MINERAL RESOURCE ESTIMATE UPDATE FOR THE SONORA LITHIUM PROJECT, MEXICO

Prepared For Bacanora Minerals Ltd

Report Prepared by



SRK Consulting (UK) Limited UK6560

version, len2015

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EXECUTIVE SUMMARY MINERAL RESOURCE ESTIMATE UPDATE FOR THE SONORA LITHIUM PROJECT, MEXICO

1 EXECUTIVE SUMMARY

SRK Consulting (UK) Limited ("SRK") has been commissioned by Bacanora Minerals Limited ("Bacanora" or the "Company") to produce an updated Mineral Resource estimate ("MRE") of the Sonora Lithium Project ("Sonora" or the "Project") located in Mexico.

The Sonora Lithium Project is an exploration project in the northwestern Mexican state of Sonora, some 11 km south of Bacadehuachi which is 180 km northeast of Hermosillo. The project site is approximately 170 km south of the USA – Mexico border.

Several concessions cover the Project area and these are majority owned by Bacanora Minerals Limited ("Bacanora"), many of these are 30% held by Rare Earth Minerals PLC ("REM") in joint venture. REM also owns 17.19% of Bacanora.

The Sonora Lithium Project MRE is for lithium clay units which are distributed across the contiguous El Sauz, El Sauz 1, Fleur and La Ventana concessions ("the concessions").

The majority of exploration on the Project has been completed under Bacanora's management since 2010. Following an early sampling and mapping phase, drilling initially took place on the La Ventana area and more recently on the El Sauz and Fleur areas. Over 14,000 m of core drilling has been completed at the effective date of this report. A Pre-Feasibility Study ("PFS") is currently underway to collate the technical work that has been completed to date. Bacanora has also converted an existing metallurgical testwork facility in Hermosillo to enable processing testwork on the clay material and the development of a process flowsheet which is also on-going.

The geology on the property is dominated by the Oligocene and Miocene Sierra Madre Oriental volcanic complex comprising Miocene sediments and volcanics deposited in half graben basins. The mineralisation studied in this report is contained in a stratiform package dominated by pyroclastics including two distinct clay-rich tuffaceous layers. Some of the clay minerals in these units such as polylithionite are a potentially economic source of lithium. The clay units are separated by an ignimbrite layer and the upper clay layer is overlain by Miocene basalt flows.

The area has mountainous relief with deeply incised valleys where the clay units outcrop in some places; the outcrop geometry is affected by the topography and several faults which offset the deposit. A three dimensional model of the deposit and faults has been created based on outcrop mapping, aerial photography and drilling.



SRK has based the resource model on geological maps, Ikonos satellite imagery, LIDAR topographic survey data as well as geological and assay data from 97 drillholes and six trenches. Density determinations, sample preparation and assaying of the drillhole samples have been undertaken using industry accepted methods and quality control. The data is considered by SRK to be adequate to support the Mineral Resources stated in this report although some improvements have been recommended.

In the main fault block in the eastern area of drilling, the stratigraphy dips gently, the dip direction changes along the strike of the deposit from northeasterly in the north, easterly in the central area to northerly in the south. The clay units have been shown to be continuous over more than 7 km of strike extent and several hundred metres down dip. Each lithium clay unit is generally 10 m to 50 m thick and separated by approximately 6 m of ignimbrite. Lithium grades, after averaging across the total thickness of each layer, are very uniform and change slowly along the strike of the deposit. The Lower Clay Unit is slightly thicker on average and considerably higher grade than the Upper Clay Units. Drilling coverage is variable and allows for Indicated Mineral Resources in a continuous northwest trending zone along the centre of the deposit that corresponds to an area with the most intense drilling; the remainder is classified as an Inferred Mineral Resource and beyond the drilled areas there is further exploration potential.

In the other fault blocks to the west, the clay units and the faults themselves are defined by fewer outcrops and drillholes, so the deposit in this area has been interpreted with lower confidence and classified as an Inferred Mineral Resource with further exploration potential. The deposit in these areas has similar mineralogy and geology, but has slightly lower thickness and grade; going westwards the dip direction has been interpreted to change from northwesterly to westerly, but this needs confirmation with more drilling.

Solid 3-D wireframes of the clay units were used to generate a block model into which geological codes, dry densities and lithium grades have been assigned and estimated. SRK chose to use composited grades for each sampled intersection of each clay unit and undertook statistical and geostatistical analysis and block grade estimation on this basis. Based on the grade distribution observed in the Upper Clay (higher grades concentrated towards the base of the unit), SRK chose to subdivide the unit based on sample grade to produce a high grade and low grade subdomain within the Upper Clay. This sub-domaining was only possible in the main eastern fault block where sufficient drilling is present to consistently see this vertical grade distribution profile. The mean composited lithium grade in the Upper Clay Unit (high grade sub domain) is 2,870 ppm, Upper Clay Unit (low grade sub domain) is 2,910 ppm. Variography on the lithium grades shows a total range in excess of 1 km. For the grade interpolation, a three-pass Kriging method was used to identify the areas drilled on a tighter grid spacing in the first pass and to ensure all blocks in the model were assigned a grade in the third pass.

In order to determine the 'reasonable prospects for eventual economic extraction' required for Mineral Resources, SRK has used mining and processing cost and recovery assumptions developed by Bacanora for use in an open pit mine optimisation study. Bacanora is developing a process flowsheet which is similar to that being developed for the Kings Valley Lithium Project. The flowsheet involves a series of stages starting with beneficiation, followed by calcination, leaching, evaporation, filtering and precipitation. Current market reports suggest a commodity price of USD6,500/t of lithium carbonate (Li_2CO_3) is appropriate, assuming sale of a battery grade Li_2CO_3 product. A 30% increase on the price has been used to develop a cut-off grade for the Mineral Resource of 450 ppm Li. Further, SRK has assumed extraction by open pit and has further constrained the resource to a pit shell which is based on the above parameters and a 45° slope.

The Mineral Resource is based on exploration results from mapping drilling and trenching made available to SRK on the 19 October 2015. The results of this report were released in a press release approved by SRK on 19 November 2015; this is the effective date of the statement.

The reporting standard adopted for the reporting of the MRE uses the terminology, definitions and guidelines given in the CIM Standards on Mineral Resources and Mineral Reserves (May 2014) as required by NI 43-101.

In the Mineral Resource statement, the lithium metal content is also given as a Lithium Carbonate Equivalent ("LCE"); using a conversion factor of 1 unit of lithium metal to 5.3 units of LCE.

The statement has been classified in accordance with the terminology, definitions and guidelines given in the Canadian Institute of Mining, Metallurgy and Petroleum ("CIM") Definition Standards for Mineral Resources and Mineral Reserves (May 2014) and has been reported in accordance with NI 43-101, by the Qualified Person, Mr Martin Pittuck (MSc, CEng, MIMMM). Mr Pittuck is an engineering consultant who is independent of Bacanora.

The Mineral Resource is the total for the Project; in respect of the total metal in the Indicated and Inferred Mineral Resources some 81% and 84% respectively is attributable to Bacanora.

Previous estimations were undertaken by SRK in May 2015 and C Verley of Amerlin Exploration Services Ltd in June 2014. The 2014 estimation used a 2-D polygonal estimation method, whereas in both the May and November 2015 estimates, SRK created a 3-D geological model giving better confidence in geological continuity which allows extrapolation over a wider area resulting in a larger overall resource than that produced in the 2014 estimate.

This updated MRE has a greater proportion of Indicated Mineral Resource than in the May 2015 MRE following the recent targeted infill drilling programme. The infill drilling confirmed the previous geological interpretation in most areas, which, along with good quality control results and the improved quality of estimation, allowed for a higher level of confidence to be attributed to more of the estimated block model. The overall tonnage of the Mineral Resource shown in Table ES 1 increased from 595 Mt to 719 Mt. This is due to three main factors:

1. The additional drilling allowed for improved geological control on the model, which extended the interpreted clay units to the west, allowing for the pit optimisation to include more material to the west than the May 2015 MRE.

- 2. In the most well drilled fault block the upper clay unit was split into high-grade footwall and low-grade hangingwall units, which improved the estimation quality and improved the grades in some parts of the model, particularly along strike to the north. This allowed for the pit optimisation to include more material to the north than the May 2015 MRE.
- 3. The block model used for reporting was changed from a regularised block model with all blocks at 50x50x10 m dimensions, to a model including sub-blocks down to 25x25x1 m dimensions. This improved the accuracy of reporting tonnage and increased the overall reported tonnage within the Mineral Resource statement.

SRK recommends continued drilling to infill the Inferred Mineral Resource to increase the confidence to an Indicated level.

Some of the quality control procedures should be improved so that the grades of the standard reference materials are more representative of the deposit grades. Some aspects of the density determination also require further study to confirm the accuracy of the density determination method which currently assumed no core shrinkage upon drying.

The laboratory method used for analysis has a maximum detection limit of 10,000 ppm Li; several samples have returned this grade. SRK recommends resubmitting all high grade samples to the laboratory, employing a method with a higher upper detection limit; this will result in a slight increase in the resource grade.

The deposit appears to be robust and to have reasonable prospects for economic extraction. A PFS is currently underway with the aim of determining Mineral Reserves using the block model created by SRK.

Classification Concession Owner		Geological Unit	gical Unit Clay Tonnes Clay G (Mt) (Li p		Contained Metal (kt Li)	Contained Metal (kt LCE)	
		Minera Sonora	Lower Clay	75	3,500	261	1,385
	La ventana	Bacanora)	Upper Clay	66	1,500	99	523
	El Soura		Lower Clay	60	2,900	174	924
Indicated	El Sauz		Upper Clay	47	1,100	52	274
Indicated	Flour	Mexilit (JV-1)	Lower Clay	60	4,300	258	1,365
	Fieur	(70% Bacanora)	Upper Clay	50	1,600	81	428
	FI O		Lower Clay	4	4,000	15	80
	El Sauz I		Upper Clay	3	1,200	3	18
Indi	cated Total		Combined	364	2,600	943	4,997
	La Vantana	Minera Sonora	Lower Clay	55	3,800	209	1,108
	La Ventana	Bacanora)	Upper Clay	80	1,500	120	636
	El Souz		Lower Clay	85	1,600	136	721
Inforred	El Sauz		Upper Clay	55	800	44	233
interred	Flour	Mexilit (JV-1)	Lower Clay	20	4,200	84	445
	Fleur	(70% Bacanora)	Upper Clay	20	1,500	30	159
	El Souz1		Lower Clay	20	4,000	80	424
	EI Sauz I		Upper Clay	20	1,200	24	127
Inferred Total			Combined	355	2,000	727	3,853

Table ES 1: SRK Mineral Resource Statement as of 19 November 2015

Notes:

1. Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability. All figures are rounded to reflect the relative accuracy of the estimate and have been used to derive sub-totals, totals and weighted averages. Such calculations inherently involve a degree of rounding and consequently introduce a margin of error. Where these occur, SRK does not consider them to be material.

2. The reporting standard adopted for the reporting of the MRE uses the terminology, definitions and guidelines given in the CIM Standards on Mineral Resources and Mineral Reserves (May 2014) as required by NI 43-101 and JORC.

3. The MRE is reported on 100 percent basis for all project areas.

 SRK assumes the Sonora Lithium deposit to be amenable to surface mining methods. Using results from initial metallurgical test work, suitable surface mining and processing costs, and forecast LCE price SRK has reported the Mineral Resource at a cut-off 450 ppm Li (2,400 ppm Li₂CO₃).

5. SRK completed a site inspection of the deposit by Mr. Martin Pittuck, MSc, C.Eng, MIMMM, an appropriate "independent qualified person" as such term is defined in NI 43-101.

LCE is the industry standard terminology for, and is equivalent to, Li₂CO₃. 1 ppm Li metal is equivalent to 5.32 ppm LCE / Li₂CO₃. Use of LCE is to provide data comparable with industry reports and assumes complete conversion of lithium in clays with no recovery or process losses.

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1 INTRODUCTION

1.1 Background

SRK Consulting (UK) Limited ("SRK") is an associate company of the international group holding company, SRK Consulting (Global) Limited (the "SRK Group"). SRK has been commissioned by Bacanora Minerals Limited ("Bacanora" or the "Company") to produce an updated Mineral Resource estimate ("MRE") of the Sonora Lithium Project ("Sonora" or the "Project") located in Mexico.

Bacanora is the majority partner in the project via its joint venture with Rare Earth Minerals PLC ("REM"). The two companies have joint ventures in different proportions for several concessions covering the project.

The Sonora Lithium Project MRE is for lithium clay units which are distributed across the contiguous El Sauz, El Sauz 1, Fleur and La Ventana concessions ("the concessions").

1.2 Qualifications of Consultants

SRK is an associate company of the SRK Group. The SRK Group comprises over 1,400 professional staff over 45 offices in 20 countries, offering expertise in a wide range of engineering disciplines. The SRK Group's independence is ensured by the fact that it holds no equity in any project. This permits the SRK Group to provide its clients with conflict-free and objective recommendations on crucial judgment issues. The SRK Group has a demonstrated track record in undertaking independent assessments of resources and reserves, project evaluations and audits, mineral expert reports, independent valuation reports and independent feasibility evaluations to bankable standards on behalf of exploration and mining companies and financial institutions worldwide. The SRK Group has also worked with a large number of major international mining companies and their projects, providing mining industry consultancy service inputs. SRK also has specific experience in commissions of this nature.

SRK's contribution to this Technical Report has been prepared based on input from a team of consultants sourced from SRK's office in the UK. These consultants are specialists in the fields of geology and resource and reserve estimation and classification and mineral processing.

The site visit and inspection of the sample preparation facilities were undertaken between 24 and 27 March 2015 by:



Mr Martin Pittuck (Project Director), who is a full time employee of SRK. Mr Pittuck is a Chartered Engineer with the Institute of Materials Minerals and Mining and has sufficient experience which is relevant to the style of mineralisation under study to qualify as a Qualified Person ("QP") as defined in the National Instrument 43-101 Standards of Disclosure for Mineral Projects. Martin has 20 years broad geological experience, specialising in Mineral Resource estimation, mine project evaluation and reporting according international reporting codes. He has produced or reviewed resource estimates for a wide variety of commodities and mineralisation styles.

Martin Pittuck supervised the resource estimation process. The majority of the Mineral Resource estimation was undertaken by:

Mr Ben Lepley (Project Manager), who is also a full time employee of SRK and is a Chartered Geologist with the Geological Society of London (CGeol). Mr Lepley has more than 7 years' geological experience specialising in Mineral Resource estimation.

Mr Oliver Jones, who is also a full time employee of SRK and is a Fellow with the Geological Society of London (FGS). Mr Jones has more than 6 years' geological experience specialising in exploration geology and geological modelling.

The individuals responsible for this report have extensive experience in the mining industry and are members in good standing of appropriate professional institutions.

2 RELIANCE ON OTHER EXPERTS

SRK has relied upon the Company's in house legal team with respect to validation of mineral tenement and land tenure status, specifically location and ownership agreements, including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.

3 PROJECT DESCRIPTION AND LOCATION

3.1 **Project Location**

The Project is situated in the northwestern Mexican state of Sonora, some 11 km south of Bacadehuachi which is 180 km northeast of Hermosillo and approximately 170 km south of the USA – Mexico border. A location plan is given in Figure 3-2.

3.2 **Project Concessions and Ownership**

The Sonora Lithium Project is an exploration project, part of which is owned 99.9% by Bacanora and part of which is owned jointly by REM (30%) and Bacanora (70%). REM also owns 17.19% of Bacanora.

The Sonora Lithium Project consists of 10 concessions which confer rights for exploration, mining and production. The concessions are owned by a number of REM-Bacanora subsidiaries:

- Mexilit SA de CV ("Mexilit"), owned 70% by Bacanora;
- Megalit SA de CV ("Megalit"), owned 70% by Bacanora; and

• Minera Sonora Borax SA de CV ("MSB"), owned 99% by Bacanora.

Two concessions (La Ventana and La Ventana 1) are 100% owned by MSB. Another five concessions (El Sauz, El Sauz 1, El Sauz 2, Fleur and Fleur 1) are 100% owned by Mexilit. Three concessions (San Gabriel, Buenavista and Megalit) are 100% owned by Megalit. Mexilit and Megalit are owned 70% by Bacanora and 30% by REM.

A separate subsidiary 'Minerales Industriales Tubutana SA de CV' is also owned under the Bacanora umbrella; however, this subsidiary deals solely with the Company's borate holding and as such is not referred to further in this report. The current ownership structure of the Project concessions can be seen in Figure 3-1.



Figure 3-1: Current Project ownership structure

Table 3-1: Concessions of Bacanora Minerals Ltd

Company	Claim	Locality	Title ref.	Area (ha)	Licence Accepted	Expiry	
Minera Sonora Borax	La Ventana	Bacadehuachi	235611	875	22-Jan-10	21-Jan-60	
Minera Sonora Borax	La Ventana_1	Bacadehuachi	243127	945	10-Jul-14	09-Jul-64	
Mexilit	El Sauz	Bacadehuachi	235614	1,025	22-Jan-10) 21-Jan-60	
Mexilit	Fleur	Bacadehuachi	243132	2,335	10-Jul-14	09-Jul-64	
Mexilit	El Sauz_1	Bacadehuachi	244345	200	11-Aug-15	10-Aug-65	
Mexilit	El Sauz_2	Bacadehuachi	243029	1,144	30-May-14	29-May-64	
Mexilit	Fleur_1	Bacadehuachi	243133	1,630	10-Jul-14	09-Jul-64	
Megalit	Buenavista	Huasabas	235613	649	22-May-10	21-May-60	
Megalit	San Gabriel	Bacadehuachi	235816	1,500	12-Mar-10	11-Mar-60	
Megalit	Megalit	Bacadehuachi		87,086	"Approved for title"		

Of the 10 concessions held within this company structure and dealt with in this programme of study, 9 have been issued to the Company and one has been applied for and currently is 'Approved for Title'. The issued and Approved for Title concessions of Bacanora Minerals Ltd are set out in Table 3-1.

The "Approved for Title" stage of application, as outlined in Table 3-1, applies to the Megalit concession which does not contain any of the Mineral Resource reported herein. A summary of the process of obtaining title to a concession from the Mexican Federal Mining Registry is as follows:

- initially an application for title is submitted to the local registry where the property is located;
- following the submission of the application, the applicant has 60 days to file a survey with the local registry;
- upon receipt of the survey, the local registry reviews and either approves it or responds to the applicant and gives them a further 15 days to correct their survey; and
- if the survey is approved (that is, no objections are conveyed to the applicant), it is stamped "Approved for Title" and is submitted to the Federal Mining Registry in Mexico City for them to grant title to the applicant as a final administrative step.

In July 2014 and as part of Bacanora's admission to the AIM market on the London Stock Exchange, a legal opinion was prepared in relation the mineral concession status. The opinion prepared by Melicoff & Asociados Abogados confirmed that:

- Each mining concession is in full force and effect and has been duly validated by the Mexican Mining Bureau and is free from any liens and encumbrances.
- Each mining concession was validly issued for a period of 50 years.
- Each of the mining concessions are in good standing, and they are not subject of any unusual or onerous conditions, and their existence or validity will not be effected by any change of control.
- Bacanora and REM do not see any reason why the pending applications which have been granted full concession status by the Ministry of Mining will not be approved by the Ministry of Mining and confirm that these transfers are being processed.

The Directors of Bacanora believe that there is minimal risk of title not being eventually granted for concessions currently "Approved for Title". Further the Directors state that Bacanora is, and has been, appropriately able to conduct its exploration activities within these concessions consistent with Approved for Title status. Once the concession that is presently "Approved for Title" has been issued, the concessions will be transferred to Megalit in line with Mexican law and applicable regulations and in accordance with the contractual obligations under the agreements between Bacanora and REM.

The licence holding by the Company forms a continuous coverage over the Project area. This is illustrated in Figure 3-2 and Figure 3-3. La Ventana and La Ventana 1, covering approximately 1,820 ha. The five concessions El Sauz, El Sauz 1, El Sauz 2, Fleur and Fleur 1 cover approximately 6,334 ha in total and the additional three concessions Buenavista, Megalit and San Gabriel cover approximately 89,235 ha in total.



Figure 3-2: Project Location Plan



Figure 3-3: Location of the Sonora Lithium Project concessions, Mexico

4 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

4.1.1 International Access

Sonora lies on the geographic corridor connecting the central Mexican highlands (Mexico City) north into the United States of America along the Pacific Coast. It is a major corridor for travel and shipping, with rail lines and Federal Highway 15 following it. The state contains a total of 24,396 km of highways. Rail lines mostly consist of those which lead into the USA. The major commercial port is in Guaymas, with smaller ones, mostly for tourism, located in San Carlos, Puerto Peñasco and Bahia Kino. The state has four airports in the cities of Hermosillo, Puerto Peñasco, Ciudad Obregón and Nogales. These airports connect the state with 112 other locations both within Mexico and internationally. Airlines that operate out of them include Aeromexico, Volaris, Interjet, Vivaaerobus, US Airways and Aero Calafia.

4.1.2 Regional and Local Access

The Sonora State and therefore the Project area has well developed infrastructure with an extensive network of roads, including a four-lane highway (Highway 15) that crosses the state from south to north. This not only joins Sonora with the rest of Mexico, but also internationally with the USA.

The Project area specifically is accessed by way of Federal Highway 14, a two-lane highway extending 225 km east of Hermosillo, 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 local base of operations in this town and undertakes all core processing facilities from this location.

Access to the concession from Bacadehauchi is on secondary, dry-weather roads, crossing various privately owned ranches for approximately 11 km. The region is well known for cattle ranching, and ranches and fenced zones cross the area. The ranchers have created a network of secondary dirt roads to access other areas, and these roads provide excellent access to the concessions. Land owners have provided authorisation for the Company to access the concessions on these roads.

4.2 Physiography and Climate

4.2.1 Physiography

The Sonora Lithium Project is situated within the Sonoran Desert in the western portion of the Sierra Madre Occidental physiographic province, within the Basin and Range sub province. It lies between "Mesa de Enmedio", "Rincon del Sauz" and "El Capulin" mountain ranges. Average elevation at the Project area is 900 m above mean sea level ("amsl"). The concessions are surrounded by mountain peaks with elevations ranging up to 1,440 m amsl.

4.2.2 Climate

The average ambient temperature is 21°C, with minimum and maximum temperatures of -5°C and 50°C, respectively in the project area. Extreme high temperatures, upwards of 49°C occur in summer, winters are considered cool compared to most of Mexico.

The accumulated annual rainfall for the area is approximately 450 ml. The wet season or desert "monsoon" season occurs between the months of July and September, and heavy rainfall can hamper exploration at times. The Sonoran Desert, because of its seasonal rainfall pattern, hosts plants from the agave, palm, cactus and legume family, as well as many others. The local climate provides no incumbents to undertaking field programmes and as such the length of the operating season is 365 days a year.

4.3 **Resources and Infrastructure**

Bacadehuachi historically is a small farming and ranching community with a population of approximately 2,010. Basic services capable of supporting early stage exploration projects are available in the town. Surface rights sufficient for mining operations are obtainable from local landowners, should such activities develop on the concessions.

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

5 HISTORY

There are no records of mineral exploration or mineral occurrences on the Property prior to 1992, when an American group, US Borax, initiated regional exploration work in the search for borate deposits.

5.1 **Previous Mapping and Surface Sampling**

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, consequently US Borax abandoned exploration in the area.

5.2 Drilling by Previous Explorers

No drilling has been undertaken on the licence concessions prior to Bacanora commencing operations in 2010.

5.3 **Previous Mineral Resource Estimation**

5.3.1 Amerlin Exploration Services 2014

Bacanora has completed mapping, chip sampling, trenching, metallurgical testwork and drilling on the Project. Mineral Resources have been previously estimated by Bacanora for the lithium bearing clays on the Company's concessions which were reported in *'Updated and reclassified Lithium resources, Sonora Lithium project, Sonora Mexico'* produced for Bacanora Minerals Ltd on 24 June, 2014 (C Verley of Amerlin Exploration Services Ltd). Within this document, Verley updated earlier estimates based on additional drilling in 2013 and 2014; in the process, reclassifying all resources from inferred to indicated (not reported using NI 43-101 guidelines).

El Sauz and Fleur Concessions

A Mineral Resource estimate was undertaken for the area drilled on the El Sauz and Fleur concessions using a polygonal estimation method. Grade and thickness continuity were assumed in an area of influence around each drill such that: (i) in the north-south direction the influence area is half of the distance between holes; and (ii) in the east-west direction a distance from outcrop and extending down dip for 150 m was used. Plan views illustrating the areas of the polygons used in the estimate are provided in Figure 5-1. Dry density values of 2.38 and 2.35 tonnes per cubic metre (t/m³) were assumed for the estimate for the Upper and Lower Clay units respectively. The resulting grade and tonnage estimates were reported at cut-offs of 1,000, 2,000 and 3,000 ppm Li, with a cut-off of 2,000 ppm Li used as a base case scenario for future study work.



Figure 5-1: Plan of resource polygons and base geological map for the Fleur and El Sauz Concessions

A total Indicated Mineral Resource, based on CIM Definition Standards for Mineral Resources and Reserves (2010), was estimated for each of the lithium-bearing units and is given in Table 5-1. At a cut-off of 2,000 ppm Li, the base case Indicated Mineral Resource for the Upper Clay unit is estimated to be 47 Mt averaging 2,222 ppm Li, and for the Lower Clay unit the Indicated Mineral Resource is 74 Mt averaging 3,698 ppm Li, giving a total Indicated Mineral Resource of 121 Mt averaging 3,120 ppm Li. A distinct zone of higher grade lithium occurs in the northern part of El Sauz and Fleur and continues through Fleur onto the southern half of La Ventana. In the Mineral Resource statement, the lithium metal content is also given as a Lithium Carbonate Equivalent ("LCE"); using a conversion factor of 1 unit of lithium metal is equivalent to 5.3 units of LCE.

Table 5-1:	Historic	Indicated	Mineral	Resources	for E	El Sauz	and	Fleur	(C	Verley,
	2014)									

Lithological Unit	Li (ppm) Cut-off	Tonnage (Mt) ²	Li (ppm)	LCE (%) ¹	LCE Tonnage (Kt) ²
	1000	97	1,657	0.88	856
Upper	2000	47	2,222	1.18	560
	3000	18	3,773	2.01	369
Upper	1000	98	3,028	1.61	1,584
	2000	74	3,698	1.97	1,450
	3000	59	4,140	2.20	1,298
Combined	1000	195	2,347	1.25	2,440
	2000	121	3,120	1.66	2,010
	3000	77	4.053	2.15	1.667

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

² Dry bulk density = 2.38 t/m^3

La Ventana

Based upon drilling undertaken during 2010, 2011 and 2013 CVerley used a polygonal estimation method to produce an Indicated Mineral Resource for the La Ventana concession based upon the same logic and processes as presented for the El Sauz and Fleur concessions. Plan views illustrating the areas of the polygons used in the estimate are provided in Figure 5-2.

A total Indicated Mineral Resource, based on CIM Definition Standards for Mineral Resources and Reserves (2010), was estimated for each of the lithium-bearing units and is given in Table 5-2. Using a 2,000 ppm Li cut-off, an Indicated Mineral Resource for the Upper and Lower Clay Units of 75 Mt averaging 3,174 ppm Li (1.69% LCE) or 1,273 kt LCE was estimated. Both the Upper and Lower Clay Units were considered to be open down-dip.

Table 5-2: Historic Indicated Mineral Resources for La Ventana Concessions (C.Verley, 2014)

Lithological Unit	Li (ppm) Cut-off	Tonnage (Mt) ²	Li (ppm)	LCE (%) ¹	LCE Tonnage (kt) ²
	1000	31	1,824	0.97	289
Upper	2000	21	2,256	1.2	258
	3000	10	3,186	1.7	170
Upper	1000	61	3,247	1.73	1,055
	2000	54	3,540	1.88	1,015
	3000	38	4,510	2.40	917
Combined	1000	92	2,771	1.48	1,353
	2000	75	3,174	1.69	1,273
	3000	48	4,235	2.25	1,087

¹LCE = Lithium carbonate equivalent and assumes that all lithium can be converted to lithium carbonate with no recovery or processing losses. ² Dry bulk density = 2.38 t/m^3



Figure 5-2: Plan of resource polygons and base geological map for La Ventana

5.3.2 SRK May 2015

SRK completed the most recent MRE in May 2015 ("May 2015 MRE") using all data collected prior to the August/September 2015 drilling campaign. The May 2015 MRE utilised 3-D wireframing techniques and block modelling with grades interpolated using Ordinary Kriging ("OK"). A pit optimisation was run on the block model to assess the 'reasonable prospects for economic extraction' and the Mineral Resource is stated within the maximum profit pit. The Mineral Resource statement produced by SRK is provided in Table 5-3. The methodology and results of the May 2015 MRE were described in a NI 43-101 technical report (SRK, 2015).

Classification	Concession	Owner	Geological Unit	Clay Tonnes (Mt)	Clay Grade (Li ppm)	Contained Metal (kt Li)	Contained Metal (kt LCE)
	La Ventana	Minera Sonora Borax	Lower Clay	35	3,250	110	580
			Upper Clay	35	1,400	50	260
	El Sauz	- Mexilit (JV-1)	Lower Clay	15	2,350	40	220
Indicated			Upper Clay	8	1,000	8	40
	Fleur		Lower Clay	1	4,250	4	20
			Upper Clay	2	1,800	4	20
	Combined			95	2,200	220	1,140
Inferred	La Ventana	Minera Sonora Borax	Lower Clay	30	3,700	100	500
			Upper Clay	90	1,700	150	800
	El Sauz	Mexilit (JV-1)	Lower Clay	100	2,500	250	1,300
			Upper Clay	100	1,100	100	500
	Fleur		Lower Clay	80	4,200	350	2,000
			Upper Clay	60	1,800	100	500
	El Sauz1		Lower Clay	20	4,300	80	400
			Upper Clay	30	1,700	60	300
	Combined			500	2,300	1,200	6,300

Table 5-3:	Previous SRK Mineral Resource Statement (SRK, May 2015)
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*Notes:

1. Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability. All figures are rounded to reflect the relative accuracy of the estimate and have been used to derive sub-totals, totals and weighted averages. Such calculations inherently involve a degree of rounding and consequently introduce a margin of error. Where these occur, SRK does not consider them to be material.

2. The reporting standard adopted for the reporting of the MRE uses the terminology, definitions and guidelines given in the CIM Standards on Mineral Resources and Mineral Reserves (May 2014) as required by NI 43-101 and JORC.

3. The MRE is reported on 100 percent basis for all project areas.

4. SRK assumes the Sonora Lithium deposit to be amenable to surface mining methods. Using results from initial metallurgical test work, suitable surface mining and processing costs, and forecast LCE price SRK has reported the Mineral Resource at a cut-off 450 ppm Li (2,400 ppm Li₂CO₃).

5. SRK completed a site inspection of the deposit by Mr. Martin Pittuck, MSc, C.Eng, MIMMM, an appropriate "independent qualified person" as such term is defined in NI 43-101

6 GEOLOGICAL SETTING AND MINERALISATION

The content of this section is largely based on the following report; *Updated and Reclassified Lithium Resource, Sonora Lithium project* by C Verley, which was lodged with the Canadian Securities Administrators 24 June 2014.

6.1 Regional Geology and Tectonics

The Property 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 the Miocene that resulted in the development of a series of half-grabens. The half-grabens 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 basin deposits. Quaternary basalt flows unconformably cover the basin sediment-volcaniclastic succession, except where later stage faulting and uplift have exposed the basin succession at surface. Mineralisation on the Property consists of lithium-bearing clays localized within these basins.

6.2 Deposit Stratigraphy

Geological mapping has defined the following stratigraphic sequence, outlined in Table 6-1. The lithium-bearing sedimentary sequences are well defined and are distinct from the surrounding volcanics by their pale colour and fine to medium bedding, they have been recorded and characterised as dominantly north striking, easterly dipping, Li-bearing sediments. Controls for the lithium sedimentary sequence and resulting mineralisation are considered to follow the shape of a lake in which the clays became entrained. Faults underlying the lake 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. Alternatively, the lithium may have been sourced from underlying volcanics and remobilised into the basin sequence at a later date; however, rhyolites with sufficient lithium-rich melt inclusions to act as source material have not yet been identified in the sequence presented or regionally.

The lithium-bearing clays occur in two discreet units: an upper clay unit and a lower clay unit. The Lower Clay Unit is underlain by basaltic flows, breccias and tuffaceous rocks and is overlain by an ignimbrite sheet. The average thickness of the Lower Clay Unit is approximately 20 m reaching 40 m in places. The ignimbrite sheet is typically 6 m thick and is overlain by the Upper Clay Unit which averages 22 m and reaches over 70 m in thickness; the Upper Clay Unit is overlain by a sequence of basalt flows and intercalated flow top breccias.

These stratigraphic units are reasonably continuous across the La Ventana, Fleur and El Sauz concessions.

Both the Upper and Lower clay units are considered to consist of several mineralised subunits. The Lower Clay Unit consists of a basal red siltstone-sandstone-conglomerate unit, tuffaceous sediments, thin lapilli tuff layers and reworked tuff layers interbedded with lithium-rich clay layers.

The Upper clay unit, consists several subunits of thin, rhythmically laminated clay and silica layers, coarse-grained, poorly sorted brown sandstone beds 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 sandstone beds; reddish medium to coarse-grained sandstone with calcite veinlets.

Unit	True	Unit/Subunit Description
Um	Thickness (m)	Ontrisubunit Description
Capping	Not	Basalt. Contains greenish olivine crystals. Veinlets of
basalt	determined	kaolinite/alunite (white/greenish, powdery).
		Reddish, medium-coarse grained sandstone with calcite veinlets.
		Pale gray tuffaceous claystone intercalated with reddish, sandy
ii.		layers. Scarce FeOx layers (black).
, m	28.0	Dark gray slumping breccias. Dark, clayey groundmass with
Upper clay	28.0 (14.10 – 40.39)	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.
		Pale green-pinkish, fine grained sequence of clays and silica
		nodules. Waxy in zones. Calcite in masses
	5.58	
Ignimbrite	(1.29 – 11.89)	Ignimbrite: orange colored, welded lapilli tuff. Locally brecciated.
r Dit	27.78	Pale gray reworked tuff with abundant lithium-bearing clay zones.
we / ur	(21.57 –	Pale green tuffaceous sediments. K-feldspar groundmass with
Lo clay	42.11)	quartz and biotite. Indurated. Contains lapilli tuff.
Basement	Not	Deels groop hassilt and saids hassilt and shuglits triff
Volcanics	determined	Dark green basan, andeside basan and myonte tun.

Table 6-1:	Stratigraphic succession on the El Sauz concession (Verley, 3	2014)
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6.3 Deposit Structure

The lithium-bearing sedimentary sequences are considered distinct and easily distinguished in the field from the surrounding volcanics by their pale colour and thin to medium bedding, as illustrated in the northeast view of gently, northeasterly dipping, lithium-bearing sediments near the centre of the El Sauz concession (Figure 6-1). On the La Ventana concession, lithium-bearing clay units are exposed from the northwest corner of the concession to the southeast of the concession, a distance of 3.6 km. The sediments dip approximately 20° to the northeast. A mapped northwesterly striking oblique slip fault has down thrown the clay units to the south of La Ventana under basalt cover so they no longer remain exposed at surface. Drilling, however, has confirmed the continuity of the clay units under the basalt cover for a distance of 2.0 km to the southeast where they are again exposed at surface, on the El Sauz concession for a further distance of 2.0 km to the southeast. In total a 7.6 km strike length of the clay unit from the north end of La Ventana to the southern part of El Sauz has been established in both the upper and lower clay units. The deposit is open at depth; however, the down dip extent to the northeast, southwest and south is not known at present and remains to be tested by further drilling.

The more southerly exposures of the clay units occurring on the western extent of the oblique slip fault and exposed on the El Sauz concession dip gently westerly probably as a result of offsets and rotation on faults. In addition, exposures of the basement volcanics consist of rhyolite tuff on the southern part of El Sauz versus andesitic basalt on La Ventana.

Figure 6-1: Northeast view of gently dipping lithium-bearing sediments near the centre of the El Sauz concession

6.4 Mineralisation

Mineralisation on the concessions consists of a series of lithium-bearing clays that occur within two bedded sequences, the Upper and the Lower Clay units, which are separated by an ignimbrite sheet.

Bacanora understands there to be a number of lithium-bearing clay minerals, with polylithionite being the only one currently positively identified. The clay units are believed to have formed from supergene or diagenetic alteration of volcanic ash. The clay layers also contain relict quartz and feldspar crystal shards, lithic fragments and silica bands (Figure 6-2), and traces of other minerals. The layers are locally interbedded with reddish terrigenous beds composed of sand and silt-sized material.

Initial interpretation has indicated a high grade lithium core in the area covered by the La Ventana, El Sauz and Fleur concessions where the lithium grades are generally above 3,000 ppm Li. This high grade zone extends from the middle of La Ventana southward across Fleur and approximately a third of the distance south into El Sauz. The best grades of lithium are associated with elevated levels of calcium, cesium, magnesium, potassium, rubidium and strontium; however, the correlation (especially for magnesium) is not one-to-one.

On La Ventana, the best grades of lithium are co-incident with elevated levels of potassium and cesium and are found in the southern part of the deposit. Magnesium appears to be irregularly distributed and does not follow lithium or the other alkalis. Mineralised intervals within the clay units vary for the Upper Clay Unit from 25% to 80% of the overall thickness and from 40% to 100% for the Lower Clay Unit, depending on the cut-off used. Vertical grade variation is noted in places, but with the exception of the Upper Clay Unit in the main eastern fault block it has not been identified with sufficient continuity between drillholes to have been reflected in the 3-D modelling process described herein.

Further mineralogical studies are recommended to determine what minerals host the various alkalis in the clay units. Results of such studies could have an impact on beneficiation of these minerals and recovery of the alkalis.

Figure 6-2: Alternating clay and silica bands within an outcrop on the La Ventana concession

7 DEPOSIT TYPE

7.1 Deposit type

The Sonora deposit is believed to have formed by hydrothermal alteration as a result of alkaline volcanism effecting layers of volcaniclastic sedimentary rocks deposited in a basin environment. The origin and timing of the mineralised content remains unclear with regard to source and whether the alteration was essentially syngenetic with deposition of the sedimentary rocks or whether the alteration is a post depositional event. Additional work is required to clarify the origin of these deposits.

The Western Lithium Kings Valley development project, Humbolt County, Nevada, has similar mineralogy and deposit geology to the Sonora Project, but the exact lithium clay mineralogy and regional geological setting is significantly different.

There are no directly analogous deposits known to be in operation.

7.2 Adjacent/Regional Deposits

The Sonora region plays a large part in Mexican production of ore minerals, predominantly silver, celestite and bismuth. The state has the largest mining surface in Mexico, and three of the country's largest mines: La Caridad, Cananea, and Mineria María. Sonora also remains the leading Mexican producer of gold, copper, graphite, molybdenum, and wollastonite, as well as one of the largest coal reserves in the country. This has resulted in established and well maintained resources, specifically infrastructure which services the existing mining industry through the region.

8 **EXPLORATION**

8.1 Introduction

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 industrial minerals. 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. Consequently, US Borax abandoned exploration in the area.

In 2010, Bacanora initiated a program of limited rock sampling on the La Ventana concession this work led to the discovery of lithium-bearing clays. Follow-up work in 2011 on the El Sauz concession led to the discovery of the lithium-bearing clays within this concession.

8.2 Surface Sampling Programme

8.2.1 2010 La Ventana Concession

Bacanora's initial exploration efforts were focused on testing the clay exposures located on the La Ventana concession. In 2010, a series of six continuous chip samples were taken perpendicular to the strike of upper clay unit at the south end of the concession.

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

The results of this work confirmed the elevated lithium concentrations in the clay unit. Values for the six samples ranged 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 four holes were drilled as an initial test of the lithium-bearing clay units.

8.2.2 2011 El Sauz Concession

A geological reconnaissance and rock-sampling program was conducted on the El Sauz concession by Bacanora's geologists during the period 28 September to 11 November 2011. A total of 116 rock samples were collected from exposures of a pale coloured, clay-bearing sequence of sediments and intercalated tuffaceous rocks. 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 the El Sauz concession.

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 to the west in the case of the more southerly exposures. These opposing dips appear to indicate an anticlinal structure. The initial mapping of the Fleur and El Sauz concessions is shown in Figure 8-1.

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. The results indicated that significant lithiumbearing clay units occur on El Sauz.

A total of 94 rock samples averaging 1.7 kg were taken from outcrops of the clay units exposed on the El Sauz concession. The samples were collected across outcrops as continuous chip samples perpendicular to the strike direction of the sediments. 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 further confirmed the 2011 work, which indicated that significant lithium-bearing clay units occur on El Sauz warranting further work to more accurately assess the extent of the units and the concentration of.

In conjunction with the rock sampling, the geology of the area around the clay units on El Sauz and Fleur were mapped (Figure 8-2). Structurally, the clay units on El Sauz and Fleur dip to the northeast at approximately 20° and in the central part of El Sauz the clay units crop out in an arcuate form, with the more easterly arm of the arc dipping to the northeast and the westerly arm dipping westerly.

The geological mapping and Stage 1 drill program suggested that the strata on El Sauz were a continuation of those found on the La Ventana concession. From this comparison it was concluded that the lithium-bearing clay units on the El Sauz are a southern extension of the sedimentary basin from La Ventana onto the Fleur and El Sauz concessions.

Figure 8-1: Initial mapping undertaken for the Sonora Lithium Project

8.2.3 2013 - El Sauz Concession

From February to April, 2013, the mapping and rock sampling campaign continued on the Fleur and El Sauz concessions, as shown in Figure 8-2.

Figure 8-2: 2013 surface sampling and mapping undertaken on the El Sauz and Fleur concessions

8.3 Trenching

In early 2014, six trenches were excavated across exposures of the Lower Clay Unit on La Ventana to provide additional grade control. Continuous chip samples were taken at intervals averaging 1.5 m in length. Figure 8-3 shows TR-6 excavated across the Lower Clay Unit in La Ventana. Collar locations of the trench samples are listed in Table 8-1 and illustrated Figure 8-4.

Trench	Easting	Northing	Elevation	Length (m)
TR-2	678073.4	3288432	874.7755	30
TR-3	678298.8	3287890	883.1865	27.7
TR-4	678436.1	3287359	925.7235	27
TR-5	678569.9	3287025	882.845	22.5
TR-6	678487.2	3286830	929.467	33.6

Table 8-1: Trench collar locations

Figure 8-3: TR-6 excavated through clay horizon in the south of La Ventana

Figure 8-4: 2014 Trench locations

9 DRILLING

9.1 Introduction

In 2010, Bacanora commenced a diamond drill program on the La Ventana concession before expanding the targeted area to include the El Sauz and Fleur concessions in 2013. Further drilling was conducted in two phases in 2015 to improve the drilling grid density. At the time of writing, a total of 14,069 m has been completed on the Sonora Lithium Project.

Initial drilling accounting for 5,065 m completed from 39 holes was undertaken on the La Ventana concession and a further 58 holes were completed on the El Sauz and Fleur concessions since 2013 resulting in some 9,004 m of NQ core which further established the continuation of lithium-bearing clay units across the entire Sonora project area. Drilling demonstrated that the lithium mineralisation exists in two units along approximately 7.2 km of strike length.

All the drilling conducted to date on the concessions was undertaken by Perforaciones Godbe de Mexico SA de CV, a Mexican subsidiary of Godbe Drilling LLC, based in Montrose, Colorado. The drill rig used for the recent drilling is shown in Figure 9-1.

Drilling has been completed on a 200 to 250 m grid basis with locations frequently constrained by access and topography.

9.1.1 La Ventana Concession

Bacanora's first drilling campaign on the La Ventana concession was conducted from May to September 2010. Four holes totalling 458 m were completed in this initial programme using NQ-core diamond drilling. Drill sites were laid out to optimally test a section of the lithiumbearing clays exposed at the south end of the La Ventana concession with holes completed on 200 m spacing along strike.

A second campaign in 2011 totalled 1,453 m in 8 drillholes and extended the known strike length of the deposit to over 2.5 km. The culmination of a successful surface mapping programme (outlined in Section 8.2) and sub-surface intercepts established the continuity of both the upper and lower clay mineralised units down dip and along strike.

Drilling in the La Ventana concession continued through 2014 and 2015. The current programme consists of some 27 holes generating 3,154 m of NQ drill core. This drilling has increased the depth extent of the upper and lower clay units and further confirmed the lithological continuity along strike.


Figure 9-1: 2015 drill rig producing NQ drill core

9.1.2 Fleur and El Sauz Concessions

In addition to the drilling undertaken on the La Ventana licence, Bacanora has undertaken a number of drill programmes aimed at extending the known strike of the mineralised clay units towards the southeast through the Fleur and El Sauz concession areas, driven by the continuity established in the La Ventana concession and supported by a positive surface mapping and sampling programmes which are outlined in Section 8.2.

An initial drilling campaign was undertaken from May to September 2013 in which a total of 1,470 m of NQ-core was completed in 10 holes. Drill sites were laid out with the objective of testing the extension of the lithium-bearing clays on the La Ventana concessions which outcrop in El Sauz.

A second drill program on the Fleur and El Sauz concessions commenced in October 2013 and was completed in February 2014. A total of 2,436 m of NQ drilling was completed in 20 holes extending the strike extent of the known lithium mineralisation. This drilling also defined the southern and southwestern extents of the mineralised unit. This area is considered to be more structurally complexity as a result of numerous offset fault sets and potential rotation or folded movement within the stratigraphic sequence.

A third drill programme along with field mapping was undertaken on the Fleur and El Sauz concessions from late 2014 to early 2015 comprising 12 drillholes totalling 1,164 m. This programme targeted this structurally complex area to test continuity using a 200 m drill spacing as used in La Ventana and along the eastern extent of El Sauz and Fleur. This drilling and additional mapping established that the mineralisation dips gently toward the east in this area.

A four drill programme was completed in summer 2015 which comprised 16 drillholes totalling 3,934 m. This programme aimed to provide more detail in the southeastern area of the Fleur concession and northern area of the El Sauz concession, where the majority of higher grade lithium is situated.

9.2 Collar Surveys

All collars were surveyed using a handheld GPS unit (Garmin 62S) taking an average waypoint over a time lapse of five minutes. Due to the higher resolution of the LIDAR topographic survey, the elevation (Z) values of the collars were taken from the LIDAR survey. All collar related coordinates are reported in UTMNAD27 Z12.

SRK understands that all drillholes to date have been drilled vertically, except hole ES-052, which dips at 70°. None of the holes has been surveyed with down-hole survey or core orientation technology.

9.3 Summary of Drillhole Locations

Figure 9-2 shows the locations of the drillhole collars across the Sonora concessions. These holes have been coded based on year drilled and as such reflects the development of the project over time.

9.4 Summary of Major Mineralisation Intersections

A summary all major lithium mineralisation intersections within the modelled resource wireframes are shown in Appendix B.



Figure 9-2: Sonora concessions drillhole collars

10 SAMPLE PREPARATION, ANALYSIS AND SECURITY

10.1 Sampling Methodology and Approach

All core drilled on site was arranged into referenced core boxes and moved from the drill sites by Bacanora personnel to a secure compound in Bacadehuachi where under the supervision of the onsite geologist, it was logged, split and sampled (Figure 10-1). 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 was also measured and recorded.



Figure 10-1: Bacanora staff preparing core in a dedicated and secure compound, Bacadehuachi

10.1.1 Core Presentation and Photography

Core and core blocks are placed in core boxes by the driller. Upon receipt in the core shed, the drill core is cleaned or washed, if required, and core blocks are checked by Bacanora staff. The core is split using a hydraulic splitter and then photographed wet and dry in a frame ensuring a constant angle and distance from the camera (Figure 10-2).



Figure 10-2: Drill core presented after cut and sampling procedures

10.1.2 Logging

Geological logging is undertaken once core photography is complete. Logging includes recording from-to intervals and brief descriptions of the lithological units as well as observations and measurements regarding core recovery. The key logging codes used by Bacanora have been summarised in Table 10-1.

Geological Unit	Code	Lithology	Description			
Capping basalt	UBAS	Capping Basalt	Dark grey olivine basalt. Massive			
Upper Sandstone	UPP_SS	Reddish sediments	Reddish-grey medium to coarse grained sandstone. Poorly bedded to massive. Abundant calcite, some iron oxides.			
	UTC	Upper Tuffaceous sequence	White to light grey claystone. Oxidized. Lithic and reworked. Contains sanidine crystals. Slightly calcareous			
	CALCLS	Calcareous sequence	Pink to dark breccias, silty-muddy matrix. Abundant calcite in masses and veinlets. Feldspar altered to clays			
Upper clay	WAXCLS	Tuffaceous sequence	Light green-white altered tuff. Feldspar is being converted into clays (light green honey). Contains glass crystals (sanidine) and biotite. Waxy.			
	BRSS	Brown/reddish sandstone	Brown sandstone. Poorly bedded. From 112 to 113. highly calcareous. Reddish tuffaceous coarse grained sandstone. Clay matrix. Soft.			
	нѕ	Hot Spring Type Section	Light green-pink fine grained sequence composed of clays and silica nodules. Waxy in zones. Folded. Friable. Abundant calcite in masses and veinlets. Thin bedded.			
Ignimbrite	IGNIMBRITE	Tuffaceous sequence	Orange to pink welded tuff. Well indurated. Brecciated. Highly silicified. Contains pumice flames.			
	LWR-T-SED	Lake-beds-altered	Dark green sequence composed of rhythmic beds of clay-silica-marls with abundant calcite in masses and veinlets. Some dark zones with clay and organic matter. Thin to medium bedded.			
Lower Clay	LART	Lower Seds	Grey well indurated sandstone. Reworked andesitic tuff?			
	LCGL	Lower conglomerate	Polymitic conglomerate. Reddish matrix to the top and greenish to the bottom. Purple-greenish- white fragments.			
Basement	LBAS_AND	Lower Basalt Andesite	Dark green basalt. Biotite rich (black) in a fine grained groundmass. In some holes tuff with andesite frags.			

Table 10-1: Key logging codes summarised based on Bacanora core logging procedures

10.1.3 Dry Density

Dry in situ density readings are taken at regular intervals within each lithology and on every lithological break. The methodology involves weighing dry samples in air and then in water, all porous samples being wrapped in plastic first. Measurements are carried out on competent whole core (typically 10-15 cm pieces) using a balance with top and modified under-slung measuring capabilities with a detection limit of ± 1 g.

 $\frac{Weight in air}{Weight after immersion - Weight in air} = Dry in situ density$

10.2 Chain of Custody, Sample Preparation, and Analyses

10.2.1 Sampling Procedure Overview

Sampling was based on lithological intervals and extended 2-3 samples either side the identified lithium clay contacts. Samples ranged from a reported 0.3 - 8.68 m; however, the average sample length remains 1.5 m, reflecting the targeted sample length.

Sample intervals are measured by the Project geologists, who mark the sample length on the core to indicate where it should be cut. The cut line along the core axis is positioned at 90° to the predominant structure to ensure that both halves of the core represent the same geological feature.

The core is then transferred to the core shed for sampling. Samples are then collected by splitting the core in half with a manual core splitter.

10.2.2 Sample Preparation

The samples are bagged and labelled with a sequential, unique sample identification number. Mr. Martin Vidal (Managing Director of Bacanora) supervised drilling of the first 12 holes on La Ventana; Daniel Calles, geologist under contract to Bacanora, supervised the core sampling during the later campaigns.

Split drill-core samples were shipped to an ALS Chemex Laboratories ("ALS Chemex Hermosillo") sample preparation facility in Hermosillo, Mexico, for preparation. Sample preparation was conducted according to the ALS Chemex rock, drill-core and chip-sampling procedures (PREP-31). This consists of crushing the sample to minus 5.0 mm sized material, splitting off 250 g and pulverizing the split sample so that greater than 85% passed through a 75 micron aperture screen.

10.2.3 Analytical Procedures

Sample pulps were then shipped to ALS Chemex Laboratory in North Vancouver, Canada ("ALS Chemex Vancouver"), 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.

All core samples were analysed by inductively coupled plasma – mass spectrographic (ICP-MS: ME-MS41) method 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, TI, U, V, W, Y, Zn.

10.3 Quality Assurance and Quality Control Procedures

10.3.1 Introduction

The Quality Assurance and Quality Control ("QA/QC") procedures included in-house standards submitted within the sample stream. SRK notes that these standards have not been certified and also they do not represent the grade range typically found in the deposit but do monitor consistency of the analytical process to some extent. Additional confidence in the accuracy of grade determinations in the grade range of the deposit was established by independent duplicate samples collected by C Verley as part of his Competent Persons checks, duplicate samples were submitted to an umpire laboratory (ACME Laboratory in Vancouver, Canada ("ACME Vancouver")).

10.3.2 Standards

Bacanora produced three in-house lithium standards through localised bulk sampling. These were inserted into the regular sample stream to provide information on the precision of the laboratory results. The standards were prepared at Laboratorio Metalurgico LTM SA de CV in Hermosillo. Approximately 50 kg of bulk sample was milled to <100 μ m and homogenised in a single batch in a drum mixer for 24 hours, after which 100 g sub-samples were split and sealed in plastic bags ready for insertion into sample batches.

Two different low grade standards and one higher grade standard were produced. These standards were not used concurrently; instead, each was used to completion before generation of a new standard material. Table 10-2 summarises the insertion rates of the three different standard samples. Table 10-3 summarises SRK's calculated means and standard deviations of the three reference samples.

Reference Sample	Total Number	Insertion Rate (%)
ТТ	26	1
MY-TT	56	2
High Grade Sample	77	2
Total Samples	159	4

 Table 10-2:
 Summary of reference sample insertion

Table 10-3: Summary of reference sample calculated means and standard deviations

Reference Sample	SRK Calculated Mean (ppm)	SRK Calculated Std Dev		
ТТ	256	14.5		
MY-TT	175	15.9		
High Grade Sample	6,709	875.3		

The performance of each standard is shown in Figure 10-3, Figure 10-4 and Figure 10-5; each shows a scattering around the calculated mean grades.

Figure 10-5 also shows that over time there has been a general trend from higher to lower assays within the range of 7,500 ppm to 6,000 ppm. SRK is satisfied at this stage the standard assays are within acceptable parameters and is not a cause for concern; however, if the current trend continues a negative bias effecting high grade samples may become apparent. SRK therefore recommends this standard's performance is monitored closely.



Figure 10-3: Low grade lithium reference standard TT



Figure 10-4: Low grade lithium reference standard MY-TT



Figure 10-5: High grade lithium reference standard

10.3.3 Blanks

A total of 32 blanks were submitted as part of the QA/QC process by Bacanora during the most recent round of drilling. Prior to this, blank samples were not submitted as part of the QA/QC program. The overall performance of the blanks is considered to be acceptable; however, it must be noted that the blank samples submitted cover a very limited period of drilling and analysis. The insertion rate for blank samples in the most recent phase of drilling is approximately 1 in 20; this is considered to be in line industry best practice. Blank performance plots are presented in Figure 10-6 and with outliers removed in Figure 10-7.

SRK notes that almost all the samples fall above the analytical detection limit stated for lithium by ALS Chemex, with two samples falling well beyond the detection limit. This may be attributable to sample swapping or mislabelling. Bacanora uses a commercially available silica sand as blank material; however, this material is not certified and is pulverised in-house prior to submission to ALS Chemex. It is therefore not possible, without further testwork, to ascertain source of the lithium causing the overall trend for blank samples to exceed the detection limit. Despite this, SRK does not consider this very low level of potential contamination to significantly impact upon the data quality.

SRK recommends that the practice of submitting blank samples as part of the standard analytical submission sequence is maintained in further programs and that certified blank material is sourced.



Figure 10-6: Blank performance plot



Figure 10-7: Blank performance plot with two outliers removed

10.3.4 Duplicates

A total of 14 quarter-core duplicate samples were submitted as part of the QA/QC process by Bacanora during the most recent round of drilling. Prior to this, duplicate samples were not submitted as part of the QA/QC program. The overall performance of the duplicates is considered to be acceptable; they show that there is little difference between the assays when one half core is compared to the other. The insertion rate for duplicate samples in the most recent phase of drilling is approximately 1 in 45; this is considered to be below industry best practice. Figure 10-8 shows a scatter plot of original vs duplicate samples highlighting a good correlation.

SRK recommends that the practice of submitting duplicate samples as part of the standard analytical submission sequence is maintained in further programs. SRK suggests that in future QA/QC programs an insertion rate of 1 in 20 should be attained.



Figure 10-8: Duplicate assay comparison

10.3.5 Comparative Laboratory techniques

In addition to the ME-MS41 method, 280 samples were submitted as pulp duplicates for further analysis using the Li-OG63 analytical method at ALS Chemex Vancouver, using a 4-acid digest with an ICP finish. Figure 10-9 shows an excellent correlation between the two methods.



Figure 10-9: Duplicate sample method comparison

10.3.6 Umpire Laboratory

The work undertaken by C Verley to verify the original analytical results included submitting 82 duplicate samples derived from quarter core to an umpire laboratory (ACME Vancouver) which is 2% of the total sample population. A 4-acid digest analysis was undertaken by ACME Vancouver (method MA270) with an ICP-ES/ICP-MS finish. The results in Figure 10-10 show that there is a good correlation between the two laboratories over the range of grades found in the deposit. SRK recommends that in the future that at least 5% of the total sample population is routinely sent for verification at an umpire laboratory.



Figure 10-10: Duplicate sample laboratory comparison

10.4 Core Recovery Analysis

Core recovery for the sampled intervals averages greater than 95%, based on core measurements undertaken by the Company. The core recovery is not believed to negatively affect the reliability of the results. SRK notes that a small drop in recovery was observed in the summer 2015 drilling, although this is also not believed to negatively affect the reliability of the results.

10.5 QA/QC Summary

SRK has reviewed the QA/QC and is confident that the quality of the data is sufficient for use a Mineral Resource estimate. SRK recommends that during future exploration drilling programmes continue to submit a full suite of QA/QC samples for analysis including blanks, and duplicate samples at a rate of 1 per 20 samples and increasing the submission of samples to umpire laboratories to at least 5% of the total sample population. SRK also recommends creating more in-house standards which more closely represent the deposit grade and ensuring a more comprehensive round-robin process to establish mean grades and standard deviations between several laboratories and methods.

11 DATA VERIFICATION

As QP, Martin Pittuck has verified that the data provided by the Company appears to be correct and viable for use in a MRE. This involved viewing some drillholes at the core shed to check the quality of the logging, along with cross-checking assay certificates against the database. Further statistical validation of the database was undertaken upon final receipt.

11.1 Data Received

The Company has provided SRK with all requested technical information and data which SRK has taken in good faith as being accurate to the best of their knowledge.

SRK was provided with a package of electronic and paper based data by the Company. This included:

- raw drillhole data sheets in Microsoft Excel format covering the drillhole collars, associated assay results and geology;
- Preliminary Economic Model prepared by REM internally (Microsoft Excel);
- Draft Preliminary Economic Assessment ("PEA") report, Preliminary Economic Assessment for the El Sauz Concession, Sonora Lithium Project, C Verley, October 2014;
- Mapinfo data files relating to:
 - topography;
 - licence tenure;
 - geological and structural interpretation;
- pdf documents relating to Resource Estimates including:
 - Initial Lithium Resource Estimate for the El Sauz and Fleur Concession, Sonora lithium project, C Verley, 11 October 2013; and
 - Updated and Reclassified Lithium Resources, Sonora lithium project, C Verley, 24 June 2013.

11.2 Database Validation

All available data has been validated through the production of histograms and scatterplots. All data was validated by an SRK geologist.

11.3 QA/QC

The quality control measures that have been put in place are discussed in the previous section. It is SRK's opinion that the procedures adopted have led to a reliable database and SRK is confident that the quality of the data is sufficient for use in an Indicated Mineral Resource.

12 MINERAL PROCESSING AND METALLURGICAL TESTING

Bacanora has a laboratory and metallurgical pilot scale test facility in Hermosillo which is being used to develop a flowsheet for production of lithium carbonate from the Sonora clays deposit. Bacanora plans to eventually produce battery grade lithium carbonate (99.9% pure Li_2CO_3) which currently sells for approximately USD6,500/t. Every unit of lithium metal is equivalent to 5.3 units of Li_2CO_3 ; in the Mineral Resource statement the lithium metal content is also given as a lithium carbonate Equivalent ("LCE").

The only comparable deposit currently being developed is Western Lithium Corp's ("Western Lithium") Kings Valley Lithium Project in Nevada. This deposit contains lithium rich phyllosilicate and smectite clays such as hectorite. The clays at Bacanora are from the same category, although they differ in species, with polylithionite being the main clay identified to date.

Western Lithium published a pre-feasibility study in May 2014 which outlined their mineral processing flow sheet. This was based both of bench scale laboratory work and semi continuous work on the calcination (pyro-metallurgy) section of mineral processing. Subsequent to this, Western Lithium produced high purity lithium carbonate (99.8%) from its demonstration plant.

Bacanora's mineral processing is similar to Western Lithium's and the flowsheet involves a series of stages starting with beneficiation, followed by calcination, leaching, evaporation, filtering and precipitation. These stages are illustrated in Figure 12-1. To date, Bacanora has produced in excess of 99.5% pure lithium carbonate at bench scale. It is currently optimising the process to produce process design criteria and mass energy balances.

Given the stage of development and continued optimisation of the process final processing costs and re-agent tonnages have not been finalised. Previously published reports, however, in particular the preliminary economic assessment (Verley, January 2013) and scoping study (Verley, December 2014) on La Ventana and Mexilit respectively, contained estimated costs which were used in this MRE in the determination of the cut-off grade. As the Project advances and the process is further defined, these costs may vary and may have an effect on the cut-off grade and consequently any subsequently published MRE.

12.1 Beneficiation

The run of mine ("ROM") material will be mechanically pre-concentrated by dry and wet screening and water "natural attrition" to clean and separate coarse silica clasts and nodules and maximise the recovery of clays where lithium is concentrated. This is intended to produce a screen concentrate with a 1.0% to 1.5% lithium grade that is then roasted. Recovery of lithium into the screen concentrate is expected to be better than 80%.

12.3 Roasting / Calcination

The screen concentrate is mixed and homogenized with gypsum and small amounts of salt and pelletized. The pellets pass through a kiln (rotary oven) for about 20 minutes at a temperature of 1,000°C to the break down the lithium clay minerals, converting the lithium to a lithium sulphate.



Figure 12-1: Conceptual Flowsheet under Development

12.2 Leaching

The roasted pellets are ground and deposited in a leaching tank and agitated for one hour at 900 rpm with 40% solids dissolving lithium into solution. The product is filtered and the pregnant solution is recovered. The solids or leach residues are discarded. Recovery of lithium in this stage is expected to be better than 90%.

12.3 Evaporation and cleaning

The process is carried out in three stages, with a reduction of 75% in volume and an increase in lithium concentration of 1 to 6 times. Initially, the leach slurry is gravity filtered through a bag filter with a minimum particle capture size of 1 μ m. The filtrate is concentrated by a factor of four in two stages of evaporation and the solution is passed through an ionic interchange resin to reduce contaminants and it is then sent to a precipitator.

12.4 Precipitation

The brine is heated up to 95° C and then Na₂CO₃ is added to convert the lithium sulphate into lithium carbonate which is then filtrated and recovered for drying. The residual liquor is circulated back into the leaching process.

13 MINERAL RESOURCE ESTIMATION

13.1 Introduction

The November 2015 MRE was completed by Oliver Jones (Consultant - Resource Geology) and Ben Lepley (Senior Consultant - Resource Geology) under the supervision of Martin Pittuck, CEng, MIMMM (Corporate Consultant - Mining Geology) who has some 20 years' experience in generating and reviewing Mineral Resource estimates for a wide variety of deposit styles; meeting the definition of an "independent Qualified Person" as this term is defined in National Instrument 43-101.

The effective date of the Mineral Resource statement is 19 November 2015.

This section describes the Mineral Resource estimation methodology and parameters. The Mineral Resources have been reported in accordance with generally accepted CIM "Estimation of Mineral Resources and Mineral Reserves Best Practices" guidelines and National Instrument 43-101. Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability. There is no certainty that all or any part of the Mineral Resources will be converted to Mineral Reserves.

The database used to estimate the Mineral Resources was audited by SRK and SRK is of the opinion that the current drilling information is sufficiently reliable to support a Mineral Resource.

Leapfrog Geo Software ("Leapfrog") was used to construct the geological model. Microsoft Excel was used to audit the drillhole database, and prepare assay data for geostatistical analysis. Supervisor Software ("Supervisor") was used for geostatistical analysis and variography. Datamine Studio Version 3 ("Datamine") was used to construct the block model, estimate grades and tabulate the resultant Mineral Resources.

13.2 Resource Estimation Procedure

The estimation methodology comprised:

- database verification and preparation for geological modelling (including compositing);
- discussions with client regarding geology and mineralisation;
- construction of geological model and wireframes;
- definition of fault blocks and resource domains;
- preparation of database for geostatistical analysis and variography;
- 2-D and 3-D Block modelling and grade interpolation;
- resource validation and classification;

- assessment of "reasonable prospects for economic extraction" and selection of appropriate cut-off grade; and
- preparation of a Mineral Resource Statement.

13.3 Resource Database

SRK was provided with a package of electronic and paper based data by the Company. This included:

- raw drillhole data sheets in Microsoft Excel format covering the drillhole collars, associated assay results and geology for each of the La Ventana and El Sauz / Fleur concessions independently;
- Preliminary Economic Model prepared by REM internally (Microsoft Excel);
- draft Preliminary Economic Assessment ("PEA") report, Preliminary Economic Assessment for the El Sauz Concession, Sonora Lithium Project, C Verley, October 2014; and
- Mapinfo data files relating to:
 - o topography;
 - o licence tenure; and
 - geological and structural interpretation.

13.4 Topographic Survey

A detailed 1 m resolution topographic survey has been undertaken (Figure 13-1), covering the extent of the known lithium deposit included in this study. Topographic data was collected using LiDAR simultaneously with high resolution aerial photography.

Figure 13-1 and Figure 13-2 show the LiDAR imagery and aerial photography draped over the LiDAR Digital Elevation Model ("DEM") which has allowed verification of the drillhole collars as well as adding increased definition to the mapped geological contacts between the clay and various other units.



Figure 13-1: Area covered by available LiDAR imagery



Figure 13-2: Aerial imagery draped over topographic mesh to validate drillhole locations (red)

13.5 Geological Modelling

The MRE is based on a 7.2 km portion of a northwest-southeast regional trending lithium enriched clay unit. SRK has created a geological model constrained by the licence holdings of the company and based on the lithological logging, assay data, structural and interpretive sections provided by the company. The deposit has been modelled as three main geological domains. At the stratigraphic base of the clay bearing units is the "Lower Clay Unit", this is typically well mineralised and up to 20 m thick, this is overlain by a weakly mineralised lgnimbrite sheet. At the top of the sequence is the "Upper Clay" which has been subdivided into a "High Grade Upper Clay" and an "Upper Clay" unit in the well drilled Fault Block 4 area of the deposit Section 13.8.1. The deposit has been subdivided into five fault blocks, described in further detail in Section 13.6.3.

13.6 2-D Modelling and Interpretation

In developing a 3-D model, SRK has created a series of 2-D representation to assess the deposit geometry and grade distribution for each clay unit, which has identified several features material to the estimation process; these are described in the following sections.

13.6.1 Elevation

Figure 13-3, Figure 13-4 and Figure 13-5 show the wireframed elevation of the footwall of the Upper, Upper High Grade and Lower Clay Units within the main northern fault block. The figures also show the thickness of the resulting wireframes. The elevation trend in each fault block is relatively consistent, showing the gentle dipping nature of each mineralised horizon.

13.6.2 Thickness

Figure 13-3, Figure 13-4 and Figure 13-5 also show the thickness of each clay unit. In the Lower Clay Unit, the thickness is greatest in the south east where it reaches 50 m; this reduces gradually to 20 m at the centre of the zone and towards the northern extents of the data. The Upper Clay and High Grade Upper Clay Units thickness is greatest at the northern end of the drilled area where it reaches 50 m and 20 m respectively; this reduces southwards varying gradually between 10 m and 30 m thick at the southern extent of the data.

13.6.3 Structure

A 3-D assessment of lithological drillhole logging and surface structural maps identify the presence of several faults which offset the mineralised horizons; these are shown in Figure 13-6. These structures have been used in the subsequent 3-D geometry and grade modelling processes as fault block domain boundaries.

13.6.4 Grade

Section 13.12.2 provides plan maps of the grade variation across the deposit. Although these trends are visible in the raw data, they are best visualised in the resultant estimated block model (as presented in the figures within Section 13.12.2). The figures demonstrate a strong trend towards grade zoning, resulting in a "bulls-eye" grade pattern with highest grades seen in the centre of the domains, gradually transitioning to towards lower grades at the margins. This effect is best observed in the northern fault block where the majority of the drilling has been undertaken.



Figure 13-3: Thickness contour map (left) and elevation contour map (right) for the Lower Clay Unit



Figure 13-4: Thickness contour map (left) and elevation contour map (right) for the Upper Clay Unit



Figure 13-5: Thickness contour map (left) and elevation contour map (right) for the High Grade Upper Clay Unit



Figure 13-6: Fault model (black wireframes) shown with resource wireframes

13.7 3-D Geological Modelling

SRK has undertaken geological modelling of the Sonora Lithium Project to provide geological constraints for the MRE. These constraints are provided as wireframe models into which the final block models were created and domained. The geological model constructed for the Project has been used to differentiate between fault blocks and the Upper and Lower Clay Units, as well as the high and low grade sub domain within the northern Upper Clay Unit.

13.8 Deposit Modelling

The following section describes the methodology undertaken for modelling of the Project. All modelling was undertaken using Leapfrog Geo software into which cross sections from previous interpretations were imported for reference.

13.8.1 Geological Zone Modelling

The deposit modelling comprised the following:

- importing the collar, survey, assay, geology, and magnetic susceptibility data into Leapfrog to create a de-surveyed drillhole file);
- importing the topography data file;

- importing site generated interpretations, plan maps and cross sections; and
- creating the mineralisation wireframes based on the domain.

A number of fault surface wireframes were first modelled based on mapped traces, dip-strike field data and interpreted occurrence in drillholes. This process resulted in five fault blocks which materially impact the strike continuity of the lithium bearing clay units. To maintain this distinction, zone codes which are listed in Table 13-1 have been preceded with the numbers 1 to 5 to represent the fault block.

Geological zones were created by grouping the logged lithology codes then generating wireframes for each lithological unit linking between drillholes and outcrop, ensuring the stratigraphic sequence continued through the Project area. Each lithological wireframe has been clipped against the fault domain boundaries and topography.

Figure 13-7 shows the mineralisation wireframes produced by SRK in combination with interpretive cross sections provided by the client. Figure 13-8 provides a cross section showing all stratigraphic units which have been offset and controlled by generating differing fault blocks independently referenced to structural data collected on site.

Figure 13-9 shows the wireframes that were used to constrained the raw data and define the zone coding implemented during the creation of the block model. Table 13-1 references each of the Kriging zone codes applied representing both the clay unit and the respective fault domain.



Figure 13-7: South facing isometric view of cross sections provided by the Company registered in 3-D space



Figure 13-8: Northwest-looking cross section showing stratigraphic units and related fault structures



Figure 13-9: Wireframes in plan showing the zone code system applied

Table 13-1: Kriging Zone Codes (KZONES)

KZONE	Description
101	Lower Clay (Fault Block 1)
103	Upper Clay (Fault Block 1)
201	Lower Clay (Fault Block 2)
203	Upper Clay (Fault Block 2)
401	Lower Clay (Fault Block 4)
403	Upper Clay High Grade domain (Fault Block 4)
404	Upper Clay Low Grade domain (Fault Block 4)
501	Lower Clay (Fault Block 5)
502	Upper Clay (Fault Block 5)

13.8.2 Block Model Creation

An empty block model was generated in CAE Datamine Studio 3 software ("Datamine"). The block model includes zone codes for each of the mineralised clay units and ignimbrite wireframes in each of the fault blocks.

The mineralisation modelled has a strike length of some 7.2 km. Deep drilling has demonstrated the existence of mineralisation some 500 m down dip from outcrop and SRK has extended the block modelled mineralisation a further 300 to 400 m down dip to ensure any potentially economic material below that already defined can be included in the Mineral Resource or identified as a drilling target. A waste model was also generated below the topography and outside of the mineralisation zones.

13.9 Classical Statistical Study

This section presents the results of the statistical studies undertaken on all the available assay and density data sets to determine their suitability for the estimation process and to derive appropriate estimation constraints.

13.9.1 Introduction

The samples analysed typically comprise an approximate 1.5 m sample interval. A total of 3,546 raw drillhole assays are available for use in the modelling and MRE process.

13.9.2 Raw Statistics

The domains described above have been used to distinguish the differing horizons and spatial relationships, based principally on the lithological logging and geological interpretation supported by Li grade. Figure 13-10 shows the key histograms for the upper and lower clay domains combined across fault blocks.



Figure 13-10: Combined Histograms for Upper and Lower Clay Units as well as the Upper Clay high grade and low grade subdivisions

Figure 13-10 shows a positive skew in both the Upper Clay and Upper Clay Low Grade domains. This distribution is likely to be related to the gradual transition in grade over the entire strike length of the deposit, resulting in a mixture of high and low grade samples rather than a specific grade population. SRK also notes that the maximum value of 10,000 ppm Li that can be returned by the laboratory and method employed terminates the distribution curve of the Lower Clay Unit unnaturally. This suggests that all samples currently in the database with a value of 10,000 ppm would have higher grades if they were submitted for assay using a different method with a higher detection limit. There are a total of twenty samples in the raw sample database that have been returned with the upper analytical detection limit of 10,000 ppm Li. All of these samples fall within the high grade core of the Lower Clay Unit in Block 4.

13.9.3 Data Compositing

Due to the relatively flat lying nature of the mineralisation and the large lateral extent compared with the vertical extent of each domain, a decision was made to undertake a 2-D grade estimate. Vertical grade variation is noted in places, but it has not been identified with sufficient continuity between drillholes to have been modelled as further subdomains or to have been reflected in the estimation process. The samples in each drillhole have therefore been composited to create one sample in each of the clay units. The statistics of the composited point data by KZONE are presented in Table 13-2.

Zone	Field	No Samples	Minimum	Maximum	Mean	Variance	Stand Dev
101		8	10	4503	1070	1888984	1374
201	Li (ppm)	8	555	1668	1224	144966	381
401	Li (ppiii)	60	107	5855	3521	1965447	1402
501		3	41	795	319	114161	338
103		6	150	529	369	19056	138
203		8	129	937	621	85455	292
403	Li (ppm)	43	804	4523	2872	883	779621
404		52	103	1658	861	115782	340
503		3	167	552	411	29894	173

 Table 13-2:
 Raw Statistics for Li by KZONE (weighted by Clay Unit thickness)

13.9.4 Density Analysis

Bulk density measurements have been undertaken for all material types for the Sonora Lithium Project. In total, 2,040 samples have been analysed for bulk density from the identified stratigraphic horizons. No further density sampling has been conducted in the most recent drilling program in 2015; therefore, the density analysis remains unchanged since the May 2015 MRE. Figure 13-11 shows the relationship between lithium grade and density for samples within the upper and lower clay domains. As no strong relationship is apparent, an average density has been applied in the geological model for tonnage calculations.

Table 13-3 shows the average density values determined for each material type which has been applied into blocks where grade has been estimated. Material deemed as non-mineralised or waste has been given a constant density based on the dominant material type, the Capping Basalt.



Figure 13-11: Grade density relations ships for upper and lower clay units

Unit	Average Dry Density (g/cm3)			
Upper Clay (including sub domains)	2.3			
Lower Clay	2.3			
Waste	2.7			

Table 15-5. Average up density used in block model	Table 13-3:	Average dry density used in block model
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In undertaking the density analysis, a number of measurements have been excluded based on bench marking against expected results. Sub populations within the dataset deemed to be not related to the target material have therefore been removed to prevent bias to the dominant sample population. Such populations have been derived through mislabelling of samples, poor analysis technique, and/or calculation errors.

13.10 Geostatistical Analysis and Variography

13.10.1 Introduction

Variography was undertaken in the zone 400 fault block for the 401, 403 and 404 domains where sufficient data to undertake a geostatistical study are present. Variography from the Lower Clay Unit was then applied to all other Lower Clay domains; similarly, the variography derived from the Upper Clay Unit (lower grade subdivision) was applied to all other Upper Clay domains.

The drillhole database, flagged by modelled zones, was imported into Snowden Supervisor software for the geostatistical analysis.

For the each of the clay zones in the most densely drilled block 4, SRK undertook 2-D variography using the composited drillhole database. Experimental semi-variograms were produced for lithium grades using a sensible lag to define the nugget effect, sill (variance) structures and ranges. Omni-directional semi-variograms were produced, which provided the most robust variogram structures.

Figure 13-12 shows the modelled variograms produced for the three clay units in Block 4.

All variograms show linear structures and likely drift, but allow reasonable spherical variogram models to be fitted and used for Kriging. The nugget and ranges are easily generated, providing an appropriate level of confidence in terms of both the short scale and longer range grade continuity.





Figure 13-12: Lithium variography for Upper and Lower Clay Units (high and low grade sub domains) based on the composite point file

13.10.2 Summary

Due to the volume of data available in fault block 4 relative to the other fault domains, the variogram models produced for fault block 4 were applied to all other fault blocks to generate suitably reliable interpolation parameters. The results of the variography were used in the interpolation to assign the appropriate weighting to the sample points utilised to calculate the block model grades.

The total ranges modelled are also incorporated to help define the optimum search parameters and the search ellipse radii dimensions used in the interpolation. Ideally, sample pairs that fall within the range of the variogram (where a strong covariance exists between the sample pairs) should be utilised if the data allows.

Table 13-4 shows the rounded total ranges of the Li variograms for the differing domains. As shown, the modelled ranges are greatly in excess of the drill spacing.

KZONE	Rotation (X)	Rotation (Y)	Rotation (Z)	Nugget	Range Strike	Range Dip	Sill
401 (applied to 101, 201 and 501)	0	0	0	0.31	2100	2100	1
403	0	0	0	0.38	1360	1360	1
404 (applied to 103, 203 and 503)	0	0	0	0.39	663	663	1

 Table 13-4:
 Summary of lithium 2-D semi-variogram parameters (normalised)
13.11 Block Model and Grade Estimation

13.11.1 Block Model Set-Up

The geological wireframes were used to create a rotated 2-D block model with origins and dimensions described in Table 13-5. The 2-D block model was used for grade interpolation. A rotated 3-D block model with origins and dimensions described in Table 13-6 was also created. The 2-D interpolated block model was then converted into the 3-D block model. Both the 2-D and 3-D block models were rotated -45°. Unique codes were developed for use in coding the block model and during estimation, as summarised in Table 13-7.

Dimension	Origin	Block Size	Number of Blocks
Х	673,970	50	200
Y	3,287,560	50	105
Z	0	1700	1

Table 13-5:	2-D Block model origins and dimensions
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Dimension	Origin	Block Size	Number of Blocks
Х	673,970	50	200
Y	3,287,560	50	105
Z	400	10	105

Table 13-7:	Summary	of fields	used	during	estimation
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Field Name	Code	Description			
	101	Lower Clay Zone Fault block 1			
	103	Upper Clay Zone Fault block 1			
	201	Lower Clay Zone Fault block 2			
KZONE	203	Upper Clay Zone Fault block 2			
	401	Lower Clay Zone Fault block 4			
	403	Upper Clay Zone (high grade) Fault block 4			
	404	Upper Clay Zone (low grade) Fault block 4			
	501	Lower Clay Zone Fault block 5			
	502	Upper Clay Zone Fault block 5			
	LI_PPM	Ordinary Kriged Lithium Grade			
Grade	CA_PCT	Ordinary Kriged Calcium Grade			
	MG_PCT	Ordinary Kriged Magnesium Grade			
	LI_SV	Search Volume			
Search Parameters	LI_KV	Variance			
	LI_NS	Number of Samples			
	La Ventana	La Ventana license			
	La Ventana 1	La Ventana 1 license			
	El Sauz	El Sauz license			
Licence	Fleur	Fleur license			
	El Sauz 1	El Sauz 1 license			
	El Sauz 2	El Sauz 2 license			
	Fleur 2	Fleur 2 license			
	2	Indicated			
Class	3	Inferred			
	4	Measured			

13.11.2 Grade Interpolation

Ordinary kriging ("OK") was used for grade interpolation into the 2-D block model. Grades for Li were interpolated into the 2-D block model honouring the geological contacts defined by the geological modelling process, and using the domains (KZONES) previously assigned. The same search parameters were used for all KZONES; these are summarised in Table 13-8. The second and third searches were expanded by a multiplier factor of 2 and 15 respectively; the latter ensured all blocks in the model were estimated. Following the interpolation of the 2-D block model, SRK converted the 2-D grade interpolation into the 3-D block model.

KZONE	Search Dist 1	Search Dist 2	Search Dist 3	SAXIS 1	SAXIS 2	SAXIS 3	Min 1	Max 1	Search Volume Factor 1	Min 2	Max 2	Search Volume Factor 2	Min 3	Max 3
101	500	500	500	3	1	3	4	6	2	4	6	15	2	8
201	500	500	500	3	1	3	4	6	2	4	6	15	2	8
401	500	500	500	3	1	3	4	6	2	4	6	15	2	8
501	500	500	500	3	1	3	4	6	2	4	6	15	2	8
103	500	500	500	3	1	3	4	6	2	4	6	15	2	8
203	500	500	500	3	1	3	4	6	2	4	6	15	2	8
403	500	500	500	3	1	3	4	6	2	4	6	15	2	8
404	500	500	500	3	1	3	4	6	2	4	6	15	2	8
503	500	500	500	3	1	3	4	6	2	4	6	15	2	8

 Table 13-8:
 Search Parameters for interpolation of Li

13.12 Block Model Validation

13.12.1 Introduction

SRK has undertaken a number of validation checks to confirm that the modelled estimates represent the input sample data on both local and global scales and to check that the estimate is not biased. Methods of validation used include:

- visual inspection of block grades in comparison with drillhole data (in plan and cross section);
- estimating Li (ppm) grades using an inverse-distance weighted algorithm ("IDW");
- swath/validation plots; and
- comparison of block model statistics.

Validation was undertaken on the 2-D block model prior to it being converted into a 3-D block model.

Based on the visual and statistical validation, SRK has accepted the grades in the 2-D and 3-D block models. The resultant block grade distribution is considered appropriate for the mineralisation style. In areas of limited sampling, the block grade estimates have been produced using expanded search ellipses. Localised comparisons of block grades to block estimates will be less accurate in these areas.

13.12.2 Visual Validation

Visual validation provides a comparison of the interpolated block model on a local scale. A thorough visual inspection of cross-sections, and bench plans, comparing the sample grades with the block grades has been undertaken. This demonstrates a good comparison between local block estimates and nearby samples without excessive smoothing in the block model. Figure 13-13, Figure 13-14 and Figure 13-15 show the visual validation checks for the Lower Clay, Upper Clay (including the Low grade Upper Clay zone) and the high grade Upper Clay zones.



Figure 13-13: Li block model validated against composited drillhole data Lower Clay (KZONES 101, 201, 401 and 501)



Figure 13-14: Li block model validated against composited drillhole data Upper Clay (including low grade Upper Clay zone) (KZONES 103, 203, 404, 503)



Figure 13-15: Li block model validated against composited drillhole data Upper Clay high grade zone (KZONE 403)

13.12.3 Swath Plots

Visual validation of composite samples grades against the interpolated 2-D block grades was undertaken to assess the performance of the estimation in the main fault block were sufficient data exists to conduct a useful assessment of estimation quality. The resultant swath plots are presented in Figure 13-17 to Figure 13-20. Swath plots have been created using data from the rotated block model. This has been required due to the linear nature of the drilling where holes have been drilled along or near to the line of outcrop. By using the rotated model it is possible to allow the swath plot to look along the axis of the drilling. For this reason, only the swath plots for the X axis have been presented in this report. An image showing the rotated block model and X axis swath direction is shown in Figure 13-16.



Figure 13-16: Swath plot orientations using rotated block model



Figure 13-17: X swath plot for zone 401



Figure 13-18: X swath plot for zone 402



Figure 13-19: X swath plot for zone 403



Figure 13-20: X swath plot for zone 404

13.12.4 Statistical Validation

Classical statistics were calculated for the estimated 2-D and 3-D block grades and compared with the composited drillhole statistics used in the estimation process. The absolute difference in the composite and block model means was considered immaterial for all mineralised domains. The comparison between the composites and OK and IDW interpolated 3-D block model statistics is shown in Table 13-9. A further comparison showing the difference between the Ordinary Kriged and IDW interpolations is provided in Table 13-10. The difference in mean block grade between the OK and IDW interpolations is typically <10% and shows that the deposit is not significantly sensitive to estimation technique and that OK has not introduced a bias compared to the input composite sample data.

Table 13-9:	Comparison statistics for Li composites versus 3-D block model grades
	(IDW and OK interpolations)

KZONE	Mean composite grade	Mean Block model grade (OK)	Mean Absolute Difference (%)	Mean Block model grade (IDW)	Mean Absolute Difference (%)
101	1070	1132	6	1037	3
103	369	363	2	407	10
201	1224	1128	8	1174	4
203	621	622	0	598	4
401	3521	3521 3380 4 3384		3384	4
403	2872	2834	1	2830	1
404	861	826	4	806	6
501	319	305	5	276	13
503	411	413	1	365	11

KZONE	Mean Block model grade (OK)	Mean Block model grade (IDW)	Mean Absolute Difference (%)
101	1132	1037	9
103	363	407	11
201	1128	1174	4
203	622	598	4
401	3380	3384	0
403	2834	2830	0
404	826	806	2
501	305	276	10
503	413	365	13

Table 13-10: Comparison statistics for OK and IDW interpolations

13.13 Mineral Resource Classification

13.13.1 Introduction

Block model tonnage and grade estimates for the Project have been classified according to the terminology and definitions given in the CIM Definition Standards for Mineral Resources and Mineral Reserves (May 2014) by Martin Pittuck, CEng, MIMMM, who is a Qualified Person as defined by the Canadian National Instrument 43-101 and the companion policy 43-101CP.

Mineral Resource classification is a subjective concept, which considers the geological confidence in the geological continuity of the mineralised structures, the quality and quantity of exploration data supporting the estimates and the geostatistical confidence in the grade estimates.

SRK is satisfied that the geological modelling honours the current geological information and knowledge and extrapolates this reasonably. The location of the samples and the assay data are sufficiently reliable to support resource evaluation. The sampling information was acquired by diamond core drilling on sections spaced at approximately 200 m, and associated drill core samples on 1.5 m intervals. In many places, the drilling combined with satellite imagery and mapped outcrop gives high confidence in the geometry of the geological features controlling grade and the grade trends themselves.

SRK has also considered sampling quality, representivity and accuracy of historical and recent assaying and density determinations. The QA/QC results suggest an acceptable level of quality for the assays; in particular, the results from the quarter core submissions to an umpire laboratory support the accuracy of the assays at the primary laboratory based on numerous batches representing the major drill phases undertaken. The standards used to date have demonstrated reasonable consistency at the primary laboratory although the grade levels were too low or too high to represent the majority of samples in the model.

SRK considers that the number of density determinations and the method used gives an accurate estimate of dry in situ bulk density.

Overall, it is SRK's view that the recent data is of a sufficient quality for the quoting of Indicated and Inferred category of Mineral Resources. The areas excluded from resource are characterised by one or more of poor or no sample coverage and being too thin, deeply buried or low grade to be realistically mined by open pit.

13.13.2 Geological and Grade Continuity

The deposit has been modelled consistently throughout the Project area as a single stratigraphic package containing two units of lithium enriched clays separated by an ignimbrite unit. Within the eastern portion of the deposit in block 4, the Upper Clay Unit is observed to have a stratification of Li grade, with high grades at the base and lower grades in the upper portion. This grade distribution has been accounted for during the wireframing and estimation process. The clay units have also been offset in places by faults, dividing the deposit into five fault blocks, with majority of the modelled deposit falling in a strike extensive fault block tending northwest-southeast. The remaining fault blocks are less extensive on strike and are based on limited drilling at present, thus reducing the confidence in the modelling in these areas.

SRK considers there may be greater geological complexity than has been currently been interpreted particularly in less well drilled or/ mapped areas, specifically:

- there may be more faults than currently modelled;
- there is lower confidence in the geometry of faults in the southern area;
- thickness is thinner and more variable towards the north and south extents; and
- the dip and orientation of the deposit in the western fault blocks is less well defined.

Grades have been composited across the thickness of each clay unit which has resulted in very good grade continuity in the data used for the block model estimate.

Overall, it appears that the clay zones identified at the project are of a reasonably low geological complexity and the hanging wall and footwall contacts are easily defined. Localised complexities in the geology however arise in the narrow internal banding, as such, and, based on the current level of data supporting the geological model, the associated risk relating to the internal continuity of layers is considered to be low.

SRK is aware that the lithium deportment in the clay units is such that an initial screening beneficiation process is likely to be used to produce an upgraded product by removing relatively coarse boulders and cobbles of chert and calcite. These lumps and nodules have very low lithium grades other than the clay coating they may carry. The proportion of such coarse barren material in the clay units has not been studied in the drillhole data and it is an important variable that may be less continuous than the composited grades modelled to date.

13.13.3 Data Quality

SRK considers the QA/QC protocols that have been put in place to monitor sample preparation quality and laboratory accuracy and precision to be sufficient to support Indicated and Inferred Mineral Resources.

There is a systematic process of sample preparation at the facilities on site. Regular submission of standards into the sample stream has tracked the performance of the primary laboratory over time albeit using grades which do not fully represent the clay units. Samples sent to an umpire laboratory have confirmed the accuracy of primary laboratory assays but this has not happened consistently through the duration of the programme to date.

SRK recommends these QA/QC protocols are brought in line with industry best practice by regularly submitting standards with representative grades in the range of 200 ppm to 2,000 ppm and regular submission of certified blank material to the sample preparation and assay process.

Validation checks of standards are broadly within acceptable reporting limits and duplicate field samples show a strong correlation to the original sample. Minor periodic drift has been recorded within the reference standard and SRK would recommend this is reported to the certified laboratory and monitored closely.

With respect to the density determinations, SRK considers that the current procedure provides a reasonably robust measure of the dry density. SRK notes, however, that the density measurements tends to be limited to competent material and that samples representing softer material types should be specifically studied. Further, the potential for clay samples to shrink when they dry should be specifically studied.

SRK recommends that these potential sources of error should be addressed to assess possible overestimation in the method used to date.

13.13.4 Results of the Geostatistical Analysis

The data used in the geostatistical analysis resulted in suitably reliable variograms for all zones in Block 4 that allowed the nugget effects, sills and ranges to the determined. The variography allowed the determination of reasonable search distances to be used through the estimation process.

13.13.5 Quality of the Estimation

The validation tools utilised for the Project show that the input data used to estimate the model is replicated in the estimation. The block model grades are smoothed around the input composites and the mean grades of the block model and composites are comparable for all modelled zones.

13.13.6 SRK Classification Approach

The Mineral Resources have been classified as Indicated and Inferred in the Upper and Lower clay units. The Indicated Mineral Resources have been limited to one broad area which was estimated in run one of the grade estimation routine and where on cross section, there are at least three points of geological evidence from mapping and drilling. The approximate drillhole spacing in areas classified as Indicated Mineral Resources is 200m.

Inferred Mineral Resources have been limited to areas where there is a wider spacing of drilling and outcrop; these areas extend some 200 m beyond the deepest drillhole intersection.

SRK has not yet defined Measured Mineral Resources because there are no large areas where drilling or outcrop are sufficiently close spaced to demonstrate the 3-D geometry of faults and clay units at a short term mine panning scale. Further, it would be appropriate to implement SRK's recommendations to ensure regular QA/QC submissions using standards with representative grades and to improve confidence in the accuracy of density values determined to date.

There are large areas of SRK's 3-D geological model that have been extrapolated beyond the Mineral Resource that remain unclassified, the intention being to facilitate drillhole planning should that be desirable in the future.

Figure 13-21 shows the full classified model in terms of Indicated, Inferred and unclassified material.



Figure 13-21: Plan view showing classification of the Sonora Lithium Project

13.14 Mineral Resource Cut-Off Grade and Practical Limits

A Mineral Resource, according to the CIM Guidelines, should show 'reasonable prospects for economic extraction' which generally implies that the tonnage and grade estimates meet certain economic thresholds by reporting using an appropriate cut-off grade and to a practical depth below surface taking into account extraction scenarios and processing recoveries. In order to meet this requirement, SRK considers that portions of the Project are amenable for open pit extraction.

SRK used a pit optimiser and reasonable mining and processing assumptions to evaluate the parts of the Indicated and Inferred model that could be "reasonably expected" to be mined from an open pit (Figure 13-22). The optimisation parameters were selected based on client information, experience and benchmarking against similar projects. Further, a 30% higher commodity price was used to ensure that only very deeply buried or thin or low grade areas are excluded from resource. The optimisation parameters are given in Table 13-11.

The reader is cautioned that the results from the pit optimisation are used solely for the purpose of testing the "reasonable prospects for economic extraction" by an open pit and do not represent an attempt to estimate Mineral Reserves.

A cut-off grade of 450 ppm for lithium has been applied in reporting the Sonora Mineral Resource. The resultant pit shell used to limit the resource is shown in green in Figure 13-22.

Parameters	Units	Value				
	Pit Slope					
Footwall	(Deg)	45				
Hangingwall	(Deg)	45				
	Mining Factors					
Dilution	(%)	15.0				
Recovery	(%)	100.0				
Processing						
Recovery Li	(%)	75				
Operating Costs						
Mining Cost	(USD/t _{rock})	2.50				
Rehabilitation Cost	(USD/t _{milled})	0.18				
Processing	(USD/t _{milled})	13.75				
G&A	(USD/t _{milled})	0.35				
Selling Cost (Li, Royalty & Duty)	(%)	10.5				
Coming Cost (EI, Royalty & Duty)	(USD/t (Li ₂ CO ₃)	682.5				
Metal Price						
Lithium Carbonate (Li ₂ CO ₃)	(USD/t (Li ₂ CO ₃) + 30% premium	8,450				
Cut-Off Grade	%					
MCOG (in situ)	(USD/t _{milled})	14.1				
MCOG (in situ)	(ppm Li) rounded	450				

 Table 13-11:
 Pit Optimisation Parameters



Figure 13-22: Oblique view showing classified material within the resource pit shell (green wireframe)

13.15 Mineral Resource Statement

The Mineral Resource is based on exploration results from mapping drilling and trenching made available to SRK on the 19 October 2015. The results of this report were reported in a press release approved by SRK on 19 November 2015; this is the effective date of the statement.

Every 1 unit of lithium metal is equivalent to 5.3 units of Li_2CO_3 (lithium carbonate) in the Mineral Resource statement the lithium metal content is also given as a Lithium Carbonate Equivalent (LCE).

The Mineral Resource is the total for the Project; in respect of the total metal in the Indicated and Inferred Mineral Resources some 81% and 84% respectively is attributable to Bacanora.

The Mineral Resource statement represents the material which SRK considers has reasonable prospects for eventual economic extraction taking into account cut-off grade and stripping ratio by means of a pit optimisation. Table 13-12 shows the resulting Mineral Resource Statement for the Sonora project. The statement has been classified in accordance with the terminology, definitions and guidelines given in the Canadian Institute of Mining, Metallurgy and Petroleum Definition Standards for Mineral Resources and Mineral Reserves (May, 2014) and has been reported in accordance with NI 43-101, by the Qualified Person, Mr Martin Pittuck (MSc., CEng., MIMMM). Mr Pittuck is a consultant who is independent of Bacanora.

Bacanora and SRK are not aware of any additional factors (environmental, legal, title, taxation, socio-economic, marketing, political, or other relevant factors) that have materially affected the Mineral Resource estimate.

The tonnage and grade of Inferred Mineral Resources are uncertain and there has been insufficient exploration to define these Inferred Mineral Resources as an Indicated or Measured Mineral Resource and it is therefore uncertain if further exploration will result in upgrading them to an Indicated or Measured Mineral Resource category.

Classification	Concession	Owner	Geological Unit	Clay Tonnes (Mt)	Clay Grade (Li ppm)	Contained Metal (Kt Li)	Contained Metal (Kt LCE)	
		Minera Sonora	Lower Clay	75	3,500	261	1,385	
	La ventana	Bacanora)	Upper Clay	66	1,500	99	523	
	El Sour		Lower Clay	60	2,900	174	924	
Indicated	El Sauz		Upper Clay	47	1,100	52	274	
Indicated	Flour	Mexilit (JV-1)	Lower Clay	60	4,300	258	1,365	
	Fieur	(70% Bacanora)	Upper Clay	50	1,600	81	428	
	El Sauz1		Lower Clay	4	4,000	15	80	
			Upper Clay	3	1,200	3	18	
Indi	icated Total		Combined	364	2,600	943	4,997	
	La Ventana	Miner	Minera Sonora	Lower Clay	55	3,800	209	1,108
		Bacanora)	Upper Clay	80	1,500	120	636	
	El Sour		Lower Clay	85	1,600	136	721	
Inforred	El Sauz		Upper Clay	55	800	44	233	
Interred	Flour	Mexilit (JV-1)	Lower Clay	20	4,200	84	445	
	Fieur	(70% Bacanora)	Upper Clay	20	1,500	30	159	
	El Souz1		Lower Clay	20	4,000	80	424	
	Ersauzi		Upper Clay	20	1,200	24	127	
Inf	erred Total		Combined	355	2,000	727	3,853	

Table 13-12: SRK Mineral Resource Statement as of 19 November 2015

Notes:

1. Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability. All figures are rounded to reflect the relative accuracy of the estimate and have been used to derive sub-totals, totals and weighted averages. Such calculations inherently involve a degree of rounding and consequently introduce a margin of error. Where these occur, SRK does not consider them to be material.

2. The reporting standard adopted for the reporting of the MRE uses the terminology, definitions and guidelines given in the CIM Standards on Mineral Resources and Mineral Reserves (May 2014) as required by NI 43-101.

3. The MRE is reported on 100 percent basis for all project areas.

4. SRK assumes the Sonora Lithium deposit to be amenable to surface mining methods. Using results from initial metallurgical test work, suitable surface mining and processing costs, and forecast LCE price SRK has reported the Mineral Resource at a cut-off 450 ppm Li (2,400 ppm Li₂CO₃).

5. SRK completed a site inspection of the deposit by Mr. Martin Pittuck, MSc, CEng, MIMMM, an appropriate "independent qualified person" as such term is defined in NI 43-101.

LCE is the industry standard terminology for, and is equivalent to, Li₂CO₃. 1 ppm Li metal is equivalent to 5.32 ppm LCE / Li₂CO₃. Use of LCE is to provide data comparable with industry reports and assumes complete conversion of lithium in clays with no recovery or process losses.

13.16 Comparison with Previous Estimate

The previous MRE undertaken by SRK in May 2015 is detailed in Section 5.3.2. The current combined Mineral Resource has more tonnes at a very similar grade.

The 20% increase in the Indicated plus Inferred Mineral Resource tonnage is due to the subdomaining of the upper clay unit which has resulted in a high grade lower part and low grade upper part whereas previously these were combined and there was a moderate grade throughout. The high grade lower part of the upper clay allowed an expansion of the pit along strike which brought new areas into resource.

The infill drilling increased the proportion of the resource classified as Indicated from 15% to 50% but it did not increase the overall area classified as Indicated and Inferred combined. Most of the infill drilling took place in the central area of the deposit where grades are highest, therefore the grade in the Indicated Mineral Resource is higher now than it was previously.

13.17 Grade Sensitivity Analysis

SRK has completed a number of check block model estimates on the deposit using a variety of parameters and the resultant models produced similar estimates.

The Mineral Resources stated in this report are sensitive to the selection of the reporting cutoff grade. To illustrate this sensitivity, the block model quantities and grade estimates within the conceptual pit used to constrain the Mineral Resources are presented in Figure 13-23 to Figure 13-28.

These figures are only presented to show the sensitivity of the block model estimates to the selection of cut-off grade.



Figure 13-23: Grade-Tonnage Curve for Li (Upper Clay Indicated material)



Figure 13-24: Grade-Tonnage Curve for Li (Upper Clay Inferred material)



Figure 13-25: Grade-Tonnage Curve for Li (Lower Clay Indicated material)



Figure 13-26: Grade-Tonnage Curve for Li (Lower Clay Inferred material)



Figure 13-27: Grade-Tonnage Curve for Li (Upper Clay High Grade Indicated material)





13.18 Exploration Potential

In addition to the MRE, a further conceptual exploration target has been modelled; the potential of these extensions are in the range of 300 to 350 Mt, at a grade of approximately 1,500 to 2,500 ppm Li. This is limited to the current pit shell and is therefore considered worthy of further exploration with a deep drilling programme. If these figures were converted to a Mineral Resource via successful drilling and exploration, it is estimated that this could represent an additional 2.4 to 4.6 Mt of LCE at the Sonora Lithium Project; it must be noted however, that the potential quantity and grade of this target is conceptual in nature, that there has been insufficient exploration to include this in the Mineral Resource and that it is uncertain if further exploration will result in the target being added to the Mineral Resource. The majority of this material is at depth, where the stripping ratio increases substantially and would therefore likely only contribute marginally economic resources.

14 MINERAL RESERVE ESTIMATES

No Mineral Reserve estimate has been prepared for the Project at this time. The Mineral Reserves are being prepared by a third party consultancy as of November 2015.

15 ADJACENT PROPERTIES

No reference has been made to adjacent properties, the Sonora Lithium Project is the first such project to be developed in the area.

16 OTHER RELEVANT DATA AND INFORMATION

To SRK's knowledge, no other information is considered relevant at this time.

17 INTERPRETATION AND CONCLUSIONS

The Sonora Lithium Project is substantial in size, with potential to produce several millions of tonnes of lithium carbonate product; it has a robust average grade compared with the cut-off grade which suggests there is potential to operate with a good profit margin. The Mineral Resource comprises an Indicated portion estimated at 364 Mt, averaging 2,600 ppm Li, for 5 Mt of LCE, in addition there is an Inferred portion estimated at 355 Mt averaging 2,000 ppm Li, for 3.85 Mt of LCE. The Mineral Resource is reported above a cut-off grade of 450 ppm lithium based on reasonably assumed technical and economic parameters and is constrained to an open pit shell which limits the resource to the near surface areas which have the best potential for economic extraction. In addition to 2,500 ppm Li has been outlined within the current pit shell; this could add 2.4 to 4.6 Mt of LCE to the resource; however, the majority of this material is at depth, where the stripping ratio increases substantially and is therefore likely to be only marginally economic.

The mineral processing testwork is on-going; and at present the flow sheet and estimates of reagent consumptions, operating costs and overall process recovery are evolving; however, it is clear there is potential to process the lithium clays using beneficiation, followed by calcination, leaching, evaporation, filtering and precipitation. Further testwork on mineral processing as well as complimentary mining, infrastructure, environmental and market studies are currently underway as part of a Prefeasibility Study, which is due to be completed in 2016.

18 **RECOMMENDATIONS**

SRK recommends that the quality control procedures should be improved so that the grades of the standard reference materials are more representative of the deposit grades. The standards should be more thoroughly tested during the initial determination of mean grade and standard deviation using several laboratories and methods. Some aspects of the density determination require further study to confirm the accuracy of the density determination method which currently assumed no core shrinkage upon drying.

The laboratory method used to date has a maximum detection limit of 10,000 ppm Li; several samples have returned this grade. SRK recommends resubmitting all high grade samples to the laboratory, employing a method with a higher upper detection limit; this will result in a slight increase in the resource grade.

19 REFERENCES

Preliminary Economic Assessment ("PEA") report: "Preliminary Economic Assessment for the La Ventanta Lithium Deposit, Sonara Lithium Project, C. Verley and M. Vidal, January 2013."

Scoping Study ("SS") report: "Scoping Study of the El Sauz and Fleur Concessions, Sonora Lithium Project, C. Verley, December 2014"

May 2015 SRK MRE report: "NI 43-101 Mineral Resource estimate for the Sonora Lithium Project, Mexico, May 2015".

For and on behalf of SRK Consulting (UK) Limited

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Martin Pittuck, C.Eng, MIMMM, Corporate Consultant (Mining Geology), **Project Director,** SRK Consulting (UK) Limited



Ben Lepley (CGeol) Senior Consultant (Resource Geology) **Project Manager,** SRK Consulting (UK) Limited



Oliver Jones, Consultant (Resource Geology) SRK Consulting (UK) Limited

APPENDIX

A QUALIFIED PERSONS CERTIFICATE

CERTIFICATE OF QUALIFIED PERSON

- I, Martin Frank Pittuck, MSc., C.Eng, MIMMM do hereby certify that:
- 1. I am a Corporate Consultant (Mining Geology) of SRK Consulting (UK) Ltd with an office at 5th Floor, Churchill House, Churchill Way, Cardiff CF10 2HH.
- 2. This certificate applies to the technical report titled "Mineral Resource Estimate Update for the Sonora Lithium Project, Mexico" dated December 2015 (the "Technical Report") prepared for Bacanora Minerals Limited.
- 3. I am a graduate with a Master of Science in Mineral Resources gained from Cardiff College, University of Wales in 1996 and I have practised my profession continuously since that time. Since graduating I have worked as a consultant at SRK on a wide range of mineral projects, specializing in precious and rare metals. I have undertaken many geological investigations, resource estimations, mine evaluation technical studies and due diligence reports. I am a member of the Institution of Materials Mining and Metallurgy (Membership Number 49186) and I am a Chartered Engineer;
- 4. I have read the definition of "Qualified Person" set out in National Instrument 43-101 (NI 43-101) and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfil the requirements to be a "Qualified Person" for the purposes of NI 43-101.
- 5. I visited the Sonora property between 24th and 27th March, 2015.
- 6. I am co-author and reviewer of this report and have overall responsibility for the Mineral Resource Estimate and all of the sections in the Technical Report.
- 7. I am independent of the issuer applying all of the tests in section 1.5 of NI 43-101.
- 8. I have not had prior involvement with the property that is the subject of the Technical Report.
- 9. I have read NI 43-101 and Form 43-101F1; the sections of the Technical Report I am responsible for have been prepared in compliance with that instrument and form.
- 10. As of the aforementioned Effective Date, to the best of my knowledge, information and belief, the sections of the Technical Report I am responsible for contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated this 22nd December, 2015.

This signature has be server permission to its use for this partic re is held on file

Martin Frank Pittuck, MSc. C.Eng, MIMMM Corporate Consultant (Mining Geology)

APPENDIX

B SUMMARY OF MAJOR LITHIUM INTERCEPTS

BOREHOLE	UNIT	FROM (m)	TO (m)	Li (ppm)
50.04	Lower Clay	156.06	193.55	3867
23-01	Upper Clay	116.13	143.41	2027
ES 02	Lower Clay	203.55	247.07	2735
E3-02	Upper Clay	190.41	197.39	1493
FS-03	Lower Clay	210.92	251.46	3344
	Upper Clay	158.50	201.47	1493
ES-04	Lower Clay	140.42	171.75	3532
	Upper Clay	96.44	132.47	1186
ES-05	Lower Clay	59.83	92.05	3003
	Upper Clay	23.16	55.47	/88
ES-06	Lower Clay	0.75	75.90	1000
		36.00	69.50	803
ES-07	Lower Clay	0.00	32.00	746
	Lower Clay	49.38	73.76	1455
ES-08	Upper Clay	19.20	45.11	648
50.00	Lower Clay	51.97	81.99	1067
ES-09	Upper Clay	14.94	46.79	588
ES-10	Lower Clay	3.96	28.35	1103
ES-11	Lower Clay	231.34	256.34	5037
23-11	Upper Clay	183.74	218.69	1844
FS-12	Lower Clay	233.66	240.49	4114
	Upper Clay	188.06	221.77	1992
ES-13	Lower Clay	322.48	347.05	3947
	Upper Clay	278.16	315.35	1959
ES-14	Lower Clay	65.53	95.10	4780
		13.72	59.74	1302
ES-15	Lower Clay	18 59	24.01	613
	L ower Clay	69.37	95.40	3394
ES-16	Upper Clay	34.23	62.18	809
50.45	Lower Clay	190.07	218.85	4832
ES-17	Upper Clay	141.67	181.36	1817
ES_19	Lower Clay	43.10	71.63	1721
23-10	Upper Clay	13.41	38.71	1129
ES-19	Lower Clay	129.33	156.21	2283
	Upper Clay	93.88	124.97	1018
ES-20	Lower Clay	12.07	37.76	1450
ES 21	Upper Clay	0.00	10.36	1306
E3-21		14.33	20.21	400
ES-22	Lower Clay	130.45	152.02	166
	Lower Clay	29.29	34 75	143
ES-23	Upper Clay	13.38	27.10	557
50.04	Lower Clay	66.39	92.72	1542
ES-24	Upper Clay	48.46	61.14	711
	Lower Clay	168.37	177.39	473
E3-20	Upper Clay	156.67	168.37	166
FS-26	Lower Clay	48.22	66.14	740
20-20	Upper Clay	16.43	44.81	473
ES-27	Lower Clay	24.38	49.50	1143
	Upper Clay	7.62	18.17	375
ES-28	Lower Clay	22.86	32.31	//
	Upper Clay	0.00	10.59	399
ES-29		24.90 11.29	29.07	02 180
FS-30	Upper Clay	28.35	39.03	139
	l ower Clay	69.49	99.97	4542
ES-31	Upper Clav	15.12	59.13	1667
ES-33	Lower Clav	147.83	150.57	847
	Upper Clay	121.13	144.78	552
EC 25	Lower Clay	106.68	129.05	1365
E0-30	Upper Clay	78.33	100.89	779
ES-36	Lower Clay	23.26	44.68	1044
ES-37	Lower Clay	0.00	23.35	1621
ES-38	Upper Clay	109.42	141.12	890
ES-39	Upper Clay	35.60	40.23	101

ES-41	Lower Clay	70.10	95.83	782
	Upper Clay	34.14	64.31	449
	Lower Clay	39.32	59.44	
L3-42	Upper Clay	16.15	23.35	
LV-01	Upper Clay	7.32	35.36	2262
LV-02	Upper Clay	78.94	108.51	1734
LV-03	Upper Clay	126.49	135.64	955
LV-04	Lower Clay	126.49	150.88	4720
-	Upper Clay	91.44	110.57	2613
LV-05	Lower Clay	60.35	80.47	3624
	Upper Clay	7.92	50.29	1526
LV-06	Lower Clay	46.18	81.69	2009
	Lower Clay	2.44	30.76	2106
LV-08	Lower Clay	90.40	04.19	2100
	Lower Clay	68.88	94.10	896
LV-09	Lover Clay	38.79	59.64	555
L V-10	Upper Clay	55 17	123.34	651
2010	Lower Clay	105 71	109 12	001
LV-11	Upper Clav	5.18	74.98	193
	Lower Clay	118.41	129.24	109
LV-12	Upper Clay	71.32	98.60	102
LV-13	Lower Clay	13.26	34.60	5076
LV-14	Lower Clay	14.17	32.00	5353
LV-15	Lower Clay	18.28	39.04	3224
LV-16	Lower Clay	17.68	42.52	2603
LV-17	Lower Clay	24.70	34.14	1753
I V-18	Lower Clay	260.30	279.50	1047
	Upper Clay	218.24	245.67	618
LV-19	Upper Clay	10.27	51.82	777
LV-20	Lower Clay	268.41	291.39	1629
	Upper Clay	219.52	252.07	568
LV-21	Lower Clay	72.24	92.96	1743
		0.93	06.35	2060
LV-22	Lower Clay	18.38	57 30	1380
LV-23	Lower Clay	69.68	84.61	3711
	Upper Clay	15.97	53.64	1794
	Lower Clay	145.27	158.89	4173
LV-24	Upper Clay	90.53	130.06	1562
LV-25	Upper Clay	127.71	155.75	1560
L V-26	Lower Clay	53.95	72.24	1979
LV-20	Upper Clay	22.86	50.29	1306
I V-27	Lower Clay	78.03	98.33	5687
	Upper Clay	43.16	66.14	2359
LV-28	Lower Clay	179.83	203.30	4845
	Upper Clay	131.73	165.93	1996
LV-29	Lower Clay	51.82	/ 3.15	
	Lower Clay	0.23 202.70	33.00	
LV-31	Lower Clay	203.70	185 56	
LV-33	Upper Clay	255 12	261 21	
LV-34	Lower Clay	3.05	7.92	
LV-35	Lower Clay	12.37	33.41	
LV-36	Lower Clay	15.33	35.36	
LV-37	Lower Clay	14.84	35.36	
LV-38	Lower Clay	13.96	37.49	
LV-39	Lower Clay	4.88	27.31	
TR-1	Lower Clay	0.00	27.80	1229
TR-2	Lower Clay	0.00	30.00	1448
TR-3	Lower Clay	0.00	27.70	2112
TR-4	Lower Clay	0.00	27.00	4776
TR-5	Lower Clay	0.00	22.50	4771
TR-6	Lower Clay	0.00	33.60	5681

BHID	ZONE	FROM	то	LI_PPM
ES-01	Lower Clay	156.06	193.55	3966
	Upper Clay (High Grade)	135.33	143.41	4043
	Upper Clay (Low Grade)	116.13	135.33	950
	Lower Clay	203.55	244.45	3079
ES-02	Upper Clay (High Grade)	193.55	197.39	2984
	Upper Clay (Low Grade)	190.41	193.55	278
	Lower Clay	210.92	239.57	3901
ES-03	Upper Clay (High Grade)	183.34	199.85	2721
	Upper Clay (Low Grade)	158.5	183.34	899
	Lower Clay	140.42	171.75	3595
ES-04	Upper Clay (High Grade)	120.7	132.47	2336
	Upper Clay (Low Grade)	96.44	120.7	671
	Lower Clay	59.83	93.57	2948
ES-05	Upper Clay (High Grade)	47.55	54.56	2107
	Upper Clay (Low Grade)	23.16	47.55	558
ES-06	Lower Clay	33.48	75.9	1539
23-00	Upper Clay (Low Grade)	9.75	27.74	708
ES-07	Lower Clay	36	69.49	808
20-07	Upper Clay	0	32	842
ES-08	Lower Clay	49.38	73.76	1551
20-00	Upper Clay	19.2	45.11	670
ES-09	Lower Clay	51.97	81.99	1163
	Upper Clay	14.94	46.79	602
ES-10	Lower Clay	3.96	28.35	1156
ES-11	Lower Clay	231.34	257.25	5206
	Upper Clay (High Grade)	207.47	218.69	3376
	Upper Clay (Low Grade)	183.74	207.47	1234
	Lower Clay	233.66	240.49	4052
ES-12	Upper Clay (High Grade)	211.76	221.77	4312
	Upper Clay (Low Grade)	188.06	211.76	971
ES-13	Lower Clay	322.48	349.61	4077
	Upper Clay (High Grade)	305.1	315.35	4523
	Upper Clay (Low Grade)	278.16	305.1	1017
	Lower Clay	65.53	95.1	4733
ES-14	Upper Clay (High Grade)	41.15	56.69	2549
	Upper Clay (Low Grade)	13.72	41.15	770
ES-15	Lower Clay	32.31	66.14	4087
	Upper Clay (High Grade)	18.59	21.95	1260
	Lower Clay	69.37	96.93	3312
ES-16	Upper Clay (High Grade)	52.65	62.18	1198
	Upper Clay (Low Grade)	34.23	52.65	584
	Lower Clay	190.07	221.59	4701
ES-17	Upper Clay (High Grade)	166.88	179.53	3585
	Upper Clay (Low Grade)	141.67	166.88	816
ES-18	Lower Clay	43.1	73.15	1720
20-10	Upper Clay (High Grade)	31.7	38.71	2175

	Upper Clay (Low Grade)	13.41	31.7	637
ES-19	Lower Clay	129.33	157.58	2308
	Upper Clay (High Grade)	117.5	124.97	2314
	Upper Clay (Low Grade)	93.88	117.5	530
ES 20	Lower Clay	12.07	41.76	1521
L3-20	Upper Clay (Low Grade)	0	8.84	1428
ES-21	Upper Clay (Low Grade)	14.33	26.21	464
ES 22	Lower Clay	153.59	158.62	41
E3-22	Upper Clay	130.45	152	167
ES 22	Lower Clay	29.29	34.75	121
E3-23	Upper Clay	13.38	27.1	513
ES 24	Lower Clay	66.39	92.71	1593
E3-24	Upper Clay	48.46	61.14	820
ES 25	Lower Clay	168.37	177.39	555
E3-25	Upper Clay	156.67	168.35	157
ES 26	Lower Clay	48.23	66.14	745
E3-20	Upper Clay	16.43	44.81	482
ES 27	Lower Clay	24.38	49.48	1225
23-27	Upper Clay	7.62	18.17	477
ES 29	Lower Clay	22.86	32.31	86
E3-20	Upper Clay	0	18.59	327
ES 20	Lower Clay	24.9	29.87	64
E3-29	Upper Clay	11.28	20.12	249
ES-30	Upper Clay	28.35	39.93	150
ES-31	Lower Clay	69.49	104.85	4864
	Upper Clay (High Grade)	43.89	59.13	3623
	Upper Clay (Low Grade)	15.12	43.89	760
ES-32	Lower Clay	32	35.36	1739
EC-33	Lower Clay	147.83	150.57	795
L3-33	Upper Clay	121.13	144.78	552
ES 25	Lower Clay	106.68	129.03	1446
E3-33	Upper Clay	78.33	100.89	808
ES-36	Lower Clay	23.26	44.68	1009
ES-37	Lower Clay	0	23.35	1668
ES-38	Upper Clay	109.42	141.12	937
F0 00	Lower Clay	40.23	44.81	10
L3-35	Upper Clay	35.6	40.23	129
ES 44	Lower Clay	70.1	95.83	774
E3-41	Upper Clay	34.14	64.31	529
ES 42	Lower Clay	39.32	64.6	4241
E3-42	Upper Clay (High Grade)	16.15	23.35	3069
	Lower Clay	118.11	133.2	5034
ES-44	Upper Clay (High Grade)	93.88	105.31	3575
	Upper Clay (Low Grade)	74.68	93.88	1252
ES-45	Lower Clay	125.73	140.51	4503
	Lower Clay	162.46	178.92	4604
E3-40	Upper Clay (High Grade)	147.22	154.38	3371

	Upper Clay (Low Grade)	133.2	147.22	1350
ES-47	Lower Clay	124.66	150.11	5146
	Upper Clay (High Grade)	105.77	111.56	1483
	Upper Clay (Low Grade)	94.79	105.77	1185
	Lower Clay	215.65	244.45	4523
ES-48	Upper Clay (High Grade)	195.38	203.25	3698
	Upper Clay (Low Grade)	182.58	195.38	1173
	Lower Clay	240.18	254.81	4916
ES-50	Upper Clay (High Grade)	218.39	228.6	3651
	Upper Clay (Low Grade)	193.85	218.39	863
	Lower Clay	238.66	267.3096	4400
ES-51	Upper Clay (High Grade)	218.39	230.124	2860
	Upper Clay (Low Grade)	197.0532	218.39	942
ES-52	Lower Clay	275.844	302.51	4572
L0-52	Upper Clay (High Grade)	263.0424	269.5956	3239
	Lower Clay	345.95	381.91	4844
ES-53	Upper Clay (High Grade)	318.8208	330.1	3362
	Upper Clay (Low Grade)	286.59	318.82	773
ES 54	Lower Clay	288.8	326.44	3802
E3-34	Upper Clay (High Grade)	274.78	280.87	804
	Lower Clay	236.68	243.6876	2639
ES-55	Upper Clay (High Grade)	221.1324	230.886	1026
	Upper Clay (Low Grade)	204.83	221.13	518
	Lower Clay	217.93	253.29	3140
ES-56	Upper Clay (High Grade)	197.21	209.4	2486
	Upper Clay (Low Grade)	179.53	197.21	669
	Lower Clay	251.03	284.07	2770
ES-57	Upper Clay (High Grade)	231.65	243.5352	1818
	Upper Clay (Low Grade)	206.96	231.648	522
	Lower Clay	195.38	227.99	2482
ES-58	Upper Clay (High Grade)	183.49	191.72	1727
	Upper Clay (Low Grade)	161.85	183.49	278
1.1/ 01	Upper Clay (High Grade)	24.54	35.36	3508
LV-01	Upper Clay (Low Grade)	7.32	24.54	1658
1.1/-02	Upper Clay (High Grade)	98.45	108.51	2882
LV-02	Upper Clay (Low Grade)	78.94	98.45	1269
LV-03	Upper Clay (Low Grade)	126.49	141.73	921
LV-04	Lower Clay	126.49	150.88	4949
	Upper Clay (High Grade)	96.62	110.57	3059
	Upper Clay (Low Grade)	91.44	96.62	1221
LV-05	Lower Clay	60.35	80.47	4028
	Upper Clay (High Grade)	36.58	46.63	3234
	Upper Clay (Low Grade)	7.92	36.58	1102
	Lower Clay	46.18	67.97	3574
LV-06	Upper Clay (High Grade)	15.85	30.78	3161
	Upper Clay (Low Grade)	2.44	15.85	666
LV-08	Lower Clay	98.45	118.26	2623

r	1	1	1	1
	Upper Clay (Low Grade)	67.89	94.18	870
LV-09	Lower Clay	77.42	95.2	1329
	Upper Clay (Low Grade)	38.79	52.43	765
LV-10	Upper Clay (Low Grade)	55.17	118.26	689
LV-11	Upper Clay (Low Grade)	5.18	74.98	196
LV-12	Lower Clay	118.41	129.24	107
	Upper Clay (Low Grade)	71.32	98.6	103
LV-13	Lower Clay	13.26	34.59	5434
LV-14	Lower Clay	14.17	32	5809
LV-15	Lower Clay	18.29	42.11	3739
LV-16	Lower Clay	17.68	42.52	2844
LV-17	Lower Clay	23.16	41.76	1555
1.1/ 49	Lower Clay	260.3	279.5	1143
LV-10	Upper Clay (Low Grade)	218.24	245.67	577
LV-19	Upper Clay (Low Grade)	11.89	48.77	1033
1.1/ 20	Lower Clay	268.41	291.39	1622
LV-20	Upper Clay (Low Grade)	219.52	247.19	653
1.1/ 24	Lower Clay	72.24	92.96	1759
LV-21	Upper Clay (Low Grade)	8.93	59.74	1194
	Lower Clay	75.86	96.35	2988
LV-22	Upper Clay (High Grade)	44.5	60.35	2457
	Upper Clay (Low Grade)	18.38	44.5	755
	Lower Clay	69.68	87.48	3547
LV-23	Upper Clay (High Grade)	38.56	56.69	2778
	Upper Clay (Low Grade)	15.97	38.56	722
	Lower Clay	145.27	158.88	4124
LV-24	Upper Clay (High Grade)	116.43	130.06	2771
	Upper Clay (Low Grade)	90.53	116.43	1012
1.1/ 05	Upper Clay (High Grade)	143.66	155.75	2744
LV-25	Upper Clay (Low Grade)	127.71	143.66	695
	Lower Clay	53.95	76.05	2087
LV-26	Upper Clay (High Grade)	42.52	48.77	3233
	Upper Clay (Low Grade)	22.86	42.52	1042
	Lower Clay	78.03	98.33	5855
LV-27	Upper Clay (High Grade)	54.86	66.14	3842
	Upper Clay (Low Grade)	43.16	54.86	1428
	Lower Clay	179.83	203.3	5228
LV-28	Upper Clay (High Grade)	153.62	165.93	4309
	Upper Clay (Low Grade)	131.73	153.62	1037
	Lower Clay	51.82	74.68	5394
LV-29	Upper Clay (High Grade)	24.69	35.66	3297
	Upper Clay (Low Grade)	8.23	24.69	1609
	Lower Clay	203.7	226.04	3092
LV-31	Upper Clay (High Grade)	173.61	185.56	2956
	Upper Clay (Low Grade)	147.83	173.61	755
LV-34	Lower Clay	3.05	7.92	516
LV-35	Lower Clav	12.37	33.41	5786
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LV-36	Lower Clay	15.33	35.36	4372
LV-37	Lower Clay	14.84	36.88	3942
LV-38	Lower Clay	13.96	37.49	3157
LV-39	Lower Clay	4.88	27.31	2188