Report on the
Sonora Lithium Project

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

Huasabas - Bacadehuachi Area
(Map Sheet H1209)
Sonora, Mexico
centered at: 29°46'29"N, 109°6'14"W

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Dated: September 5, 2012.

Date and Signature Page

Date

Dated Effective: September 5, 2012.

Signatures

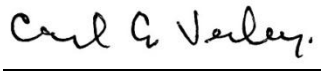

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Table 1: Abbreviations used in this report

ASTM	American Standards for Testing Materials
ºC	Degrees Celsius
Fm	Geological formation
gm	gram
ha	Hectares
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
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

1.0 Summary

The Bacanora Minerals Ltd. ("Bacanora") Sonora Lithium Project ("the Project") consists of 4 separate mineral concessions covering 4,049 ha in central Sonora State, Mexico. The concessions are held by Bacanora's wholly-owned Mexican subsidiary: Minera Sonora Borax S.A. de C.V. The Project 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, US Borax commenced an exploration program in the area, which led to the discovery of some weakly anomalous boron showings which also were high in lithium. US Borax abandoned exploration in the area shortly thereafter.

The Project 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 that contain lithium-bearing clay units. Quaternary basalt flows cover the basinal sediment-volcaniclastic succession.

Initial rock sampling and mapping in the Project area by Bacanora relocated the lithium-bearing clay units. Drilling by Bacanora in 2010 and 2011 on one of the concessions (La Ventana) in the Project area located two lithium-bearing clay units (upper and lower) that average 41 and 22 m in thickness, respectively, and that are separated by an ignimbrite unit varying from 1 to 45 m in thickness. The sedimentary-volcanic sequence dips at approximately 20^{o} to the east and crops out along 3.5 km of strike length. The exposures are in erosional windows looking through overlying basalt that covers much of the area. Rock sampling on the El Sauz concession by Bacanora has also resulted in the location of lithium-bearing clay units with strike length of up to 2.2 km.

The drilling results from La Ventana have been used to estimate an inferred resource for lithium. The estimate of inferred resources 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 20,682,000 tonnes averaging 4,103 ppm Li (2.0% LCE). The inferred resource for both the upper and lower clay units is estimated to total 43,324,000 tonnes averaging 3,005 ppm Li (1.6% LCE) or 712,000 tonnes LCE (Table 1). Both the upper and lower clay units are open down-dip; the lower clay unit has untested resource potential up-dip.

Investors are cautioned that the resource estimate does not mean or imply that an economic lithium deposit exists at La Ventana concession. Further testing will need to be undertaken to confirm economic feasibility.

Table 2. Inferred Lithium Resource Estimate Summary – La Ventana Concession

		Average Grade		
Unit	**Tonnes**	**Li ppm**	**LCE %**	**LCE tonnes**
Upper Clay	22,642,000	2,632	1.3	292,000
Lower Clay	20,682,000	4,103	2.0	420,000
Upper & Lower Clay	43,324,000	3,005	1.6	712,000

Based on the drill results and the lithium showings on the other concessions in the Project area, the Qualified Person concludes that a significant lithium resource exists in the Project area. An exploration program designed to upgrade the resource category and to demonstrate that the clay units are amenable to a commercial lithium recovery process is recommended. The work should include detailed topographic control surveys, detailed geological mapping, bulk sampling of clay exposures on La Ventana in order to obtain sufficient material for beneficiation and recovery process tests, as well as in-fill drilling to up-grade the resource.

The estimated cost of this work is $US800,000.00.

Figure 1. Sonora Lithium Project Location Map

2.0 Introduction

This report was prepared at the request of Mr. Paul T. Conroy, President of Bacanora Minerals Ltd.

The purpose of the report is to provide a summary of scientific and technical information concerning mineral exploration and development on the Sonora Lithium Project (hereafter referred to as "the Project"), in the state of Sonora, Mexico.

The mineral rights of the Project are currently owned by Bacanora.

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 lead author with overall responsibility for this report, Carl Verley, P.Geo., inspected the Project concessions on June 10, 2012. During this time he examined and verified the location of some of the diamond drill holes, examined the geology of the Project area in the field, examined the diamond drill core from the drilling program. In addition, he reviewed all analytical data generated from exploration on the Project including quality control and quality assurance protocols at the offices of Bacanora's Mexican subsidiary, Minera Sonora Borax S.A. de C.V., in Hermosillo, Mexico.

Mr. Martin Vidal, MSc, is responsible for managing the Sonora Lithium Project exploration program. Much of the historical reports and some of the academic geological articles used in the preparation of this Technical Report were authored by Martin F. Vidal, Lic.Geo., and Vice-president of Exploration for Bacanora. Mr. Vidal is responsible for the sections on Geology and Deposit Types. Mr. Vidal is also responsible for Items 14.0 of this report.

Ms. Ellen MacNeill, MSc, P.Geo., is responsible for Items 2.0 through 5.0. In addition, Ms. MacNeill provided peer review of the report.

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 4 individual mineral concessions in 4 separate parcels held by Bacanora's Mexican subsidiary: Minera Sonora Borax S.A. de C.V. ("MSB"). The parcels total 4,049 hectares in area. 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 which are shown in map view in Figure 2.

Table 3: Concession Status, Sonora Lithium Project

Concession Name	Title #	Record Date	Expiry Date	Area (ha)
La Ventana	235611	Jan. 22, 2010	Jan. 21, 2060	875
El Sauz	235614	Jan. 22, 2010	Jan. 21, 2060	1025
Buenavista	235613	Jan. 22, 2010	Jan. 21, 2060	649
San Gabriel	235816	Mar. 12, 2010	Mar. 11, 2060	1500

The boundaries of each claim are located with reference to a claim monument (Punto de Partida) and the distances and directions from the claim 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 concessions from their owner by paying an aggregate of 500,000 shares in Bacanora and $US40,000 to the owner for a 100% interest in the Project.

Surface rights to the concession areas are divided amongst the Municipalities of Bacadehuachi, Granados and Huasabas, from whom permission to work must be received. In addition, permission to work must be received from individual landowners.

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 is required under Mexican Mining Law to file environmental impact assessment reports along with applications for drill permits. To date, MSB has been able to obtain all of the permits and permissions required to conduct its exploration work on the claimed area. 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 flooding may temporarily block present access routes to La Ventana, thus affecting the ability to perform work there.

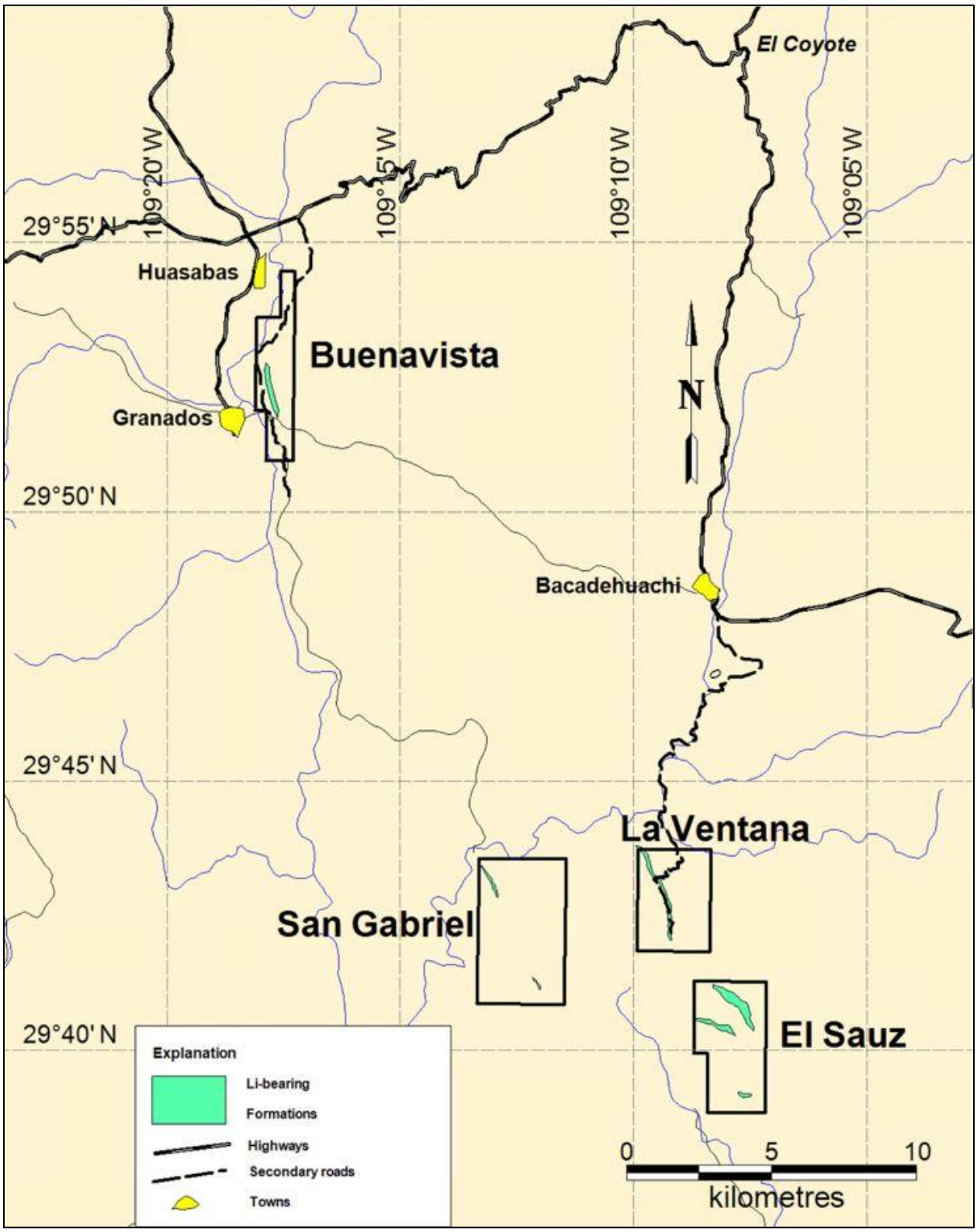

Figure 2. Location of the Concessions in the Sonora Lithium Project

5.0 Accessibility, Climate, Local Resources, Infrastructure and Physiography

5.1 Accessibility

Access to the Project 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. The company has been setting up its field camps within this town. Access to La Ventana, El Sauz and San Gabriel concessions is via secondary, unimproved, dry-weather roads south from Bacahehauchi, approximately 10-12 km, crossing various privately owned ranches of which land owners have granted permission for access to the concessions. The Buenavista concession is located immediately east of the towns of Granados and Huasabas, and is reached by a similar secondary road system as the other concessions.

5.2 Climate and Physiography

The Project area 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. Average elevation at La Ventana project is 900 m above sea level. The Project is surrounded by mountain peaks with elevations ranging up to 1440 meters above sea level.

The average ambient temperature is 21° C, with minimum and maximum temperatures of -5º C and 50º C, respectively, in the concession areas. Extreme high temperatures, upwards of 49º C, occur in summer, while winters, although short, are cool comparable with most 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. 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 any of the concessions.

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

All water for exploration and mining activities must be pumped 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.

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 in the Project area prior to 1992, when US Borax initiated regional exploration work in the search for borate deposits. In 1996, US Borax 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. US Borax abandoned exploration in the area due to the low boron values. However, samples taken from areas now covered by the Buenavista concession returned significant lithium values ranging from 121 to 1,350 ppm Li (equivalent to 0.06 to 0.72% LCE, Figure 3). Samples collected from areas now covered by La Ventana concession returned lithium values ranging from 405 to 5,480 ppm Li (0.22 to 2.92% LCE, Figure 4).

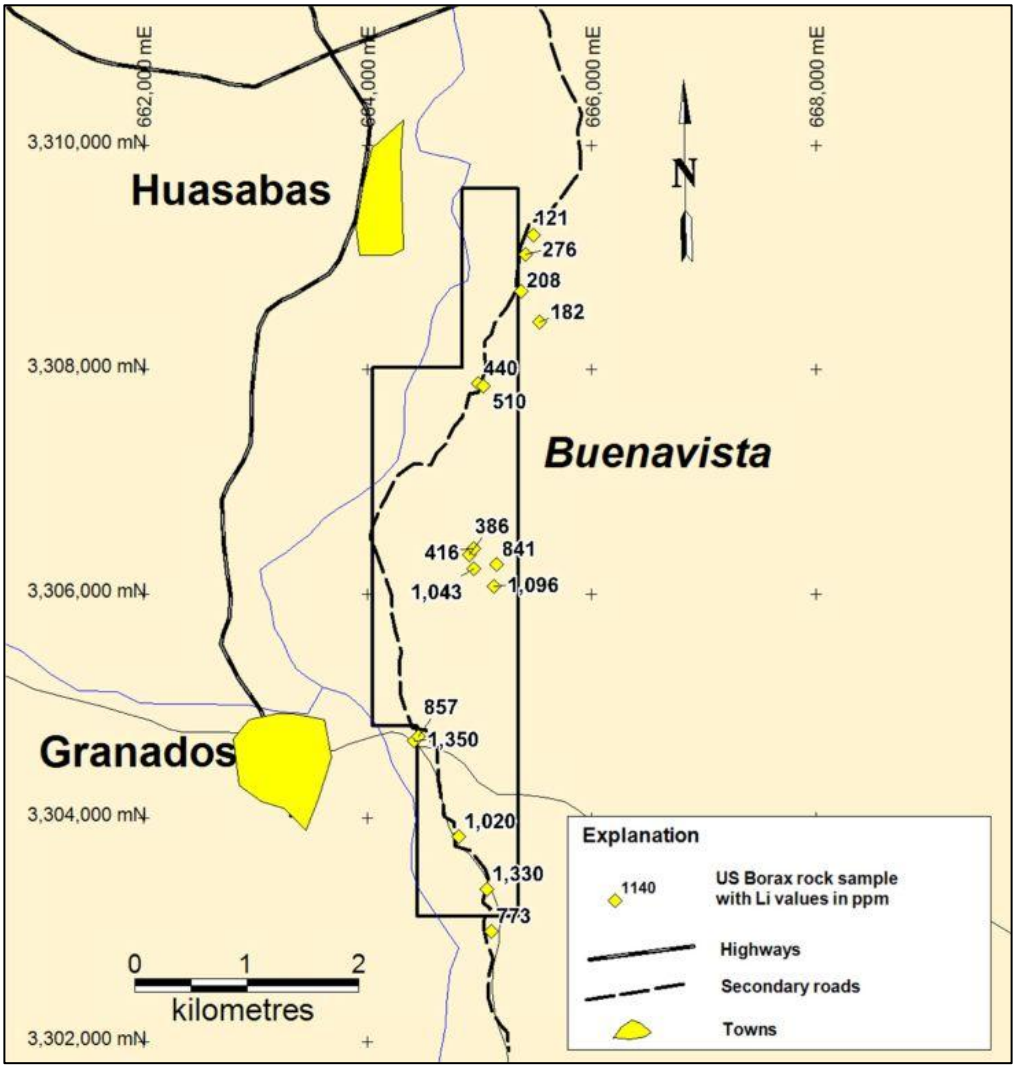

Figure 3. US Borax Rock Samples - Buenavista Area

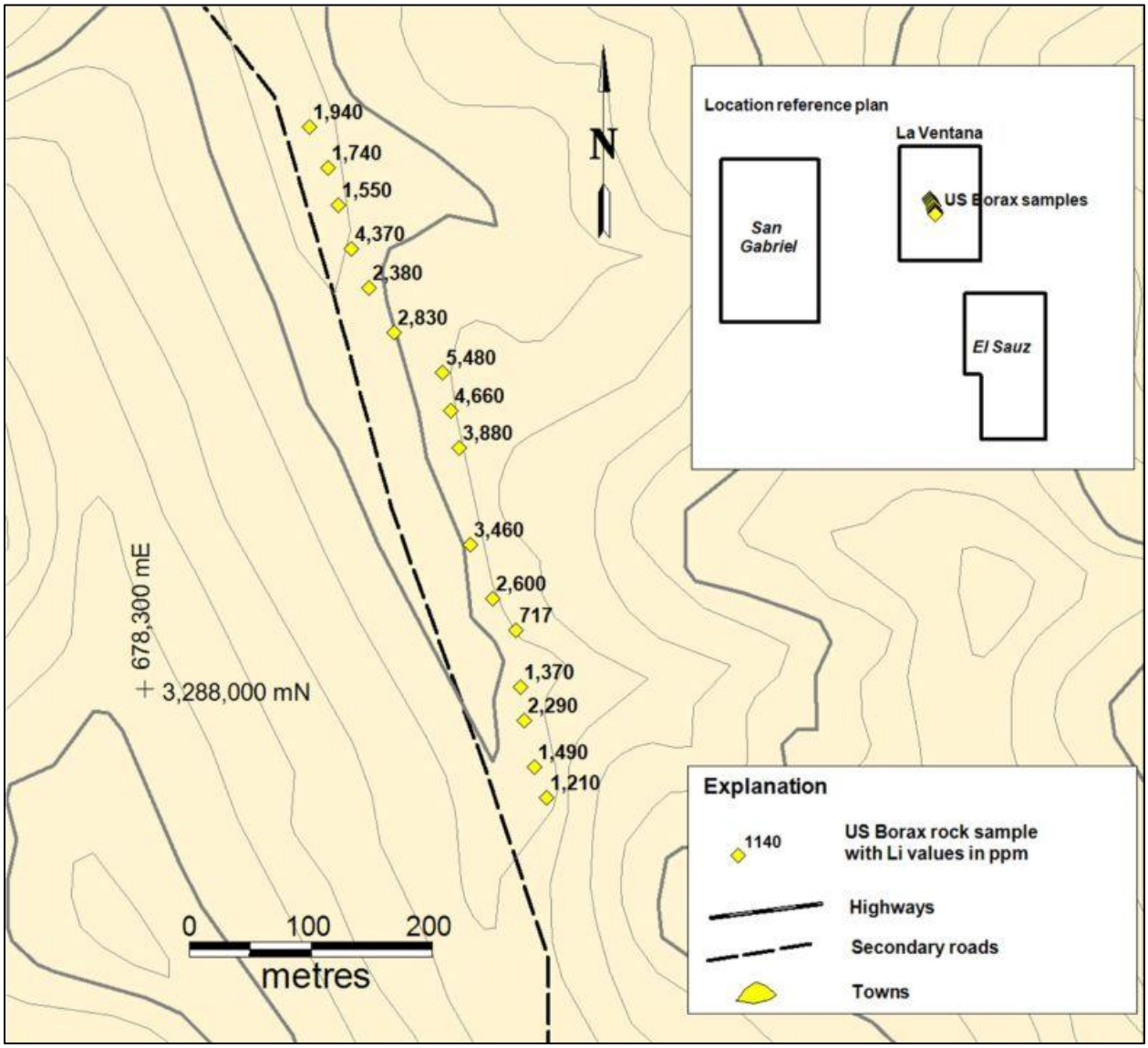

Figure 4. US Borax Rock Samples - La Ventana Concession

There are no historical mineral resource or mineral reserve estimates in the area of the concessions.

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

7.0 Geological Setting and Mineralization

7.1 Regional Geology

The Project area 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. Quaternary basalt flows cover the basinal sediment-volcaniclastic succession (Figure 5).

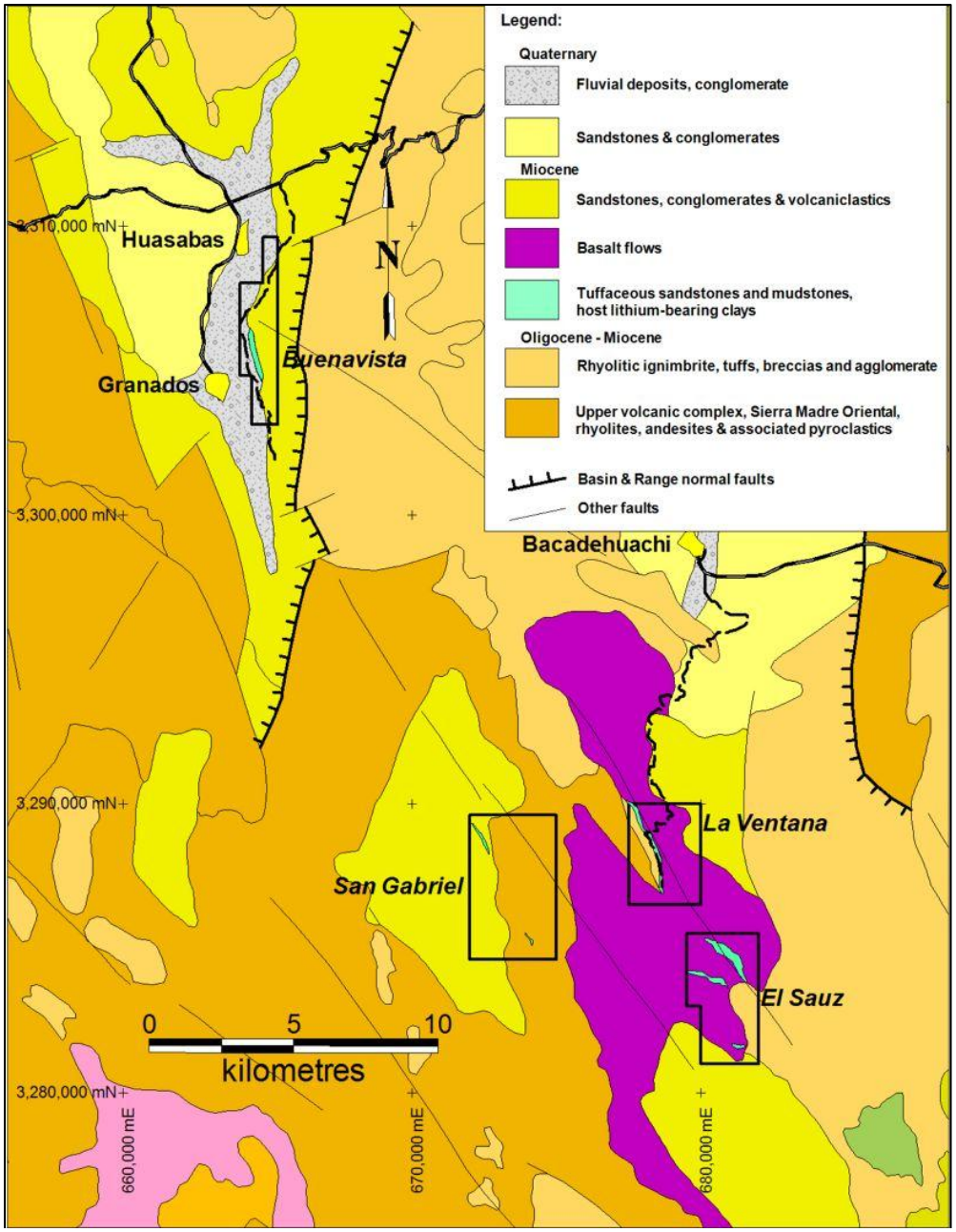

Figure 5. Regional Geology of the Sonora Lithium Project Area

7.2 Property Geology

Preliminary geological mapping of the Project concession areas was initiated by US Borax in the mid 1990's. The lithium-bearing sedimentary sequences were 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 north-looking views of gently, easterly dipping, Li-bearing sediments on Buenavista and La Ventana concessions (Figure 6 & 7).

Figure 6. Clay Unit - Buenavista Concession.

Li clays at sample point 12CGV535BV (800 ppm Li)

Figure 7. Upper Clay Unit - La Ventana Concession. Li clays at sample point 12CGV539VT (2,600 ppm Li)

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 8). 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

Figure 8. La Ventana Concession, Lithium-bearing Sequences.

(looking south from drill hole LV-09)

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. Based on information from drill core a stratigraphic succession for La Ventana concession has been proposed (Table 4) in which the clay units have been further divided into a series of subunits.

Table 4. La Ventana – Stratigraphy of Lithium-bearing Sequences.

Unit	Subunit	Description
Capping basalt	UBAS	Basalt. Contains greenish olivine crystals. Veinlets of kaolinite/alunite (White/greenish, powdery).
Upper clay unit	UPP_SS	Reddish medium-coarse grained sandstone. Contains moderate calcite in veinlets.
	UTC	Light gray tuffaceous claystone intercalated with reddish, sandy layers. Scarce FeOx layers (black).
	CALCLS	Dark gray slumping breccias? Dark-fine clayey groundmass with tuffaceous fragments. Calcite in masses.
	WAXCLS	Green-yellowish silica nodules in a clayey waxy-tuffaceous matrix.
	BRSS	Brown sandstone. Poorly bedded. Highly calcareous. Reddish tuffaceous coarse grained sandstone. Clay matrix. Soft.
	HS	Light green-pinkish fine grained seq. of clays and silica nodules (Hot spring). Waxy in zones. Calcite in masses
Ignimbrite	IGNIM	Ignimbrite: orange colored, welded lapilli tuff. Locally brecciated.
Lower clay unit	LWR-TS	Light Gray reworked tuff with abundant lithium-bearing clayey zones.
	LART	Light green tuffaceous sediments. K-feldspar groundmass with quartz and biotite. Indurated. Contains lapilli tuff.
	LCGL	Polymitic conglomerate. Reddish matrix to the top and greenish to the bottom. Purple-greenish-white fragments. Occurs as a lens at the northern part of La Ventana.
Basement Volcanics	LBAS_AND	Dark green basalt, biotite-rich (black) in a fine grained groundmass. Andesitic tuff at the northern part of the concession

On the El Sauz concession, lithium-bearing clay units are found in two areas: in the case of the northeastern-most exposures, outcrops dip to the east and occur across a strike length of approximately 2.2 km; outcrops dip to the west in the case of the more southerly exposures, appearing to form an anticlinal structure.

7.3 Mineralization

Mineralization in the Project consists of a series of lithium-bearing clay units that occur within and make up a substantial component of the intervolcanic sedimentary units on the individual concession blocks.

On La Ventana concession, lithium-bearing clays in the upper clay unit 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 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).

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. 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).

Analyses of rock samples collected from surface exposures at Buenavista range from 121 to 1,350 ppm Li (0.06 to 0.72% LCE), at El Sauz from 49 to 7,220 ppm Li (0.03 to 3.84% LCE) and for La Ventana from 405 to 5,480 ppm Li (0.22 to 2.92% 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).

In addition, analyses of the drill core from La Ventana have elevated values in cesium that range from 8 to 2,650 ppm and average 421 ppm. Analyses for rare earth elements indicate that these commodities are negligible since maximum total rare earth oxide concentration is 0.07% at La Ventana.

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 and subsequent impoundment of the resulting clay minerals in lakes. It is also thought that hot-spring activity related to volcanism may also supply some of the lithium to the lake environment. 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 mineralization in the concessions making up the Project 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. Lithogeochemical sampling of clay units exposed in young sedimentary basins by means of surface sampling or drilling.

9.0 Exploration

Bacanora's initial exploration efforts were directed to confirming the high lithium values that US Borax reported in samples from the clay units in the Buenavista and La Ventana concession areas.

9.1 La Ventana

A series of six samples were collected by Bacanora at the southern end of the upper clay unit on La Ventana concession in 2010 (Figure 9). The samples were continuous chip samples taken perpendicular to the strike of the clay unit and along intervals between 1 and 1.5 m in length.

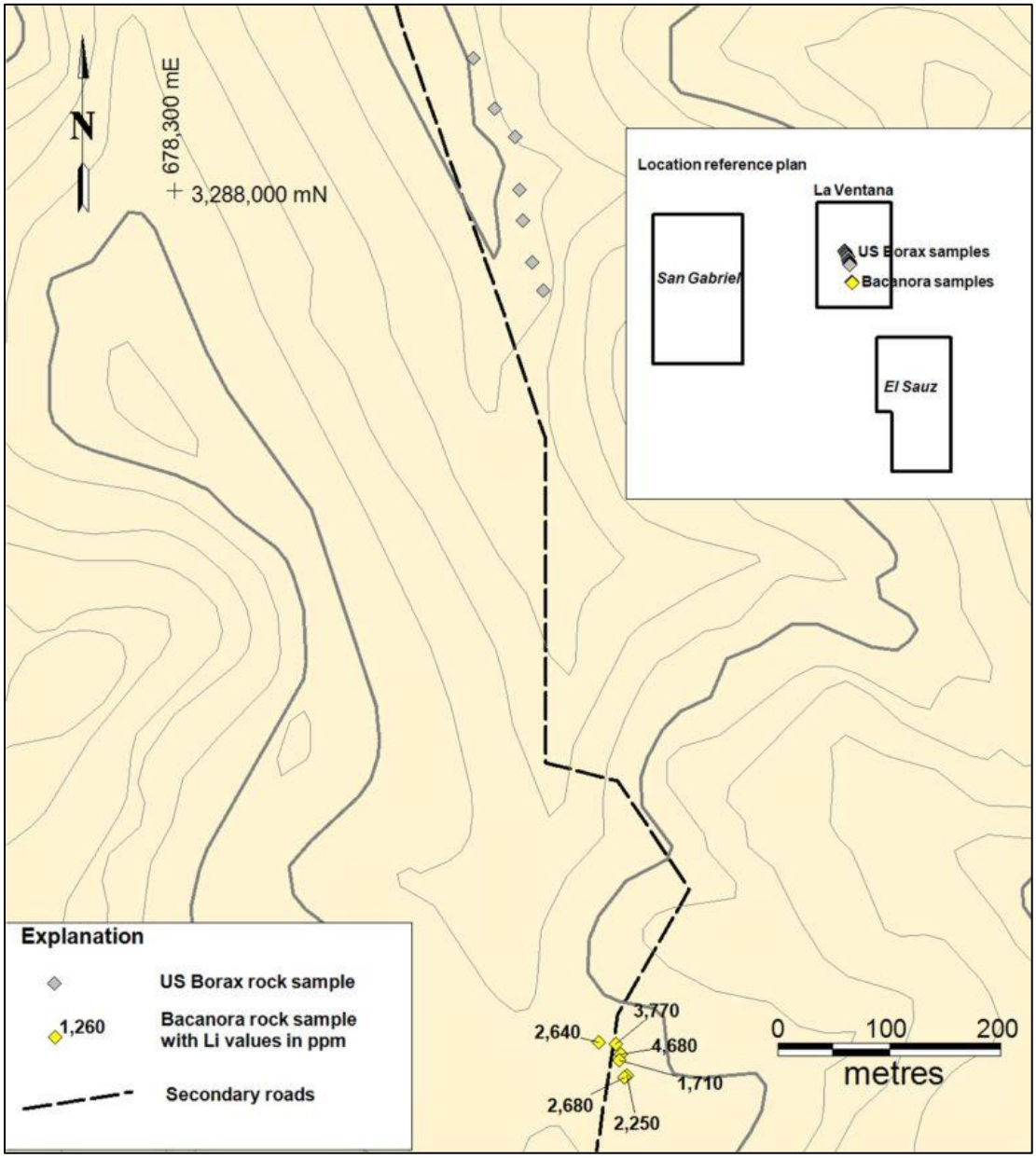

Figure 9. Bacanora Rock Sample Location Plan - La Ventana Concession.

Each sample was placed in a numbered, fiber-weave sack. The samples were then taken to ALS Chemex facility in Hermosillo for Li analysis and a multi-element scan using ICP-MS techniques.

The results of this work confirmed the high lithium concentrations in the clay unit with values for the six samples ranging from 1,710 to 4,680 ppm Li (0.91 to 2.49% LCE).

Bacanora then conducted a diamond drilling campaign at La Ventana in 2010. A total of 4 holes were drilled as an initial test of the lithium-bearing clay units located there. In 2011, a further 8 core holes were drilled into the clay units.

Details and significant results of Bacanora's drilling are found in Section 10.0: *Drilling*.

9.2 El Sauz

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 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 49 to 7,220 ppm Li, with 39 samples greater than 1,000 ppm Li (Figure 10). The results indicate 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.

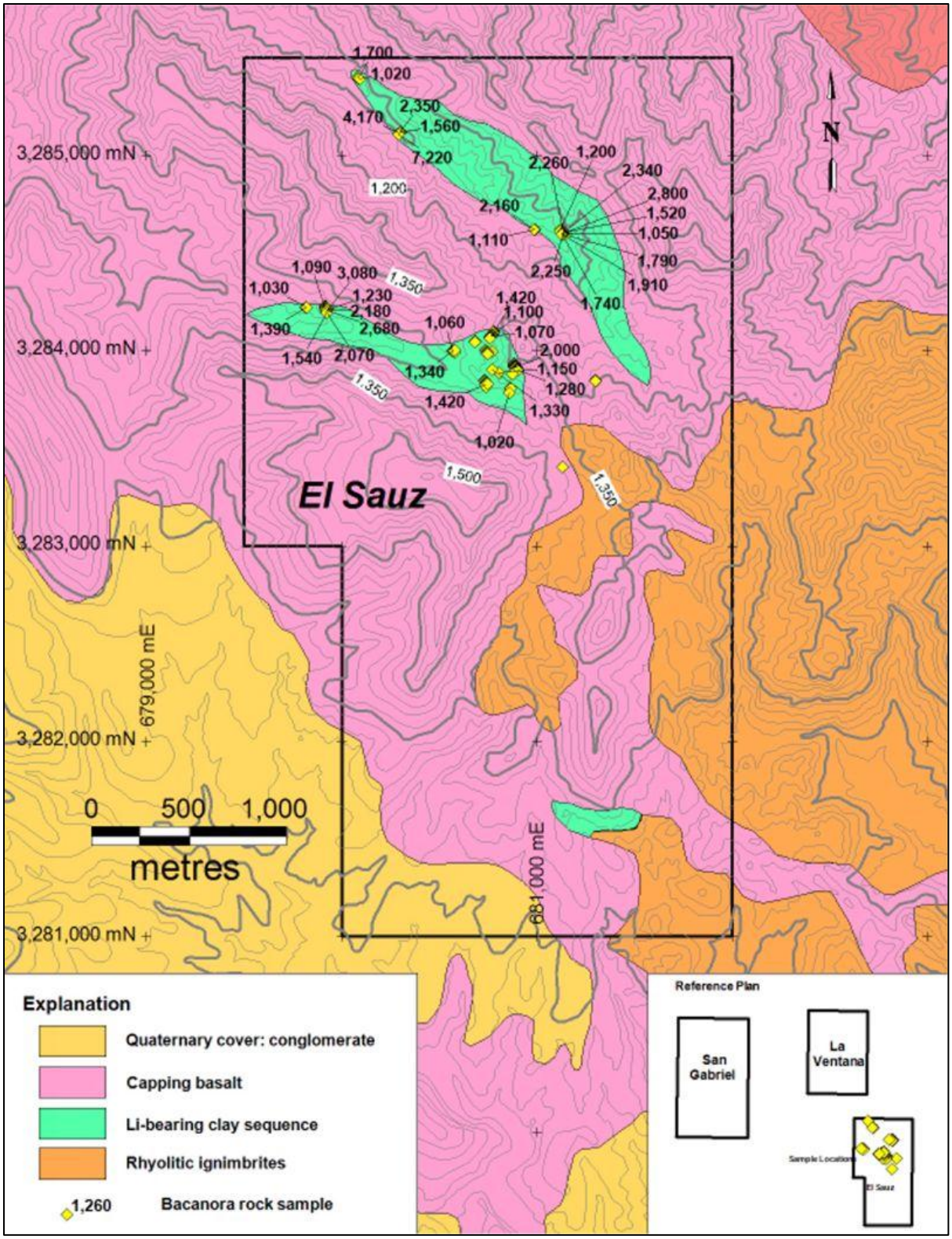

Figure 10. Bacanora Rock Samples - El Sauz Concession
(sample sites with values greater than 1000 ppm Li shown)

10.0 Drilling

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

For each phase of drilling, drill core was moved from the drill sites by Bacanora personnel to a secure compound in Bacadehuachi where it was logged and split. 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.

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 both the 2010 and 2011 drill programs. There are no sampling or recovery factors that could materially impact the accuracy of the results.

10.1 Drilling in 2010:

Bacanora´s first drilling campaign at La Ventana concession was conducted from May to September 2010.

A total of 458.4 m, using an NQ-core recovery diamond drilling technique, were drilled in four holes (Table 5). Drill sites were laid out in such a manner as to test a section of the lithium-bearing clays exposed at the south end of the property with a fence of holes (Figure 11).

Table 5. La Ventana Concession - 2010 Diamond Drill-hole Locations

Hole	Easting*	Northing	Elevation (m)	Length (m)	Azimuth	Dip
LV-01	678732	3287009	898	39.93	0	-90
LV-02	678824	3287034	925	111.56	0	-90
LV-03	678890	3287000	954	153.01	0	-90
LV-04	678788	3287228	946	153.92	0	-90

* Map Datum: NAD 27, Zone 12.

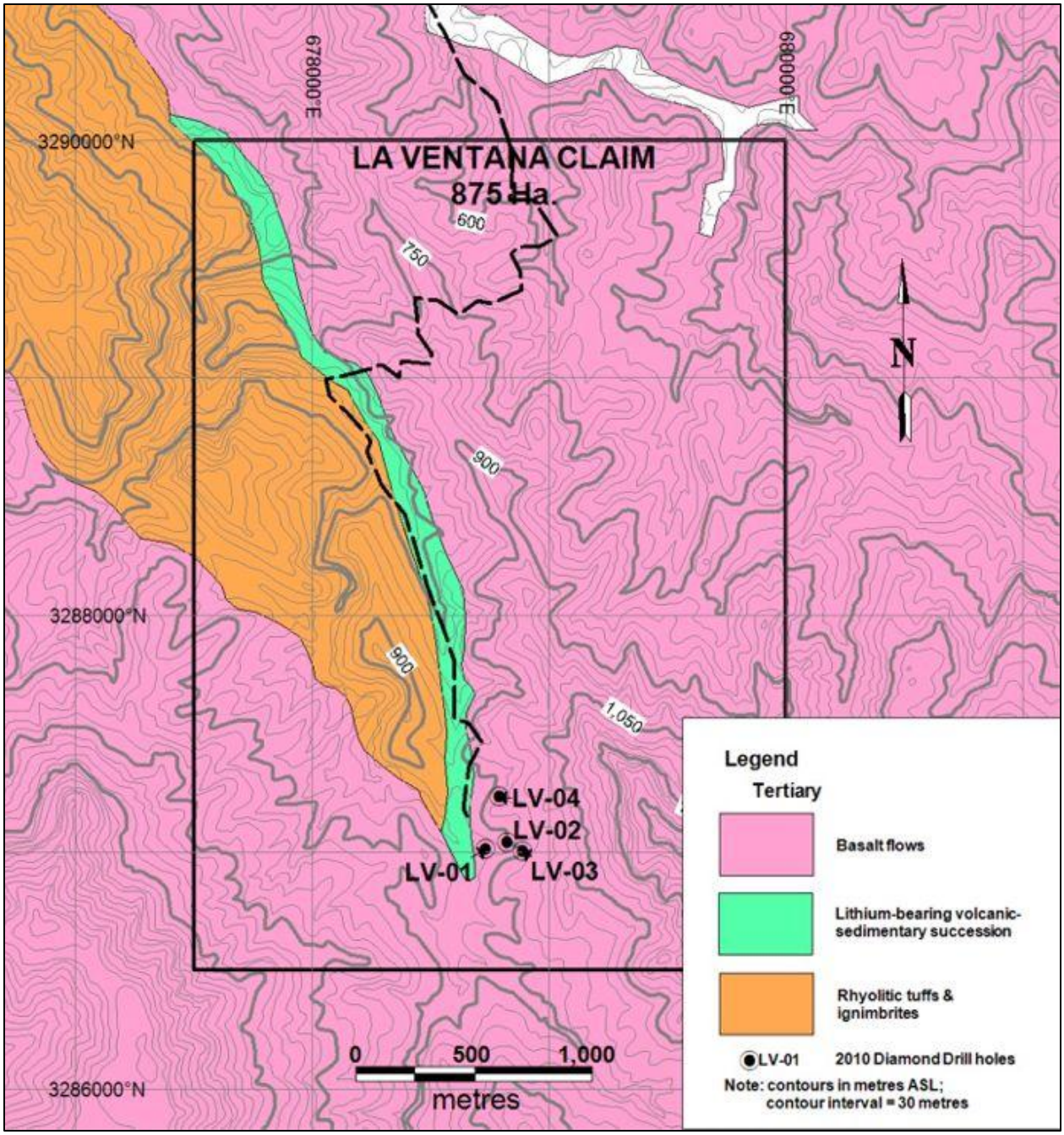

Figure 11. Location Plan of 2010 Drill Holes – La Ventana Concession.

10.2 Drilling in 2011:

A total of 1,453.6 m using an NQ-core recovery diamond drilling technique were drilled in eight holes (Table 6). Drill sites were laid out in such a manner as to test the exposed strike length of the clay horizons on the property (Figure 12).

Table 6. La Ventana Concession - 2011 Diamond Drill-hole Locations

Hole	Easting	Northing	Elevation (m)	Length (m)	Azimuth	Dip
LV-05	678723	3287455	877	83.82	0	-90
LV-06	678640	3287824	833	195.07	0	-90
LV-07	678577	3288300	870	76.2	0	-90
LV-08	678414	3288515	820	239.57	0	-90
LV-09	678240	3288913	829	203	0	-90
LV-10	678073	3289160	772	218.24	0	-90
LV-11	677874	3289657	679	228.6	0	-90
LV-12	677736	3290019	659	209.09	0	-90

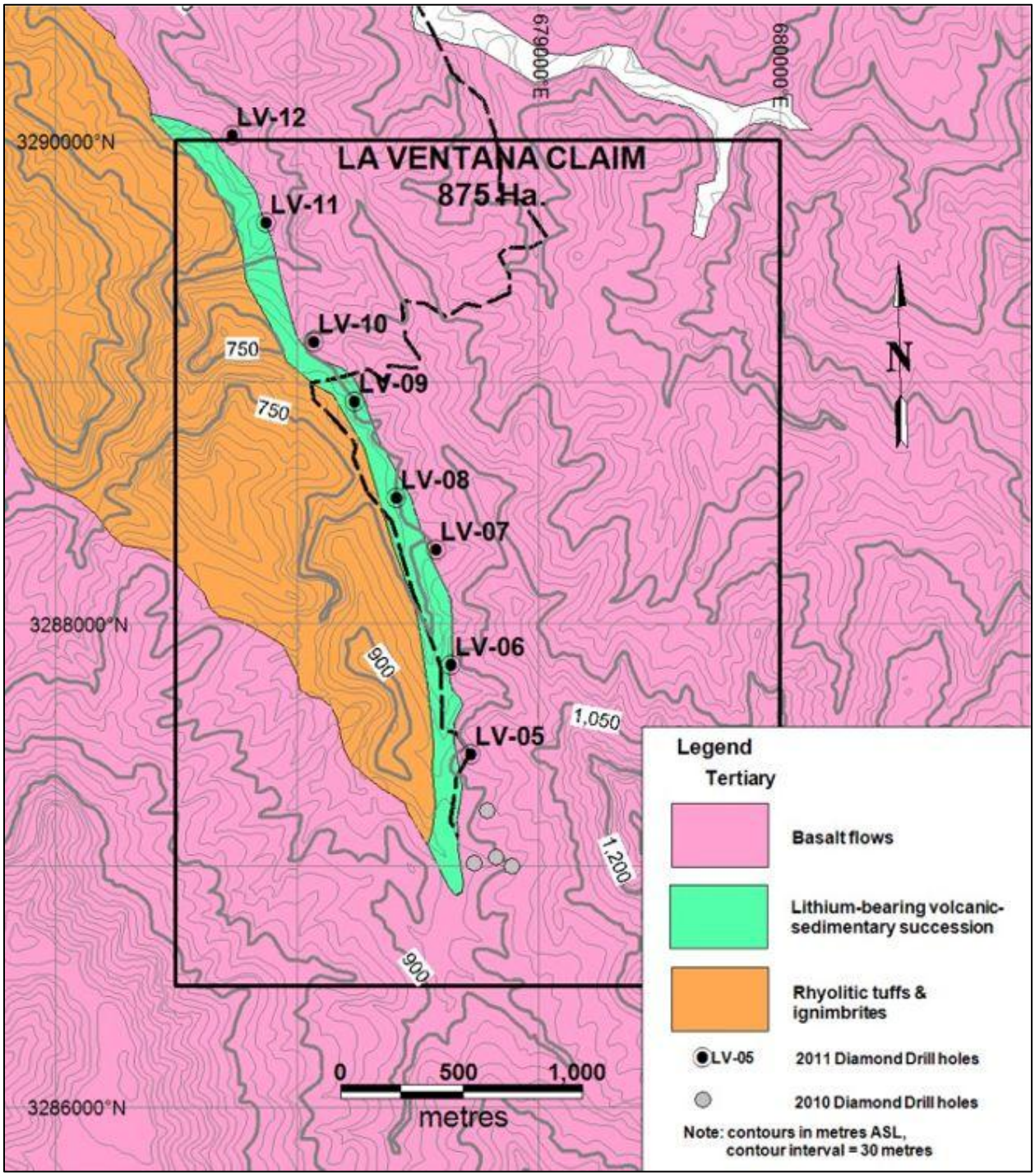

Figure 12. Location Plan of 2011 Drill Holes – La Ventana Concession.

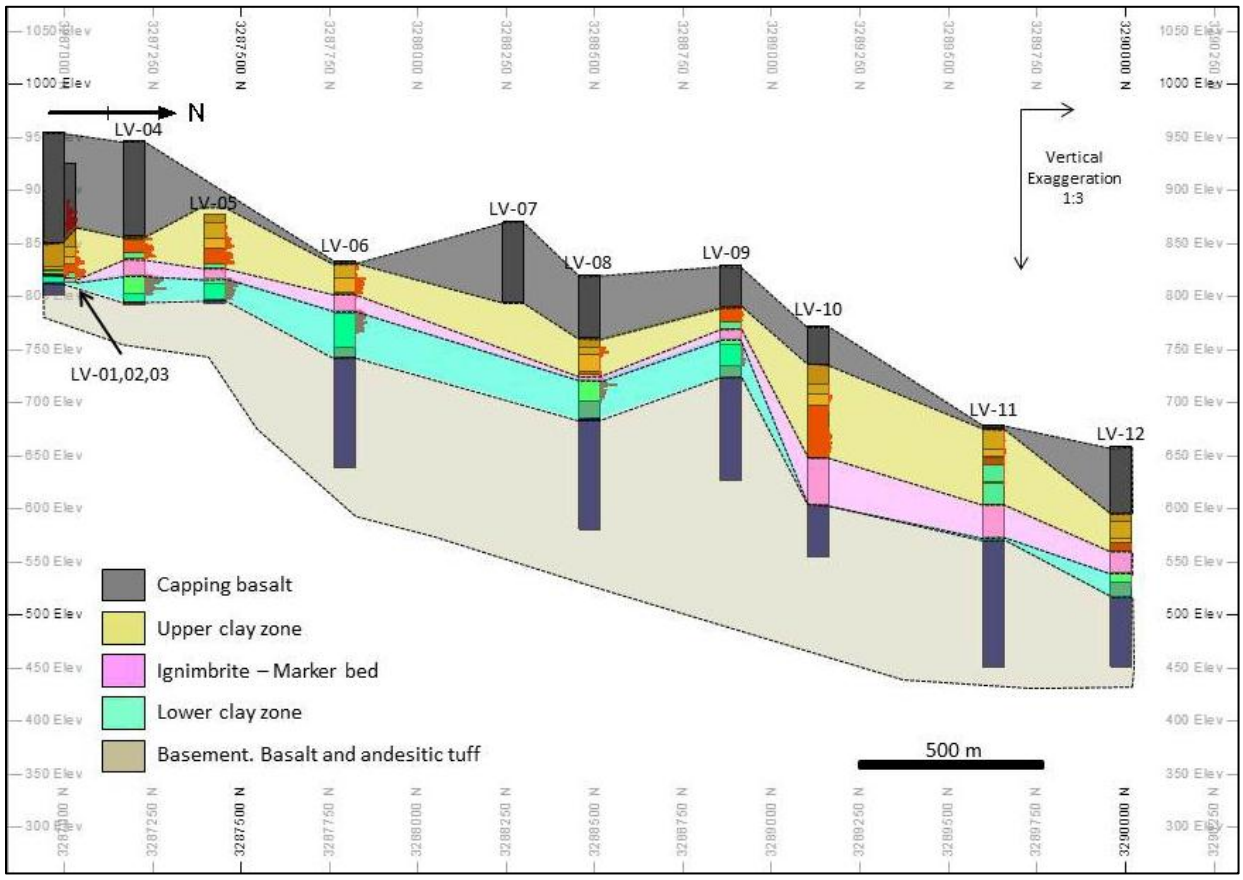

Figure 13. Geological Long Section through the 2011 Drill Holes.

Table 7. Significant Lithium Drill Intercepts - La Ventana Concession

Hole No	Unit*	From (m)	To (m)	Interval (m)	Li ppm	LCE %
LV-01	UCU	7.32	37.8	30.48	2,198	1.17
including	UCU	14.94	35.36	20.42	3,005	1.60
LV-02	UCU	78.94	110.03	31.09	1,728	0.92
including	UCU	88.57	106.98	18.41	2,573	1.37
LV-03	UCU	126.49	137.16	10.67	920	0.49
LV-04	UCU+LCU	91.44	144.17	54.25	2,667	1.42
including	UCU	96.62	110.57	13.95	3,062	1.63
including	LCU	126.49	145.69	19.2	4,940	2.63
LV-05	UCU+LCU	7.92	83.82	75.78	2,216	1.18
including	UCU	20.42	32	11.56	2,517	1.34
including	UCU	36.58	46.63	10.05	3,418	1.82
including	LCU	60.35	80.47	20.08	4,527	2.41

Table 7 continued. Significant Lithium Drill Intercepts - La Ventana Concession

Hole No	Unit*	From (m)	To (m)	Interval (m)	Li ppm	LCE %
LV-06	UCU+LCU	2.44	81.16	79.11	1,766	0.94
including	UCU	14.02	33.83	19.79	2,573	1.37
including	IGN+LCU	46.18	67.97	21.76	3,531	1.88
LV-08	UCU+LCU	67.89	119.26	51.78	1,484	0.79
including	UCU	67.89	77.11	9.2	2,179	1.16
including	LCU	97.23	116.74	19.46	2,686	1.43
LV-09	UCU+LCU	38.79	95.2	56.32	733	0.39
including	UCU	43.89	48.16	4.26	1,183	0.63
including	LCU	77.42	93.88	16.43	1,446	0.77
LV-10	UCU	55.17	123.34	51.35	695	0.37
including	UCU	101.5	118.26	16.73	1,146	0.61

*UCU = upper clay unit; LCU = lower clay unit; IGN = ignimbrite

11.0 Sample Preparation, Analyses and Security

A total of 345 samples were obtained from drill core from all of the drill holes on La Ventana. 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 La Ventana drilling campaign, the average length of core was 1.50 m per sample and was obtained from a total of 514.48 m of core.

The samples were bagged and labeled with a sequential, unique sample identification number. Mr. Martin Vidal, Vice-president of exploration for 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.

A list of relevant sample intervals is found in Section 10.2, Table 6.

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).

For the first four drill holes, 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, Tl, Ti, U, V, W, Y, Zn, Zr). In addition, samples were analysed for rare earth and trace elements using ICP-MS method ME-MS81.

For drill-core samples from holes LV-5 to LV-12, assays for Li were performed using a 4-acid digestion (Li-OG63). In addition, samples were analysed for rare earth and trace elements using ICP-MS method ME-MS81.

As part of an internal Quality Assurance/Quality Control protocol, an in-house prepared standard was inserted on average every 10th sample for samples from holes LV-5 to LV-12. 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.

Analytical ranges were determined from 3 laboratories with additional analytical data collected in other projects where the same standard was used to refine the precision of the standard.

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 a second standard for high grade mineralization is highly recommended in further drilling campaigns, and sample repeats in other labs must be also included in order to maintain a better 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.

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 Buenavista and La Ventana concessions. As well, drill-hole locations and the locations of Principal Points (i.e. location monuments) of the Buenavista and La Ventana concessions were checked and found to be in order.

During the course of the QP's on-site examination, two samples of the lithium-bearing clays were collected from the Buenavista concession and two from the La Ventana concession. These samples were taken by the QP to Acme Analytical laboratories in Vancouver, BC, Canada, for analysis for Li as well as rare earth elements. The location of the samples is illustrated on Figures 14 and 15. The results of the analyses from the Buenavista claim were 300 and 800 ppm Li; for the samples from the La Ventana concession the results were 2,200 and 2,600 ppm Li. These results are consistent with sample results obtained by Bacanora and demonstrate that relatively high Li concentrations occur in the clay-bearing sediments on the Buenavista and La Ventana concessions.

The QP did not examine the El Sauz or San Gabriel concessions which are very close to the La Ventana concession and are underlain by the same geological formations and host occurrences of the same lithium-bearing sediments. On that basis, and because Bacanora's work has focused on the Buenavista and La Ventana concessions and future work will continue to focus on these, it was the QP's conclusion that site visits to El Sauz or San Gabriel would not have a material impact on the overall conclusions and recommendations regarding the Project.

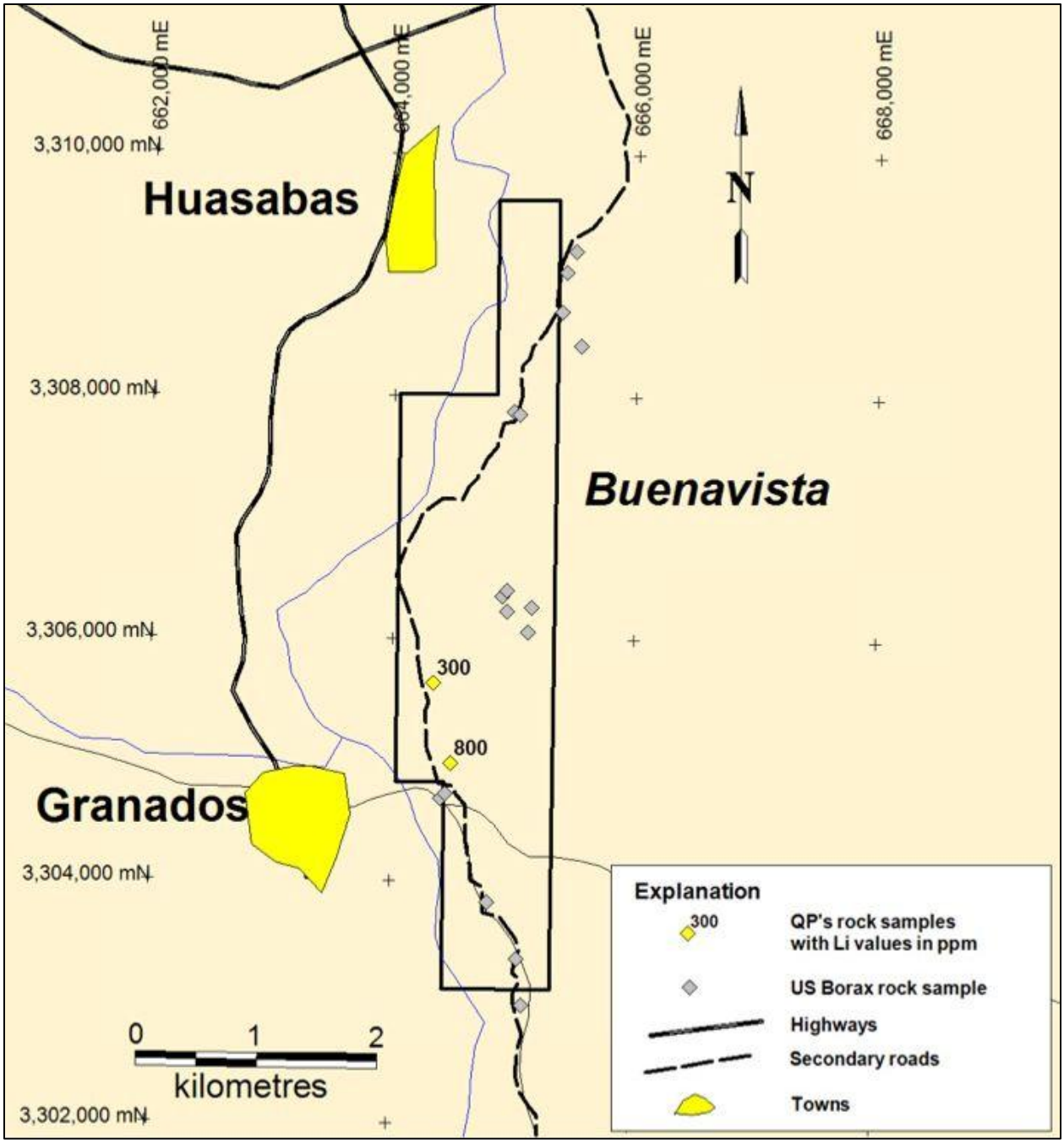

Figure 14. Location of QP's Samples - Buenavista Concession.

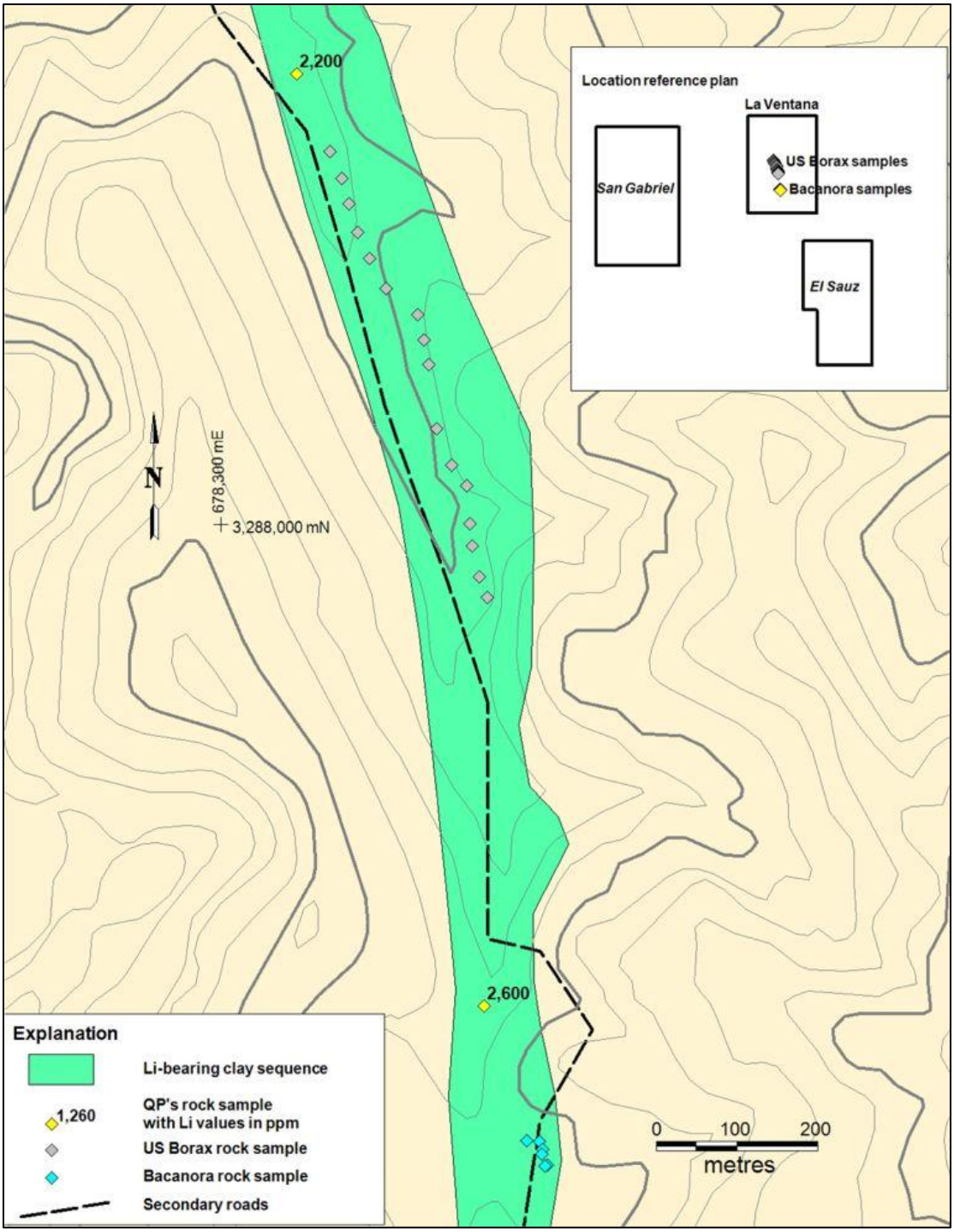

Figure 15. Location of QP's Samples - La Ventana Concession.

13.0 Mineral Processing and Metallurgical Testing

There has been no mineral processing or metallurgical testing undertaken on material collected from the Project.

14.0 Mineral Resource Estimates

A preliminarily resource estimate, using a polygonal method, was undertaken for the area drilled on La Ventana. Grade and thickness continuity were assumed in an area of influence around each drill 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. A cut-off of 2,000 ppm Li, or 1% LCE, was used.

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

An inferred resource, based on CIM Definition Standards (2004), was estimated for each of the lithium-bearing units and is found in Table 8. The inferred resource for the upper clay unit is estimated to be 22,642,000 tonnes averaging 2,450 ppm Li (1.3% LCE), and for the lower clay unit the inferred resource is 20,682,000 tonnes averaging 3,750 ppm Li (2.1% LCE), giving total inferred resources of 43,324,000 tonnes averaging 3,005 ppm Li (1.6% LCE). A plan view illustrating the area of the polygons used in the estimate is found in Figure 16.

Investors are cautioned that the resource estimate does not mean or imply that an economic lithium deposit exists at the Ventana concession. Further testing will need to be undertaken to confirm economic feasibility.

Table 8. Inferred Resource Estimate - La Ventana Concession.

Hole No.	From (m)	To (m)	Interval (m)	Li ppm	LCE %[1]	Polygon area (m^2)	Volume	Tonnes[2]	Tonnes LCE
Upper Clay Unit									
LV-01	24.74	34.57	9.83	3,704	1.97	27,652	271,819	570,820	11,245
LV-02	99.97	106.98	7.01	3,722	1.98	14,905	104,484	219,417	4,344
LV-04	98.27	109.12	10.85	3,562	1.89	67,797	735,597	1,544,755	29,196
LV-05	21.64	32.00	10.36	2,697	1.44	90,591	938,523	1,970,898	28,381
LV-05	36.58	46.63	10.06	3,418	1.82	90,591	911,345	1,913,825	34,832
LV-06	15.85	30.78	14.94	3,120	1.66	182,452	2,725,833	5,724,249	95,023
LV-08	67.89	74.07	6.17	2,676	1.43	180,350	1,112,760	2,336,795	33,416
LV-09	77.42	93.98	16.46	1,443	0.77	96,176	1,583,057	3,324,420	25,598
LV-10	101.50	118.26	16.76	1,148	0.61	143,124	2,398,758	5,037,392	30,728
		average	**11.38**	**2,632**	**1.3**		**Total**	**22,642,000**	**292,000**
Lower Clay Unit									
LV-04	126.49	145.69	19.20	4,940	2.63	67,797	1,301,702	2,733,575	74,080

LV-05	60.35	80.47	20.12	4,520	2.41	90,591	1,822,691	3,827,651	92,246
LV-06	46.18	67.97	21.79	3,538	1.89	182,452	3,975,629	8,348,821	157,793
LV-08	98.45	113.69	15.24	3,131	1.67	180,350	2,748,534	5,771,921	96,391
		average	**19.08**	**4,103**	**2.0**		**Total**	**20,682,000**	**420,000**
Upper and Lower Clay Units									
				average	**3,005**	**1.6**		**43,324,000**	**712,000**

[1]LCE = Lithium carbonate equivalent and assumes that all lithium can be converted to lithium carbonate with no recovery or processing losses. [2] SG = 2.1

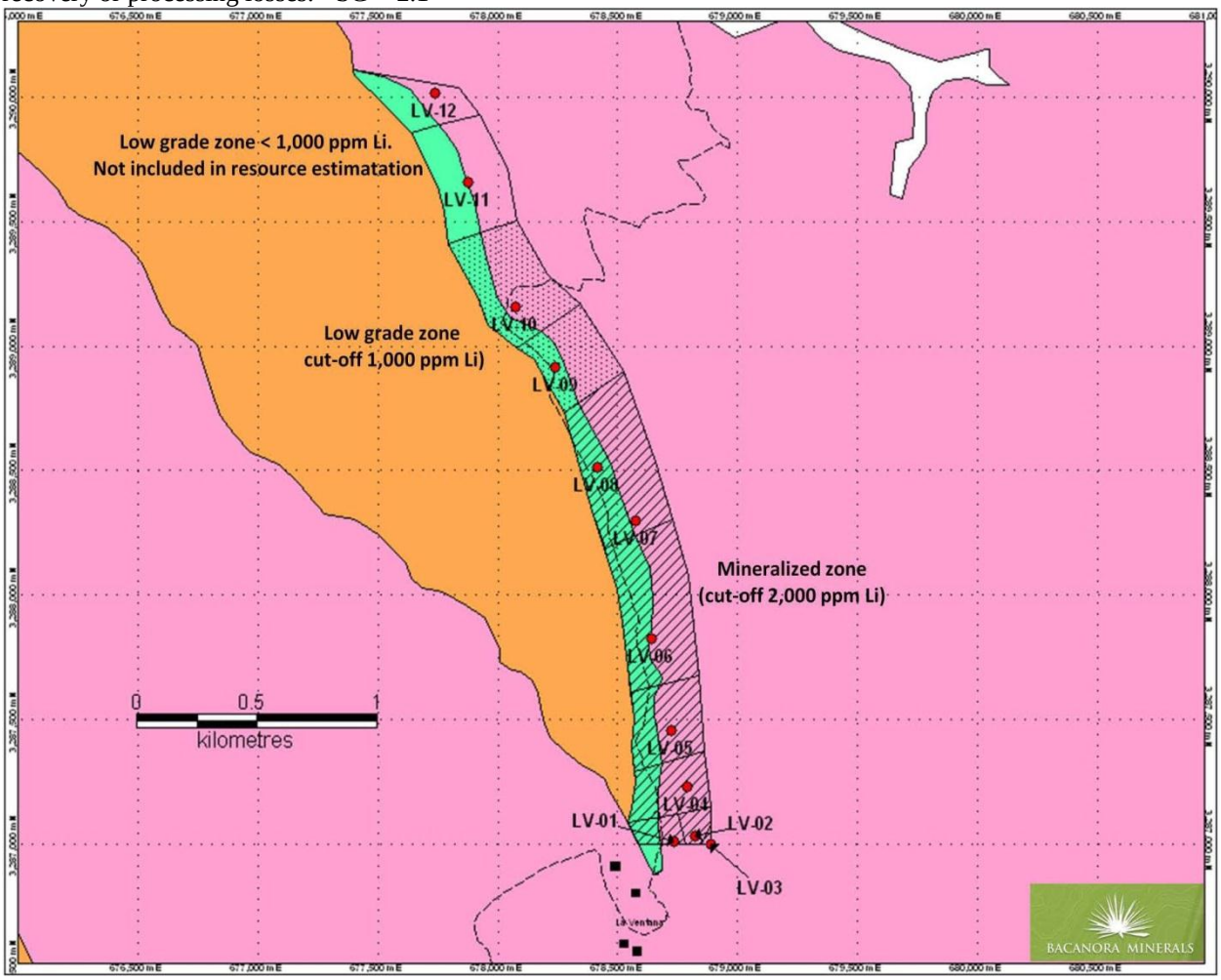

Figure 16. Plan of Polygons used in La Ventana Inferred Resource Estimate

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

23.0 Adjacent Properties

There are no significant lithium properties adjacent to the concessions that constitute the Project area.

24.0 Other Relevant Data and Information

There is no other relevant data or information concerning the Sonora Lithium Project.

25.0 Interpretation and Conclusions

Lithium-bearing clays are found on all four concessions that comprise Bacanora's Sonora Lithium Project.

Surface sampling of the clay units on the concessions have yielded lithium values that are within a range that have been considered potentially economic in other lithium deposits.

On the La Ventana concession, the clays are situated in two units that dip gently to the east and crop out over a strike length of 3.5 km. On the El Sauz concession, exposures of the clay units crop out over a strike length of 2.2 km, and on the Buenavista concession, over 3 km.

A total of 12 diamond drill holes tested La Ventana in 2010 and 2011. Significant drill-intercept results from these holes ranged from a low in the upper clay unit (hole LV-10) of 695 ppm Li over 51.33 m, to a high (hole LV-04) in the lower clay unit of 4,940 ppm Li over 19.2 m.

The drill results were used to estimate inferred resources for the upper clay unit of 22,642,000 tonnes averaging 2,632 ppm Li (1.3% LCE), and 20,682,000 tonnes averaging 4,103 ppm Li (2.0% LCE) for the lower clay unit.

The estimated resources for the upper and lower clay units on La Ventana 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.

Based on the results of work conducted on the Project, further work is warranted, particularly on the La Ventana concession, in order to upgrade and expand the resource in addition to collecting samples for mineral processing and metallurgical studies.

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

26.0 Recommendations

Further work on the Project should consist of:

1. Acquiring high quality topographic control, preferably through airborne LIDAR survey of the concession areas;
2. Detailed geological mapping to define the survey extents of the favorable lithium-bearing clay units on all of the concessions;
3. Acquisition of large surface samples of both the upper and lower clay units from La Ventana for mineral processing and metallurgical test work;
4. Additional drill testing of La Ventana in order to expand and upgrade the Li resources.

The estimated cost of the recommended program is in the order of $US800,000.00.

A detailed breakdown of the recommended program costs are found in Table 9 below.

Contingent upon the success of the recommended program, additional work will be required to further evaluate the Project concessions. 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 9. Estimated Cost of Recommended Exploration Program

Expense Category	Days	/units	Budgeted Cost
WAGES & SALARIES			
Consultant, QP	20	days	$16,000.00
Project Manager	90	days	$45,000.00
Project Geologist	90	days	$36,000.00
Field technicians, 2	90	days	$18,000.00
Local labor	60	days	$1,500.00
FIELD EXPENSE:			
Field supplies, consumables			$20,000.00
Lodging			$30,000.00
Water			$5,000.00
Project compilation report			$10,000.00
TECHNICAL SERVICES/			
SUBCONTRACTORS			
Assay & analysis, incl standards	1000	samples	$25,000.00
Diamond Drilling			
Mob/demob			$10,000.00
Moves			$58,000.00
2,500 meters of NQWL			$250,000.00
Core boxes & mud, fuel			$52,000.00
Bulldozer & water truck rental			$50,000.00
Excavator trenching & bulk sampling			$18,500.00
Metallurgical testing			$100,000.00
Surveying (LIDAR and ground control)			$55,000.00
TOTAL			**$800,000.00**

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.

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.

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.