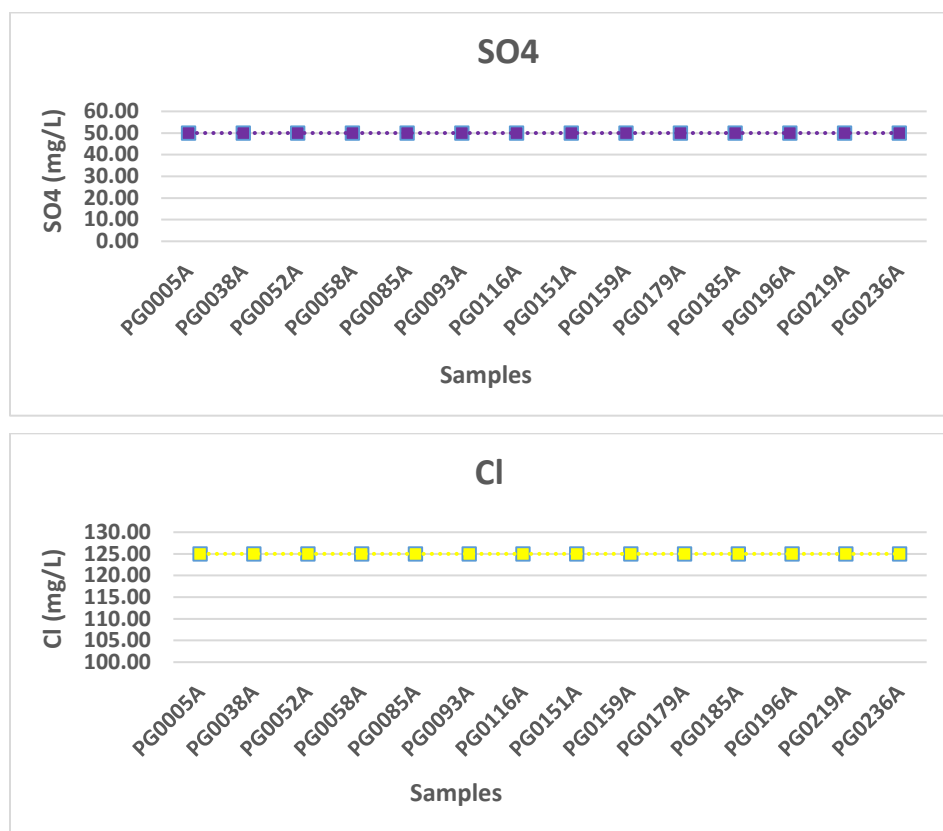
11.3.1.4 Blanks

Assays for blanks were used to check for sample contamination. All assays for all major cations and anions returned values below the reporting limits for the analytical method used, except for 9 samples, where the supplier of the blank material (distilled water) was substituted. In those cases, while key anion and cation values continued to report below the reporting limits, Ca and Mg values were slightly above the reporting limits. The reasons for the differences have been investigated and it has been concluded that as the reported differences are very slight (a few mg/L at most) and would not impact the overall assay results, the affected samples are not considered as failures or indications of sample contamination. LSC has been advised of the issue and is taking corrective measures to ensure all blank sample material is suitably certified.

Control charts for the blanks used for sample assays for Hole PG18-01 are illustrated in Figure 11-4. The control limit was set at half of the LOD (Limit of Detection) for the respective element. The results show no contamination.

FIGURE 11-4: CONTROL CHARTS FOR BLANKS ASSAYS
LSC EXPLORATION 2017/18 – PASTOS GRANDES
Hole PG18-01





11.3.1.5 Cation-Anion Balance

A cation-anion balance for the main samples was undertaken as another check on the analytical accuracy. Assay results should be electrically neutral, with ionic balances of <5% difference (cations vs anions) considered as excellent and results between 5% and 10% considered as acceptable. The results of the ionic balance calculations for the 194 main samples showed a minimum difference of -1.88% and a maximum difference of +2.00% and an average for all samples of -0.15%. These results are considered as excellent and demonstrate that the analytical results are reliable.

11.3.1.6 RBRC Check Samples

15 RBRC control samples were taken, of which results have been received for nine samples. The results are summarized in Table 11-8. Graphical analysis of the data (Figure 11-5) indicates poor correlation between the main and control samples. This type of result is common when attempting to monitor RBRC results between different laboratories, or even the same laboratory. It is also commonly observed that there can be significant differences in RBRC values within very short intervals within comparable lithologies. However, RBRC values averaged over longer intervals tend to demonstrate more comparable results.

Table 11-8: RBRC Control Samples

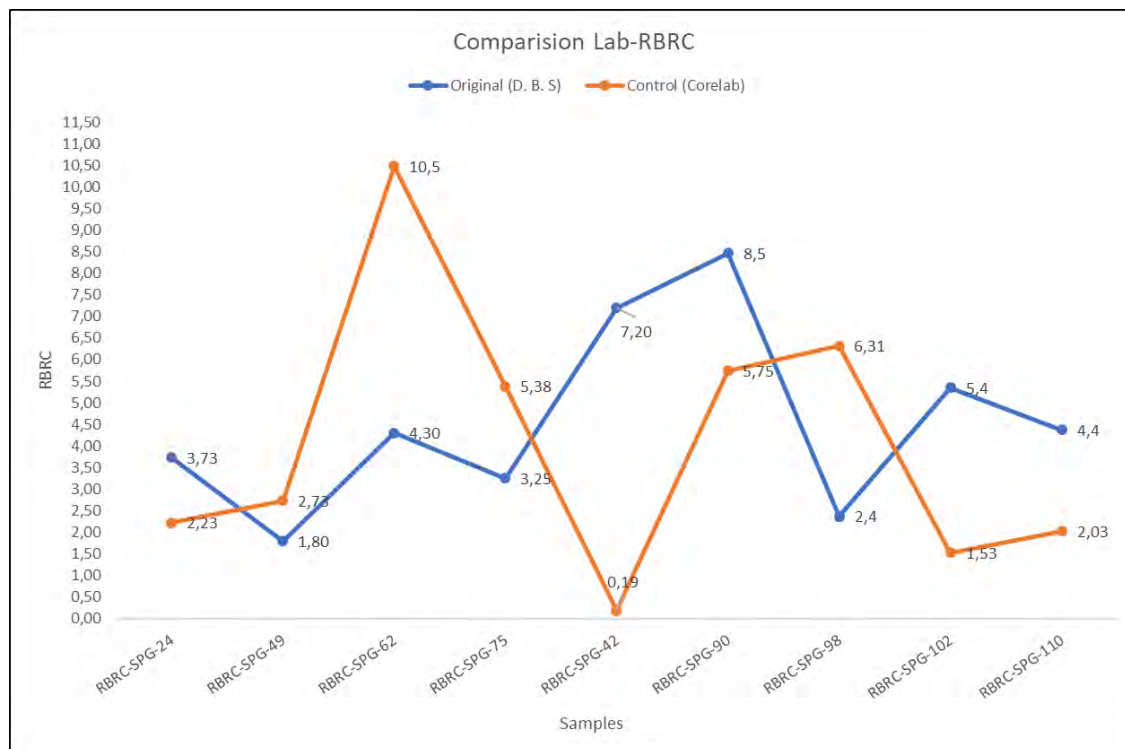
Hole Number	Main Sample	From (m)	To (m)	RBRC (%)	Control Sample	From (m)	To (m)	RBRC (%)
SPG-2017-2b	RBRC-SPG-24	47.92	48.02	3.73	RBRC-SPG-DUP-24	47.7	47.89	2.23
	RBRC-SPG-42	219.00	219.15	7.20	RBRC-SPG-DUP-42	219.18	219.33	0.19
	RBRC-SPG-49	267.77	267.90	3.50	RBRC-SPG-DUP-49	279.42	279.54	2.73
	RBRC SPG-62	352.75	352.89	4.30	RBRC-SPG-DUP-62	360.57	360.68	10.5
	RBRC SPG-75	438.99	439.18	3.25	RBRC-SPG-DUP-75	438.76	438.92	5.38
SPG-2017-05	RBRC-SPG-99	97.51	97.71	2.6	RBRC-SPG-DUP-99	97.31	97.51	1.85
	RBRC-SPG-90	22.10	22.25	8.5	RBRC-DUP-90	21.97	22.1	5.75
	RBRC-SPG-98	81.09	81.35	2.4	RBRC-DUP-98	81.04	81.19	6.31
	RBRC-SPG-102	118.04	118.21	5.4	RBRC-DUP-102	107.58	107.75	1.53
	RBRC-SPG-110	224.78	224.95	4.4	RBRC-DUP-110	224.67	224.78	2.03
PG18-01	PG0026A	74.62	74.82	5.4	PG0026B	74.82	75.07	n.a.
	PG0077A	182.73	182.88	1.8	PG0077B	182.88	183.03	n.a.
	PG0130A	271.05	271.22	2.30	PG0130B	271.27	271.50	n.a.
	PG0161A	316.10	316.28	1.48	PG0161B	316.41	316.58	n.a.
	PG0172A	359.53	359.77	0.51	PG0172B	359.77	359.91	n.a.

n.a. = results not received as of August 29, 2018

Source: LSC

FIGURE 11-5: RBRC CHECK SAMPLE ANALYSIS
LSC Exploration – Pastos Grandes Project

Graphic Showing original samples (blue) and control samples (orange)



Differences in the reported values may be attributable to changes in lithology, even within very short distances; timing gaps between taking main and control samples, potential resulting in formation of undissolved salts in the control sample; and differences in lithological descriptions and thus potential mis-classification. Examples of possible issues are illustrated in Figure 11-6. It is concluded that the primary RBRC results should be used in resource estimate calculations and that duplicate RBRC samples should be analysed at the same laboratory, with samples taken at the same time and within the same lithology to minimize potential sampling and timing variances.

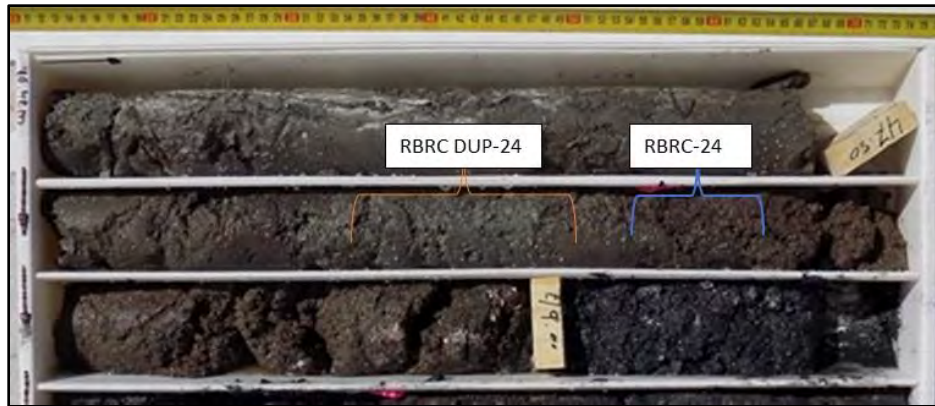
FIGURE 11-6: EXAMPLES OF RBRC REPORTED DIFFERENCES LSC Exploration – salar de Pastos Grandes Project

Example 1

RBRC-SPG-24: From 47,92 m to 48,02 m (RBRC 3,73%)

RBRC-SPG-DUP 24: From 47,70 m to 47,89 m (RBRC 2,23%)

The original sample was taken in coarse sand texture, and the duplicate was taken immediately above, but in clay + silt grain size. The size of the duplicate is 9 cm longer than the original.



Example 2

RBRC-SPG-49: From 279.28 m to 279.43 m (RBRC 1.80%)

RBRC-SPG-DUP-49 From 279.43 m to 279.54 m (RBRC 2.73%)

The samples were taken in the same lithology (fine pebbles) and the duplicate was taken immediately below the original.



Example 3:

RBRC-SPG-62 From 352.75 m to 352.89 m (RBRC 4.3%)

RBRC-SPG-DUP-62 From 360.57 m to 360.68 m (RBRC 10.5%)

The original samples was taken in medium sand. The duplicate was taken in fine sand and silt, 7.68 m below the original. The duplicate sample is not representative of the original.

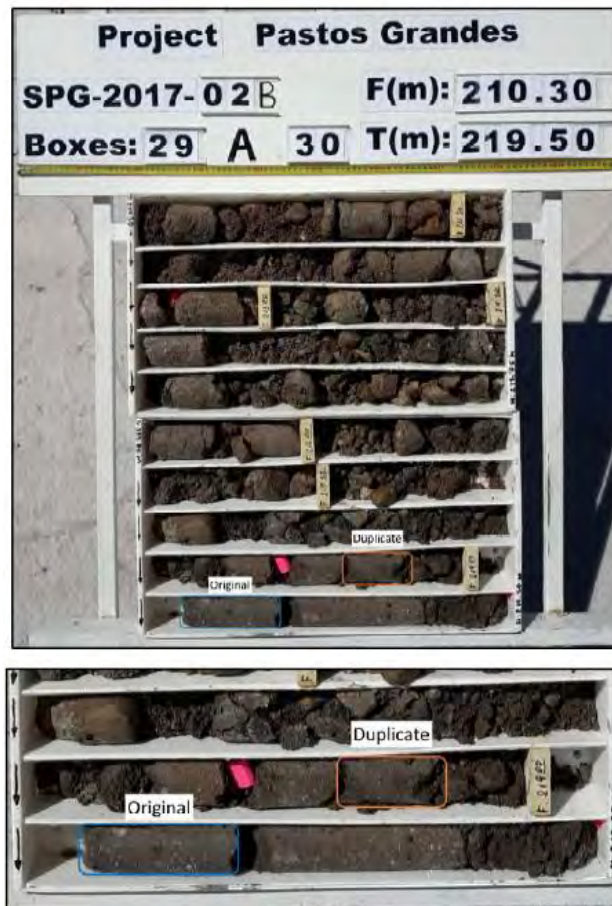


Example 4

RBRC-SPG-42 From 219 m to 219.15 m (RBRC 7.2%)

RBRC-SPG-DUP-42 From 218.8 m to 218.9 m (RBRC 0.19%)

The samples were taken in the same lithology (coarse sand) and close to each other, but the duplicate was taken 4 months after the original.



11.4 OPINION ON QA/QC, SAMPLE SECURITY and SUITABILITY OF ASSAY DATA

In the opinion of the author, the QA/QC procedures and sample security and the methods employed for sample assays are suitable for the purposes of brine exploration programs and the results are representative and fairly present the sample data and the brine and drainable porosity properties of the LSC tenements. In the opinion of the author, the assay results are suitable for use in resource estimates.

Re-certification of Standard LSC-2018-2 (ASA Standard D3003) is indicated.

12 DATA VERIFICATION

Data verification by the author included the following procedures:

1. Site visits on several occasions to observe drilling, brine sampling, RBRC sampling and to inspect drill core against the drill logs;
2. Review of drill reports;
3. Review of certified laboratory assay reports against the assay data base to check for transcription and transposition errors;
4. Review of drill core photos against drill logs to verify drill core descriptions in drill logs and check lithology against reported RBRC values for reasonableness.

One sample, PG208A, was noted as being incorrectly labelled as a blank and was reclassified as Standard LSC-2018-2. Samples SPG-69 through SPG-078 were excluded from the data base due to sampling issues associated with packer operation in the field.

The author did not take any independent brine or RBRC samples for analysis. In the opinion of the author, collection of such samples would not provide meaningful data on the integrity of the data base. The author has visited the project site on numerous occasions in 2016, 2017 and 2018 and is satisfied that the field work, sample collection, sample handling and assaying procedures and data recording are of high quality and meet or exceed industry practice.

In the opinion of the author, the data base is complete and valid and is suitable for use in resource estimates.

13 MINERAL PROCESISNG AND METALLURGICAL TESTING

LSC is undertaking a program of laboratory scale evaporation testing to evaluate evaporation and salt formation pathways. This work is on-going and no results have been reported as of the date of this report.

14 MINERAL RESOURCE ESTIMATE

A resource estimate for the LSC tenements has been prepared based on the results of the geophysical surveys, drilling, sample assays, and RBRC tests. The resource estimate covers all of the LSC tenements at Pastos Grandes except for the Rescatada II tenement (File No. 17391) located in the NW side of Pastos Grandes and the Maria Luisa II tenement (File No. 17904-2004) located in the SE side of Pastos Grandes (see Figure 4-2 for tenement locations) as no data are available to determine the brine potential of these tenements.

14.1 MODELLING

The resource estimate was completed using the polygonal method. The drill hole locations were plotted on a map of the salar. Polygons were constructed centered on these drill holes, with polygon boundaries determined by the middle of the distance between all neighbouring drill holes. Once this was completed, the constructed polygons were clipped by the tenement boundaries (Figure 14-1). Note that the polygons were not clipped by the “islands” in the salar, as the lithohydrostratigraphic units are hydraulically connected beneath the “islands”, as demonstrated by the seismic and SEV data. In addition, the polygons were extended where the tenement boundaries extended off of the salar, as hydraulic continuity is assumed based on the results of the geophysical data and as reported in Rosko (2018).

Lithological units were defined based on analysis of drill core and drill logs and comparison to the seismic results. Five major lithological units were defined:

- Upper Halite
- Upper Sand
- Halite
- Sand
- Gravel

To compute the relevant polygon volumes, lithological thicknesses for each hole were multiplied by the area to obtain the rock volume. All holes were taken to a depth of 600 m. In cases where the drilled depth was less than 600 m, the lithology for the interval between the EOH and 600 m was derived from the seismic data and comparison to adjacent holes. The rock volume times the applicable RBRC (expressed as a percentage) for the relevant lithology provides the available brine volume. To determine the applicable brine grades and RBRC for each polygon, the average for all assays for the specific lithological horizon was determined. This included a small number of surface samples.

Table 14-1 details the thicknesses and average RBRC values for the various lithological units within each resource estimate polygon.

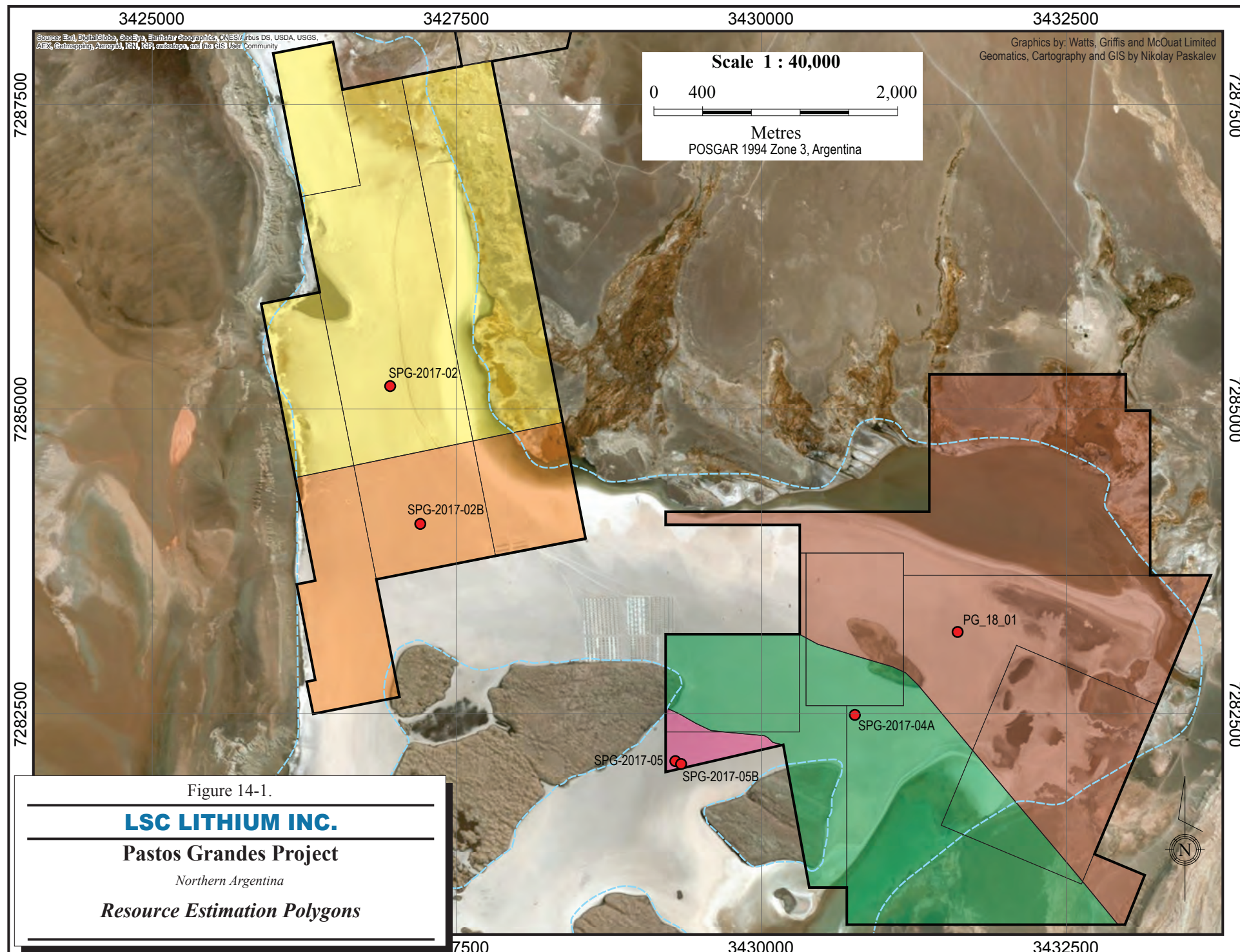


TABLE 14-1: RESOURCE ESTIMATION POLYGONS
THICKNESSES AND RBRC VALUES

POLYGON	LITHOLOGICAL UNIT	FROM – TO (m)	THICKNESS (m)	RBRC VALUE (%)
PG 18-01	HALITE	0 – 393	393.12	2.41
	SAND	393 - 517	124.28	9.21
	GRAVEL	517 - 601	83.60	10
SPG-2017-02	UPPER HALITE	0 – 7	6.98	6.01
	UPPER SAND	7 - 31	23.92	4.60
	HALITE	31 - 76	44.96	2.24
	SAND	76 - 106	30.32	3.09
	GRAVEL	106 - 122	15.32	3.18
SPG-2017-2B	UPPER HALITE	0 - 13	13.00	11.29
	UPPER SAND	13 - 49	36.40	4.05
	HALITE	49 - 73	23.60	3.63
	SAND	73 - 163	89.72	4.56
	GRAVEL	163 - 573	409.50	3.18
SPG-2017-05	HALITE	0 - 275	275.00	2.35
	SAND	275 - 280	5.00	9.21
SPG-2017-05B	HALITE	0 - 305	304.75	4.12
	SAND	305 - 500	195.25	9.21
SPG-2017-04A	HALITE	0 - 310	310.00	2.38
	SAND	310 - 576	265.50	9.21

The assay data base for the resource estimate incorporated 205 assay samples (194 packer samples, 11 surface samples) and 190 RBRC samples, as detailed in Table 14-2:

TABLE 14-2: ASSAY DATA BASE FOR RESOURCE ETIMATE
LSC Salar de Pastos Grandes Project

Polygon	Brine Samples	RBRC Samples
PG 18-01	104	69
SPG-2017-2	4	18
SPG-2017-2B	45	69
SPG-2017-4A	22	
SPG-2017-5/5B	30	34
Total	205	190

14.2 RESOURCE CLASSIFICATION and ESTIMATION

14.2.1 Resource Classification

Resources were classified as follows:

Measured Resource:

A radius of influence (ROI) of 2000 m was applied to all drill holes with assay and/or RBRC data to a depth of 600 m. The ROI was selected based on the criteria defined by Houston et al (2011). This covered all of the tenement areas, except for a relatively small area in the northwest (indicated as number 1 in Figure 14-2). In addition, the resource volume lying between 200 m and 600 m within these areas was classified as Measured.

Indicated Resource:

Areas covered by surface fresh-brackish water on the salar were treated as follows:
Top 50 m removed from the resource estimate
Next 150 m classified as Indicated, irrespective of distance from drilling

These areas are indicated by numbers 2 and 3 in Figure 14-2.

Inferred Resource:

Resources outside the perimeter of the salar, but within the tenement boundaries (indicated by numbers 4 – 7 in Figure 14-2) were classified as Inferred Resources. In addition, where bordering areas presenting surface fresh-brackish water were present, the top 50 m was removed from the resource estimate, similar to the methodology noted above for resources classified as Indicated.

14.2.1 Resource Estimate

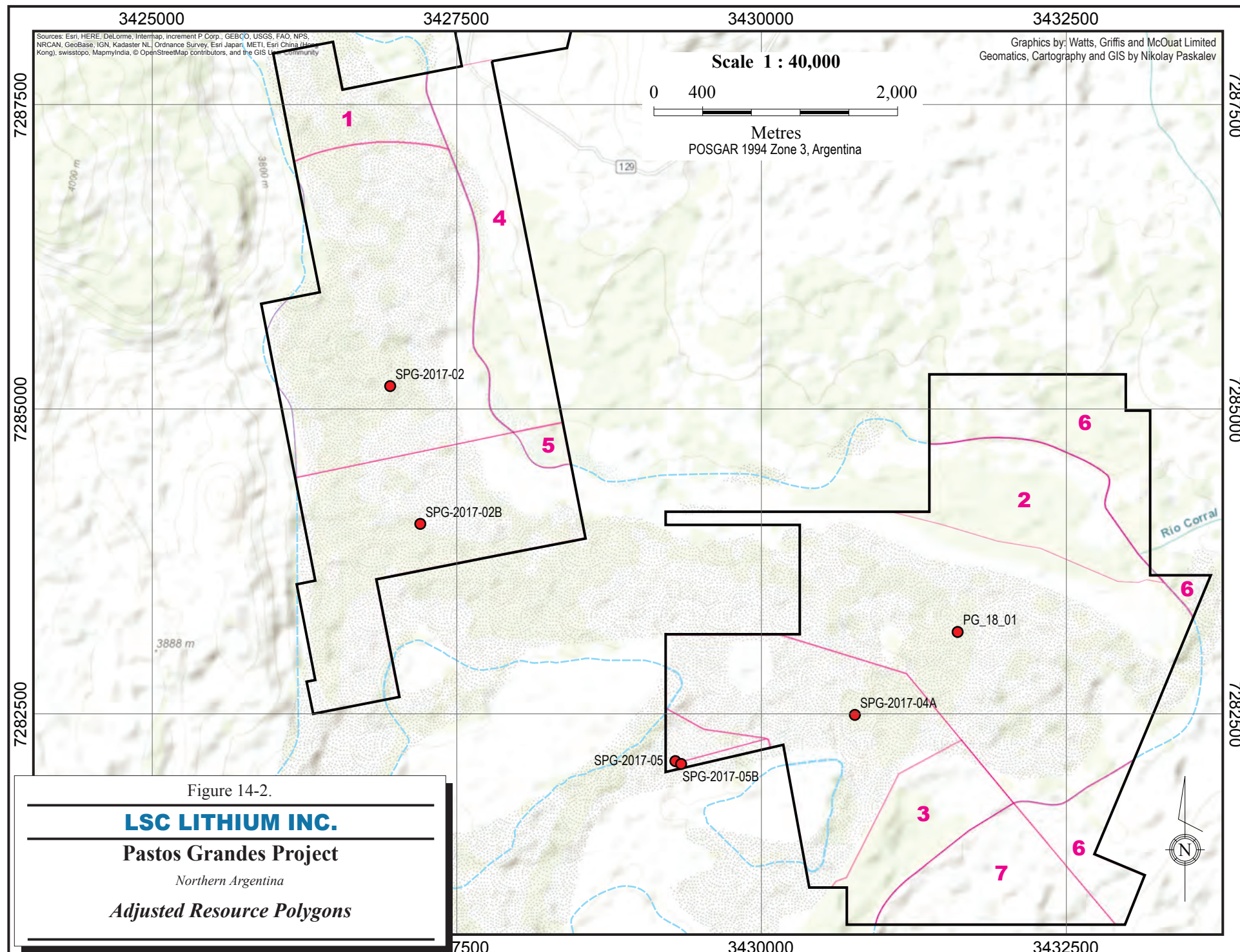
Resources were estimated for each of the lithological units in each polygon and also summarized by lithology. Resources have been classified as Measured, Indicated or Inferred based on the criteria noted above. Table 14-3 details the estimated brine volumes by lithological unit and polygon.

Brine assays were assigned to the relevant lithological unit for each polygon based on the sample intervals down hole and the average value applied to determine average brine grades by lithological unit. Where assay data was not available between the last sample and the End-of-Hole, the average assay values for the lowest lying relevant 50 m interval was applied. This assumption is valid as the assay data show very consistent values over extended intervals, regardless of lithology.

RBRC values were applied to the brine volumes for each polygon and lithological unit to estimate the available brine volume by polygon and lithology and the estimated brine grades and volumes by polygon calculated as detailed in Table 14-4.

Estimated mineral resources and grade are detailed by lithological horizon and resource classification and summarized in Table 14-5.

Based on these criteria, resource volumes were calculated by lithological unit and polygon (Table 14-3). Average brine grades and RBRC values by polygon, lithological unit and resource classification are detailed in Table 14-4. Table 14-5 details the overall resource estimate by resource classification and lithological unit. Figure 14-3 illustrates a plan view of the resource polygons by resource classification.



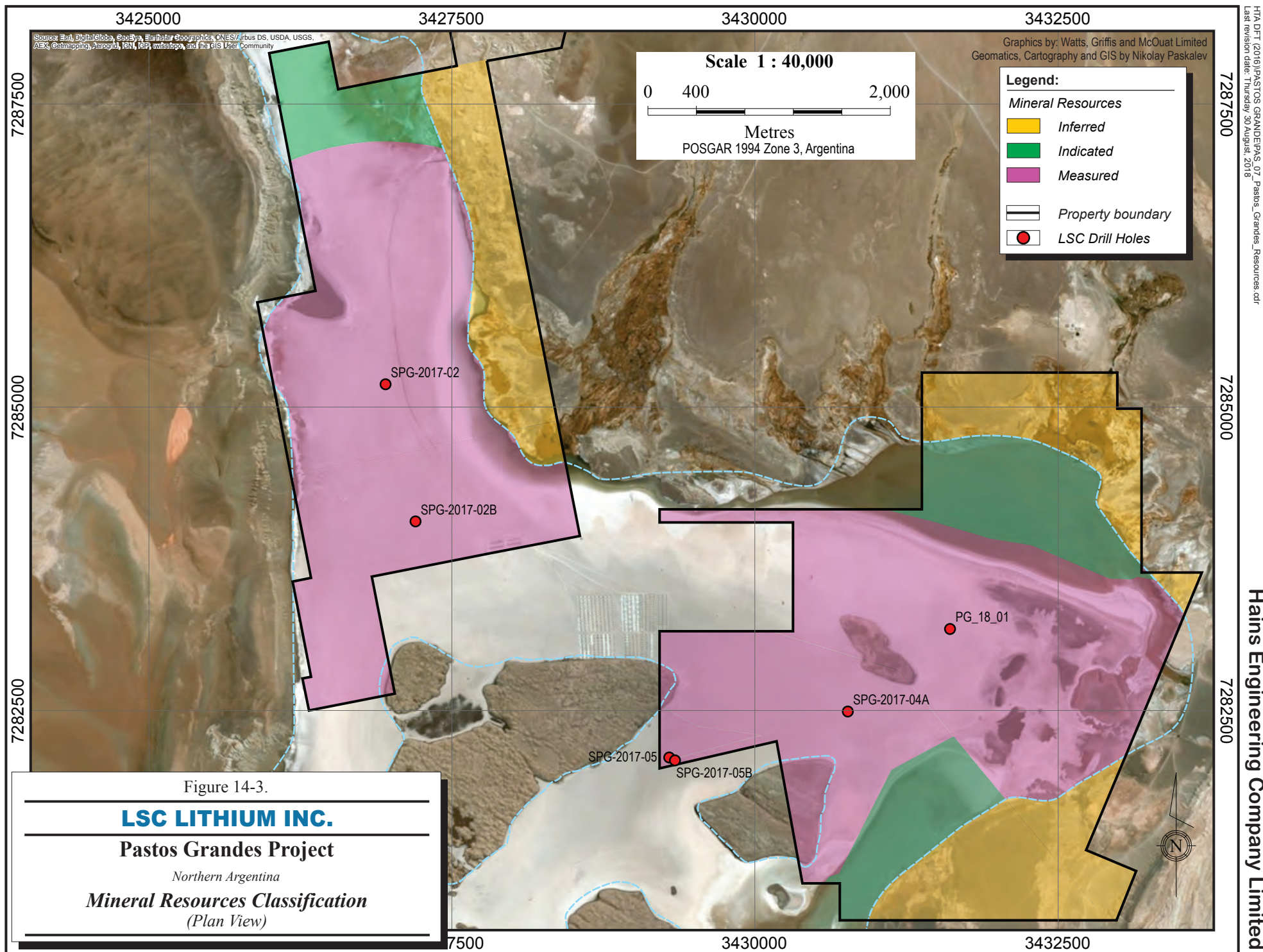


TABLE 14-3: ESTIMATED BRINE VOLUMES BY LITHOLOGICAL UNIT AND POLYGON BY CLASSIFICATION

(Brine volumes before application of RBRC values)

Polygon	Area (m ²)	Upper Halite		Upper Sand		Halite		Sand		Gravel	
		Thickness (m)	Volume (m ³)	Thickness (m)	Volume (m ³)	Thickness (m)	Volume (m ³)	Thickness (m)	Volume (m ³)	Thickness (m)	Volume (m ³)
Measured											
Poly 2	3,858,064	6.98	26,929,289	23.92	92,284,898	44.96	173,458,572	30.32	116,976,510	15.32	59,105,545
Poly 2B	2,734,140	13	35,543,821	36.4	99,522,699	23.6	64,525,706	89.72	245,307,048	409.5	1,119,630,363
Poly 4A	3,390,731					310.00	864,711,854	265.50	900,239,067		
Poly 5	170,827					275	46,977,516	5	854,136.65		
Poly 5B	85,575					304.75	26,078,984	195.25	16,708,521		
Poly 18-01	620,6875					393.12	2,174,037,197	124.28	771,390,487	83.60	518,894,792
Total			62,473,110		191,807,597		3,349,789,829		2,051,475,770		1,697,630,700
Indicated											
Poly 2	810,754	6.98	5,659,063	23.92	19,393,235	44.96	36,451,499	30.32	24,582,061	15.32	12,420,751
Poly 4A	3,390,731					150.0	139,811,055				
Poly 18-01	6,206,875					150.0	199,507,275				
Poly 5	170,827							312	53,298,127		
Poly 5B	85,575							101	17,253,560		
Total			5,659,063		19,393,235		375,769,829		95,133,748		12,420,751
Inferred											
Poly 2	1,499,075	6.98	10,463,546	23.92	35,857,882	44.96	67,398,428	30.32	45,451,965	493.82	740,273,389
Poly 2B	115,265	13	1,498,448	36.4	4,195,655	23.6	2,720,260	89.72	10,341,599	437.28	50,403,193
Poly 4A	1,090,995					260.0	229,109,069	340.0	370,938,494		
Poly 18-01	1,888,274					343.12	553,490,974	124.28	234,674,735	83.60	157,859,735
Total			11,961,994		40,053,537		852,718,732		661,406,793		948,536,317
Grand Total			18,775,212		251,254,370		4,578,278,391		2,808,016,311		2,658,587,768

Notes: 1) data are rounded and may not add; 2) volumes are exclusive of fresh water exclusion volumes

Table 14-4:BRINE GRADE BY POLYGON AND LITHOLOGICAL UNIT BY CLASSIFICATION
(Assay values in mg/L, RBRC Values in %)

Polygon & Classification	Upper Halite							Upper Sand							Halite							Sand							Gravel						
	Li	Ca	Mg	B	K	SO42-	RBRC	Li	Ca	Mg	B	K	SO42-	RBRC	Li	Ca	Mg	B	K	SO42-	RBRC	Li	Ca	Mg	B	K	SO42-	RBRC	Li	Ca	Mg	B	K	SO42-	RBRC
Inferred																																			
Poly 2	463	664	3555	676	2220	10570	6.01	463	664	3555	676	2220	10570	4.60	414	667	3270	651	4209	9837	2.24	364	661	2613	460	3652	6636	3.10	458	701	2945	610	4342	9637	3.10
Poly 2B	463	664	3555	676	2220	10570	11.29	463	664	3555	676	2220	10570	4.05	414	667	3270	651	4209	9837	3.63	364	661	2613	460	3652	6636	4.56	458	701	2945	610	4342	9637	3.18
Poly 4A															358	745	2307	686	3765	8013	2.38	500	611	3372	683	5562	10215	4.02							
Poly 1-18															479	734	3080	929	5039	10096	2.41	524	623	3517	859	5682	11027	3.56	523	579	3537	646	5780	11483	10.00
Total Inferred	463	664	3555	676	2220	10570	6.67	463	664	3555	676	2220	10570	4.55	441	731	2888	841	4629	9515	2.39	497	619	3359	727	5443	10201	3.80	469	680	3044	616	4581	9945	4.25
Indicated																																			
Poly 2 - Indicated	463	664	3555	676	2220	10570	6.01	463	664	3555	676	2220	10570	4.60	414	667	3270	651	4209	9837	2.24	364	661	2613	460	3652	6636	3.10	458	701	2945	610	4342	9637	3.10
Poly 4 A Indicated															358	745	2307	686	3765	8013	2.38														
Poly 1-18 indicated															479	734	3080	929	5039	10096	2.41														
Poly 3															588	567	4163	815	6274	12270	2.35	550	752	3476	785	5896	10085	4.48							
Poly 5B															589	573	4171	834	6331	12313	4.12	550	752	3476	785	5896	10085	9.21							
Total Indicated	463	664	3555	676	2220	10570	6.01	463	664	3555	676	2220	10570	4.60	439	731	2874	836	4603	9476	2.39	502	728	3253	701	5316	9194	4.98	458	701	2945	610	4342	9637	3.10
Measured																																			
Poly 2	463	664	3555	676	2220	10570	6.01	463	664	3555	676	2220	10570	4.60	414	667	3270	651	4209	9837	2.24	364	661	2613	460	3652	6636	3.10	458	701	2945	610	4342	9637	3.10
Poly 2B	463	664	3555	676	2220	10570	11.29	463	664	3555	676	2220	10570	4.05	414	667	3270	651	4209	9837	3.63	364	661	2613	460	3652	6636	4.56	458	701	2945	610	4342	9637	3.18
Poly 4A															358	745	2307	686	3765	8013	2.38	500	611	3372	683	5562	10215	4.02							
Poly 3															588	567	4163	815	6274	12270	2.35	550	752	3476	785	5896	10085	4.48							
Poly 5B															589	573	4171	834	6331	12313	4.12	550	752	3476	785	5896	10085	9.21							
Poly 1-18															479	734	3080	929	5039	10096	2.41	524	623	3517	859	5682	11027	3.56	523	579	3537	646	5780	11483	10.00
Total Measured	463	664	3555	676	2220	10570	9.02	463	664	3555	676	2220	10570	4.32	446	728	2918	844	4679	9588	2.43	486	625	3293	711	5273	9887	3.90	478	663	3126	621	4781	10202	5.26

TABLE 14-5: MINERAL RESOURCE ESTIMATE – SALAR DE PASTOS GRANDES PROJECT
LSC Lithium Corporation
October 19, 2018

Measured												
Horizon	Total Volume	# Assay Samples*	Li	Ca	Mg	B	K	SO ₄ ²⁻	RBRC	Available Brine	Li (tons)	LCE Equivalent
	million m ³		mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	%	Million m ³	Metric tonnes	Metric tonnes
Upper Halite	62.47	5	463	664	3555	676	2220	10570	9.02	5.63	2600	13840
Upper Sand	191.81	0	463	664	3555	676	2220	10570	4.32	8.28	3830	20390
Halite	3349.79	122	446	728	2918	844	4679	9588	2.43	81.35	36260	193000
Sand	2051.48	39	486	625	3293	711	5273	9887	8.30	170.30	82700	440200
Gravel	1697.63	39	478	663	3126	621	4781	10202	5.26	89.37	42700	227290
Total Measured	7353.18	205	465	682	3093	750	4783	9847	4.83	354.94	168090	894720
Indicated												
Upper Halite	5.66	5	463	664	3555	676	2220	10570	6.01	0.34	160	850
Upper Sand	19.39	0	463	664	3555	676	2220	10570	4.60	0.89	410	2180
Halite	375.77	105	439	731	2874	836	4603	9476	2.39	8.98	3950	21025
Sand	95.13	24	502	731	2874	836	4603	9476	7.63	7.26	3640	19375
Gravel	12.42	39	458	701	2945	610	4342	9637	3.10	0.38	175	930
Total Indicated	508.38	173	452	727	2909	822	4479	9533	3.51	17.85	8335	44360
Total M&I	7861.55	205	464	685	3081	754	4763	9827	4.74	372.79	176425	939080

Inferred												
Horizon	Total Volume	# Assay Samples*	Li	Ca	Mg	B	K	SO ₄ ²⁻	RBRC	Available Brine	Li (tons)	LCE Equivalent
	million m ³		mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	%	Million m ³	Metric tonnes	Metric tonnes
Upper Halite	11.96	5	463	664	3555	676	2220	10570	6.67	0.80	370	1960
Upper Sand	40.05	0	463	664	3555	676	2220	10570	4.55	1.82	840	4480
Halite	852.72	105	441	731	2888	841	4629	9515	2.39	20.39	9000	47900
Sand	661.41	24	497	619	3359	727	5443	10201	8.71	57.64	28660	152600
Gravel	948.54	39	469	680	3044	616	4581	9945	4.25	40.32	18890	100550
Total Indicated	2514.68	173	467	681	3084	723	4775	9879	4.81	120.97	57760	307500

Note: data are rounded and may not sum

Notes:

1. Brine volumes are before application of Relative Brine Release Capacity (RBRC) factor
2. RBRC value is the weighted average for the lithological horizon for each resource classification category
3. Resources have been classified in accordance with CIM mineral resource definitions, May 25, 2014
4. Resources have been estimated by Louis Fourie, P. Geo., Pr.Nat. Sci., under the direction of D. Hains, P. Geo..
5. The effective date of this mineral resource estimate is October 19, 2018
6. Resources have been estimated using a cut-off grade of 100 mg/L lithium.
7. Mineral resources which are not Mineral Reserves do not have demonstrated economic value. There is no assurance that additional exploration will result in the conversion of Mineral resources to Mineral Reserves.
8. Inferred Mineral Resources are considered as too speculative to have economic criteria applied to them. There is no assurance that additional exploration will result in the conversion of Inferred Mineral Resources to Indicated or Measured Mineral Resources.
9. A conversion factor of 5.323 has been used to convert Li metal to Lithium Carbonate Equivalent (LCE).

Average brine chemistry ratios by resource category are summarized in Table 14-6.

TABLE 14-6: AVERAGE BRINE ASSAY CHEMICAL RATIOS
LSC Tenements – salar de Pastos Grandes

Resource Classification	Mg:Li	K:Li	SO ₄ :Li	SO ₄ :Ca
Measured	6.65	10.29	21.18	14.44
Indicated	6.63	10.13	21.59	13.03
M&I	6.65	10.28	21.20	14.35
Inferred	6.61	10.23	21.16	14.50

The brine chemistry is favourable for lithium production using solar evaporation processes to concentrate the brine, followed by brine purification and precipitation with sodium carbonate to produce lithium carbonate. A cut-off value of 100 mg/L Lithium has been used. The cut-off value is reasonable based on current and projected lithium prices, reasonably assumed lithium recovery factors and comparisons to other lithium exploration projects for which Measured and Indicated Resources have been estimated.

Other than as discussed, there are no other known legal, political or environmental, or other risks that could materially affect the mineral resource.

14.3 EXPLORATION POTENTIAL

The resource estimate summarized in Table 14-5 excludes potential brine resources beneath the 600 m level of the current resource area and the potential brine resources contained within the Maria Luisa II tenement in the southeast portion of salar de Pastos Grandes and the La Rescatada II tenement in the northwest portion of salar de Pastos Grandes. These tenements are considered to have exploration potential for lithium brine based on the following considerations:

1. The Maria Luisa II tenement is adjacent to tenements controlled by Millennial Lithium and for which Millennial Lithium has estimated Inferred Resources (Rosko, 2018). It can be reasonably assumed that the same lithology and lithium brine grade as found in the adjacent Millennial tenements will be present in the Maria Luisa II tenement held by LSC.

2. SEV geophysical work by LSC on the La Rescatada II tenement indicated the presence of a potential aquifer at depths below approximately 200 m from surface. Millennial Lithium reported the presence of deep lying lithium brine at Hole PGMW1711 (Rosko, 2018) on the northeast side of Pastos Grandes. By analogy, it can be inferred there is potential for lithium brine at depth on the LSC tenement given geological continuity at depth in the northern sector of Pastos Grandes.

Based on the above, an estimate of exploration potential for the two LSC tenements has been developed, as detailed in Table 14-7:

**TABLE 14-7: EXPLORATION POTENTIAL
LSC TENEMENTS MARIA LUISA II AND LA RESCATADA II
SALAR DE PASTOS GRANDES**

Tenement	Area (ha)	Assumed Depth (m)	Volume ('000 m ³)	Assumed RBRC (%)		Assumed Li Grade (mg/L)		LCE Potential (t) ¹	
				Min	Max	Min	Max	Min	Max
Below 600 m level within current resource area	1,644	200	3,289,000	2.5	6.0	300	500	131,000	525,000
Maria Luisa II	100	600	600,000	2.5	6.0	300	500	24,000	96,000
La Rescatada II	396	300	1,188,000	2.5	6.0	300	500	47,000	190,000
Total Exploration Potential	496		5,077,000	2.5	6.0	300	500	202,000	811,000

1) numbers are rounded

The exploration potential described in Table 14-7 is purely conceptual in nature. There has been insufficient exploration to define a mineral resource and it is uncertain if further exploration will result in the target being delineated as a mineral resource.

15 MINERAL RESERVE ESTIMATE

This section is not applicable to this Technical Report.

16 MINING METHODS

It is anticipated conventional brine pumping wells will be used for recovery of lithium bearing brine. The number, location, size and other factors related to pumping operations have not been defined as of the date of this report.

LSC is proposing to develop its Pastos Grandes tenements in conjunction with potential development of its salar de Pozuelos lithium brine project. The brine chemistry at Pastos Grandes is complementary to the brine chemistry at salar de Pozuelos (Hains, 2017b). LSC is currently undertaking studies to evaluate the potential to pump raw brine from Pastos Grandes to a potential process plant at Pozuelos. Such a concept could potentially reduce capital and operating costs associated with development of the tenements at Pastos Grandes.

17 RECOVERY METHODS

No recovery methods for production of lithium carbonate have been defined as of the date of this Technical Report.

18 PROJECT INFRASTRUCTURE

No project infrastructure requirements have been defined as of the date of this Technical Report.

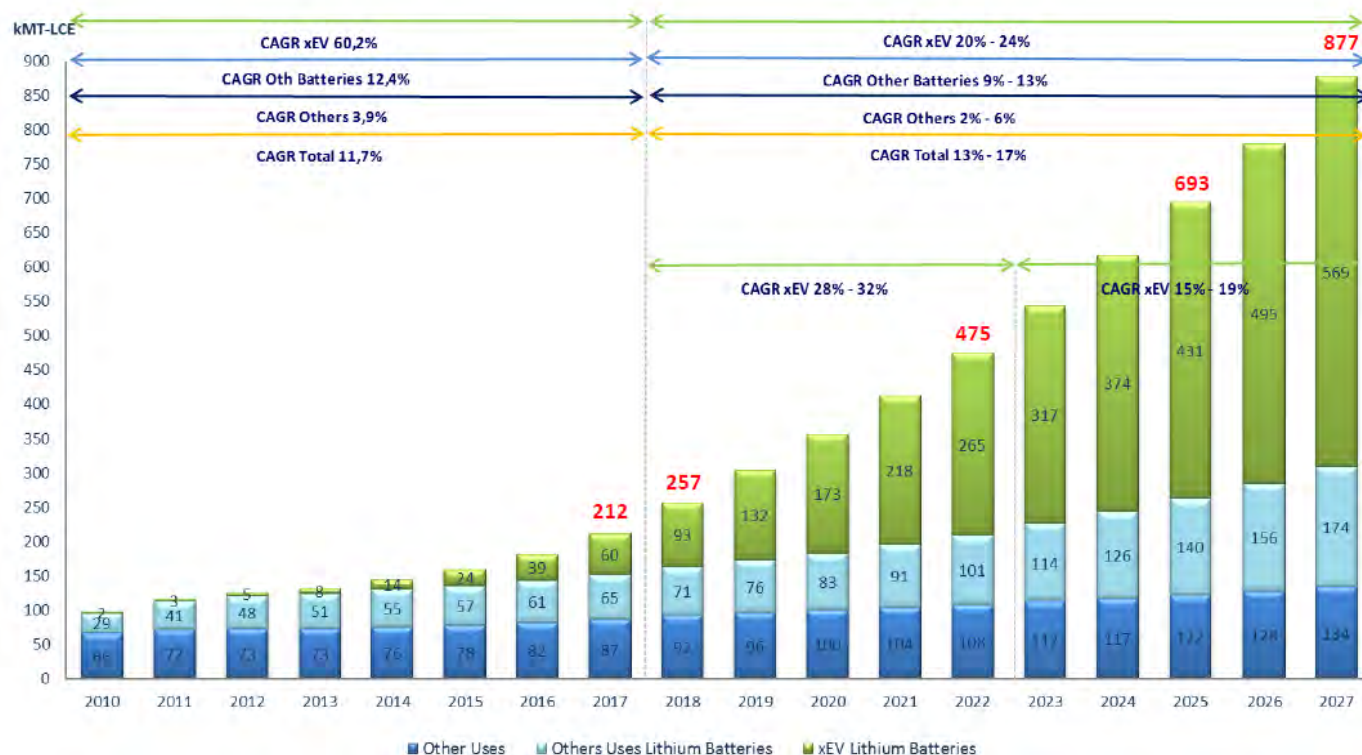
19 MARKET STUDIES AND CONTRACTS

LSC has not undertaken any formal market studies nor entered into any formal contracts for sale of potential lithium products from development of its salar de Pastos Grandes tenements. General information on the current market environment for lithium chemicals is provided below.

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.

19.1 Lithium Demand

Global lithium demand is estimated to approximate 212kt LCE (Lithium Carbonate Equivalent) in 2017. Demand has been growing at a compound annual rate of approximately 11.7% since 2010, driven primarily by increases in battery applications. Battery applications accounted for an estimated 59% of total lithium demand in 2017 and are forecast to account for 85% of total demand in 2027. By 2027, total lithium demand is forecast to be approximately 877kt on an LCE basis as illustrated in Figure 19-1 (SQM, 2018).



Source: SQM, 2018

FIGURE 19-1: GLOBAL LITHIUM DEMAND – 2010 – 2027

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, Japan and China are the dominant rechargeable battery and battery material producers.

Forecasts for electric vehicle uptake, either as hybrids, plug in hybrids or full electric vehicles have been revised significantly upward by several industry observers (Deutsche Bank, 2016, 2018; Exane BNP Paribas, 2016, BMO, 2018) 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. Major automotive manufacturers are projecting EVs will account for a very significant share of total production by 2025 (Figure 19-2).



Automotive OEMs: BEV Volumes (Global: 2020 and 2025) and % Penetration

Source: SQM, 2018 (from Citi Research 2018)

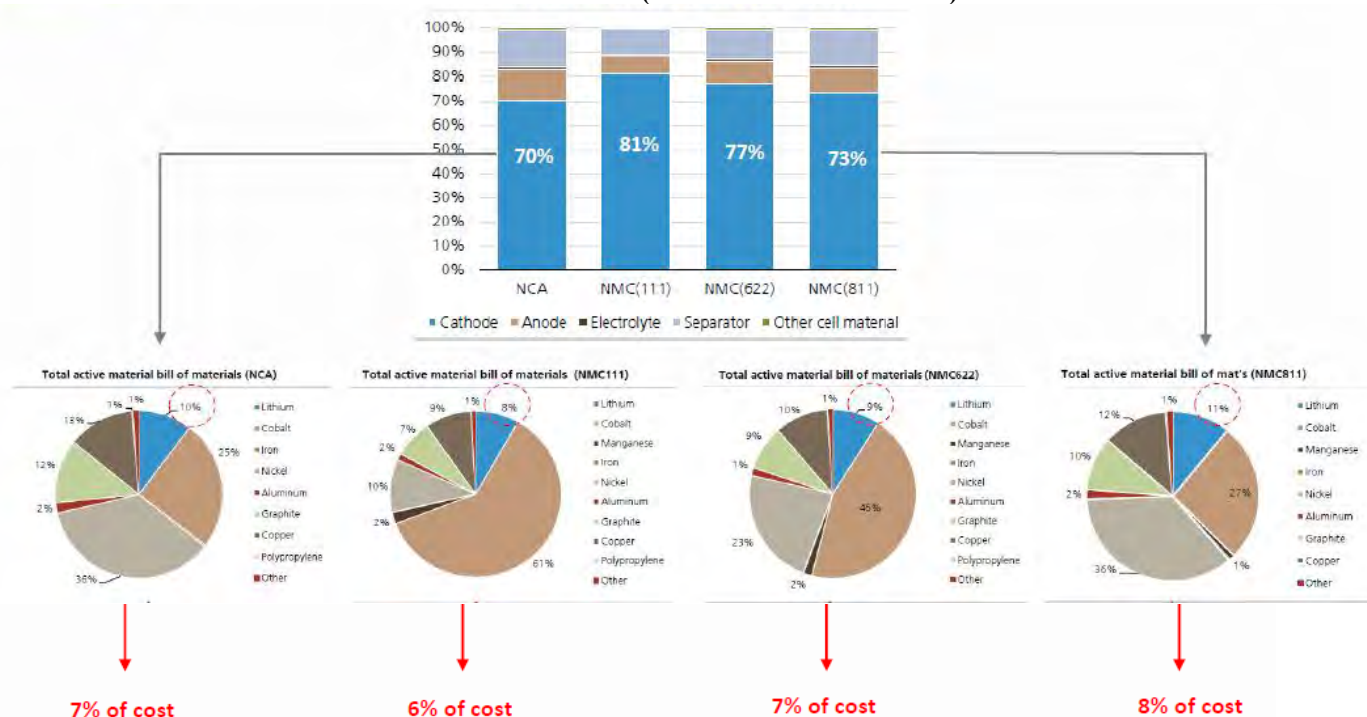
FIGURE 19-2: ELECTRIC VEHICLE SHARE TO 2025 BY MAJOR MANUFACTURER

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.

It is important to recognize that lithium represents a very small component on electric vehicle battery production costs, typically less than 7% of total battery materials cost, depending on the battery chemistry (Figure 19-3).

Active Material Cost (% of total bill of materials)



Source: SQM, 2018, after UBS

FIGURE 19-3: BATTERY PACK RAW MATERIALS 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 19-1 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.

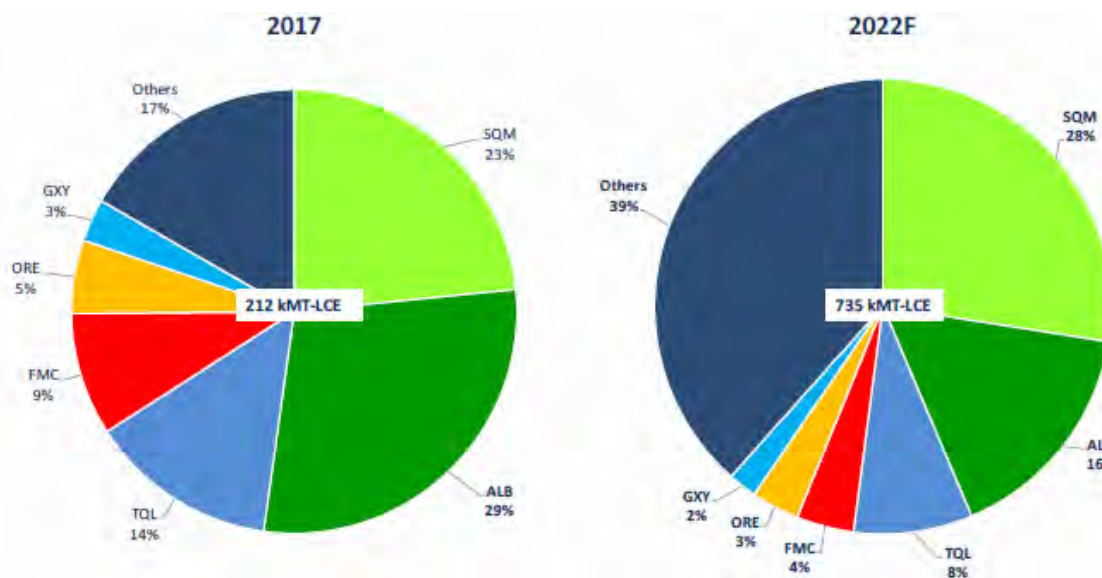
Table 19-1: Lithium Carbonate Price Impact on Electric Vehicle Selling Price

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

19.2 Lithium Supply

Global lithium production is dominated by six companies: SQM in Chile, Albemarle in Chile, the US and Australia, Tianqi in China and Australia, FMC in Argentina, Orocobre in Argentina and Galaxy in Australia. These companies accounted for 83% of global lithium production on an LCE basis in 2017. By 2022 the share of the market held by the six major companies is anticipated to decline to 71% as new producers enter the market, although the absolute amount of production by each of the big six is anticipated to increase due to market growth (Figure 19-4).



Source: SQM, 2018

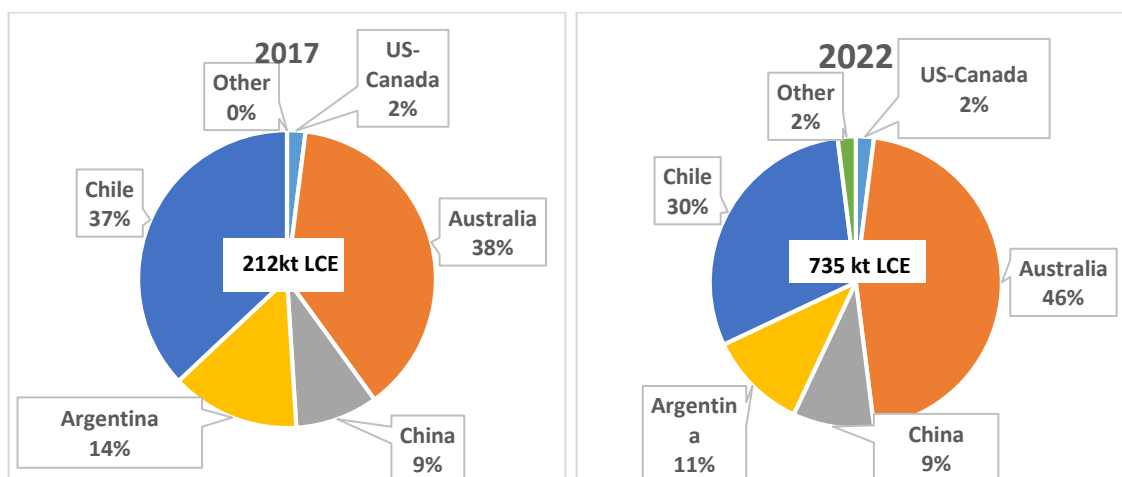
FIGURE 19-4: LITHIUM CHEMICAL SUPPLY BY MAJOR PRODUCER

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) 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 58% of global production as of 2017. Lithium brine operations are confined to Chile, Argentina, the USA and China, with South America hosting the largest producers.

Lithium mineral production is concentrated in Australia and there has been a significant increase in lithium concentrate production in the past two years, with several very significant new developments and expansion projects currently under construction. By 2022, Australia is projected to account for 46% of lithium production on an LCE basis, all of which will be lithium mineral. A very significant portion of lithium mineral concentrate production in Australia is shipped to China for conversion to lithium carbonate and lithium hydroxide. China has limited supplies of lithium mineral concentrate but a very significant base of conversion capacity, as well as being home to much of the world's lithium ion battery production capacity. Figure 19-5 illustrates projected changes in the location of lithium production capacity from 2017 to 2022.

FIGURE 19-5: LITHIUM PRODUCTION CAPACITY

(Excludes raw material for direct use)



Source: SQM (2018)

19.3 Lithium Specifications

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 .

20 ENVIRONMENTAL STUDIES, PERMITTING AND SOCIAL OR COMMUNITY ISSUES

20.1 Environmental Studies

LSC has completed and filed the required bi-annual environmental studies to maintain its tenements in good standing. LSC is currently undertaking more detailed analyses related to the hydrology and hydrogeology of salar de Pastos Grandes in support of the current PEA (in progress) for the combined PPG project. The environmental impact of the Pastos Grandes project is anticipated to be very low as the production concept is limited to installation of a limited number of pumping wells and the associated pipeline to pump brine to a processing facility at Pozuelos. The pipeline would follow the route of the existing paleoflood channel connecting Pozuelos to Pastos Grandes.

20.2 Permitting

LSC is in the process of filing applications for servitudes (easements) to allow for the installation of pipelines across the salar and connecting to the proposed processing facility at Pozuelos. Servitudes are required as the pipelines would cross tenements held by others. Applications for servitudes for surface installations are quite typical in Argentina and no issues are anticipated in obtaining the required permits.

20.3 Social or Community Issues

LSC has a well-developed program of community relations in the Pastos Grandes area and there are no known social or community issues which would negatively impact development of the Pastos Grandes brine project.

21 CAPITAL AND OPERATING COSTS

Not relevant for this stage of project development.

22 ECONOMIC ANALYSIS

Not relevant for this stage of project development.

23 ADJACENT PROPERTIES

LSC's tenements on salar de Pastos Grandes are located on the east and west sides of the salar. Adjoining tenements in the central portion of the salar and to the north and south are owned or under control by Millennial Lithium and a number of other companies. Figure 23-1 illustrates the disposition and ownership of the adjacent tenements.

Millennial Lithium has filed an NI 43-101 technical report on its tenements at salar de Pastos Grandes. This report (Rosko, 2018) provides a resource estimate for the tenements located in the central part of salar de Pastos Grandes, excluding those tenements acquired by Millennial Lithium from REMSA in late 2017. In its 2018 technical report, Millennial reported the following resource estimate (Table 23-1):

Table 23-1: Millennial Lithium Resource Estimate
Salar de Pastos Grandes Property
January, 2018
 (cut-off grade 300 mg/L Li)

Resource Category	Brine Vol. (m³)	Avg. Li (mg/L)	In-Situ Li (tonnes)	Avg. K (mg/L)	In-Situ K (tonnes)
Measured	5.2 x 10⁸	465	240,000	5,009	2,582,000
Indicated	3.8 x 10⁸	418	160,000	4,395	1,687,000
M+I	9.0 x 10⁸	445	400,000	4,747	4,269,000
Inferred	3.5 x 10⁸	469	165,000	4,871	1,711,000

Source: Rosko, 2018

Note: Mineralization on adjacent properties may not necessarily be comparable to mineralization on the LSC tenements. The Qualified Person for this report has not verified the information contained in the Millennial Lithium technical report.

Salt is produced by various operators on the Millennial tenements located on the salar surface under usufruct agreement.

Millennial Lithium acquired tenements to the south and north of its existing tenements from REMSA, the Salta Province state mining company, in a complete bidding process in late 2017. No information is available on the lithium mineral potential of these tenements as of the date of this report.

The tenements held by Borax Argentina S.A. are located off of the salar surface and within the Sijes Formation. These tenements are mined for borax minerals by Borax Argentina. Tenements held by others on the periphery of the salar are licensed for borate production.

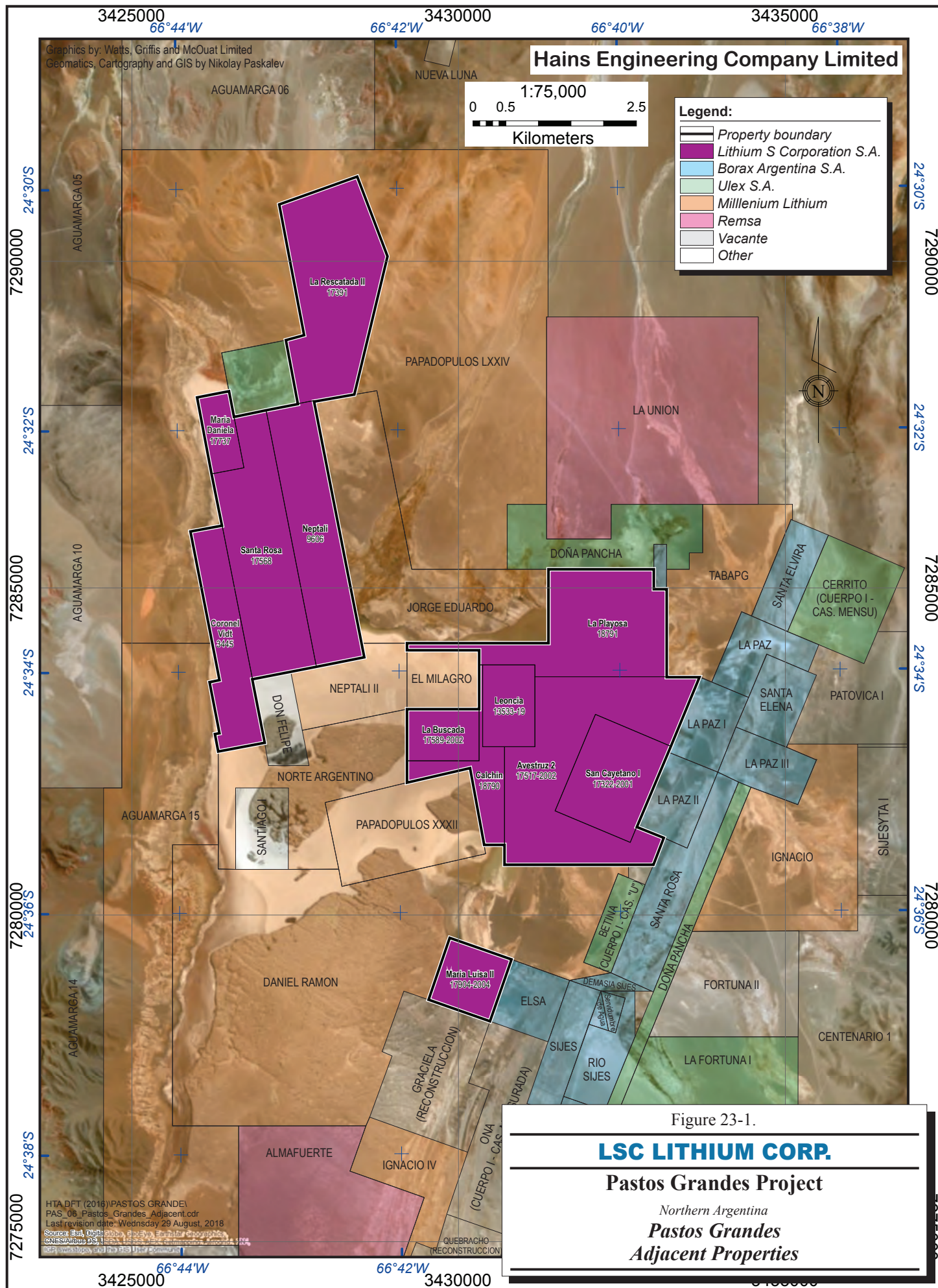


Figure 23-1.

LSC LITHIUM CORP.

Pastos Grandes Project

Northern Argentina

**Pastos Grandes
Adjacent Properties**

HTA DFT (2016) PASTOS GRANDES
PAS_06_Pastos_Grandes_Adjacent.cdr
Last revision date: Wednesday 29 August, 2018
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics,
CNES/Airbus DS, USDA, AeroGRID, IGN, SIA, USGS Earth
Explorer, NOAA, GEBCO, Esri, Swisstopo, and the GIS User Community

24 OTHER RELEVANT DATA AND INFORMATION

There is no other data or information to be added to make this report complete.

25 INTREPRETATION AND CONCLUSIONS

LSC holds 2,683 ha of tenements located on the east and west sides of salar de Pastos Grandes. The tenements are prospective for lithium brine. Salar de Pastos Grandes is classified as an immature salar comprised of thick sequences mixed halite-sand-silt and sand/gravels. The salar brine is of the Na-Cl-Ca/SO₄ type. Brine sample assay data show consistent values down hole and across the LSC tenements.

The mixed halite-sand-silt sequences vary considerably in terms of the proportions of the matrix. Geophysical exploration (seismic, SEV, TEM) and sampling indicates brine is present in the salar to depths of at least 600 m. While RBRC (S_y) values vary widely, all sampled lithologies returned brine samples, indicating all lithologies can be productive for brine. In the opinion of the author, reported RBRC values are conservative and thus the resource estimate may be understated.

The estimated brine resources contained within the LSC tenements are summarized in Table 25-1. Average brine chemistry ratios are noted in Table 25-2.

TABLE 25-2: AVERAGE BRINE ASSAY CHEMICAL RATIOS
LSC TENEMENTS
Salar de Pastos Grandes

Resource Category	Mg:Li	K:Li	SO ₄ :Li	SO ₄ :Ca
Measured	6.65	10.29	21.18	14.44
Indicated	6.63	10.13	21.59	13.03
M&I	6.65	10.28	21.20	14.35
Inferred	6.61	10.23	21.16	14.50

The brine chemistry is amenable to lithium carbonate production using conventional lithium brine processing technologies for brine concentration such as solar evaporation, followed by precipitation of lithium carbonate.

LSC is proposing to develop its Pastos Grandes tenements in conjunction with development of its salar de Pozuelos lithium brine project. The brine chemistry at Pastos Grandes is complementary to the brine chemistry at salar de Pozuelos (Hains 2017b). LSC is proposing to pump raw brine from Pastos Grandes to a potential processing plant at Pozuelos.

TABLE 25-1: RESOURCE ESTIMATE SUMMARY– LSC TENEMENTS
Salar de Pastos Grandes
October 19, 2018

Measured												
Horizon	Total Volume	# Assay Samples*	Li	Ca	Mg	B	K	SO ₄ ²⁻	RBRC	Available Brine	Li (tons)	LCE Equivalent
	million m ³		mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	%	Million m ³	Metric tonnes	Metric tonnes
Upper Halite	62.47	5	463	664	3555	676	2220	10570	9.02	5.63	2600	13840
Upper Sand	191.81	0	463	664	3555	676	2220	10570	4.32	8.28	3830	20390
Halite	3349.79	122	446	728	2918	844	4679	9588	2.43	81.35	36260	193000
Sand	2051.48	39	486	625	3293	711	5273	9887	8.30	170.30	82700	440200
Gravel	1697.63	39	478	663	3126	621	4781	10202	5.26	89.37	42700	227290
Total Measured	7353.18	205	465	682	3093	750	4783	9847	4.83	354.94	168090	894720
Indicated												
Upper Halite	5.66	5	463	664	3555	676	2220	10570	6.01	0.34	160	850
Upper Sand	19.39	0	463	664	3555	676	2220	10570	4.60	0.89	410	2180
Halite	375.77	105	439	731	2874	836	4603	9476	2.39	8.98	3950	21025
Sand	95.13	24	502	731	2874	836	4603	9476	7.63	7.26	3640	19375
Gravel	12.42	39	458	701	2945	610	4342	9637	3.10	0.38	175	930
Total Indicated	508.38	173	452	727	2909	822	4479	9533	3.51	17.85	8335	44360
Total M&I	7861.55	205	464	685	3081	754	4763	9827	4.74	372.79	176425	939080

Inferred												
Horizon	Total Volume	# Assay Samples*	Li	Ca	Mg	B	K	SO ₄ ²⁻	RBRC	Available Brine	Li (tons)	LCE Equivalent
	million m ³		mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	%	Million m ³	Metric tonnes	Metric tonnes
Upper Halite	11.96	5	463	664	3555	676	2220	10570	6.67	0.80	370	1960
Upper Sand	40.05	0	463	664	3555	676	2220	10570	4.55	1.82	840	4480
Halite	852.72	105	441	731	2888	841	4629	9515	2.39	20.39	9000	47900
Sand	661.41	24	497	619	3359	727	5443	10201	8.71	57.64	28660	152600
Gravel	948.54	39	469	680	3044	616	4581	9945	4.25	40.32	18890	100550
Total Indicated	2514.68	173	467	681	3084	723	4775	9879	4.81	120.97	57760	307500

Note: data are rounded and may not sum

Notes:

1. Brine volumes are before application of Relative Brine Release Capacity (RBRC) factor
2. RBRC value is the weighted average for the lithological unit within each resource category
3. Resources have been classified in accordance with CIM mineral resource definitions, May 25, 2014 and the CIM Best Practice Guidelines for Estimation of Lithium Brine Resources and Reserves
4. Resources have been estimated by Louis Fourie, P. Geo., Pr.Nat. Sci., under the direction of D. Hains, P. Geo.
5. The effective date of this mineral resource estimate is October 19, 2018
6. Resources have been estimated using a cut-off grade of 100 mg/L lithium.
7. Mineral resources which are not Mineral Reserves do not have demonstrated economic value. There is no assurance that additional exploration will result in the conversion of Mineral resources to Mineral Reserves.
8. Inferred Mineral Resources are considered as too speculative to have economic criteria applied to them. There is no assurance that additional exploration will result in the conversion of Inferred Mineral Resources to Indicated or Measured Mineral Resources.
9. A conversion factor of 5.323 has been used to convert Li metal to Lithium Carbonate Equivalent (LCE). Totals for M&I and Inferred Resources have been rounded to nearest thousand

26 RECOMMENDATIONS

The following recommendations are made:

1. Develop Holes PG18-01 and SPG-2017-04 as pumping wells to obtain pumping data on the tenements on the east side of Pastos Grandes;
2. Drill a pumping well on the west side of Pastos Grandes near hole SPG-2017-2b to develop pumping data on the west side of Pastos Grandes.

Note: for both pumping wells, tracer dyes should be used to better establish Specific Yield data

3. Drill an exploration hole on south end the Coronal Vidt tenement to develop additional data on brine grade and salar lithology on the western tenements.
4. Drill an exploration hole on the La Rescatada II tenement on the NW side of Pastos Grandes to explore for deep lying brine off of the salar.
5. Drill an exploration hole on the north side of the La Playosa tenement to confirm the presence of brine below the overlying fresh water, as noted by Millennial Lithium for its tenement located north of the La Playosa tenement.
6. Obtain additional brine volume from various holes sufficient to undertake pilot scale brine evaporation and concentration studies in support of a combined Pastos Grande-Pozuelos (PPG) Preliminary Economic Analysis (PEA) report.
7. Undertake additional environmental impact assessment work in support of a PEA for a combined PPG PEA report.
8. Update the resource estimate for Pastos Grandes based on the results of the pumping tests and additional drilling.

The budget for the work noted above is detailed in Table 26-1.

**TABLE 26-1: PROPOSED EXPLORATION BUDGET
LSC Pastos Grandes Project**

Activity	Budget Estimate (\$US)
Pumping Wells (2), east side Pastos Grandes, 600 m	\$750,000
Pumping Well (1), west side Pastos Grandes, 600 m	\$250,000
Exploration holes (3), DDH/Tricone, HQ, 600 m each	\$750,000
Brine testing	\$75,000
Environmental Impact Studies for PEA	\$250,000
Resource Estimate Update	\$50,000
General Support, Project Admin	\$500,000
Total	\$2,625,000

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28 DATE AND SIGNATURE PAGE



(Signed & Sealed) "Donald H. Hains"

Donald H Hains, P.Geo

Dated October 25, 2018 at Toronto, Ont.

Dated this 25th day of October 2018 at Saskatoon, SK


Louis Fourie, B.Sc., P. Geo,



Signed and Sealed

Professional Seal

29 CERTIFICATE OF QUALIFIED PERSON

DONALD H. HAINS

I, Donald H. Hains, P.Geo., as author of this report entitled “Technical Report of Pastos Grandes Lithium Project” prepared for LSC Lithium Corp. and dated October 25, 2018 with an effective date of October 19, 2018 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 for a since my graduation.
4. My relevant experience for the purpose of the Technical Report is:
 - NI 43-101 Technical report on four lithium brine properties, northwestern Argentina, prepared for LSC Lithium, December, 2016;
 - NI 43-101 Technical report on salar de Pozuelos lithium project, Salta Province, Argentina, prepared for LSC Lithium, January, 2017;
 - NI 43-101 technical report on salar de Pozuelos lithium project, Salta Province, Argentina, prepared for LSC Lithium, June, 2017;
 - NI 43-101 technical report on salar del Rio Grande lithium project, prepared for LSC Lithium, January, 2018
 - 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, 2017)
 - 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)
 - Tres Quebradas (2018)
 - Salar Antofallo (2018)

- Due diligence reviews of selected sabkha brine projects in Saudi Arabia
 - 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. I have visited the property which is the subject of this report on numerous occasions since July, 2016. My most recent visit was June 16-17, 2018.
7. I am responsible for overall preparation of the Report. I am directly responsible for Sections 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27, 28 and 29.
8. I am independent of LSC Lithium Inc. applying all of the tests in section 1.4 of National Instrument 43-101
9. To the best of my knowledge, information, and belief, this Report contains all scientific and technical information that is required to be disclosed to make the report not misleading.
10. I have read National Instrument 43-101, Form 43-101F1, and 43-101CP and the Technical Report has been prepared in compliance with that instrument and form.
11. I consent to the filing of the Technical Report with any stock exchange and other regulatory authority and any publication by LSC Lithium Corp. for regulatory purposes, including electronic publication in the public company files on their websites accessible by the public, of the Technical Report.

Dated 25th day of October, 2018



Signed and sealed

Donald H. Hains, P. Geo

LOUIS FOURIE

I, Louis Fourie, B.Sc., P. Geo, Pr. Sci. Nat., as an author of this Technical Report entitled "Technical Report on Pastos Grandes Lithium Project" dated October 25, 2018 with an effective date of October 19, 2018 prepared for LSC Lithium Corporation, do hereby certify that:

1. I am Owner & Principal of Terra Modelling Services Inc., 438 — 165 Third Avenue South, Saskatoon, SK, Canada, S7K1L8
2. I am a graduate of the Rand Afrikaans University (University of Johannesburg) with a B.Sc. (Hons) in Geology and a B.Sc. in Geology and Mathematics (1996}.
3. I am a Professional Geoscientist licensed by Association of Professional Geoscientists of Saskatchewan (Membership Number 22198). I am also registered as a Pr. Sci. Nat. in South Africa (registration number 400035/02}. Terra Modelling Services is authorized to practice in Saskatchewan by the Association of Professional Geoscientists of Saskatchewan (Certificate Number 32894)
4. I have practised my profession as a geoscientist since 1996. My experience with evaporite mineral deposits includes:
 - a. Modelling Potash and other evaporite deposits in Canada (Southey, Muskowekwan, Foam Lake), Spain (Sierra del Perdon, Muga), the United States (Holbrook), and elsewhere (2012–the present).
 - b. Author of NI43-101 reports on the Vanguard Potash Project, Saskatchewan, Canada (Technical Reports 2016 & 2017, PEA 2016, Feasibility 2018)
 - c. Author of the JORC Maiden Mineral Resource Report as well as the Updated Mineral Resource Report for the Fort Cady Borate & Lithium Project, California, USA (2017, 2018)
 - d. Doing due diligence on existing potash and related mines and mineral projects, in Canada, the Republic of the Congo and elsewhere.
 - e. Qualified Person for Lithium Brine Projects in Argentina (Salar de Pozuelos, Salar del Rio Grande)
 - f. Qualified person for the Thacker Pass Lithium Project, NV., USA as well as the Pre-feasibility report of the same.
5. I have read the definition of "qualified person" set out in the National Instrument 43-101("NI43101") and certify that by reason of my education, affiliation with a professional association (as defined in NI43-101) and past relevant work experience, I fulfill the requirements to be a "qualified person" for the purposes of NI 43-101.
6. I did not visit the property
7. I contributed to Section 14 of the Report
8. I am independent of the Issuer as set out in Section 1.5 of NI 43-101.
9. I have read NI43-101 and Form 43-101F1 and the technical report and have contributed to the relevant sections of the technical report in compliance with the standards as pertaining to NI 43-101, Form 43-101F1.

10. As of the date of the technical report, to the best of my knowledge, information and belief, the technical report contains all scientific and technical information that is required to be disclosed to make the technical report not misleading.
11. I consent to the filing of the Technical Report with any stock exchange and other regulatory authority and any publication by LSC Lithium Corp. for regulatory purposes, including electronic publication in the public company files on their websites accessible by the public, of the Technical Report.



Professional Seal

Dated this 25th day of October, 2018

Signed and Sealed



Louis Fourie, B.Sc., P. Geo, Pr. Sci. Nat.

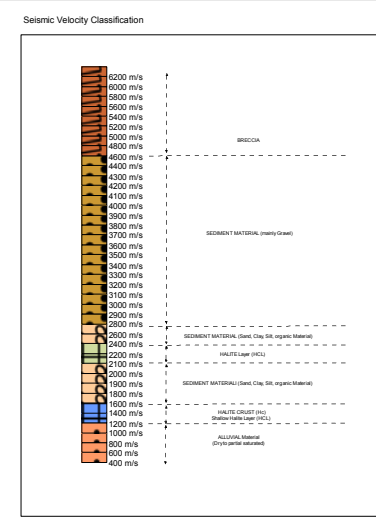
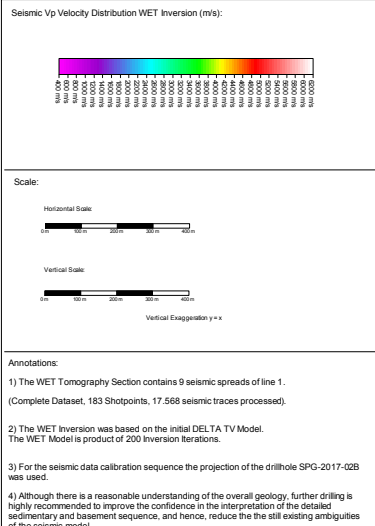
30 APPENDICES

Appendix 1: Seismic Tomography Results

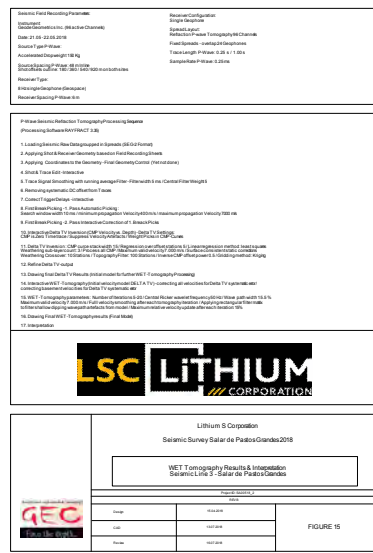
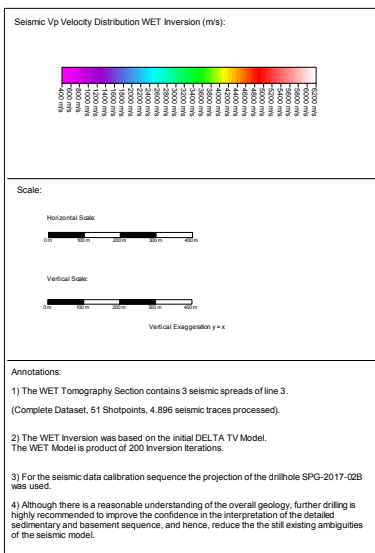
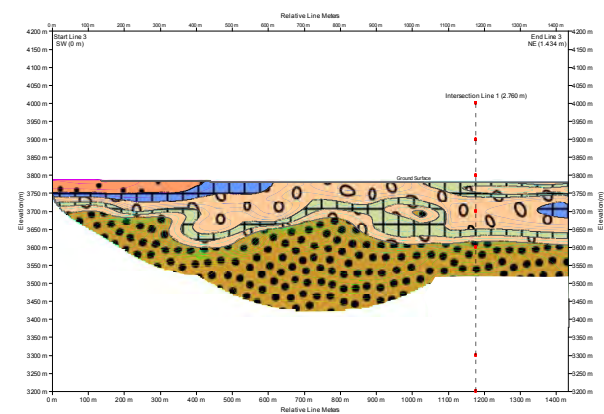
Appendix 2: Drill Logs – LSC Exploration Drilling

Appendix 3: RBRC Sample Results and Lithological Descriptions

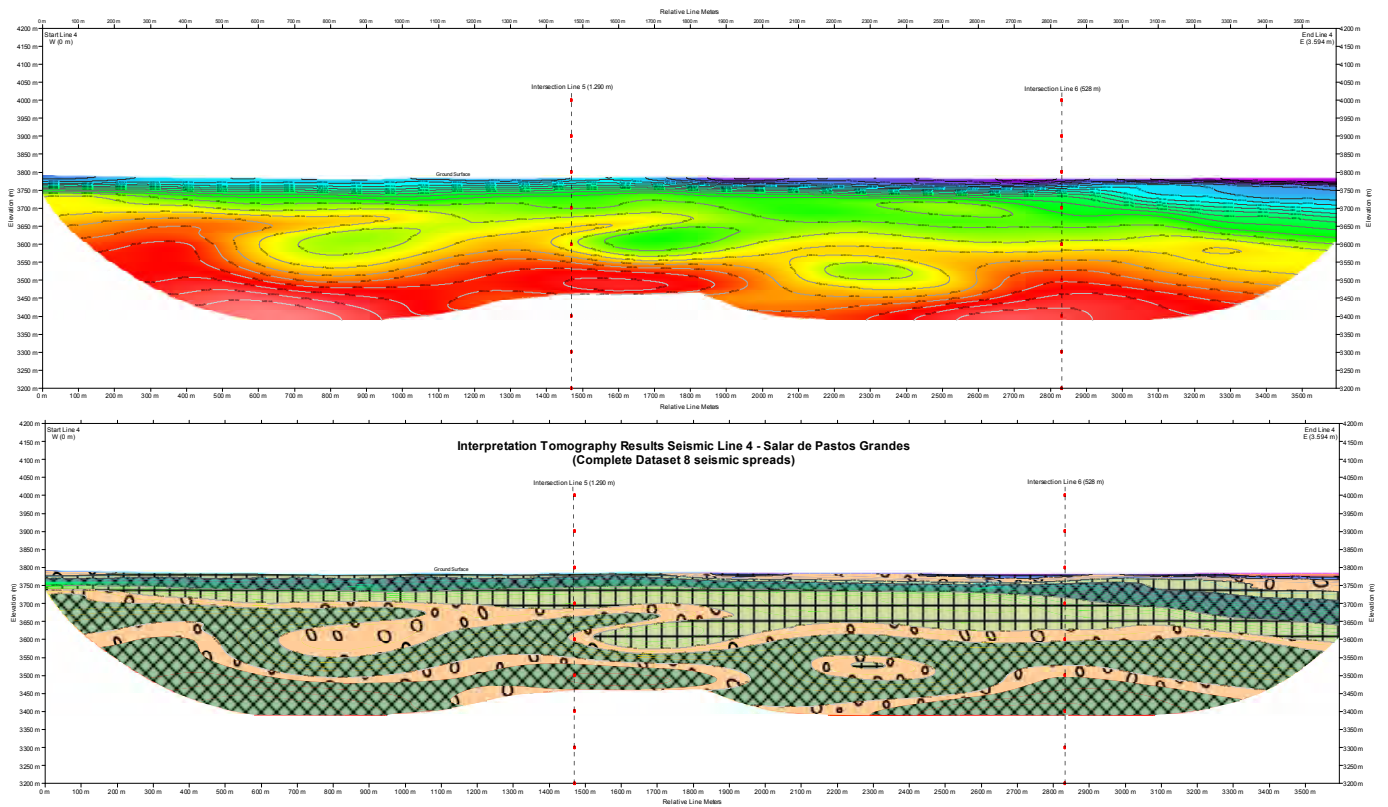
Appendix 1: Seismic Tomography Results

[illegible]

**Interpretation Tomography Results Seismic Line 3 - Salar de Pastos Grandes
(Complete Dataset 3 seismic spreads)**



WET Results Seismic Line 4 - Salar de Pastos Grandes
(Complete Dataset 8 seismic spreads / 200 Iterations)

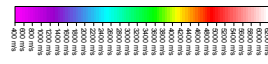


Seismic Line Location:
SEISMIC LINE 4 - Salar de Pastos Grandes

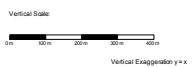


Coordinates UTM - 19S

Seismic Vp Velocity Distribution WET Inversion (m/s):



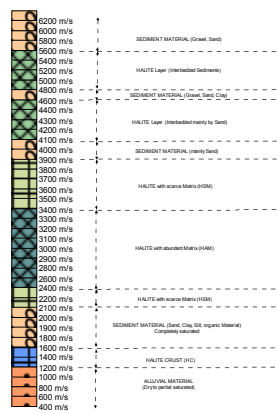
Scale:



Annotations:

- 1) The WET Tomography Section contains 8 seismic spreads of line 4. (Complete Dataset, 150 Shotpoints, 14,400 seismic traces processed).
- 2) The WET Inversion was based on the initial DELTA TV Model. The WET Model is product of 200 Inversion Iterations.
- 3) For the seismic data calibration sequence the projection of the drillhole SPG-2017-04A was used.
- 4) Although there is a reasonable understanding of the overall geology, further drilling is highly recommended to improve the confidence in the interpretation of the detailed sedimentary and basement sequence, and hence, reduce the still existing ambiguities of the seismic model.

Seismic Velocity Classification



Project Data/Processing Parameters

Location: Salar de Pastos Grandes, Salta, Argentina

Date: 01/01/2018

Project Name: WET Tomography

Processed Data: 14,400 traces

Processing Software: WET

Processing Version: 1.0.0

Processing Parameters: 1.0.0

Processing Results: 1.0.0

Project Description

1. Seismic tomography results for Seismic Line 4 - Salar de Pastos Grandes.

2. The WET Tomography results are based on the initial DELTA TV Model.

3. The WET Tomography results are based on the initial DELTA TV Model.

4. The WET Tomography results are based on the initial DELTA TV Model.

5. The WET Tomography results are based on the initial DELTA TV Model.

6. The WET Tomography results are based on the initial DELTA TV Model.

7. The WET Tomography results are based on the initial DELTA TV Model.

8. The WET Tomography results are based on the initial DELTA TV Model.

9. The WET Tomography results are based on the initial DELTA TV Model.

10. The WET Tomography results are based on the initial DELTA TV Model.

11. The WET Tomography results are based on the initial DELTA TV Model.

12. The WET Tomography results are based on the initial DELTA TV Model.

13. The WET Tomography results are based on the initial DELTA TV Model.

14. The WET Tomography results are based on the initial DELTA TV Model.

15. The WET Tomography results are based on the initial DELTA TV Model.

16. The WET Tomography results are based on the initial DELTA TV Model.

17. The WET Tomography results are based on the initial DELTA TV Model.

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Seismic Survey Salar de Pastos Grandes 2018

WET Tomography Results & Interpretation

Seismic Line 4 - Salar de Pastos Grandes

FIGURE 16



Vertical Scale:



0 m 100 m 200 m 300 m 400 m

Vertical Exaggeration $y = x$

1) The WET Tomography Section contains 5 seismic spreads of line 1. (Complete Dataset, 93 Shotpoints, 8.928 seismic traces processed).

2) The WET Inversion was based on the initial DELTA TV Model. The WET Model is product of 200 Inversion Iterations.

3) For the seismic data calibration sequence the projection of the drillhole SPG-2017-04A was used.

4) Although there is a reasonable understanding of the overall geology, further drilling is highly recommended to improve the confidence in the interpretation of the detailed sedimentary and basement sequence, and hence, reduce the the still existing ambiguities of the seismic model.

6200 m/s	↑
6000 m/s	
5800 m/s	SEDIMENTARY MATERIAL (Gravel, Sand)
5600 m/s	
5400 m/s	
5200 m/s	HAUTE Layer (Unconsolidated Sediments)
5000 m/s	
4800 m/s	
4600 m/s	
4400 m/s	
4200 m/s	
4000 m/s	HAUTE Layer (Unconsolidated Sediments)
3800 m/s	
3600 m/s	
3400 m/s	SEDIMENTARY MATERIAL (Gravel, Sand)
3200 m/s	
3000 m/s	
2800 m/s	
2600 m/s	HAUTE with coarse sand (100%)
2400 m/s	
2200 m/s	
2000 m/s	
1800 m/s	HAUTE with sandstone (100%)
1600 m/s	
1400 m/s	
1200 m/s	HAUTE with coarse sand (100%)
1000 m/s	
800 m/s	SEDIMENTARY MATERIAL (Gravel, Sand, Organic Material)
600 m/s	Compaction zone
400 m/s	

Source File Recording Parameters Instrument: SpectraAnalyzer1000 (384 active channels) Date: 2016-08-05 10:10:10 Source Type: P-0104 Acquisition Duration: 17.000 Hz Sample Rate: 1000 Hz, 1000000 Samples Recorder Type: SingleSweepGeophones RecorderSamplingRate: 1000 Hz RecorderSamplingPath: 0-0-0	Sampling Configuration Sample Rate: 1000 Hz Sample Path: SpectraAnalyzer1000 / PulseTernGeophony100 Channels File Prefix: P-0104 - v-ws4g24 Geophones Timespan: 17.000s, 0.25 s x 1.00s Compression: 16-bit, 3.000 Hz
---	---

P-Wave Seismic Reflection Tomography Processing Sequence

- [illegible]



Lithium S Corporation
Seismic Survey Salar de Pastos Grandes 2018

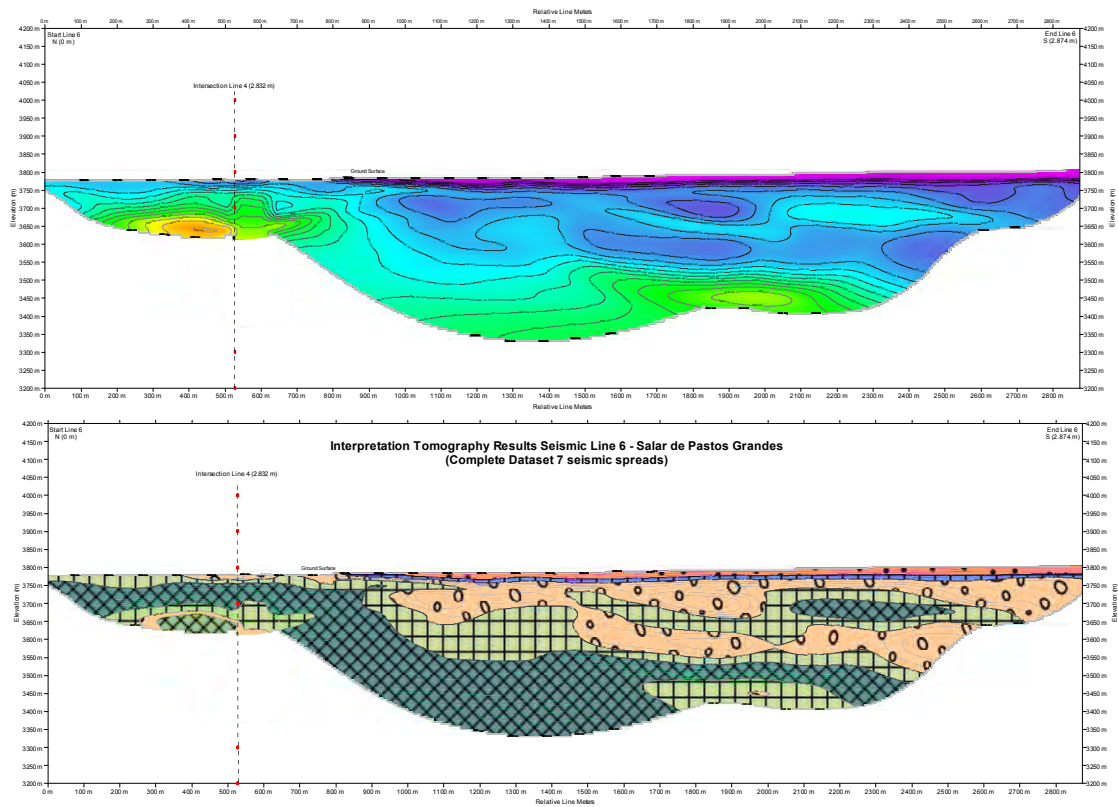
WET Tomography Results & Interpretation
Salar de Pastos Grandes - Salar de Pastos Grandes

Figure 17

Depth	Velocity (km/s)
0.00	1.50
1.00	1.60
2.00	1.70

FIGURE 17

WET Results Seismic Line 6 - Salar de Pastos Grandes
(Complete Dataset 7 seismic spreads / 200 Iterations)

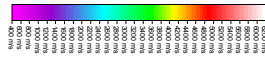


Seismic Line Location:
SEISMIC LINE 6 - Salar de Pastos Grandes



Coordinates UTM - 19S

Seismic Vp Velocity Distribution WET Inversion (m/s):



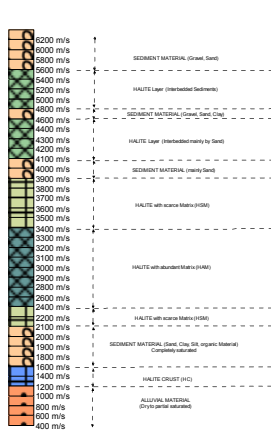
Scale:



Annotations:

- 1) The WET Tomography Section contains 7 seismic spreads of line 6. (Complete Dataset, 125 Shotpoints, 12,000 seismic traces processed).
- 2) The WET Inversion was based on the initial DELTA TV Model. The WET Model is product of 200 Inversion Iterations.
- 3) For the seismic data calibration sequence the projection of the drillhole SPG-2017-04A was used.
- 4) Although there is a reasonable understanding of the overall geology, further drilling is highly recommended to improve the confidence in the interpretation of the detailed sedimentary and basement sequence, and hence, reduce the still existing ambiguities of the seismic model.

Seismic Velocity Classification



Project Data/Processing Parameters

Location: Salar de Pastos Grandes, (La Antea Channel)

Date: 01-04-2019

Processed by: LSC

Acquisition/Processing/Integration

Project Name: WET Tomography

Project Number: 7280436.27

Project Date: 01-04-2019

Project Location: Salar de Pastos Grandes

Project Scale: 1:100,000

Project Status: Completed

Project Description/Summary

1. Seismic data acquisition and processing

2. Seismic data processing and interpretation

3. Seismic data processing and interpretation

4. Seismic data processing and interpretation

5. Seismic data processing and interpretation

6. Seismic data processing and interpretation

7. Seismic data processing and interpretation

8. Seismic data processing and interpretation

9. Seismic data processing and interpretation

10. Seismic data processing and interpretation

11. Seismic data processing and interpretation

12. Seismic data processing and interpretation

13. Seismic data processing and interpretation

14. Seismic data processing and interpretation

15. Seismic data processing and interpretation

16. Seismic data processing and interpretation

17. Seismic data processing and interpretation

LSC LITHIUM CORPORATION

Seismic Survey Salar de Pastos Grandes 2018

WET Tomography Results & Interpretation

Seismic Line 6 - Salar de Pastos Grandes

FIGURE 18

Appendix 2: Drill Logs – LSC Exploration Drilling

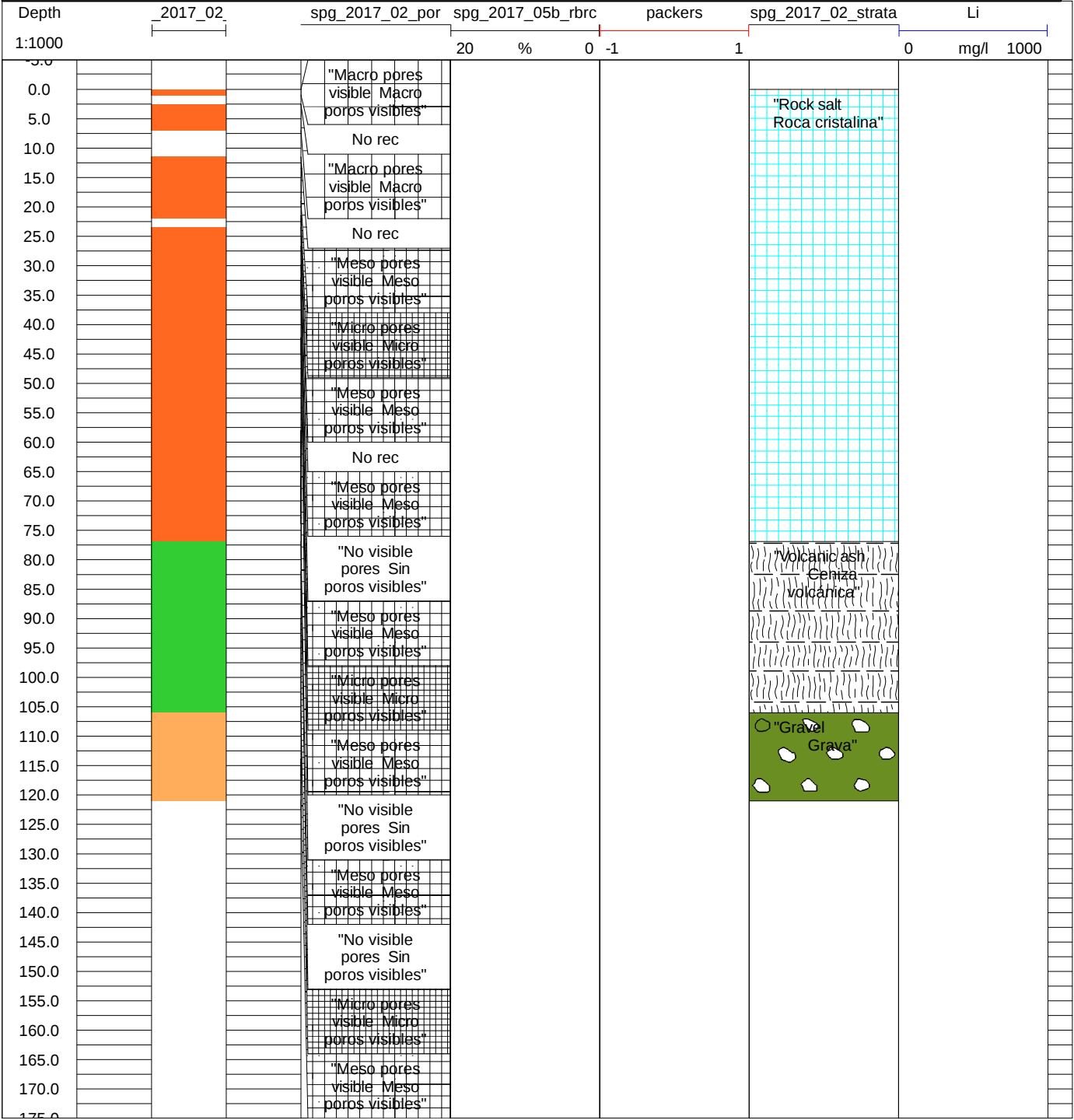


Project Pastos Grandes

Borehole plot

BH_ID SPG_2017_02

Date



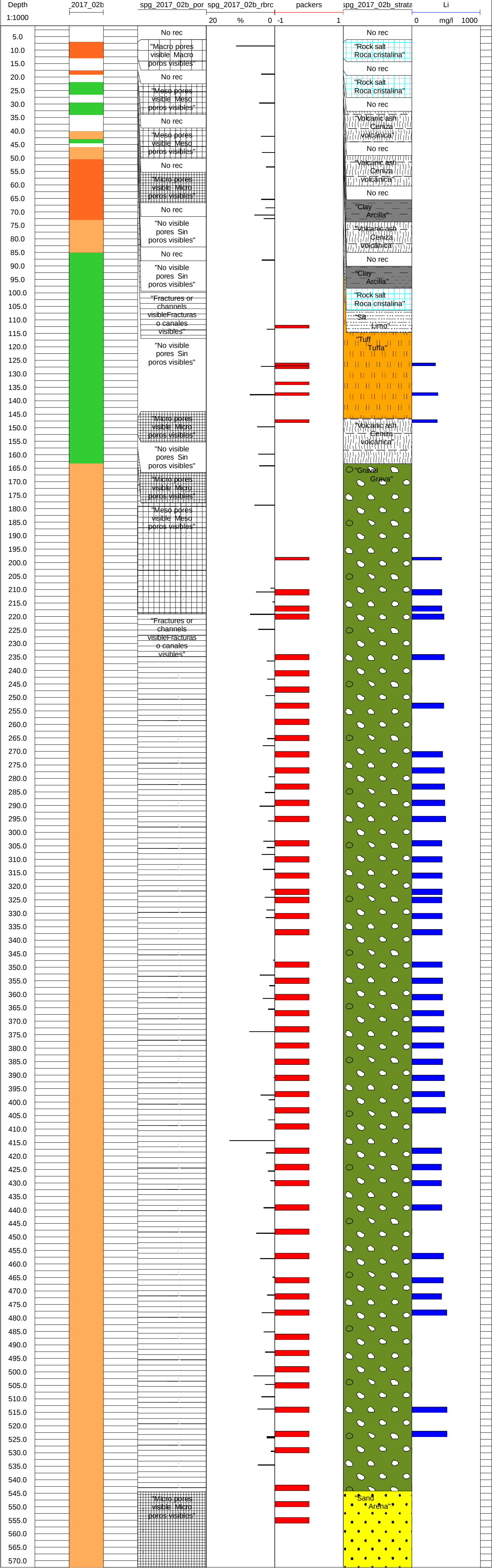


Project Pastos Grandes

Borehole plot

BH_ID SPG_2017_02b

Date



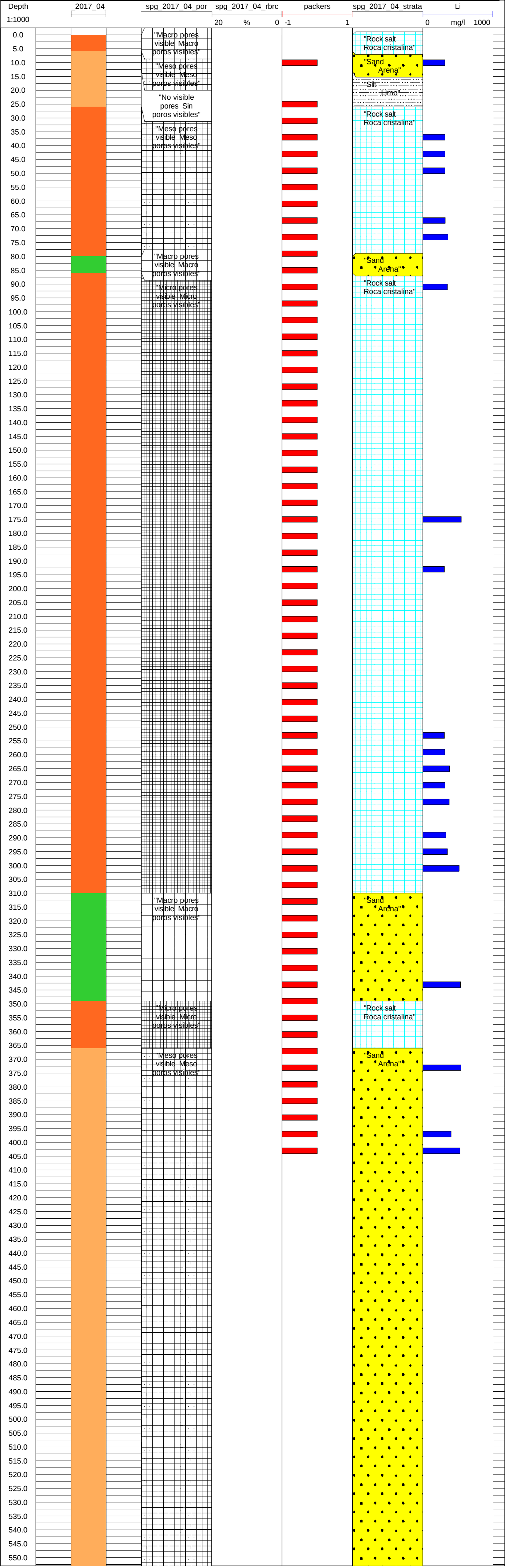


Project Pastos Grandes

Borehole plot

BH_ID SPG_2017_04

Date



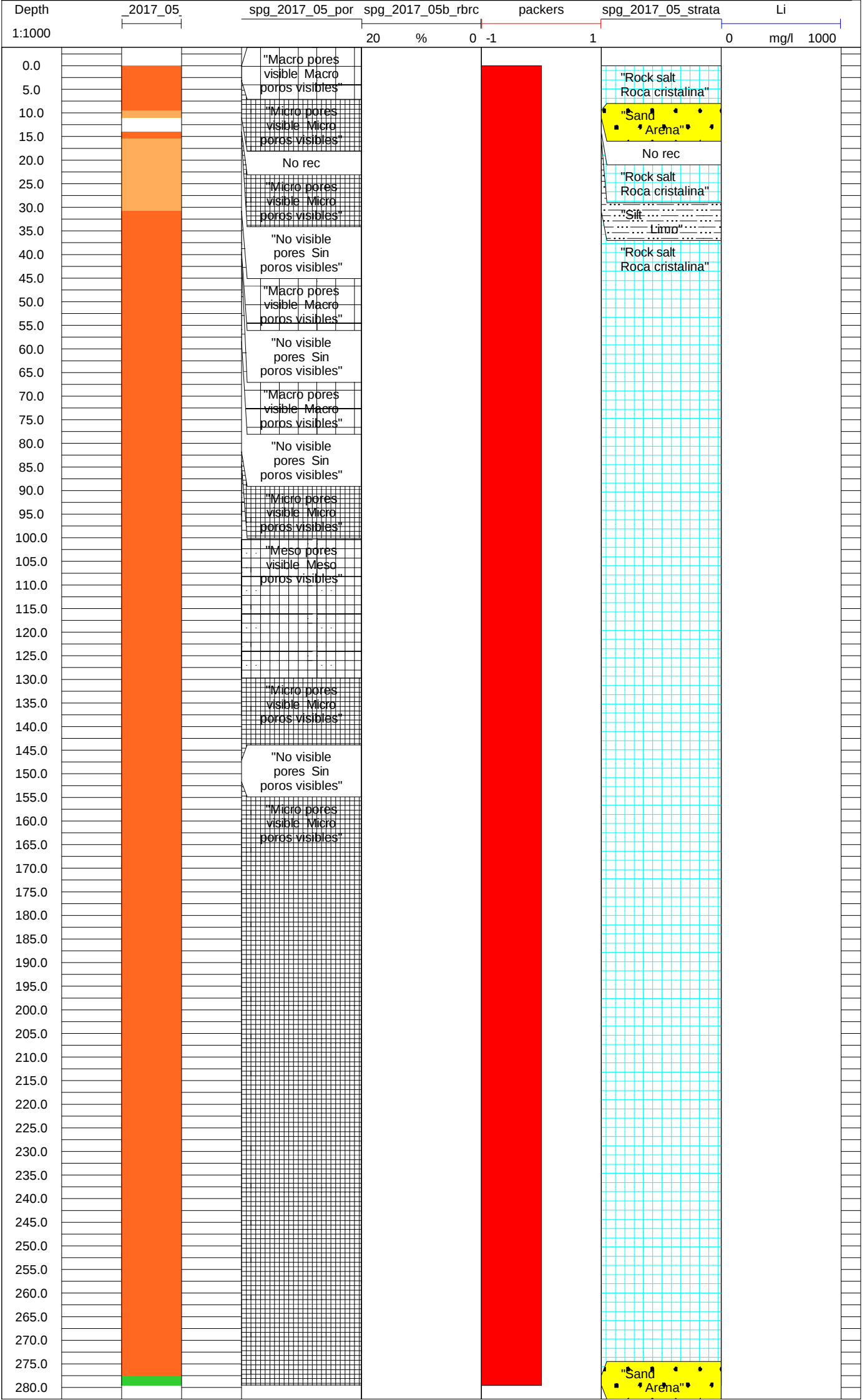


Project Pastos Grandes

Borehole plot

BH_ID SPG_2017_05

Date 13/04/18



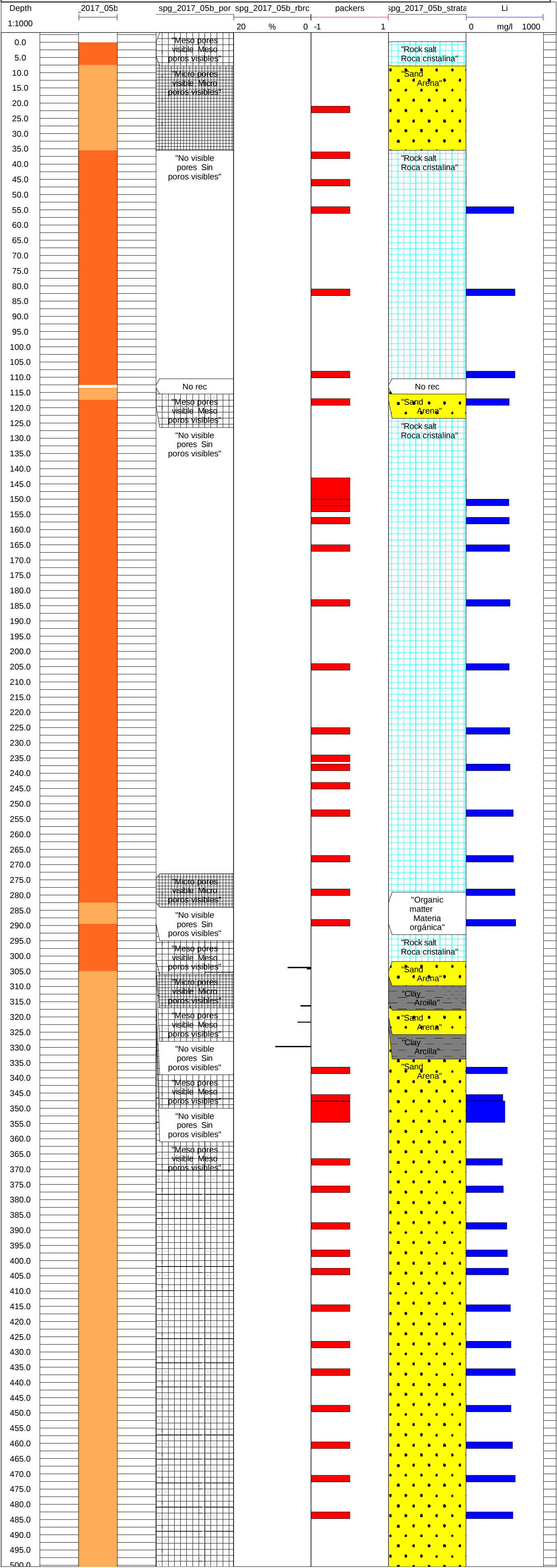


Project Pastos Grandes

Borehole plot

BH_ID SPG_2017_05b

Date





Project

Pastos Grandes

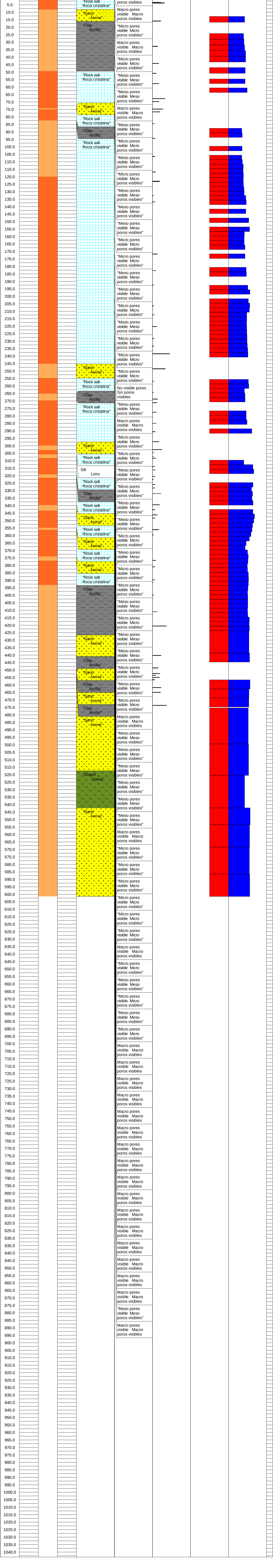
Borehole plot

BH_ID

PG_18_01

Date

30/08/18



Appendix 3: RBRC Sample Results and Lithological Descriptions

Hole	Sample	From (m)	To (m)	Length (m)	Relative Brine Release Capacity (% cm3/cm3)	Technician Description
SPG-2017-02	RBRC-SPG-01	6.76	6.98	0.22	0.73	Gypsum core, light weight, with halite in veins, impurities, and some macro pores
SPG-2017-02	RBRC-SPG-02	12.77	12.88	0.11	2.70	Sand core, with salt
SPG-2017-02	RBRC-SPG-03	18.00	18.11	0.11	1.32	Sand core, dense, cemented, with salt and silt
SPG-2017-02	RBRC-SPG-04	25.35	25.47	0.12	4.60	Clay core, with silt and salt
SPG-2017-02	RBRC-SPG-05	30.77	30.90	0.13	4.61	Silt core, with sand and some salt
SPG-2017-02	RBRC-SPG-06	34.26	34.35	0.09	0.68	Halite core, large crystals, with sand matrix
SPG-2017-02	RBRC-SPG-07	38.25	38.45	0.20	0.55	Clear halite core, medium crystals, dense
SPG-2017-02	RBRC-SPG-08	42.60	42.75	0.15	4.31	Halite core, medium and large crystals, with sand, silt, and gypsum
SPG-2017-02	RBRC-SPG-09	51.48	51.66	0.18	1.47	Halite core, large crystals, with macro pores and sand in matrix
SPG-2017-02	RBRC-SPG-10	56.79	56.91	0.12	2.71	Halite core, medium crystals, with silt and clay matrix
SPG-2017-02	RBRC-SPG-11	64.00	64.13	0.13	5.83	Halite core, medium crystals, dense, with clay layers and macro pores
SPG-2017-02	RBRC-SPG-12	68.54	68.65	0.11	1.71	Halite core, medium to large crystals, with much clay and sand
SPG-2017-02	RBRC-SPG-13	75.76	75.86	0.10	0.67	Clay core, with sand and salt
SPG-2017-02	RBRC-SPG-14	90.60	90.67	0.07	5.60	Sand core, brittle, with salt
SPG-2017-02	RBRC-SPG-15	100.30	100.39	0.09	1.71	Sand core, brittle, with salt
SPG-2017-02	RBRC-SPG-16	102.70	102.76	0.06	2.26	Sand core, cemented, with silt and salt
SPG-2017-02	RBRC-SPG-17	106.12	106.18	0.06	1.16	Sand core, loose, with salt
SPG-2017-02	RBRC-SPG-18	108.43	108.60	0.17	0.98	Sandstone core, dense, with halite and gravel in matrix
SPG-2017-02b	RBRC-SPG-19	8.40	8.50	0.10	11.29	Halite core, large crystals, with gypsum and macro pores
SPG-2017-02b	RBRC-SPG-20	18.81	19.00	0.19	3.96	Sand core, cemented, with gravel and salt
SPG-2017-02b	RBRC-SPG-22	29.52	29.65	0.13	4.45	Sand core, cemented, with gravel, silt, and salt
SPG-2017-02b	RBRC-SPG-23	41.89	42.00	0.11	4.03	Sand core, cemented, with silt and salt
SPG-2017-02b	RBRC-SPG-24	47.92	48.02	0.10	3.73	Sand core, cemented with silt, halite, fine grained, and gypsum
SPG-2017-02b	RBRC-SPG-25	53.22	53.36	0.14	2.53	Halite core, large crystals, dense, with large macro pores
SPG-2017-02b	RBRC-SPG-27	65.22	65.35	0.13	3.94	Halite core, large crystals, with silt and sand in matrix
SPG-2017-02b	RBRC-SPG-28	68.38	68.50	0.12	2.67	Halite core, large crystals, with gypsum and macro pores
SPG-2017-02b	RBRC-SPG-29	71.10	71.23	0.13	5.94	Halite core, large crystals, with sand, silt, and gypsum in matrix
SPG-2017-02b	RBRC-SPG-30	72.35	72.50	0.15	3.16	Halite core, large crystals, with sand and silt in matrix, macro pores
SPG-2017-02b	RBRC-SPG-31	87.68	87.87	0.19	3.79	Silt core, cemented, with sand and salt
SPG-2017-02b	RBRC-SPG-32	133.35	113.50	0.15	2.26	Sand core, with silt, gravel, and salt
SPG-2017-02b	RBRC-SPG-33	137.62	137.79	0.17	7.22	Sand core, loose with silt, gravel, and salt
SPG-2017-02b	RBRC-SPG-34	149.60	149.72	0.12	5.11	Sand core, much salt and small amount of gravel
SPG-2017-02b	RBRC-SPG-35	127.16	127.26	0.10	3.98	Clay core, with salt
SPG-2017-02b	RBRC-SPG-36	159.68	159.82	0.14	4.80	Sand core, brittle, partially intact, with silt and salt
SPG-2017-02b	RBRC-SPG-37	163.95	164.17	0.22	4.50	Sand core, with gravel and salt
SPG-2017-02b	RBRC-SPG-38	178.56	178.71	0.15	5.90	Sand core, with gravel and salt
SPG-2017-02b	RBRC-SPG-39	209.40	209.52	0.12	1.20	Sandstone core with salt
SPG-2017-02b	RBRC-SPG-40	210.80	210.91	0.11	5.40	Sandstone core, dense, with salt
SPG-2017-02b	RBRC-SPG-41	214.50	214.60	0.10	0.60	Sandstone core, dense
SPG-2017-02b	RBRC-SPG-42	219.00	219.15	0.15	7.20	Sand core with salt
SPG-2017-02b	RBRC-SPG-43	224.61	224.80	0.19	4.70	Silt core, brittle, with gravel, salt, halite, small crystals
SPG-2017-02b	RBRC-SPG-44	236.36	236.50	0.14	2.30	Sandstone core, dense, with gypsum and salt
SPG-2017-02b	RBRC-SPG-45	243.06	243.18	0.12	2.20	Sandstone core, moderately dense, with gypsum and salt
SPG-2017-02b	RBRC-SPG-46	249.19	249.31	0.12	2.70	Claystone, with silt, sand, and fine grained halite
SPG-2017-02b	RBRC-SPG-47	265.11	265.27	0.16	2.20	Sand core, dense, cemented, brittle, soft, with halite, medium crystals, and silt
SPG-2017-02b	RBRC-SPG-48	267.77	267.90	0.13	3.50	Silt core, brittle, soft, with halite, medium crystals
SPG-2017-02b	RBRC-SPG-49	279.28	279.43	0.15	1.80	Sandstone, with silt, gravel, and halite, small crystals
SPG-2017-02b	RBRC-SPG-50	285.11	285.28	0.17	2.80	Sandstone core, dense, with silt and gravel
SPG-2017-02b	RBRC-SPG-51	290.22	290.38	0.16	4.40	Sandstone core, with gravel and halite, medium crystals
SPG-2017-02b	RBRC-SPG-52	295.66	295.77	0.11	1.90	Sandstone, with clay, silt, gravel, and salt
SPG-2017-02b	RBRC-SPG-53	303.15	303.28	0.13	3.30	Silt core, cemented, with sand, gravel, and halite, large crystals
SPG-2017-02b	RBRC-SPG-54	305.49	305.67	0.18	2.30	Sandstone, with silt, gravel, and halite, large crystals
SPG-2017-02b	RBRC-SPG-55	308.07	308.23	0.16	3.80	Silt core, with sand, and fine grained halite
SPG-2017-02b	RBRC-SPG-56	313.60	313.78	0.18	3.40	Conglomerate, dense, cemented with gravel, silt and sand in matrix
SPG-2017-02b	RBRC-SPG-57	321.21	321.34	0.13	1.00	Silt core, dense, with sand and clay
SPG-2017-02b	RBRC-SPG-58	324.00	324.13	0.13	2.90	Sandstone, with gravel and salt
SPG-2017-02b	RBRC-SPG-59	328.70	328.80	0.10	2.40	Sand core, with silt, clay, gravel, and much fine grained halite
SPG-2017-02b	RBRC-SPG-60	331.50	331.60	0.10	2.60	Sandstone, with silt and salt
SPG-2017-02b	RBRC-SPG-61	347.27	347.42	0.15	0.50	Sandstone with silt
SPG-2017-02b	RBRC-SPG-62	352.75	352.89	0.14	4.30	Sand core, with halite, small crystals, gravel and silt
SPG-2017-02b	RBRC-SPG-63	356.70	356.88	0.18	1.60	Conglomerate, dense, cemented with gravel, silt, sand, and fine grained halite
SPG-2017-02b	RBRC-SPG-64	361.50	361.61	0.11	3.50	Silt core, with much fine grained halite and gravel
SPG-2017-02b	RBRC-SPG-65	365.40	365.57	0.17	1.90	Sandstone with silt
SPG-2017-02b	RBRC-SPG-66	373.82	373.93	0.11	7.40	Silt core, crumbly, cemented, with sand, clay, gravel, and halite, medium crystals
SPG-2017-02b	RBRC-SPG-67	390.80	390.93	0.13	0.20	Claystone with silt
SPG-2017-02b	RBRC-SPG-68	397.27	397.38	0.11	4.10	Silt core, dense

SPG-2017-02b	RBRC-SPG-69	399.00	399.12	0.12	1.70	Conglomerate, very dense, cemented with gravel, silt, sand, and clay
SPG-2017-02b	RBRC-SPG-70	406.50	406.63	0.13	1.89	Sandstone with salt
SPG-2017-02b	RBRC-SPG-71	414.20	414.31	0.11	13.18	Siltstone, brittle, with halite, large crystals, sand, gravel, and clay
SPG-2017-02b	RBRC-SPG-72	418.74	418.92	0.18	2.51	Clay core with salt
SPG-2017-02b	RBRC-SPG-73	425.43	425.60	0.17	1.94	Conglomerate, dense, cemented, with gravel, sand and silt in matrix
SPG-2017-02b	RBRC-SPG-74	429.00	429.17	0.17	1.29	Sandstone, cemented, with silt and clay in matrix
SPG-2017-02b	RBRC-SPG-75	438.99	439.18	0.19	3.25	Conglomerate, dense, with halite, medium crystals, gravel, sand, silt, and clay
SPG-2017-02b	RBRC-SPG-76	448.50	448.70	0.20	5.37	Conglomerate, cemented, with sand, gravel, sand, and halite, small to medium crystals
SPG-2017-02b	RBRC-SPG-77	457.88	458.03	0.15	4.24	Conglomerate, with much halite, medium to large crystals, sand and clay in matrix
SPG-2017-02b	RBRC-SPG-78	464.80	464.96	0.16	0.63	Claystone, dense, with silt
SPG-2017-02b	RBRC-SPG-79	471.35	471.60	0.25	2.24	Siltstone, dense, with much halite, medium crystals, sand and clay
SPG-2017-02b	RBRC-SPG-80	477.97	478.12	0.15	3.75	Clay core, cemented, dense, with sand and salt
SPG-2017-02b	RBRC-SPG-81	485.10	485.20	0.10	3.14	Sandstone, dense, with silt and salt
SPG-2017-02b	RBRC-SPG-82	492.50	492.69	0.19	2.76	Conglomerate, cemented, dense, with gravel, sand, and silt in matrix
SPG-2017-02b	RBRC-SPG-83	501.36	501.51	0.15	6.15	Silt core, cemented, dense, with clay and salt
SPG-2017-02b	RBRC-SPG-84	504.57	504.74	0.17	2.85	Sandstone, dense
SPG-2017-02b	RBRC-SPG-85	509.07	509.30	0.23	3.87	Clay core, cemented, dense, with sand and salt
SPG-2017-02b	RBRC-SPG-86	513.67	513.84	0.17	5.02	Clay core, dense, with gravel, halite, large crystals, and sand
SPG-2017-02b	RBRC-SPG-87	523.86	524.45	0.59	2.26	Clay core, dense, cemented, halite, medium crystals, with some sand and gravel
SPG-2017-02b	RBRC-SPG-88	529.28	529.45	0.17	1.09	Sandstone, with silt, clay, and salt
SPG-2017-02b	RBRC-SPG-89	534.43	534.60	0.17	4.87	Clay core, dense, cemented, with sand gravel, and halite, medium to large crystals
SPG-2017-05	RBRC-SPG-90	22.10	22.25	0.15	8.5	Clay core with silt and sand
SPG-2017-05	RBRC-SPG-91	28.66	28.78	0.12	7.0	Silt core with salt and gypsum
SPG-2017-05	RBRC-SPG-92	32.10	32.23	0.13	6.1	Silt/Halite core, medium crystal, with gypsum in matrix
SPG-2017-05	RBRC-SPG-93	36.71	36.89	0.18	2.9	Halite core, fine grained, layered, with sand and silt
SPG-2017-05	RBRC-SPG-94	42.50	42.68	0.18	3.5	Halite core, fine grained, layered, dense, with sand and gypsum
SPG-2017-05	RBRC-SPG-95	46.33	46.46	0.13	1.6	Halite core, fine grained, layered, with sand and gypsum
SPG-2017-05	RBRC-SPG-96	55.25	55.40	0.15	1.9	Halite, small crystals, with sand and gypsum in matrix
SPG-2017-05	RBRC-SPG-97	65.02	65.18	0.16	1.0	Halite, large crystals, with sand and gypsum
SPG-2017-05	RBRC-SPG-98	81.19	81.35	0.16	2.4	Halite core, medium crystals, dense, with sand in matrix
SPG-2017-05	RBRC-SPG-99	97.51	97.71	0.20	2.6	Halite core, medium crystals with gypsum, silt and some sand
SPG-2017-05	RBRC-SPG-100	108.68	108.88	0.20	1.5	Halite core, fine grained, with a thin layer of gypsum
SPG-2017-05	RBRC-SPG-101	113.82	114.03	0.21	0.8	Halite core, large crystal with small amount of sand and silt
SPG-2017-05	RBRC-SPG-102	118.04	118.21	0.17	5.4	Gypsum core, with medium crystal halite, sand, and macro pores.
SPG-2017-05	RBRC-SPG-103	143.79	143.93	0.14	0.9	Sandstone core, cemented, dense, with salt
SPG-2017-05	RBRC-SPG-104	150.14	150.31	0.17	2.7	Silt core, with salt, sand, and clay
SPG-2017-05	RBRC-SPG-105	157.61	157.88	0.27	0.8	Sandstone core, cemented, with large crystal halite
SPG-2017-05	RBRC-SPG-106	166.65	166.87	0.22	2.4	Sandstone, cemented, dense, with silt and salt
SPG-2017-05	RBRC-SPG-107	182.12	182.31	0.19	1.0	Halite core, medium crystals, with clay and silt in matrix
SPG-2017-05	RBRC-SPG-108	203.75	203.97	0.22	0.6	Sandstone core, cemented, dense
SPG-2017-05	RBRC-SPG-109	206.00	206.21	0.21	1.1	Halite core, medium crystals, cemented, with sand in matrix
SPG-2017-05	RBRC-SPG-110	224.78	224.95	0.17	4.4	Halite core, large crystals, layered, brittle, with sand
SPG-2017-05	RBRC-SPG-111	233.24	233.37	0.13	1.0	Sandstone core, cemented, dense, with some small crystal halite
SPG-2017-05	RBRC-SPG-112	237.10	237.24	0.14	0.7	Sandstone core, cemented, dense, with some fine grained halite
SPG-2017-05	RBRC-SPG-113	242.00	242.20	0.20	2.7	Halite core, fine grained, dense, with sand and silt in matrix
SPG-2017-05	RBRC-SPG-114	253.63	253.85	0.22	1.0	Halite core, medium crystals, with cemented sand in matrix
SPG-2017-05	RBRC-SPG-115	266.61	266.72	0.11	0.5	Halite core, medium crystals, with cemented sand and gypsum in matrix
SPG-2017-05	RBRC-SPG-116	277.38	277.58	0.20	1.1	Sandstone core, cemented, dense, with some fine grained halite
SPG-2017-05	RBRC-SPG-117	278.41	278.52	0.11	10.5	Sand core, soft, with silt and salt
SPG-2017-05B	RBRC-SPG-118	303.65	303.81	0.16	2.4	Halite core, small crystals, brittle, with silt and gypsum
SPG-2017-05B	RBRC-SPG-119	303.61	303.79	0.18	6.0	Sand core, brittle, cemented, with silt and salt
SPG-2017-05B	RBRC-SPG-120	304.03	304.23	0.20	1.0	Clay core, lightweight, with gypsum and sand
SPG-2017-05B	RBRC-SPG-121	316.15	316.38	0.23	2.7	Gypsum core, lightweight, with clay
SPG-2017-05B	RBRC-SPG-122	321.59	321.71	0.12	3.4	Clay core, cemented, dense
SPG-2017-05B	RBRC-SPG-123	329.62	329.81	0.19	9.2	Sand core, loose, with salt
PG_18_01	PG0017A	3.37	3.54	0.17	4.3	Halite core, small crystals, with gypsum and silt in the matrix
PG_18_01	PG0018A	3.67	3.97	0.3	6.2	Fine grained, marbled, chalk like when dry
PG_18_01	PG0019A	15.77	16	0.23	4.3	Fine grained, marbled, chalk like when dry
PG_18_01	PG0020A	32.68	32.98	0.3	2.7	Clay core, with silt
PG_18_01	PG0021A	44.12	44.37	0.25	3.2	Clay/Silt core, dense, marbled, with gypsum
PG_18_01	PG0022A	50.73	50.98	0.25	2.0	Clay/Silt core, dense, with sand, salt and chunks of medium crystal halite
PG_18_01	PG0023A	57.63	57.88	0.25	3.3	Clay core, with some silt and salt
PG_18_01	PG0024A	67.66	67.88	0.22	6.6	Halite core, fine grained and medium crystals, with gypsum and silt
PG_18_01	PG0025A	69.66	69.88	0.22	3.4	Halite core, layered, small to medium crystals, with impurities and gypsum
PG_18_01	PG0026A	74.62	74.82	0.2	5.4	Halite core, small crystals, with sand, silt, and small amount of gypsum
PG_18_01	PG0027A	76.53	76.74	0.21	3.9	Halite core, medium crystals
PG_18_01	PG0028A	84.34	84.58	0.24	0.8	Fine grained, layered, chalk like when dry
PG_18_01	PG0029A	94.22	94.48	0.26	1.3	Halite core, medium crystals, with clay
PG_18_01	PG0030A	106.36	106.63	0.27	1.1	Halite core, medium crystals, with silt and little gypsum
PG_18_01	PG0031A	116.73	116.95	0.22	1.6	Halite core, medium crystals, with silt in matrix

PG_18_01	PG0032A	122.97	123.21	0.24	3.7	Gypsum core
PG_18_01	PG0033A	132.62	132.84	0.22	0.5	Halite core, medium crystals, with traces of sand
PG_18_01	PG0034A	136.7	136.91	0.21	1.2	Halite core, small and medium crystals, with traces of silt
PG_18_01	PG0075A	160.16	160.36	0.2	6.0	Halite core, medium crystals, with sand and silt
PG_18_01	PG0076A	171.62	171.83	0.21	2.5	Halite core, large crystals, with traces of silt
PG_18_01	PG0077A	182.73	182.88	0.15	1.8	Halite core, medium crystals, with silt
PG_18_01	PG0078A	192.28	192.49	0.21	0.5	Halite core, fine grained, with some gypsum
PG_18_01	PG0079A	206.24	206.5	0.26	0.5	Halite core, large crystals, with some gypsum
PG_18_01	PG0102A	212.29	212.47	0.18	0.91	Halite core, medium crystals, with silt and a small amount of gypsum
PG_18_01	PG0103A	220.1	220.31	0.21	2.28	Halite core, small crystals, with layers of sand and silt
PG_18_01	PG0104A	228.18	228.37	0.19	0.79	Halite core, medium crystals, with traces of silt
PG_18_01	PG0105A	233.25	233.43	0.18	0.69	Halite core, small crystals, with layers of silt and clay
PG_18_01	PG0106A	238.29	238.49	0.2	8.88	Halite core, small and medium crystals, with macropores and voids
PG_18_01	PG0107A	248.32	248.51	0.19	6.79	Silt core, with sand and salt
PG_18_01	PG0108A	256.7	256.87	0.17	0.85	Halite core, large and medium crystals, with impurities
PG_18_01	PG0128A	264.16	264.32	0.16	0.48	Halite core, small crystals, with small amount of sand
PG_18_01	PG0129A	268.66	268.79	0.13	2.68	Silt core, dense
PG_18_01	PG0130A	271.05	271.22	0.17	2.30	Halite core, medium crystals, dense
PG_18_01	PG0131A	277.4	277.58	0.18	2.06	Halite core, small crystals, with small amount of sand, silt and traces of gypsum
PG_18_01	PG0132A	284.89	285.03	0.14	2.00	Halite core, medium crystals, with some silt and small amount of sand
PG_18_01	PG0133A	290.47	290.61	0.14	1.35	Halite core, medium crystals, with gypsum and traces of silt
PG_18_01	PG0134A	297.16	297.34	0.18	3.38	Halite core, medium crystals, with silt and traces of gypsum
PG_18_01	PG0135A	302.45	302.59	0.14	5.05	Clay core, with sand and salt
PG_18_01	PG0136A	304.51	304.64	0.13	0.89	Halite core, small crystals, dense, with layers of silt and sand
PG_18_01	PG0137A	307.31	307.45	0.14	0.67	Halite/silt core, small crystals, with much sand
PG_18_01	PG0138A	308.34	308.48	0.14	1.79	Halite core, medium crystals, with gypsum, silt and sand in matrix
PG_18_01	PG0139A	313.83	314.04	0.21	1.07	Halite core, medium crystals, dense, with gypsum
PG_18_01	PG0161A	316.41	316.58	0.17	1.48	Silt core, dense, with sand and salt
PG_18_01	PG0162A	320.41	320.68	0.27	1.16	Silt core, dense, with clay and salt
PG_18_01	PG0163A	322.41	322.66	0.25	0.50	Halite core, small crystals, with traces of silt
PG_18_01	PG0164A	325.84	326.03	0.19	1.20	Halite/silt core, small crystals, dense, layered, with small amount of sand
PG_18_01	PG0165A	328.14	328.35	0.21	1.00	Halite core, large crystals, dense
PG_18_01	PG0166A	331.9	332.05	0.15	4.43	Halite core, small and large crystals, with silt
PG_18_01	PG0167A	339.33	339.56	0.23	3.69	Halite core, medium crystals, with silt and some gypsum
PG_18_01	PG0168A	342.66	342.81	0.15	1.27	Silt core, dense, with clay and salt
PG_18_01	PG0169A	346.14	346.38	0.24	2.50	Halite core, small crystals, dense, with layers of silt
PG_18_01	PG0170A	348.24	348.4	0.16	1.15	Halite core, small crystals, with silt and some gypsum
PG_18_01	PG0171A	355.97	356.12	0.15	3.16	Silt core, cemented, with sand and some salt
PG_18_01	PG0172A	359.53	359.77	0.24	0.51	Halite core, small crystals, with gypsum
PG_18_01	PG0198A	376.52	376.74	0.22	1.74	Clay core
PG_18_01	PG0199A	380.8	380.99	0.19	1.10	Halite core, medium crystals, with small amount of silt in matrix
PG_18_01	PG0200A	389.54	389.73	0.19	1.01	Halite core, small crystals, with traces of sand and silt
PG_18_01	PG0201A	391.17	391.34	0.17	0.23	Halite core, small crystals, dense, with small amount of sand and gypsum
PG_18_01	PG0202A	399.82	400.02	0.2	0.57	Clay core, cemented, layered with salt
PG_18_01	PG0203A	410.93	411.07	0.14	2.40	Siltstone, with halite, medium crystals, dense
PG_18_01	PG0227A	420.45	420.62	0.17	7.22	Silt core, crumbly, brittle, with sand
PG_18_01	PG0229A	440.12	440.37	0.25	4.47	Sand core
PG_18_01	PG0232A	448.48	448.69	0.21	2.90	Clay core with salt
PG_18_01	PG0233A	452.23	452.43	0.2	3.90	Sand core with some salt
PG_18_01	PG0237A	453.48	453.62	0.14	1.66	Claystone, with some sand and little gypsum
PG_18_01	PG0238A	454.88	455.06	0.18	3.64	Silt core with much sand
PG_18_01	PG0239A	456.34	456.62	0.28	1.02	Siltstone
PG_18_01	PG0240A	461.64	461.85	0.21	4.47	Silt core with salt and little sand
PG_18_01	PG0241A	464.83	465.05	0.22	4.28	Sand core with salt
PG_18_01	PG0244A	473.5	473.71	0.21	7.33	Sand core with silt and some sand