Initial Estimate of Inferred Resources for Alkali Metals and Alkali Earth Metals El Sauz & Fleur Concessions Sonora Lithium Project

(Pursuant to National Instrument 43-101 of the
Canadian Securities Administrators)

Huasabas - Bacadehuachi Area

(Map Sheet H1209)

Sonora, México

Centered at: 29°46’29”N, 109°6’14”W

For

Bacanora Minerals Ltd.
1800 – 510 5^{th} Avenue SW
Calgary, Alberta
Canada T2P 3S2
Tel. +1-403-237-6122

&

Rare Earth Minerals PLC
Suite 3B Princes House,
38 Jermyn Street,
London, SW1Y 6DN
Tel. +44 020 7440 0647

By

Carl G. Verley, P. Geo.
Geological Consultant
Amerlin Exploration Services Ltd.
2150 – 1851 Savage Road
Richmond, B.C. Canada V6V 1R1
Tel. +1-604-821-1088

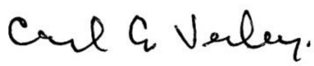
Dated Effective: December 10, 2013.

Date and Signature Page

Dated Effective: December 10, 2013.

Signature:

Signed on: January 9, 2014.



Carl G. Verley, P.Geo.

Table of Contents

List of Figures

List of Tables

Table 1: Abbreviations used in this report

^oC	Degrees Celsius
FeOx	Iron oxides
Fm	Geological formation
gm	gram
ha	Hectares
hrs	hours
km	Kilometre/kilometres
LCE	Lithium Carbonate (Li_2CO_3) Equivalent: determined by multiplying Li value in percent by 5.324 to get an equivalent Li_2CO_3 value in percent
Li	Chemical symbol for the element lithium
ltr	litre
m	Metre/Metres
mm	Millimetre/millimetres
M	Mega (million)
NAD	North American map Datum
NQ	A size of drill core 47.6 mm in diameter
OB	Overburden
ppm	Parts per million
QP	Qualified Person as defined by NI 43-101
S.A. de C.V.	Mexican legal term: Sociedad Anónima de Capital Variable or variable capital corporation, the common form for a corporate entity in Mexico
µm	Micrometre. 1 micrometre = one-millionth of a metre
~	approximately

1.0 Summary

The El Sauz and Fleur concessions (the “Property”) are part of a group of 5 contiguous concessions that are owned by Mexilit S.A. de C.V. (“Mexilit”). Ownership of Mexilit is currently held by Bacanora Minerals Ltd (“Bacanora”) and Rare Earth Minerals PLC (“REM”) under a joint venture arrangement (“Joint Venture #1”). At the present time Bacanora owns 70% of the issued and outstanding shares of Mexilit and REM owns 30% of the shares. REM has a first right of refusal to increase its ownership interest in Mexilit to 49.9%. In addition to the Joint Venture #1 lands Bacanora has entered into an agreement (“Joint Venture #2”) with REM whereby REM has rights to earn up to a 49.9% interest in a 3 concessions totaling 96,964 ha that surround the Joint Venture #1 lands.

The Property covers 3,305 ha in eastern Sonora State, Mexico. The Property is situated 120 km northeast of Hermosillo and approximately 170 km south of the USA – Mexico border and is road accessible (Figure 1).

There are no records of exploration or mineral occurrences in the Project area prior to 1992. In 1992, an American group commenced an exploration program in the area for industrial minerals which led to the discovery of some weakly anomalous boron, with the result that the group abandoned exploration in the area shortly thereafter. Bacanora initiated sampling campaigns in the area of the Property in 2010 and applied for and was granted the El Sauz concession through its wholly-owned subsidiary, Minera Sonora Borax S.A. de C.V. (“MSB”), in that year. Rock sampling on El Sauz was conducted by Bacanora in 2011. In 2012, MSB applied for and was granted the Fleur concession. No further work was conducted on the Property until early 2013 when the Joint Venture #1 was established with REM. The concessions were subsequently transferred from MSB to Mexilit.

The Property area is underlain by Oligocene to Miocene age rhyolitic tuffs, ignimbrites and breccias of the upper volcanic complex of the Sierra Madre Occidental. This succession was subjected to Basin and Range extensional normal faulting during Miocene times that resulted in the development of a series of half-grabens. The half-grabens are locally filled with fluvial-lacustrine sediments and intercalated tuffs. Alkaline volcanism around this time is thought to have contributed lithium and other alkali metals into these or similar basins. Quaternary basalt flows cover the basinal sediment-volcaniclastic succession, except where later faulting and uplift have exposed the basin infill. Mineralization on the Property consists of lithium-bearing clays localized in lacustrine basins. The Property adjoins the La Ventana lithium deposit that is owned by Bacanora.

In early 2013, Bacanora, as operator of the Joint Venture #1, conducted further surface rock sampling and completed a Stage 1 diamond drill program consisting of 1,400 metres of NQ core drilling in 10 holes on the Property. The program was successful in confirming the continuation of lithium-bearing clay units found on Bacanora’s adjacent La Ventana concession onto the Property and demonstrating that significant lithium values occur in the 2 clay units identified by the drilling along the 4.2 kilometres of strike length tested.

In October 2013, Bacanora commenced a Stage 2 diamond drill program on the Property. As of December 10th 2013, 8 drill holes have been completed for the Stage 2 program and results have been received for 6 of these drill holes, as disclosed in Bacanora news release dated

December 10, 2013. The Stage 2 program is ongoing. No results or data from the Stage 2 program have been used to estimate alkali metal or alkali earth metal resources for the Property as of the the effective data and signing date of this report.

Results from the Stage 1 drilling were used to estimate inferred resources in the 2 clay units for lithium (Verley, 2013a). At a cutoff of 2,000 ppm Li, the estimate of inferred resources for the upper clay unit is 20,060,000 tonnes averaging 2,748 ppm Li (1.46% LCE); for the lower clay unit the inferred resource is estimated at 68,211,000 tonnes averaging 3,278 ppm Li (1.75% LCE). The inferred resource for both the upper and lower clay units is estimated to total 88,271,000 tonnes averaging 3,163 ppm Li (1.68% LCE) or 1,486,569 tonnes LCE (Table 1). Both the upper and lower clay units are open down-dip. Additional analysis of the drill core samples indicated there were high levels of other alkali metals and alkali earth metals. Based on the intervals used to estimate inferred lithium resources for the Property (which have been declared in accordance with National Instrument 43-101 – *Standards of Disclosure for Mineral Projects* ("NI 43-101") at varying Li cutoffs, new inferred resources for selected alkalis have been estimated for those same intervals based on the Li cut-offs. The new inferred resources for selected alkalis are tabulated below (Table 2).

Investors are cautioned that further testing will be necessary to confirm economic feasibility of recovering these elements as either co-products or by-products in a potential future mining and processing operation.

Table 2. Estimate of Inferred Resources for Selected Alkalis on the Property

			Grade					
Cut-off (ppm Li)	**True[1] Thickness (m)**	**Tonnes[2] of clay**	**Li ppm**	**K %**	**Rb ppm**	**Cs ppm**	**Mg %**	**Sr ppm**
Upper Clay								
1,000	18.30	57,700,000	1,381	0.59	157	473	1.67	1,274
2,000	6.80	20,060,000	2,748	1.07	267	537	2.16	1,136
3,000	8.10	9,846,000	3,398	1.17	301	560	2.06	1,375
Lower Clay								
1,000	27.60	96,103,000	2,526	1.10	263	702	1.77	983
2,000	14.70	68,211,000	3,278	1.34	331	807	2.22	1,007
3,000	24.00	44,083,000	4,030	1.65	379	886	2.18	1,092
Combined Clay Units								
1,000	45.90	153,806,000	2,052	0.91	224	617	1.73	1,092
2,000	21.50	88,271,000	3,163	1.28	317	749	2.21	1,036
3,000	32.10	53,929,000	3,922	1.56	364	822	2.16	1,148

[2] Specific Gravity = 2.1 tonnes/cubic metre

Based on the drill results, the Qualified Person concludes that, in addition to the previously disclosed lithium resource on the Property, there are inferred resources in alkali metals and alkali earth metals. An exploration program designed to demonstrate recovery of these additional alkali resources is recommended. The work should focus on metallurgical testing, with additional infill drilling on the known clay units on El Sauz as well as a program of geological mapping and sampling on the Joint Venture #2 Lands.

The estimated cost of the recommended exploration program is $US1,250,000.

Figure 1. Sonora Lithium Project Location Map

2.0 Introduction

This report was prepared at the request of Mr. Martin F. Vidal, President of Bacanora Minerals Ltd. and Mr. David Lenigas, Chairman of Rare Earth Minerals PLC.

The purpose of the report is to provide a summary of scientific and technical information concerning estimates of alkali metal and alkali earth metal mineral resources on the Property as a part of Bacanora's continuous disclosure requirements under Canadian securities laws and regulatory policies and corresponding TSX Venture Exchange rules.

The Property forms a part of 10 contiguous concessions that constitute the Sonora Lithium Project (the "Project"), in the state of Sonora, Mexico. Ownership of mineral rights to the Project is currently divided between Bacanora's wholly owned subsidiaries: Minera Sonora Borax S.A. de C.V. ("MSB") and Mexilit S.A. de C.V. ("Mexilit"). An agreement between Bacanora and REM provides REM with the right to acquire up to a 49.9% interest in Mexilit (Joint Venture #1). Currently, REM has exercised its rights to acquire a 30% interest in Mexilit, thus Mexilit is presently controlled on a 70:30 basis by Bacanora and REM, respectively. The El Sauz and Fleur concessions are 2 of 5 contiguous concessions that make up the properties owned by Mexilit; the other 5 contiguous concessions of the Project are owned 100% by Bacanora, through MSB. However, 3 of the 5 concessions owned by Bacanora are now subject to a Memorandum of Understanding (Joint Venture #2) with REM, which allows REM to earn a 30% interest in such concessions with a first right of refusal to acquire an additional 19.9% interest.

Information contained in this report was sourced from Bacanora and involved a complete review and evaluation of all available survey data, drill logs, assay and analytical reports, Government of Mexico mineral titles data bases and topographic maps. General information concerning regional geology and deposits types was sourced from references cited herein and listed at the end of this report.

The Qualified Person responsible for this report, Carl Verley, P.Geo., inspected the Property on March 16 to 18, 2013, April 26, 2013, June 4, 2013 and again on November 29 to December 2, 2013. During this time he examined and verified the location of some of the diamond drill holes, examined the geology of the Property in the field, examined the diamond drill core from the drilling program and collected surface rock samples and duplicate drill core samples for quality assurance purposes. In addition, he reviewed all analytical data generated from exploration on the Property including quality control and quality assurance protocols at the offices of Bacanora's Mexican subsidiary, MSB, in Hermosillo, Mexico.

Mr. Martin F. Vidal, MSc, Lic.Geo., President of Bacanora is responsible for managing the Sonora Lithium Project exploration program. On a day-to-day basis, Mr. Daniel Calles, BSc, is responsible as project geologist for geology, drill supervision, core logging and sampling on the Property. Both Mr. Vidal and Mr. Calles are involved in maintaining good corporate-community social relations with residents of Bacadehuachi and local land owners during work on the Property.

3.0 Reliance on Other Experts

Reliance on other experts has not been used in the preparation of this report.

4.0 Property Description and Location

The Sonora Lithium Project consists of 10 individual mineral concessions. Bacanora through its wholly-owned Mexican subsidiary, MSB, has a 100% interest in 2 of these concessions: La Ventana and La Ventana 1, which cover 1,775 ha.

Mexilit S.A. de C.V. has a 100% interest in 5 concessions (El Sauz, El Sauz 1, El Sauz 2, Fleur and Fleur 2) covering 5,325 ha. Mexilit is controlled by a joint venture (the "Joint Venture #1") between Bacanora and REM, under which Bacanora has a 70% interest and REM has a 30% interest. In addition, REM has a first right of refusal to increase its interest in Joint Venture #1 and consequently, Mexilit, by negotiating the purchase of an additional 19.9% interest in Mexilit from Bacanora.

Furthermore, through a Memorandum of Understanding ("MOU") Bacanora and REM have agreed to terms of a second joint venture ("Joint Venture #2") that will allow REM to earn in and thereby acquire a 30% interest in three other concessions currently held by MSB, namely the Buenavista, Megalit and San Gabriel, which cover a total of approximately 96,964 ha. The MOU also provides REM a first right of refusal to increase its interest in the MOU lands by negotiating for the purchase of an additional 19.9% interest from Bacanora.

The concessions are located approximately 190 km northeast of the city of Hermosillo, in Sonora State, Mexico, and are about 200 km south of the border with Arizona, USA. Table 3 lists the individual concessions. A map with the locations of the 10 contiguous concessions is illustrated in Figure 2 and a detailed map of the core concession in Figure 3.

Table 3: Concession Status, Sonora Lithium Project

<table>
<tr><th colspan="2">Concession Name</th><th>Title #</th><th>Record Date</th><th>Expiry Date</th><th>Area (ha)</th></tr>
<tr><td colspan="6">Mexilit Joint Venture #1 Lands – BCN 70% - REM 30%</td></tr>
<tr><td>El Sauz</td><td rowspan="2">the "Property"</td><td>235614</td><td>Jan. 22, 2010</td><td>Jan. 21, 2060</td><td>1,025</td></tr>
<tr><td>Fleur</td><td>235816</td><td>Dec. 7, 2012</td><td>Dec. 6, 2060</td><td>2,280</td></tr>
<tr><td colspan="2">El Sauz 1</td><td>n/a</td><td>Apr 2, 2013</td><td>n/a</td><td>200</td></tr>
<tr><td colspan="2">El Sauz 2</td><td>n/a</td><td>Apr 2, 2013</td><td>n/a</td><td>1,100</td></tr>
<tr><td colspan="2">Fleur 1</td><td>n/a</td><td>Apr 2, 2013</td><td>n/a</td><td>720</td></tr>
<tr><td colspan="6">Bacanora 100% adjacent lands</td></tr>
<tr><td colspan="2">La Ventana</td><td>235611</td><td>Jan. 22, 2010</td><td>Jan. 21, 2060</td><td>875</td></tr>
<tr><td colspan="2">La Ventana 1</td><td>n/a</td><td>Apr 2, 2013</td><td>n/a</td><td>900</td></tr>
<tr><td colspan="6">MOU or Joint Venture #2 Lands BCN - REM</td></tr>
<tr><td colspan="2">Buenavista</td><td>235613</td><td>Jan. 22, 2010</td><td>Jan. 21, 2060</td><td>649</td></tr>
<tr><td colspan="2">Megalit</td><td>n/a</td><td>Nov 7, 2013</td><td>n/a</td><td>94,815</td></tr>
<tr><td colspan="2">San Gabriel</td><td>235614</td><td>Mar. 12, 2010</td><td>Mar 11, 2060</td><td>1,500</td></tr>
</table>

The boundaries of each concession are located with reference to a concession monument (Punto de Partida) and the distances and directions from the monument are specified in the title document as issued by the Mexican Mining Authorities once the approval for a claim application has been granted.

Bacanora, through MSB, acquired the La Ventana and El Sauz concessions from their previous owner by paying an aggregate of 500,000 shares in Bacanora and $US40,000 to the previous owner for a 100% interest in the Project. Mexilit acquired the Property from MSB, by issuing to MSB an aggregate of 100,000 shares in Mexilit at a deemed value of $US1.00 per share.

The 10 contiguous concessions lie within 7 municipalities: Bacadehuachi, Divisaderos, Granados, Huasabas, Nacori Chico, Sahuaripa and Tepache. The Property falls within one of these municipalities: Bacadehuachi, from whom permission to work must be received. In addition, permission to work must be received from individual landowners who have surface rights in the Property area, these are held under the following ranches: El Rancho Seco, Las Chivas, San Gabriel de los Castores, El Palmar, La Joya, El Sauz, El Cubachi, Zauz de Valencia, Los Americanos, La Ventana, Las Perdices, Moinadehuachi. Bacanora on behalf of the Joint Venture #1 and #2 and for its wholly-owned concessions has received permission from the Municipality of Bacadehuachi and the ranch owners to conduct exploration work on the concessions.

There are no other royalties payable or back-in rights, payments or other agreements or encumbrances to which the Property is subject, with the exception of the previously mentioned first right of refusal that Bacanora has granted REM to negotiate a further 19.9% interest in Mexilit, which, if agreed upon, would increase REM's interest in Mexilit to 49.9%.

There are no known mineralized zones, mineral resources, mineral reserves and mine workings, existing tailing ponds or waste deposits on the concession areas. Land use, by nature of the environment, is restricted to cattle grazing. There are no environmental liabilities to which the Property is subject.

Bacanora's Mexican subsidiary (MSB) and Mexilit are required under Mexican Mining Law to file environmental impact assessment reports along with applications for drill permits. To date, MSB and Mexilit have been able to obtain all of the permits and permissions required to conduct its exploration work on the Property. Reclamation of drill sites is required and was undertaken at the completion of each drill hole.

In the QP's opinion, there are no other significant factors or risks that may affect title or the right to perform work on the Property. Access can be an issue during the July to September rainy season when flash flooding of some creeks and rivers may temporarily block access routes to the Property, thus affecting the ability to perform work there for short periods of time until access has been upgraded to all weather status.

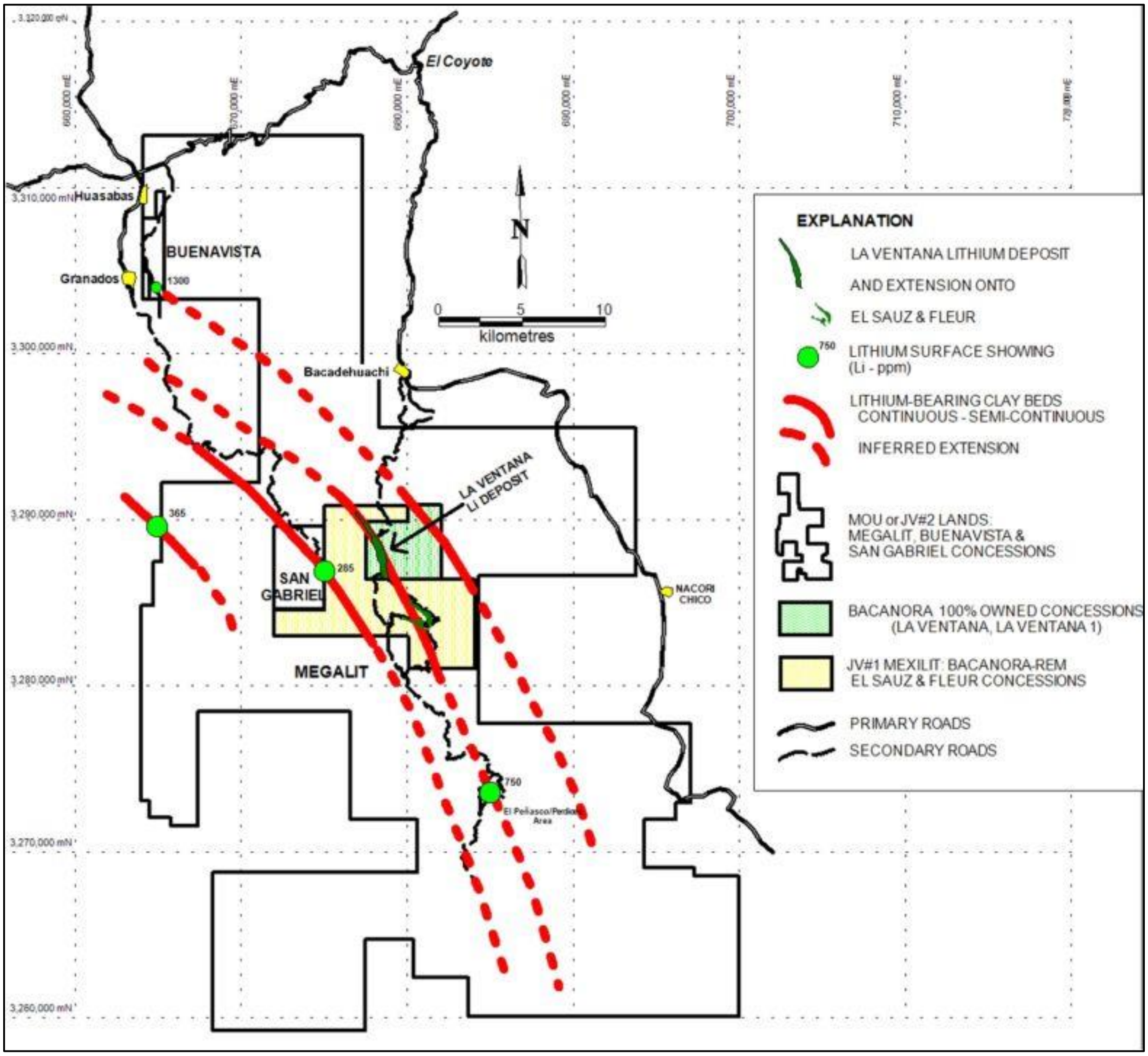


Figure 2. Location of the 10 Contiguous Concessions in the Sonora Lithium Project

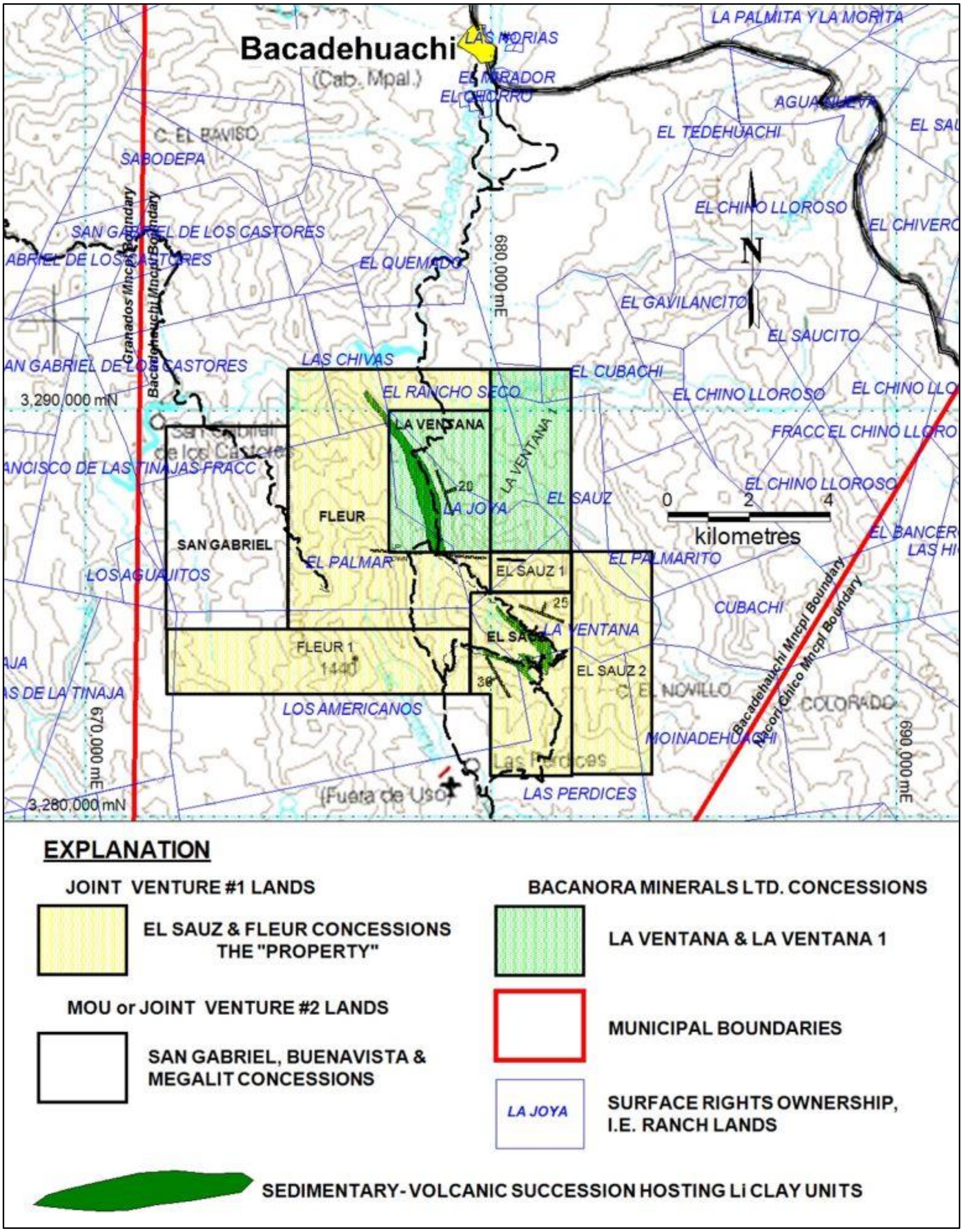


Figure 3. Detailed Map of the 8 Core Concessions in the Sonora Lithium Project

5.0 Accessibility, Climate, Local Resources, Infrastructure and Physiography

5.1 Accessibility

Access to the Property area is by way of Federal Highway 14, a two-lane highway from Hermosillo, for 225 km east (passing through the towns of Ures, Mazocahui, Moctezuma and Huasabas), to the intersection known as "El Coyote", then south from the intersection for 20 km on a recently paved, two-lane highway to the town of Bacadehuachi. Bacanora has set up its base of operations for work on the Property in this town. Access to the Property from Bacahehauchi is via secondary, unimproved, dry-weather roads, approximately 10-12 km to the south, crossing various privately owned ranches. Land owners have granted permission for access to the Property.

5.2 Climate and Physiography

The Property is situated in the western portion of the "Sierra Madre Occidental" (SMO) physiographic province, within the Basin and Range subprovince, and lies between "Mesa de Enmedio", "Rincon del Sauz" and "El Capulin" mountain ranges and also lies within the Sonoran desert. Average elevation at the Property is 900 metres above sea level. The Property is surrounded by mountain peaks with elevations ranging up to 1,440 metres above sea level.

The average ambient temperature is 21° C, with minimum and maximum temperatures of -5º C and 50º C, respectively, on the Property. Extreme high temperatures, upwards of 49º C, occur in summer, while winters, although short, are cool compared to other parts of Mexico. The accumulated annual rainfall for the area is 450 millimetres. The wet season, or desert "monsoon" season, occurs between the months of July and September and heavy rainfall can temporarily hamper exploration at times due to flash flooding. The Sonoran Desert, because of its bi-seasonal rainfall pattern, hosts plants from the agave, palm, cactus and legume family, as well as many others. The length of the operating season is 365 days a year.

5.3 Local Resources and Infrastructure

Bacadehuachi is a small farming and ranching community with basic services capable of supporting early stage exploration projects. Surface rights are obtainable from local landowners and are sufficient for mining operations, should these develop on the Property.

The closest electric power line is about 10 km north of the Property, passing very close to Bacadehuachi and then heading toward Nacori Chico, the next village southeast from Bacadehuachi.

All water for exploration and mining activities must be pumped from the local river or from wells. Ranch owners have been supportive in supplying sufficient water for drilling programs. Availability of water for advanced exploration or mining has not been assessed. There is sufficient area on the Property for potential tailing storage areas, potential waste disposal areas and potential processing plant sites.

Mexico has a skilled and mobile exploration and mining labor pool capable of meeting the needs of advanced projects or mining operations.

6.0 History

There are no records of mineral exploration or mineral occurrences on the Property prior to 1992, when an American group initiated regional exploration work in the search for industrial minerals. In 1996, the American group conducted detailed field work in the area, which consisted of geological mapping and rock sampling. The mapping resulted in the discovery of sequences of calcareous, fine-grained sandstones to mudstones intercalated with tuffaceous bands that are locally gypsiferous. Rock sampling across representative sections of the sequence at intervals along the strike extensions of these units returned weakly anomalous boron values, consequently the American group abandoned exploration in the area.

In 2011, Bacanora initiated a program of limited rock sampling on the El Sauz concession; this work led to the discovery of the lithium-bearing clays and is described in detail under Item 9.0.

There are no historical estimates of mineral resources or mineral reserves in the area covered by the Property.

There has been no mineral production from any of the concessions.

7.0 Geological Setting and Mineralization

7.1 Regional Geology

The Property is underlain by Oligocene to Miocene age rhyolitic tuffs, ignimbrites and breccias of the upper volcanic complex of the Sierra Madre Occidental (INEGI, 1982). This succession was subjected to Basin and Range extensional events during Miocene times that resulted in the development of a series of half-grabens. The half-grabens are locally filled with fluvial-lacustrine sediments and intercalated tuffs that contain lithium-bearing clays as at the Buenavista concession of Bacanora. However, the clay-bearing sequence on the Property may be derived from pyroclastic debris formed during a slightly earlier stage of alkaline volcanism and which was then entrained in a caldera formed during the waning stages of volcanic activity. Quaternary basalt flows cover the basinal sediments and alkaline volcaniclastic succession (Figure 4).

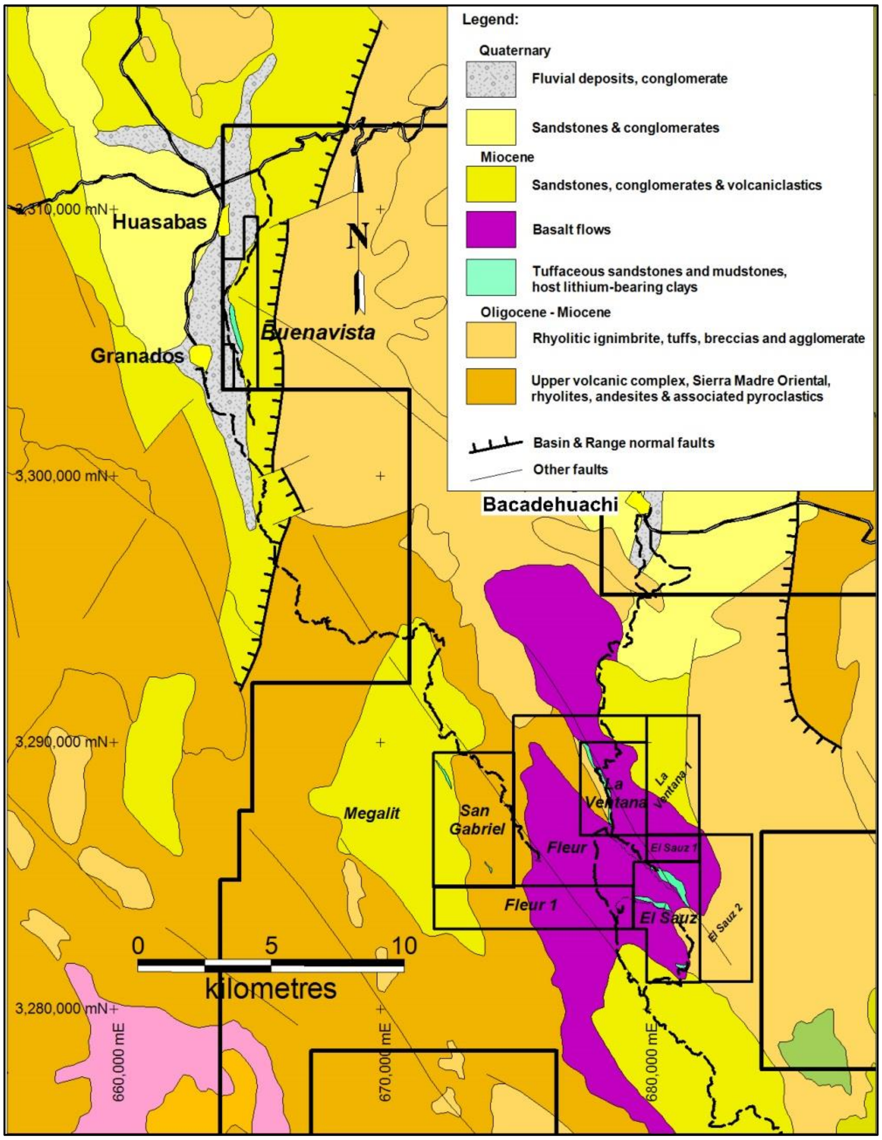


Figure 4. Regional Geology of the Sonora Lithium Project Area

7.2 Property Geology

Preliminary geological mapping of the core area of Property was conducted by Daniel Calles, a geologist under contract to Bacanora (Figure 5).

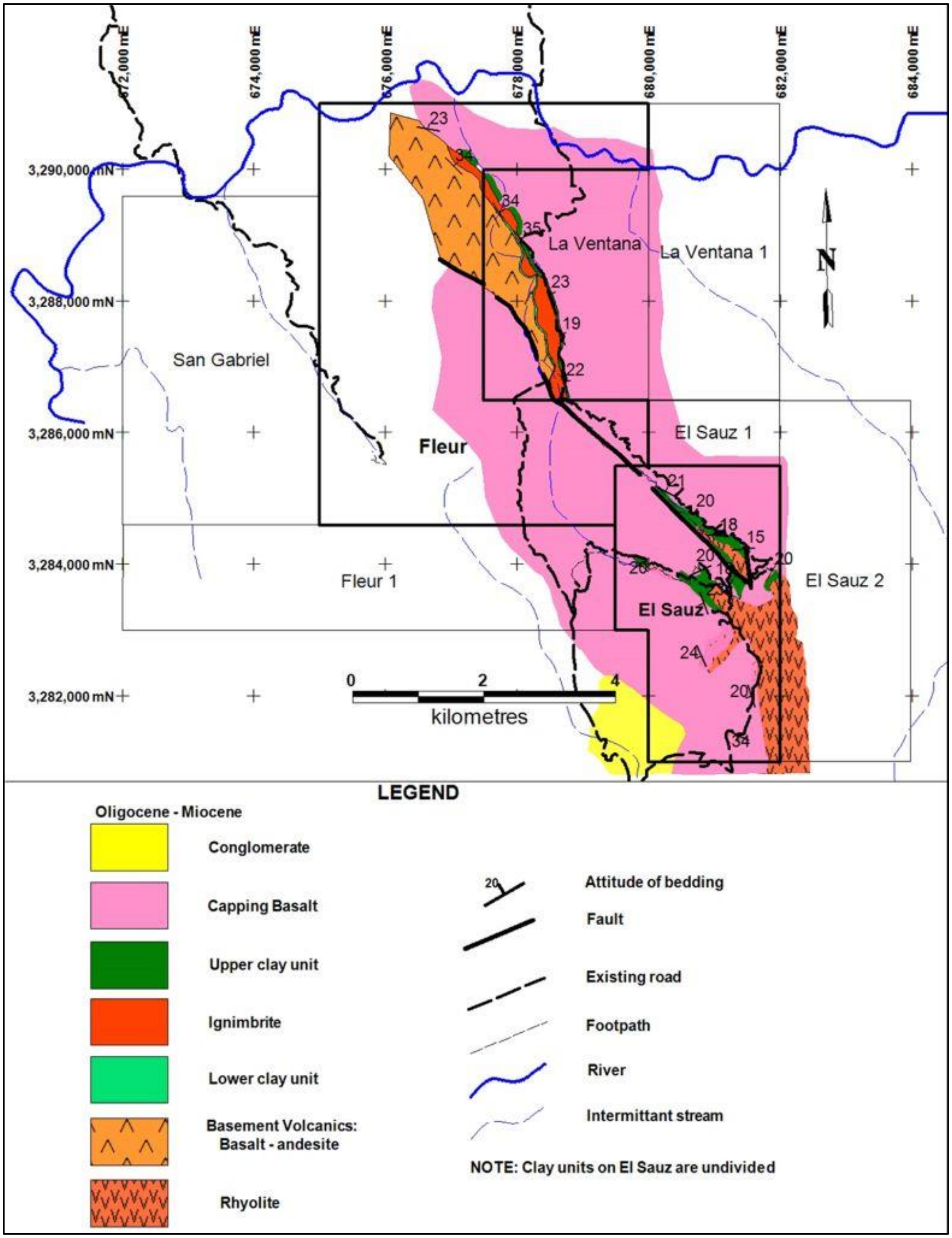


Figure 5. Property Geology

The stratigraphic succession hosting the lithium-bearing clay units consists of the following, as determined from Mr. Calles' mapping and recent drilling, as further described in Item 10.0:

1. A basal sequence of varying from basalt, andesitic basalt pyroclastics and rhyolite tuff.
2. Lower clay unit, consisting of several subunits of tuffaceous sediments, thin lapilli tuff layers and reworked tuff layers interbedded with lithium-rich clay layers. The lower clay unit ranges from 21.57 to 42.11 metres in true thickness, averaging 27.78 metres thick.
3. Ignimbrite layer, consisting of an orange, welded, lapilli tuff ranging from 1.29 to 11.89 metres in true thickness and averaging, 5.58 metres.
4. Upper clay unit, also consisting of several subunits of thin, rhythmically laminated clay and silica layers, thought to be indicative of a hot spring environment; coarse-grained, poorly sorted brown sandstone with a clayey and calcareous matrix; yellowish green clay beds with silica nodules; dark grey clay bands with distinct slump features and local calcite masses; light grey claystone layers interbedded with reddish sandy layers; reddish medium to coarse-grained sandstone with calcite veinlets. The upper clay unit ranges from 14.10 to 40.39 metres in thickness, averaging 28.20 metres thick.
5. Capping basalt, consisting of vesicular olivine basalt flows and intercalated flow top breccias.

Table 4. Stratigraphic Succession on the Property.

Unit	True[1] Thickness (m)	Unit/Subunit Description
Capping basalt	Not determined	Basalt. Contains greenish olivine crystals. Veinlets of kaolinite/alunite (White/greenish, powdery).
Upper clay unit	28.0 (14.10 – 40.39)	Reddish medium-coarse grained sandstone with calcite veinlets.
		Light gray tuffaceous claystone intercalated with reddish, sandy layers. Scarce FeOx layers (black).
		Dark gray slumping breccias. Dark-fine clayey groundmass with tuffaceous fragments. Calcite in masses.
		Green-yellowish silica nodules in a clayey waxy-tuffaceous matrix.
		Brown sandstone. Poorly bedded. Highly calcareous. Reddish tuffaceous coarse grained sandstone. Clay matrix. Soft.
		Light green-pinkish fine grained sequence of clays and silica nodules (Hot spring). Waxy in zones. Calcite in masses
Ignimbrite	5.58 (1.29 – 11.89)	Ignimbrite: orange colored, welded lapilli tuff. Locally brecciated.
Lower clay unit	27.78 (21.57 – 42.11)	Light Gray reworked tuff with abundant lithium-bearing clayey zones.
		Light green tuffaceous sediments. K-feldspar groundmass with quartz and biotite. Indurated. Contains lapilli tuff.
Basement Volcanics	Not determined	Dark green basalt, andesitic basalt and rhyolite tuff.

[1] Average true thickness; range of true thickness from minimum to maximum

The lithium-bearing sedimentary sequences are well defined and are distinct and easily distinguished in the field from the surrounding volcanics by their pale colour and fine to medium bedding, as illustrated in the northeast view of gently, northeasterly dipping, lithium-bearing sediments near the center of the Property (Figure 6).

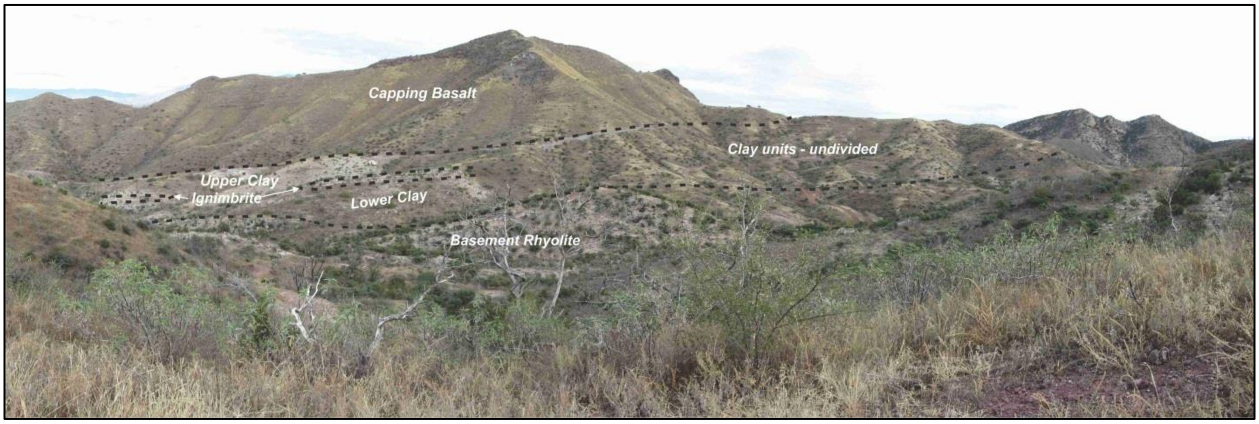


Figure 6. Stratigraphic succession– looking northeast from center of El Sauz

On the El Sauz concession, lithium-bearing clay units are exposed in two areas: in the case of the northeastern-most exposures, outcrops dip approximately 20^o to the east and occur across a strike length of approximately 2.2 km. Based on recent drilling these clay units extend to the north under the capping basalt on the Fleur concession. There they are down dropped relative to the clay units exposed on the adjoining La Ventana concession by a north-northwestly striking fault with oblique slip movement.

The more southerly exposures of the clay units on El Sauz dip westerly probably as a result of offset on faults, rather than a previously suggested an anticlinal structure. In addition, exposures of the basal rhyolite tuff crop out on the southern part of El Sauz.

7.3 Mineralization

Mineralization in the Property consists of a series of lithium-bearing clays that occur within 2 bedded sequences: upper and lower clay units that are separated by an ignimbrite sheet.

The lower clay unit hosts lithium-bearing clays assumed to be principally illitic in composition (var. polylithionite) based on work done on adjacent properties (refer to Item 23.0). The lower clay unit is underlain by basaltic flows, breccias and tuffaceous rocks and is overlain by an ignimbrite sheet. The average true thickness of the lower clay unit is 27.78 m and it ranges from 21.57 to 42.11 m in true thickness. Based on the results from a recent drill program on the Property (refer to Item 10.0), lithium values in the lower clay range from 38 to greater than 10,000 ppm Li.

The upper clay unit, on the other hand, hosts lithium-bearing clays that are assumed to be principally of the smectite family (var. hectorite and montmorillonite), again based on work conducted on the adjacent La Ventana concession. The upper clay unit is underlain by the ignimbrite sheet that overlies the lower clay unit and the upper clay is overlain by a sequence of basalt flows and intercalated flow top breccias. The upper clay unit ranges from 14.10 to 40.39 m in true thickness and averages 28.20 m. Lithium values in the upper clay range from 41 to 6,200 ppm Li, again, based on results from the analyses of drill core from the recent drill program.

Re-analyses of the drill core sample pulps were undertaken in order to determine values for some of the alkalis that previous analyses reported as being above detection limits. Ranges for selected alkalis are tabulated below.

Table 5. Ranges of analyses for selected alkalis on the Property

	Li ppm	K %	Rb ppm	Cs ppm	Mg %	Sr ppm
Upper Clay	41 - 6,200	0.12 - 1.75	23 - 480	34 - 1,805	0.13 - 5.21	128 - 8,380
Lower Clay	38 - >10,000	0.12 - 4.45	14 - 880	68 - 3,000	0.16 - 5.52	31 - 6,820

Limited petrographic work indicates that the mineral ramanite ((Cs, Rb)$[B_5O_6(OH)4]\cdot 2H_2O$) may be the predominate carrier of cesium and rubidium in the clays (M. Vidal, personal communication). Further mineralogical studies are recommended in order to determine what minerals host the various alkali's in the clay units as clearly results of such studies could have an impact on beneficiation of these minerals and recovery of the alkali's.

Significant drill intercepts of lithium mineralization are tabulated in Table 6, Item 10.0.

Controls for the lithium and alkali mineralization are the shape of the lake in which the clays became entrained and, possibly, faults underlying the lake that may have served as channel ways for lithium-rich solutions to percolate into the lake basin and possibly alter and enrich the existing clays in lithium. The lithium may have been sourced from rhyolites (Hofstra et al., 2013). However, rhyolites with lithium-rich melt inclusions have not yet been identified in the succession on or near the Property.

Based on the surface mapping and drill results, the clay units extend continuously along strike in a southeasterly direction for 4.2 kilometres from the south boundary of the La Ventana concession to the middle of the El Sauz concession, with main exposures in the central part of the El Sauz concession. North from El Sauz, the clay units are covered by basalt, but drilling has demonstrated that they continue to the north on the Fleur concession. The down dip extent to the northeast, southwest and south is not known at present and remains to be tested by further drilling.

8.0 Deposit Types

Lithium occurs in commercial concentrations in three types of mineral deposits:

1. Pegmatites
2. Brines
3. Clays

Pegmatites were traditionally the primary source of lithium from contained minerals: spodumene ($LiAlSi_2O_6$), lepidolite ($K(Li, Al)_3(Si, Al)_4O_{10}(F, OH)_2$ and petalite ($LiAlSi_4O_{10}$) (Cerny, 1991). Examples of productive lithium pegmatites are Kings Mountain – Bessemer City tin-spodumene belt in North Carolina (Broadhurst, 1956) or the Quebec Lithium Property of Canada Lithium Corp. (Shannon et al. 2011).

Brines are the main source for lithium today. In brines, lithium occurs as lithium chlorides (LiCl) that are pumped from the evaporite lakes or salt pans (salars) into a processing facility to produce lithium carbonate (Li_2CO_3). Examples of productive brine fields are found in South America at the Salar de Atacama, Chile.

Clays such as jadarite ($LiNaB_3SiO_7(OH)$, hectorite ($Na_{0.3}(Mg, Li)_3Si4O_{19}(OH)_2$) and polylithionite ($KLi_2AlSi_4O_{10}F_2$) are some of the lithium bearing clay minerals that are potential sources for lithium. The lithium-bearing clays are the result of degradation of felsic volcaniclastic rocks through either weathering processes or hydrothermal alteration. Subsequent impoundment of the resulting clay minerals is into local catchment basins, i.e. lakes. It is also thought that hot-spring activity related to volcanism may also supply some of the lithium into the lake environment by way of faults coming into the lake basins. An example of a potentially economic lithium deposit in clay is the Kings Valley Project in Nevada, USA, of Western Lithium Corp. (Ajie et al., 2009). Lithium clays have 2 potential end uses, as sources for:

1. Lithium compounds such as lithium carbonate, as well as,
2. High temperature - high pressure tolerant drilling muds for the petroleum industry.

Demand for lithium compounds is strong because of its unique electrochemical properties that make lithium the element of choice for batteries having high energy storage capacity and other energy applications as well as a host of other industrial and health applications. Deep and horizontal drilling techniques employed in the petroleum industry place a strong demand on lithium-bearing clays used in drilling muds.

Lithium mineralization in the Property is of the clay type.

Concepts from the geological model for lithium-bearing clay deposits that are applied to exploration of these deposits include:

1. Recognition of young sedimentary basins containing or having the potential to contain clays derived from felsic volcanic rocks,
2. Litho-geochemical sampling of clay units exposed in young sedimentary basins by means of surface sampling or drilling.

9.0 Exploration

Bacanora's initial exploration efforts, in 2011, were directed to identifying lithium-bearing clays on the El Sauz concession of the Property and sampling those units to determine their lithium content. Later exploration, in 2013, included additional surface sampling and preliminary geological mapping of the areas immediately surrounding the known clay zones. In addition, a Stage 1, 10 hole diamond drilling program was conducted on the Property in early 2013 and was followed by the ongoing Stage 2 drilling program. Both of these programs are described in detail under Item 10.0

9.1 Exploration in 2011

A geological reconnaissance and rock-sampling program was conducted on the El Sauz concession by Adrian Edgardo Perez on behalf of MSB during the period September 28 to November 11, 2011.

A total of 116 rock samples were collected from exposures of a pale colored, clay-bearing sequence of sediments and intercalated tuffaceous rocks. The sampled exposures occur in the northern half of El Sauz and dip to the east, in the case of the northeastern most outcrops, and west, in the case of the more southerly exposures, appearing to form an anticlinal structure.

The samples were collected across outcrops as continuous chip samples ranging in width from 0.9 to 2.2 m and averaging 2.0 m perpendicular to the strike direction of the sediments. Sample spacing was dependent on exposure; consequently it was difficult to ascertain how representative the samples were of the overall clay-bearing units on El Sauz.

Results of analyses performed on the samples by ALS Chemex ranged from 49 to 7,220 ppm Li, with 39 samples greater than 1,000 ppm Li (Figure 7). The results indicated that significant lithium-bearing clay units occur on El Sauz and warranted further work in order to more accurately assess the extent of the units and the concentration of lithium within them.

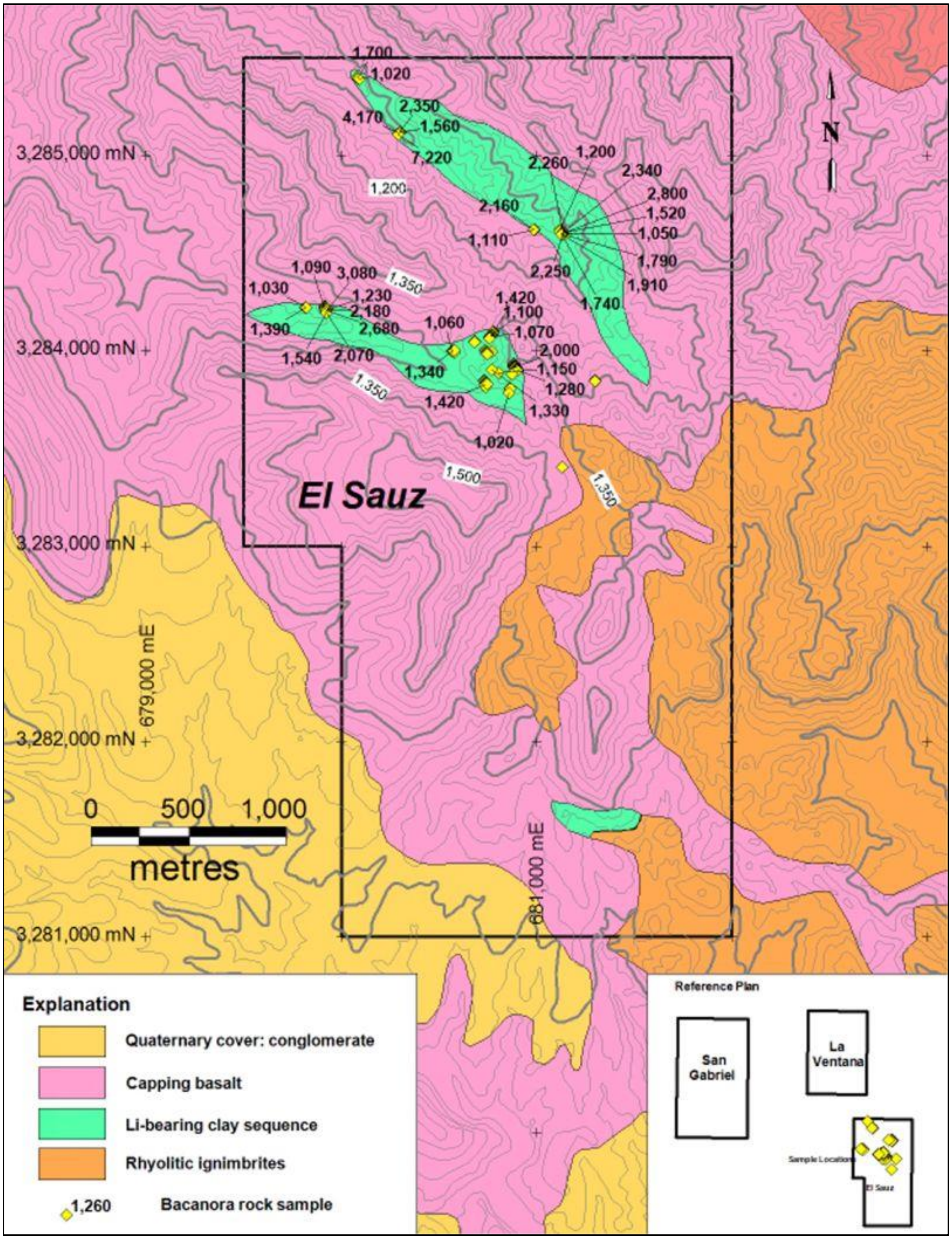


Figure 7. Bacanora 2011 Rock Samples - El Sauz Concession
(sample sites with values greater than 1000 ppm Li shown)

9.2 Exploration in 2013

During the period February to April, 2013, Daniel Calles undertook a mapping and rock sampling campaign on the Property on behalf of the Bacanora – REM Joint Venture #1.

A total of 94 rock samples averaging 1.71 kg in size were taken from outcrops of the clay units exposed on El Sauz (Figure 8).

The samples were collected across outcrops as continuous chip samples perpendicular to the strike direction of the sediments. Sample spacing was dependent on exposure; consequently it is difficult to ascertain how representative the samples are of the overall clay-bearing units on El Sauz.

Results of analyses performed on the samples by ALS Chemex ranged from 10 to 2,130 ppm Li, with 15 samples greater than 1,000 ppm Li. The results confirm that significant lithium-bearing clay units occur on El Sauz and warrant further work in order to more accurately assess the extent of the units and the concentration of lithium within them. The clay units also have elevated levels of other alkali metals and alkali earths, most notably: cesium and strontium (Table 6).

Table 6. Rock Samples Basic Statistics for Alkali Metals and Earths

n = 94	Li ppm	Ca %	K %	Mg %	Na %	Cs ppm	Rb ppm	Sr ppm
Maximum	2,130	21.8	1.37	4.2	2.2	1,215	572	7,160
Minimum	10	0.11	0.04	0.11	0.02	11	7	30
Average	418	5.52	0.47	1.04	0.21	248	169	2,057
Median	158	3.14	0.42	0.77	0.09	199	133	1,763
75th Percentile	650	7.44	0.62	1.25	0.17	305	232	2,935
90th Percentile	1,110	14.48	0.89	2.43	0.58	532	327	5,027
95th Percentile	1,605	18.18	1.09	3.07	1.06	721	414	6,429

In conjunction with the rock sampling, Mr. Calles mapped the geology of the area around the clay units on the Property. This mapping, combined with the results of drilling, has allowed a comparison to be made between the strata intersected in drill holes and that exposed at surface on the Property and those clay units found on the adjoining La Ventana concession. From this comparison it is concluded that the lithium-bearing clay units on the Property correlate with those on La Ventana and therefore represent a southern extension, from La Ventana, of the sedimentary basin on to the Property.

Structurally the clay units on El Sauz and Fleur dip to the northeast at approximately 20^o. However, the clay units are covered by basalt on Fleur. In addition, in the central part of El Sauz the clay units crop out in an arcuate form with one limb dipping to the northeast and one dipping westerly. Further mapping is required to determine if this structure reflects folding or is the result of faulting.

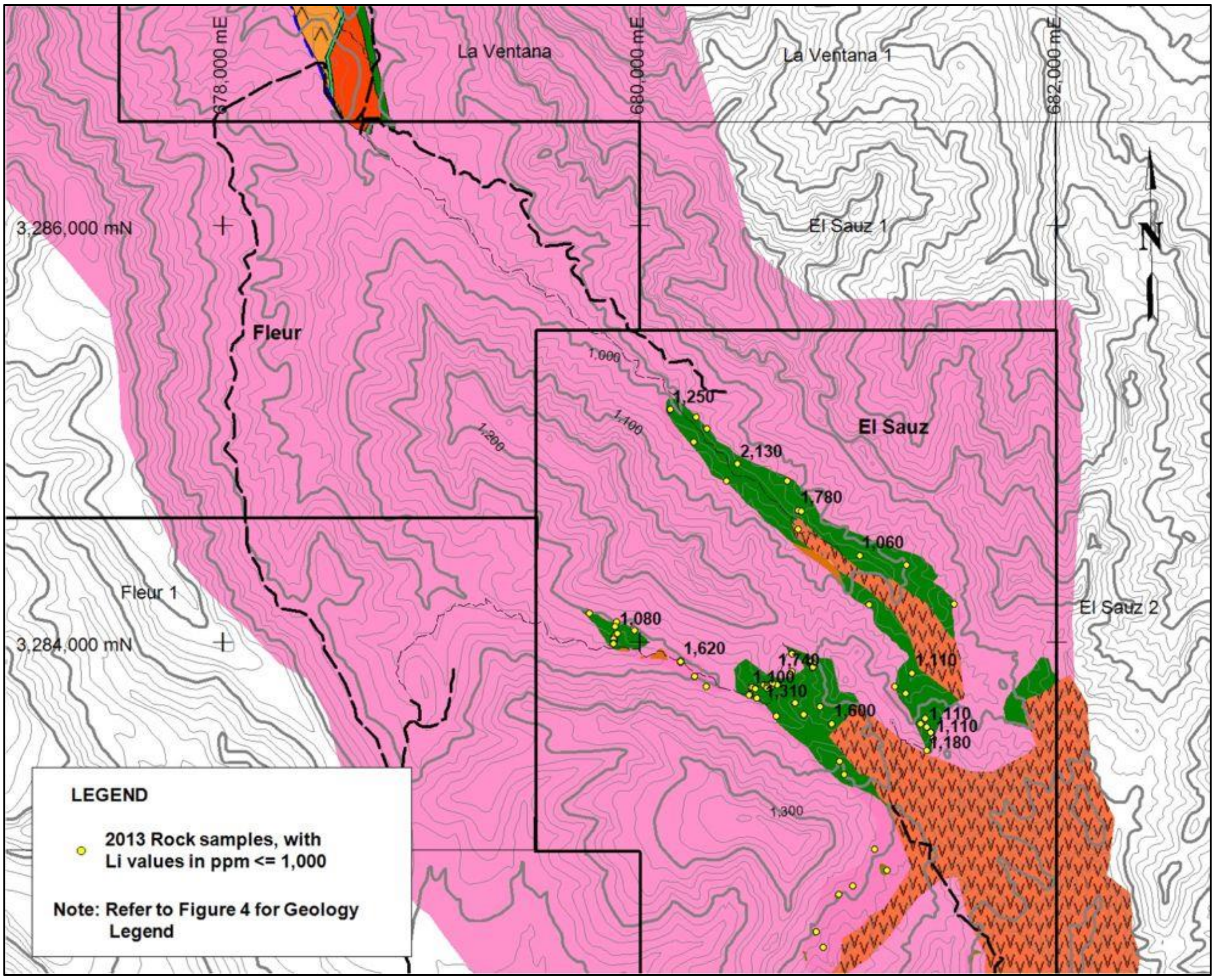


Figure 8. Bacanora 2013 Rock Samples - El Sauz Concession
(Sample sites with values greater than 1000 ppm Li shown)

10.0 Drilling

All of the drilling conducted to date on the Property was undertaken by Perforaciones Godbe de Mexico SA de CV, a Mexican subsidiary of Godbe Drilling LLC, based in Montrose, Colorado.

Drill core was moved from the drill sites by Bacanora personnel to a secure compound in Bacadehuachi where it was logged, split and sampled. Core was then moved to Bacanora's secured facility in Magdalena de Kino for storage. In addition to logging of geological parameters in drill core, core recovery, recovery-of-broken intervals and rock quality designations were measured. Drill-hole collar locations were located by hand-held GPS instrument.

The objective of the diamond drilling program was to intersect the down-dip extensions of the exposed lithium-bearing clay horizons. Each drill hole in the program succeeded in meeting this objective.

The relationship between sample length and the true thickness of the mineralization is approximately 94% of sample length, being equivalent to true thickness based on the observed average dip of 20^{o} for the clay units.

Drill-core recovery was very close to 100% for the drill program. There are no sampling or recovery factors that could materially impact the accuracy of the results.

The first, or Stage 1, drilling campaign on the Property was conducted from May to September 2013.

A total of 1,470.35 metres, using an NQ-core recovery diamond drilling technique, were drilled in 10 holes (Table 7) for Stage 1. Drill sites were laid out in such a manner as to test the strike length of the lithium-bearing clays exposed on the Property (Figure 9). A long section through drill holes (A-A', Figure 10) illustrates the gently dipping, apparent attitude of the clay units to the north, where they plunge under the capping basalt on the Fleur concession. Cross sections B-B' and C-C' (Figures 11 & 12) illustrates the true dip of the clay units to the northeast and a fault that results in an apparent thinning of the upper clay unit in this hole. A third cross-section (D-D', Figure 13) through holes ES-06, ES-08 and ES-09 shows apparent dips of the clay units to the northeast as in the case of ES-06 and to the southwest as in the case of ES-08 and ES-09. The nature of the structure between ES-06 and ES-08 has not been confirmed; it may be the result of faulting and rotation of fault blocks or a gentle fold.

The Stage 2 drill program commenced in October and is ongoing. As of the effective date of this report 8 holes were completed with analytical results available and reported for 6 of the 8 holes. However, none of the Stage 2 drill hole information or results are used in the estimate of resources declared in this report.

An example of an intersection of the lower clay unit is illustrated in Figure 14, where sample intervals are marked by red heavy lines and footage blocks are labeled in feet. Lithium values from samples that were subsequently split from the core are found in Table 8. Note the slightly darker grey laminations in the interval 729 to 736 that are silica-rich layers; also the slight greenish cast to intervals of clay in 736 to 741 that appears to be characteristic of lithium-rich clay.

Intercepts with significant values in alkali and alkali earth metals for each of the drill holes are listed in Table 9.

Table 7. Stage 1 Diamond Drill Hole Locations

Hole	Easting (NAD27z12)	Northing (NAD27z12)	Elevation (m)	Length (m)	Azimuth	Dip
ES-01	679046	3286345	939	204.22	0	-90
ES-02	679565	3285905	974	259.69	0	-90
ES-03	680087	3285383	1034	256.04	0	-90
ES-04	680414	3285053	1076	195.10	0	-90
ES-05	680768	3284734	1089	123.7	0	-90
ES-06	681220	3284464	1126	92.66	0	-90
ES-07	681224	3283811	1186	96.32	0	-90
ES-08	680835	3283940	1225	85.34	0	-90
ES-09	680443	3283807	1112	97.54	0	-90
ES-10	679972	3284062	1108	59.74	0	-90
ES-11	679199	3286482	967	258.17	0	-90
ES-12	679448	3286178	997	240.49	0	-90
ES-13	679719	3286039	1016	349.60	0	-90
ES-14	680203	3285146	1000	95.40	0	-90
ES-15	680215	3285000	1041	66.14	0	-90
ES-16	680569	3284870	1083	98.45	0	-90
ES-17	679892	3285566	1020	222.50	0	-90
ES-18	681007	3284566	1097	74.68	0	-90

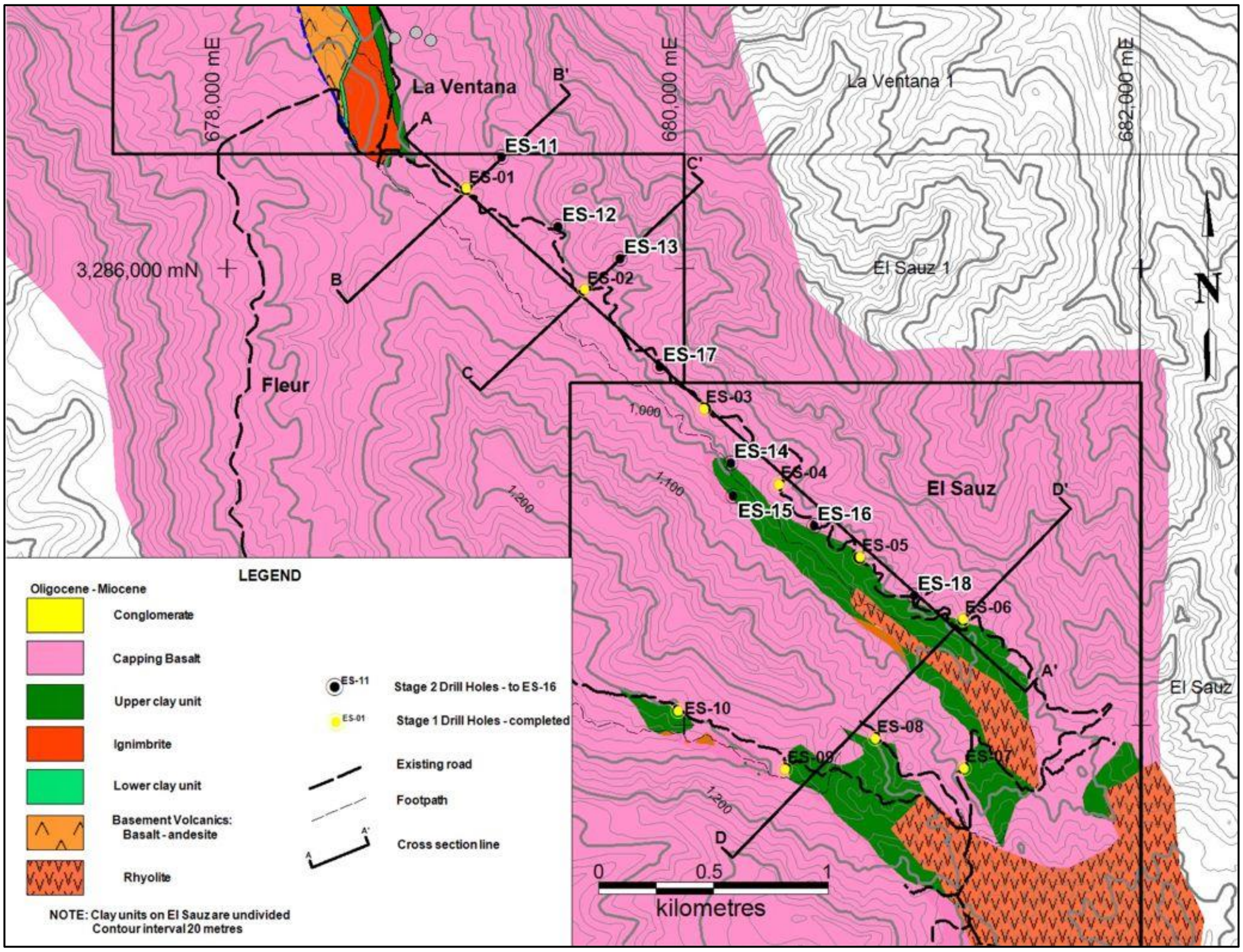


Figure 9. Location Plan of Stage 1 & Stage 2 Drill Holes as of December 10, 2013

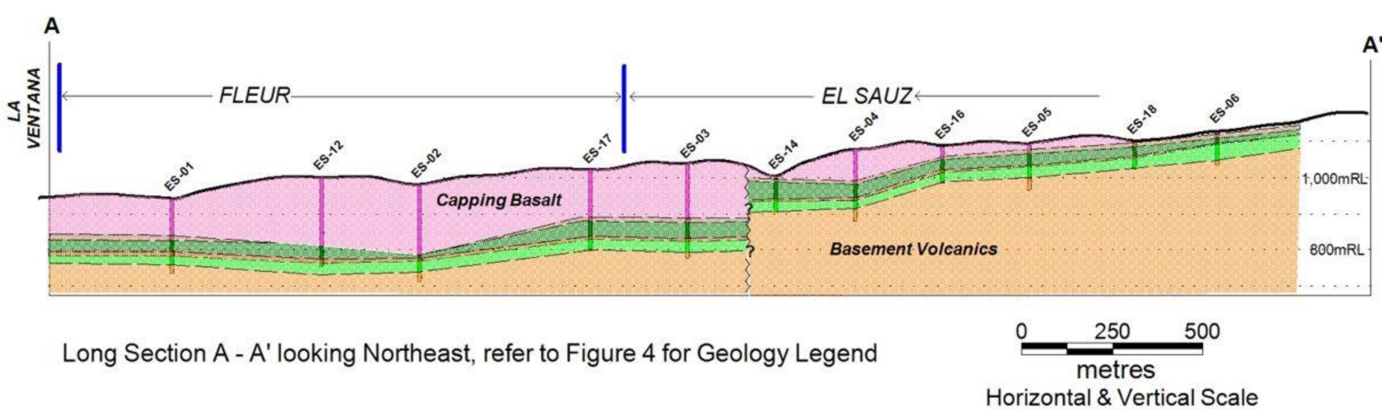


Figure 10. Long Section through drill holes ES-01 to ES-06

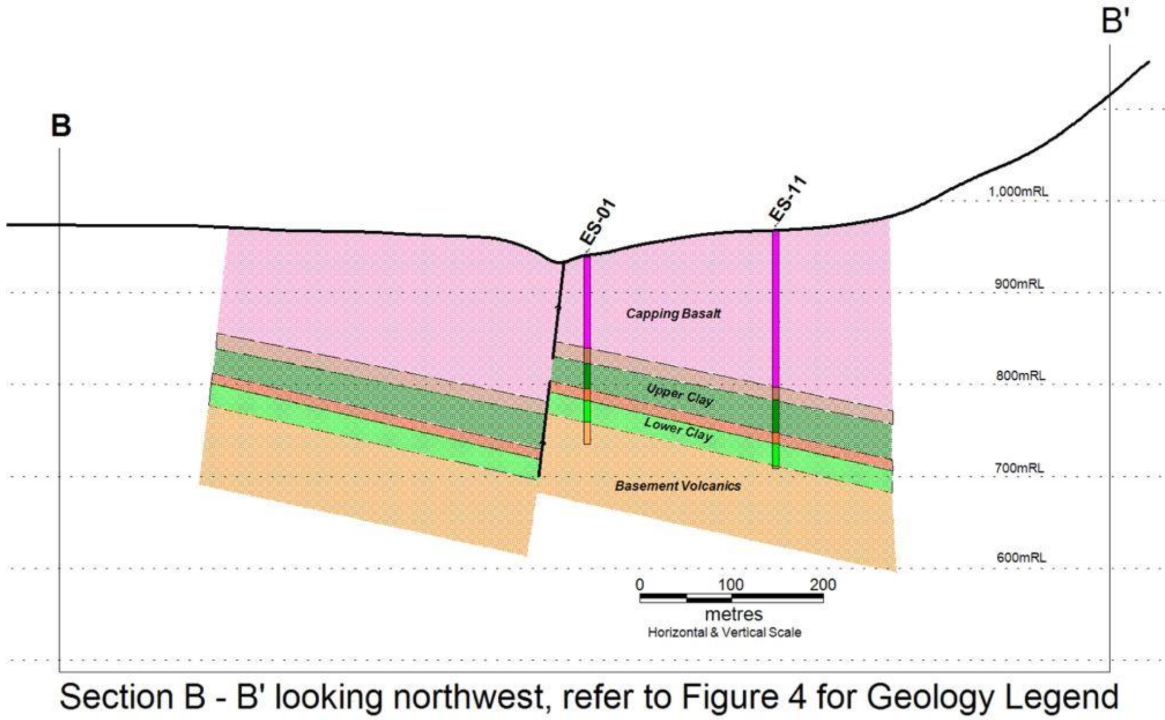


Figure 11. Cross Section through Drill Holes ES-01 & ES-11

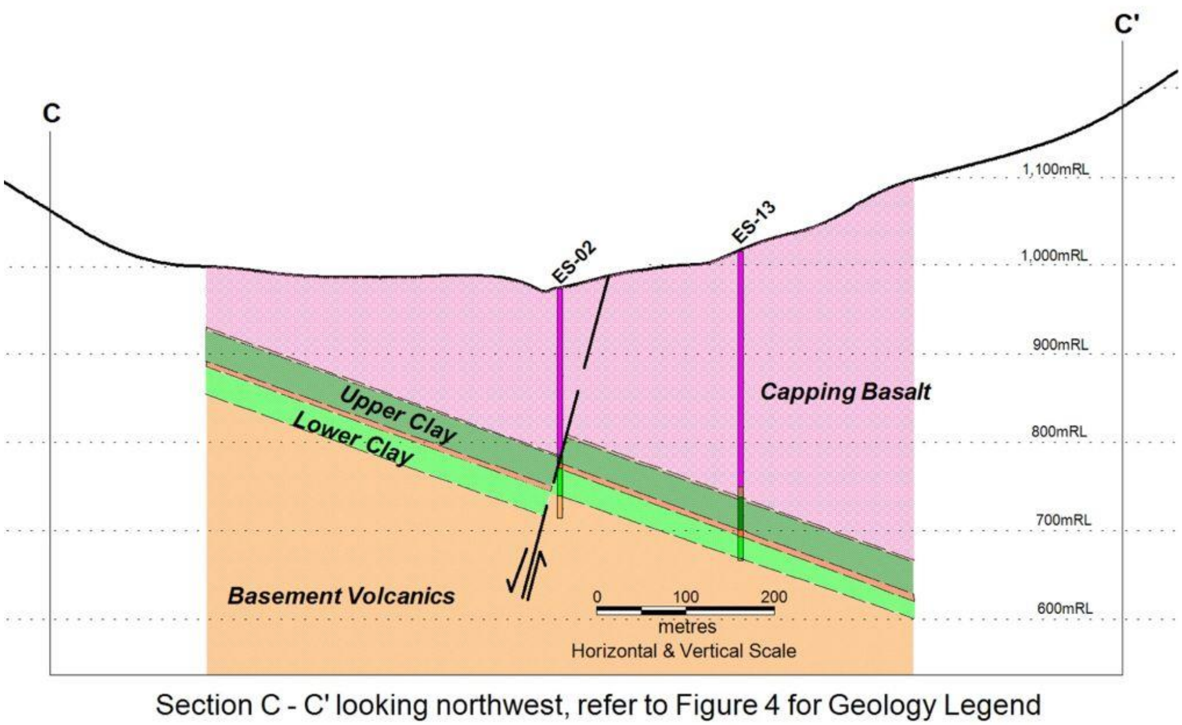
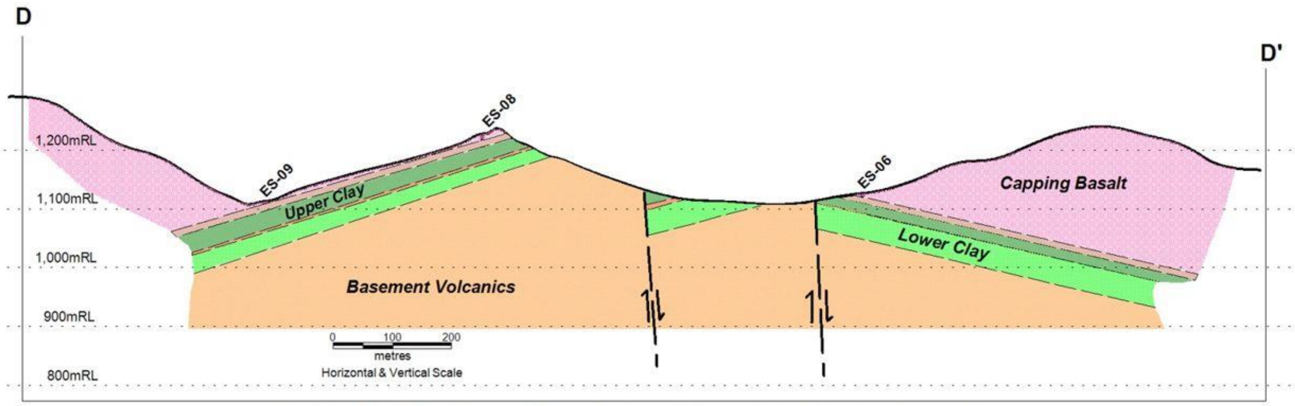


Figure 12. Cross Section through Drill Holes ES-02 & ES-13



Section D - D' looking northwest, refer to Figure 4 for Geology Legend

Figure 13. Cross Section through Drill Holes ES-06, ES-08 & ES-09

Figure 14. Hole ES-02 Lower Clay intercept from ~722 to ~752 feet

Table 8. Li values, Hole ES-02, 724 to 746 feet

Sample No	From (ft)	To (ft)	Li ppm	K%	Rb ppm	Cs ppm	Mg%	Sr ppm
BM-60316	724	729	2580	0.74	152	370	3.64	842
BM-60317	729	736	2800	0.80	158	310	4.3	895
BM-60318	736	741	4390	2.16	362	747	3.48	724
BM-60319	741	746	2960	1.33	213	472	2.48	939

Table 9. Significant Li Analyses

Hole No.	From (m)	To (m)	Intercept Length (m)	Weighted Averages						
				Li ppm	K%	Rb ppm	Cs ppm	Mg%	Sr ppm	Unit
ES-01	124.66	129.24	4.58	2,113	1.20	209	251	4.49	944	Upper Clay
ES-01	135.33	143.56	8.23	4,017	1.34	360	628	2.44	1646	Upper Clay
ES-01	156.00	179.83	23.83	4,422	1.87	434	826	1.63	845	Lower Clay
ES-02	193.55	197.21	3.66	3,114	1.25	359	636	0.89	475	Upper Clay
ES-02	203.50	233.78	30.28	3,964	1.73	380	680	2.18	632	Lower Clay
ES-03	186.39	199.85	13.36	3,073	1.09	280	525	2.07	1714	Upper Clay
ES-03	210.31	239.65	29.34	3,877	1.61	373	982	2.14	1598	Lower Clay
ES-04	120.70	131.37	10.67	2,547	0.99	236	592	1.71	714	Upper Clay
ES-04	140.39	171.75	31.37	3,594	1.39	329	912	2.03	1235	Lower Clay
ES-05	47.55	54.56	7.01	2,107	0.91	231	481	1.88	874	Upper Clay
ES-05	59.82	92.05	32.23	3,038	1.23	309	792	2.00	930	Lower Clay
ES-06	39.62	45.72	6.1	2,140	0.78	194	567	2.15	749	Upper Clay
ES-06	52.88	75.90	23.02	1,999	0.84	213	852	2.01	616	Lower Clay
ES-07	23.77	25.30	1.53	2,260	0.82	316	1015	1.97	1190	Upper Clay
ES-07	43.59	48.16	4.57	2,117	0.69	154	443	3.08	921	Lower Clay
ES-08	50.90	58.52	7.62	2,242	0.94	247	633	2.61	830	Lower Clay
ES-08	64.62	69.19	4.57	2,029	0.53	130	476	2.66	840	Lower Clay
ES-09	58.83	66.45	7.62	2,009	0.81	218	857	2.45	835	Lower Clay
ES-09	74.07	75.59	1.52	2,160	0.74	213	947	2.82	694	Lower Clay
ES-10	10.97	12.50	1.53	2,430	1.34	333	629	1.11	31	Lower Clay
ES-10	18.59	24.38	5.79	2,101	0.59	138	546	2.86	674	Lower Clay

11.0 Sample Preparation, Analyses and Security

A total of 543 samples were obtained from drill core from all of the Stage 1 drill holes on the Property. The samples were collected by splitting the core in half with a manual core splitter. One half was sent for assay and the remaining half was retained for future analysis. The samples have a standard length of 1.52 metres (5 feet), except on the geologic contacts where the length is adjusted to the contact. For the drilling campaign on the Property, the average length of core was 1.51 metres per sample and was obtained from a total of 819.26 metres of core.

The samples were bagged and labeled with a sequential, unique sample identification number. Mr. Daniel Calles, geologist under contract to Bacanora, supervised the core sampling.

Factors that could materially impact the reliability and accuracy of results are: core recovery, sample size, and nature of the mineralization. Core recovery for the sampled intervals was estimated to be 100 %, based on core measurements. Therefore core recovery is not believed to be a significant factor affecting the reliability of the results in this case. Sample size (split NQ drill-core) is a factor if the mineralization is subject to nugget effects. The lithium-bearing clays are believed to be uniformly distributed throughout the sampled intervals and laterally from hole-to-hole. Consequently, sample size in this case in not considered being a factor that would affect the reliability of the results.

The relatively undeformed and layered nature of the sedimentary rock succession that hosts the lithium mineralization, and the distinct clay-rich units which vary between 4 and 80 metres within the sediments, were the determining factors in establishing sample interval.

Split drill-core samples were shipped to an ALS Chemex Laboratories sample preparation facility in Hermosillo, Mexico, for preparation. Prepared sample pulps were then shipped to ALS Chemex Laboratory in North Vancouver, Canada, for assay and analysis. ALS Chemex is an ISO 14001-2004 certified laboratory in Canada and its preparation facility in Mexico has received ISO 17025 certification.

Sample preparation was conducted according to the regular ALS Chemex commonly used rock, drill-core and chip-sampling procedures which consist of crushing the sample to - 5 mm sized material, splitting off 250 gm of that and pulverizing the split sample so that better than 85% passed through a 75 micron aperture screen (PREP-31).

All core samples were analysed by inductively coupled plasma – mass spectrographic (ICP-MS) method, ME-MS41, to provide data for a suite of 51 elements (Ag, Al, As, Au, B, Ba, Be, Bi, Ca, Cd, Ce, Co, Cr, Cs, Cu, Fe, Ga, Ge, Hf, Hg, In, K, La, Li, Mg, Mn, Mo, Na, Nb, Ni, P, Pb, Rb, Re, S, Sb, Sc, Se, Sn, Sr, Ta, Te, Th, Ti, Tl, U, V, W, Y, Zn, Zr).

As part of an internal Quality Assurance/Quality Control protocol, an in-house prepared standard was inserted on average every 20th sample for samples from all of the holes. The sample was collected from a tuffaceous clay horizon that has been used as a marker bed in the borate-bearing Tubutama basin in Sonora, Mexico, and is lithium deficient.

The standard was prepared at Laboratorio Metalurgico LTM SA de CV in Hermosillo. A sample of approximately 50 kg was bulk milled to <100µm and homogenized in a single batch in a drum mixer for 24 hours. Then, 100 gram sub-samples were split from the standard and sealed in plastic bags, ready for insertion into sample batches.

Results of analyses of samples of the internal standard inserted into the sample runs are in general within 1 standard deviation of the median for all the results (Figure 15). A total of 5 samples are outside of 1 standard deviation from the median, but are within 3 standard deviations.

In addition, duplicate analyses were performed by the laboratory as their own internal quality control.

From the QA/QC analysis it was determined that there were no issues with the analytical and assay data and it is therefore considered to be reliable.

The use of additional standards for low grade (1,000 to 2,000 ppm Li) and high grade (8,000 to 10,000 ppm Li) mineralization is highly recommended in further drilling campaigns, and sample repeats in other labs must be also included in order to maintain a quality control.

In the QP's opinion, sample preparation, security and analytical procedures were adequate for this stage of exploration and comply with industry best practices.

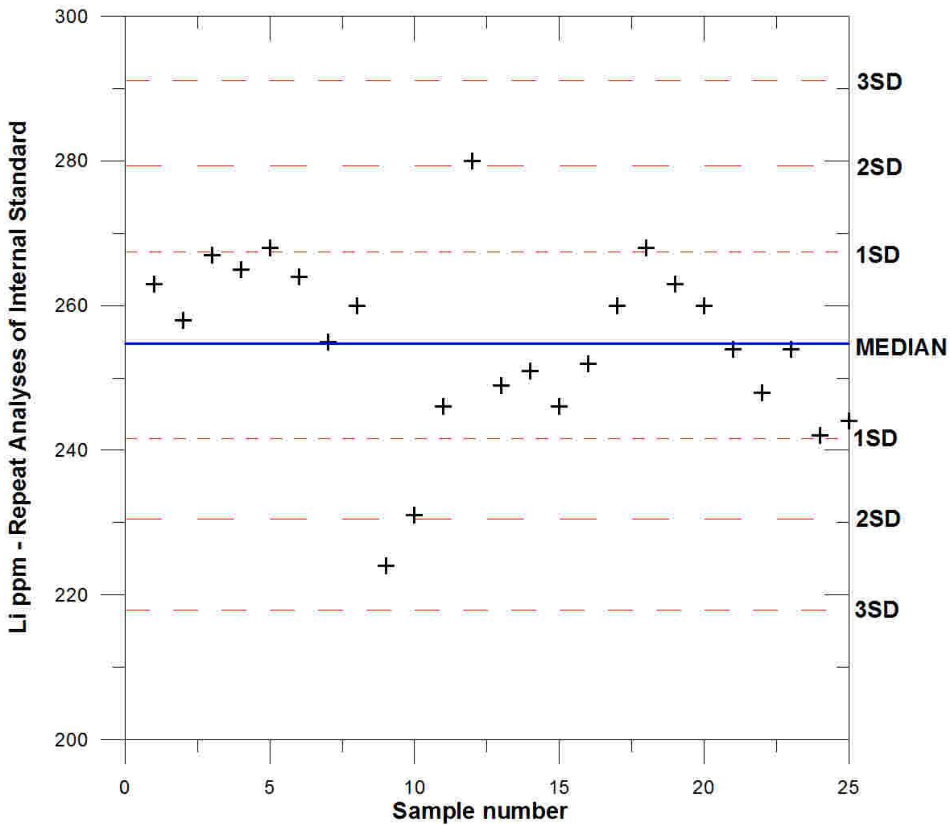


Figure 15. Analyses of Internal Standard

12.0 Data Verification

The QP has reviewed the rock and drill-core sample data collected by Bacanora, checked the digital assay and analytical certificates of ALS Chemex, and checked, in the field, locations of the lithium-bearing clay sequences on the Property. As well, drill-hole locations and the locations of Principal Points (i.e. location monuments) of the Property were checked and found to be in order.

During the course of the QP's on-site examination in 2012 several exposures of the clay units were sampled (Figure 16 & 17). Clay samples were found to range from 28 ppm to 7,236 ppm Li (0.41% to 3.85% LCE) and a 4.5 m interval averaged 5,537 ppm Li (2.95% LCE, Table 9).

In 2013, the QP collected a further 4 rock samples from surface exposures of clay-bearing units at various locations on the Property (Figure 16). The results yielded values ranging from 955 to 1,257 ppm Li for the samples, confirming the presence of lithium-rich clays on the Property.

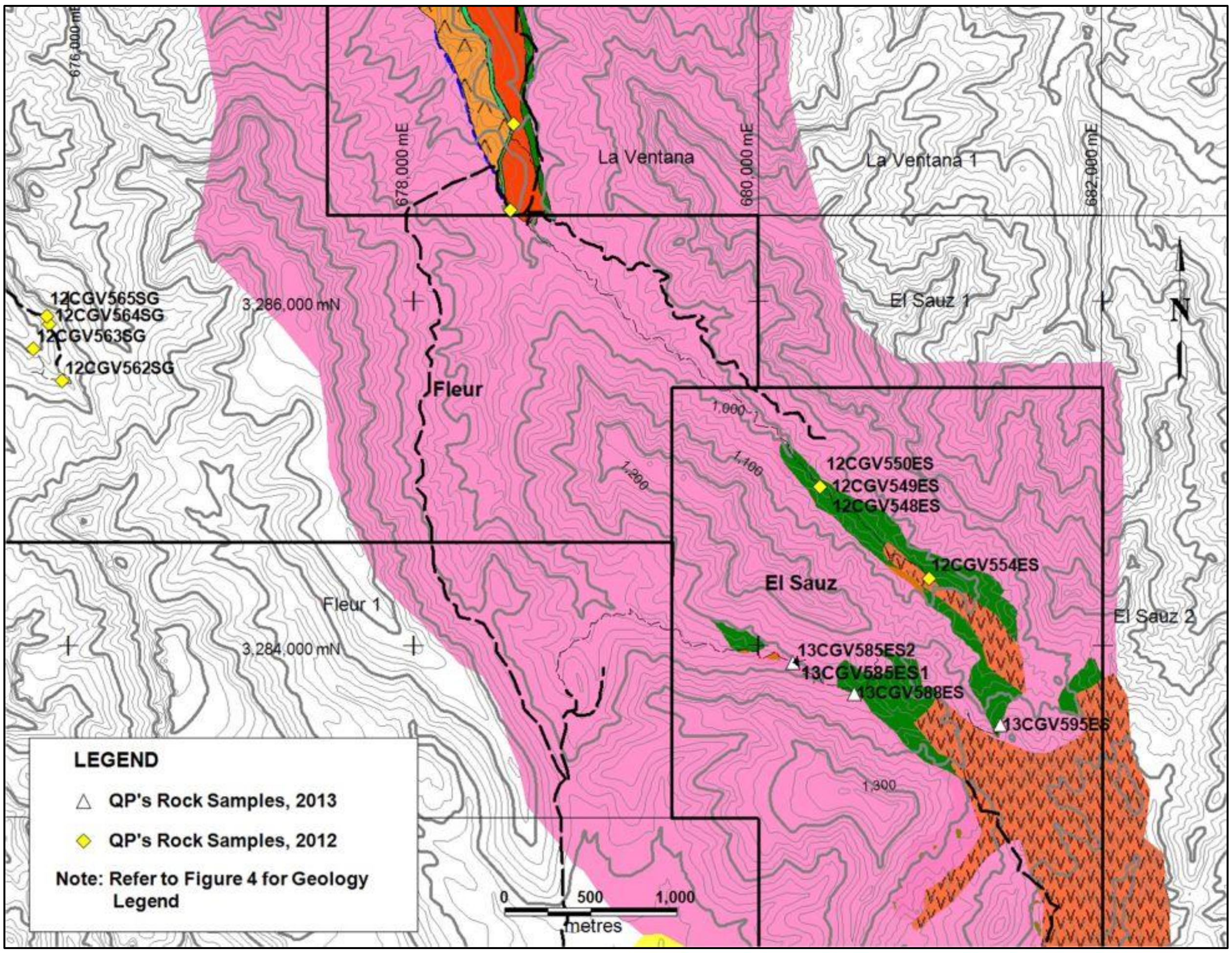


Figure 16. Location Map of QP's 2012 and 2013 Rock Samples

Figure 17. El Sauz concession Li-bearing clay unit

Table 10. QP's Samples from the Property

Concession	Sample No	Length	Li	LCE%	Li_2O	K	Rb	Sr
		m	ppm			%	ppm	ppm
2012 Samples								
El Sauz	12CGV548ES	1.50	7,236	3.85	1.56	1.50	307.2	439
El Sauz	12CGV549ES	1.50	4,372	2.33	0.94	1.92	379.9	499
El Sauz	12CGV550ES	1.50	5,003	2.66	1.08	1.76	303.5	498
El Sauz	12CGV554ES	1.50	766	0.41	0.17	1.34	199.9	145
Fleur	12CGV562SG	1.00	86			0.55	34.8	1,685
Fleur	12CGV563SG	1.00	28			2.36	92.8	2,539
Fleur	12CGV564SG	1.50	269			0.65	44.9	1,178
Fleur	12CGV565SG	1.50	58			2.21	133.5	25
2013 Samples								
El Sauz	13CGV585ES1	1.10	1,254	0.67	0.27	1.10	76.7	2,067
El Sauz	13CGV585ES2	1.40	1,257	0.67	0.27	1.36	224.7	1,284
El Sauz	13CGV588ES	1.00	955	0.51	0.21	2.15	327.8	422
El Sauz	13CGV595ES	1.00	1,119	0.60	0.24	0.31	23.3	1,909

In addition, the QP collected duplicate samples of drill core split from previous split core. A total of 20 samples were collected from upper and lower clay units and from intervals in each hole, as well as from intervals with varying lithium contents, based on original analytical data.

The sample duplicates were shipped to Acme Analytical Laboratories preparation facility in Caborca, Sonora and from there the prepared sample pulps were shipped to Acme's laboratory in Vancouver, Canada for analysis by ICP-MS methods using Acme's 7TX procedure.

Analyses of the duplicates when compared to the original sample values determined by ALS Chemex are in relatively close agreement particularly for samples at the low and high end of Li values (Figure 18). There is some variation in values in intermediate ranges (3,000 to 7,000 ppm Li).

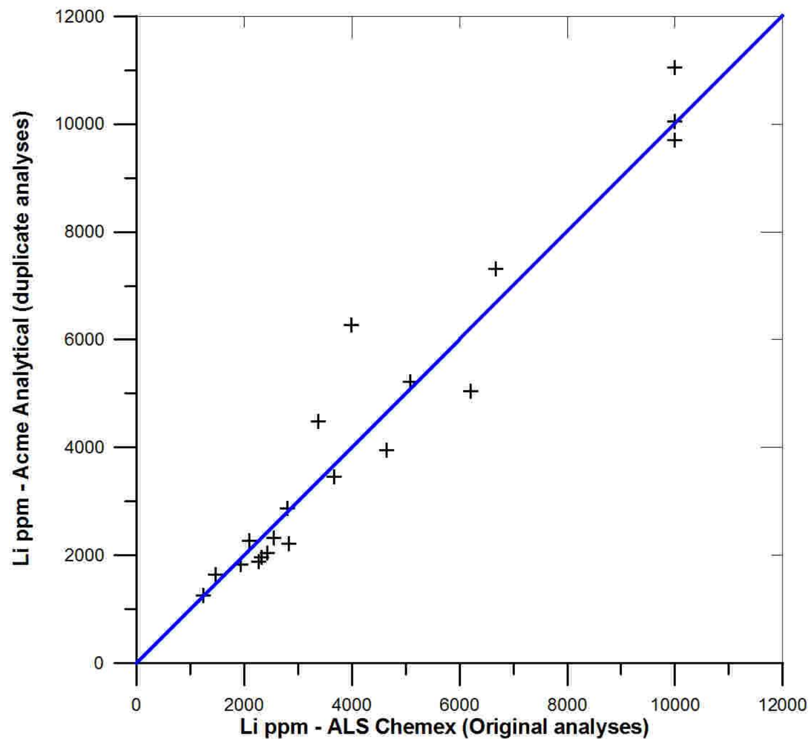


Figure 18. Duplicate core samples Li values

For the other alkali metals there is reasonable agreement between the duplicate analyses for Mg and Sr (refer to Figures 19 and 20), but for K and Rb there is not good agreement (refer to Figures 21 and 22). Duplicate analyses for drill core samples by Acme using a 4 acid digestion do not yield K values above 1.5% or Rb values above 300 ppm. The discrepancy in analyses for these 2 elements is most likely due to the digestion method. Acme's 4 acid digestion is thought to result in the formation of insoluble salts of K and Rb that reduce the amount of K and Rb in the solution available for ICP analysis, thus resulting in lower K and Rb values. The ALS aqua regia digestion appears not to have this problem; consequently the K and Rb values are higher and more representative of the levels of those elements in the drill core samples. Clearly further orientation work is required to determine the best analytical methods for accurate determinations of the levels of alkali's in the clay units.

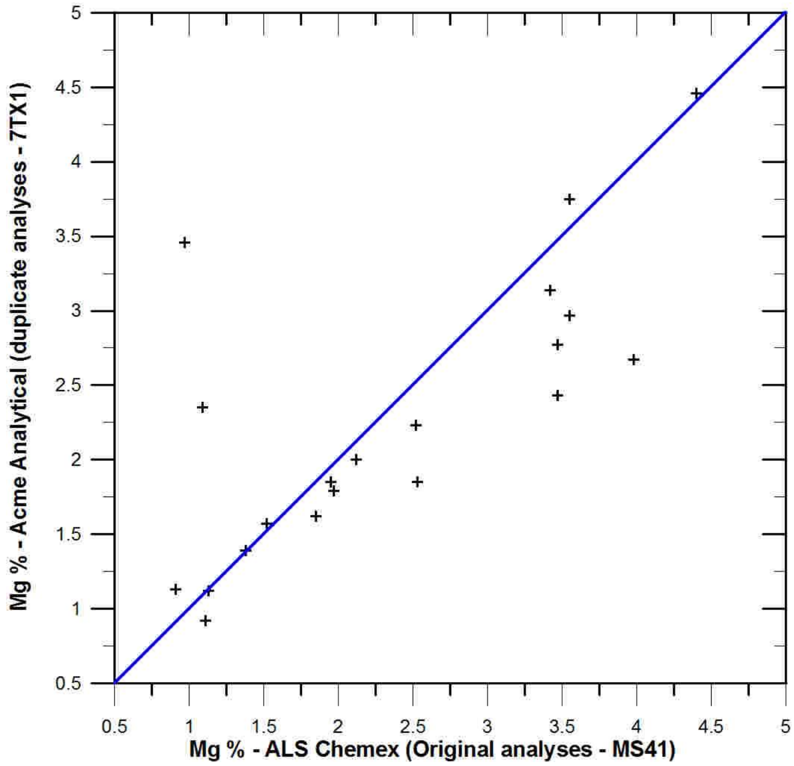


Figure 19. Duplicate core samples Mg values

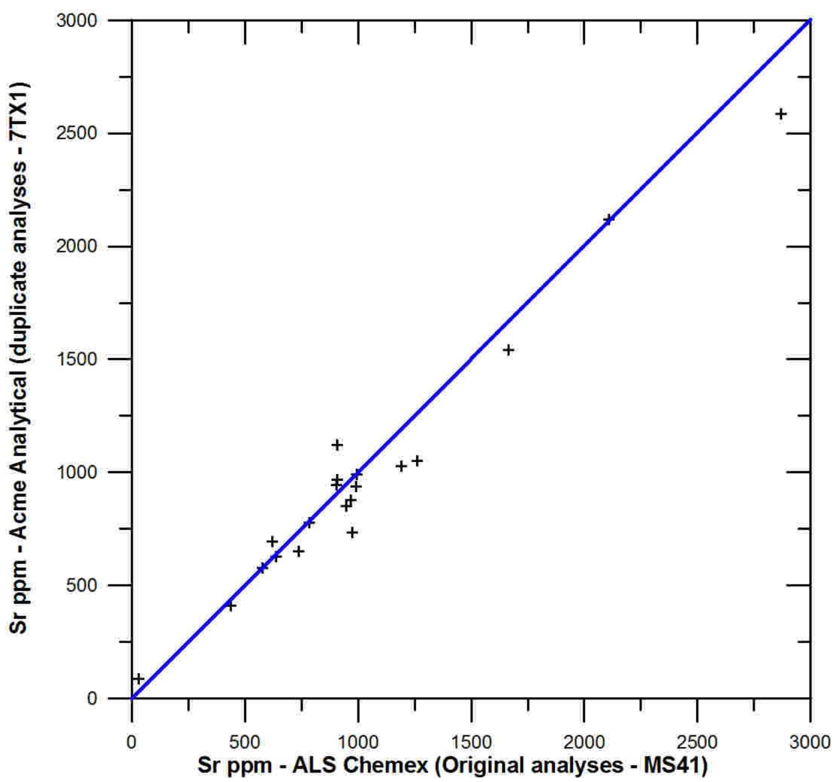


Figure 20. Duplicate core samples Sr values

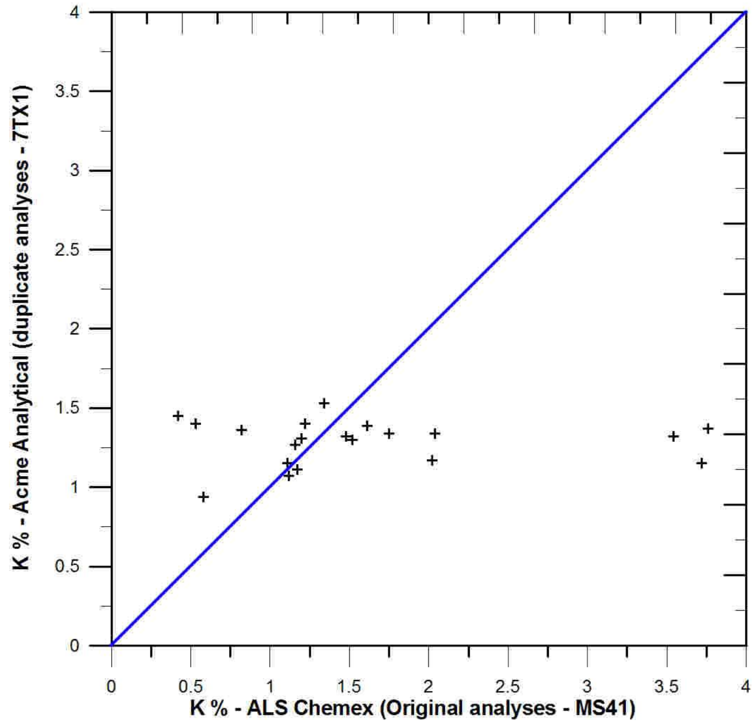


Figure 21. Duplicate core samples K values

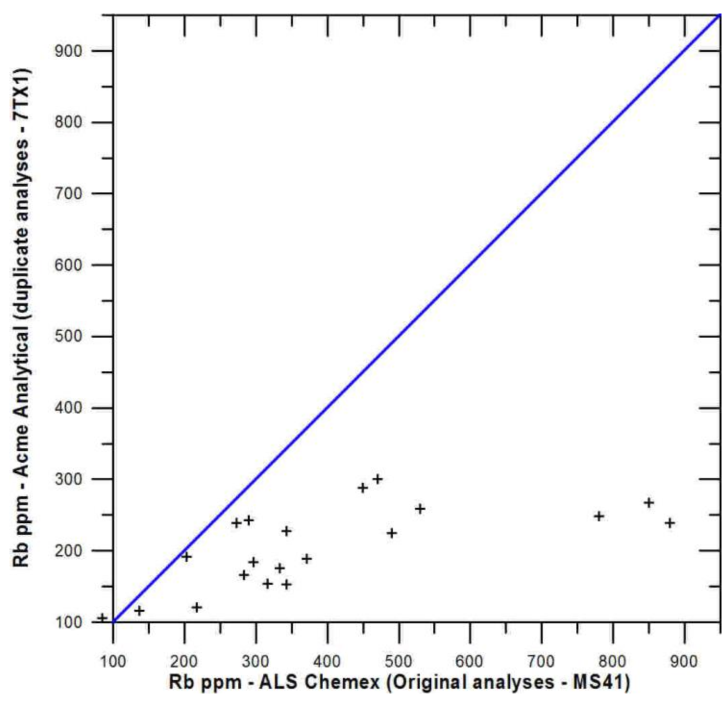


Figure 22. Duplicate core samples Rb values

In the QP's opinion, considering the nature of the samples, quarter core, the duplicate analyses are acceptable for Li, Mg and Sr when compared to the original values. However, further testing is required to provide assurance that the K and Rb data is reliable.

13.0 Mineral Processing and Metallurgical Testing

Preliminary metallurgical testing has been initiated on sample rejects from the Stage 1 drill program. However as at the effective date of this report no results have been received for this work.

14.0 Mineral Resource Estimates

New inferred resources for selected alkalis have been estimated for the same intervals used in the previously declared lithium resource estimate (Verley, 2013a). These new inferred resources, based on CIM Definition Standards on Mineral Resources and Reserves (2004), for potassium (K), rubidium (Rb), cesium (Cs), magnesium (Mg) and strontium (Sr) are tabulated below (Table 11).

The estimate of new resources was undertaken for the area drilled during the Stage 1 drill program on the Property using a polygonal method and using only analytical data from the Stage 1 drilling program. Grade and thickness continuity were assumed in an area of influence around each drill hole such that: in the north-south direction the influence area is half of the distance between holes; and in the east-west direction a distance from outcrop and extending down dip for 300 metres was used. A specific gravity of 2.1 tonnes per cubic metre was assumed for the estimate. Cut-offs of 1,000, 2,000 and 3,000 ppm Li, were used, with a cut-off of 2,000 ppm Li assumed to be a reasonable choice for a potentially economic lithium resource.

The lithium-bearing clays occur in two discreet units: an upper clay unit, and a lower clay unit, separated by an ignimbrite sheet.

Inferred resources were estimated for each of the lithium-bearing units At a cut-off of 2,000 ppm Li, the inferred resource for the upper clay unit is estimated to be 20,060,000 tonnes averaging 2,748 ppm Li (1.46% LCE), 1.07% K, 267 ppm Rb, 537 ppm Cs, 2.16% Mg and 1,136 ppm Sr. For the lower clay unit the inferred resource is 68,211,000 tonnes averaging 3,278 ppm Li (1.75% LCE), 1.34% K, 331 ppm Rb, 807 ppm Cs, 2.22% Mg and 1,007 ppm Sr. Total inferred resources for the combined clay units are estimated at 88,271,000 tonnes averaging 3,163 ppm Li (1.68% LCE), 1.28% K, 317 ppm Rb, 749 ppm Cs, 2.21% Mg and 1,036 ppm Sr. Plan views illustrating the areas of the polygons used in the estimate for the upper and lower clay units are found in Figures 21 and 22. Weighted averages of lithium grades over intercept thickness in each of the holes are also plotted on Figures 23 and 24 and show a zone of higher lithium grades in the northern part of El Sauz and continuing through Fleur to La Ventana.

Mineral resources that are not mineral reserves do not have demonstrated economic viability. Further testing will need to be undertaken to confirm economic feasibility.

Table 11. Inferred Resource Estimate – El Sauz - Fleur Concessions.

			Grade					
Cut-off (ppm Li)	**True[1] Thickness (m)**	**Tonnage[2]**	**Li ppm**	**K %**	**Rb ppm**	**Cs ppm**	**Mg %**	**Sr ppm**
Upper Clay								
1,000	18.30	57,700,000	1,381	0.59	157	473	1.67	1,274
2,000	6.80	20,060,000	2,748	1.07	267	537	2.16	1,136
3,000	8.10	9,846,000	3,398	1.17	301	560	2.06	1,375
Lower Clay								
1,000	27.60	96,103,000	2,526	1.10	263	702	1.77	983
2,000	14.70	68,211,000	3,278	1.34	331	807	2.22	1,007
3,000	24.00	44,083,000	4,030	1.65	379	886	2.18	1,092
Combined Clay Units								
1,000	45.90	153,806,000	2,052	0.91	224	617	1.73	1,092
2,000	21.50	88,271,000	3,163	1.28	317	749	2.21	1,036
3,000	32.10	53,929,000	3,922	1.56	364	822	2.16	1,148

At the present time there are no known environmental, permitting, legal, title or socio-economic factors that would adversely impact future development of these resources. A proposed royalty on pre-tax earnings from mining operations of 7.5%, to be imposed by the Government of Mexico, would have an impact on the viability of these resources. At this time it is not known if such a royalty will be imposed or what the actual rate will be. Economic assessments of these resources will need to look at the possible effects of royalties on a commercial operation.

[1] True thickness is estimated to be 94% of drill intercepts.

[2] It should be noted that figures expressed above are gross figures. The Property is the subject of Joint Venture #1 between Bacanora and REM, pursuant to which REM has an option to earn up to a 49.9% interest. To date, REM has earned a 30% interest. Specific Gravity = 2.1 tonnes/cubic metre.

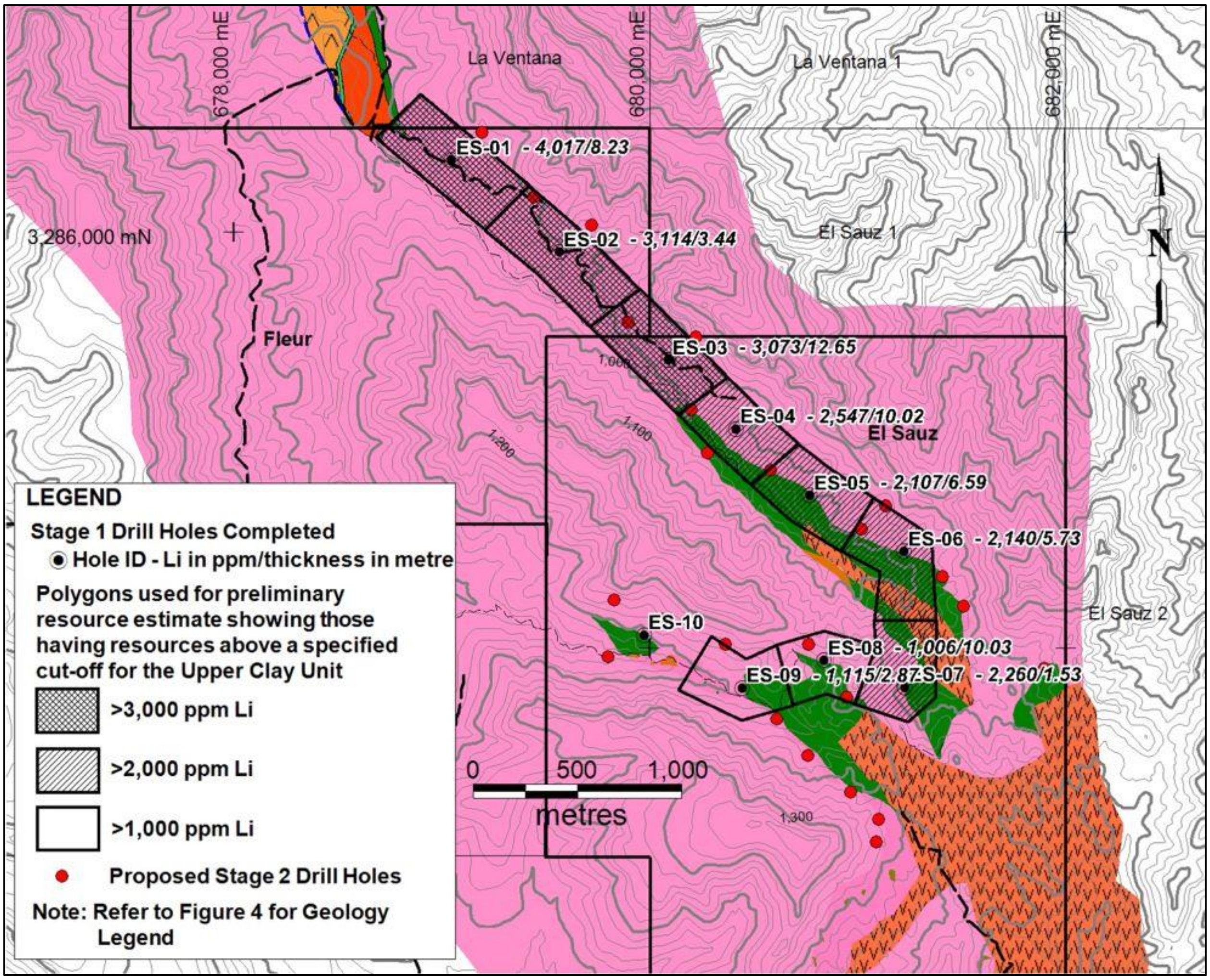


Figure 23. Plan of Polygons used in the Inferred Resource Estimate for the Upper Clay

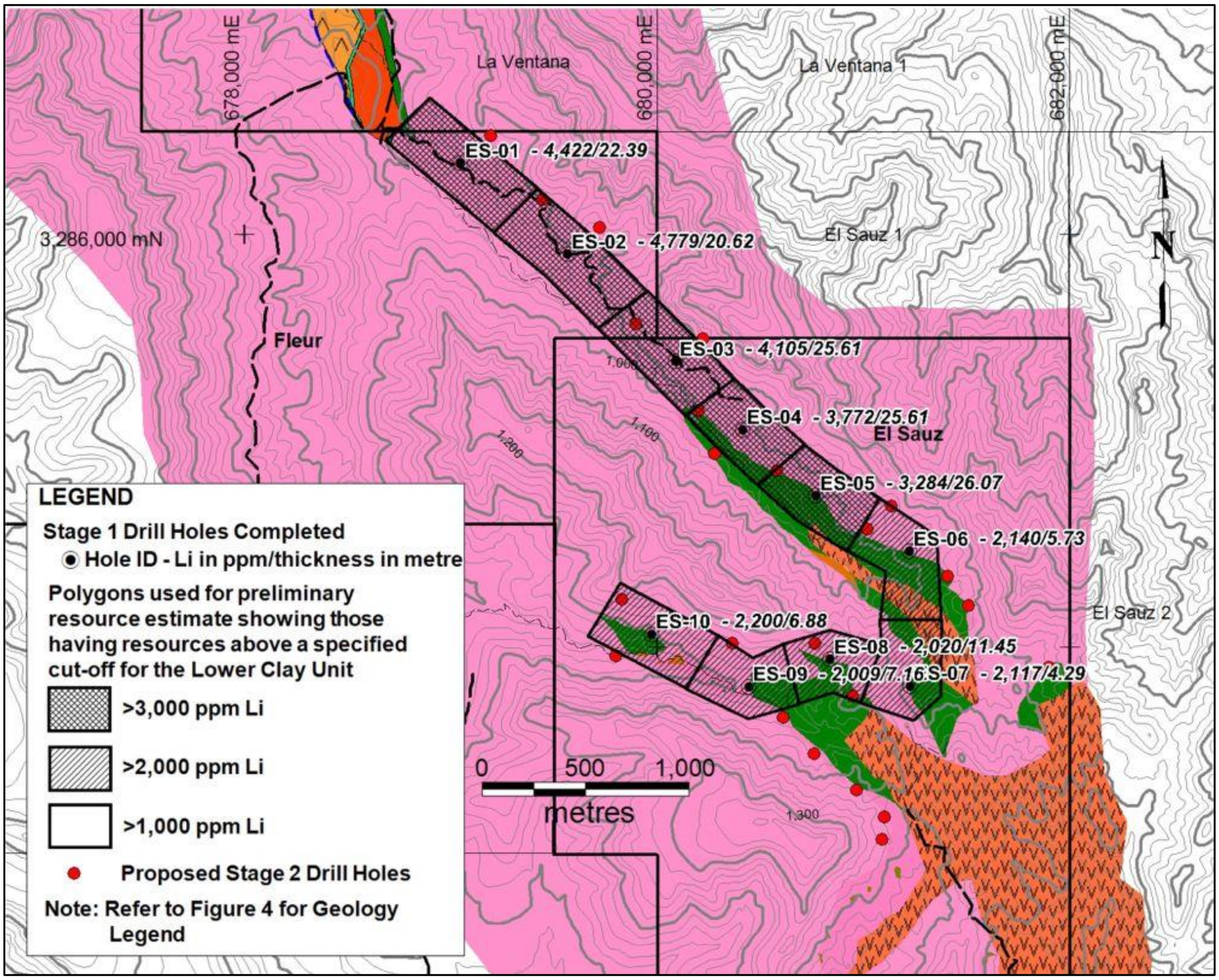


Figure 24. Plan of Polygons used in the Inferred Resource Estimate for the Lower Clay

NOTE: Items 15.0 to 22.0 of NI 43-101(F1) have been omitted from this report as the Property is an early stage project.

23.0 Adjacent Properties

There are 3 concessions that adjoin the Property: San Gabriel, La Ventana and La Ventana 1, all of which are owned 100% by Bacanora's subsidiary, MSB. In addition, the Property is surrounded by the large Megalit concession that is subject to Joint Venture #2 between Bacanora and REM. No work has been conducted on San Gabriel, La Ventana 1 or Megalit. However, the La Ventana concession that adjoins the northeast sides of the Property hosts lithium-bearing clays in 2 units that are correlative to those found on the Property and are in the same geological setting (Verley et al., 2012). The Qualified Person has visited the La Ventana concession several times and has verified the work that has been done on that concession. Information on La Ventana is sourced from reports written by the Qualified Person and referenced herein.

Mapping and drilling by Bacanora on La Ventana concession has established the presence of two lithium-bearing, sedimentary-volcaniclastic sequences ("clay units") separated by an ignimbrite sheet (Figure 25). The sequence dips approximately 20^{o} to the east and is capped by olivine basalt flows. The basalt is underlain by the upper clay unit and is traceable along strike for 3.5 km on La Ventana. Drill intercepts of the upper clay unit vary from 24 to 85 m in length. The upper clay unit is underlain by an ignimbrite layer that has drill intercepts varying from 1 to 45 metres in length. The ignimbrite is underlain by the lower clay unit that has intercepts in drill holes ranging from 4 to 40 m in length. The lower clay unit has not been fully delineated on surface, but drilling has intersected it along 2 km of strike length.

Figure 25. La Ventana Concession, Lithium-bearing Sequences
(Looking south from drill hole LV-09)

Analyses of rock samples collected from surface exposures at La Ventana range from 405 to 9,831 ppm Li (0.22 to 5.23% LCE). Lithium values from core samples from drill holes at La Ventana range from 0 to 10,000 ppm Li (0 to 5.3% LCE).

Drill intercepts of the Li-rich zone within the upper clay unit average 11.38 m in length. This is equivalent to a true thickness of 10.69 m based on the inclination of the unit (20^o) and that of the drill holes (90^o). Clays in the upper clay unit belong to the smectite family and are believed to be predominantly hectorite ($Na_{0.3}(Mg, Li)_3Si_4O_{10}(OH)_2$).

Drill intercepts of the Li-rich zone within the lower clay unit average 19 m in length. This is equivalent to a true thickness of 17.85 m based on the inclination of the unit (20^o) and that of the drill holes (90^o). Preliminary studies of clays from four samples by Zhou and Yeung of SGS Minerals (2011) indicate that the lithium-bearing clay polylithionite ($KLi_2AlSi_4O_{10}F_2$) is a major component in some of the sediments in the lower clay unit.

The drilling results from La Ventana have been used to estimate an NI 43-101 compliant inferred resource for lithium (Verley et al., 2012). The estimate of inferred resources (Table 12) for the upper clay unit is 22,642,000 tonnes averaging 2,632 ppm Li (1.3% LCE). For the lower clay unit the inferred resource is estimated at 37,511,000 tonnes averaging 3,190 ppm Li (1.7% LCE). The inferred resource for both the upper and lower clay units is estimated to total 60,153,000 tonnes averaging 3,000 ppm Li (1.6% LCE) at a cut-off of 2,000 ppm Li. Both the upper and lower clay units are open down-dip. No estimate of resources was made for other alkali metals or alkali earths in the La Ventana deposit.

Mineral resources that are not mineral reserves do not have demonstrated economic viability. Further testing will need to be undertaken to confirm economic feasibility.

Table 12. Inferred Lithium Resource Estimate Summary – La Ventana Concession

		Average Grade	
Unit	Tonnes	Li ppm	LCE* %
Upper Clay	22,642,000	2,632	1.3
Lower Clay	37,511,000	3,190	1.7
Total: Upper & Lower Clay	60,153,000	3,000	1.6

* LCE = Li% multiplied by 5.324

Based on the estimated resources and other factors, Bacanora completed a Preliminary Economic Assessment ("PEA") of La Ventana (Verley et. al., 2013b), which indicated that La Ventana has potential to support a potential lithium mining and production operation with an output of 35,000 tonnes battery grade lithium carbonate per annum over a 20 year open pit mine life, suggesting annual revenue of $US210 million for an Internal Rate of Return ("IRR") of 138%, with a 1.9 year pay back (Table 13). Capital costs are estimated at $US114 million and average operating costs at $US1,958/tonne. Net present value ("NPV") of the Project, discounted at 8%, is $US848 million, assuming an average lithium carbonate price of $US6,000/tonne.

Table 13. Preliminary Financial Highlights

Open Pit Mine Production per annum	2,735,000	tonnes @ 0.3% Li
Lithium carbonate production per annum	35,000	tonnes
Revenue ($US6,000/tonne of lithium carbonate) per annum	$US210	million
NPV (8% Discount)	$US848	million
Internal rate of return (IRR)	138%	
Average Operating costs	$US1,958	per tonne
Total Initial Capital Costs	$US114	million
Expected Mine Life	20	years
Pay Back of Capital Costs	1.9	years

The PEA has been produced for La Ventana based on the disclosed inferred resources and preliminary metallurgical test work that shows lithium can be liberated from the clays into a solution from which lithium carbonate has the potential to be precipitated. The PEA is preliminary in nature as it includes inferred mineral resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as mineral reserves, and there is no certainty that the preliminary assessment will be realized. In order to make the PEA the Qualified Person used forward looking information including, but not limited to assumptions concerning lithium commodity prices, cash flow forecasts, project capital and operating costs, commodity recoveries, mine life and production rates. Readers are cautioned that actual results, should they be realized, may vary from those presented. Further testing will need to be undertaken to confirm economic feasibility of the La Ventana Lithium Deposit. There have been no prior pre-feasibility or feasibility studies undertaken for La Ventana.

The Qualified Person cautions readers that there is no assurance that resources identified on the Property will be subject to the same economic parameters as those used for the La Ventana resources and PEA.

24.0 Other Relevant Data and Information

There is no other relevant data or information concerning the Property.

25.0 Interpretation and Conclusions

Exploration during 2013 has confirmed that the clay units on the Property (El Sauz and Fleur concessions) correlate with the clay units intersected in drilling at the adjoining La Ventana lithium deposit.

On the Property the clays are situated in two units that dip gently to the east over a strike length of 4.2 km. On the El Sauz concession, exposures of the clay units crop out over a strike length of 2.2 km. A portion of the clay units, exposed in the central part of El Sauz, dip toward the southwest. On Fleur, the clay units are covered by basalt, but drilling has demonstrated that the clay units continue under the basalt.

A total of 10 diamond drill holes tested the Property in 2013. Significant drill-intercept results from these holes ranged from a low in the upper clay unit (hole ES-01) of 2,107 ppm Li over 7.01 m, to a high (hole ES-02) in the lower clay unit of 3,964 ppm Li over 30.28 m.

The drill results were used to estimate inferred resources for the upper clay unit of 20,060,000 tonnes averaging 2,748 ppm Li (1.46% LCE), including 1.07% K, 267 ppm Rb, 537 ppm Cs, 2.16% Mg and 1,136 ppm Sr and 68,211,000 tonnes averaging 3,278 ppm Li (1.75% LCE), including 1.34% K, 331 ppm Rb, 807 ppm Cs, 2.22% Mg and 1,007 ppm Sr for the lower clay unit at a cutoff of 2,000 ppm Li. The lithium grade of both the upper and lower clay units increases from the northern part of El Sauz through Fleur to La Ventana.

The estimated resources for the upper and lower clay units on the Property are classified as inferred, based on the spacing of the available data and the level of confidence on the geological continuity of the mineralization, the confidence on the sampling techniques and assaying procedures.

The data density, while widely spaced, is adequate for this stage of exploration. Based on the QP's examination of the data, it is his opinion that it is reliable and meets or exceeds industry standards for such data.

At the present time no significant risks have been identified that would inhibit the advancement of development of the Property.

Based on the results of work conducted on the Property, further work is warranted in order to upgrade and expand the resource, as well as to collect samples for mineral processing and metallurgical studies.

In the QP's opinion, the work conducted by Bacanora on the Property met the original objective of estimating a preliminary inferred lithium and alkali metal resource.

26.0 Recommendations

Further work on the Property should consist of:

1. Stage 3 diamond drilling consisting of approximately 4,000 metres of NQ-sized core in 20 drill holes designed as infill and step-out holes with the objective of upgrading the resource category and expanding the size of the resource in the central El Sauz area, as well as test new targets on the Joint Venture #1 lands;
2. Continued detailed geological mapping to define the extents of the favorable lithium-bearing clay units on the Property as well as on the new concessions held by the Joint Venture #2;
3. Continuous channel samples across select exposures of the upper and lower clay units;
4. Acquisition of large (~1 tonne) surface samples by trenching of exposures of the upper clay unit and, if possible, the lower clay unit from the Property for mineral processing and metallurgical test work;
5. Acquiring high quality topographic control, preferably through airborne LIDAR survey of the concession areas, in order to assist with the resource estimation and provide more accurate surface details to aid in development planning;
6. Acquire specific gravity measurements for all lithologies and subunits.

The estimated cost of the recommended program is in the order of $US1,250,000.

A detailed breakdown of the recommended program costs are found in Table 14 below.

Contingent upon the success of the recommended program, additional work will be required to further evaluate the Property. At this juncture, it would be premature to propose a second phase program or budget prior to an assessment of the results of the above recommended program.

Table 14. Estimated Cost of Recommended Exploration Program

Item	Days	/units	Rate	Budgeted Cost
WAGES & SALARIES				
Project Geologists (3)	400	m-days	$250	$100,000
Field technicians (4)	400	m-days	$150	$60,000
FIELD EXPENSE:				
Field supplies				$300
Fuel	1200	ltr	$1.50	$1,800
Lodging & meals	60	days	$266	$15,960
Permitting				$125,000
Truck rental (2)	400	days	$100	$40,000
TECHNICAL SERVICES/ SUBCONTRACTORS				
Assay & analysis	1200	samples	$29	$34,848
Drilling				
NQ-core drilling	4000	m	$95	$380,000
Drill mob/demob				$10,000
Drill moves & hole surveys	1000	hrs	$32	$32,000
Consumables: core boxes, lubricants, mud	4000	m	$40	$160,000
Fuel	3000	ltrs	$1.50	$4,500
Lodging & meals (drillers)	4000		$10.48	$41,920
Drilling Support				
Bulldozer	300	hrs	$120	$36,000
Water truck	200	hrs	$75	$15,000
Water				$5,000
Surveying				
LIDAR Topographic survey				$140,000
SUBTOTAL				$1,202,328
Contingency				$47,672
TOTAL				**$1,250,000**

27.0 References

Ajie, J., T. Eggleston, M. Hertel and D. Kappes, 2009: Preliminary Assessment and Economic Evaluation, Kings Valley Project, NI43-101 Technical Report for Western Lithium Corp.

Broadhurst, S.D., 1956: Lithium Resources of North Carolina, Information Circular 15, Division of Mineral Resources, Dept. of Conservation and Development, North Carolina.

Cerny, P., 1991: Rare element granitic pegmatites. Part 1: Anatomy and internal evolution of pegmatite deposits. Geological Association of Canada, Geoscience Canada, vol. 18, p. 49-67.

CIM Standing Committee on Reserve Definitions, 2004: CIM Definition Standards – on Mineral Resources and Mineral Reserves.

Hofstra, A.H., T.I Todorov, C.N. Mercer, D.T. Adams, and E.E. Marsh, 2013: Silicate Melt Inclusion Evidence for Extreme Pre-eruptive Enrichment and Post-eruptive Depletion of lithium in Silicic Volcanic Rocks of the Western Unitied States: Implications for the Origin of Lithium-Rich Brines, Econo Geol., Vol 108, pp. 1691-1701.

Shannon, J.M., D. Nussipakynova and C. Pitman, 2011: Quebec Lithium Property, La Corne Township, Quebec, Canada, SEDAR filed NI43-101 Technical Report for Canada Lithium Corp.

Verley, C.G., E. McNeill and M.F. Vidal, 2012: Report on the Sonora Lithium Project, SEDAR filed NI43-101 technical report for Bacanora Minerals Ltd. Dated effective September 5, 2012.

Verley, C.G., 2013a: Initial Lithium Resource Estimate El Sauz & Fleur Concessions, Sonora Lithium Project, SEDAR filed NI43-101 technical report for Bacanora Minerals Ltd and Rare Earth Minerals PLC. Dated effective October 11, 2013.

Verley, C.G., and M.F. Vidal, 2013b: Preliminary Economic Assessment of the La Ventana Lithium Deposit, Sonora, Mexico, SEDAR filed NI43-101 technical report for Bacanora Minerals Ltd. Dated effective January 24, 2013.

Zhou, Huyun and B.C. Yeung, 2011: Report on Clay Speciation by X-Ray Diffraction, Project No. MI4508-MAR11, SGS Minerals for Bacanora Minerals Ltd.