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#### **ASX RELEASE**

LPI: ASX

29 September 2021

# 90 PER CENT INCREASE IN MEASURED & INDICATED RESOURCES FOR LPI'S MARICUNGA STAGE ONE LITHIUM PROJECT

## Highlights

- Updated Measured and Indicated resource for the Maricunga Stage One Lithium Brine Project in Chile confirmed an increase by 90 per cent compared with 2019 Definitive Feasibility Study.
- Measured and Indicated (M&I) resource now estimated as 1,905,000 tonnes of Lithium Carbonate Equivalent (LCE) for the Stage One (Old Code) mining properties at an average grade of 953 mg/l lithium.
- This increase in M+I Resources is in addition to the M+I Resources (2018) of 184 Kt Lithium (979 Kt LCE) in the Litio 1-6 (New Code) concessions to a depth of 200 m.
- The Maricunga resource remains open at depth, with a new exploration target for further resource expansion between 400m-550m in the Stage One concessions.
- The DFS update for the Stage One continues as expected by Worley, GEA Messo and Atacama Waters.
- The latest drilling for the resource increase on the Stage One mining concessions at Maricunga has been completed, with the five exploration core holes each reaching target depth of 400m.

Lithium Power International Limited (ASX: LPI) (LPI or the Company), through its Joint Venture (JV) company, Minera Salar Blanco S.A. (MSB), is pleased to provide details of the updated resource for the Maricunga Stage One project in Chile.

Access to the full technical report prepared by Atacama Water Consultants is available on the LPI website at *https://lithiumpowerinternational.com/maricunga-chile/* 



#### Lithium Power International's Chief Executive Officer, Cristobal Garcia-Huidobro, commented:

"We are very pleased with these updated results, which confirm Maricunga as one of the world's richest lithium brine deposits. Technical activities continue towards the completion of an updated DFS in Q4 2021. The financing for Stage One is now a priority, with preliminary indications of interest received from international financial institutions and private funds for debt and equity financing of the project."

# **Resource Estimate Highlights**

The updated resource estimate of 1,905,000 tonnes of lithium carbonate equivalent (LCE) represents close to double the initial resource of 1,020,000 tonnes of LCE in the equivalent area (Stage One) in the 2019 Definitive Feasibility Study (DFS). A resource equivalent to 4.95 Mt of KCl was also defined. The resource estimate was prepared in accordance with JORC and NI 43-101 international reporting standards. Results are summarised in Table 1.

	Measured (M)		Indica	ated (I)	M+I	
	Li	К	Li	К	Li	К
Area (Km²)	4	.5	6.76		11.25	
Aquifer volume (km³)	1.8		1.8		3.6	
Mean specific yield (Sy)	0.09		0.12		0.1	
Brine volume (km <sup>3</sup> )	0.1	162	0.	216	0.3	378
Mean grade (g/m³)	87	641	111	794	99	708
Concentration (mg/l)	968	7,125	939	6,746	953	6,933
Resource (tonnes)	154,500	1,140,000	203,500	1,460,000	358,000	2,600,000

#### Table 1: Mineral Resource Estimate for Lithium Metal (Li) and Potassium

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Table 2 shows the total resources of the Stage One concessions (Old Code concessions) expressed as Lithium Carbonate Equivalent (LCE) and Potash (KCL).

	M+I Resources		
	LCE	KCL	
Tonnes	1,905,000	4,950,000	

#### Table 2: Mineral Resource Estimate for Lithium Carbonate Equivalent (LCE) and Potash

1. Lithium is converted to lithium carbonate (Li2CO3) with a conversion factor of 5.32.

2. Potassium is converted to potash with a conversion factor of 1.91

3. Numbers may not add due to rounding.

The Stage One project comprises the Old Code properties of Cocina 19-27, Salamina, Despreciada and San Francisco, which have a total combined area of 1,125 hectares (Figure 1). These properties were constituted under the 1932 Chilean mining law and have grandfathered rights for the exploitation, production and sale of lithium.

It should be noted that the M+I Resources described above in Tables 1 and 2 are in addition to the M+I Resources (2018) of 184 Kt Lithium (979 Kt LCE) in the Litio 1-6 (New Code) concessions to a depth of 200 m.

The Maricunga resource remains open at depth. A new Exploration Target between 400m-550m has been defined for further resource expansion below the Old Code Concessions, and between 200m–550m below the New Code concessions. They could potentially contain between 1.2Mt-2.1Mt of LCE<sup>1</sup>. Figure 2 illustrates the geological exploration target for all of the Maricunga concessions.

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<sup>&</sup>lt;sup>1</sup> An Exploration Target is not a mineral resource. The potential quantity and grade of the Exploration Target is conceptual in nature, and there has been insufficient exploration to define a Mineral Resource in the volume where the Exploration Target is outlined. It is uncertain if further exploration drilling will result in the determination of a Mineral Resource in this volume



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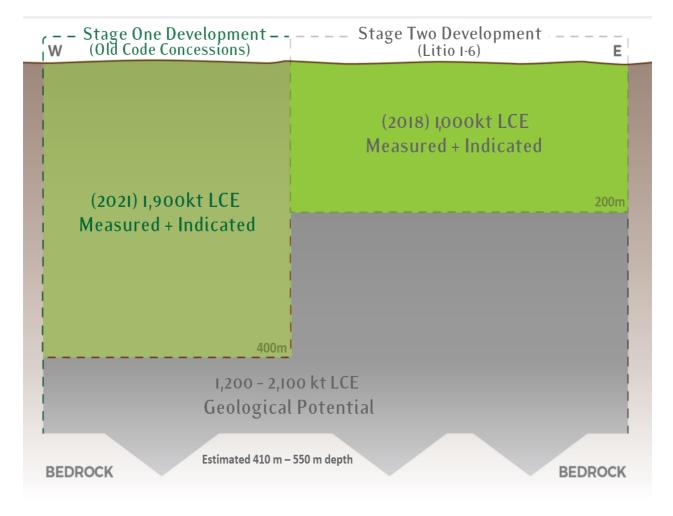
## Figure 1: Maricunga project – Old Code and New Code properties

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#### Figure 2: Geological Exploration Target





# **Project Geology**

#### **Geological Setting**

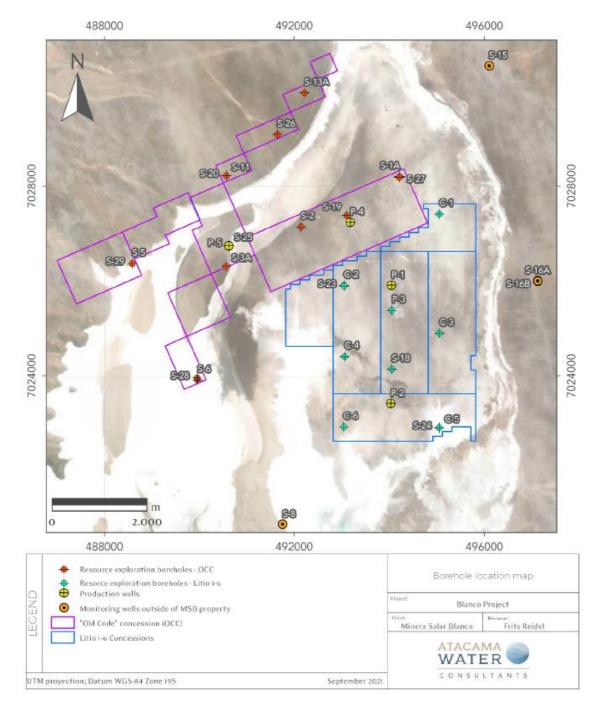
The Maricunga Salar is located within a large drainage basin of approximating 2,200 km<sup>2</sup> located to the west of the western Andes cordillera. The basin enclosing the Maricunga Salar has surrounding mountain ranges that have been raised by inverse faults that expose a basement sequence ranging in age from Upper Paleozoic to Lower Tertiary. The mountains and volcanoes have elevations from 4,463 m (Cerro los Corrolos) to 6,052 m (Cerro Copiapo). To the south-east, the basin limit coincides with the Chilean-Argentine frontier, which is defined by a line of modern volcanoes. The eastern limit of the basin is marked by the north-south trending Claudio Gay mountain range, with a maximum elevation of 5,181 m (Cerro Colorado). This consists of Middle to Upper Paleozoic rocks and deformed volcanoclastic sequences of Upper Oligocene to Lower Miocene, which represent remnants of the volcanic arc preserved on the margins of the Maricunga Basin. Deformed terraces and sub-horizontal gravels, ranging in age from 12 Ma to 4 Ma, are deposited on this sequence and form the alluvial plain that extends toward the salar.

The Salar de Maricunga has an ellipsoidal, shape covering an area of approximately 140 km<sup>2</sup> in the northern sector of the Maricunga basin, with a NNE-SSW trending axis approximately 23 km long and an approximately east-west axis of 10 km long. The salar proper is surrounded on the northwest, north, northeast, east and south by Quaternary and Miocene-Cenozoic alluvial deposits and on the west and southwest by volcanic rocks of Upper Miocene age. The asymmetric shape of the salar suggests the importance of faulting in the basin, with movement along faults trending north to northeast during Quaternary time.

The clastic sediments bordering the salar on the north, northwest and west sides are composed of fluvial Quaternary sands and gravels of mixed size and composition. In addition to drilling undertaken by the joint venture there are a number of historical drill holes outside the salar which provide useful information on the distribution of the clastic sediments outside the salar.



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## Figure 3: Location map of the boreholes (2011 – 2021 programs)

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#### **Geological Interpretation**

Correlation between Maricunga drill holes from logging of diamond core and geophysical logs has allowed recognition of different sediment units, which vary in thickness and lateral extent. These represent variations between lithologies originally deposited in a dry salt lake environment (salt, clays) and those deposited by flooding and transportation of coarser grained material (sands, gravels, volcaniclastic). The distribution of these units is shown in Figures 4 and 5. Interpretation is based on the drilling from the 2021, 2016-17 (S and M-holes) and 2011 C-series (sonic) and P-series (Reverse circulation) drill holes. The general distribution of units from top to bottom consists of the:

- Upper Halite unit (salt) with salt+clay intervals. This unit is present at surface in the north of the salar. The upper halite unit has a thickness of 30 m in the center of the properties and thins in all directions through the project area, thinning most in the southern part of the project area. This upper halite unit has relatively high drainable porosity and permeability (discussed in subsequent sections), with clay interbeds reducing the drainable porosity and permeability at different depths;
- Lacustrine unit (Clay Core) This clay unit is located predominantly beneath the *Litio 1-6* properties and thickens towards the south and east, extending to a depth of approximately 100 m in C1 and C2 and to a depth of 170 m in S18. This unit is absent in the western Old Code properties, which constitute the Stage One project and which contain dominantly coarser material. This unit continues beneath alluvial fans in the south of the Maricunga Basin;
- Deeper halite This localized deeper halite (salt) unit within the clay core was intersected in holes S18 and C3. It has a thickness of approximately 20 m and represents a previous salar surface and has relatively lower drainable porosity than the upper halite unit due to compaction;
- Alluvial Deposits This comprises Eastern and Northwestern Gravel units. These consists of clean gravels to clayey gravels, and has moderate drainable porosity. This unit is present to the east of the *Litio 1-6* properties and becomes interbedded with sediments of the clay core and sands within the salar. The unit is heterogeneous, with gravel fragments in a matrix of sand, silt and clay. The Northwest Gravel consists of well sorted gravel and sandy gravel, part the of alluvial / fluvial fan system entering the salar from the west and northwest. The unit may locally contain sub-rounded fragments and sand. The northwest gravel unit has a high drainable porosity:



Within the salar the unit consists of gravels, sands and silty sands spatially interpreted as the distal part of Northwest gravel alluvial/fluvial system entering from the northwest. This unit is interbedded with the Lacustrine Sediments further east in the salar;

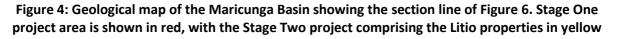
- Volcaniclastic deposits. This upper volcaniclastic unit (Figure 7) is very friable and matrix supported, with sub angular fragments including pumice material. A maximum thickness of 139 m was intersected in hole M2 and it is interpreted to thin further east in the salar. The Upper Volcaniclastic have a high drainable porosity;
- Lower Sand A lower sand unit recognized separating the upper and lower volcaniclastic units, interpreted as reworked material from the lower volcaniclastic unit. This unit consists of medium to fine sand with an average thickness of approximately 40 m, which has moderate sorting and a moderate porosity due to the presence of a finer grained matrix;
- Lower Volcaniclastic A lower volcaniclastic unit has been intersected to the base of the drilling in hole S-19 to a depth of 360 m in the Litio properties. The unit is homogeneous and friable with a fine to medium sand texture and some silt, also containing some pumice fragments. The Lower Volcaniclastic has a high drainable porosity;
- Volcanic Breccia Below the lower volcaniclastic the unit has a matrix of minor lithic fragments and fine sand and silt. The lithic fragments are reworked and the unit is distinct from the overlying volcaniclastics; and
- Basement rocks The bedrock contact in Salar de Maricunga was modelled based on borehole data and results of the gravity, TEM and AMT geophysical surveys. Drilling results of boreholes S-19, S-25, S-26, S27 and S-28 indicate that the depth to bedrock is more than 400 m in the north-central part of the Salar. Bedrock was only encountered on the western margin of the Salar in borehole S-29 at a depth of 213 m. Consequently the bedrock in the Litio properties is expected to be deeper than in the Old Code tenements, and is expected to be significantly deeper than 400 m. The modeled/interpreted thickness of the sediments increases towards the center of the basin, reaching up to 1,500 m.

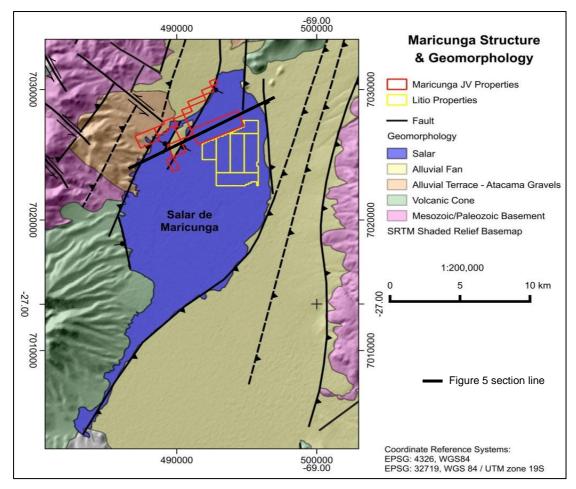
9



#### **Groundwater Hydrology**

The salar is the topographic low point within the Maricunga Basin. The salar itself is surrounded by alluvial fans which drain into the salar. In the north of the salar the water table can be within approximately 5 cm of the surface, promoting evaporation of shallow groundwater in the marginal sediment surrounding the salar and the salar nucleus, resulting in hyper-saline brine (6 times more concentrated than sea water) which contains elevated concentrations of lithium and potassium. Interpretation of drilling and testing results in the salar and the surrounding alluvial fans by MSB suggests the occurrence of several hydrogeological units of importance that can be summarized as follows:





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10



- Alluvial fans surrounding the salar These are coarse grained and overall highly permeable units that drain towards the salar. Groundwater flow is unconfined to semi-confined; specific yield (drainable porosity) is high. Water quality in the fans on the east side of the salar is fresh to brackish;
- An unconfined to semi-confined Upper Halite+Clay aquifer identified in the northern center of the salar. This unit is limited in areal extent to the visible halite nucleus of the salar observed in satellite images. This upper brine aquifer is highly permeable and has a medium drainable porosity. This upper brine aquifer contains high concentration lithium brine;
- The lacustrine sediments (clay core) -This unit underlies the upper halite aquifer in the center of the salar and extends to the east below the alluvial fans. This clay unit has a very low permeability and forms a hydraulic barrier for flow between the upper halite aquifer and the underlying clastic units (deeper sand gravel and volcaniclastic aquifers). On the eastern side of the salar fresh water in the alluvial fans sits on top of this clay core; while brine is encountered in the clastic sediments underlying the clay. In the nucleus of the salar the clay unit contains high concentration lithium brine; and
- A deeper brine aquifer occurs in the gravel, sand and volcaniclastic and volcanic breccia units. This deeper aquifer is overlain by the lacustrine sediments with confined groundwater conditions. On the west side of the salar groundwater conditions become semi-confined to unconfined. The deeper brine aquifer is relatively permeable (based on the P4/S-10 pumping test results) and has a relatively high drainable porosity.

# **Drilling programs**

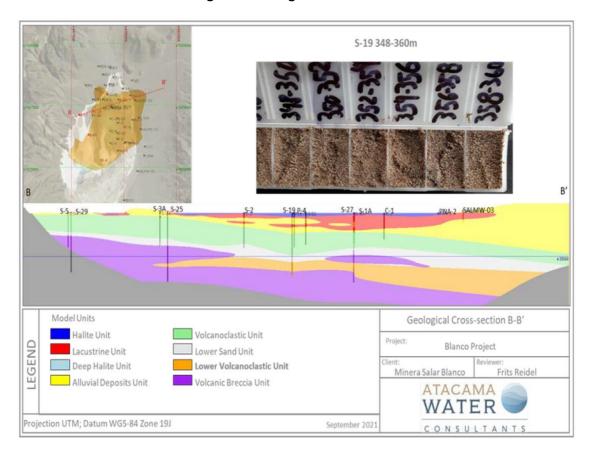
## **Previous Drilling**

Three principal drilling campaigns were carried, the first in 2011 on the Litio 1-6 claims by MLE, a second and third on the Blanco properties by MSB in 2016/17 in addition to the recent 2021 program. (Figure 3).



Exploration drilling on a general grid basis supports the estimation of "in-situ" brine resources. The drilling methods were selected to allow for 1) the collection of continuous core, to prepare "undisturbed" samples at specified depth intervals for laboratory porosity analyses and 2) the collection of depth-representative brine samples at specified intervals without the possibility of contamination by drilling fluids.

- The 2011 campaign included six (6) sonic boreholes (C-1 through C-6) on the Litio 1-6 claims.
- The 2016-2018 campaign included six (6) sonic boreholes (S-1, S-2, S-18 and S-20, S-23, and S-24) and eight (8) tricone /HWT boreholes (S-3, S-3A, S-5, S-6, S-10, S-11, S-13, and S-19).
- The recent 2021 campaign included five diamond core holes (S-25 through S-29) in the Old Code properties.



#### Figure 5: Geological cross section

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12



#### 2021 Drilling Program

Five (5) tricone /Diamond HQ/HWT core holes (S-24 through S-29) were drilled as part of the 2021 program by Major Drilling. The five holes were drilled with tricone from ground surface to 200 m depth and cored at HQ diameter from 200 m to 400 m depth. HWT casing was installed during the drilling to provide hole stability and facilitate depth-representative brine sampling. Continuous HQ core was collected for geological logging and the collection of 'undisturbed' sub-samples at 12 m intervals between 200 m and 400 m depth (with exception of S-29 on the northwestern edge of the properties, which intercepted bedrock at 219 m depth).

Brine samples were collected using bailer methodology at 12 m intervals during the core drilling over the 200 m - 400 m depth interval. The five boreholes were all completed as monitoring wells with blank and slotted 3-inch diameter PVC casing to facilitate BMR logging and future water level and brine chemistry monitoring.

#### **Pumping Tests**

Pumping tests were carried out on wells P-1, P-2, and P-4 between 2015 and 2017. A further pumping well will be installed starting in October, to provide additional information on brine flows in the Old Code tenements, to optimize well design and pump sizing for production from this area.

## **Brine sampling**

Brine sampling was carried out using a bailer device, with samples taken every 200 m between depths of 200 and 400 m in the five diamond holes (except within the basement rocks in hole S-29. Brine equivalent to three volumes of the bore hole was purged prior to collection of the sample from the well, to allow purging of drilling fluid and inflow of fresh uncontaminated brine into the well.

#### **Brine Quality Assurance and Quality Control**

Andes Analytical Assay SpA laboratory (AAA) was used as the primary analytical laboratory because the University of Antofagasta (UoA) laboratory which has been used in prior drilling programs had limitations on its production capacity due to COVID 19 related restrictions. UoA was therefore used as the secondary/external laboratory for the analysis of check samples. The University of Antofagasta laboratory in Chile is not a NATA certified laboratory, unlike other commercial laboratories used in the round robin.



However, the laboratory has extensive experience and a long history of analysing brine samples for industrial mineral mining clients (potash and lithium projects) in South America, including SQM, Albemarle, Lithium Americas and Orocobre.

A total of 92 primary brine samples were analyzed from the 2021 drilling campaign. These primary analyses were supported by a total 36 QA/QC analyses consisting of:

- 10 standards (7 %);
- 20 duplicates (14 %); and
- blank samples (4 %).

As in previous campaigns two standard reference samples, SRM-1 and SRM-2 were used in the sampling program. Sets of randomized replicates were sent in a Round Robin analysis program to four laboratories to confirm the certified values used to monitor the accuracy of analyses. The standard reference samples certified for the elements met the criteria of having a global Relative Standard Deviation (RSD) of near 5 % or less. Overall, the performance of AAA and the external laboratory (UoA) was satisfactory.

No failure was observed for Li, K and Mg for both standards (SMR-1 and SMR-2) with regards to the acceptable failure criteria of the mean ± 2 standard deviations, and the relative standard deviation (RSD) for each standard. Standard analyses by AAA indicate an acceptable accuracy. Based on the analysis detailed above, the authors are of the opinion that the lithium, potassium and magnesium analyses are accurate. There is also a good reproducibility or precision in the assay values reported by the AAA for these three elements.

In addition to the evaluation of standards, field duplicates, and blanks, the ionic balance was evaluated for data quality. The performance of the AAA in the analyses of 92 primary samples and 10 duplicates show a balance within 2 %, and all the check samples analyzed by University of Antofagasta within a value of 2 %. Balances are generally considered to be acceptable if the difference is < 5 %. The results of standard, duplicate and blank samples analyses are considered to be adequate and appropriate for use in the resource estimation described herein.

Check analyses were conducted at UoA. Nine drill samples were analyzed in addition to five blank and standard samples to monitor accuracy and potential laboratory bias. The standards indicated acceptable accuracy and precision for Li and K. Based on the analysis detailed above, the author is of the opinion the check assays indicate the lithium and potassium concentrations for the primary sample assays are acceptable for use in a resource calculation.



Ten (10) duplicate (drill) samples were analyzed by AAA to confirm the overall sampling precision of the internal duplicates were evaluated through the relative error (<5% for internal duplicates). The results of the duplicate analyses show very good precision.

Field blanks (7) consisting of distilled water were included with samples sent to the AAA laboratory. New plastic bottles were used in all the cases to avoid contamination of brine samples. Results reported by AAA indicate Li concentrations of <5 mg/l (quantification limit for lithium) in four of the blank samples. Three samples showed values over the quantification limit (a maximum of 19 mg/l) within the acceptable limit of 5 times the detection limit. This suggests there was no lithium contamination during the sampling and laboratory analysis stages.

# **Drainable Porosity Sampling**

Extensive testing has been undertaken on sediment samples from the different lithological units in all of the drilling programs conducted to date. This included samples from both sonic and diamond drilling. Samples have been analysed in four separate laboratories, each using a proprietary testing procedure. Laboratories include the Daniel B. Stevens & Associates Inc. (DBSA) lab and Core Laboratories in the USA, and the British Geological Survey. For the two most recent drilling programs the Geosystems Analysis (GSA) was used as the primary laboratory, with the DBA Stephens lab used as the major check laboratory.

The Rapid Brine Release (RBR) method was used by the GSA Laboratory (Tucson, Arizona) to determine drainable porosity (specific yield Sy) and total porosity (Pt). A total of 66 HQ core samples were shipped to the GSA laboratory from boreholes S-25 through S29, complementing the 444 samples previously analysed for porosity.

Ten samples were selected from the 2021 GSA batch to perform an inter-laboratory check analysis by the DBSA lab using its RBRC methodology. The check analyses included total porosity and RBRC (specific yield). The results of the check analyses show a certain degree of correlation between the analyses of both laboratories. The observed differences can be assumed due to the high vertical geological variability of the sediments or DBSA testing methodology systematically under-estimating drainable porosity for finer grained sediments (clay and silt).

In addition to the laboratory porosity sampling undertaken during this drilling campaign down hole geophysical logging was completed on the five drill holes. This assisted with the correlation of geological units.



The geophysical logging included use of a Borehole Magnetic Resonance tool (BMR), which measures porosity in-situ in the drill hole. The results from the BMR profiles were compared with and validated the laboratory porosity samples analysed in the program.

# **Reasonable Prospects for Resource Extraction**

Porosity testing of sediment samples by four reputable laboratories and pumping tests carried out by the MJV indicate the porosity and permeability characteristics of the sediments in the Stage One and Stage Two project resource areas are favorable for brine extraction by pumping (refer to announcements by the company on the 23 February and 17 May 2017 regarding pumping test results and in this announcement for details of drainable porosities). Process test work completed on extracting lithium and potassium from the Maricunga brine confirms the technical viability of the project and the

Competent Person considers there are reasonable grounds for future economic extraction of the resource, considering the necessary modifying factors and using wells installed to and beyond the depth of current drilling. Lithium brine has been extracted from salars in Chile and Argentina for over 34 years for production of lithium chemicals.

It should be noted that even considering the brine volume corresponding to the drainable porosity applied to each sediment unit it is not possible to convert the majority of resources to reserves in any salt lake mining operation, due to considerations such as changes in the water levels and lithium concentrations, brine flow, environmental effects, and third-party property ownership. The conversion of the resource to a reserve is undertaken with a numerical groundwater flow model that has been established for the project. This takes account of these different variables and defines the volume of brine that can be extracted from the resource and the level of any possible dilution in brine grade over the life of the mining operation.

No cut-off grade was applied to the resource estimation, as Maricunga is characterized by high lithium concentrations to the boundaries of the properties and initial mineral process information suggests the lithium and potassium concentrations to date are economic for processing. Monitoring of brine chemistry over time will be required to evaluate potential changes in the lithium and potassium concentrations during the life of the mining operation.



# **Industrial Minerals and Pricing**

Lithium is considered an essential or critical metal, although historically it was considered an industrial mineral. Historically prices for sale of lithium products were not readily quoted in financial media. However, as the lithium market has grown very strongly, through the use of lithium in electronic applications and the imminent very significant expansion of electric vehicles and batteries for large scale energy storage, pricing of lithium commodities has become more transparent and readily available.

As both vehicle and stationary power storage battery usage is expanding rapidly lithium commodity prices have increased significantly in the last three trimesters.

It should be noted that the lithium and potash markets have a high degree of producer concentration and the value of lithium products is a function of product quality, volume of supply to the market, production costs and transport and handling. The production of lithium is independent from that of potash, and at this stage it is not planned to produce potash at the project.

The concentrations of lithium and potassium through the mineral deposit show a relatively low level of variability and have been characterized along with magnesium, calcium and trace elements, which will be removed as part of the lithium production process.

## **Mineral Resource Estimation**

The mineral resource is defined as the tonnage of lithium and potassium dissolved in brine within porous sedimentary units identified in drilling by the MJV. The product of the area covered by the JV properties x the thickness of brine saturated sediments encountered in drilling x the drainable porosity (Sy) of the sediment units x the concentration of lithium and potassium in the brine = the brine resource.

The resource model domain is constrained by the following factors:

- The top of the model coincides with the brine level in the Salar that was measured in monitoring wells.
- The lateral boundaries of the model domain are limited to the area of the MSB 'Old Code' mining properties.



• The bottom of the model domain coincides with the modeled basement from the geological model or the depth of 400 m over the majority of the model area.

#### Specific Yield

Specific yield is defined as the volume of water released from storage by an unconfined aquifer per unit surface area of aquifer per unit decline of the water table.

The specific yield values used for the resource estimate are based on results of logging and hydrogeological interpretation of 17 sonic-and HQ core holes, results of drainable porosity analyses carried out on 520 undisturbed core samples by GeoSystems Analysis, Daniel B Stephens and Associates, Corelabs, the BGS, and four pumping tests. The holes within the measured and indicated resource areas are appropriately spaced at a hole density of one bore per 1.5 km2. Table 3 shows the values defined in the resource model.

Unit		Sy Average	-	-	-
Halite	6	0.06	0.05	0.12	0.028
Lacustrine	323	0.02	0	0.15	0.023
Deep Halite	8	0.06	0.01	0.13	0.044
Alluvial Deposits	31	0.14	0	0.31	0.097
Lower Sand	20	0.06	0.01	0.19	0.046
Volcanoclastics	72	0.12	0	0.31	0.073
Lower Volcanoclastics	7	0.08	0.05	0.18	0.046
Volcanic Breccia	52	0.13	0.01	0.29	0.070

#### Table 3: Porosities of geological units defined in the geological model

#### **Brine Concentrations**

The distributions of lithium and potassium concentrations in the model domain are based on a total of 554 brine chemistry analyses (not including QA/QC analyses) across all the project properties. Table 4 shows a summary of the brine composition below all mining properties (Old Code and Litio 1-6).

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18



	В	Ca	Cl	Li	Mg	К	Na	SO4	Densi ty
Units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	g/cm <sup>3</sup>
Maximum			233,800						1.31
Average	572	12,847	192,723	1,122	7,327	8,142	87,106	711	1.20
Minimum	234	4,000	89,441				37,750		1.10

#### Table 4: Brine concentration from sampling over the entire Stage One and 2 properties

## **Resource Model Methodology**

The resource estimation for the Project was developed using the Stanford Geostatistical Modeling Software (SGeMS) and the leapfrog geological model. In order to incorporate the geological model in the interpolation, kriging was used within units, which consisted of stratifying the resource model based on the geological model. Kriging interpolation within each specific unit is sequentially performed using a semi-variogram model and the closest primary data samples within the unit.

The method assumes the stratification is delimited by accurate geological boundaries. The following steps were carried out to calculate the lithium and potassium resources:

- Definition of the block model (9,419,505 blocks), with block size (x=50 m, y=50 m, z=1 m). The block size has been chosen for being representative of the thinner units within the geological model.
- Definition of regions or units based on the geological model.
- Generation of histograms, probability plots and box plots for the Exploratory Data Analysis (EDA) for lithium and potassium for each region. No outlier restrictions were applied, as distributions of the different elements do not show anomalously high values. Calculation of the experimental variograms and their respective variogram models for lithium and potassium was in three orthogonal directions. Variography revealed the variogram model is isotropic in the horizontal direction and anisotropic in the vertical.
- For each region, interpolation of lithium and potassium concentrations for each block in mg/L using ordinary kriging with the variogram models. The distribution of brine concentration does not follow lithological boundaries, therefore no hard boundaries are considered within the geological model for the estimation.

- Validation using a series of checks including comparison of univariate statistics for global estimation bias, visual inspection against samples on plans and sections, swath plots in the north, south and vertical directions to detect any spatial bias.
- Calculation of total resources using the average drainable porosity value for each geological unit, based on the boreholes data and results of the laboratory drainable porosity analysis as shown in Table 3.

The univariate statistical description of lithium and potassium concentrations are based on histograms, probability plots and box plots. The mean concentration of potassium is 7.3 times of the lithium. Both exhibit the same degree of variability with a coefficient of variation of 0.31 and 0.33 for the potassium and lithium, respectively. Distributions are positively skewed. The concentrations of potassium range between 2,940 mg/L and 20,640 mg/L, and the concentrations of lithium range between 460 mg/L and 3,375 mg/L across the model area.

Results show that the data do not strictly follow a normal distribution. However, the figures permit to identify a straight line, indicating that although the data fail the normality tests, the distribution is close to a Gaussian shape. This gives confidence in the kriging estimate of the concentrations when the data follow a multivariate normal distribution.

## Variography

The spatial correlation for the lithium and potassium concentrations were reviewed using experimental variograms with the parameters shown in Table 5. Variogram models are axisymmetric with multiple structures characterized by a horizontal range ah and a vertical range az. Consequently, for each region, the spatial variability was modelled using two experimental directions. Lithium and potassium concentrations are expressed in mg/L. The variograms are expressed in mg/I squared. In general, a good correlation was found between the sample concentrations of lithium and potassium in all regions. Consequently, results show that the lithium and potassium concentrations by the same fundamental structures.



	Variogram Para	Tolerar	ice		
Lag (m)	Max. No. Of Lags	Azimuth (°)	Dip (°)	Bandwidth (m)	Angular (°)
400	50	-45	0	500	45
400	50	-135	0	500	45
3	40	0	90	25	89

#### Table 5: Parameters for the calculation of the experimental variograms

#### **Resource classification**

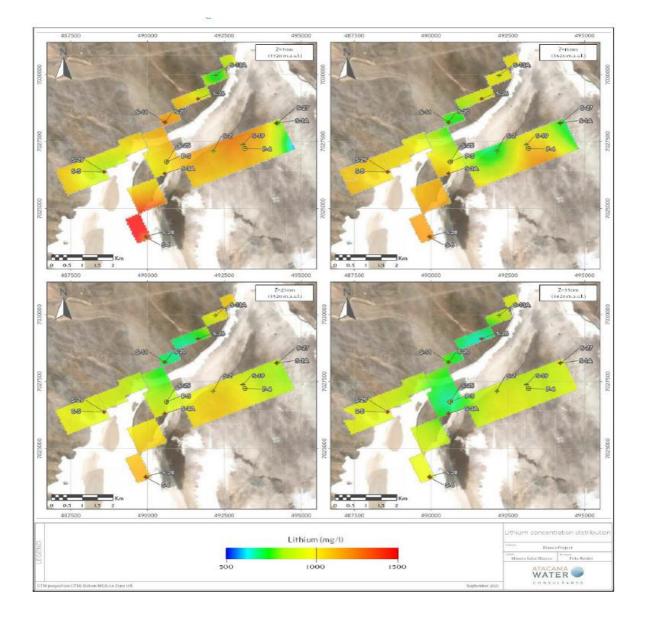
Based on the available drilling the Cocina property in the salar has been defined as hosting Measured Resources, and the Salamina, Despreciada and San Francisco properties as hosting Indicated mineral resources. The New Code Litio 1-6 properties (not included in this resource) were previously classified as Measured Resources to 200 m).

The resource estimate for the Blanco Project was prepared in accordance with the JORC guidelines and considers the best practices methods specific to brine resources. The lithium and potassium resources are summarized in Table 6 below.



SYDNEY. Australia

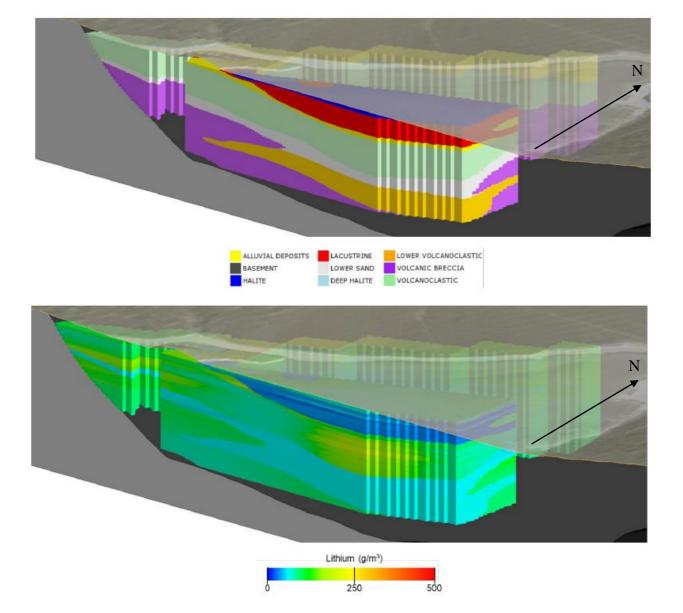
#### Figure 6: Lithium distribution at different depths in the salar



ACN 607 260 328



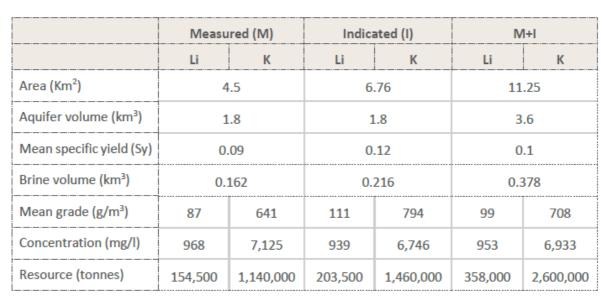
SYDNEY. Australia



## Figure 7: Lithium grade distribution relative to the geological model

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#### Table 6: September 2021 Resource estimate for the Old Code properties only

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Notes to the Resource estimate: 1. JORC definitions were followed for mineral resources; 2. The Competent Person for the mineral resource estimate is Murray Brooker MAIG, PGeo; 3. No cut-off values have been applied to the Resource estimate; 4. Numbers may not add due to rounding; 5. The effective date is September 20, 2021.

#### Table 7: September 2021 resource estimate as lithium carbonate equivalent and KCL

	M+I Resources			
	LCE	KCL		
Tonnes	1,905,000	4,950,000		

Notes to the Resource estimate: 1. Lithium is converted to lithium carbonate Li2Co3 with a conversion factor of 5.32; 2. Potassium is converted to KCl with a conversion factor of 1.91; 3. Numbers may not add due to rounding.

It is the opinion of the author the Salar geometry, brine chemistry composition and specific yield of the Salar sediments have been adequately characterized to support the Measured and Indicated Resource estimate for the Project in this report.

24



SYDNEY. Australia

# Camp Lithium Processing plant Evaporation ponds HILEAN DAST Power Line Highway 31 LPI Tenements ARGENTINA BORDER 2 5 KILOMETRES

Figure 8: Maricunga properties and the location of key project infrastructure

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## Table 8: Exploration target range for the Old Code and New Code tenements

	OLD CODE (400 m to Basement)	LITIO 1-6 (200 m to Basement)	OLD CODE + LITIO 1-6 (Total Potential)
	Li	Li	Li
	Upper	range	
Area (Km2)	11.25	14.38	25.63
Aquifer volume (km <sup>3</sup> )	0.36	5.05	5.41
Mean specific yield (Sy)	13%	8%	8%
Brine volume (km <sup>3</sup> )	0.05	0.41	0.45
Concentration (mg/L)	877	877	877
Resource (tonnes)	41,000	357,000	398,000
	Lower	Range	
Area (Km2)	11.25	14.38	25.63
Aquifer volume (km <sup>3</sup> )	0.11	3.02	3.13
Mean specific yield (Sy)	13%	8%	8%
Brine volume (km <sup>3</sup> )	0.015	0.24	0.25
Concentration (mg/L)	877	877	877
Resource (tonnes)	13,000	212,000	228,000



#### **Competent Person Statements**

The information contained in this ASX release relating to Exploration Targets, Exploration Results and Resources has been compiled by Murray Brooker. Mr Brooker is a Geologist and Hydrogeologist and is a Member of the Australian Institute of Geoscientists (AIG) and the International Association of Hydrogeologists (IAH). Mr Brooker has sufficient experience that is relevant to the style of mineralization and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the JORC Code).

Mr Brooker takes responsibility for the Resource estimation undertaken by Atacama Water Consultants of Santiago, Chile.

Mr Brooker is an employee of Hydrominex Geoscience Pty Ltd and an independent consultant to the Company. Mr Brooker consents to the inclusion in this announcement of this information in the form and context in which it appears. The information in this announcement is an accurate representation of the available data from exploration and Resource estimation at the Maricunga project.

The Company confirms the form and context in which the Competent Person's findings are presented have not been materially modified from the original release.

#### For further information, please contact:

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#### APPENDIX 1 - JORC Code, 2012 Edition - Table 1 Report: Maricunga Salar

#### Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Considerations for Mineral Brine Projects
Sampling techniques	<ul> <li>Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul> <li>Drill cuttings were taken during rotary drilling. These are low quality drill samples, but provide sufficient information for lithological logging and for geological interpretation.</li> <li>Drill core was recovered in lexan polycarbonate liners and plastic bags alternating every 1.5 m length core run during the sonic drilling.</li> <li>Brine samples were collected at 6 m intervals during drilling (3 m in 2011 drilling). This involved purging brine from the drill hole and then taking a sample corresponding to the interval between the rods and the bottom of the hole. Brine samples below 204 m in hole S19 were taken every 12 m. Fluorescein tracer dye was used to distinguish drilling fluid from natural formation brine.</li> <li>The brine sample was collected in a clean plastic bottle and filled to the top to minimize air space within the bottle. Each bottle was marked with the sample number and details of the hole.</li> </ul>
Drilling techniques	<ul> <li>Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</li> </ul>	<ul> <li>Rotary drilling (using HWT size casing) – This method was used with natural formation brine for lubrication during drilling, to minimize the development of wall cake in the holes that could reduce the inflow of brine to the hole and affect brine quality.</li> <li>Rotary drilling allowed for recovery of drill cuttings and basic geological description. During rotary drilling, cuttings were collected directly from the outflow from the HWT casing. Drill cuttings were collected over two metre intervals in cloth bags, that were marked with the drill hole number and depth interval. Sub-samples were collected from the cloth bag by the site geologist to fill chip trays.</li> <li>Sonic drilling (M1A, S2, S18 and S20) produced cores with close to 100% core recovery. This technique uses sonic vibration to penetrate the salt lake sediments and produces cores without the rotation and drilling fluid cooling of the bit required for rotary drilling – which can result in the washing away of more friable unconsolidated sediments, such as sands.</li> </ul>
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse</li> </ul>	<ul> <li>Rotary drill cuttings were recovered from the hole in porous cloth bags to retain drilling fines, but to allow brine to drain from the sample bags (brine is collected by purging the hole every 6 m and not during the drilling directly, as this uses recirculated brine for drilling fluid). Fluorescein tracer dye was used to distinguish drilling fluid from natural formation brine.</li> </ul>

Criteria	JORC Code explanation	Considerations for Mineral Brine Projects
	material.	<ul> <li>Sonic drill core was recovered in alternating 1.5 m length lexan tubes and 1.5 m length tubular plastic bags.</li> </ul>
Geologic Logging	<ul> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul> <li>Rotary (using HWT size casing) drilling was carried out from the collection of drill cuttings for geologic logging and for brine sampling. Drill cuttings were logged by a geologist.</li> <li>Sonic holes were logged by a geologist who supervised cutting of samples for porosity sampling then splits the plastic tube and geologically logs the core.</li> </ul>
Sub-sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul> <li>Core samples were systematically sub-sampled for laboratory analysis, cutting the lower 15 cm of core from the polycarbonate core sample tube and capping the cut section and taping the lids tightly to the core. This sub-sample was then sent to the porosity laboratory for testing. Sampling was systematic, to minimize any sampling bias.</li> <li>Brine samples collected following the purging of the holes during drilling are homogenized over the sampling interval, as brine is extracted from the hole using a bailer device. No sub-sampling fluid from natural formation brine.</li> <li>The brine sample was collected in one-litre sample bottles, rinsed and filled with brine. Each bottle was marked with the drill whole number and details of the sample. Prior to sending samples to the laboratory they were assigned unique sequential numbers with no relationship to the drill hole number.</li> </ul>
Quality of assay data and laboratory tests	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and the derivation, etc.</li> <li>Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</li> </ul>	<ul> <li>The University of Antofagasta in northern Chile was used as the primary laboratory to conduct the assaying of the brine samples collected as part of the drilling program. They also analyzed blanks, duplicates and standards, with blind control samples in the analysis chain. The laboratory of the University of Antofagasta is not ISO certified, but is specialized in the chemical analysis of brines and inorganic salts, with extensive experience in this field since the 1980s, when the main development studies of the Salar de Atacama were begun.</li> <li>The quality control and analytical procedures used at the University of Antofagasta laboratory are considered to be of high quality and comparable to those employed by ISO certified laboratories specializing in analysis of brines and inorganic salts.</li> <li>Duplicate and standard analyses are considered to be of acceptable quality.</li> <li>Samples for porosity test work are cut from the base of the plastic drill tubes every 3 m.</li> <li>Down hole geophysical tools were provided by a geophysical contractor and these are believed to be calibrated periodically to produce consistent results.</li> </ul>
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data</li> </ul>	<ul> <li>A full QA/QC program for monitoring accuracy, precision and to monitor potential contamination of samples and the analytical process was implemented. Accuracy, the closeness of measurements to the "true" or accepted value, was monitored by the insertion of standards, or reference</li> </ul>

Criteria	JORC Code explanation	Considerations for Mineral Brine Projects
	storage (physical and electronic) protocols. <ul> <li>Discuss any adjustment to assay data.</li> </ul>	<ul> <li>samples, and by check analysis at an independent (or umpire) laboratory.</li> <li>Duplicate samples in the analysis chain were submitted to the University of Antofagasta as unique samples (blind duplicates) following the drilling process.</li> <li>Stable blank samples (distilled water) were inserted to measure cross contamination during the analytical process.</li> <li>The anion-cation balance was used as a measure of analytical accuracy and was always considerably less than +/-5%, which is considered to be an acceptable balance.</li> </ul>
Location of data points	<ul> <li>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul> <li>The hole was located with a hand held GPS in the field and subsequently located by a surveyor on completion of the drilling program.</li> <li>The location is in WGS84 Zone 19 south.</li> </ul>
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul> <li>Lithological data was collected throughout the drilling. Drill holes have a spacing of approximately 2 km.</li> <li>Brine samples have a 6 m vertical separation and drill cutting lithological samples are on 2 m intervals (in 2011 drilling samples were taken every 3 m). Porosity samples were taken every 3 m in sonic core holes.</li> </ul>
Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</li> </ul>	<ul> <li>The salar deposits that host lithium-bearing brines consist of sub-horizontal beds and lenses of halite, sand, gravel and clay. The vertical holes are essentially perpendicular to these units, intersecting their true thickness.</li> </ul>
Sample security	• The measures taken to ensure sample security.	<ul> <li>Samples were transported to the University of Antofagasta (primary, duplicate and QA/QC samples) for chemical analysis in sealed 1-litre rigid plastic bottles with sample numbers clearly identified.</li> <li>The samples were moved from the drill site to secure storage at the camp on a daily basis. All brine sample bottles are marked with a unique label.</li> </ul>
Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	No audits or reviews have been conducted at this point in time.

#### Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Considerations for Mineral Brine Projects
Mineral tenement and land tenure status	<ul> <li>Type, reference name/number, location and ownership 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.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul>	<ul> <li>The Maricunga property is located approximately 170 km northeast of Copiapo in the III Region of northern Chile at an elevation of approximately 3,800 masl.</li> <li>The property comprises 1,438 ha in six mineral properties known as <i>Litio 1 -6</i>. In addition, the <i>Cocina 19-27</i> properties, <i>San Francisco, Salamina</i> and <i>Despreciada</i> properties (1,125 ha) were purchased between 2013 and 2015.</li> <li>The properties are located in the northern section of the Salar de Maricunga.</li> <li>The tenements/properties are believed to be in good standing, with payments made to relevant government departments.</li> </ul>
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	<ul> <li>SLM Litio drilled 58 vertical holes in the Litio properties on a 500 m x 500 m grid in February 2007. Each hole was 20 m deep. The drilling covered all of the Litio 1 – 6 property holdings.</li> <li>Those holes were 3.5" diameter and cased with either 40 mm PVC or 70 mm HDPE pipe inserted by hand to resistance. Samples were recovered at 2 m to 10 m depth and 10 m to 20 m depth by blowing the drill hole with compressed air and allowing recharge of the hole.</li> <li>Subsequently, samples were taken from each drill hole from the top 2 m of brine. In total, 232 samples were collected and sent to Cesmec in Antofagasta for analysis.</li> </ul>
Geology	Deposit type, geological setting and style of mineralisation.	<ul> <li>The sediments within the salar consist of halite, sand, gravel and clay which have accumulated in the salar from terrestrial sedimentation and evaporation of brines within the salar. These units are interpreted to be essentially flat lying, with unconfined aquifer conditions close to surface and semi-confined to confined conditions at depth.</li> <li>Brines within the salar are formed by solar concentration, with brines hosted within the different sedimentary units.</li> <li>Geology was recorded during drilling of all the holes.</li> </ul>
Drill hole Information	<ul> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:         <ul> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>If the exclusion of this information is justified on the basis that the information is not</li> </ul>	<ul> <li>Lithological data was collected from the holes as they were drilled as drill cuttings, and at the geological logging facility for sonic cores, with the field parameters (electrical conductivity, density, pH) Measured on the brine samples taken on 6 m intervals.</li> <li>Brine samples were collected at 6 m intervals and sent for analysis to the University of Antofagasta, together with quality control/quality assurance samples.</li> <li>Drill hole collars, surveyed elevations, dip and azimuth, hole length and aquifer</li> </ul>

Criteria	JORC Code explanation	Considerations for Mineral Brine Projects
	Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	intersections are provided in tables within the text.
Data aggregation methods	<ul> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul> <li>Brine samples taken from the holes every 6 m represent brine over the sample interval.</li> <li>No outlier restrictions were applied to the concentrations, as distributions of the different elements do not show anomalously high values.</li> </ul>
Relationship between mineralisation widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').</li> </ul>	<ul> <li>The lithium-bearing brine deposits extend across the properties and over a thickness of &gt; 150 to 200 m (depending on the depth of drilling), limited by the depth of the drilling. Mineralization in brine is interpreted to continue below the depth of the Resource.</li> <li>The drill holes are vertical and essentially perpendicular to the horizontal sediment layers in the salar (providing true thicknesses of mineralization).</li> </ul>
Diagrams	<ul> <li>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</li> </ul>	<ul> <li>Diagrams are provided in the text of this announcement and diagrams were provided in the technical report on the Maricunga Lithium Project Region III, Chile, NI 43-101 report prepared for Minera Salar Blanco S.A., December 14, 2017. See attached location map.</li> </ul>
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	<ul> <li>This announcement presents representative data from drilling at the Maricunga Salar, such as lithological descriptions, brine concentrations and chemistry data, and information on the thickness of mineralization.</li> </ul>
Other substantive exploration data	<ul> <li>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</li> </ul>	<ul> <li>Refer to the information provided in the technical report on the Maricunga Lithium Project Region III, Chile NI 43-101 report prepared for Minera Salar Blanco S.A., December 14, 2017 for all geophysical and geochemical data.</li> <li>Information on pumping tests has been provided by the Company following the completion of pumping tests at holes P4 and P2.</li> </ul>
Further work	<ul> <li>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul> <li>The Company will consider additional drilling. The brine body is open at depth and there is an exploration target defined in this area which could potentially be incorporated into the Resource subject to positive drilling results.</li> </ul>

#### Section 3 Estimation and Reporting of Mineral Resources

Criteria	JORC Code explanation	Considerations for Mineral Brine Projects
Database integrity	<ul> <li>Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.</li> <li>Data validation procedures used.</li> </ul>	<ul> <li>Data was transferred directly from laboratory spreadsheets to the database.</li> <li>Data was checked for transcription errors once in the database, to ensure coordinates, assay values and lithological codes were correct.</li> <li>Data was plotted to check the spatial location and relationship to adjoining sample points.</li> <li>Duplicates and standards have been used in the assay process.</li> <li>Brine assays and porosity test work have been analyzed and compared with other publicly available information for reasonableness.</li> <li>Comparisons of original and current datasets were made to ensure no lack of integrity.</li> </ul>
Site visits	<ul> <li>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</li> <li>If no site visits have been undertaken indicate why this is the case.</li> </ul>	<ul> <li>The JORC Competent Person visited the site multiple times during the drilling and sampling program.</li> <li>Some improvements to procedures were made during visits by the Competent Person.</li> </ul>
Geological interpretation	<ul> <li>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</li> <li>Nature of the data used and of any assumptions made.</li> <li>The effect, if any, of alternative interpretations on Mineral Resource estimation.</li> <li>The use of geology in guiding and controlling Mineral Resource estimation.</li> <li>The factors affecting continuity both of grade and geology.</li> </ul>	<ul> <li>There is a high level of confidence in the geological model for the Project. There are relatively distinct geological units in essentially flat lying, relatively uniform, clastic sediments and halite.</li> <li>Any alternative interpretations are restricted to smaller scale variations in sedimentology, related to changes in grain size and fine material in units.</li> <li>Data used in the interpretation includes sonic, rotary and reverse circulation drilling.</li> <li>Drilling depths and geology has been used to separate the deposit into different geological units.</li> <li>Sedimentary processes affect the continuity of geology, whereas the concentration of lithium and potassium and other elements in the brine is related to water inflows, evaporation and brine evolution in the salt lake.</li> </ul>
Dimensions	The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.	<ul> <li>The lateral extent of the Resource has been defined by the boundary of the Company's properties. The brine mineralization consequently covers 25.64 km<sup>2</sup>.</li> <li>The top of the model coincides with the topography obtained from the Shuttle Radar Topography Mission (SRTM). The original elevations were locally adjusted for each drill hole collar with the most accurate coordinates available. The base of the Resource is limited to a 200 m depth. The basement rocks underlying the salt lake sediments have not yet been intersected in drilling.</li> <li>The Resource is defined to a depth of 200 m below surface, with the exploration target immediately underlying the Resource.</li> </ul>

Criteria	JORC Code explanation	Considerations for Mineral Brine Projects
Estimation and modelling techniques	<ul> <li>The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.</li> <li>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</li> <li>The assumptions made regarding recovery of by-products.</li> <li>Estimation of deleterious elements or other non-grade variables of economic significance (e.g., sulphur for acid mine drainage characterisation).</li> <li>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</li> <li>Any assumptions about correlation between variables.</li> <li>Description of how the geological interpretation was used to control the Resource estimates.</li> <li>Discussion of basis for using or not using grade cutting or capping.</li> <li>The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</li> </ul>	<ul> <li>The Resource estimation for the project was developed using the Stanford Geostatistical Modeling Software (SGeMS) and the geological model as a reliable representation of the local lithology. Generation of histograms, probability plots and box plots were conducted for the Exploratory Data Analysis (EDA) for lithium and potassium. Regarding the interpolation parameters, it should be noted that the search radii are flattened ellipsoids with the shortest distance in the Z axis (related to the variogram distance). No outlier restrictions were applied, as distributions of the different elements do not show anomalously high values.</li> <li>No grade cutting, or capping was applied to the model. The very high lithium concentration values obtained near surface during the drilling and sampling are considered to be representative of the upper halite unit locally.</li> <li>Results from the primary porosity laboratory GSA were compared with those from the check laboratory Core Laboratories, and historical porosity results when assigning porosity results were normalized within the complete data set based on the results from the total data set.</li> <li>Potassium is the most economically significant element dissolved in the brine after lithium. Potassium can be produced using the evaporative process is well understood and could be implemented in the project. Potassium has been estimated as a by-product of the lithium extraction process. As a Resource this makes no allowance for losses following brine extraction in evaporation ponds and the processing plant.</li> <li>Interpolation of lithium and potassium for each block in mg/l used ordinary kriging. The presence of brine is not necessary controlled by the lithologies and lithium and potassium concentrations are independent of lithology. Geological units had hard boundaries for estimation of porosity, walue for each geological unit, based on the drill hole data.</li> <li>The block size (50 x 50 x 1 m) has been chosen for being representative o</li></ul>

Criteria	JORC Code explanation	Considerations for Mineral Brine Projects
		<ul> <li>property limit was used to enclose the reported Resources. The lithium and potassium concentration is not necessary related to a particular lithology.</li> <li>Validation was performed using a series of checks including comparison of univariate statistics for global estimation bias, visual inspection against samples on plans and sections, swath plots in the north, south and vertical directions to detect any spatial bias.</li> <li>An independent Nearest-Neighbor (NN) model was generated for each parameter in order to verify that the estimates honor the drill hole data. The NN model also provides a de-clustered distribution of drill hole data that can be used for validation.</li> <li>Visual validation shows a good agreement between the samples and the OK estimates. A global statistics comparison shows relative differences between the ordinary kriging results and the Nearest-Neighbor is below 0.3% for Measured Resources and below 3% for Indicated Resources which is considered acceptable.</li> </ul>
Moisture	• Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	<ul> <li>Moisture content of the cores was not Measured (porosity and density measurements were made), but as brine will be extracted by pumping not mining, this is not relevant for the Resource estimation.</li> <li>Tonnages are estimated as metallic lithium and potassium dissolved in brine.</li> </ul>
Cut-off parameters	• The basis of the adopted cut-off grade(s) or quality parameters applied.	<ul> <li>No cut-off grade has been applied as the highest grades are present within the upper halite unit and are considered to be real and consistent and a relatively small volume of the total Resource.</li> </ul>
Mining factors or assumptions	<ul> <li>Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.</li> </ul>	<ul> <li>The Resource has been quoted in terms of brine volume, concentration of dissolved elements, contained lithium and potassium and their products lithium carbonate and potassium chloride.</li> <li>No mining or recovery factors have been applied (because the use of the specific yield = drainable porosity reflects the reasonable prospects for economic extraction with the proposed mining methodology).</li> <li>Dilution of brine concentrations may occur over time and typically there are lithium and potassium losses in both the ponds and processing plant in brine mining operations which are estimated as part of the delineation of Reserves. Potential dilution was estimated in the groundwater model simulating brine extraction to define the project Reserve.</li> <li>The conceptual mining method is recovering brine from the salt lake via a network of wells, the established practice on existing lithium and potash brine projects.</li> </ul>

Criteria	JORC Code explanation	Considerations for Mineral Brine Projects
		<ul> <li>Detailed hydrologic studies of the salt lake and basin have been undertaken (in the groundwater modelling) to define the extractable Resources and project extraction rates.</li> </ul>
Metallurgical factors or assumptions	• The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	<ul> <li>The preferred brine processing route has been determined by test work conducted by major global chemical engineering companies GEA and Veolia, conducting pilot plant testing and estimating the equipment necessary for the production plant.</li> <li>Lithium and potassium would be produced via conventional brine processing, following the use of evaporation ponds to concentrate the brine prior to processing.</li> <li>Process test work (which can be considered equivalent to metallurgical test work) has been carried out on the project brine since 2012.</li> </ul>
Environmental factors or assumptions	<ul> <li>Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.</li> </ul>	<ul> <li>Impacts of a lithium and potash operation at the Maricunga project would include: surface disturbance from the creation of extraction/processing facilities and associated infrastructure (mostly away from and not visible from the salar), accumulation of various salt tailing impoundments and extraction from brine and fresh water aquifers regionally.</li> </ul>
Bulk density	<ul> <li>Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.</li> <li>The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.</li> <li>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</li> </ul>	<ul> <li>Density measurements were taken as part of the drill core assessment. This included determining dry density and particle density as well as field measurements of brine density. Note that no open pit or underground mining is to be carried out as brine is to be extracted by pumping and consequently sediments are not mined but the lithium and potassium is extracted by pumping.</li> <li>No bulk density was applied to the estimates because Resources are defined by volume, rather than by tonnage.</li> <li>The salt unit can contain fractures and possibly vugs which host brine and add to the drainable porosity.</li> </ul>
Classification	<ul> <li>The basis for the classification of the Mineral Resources into varying confidence categories.</li> <li>Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).</li> <li>Whether the result appropriately reflects the Competent Person's view of the deposit.</li> </ul>	<ul> <li>The Resource has been classified into the Measured and Indicated categories based on confidence in the data collected and the estimation.</li> <li>The Measured Resource reflects the predominance of sonic drilling, with porosity samples from drill cores and well constrained vertical brine sampling in the holes.</li> <li>The Indicated Resource reflects the lower confidence in the brine sampling in the rotary drilling and lower quality geological control from the drill cuttings.</li> <li>In the view of the Competent Person, the Resource classification is believed to adequately reflect the available data and is consistent with the suggestions of</li> </ul>

Criteria	JORC Code explanation	Considerations for Mineral Brine Projects
		Houston et. al., 2011 and the CIM Best Practice Guidelines.
Audits or reviews	The results of any audits or reviews of Mineral Resource estimates.	• This Mineral Resource was estimated by independent consultancy FloSolutions, who are contracted by the Maricunga JV for hydrological services. This work has been reviewed by the Competent Person.
Discussion of relative accuracy/ confidence	<ul> <li>Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the Resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.</li> <li>The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.</li> <li>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</li> </ul>	<ul> <li>An independent estimate of the Resource was completed using a Nearest-Neighbor (NN) estimate and the comparison of the results with the ordinary kriging estimate is below 0.3% for Measured Resources and below 3% for Indicated Resources which is considered to be acceptable.</li> <li>Univariate statistics for global estimation bias, visual inspection against samples on plans and sections, swath plots in the north, south and vertical directions to detect any spatial bias shows a good agreement between the samples and the ordinary kriging estimates.</li> </ul>

#### Section 4 Estimation and Reporting of Mineral Reserves

Criteria	JORC Code explanation	Considerations for Mineral Brine Projects
Mineral Resource estimate for conversion to Ore Reserves	<ul> <li>Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.</li> <li>Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.</li> </ul>	<ul> <li>The Mineral Resource estimate was undertaken as outlined above and takes into account the reasonable potential for eventual extraction, as the specific yield values and permeabilities used for estimation are allocated by unit. Units with lower drainable porosity and low permeability have a lower conversion to Reserves, regardless of the Resource volume they occupy, as less of the material can be extracted over the life of mine.</li> <li>Ore Reserves are defined based on the Measured and Indicated Mineral Resources, with all Resources now in these categories, as required by the JORC Code.</li> </ul>
Site visits	<ul> <li>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</li> <li>If no site visits have been undertaken indicate why this is the case.</li> </ul>	• The Competent Person has visited the site several times during the drilling program and has a long-standing understanding of the Cauchari Salar going back a decade.
Study status	<ul> <li>The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.</li> <li>The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.</li> </ul>	<ul> <li>A Definitive Feasibility Study (DFS) has been completed on the project by WorleyParsons, a major international engineering consultancy. The evaluation of ponds, process and brine extract and the associated modifying factors discussed more in detail below support the definition of Reserves.</li> <li>The DFS has defined a production well field configuration with numerous simulations of brine extraction over the proposed life of mine undertaken to evaluate the evolution of pumping, potential environmental impacts and to develop a production schedule for the project. This schedule is based on the</li> </ul>

Criteria	JORC Code explanation	Considerations for Mineral Brine Projects
		installation of 44 wells over the life of the study, with different wells operating in different periods of the mine life.
Cut-off parameters	• The basis of the cut-off grade(s) or quality parameters applied.	<ul> <li>No cut-off has been applied to the Resource, as it has a very high grade (&gt;1,000 mg/l lithium) and the high grades, which are all deemed to be economic, extend to the limits of the properties owned by the company.</li> </ul>
Mining factors or assumptions	<ul> <li>The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).</li> <li>The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.</li> <li>The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling.</li> <li>The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).</li> <li>The mining dilution factors used.</li> <li>Any minimum mining widths used.</li> <li>The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.</li> <li>The infrastructure requirements of the selected mining methods.</li> </ul>	<ul> <li>The Mineral Resource was converted to Mineral Reserves, based on the results of the DFS and consideration of the modifying factors identified in the DFS. As the project is advanced in nature, site-specific information is available for definition of the modifying factors.</li> <li>The mining method is dictated by the deposit type, which is a brine deposit in which brine is hosted in pore spaces between grains of sediments. Wells are installed to allow flow of brine to the wells and exploitation of the brine by pumping from the wells, developing cones of depression around the individual wells as brine flows to the wells. Limited shallow wells are considered for production from the shallow halite.</li> <li>There is no open pit or underground excavation (because the brine is pumped out from wells) and no geotechnical parameters are directly measured. The future change of lithium concentration in wells will be monitored as part of the future pumping and monitoring activities.</li> <li>The Mineral Reserve has potential dilution built in as it is the product of a groundwater model developed from drilling and water level information and is calibrated during actual project pumping data and water levels, with the estimation defined by the model showing the effects of and response to pumping and dilution simulated as part of modelling. There is no specific dilution factor.</li> <li>The mining recover conversion from Resources to Reserves, at close to 20% of Resources, is typical of results for lithium brine operations, taking account of losses/recoveries through the evaporation ponds and the production plant and recovery from the sediments hosting brine.</li> <li>Minimum mining widths are not relevant in the context of this project.</li> <li>Inferred Resources are not considered for the purposes of the production plan and Reserves, as all Inferred Resources have been converted to Indicated Resources and cannot be converted to Reserves.</li> <li>The infrastructure required for brine</li></ul>
Metallurgical factors	• The metallurgical process proposed and the appropriateness of that process to the style	The metallurgical process proposed is conventional pond evaporation, followed

Criteria	JORC Code explanation	Considerations for Mineral Brine Projects
or assumptions	<ul> <li>of mineralisation.</li> <li>Whether the metallurgical process is well-tested technology or novel in nature.</li> <li>The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.</li> <li>Any assumptions or allowances made for deleterious elements.</li> <li>The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole.</li> <li>For minerals that are defined by a specification, has the Ore Reserve estimation been based on the appropriate mineralogy to meet the specifications?</li> </ul>	<ul> <li>by a Salt Removal Plant and a conventional Lithium Carbonate Plant. The majority of the proposed equipment is in use on existing brine projects and is considered appropriate for the purpose of producing lithium carbonate.</li> <li>The metallurgical equipment proposed for the project is well tested and is considered appropriate for the project.</li> <li>Metallurgical test work was carried out with bulk brine samples and is considered appropriate to support the project.</li> <li>Pilot scale test work has been carried out by highly experienced processing companies GEA and Veolia.</li> </ul>
Environmental	• The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.	<ul> <li>The baseline environmental studies for the project have been prepared and submitted, along with the project EIA, which is being evaluated in detail by government departments who approve new developments of this type.</li> <li>The project comprised ponds, which at the end of the project will become large salt repositories, in addition to the salt storage pile where harvested waste salts are dumped.</li> <li>Sectorial permit requests are being prepared by the company.</li> </ul>
Infrastructure	The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed.	<ul> <li>The project is well supported by infrastructure. There is an existing power line that passes by the project, which has the capacity to supply the electricity needs of the project. The company has negotiated access to an industrial water supply for the project. The company owns rights to land for plant and pond and camp development. Transportation to the site has been evaluated by experienced consultants, and the necessary relationships defined for importation of raw materials to site and the storage and transportation of product from the site to the port for export. Labour for the project is available in the Copiapo area and within Chile, with an accommodation camp to be built to support construction and operation of the project.</li> </ul>
Costs	<ul> <li>The derivation of, or assumptions made, regarding projected capital costs in the study.</li> <li>The methodology used to estimate operating costs.</li> <li>Allowances made for the content of deleterious elements.</li> <li>The derivation of assumptions made of metal or commodity price(s), for the principal minerals and co- products.</li> <li>The source of exchange rates used in the study.</li> <li>Derivation of transportation charges.</li> <li>The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.</li> <li>The allowances made for royalties payable, both Government and private.</li> </ul>	<ul> <li>The project DFS has used costs based on vendor quotations and the extensive knowledge and database of WorleyParsons engineers, together with the experience of process consultant Peter Ehren.</li> <li>Operating costs were estimated based on the definition of the extraction process and test work which has been undertaken to define and optimise the process, with tests conducted at equipment suppliers and reagent consumption rates estimated for the process – which is a conventional evaporation pond and lithium carbonate processing operation. Vendor quotations were used for reagent costs, which together with electricity are the largest component of the project operation costs. Manpower levels are based on WP experience. Energy prices (mainly electricity and diesel fuel) and chemical prices correspond to expected costs for products delivered at the project's location.</li> </ul>

Criteria	JORC Code explanation	Considerations for Mineral Brine Projects
		<ul> <li>The process requires the removal of deleterious elements to specifications for the final high quality product and has been considered in the estimation of costs.</li> <li>The lithium carbonate price has been estimated using information provided by experienced industry analysts, Roskill. There is a significant margin between the estimated sale price and the estimated project operating cost.</li> <li>All costs were estimated in US\$. All values are expressed in 4Q18 US dollars; the exchange rate between the Chilean peso and the US dollar has been assumed as CHP\$ 650 / US\$; no provision for escalation has been included since both revenues and expenses are expressed in constant dollars. A US dollar Euro rate of 0.85 has also been used in some calculations.</li> <li>Costs of all production supply items have been taken at the Maricunga plant, thus there is no transport cost to add from the supply side.</li> <li>Prices for lithium carbonate considered in the economic evaluation, correspond to CIF China prices, with all costs items necessary to transport produced lithium carbonate to Antofagasta, or nearby Mejillones, both in Chile, which are usual export locations for this product. Additional costs to be considered correspond to port warehousing and handling fees, as well as ocean freight and insurance to a destination port in China.</li> <li>Lithium carbonate is a specialist product and is historically sold under contract, with prices specific to the purity provided by individual producers. The company will be supplying lithium carbonate, a universal product used by lithium product manufacturers.</li> <li>Allowance has been made for royalty payments to the government in the operating expenses. There are not private royalties on the project. Because there remains some uncertainty regarding royalties covering privately owned lithium project in Chile, certain assumptions have been made regarding the royalty regime. The uncertainty exists because Maricunga is the most advanced lithium</li></ul>
Revenue factors	• The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.	<ul> <li>The head grade has been determined by the groundwater model which has been developed for the project and is based on the drilling which was used to produce the Measured and Indicated Resources.</li> </ul>

Criteria	JORC Code explanation	Considerations for Mineral Brine Projects
	The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.	<ul> <li>Commodity prices are based on forward estimates by experienced industry consultants Roskill.</li> <li>All costs were estimated in US\$. All values are expressed in 4Q17 US dollars; the exchange rate between the Chilean peso and the US dollar has been assumed as CHP\$ 650 / US\$; no provision for escalation has been included since both revenues and expenses are expressed in constant dollars. A US dollar Euro rate of 0.85 has also been used in some calculations.</li> <li>Transportation costs are included in the estimation of operating costs (see section above).</li> <li>Product sale prices and potential penalties are discussed in the preceding section.</li> <li>The operating costs are for lithium carbonate only and do not include any allowance for by-product credits.</li> </ul>
Market assessment	<ul> <li>The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.</li> <li>A customer and competitor analysis along with the identification of likely market windows for the product.</li> <li>Price and volume forecasts and the basis for these forecasts.</li> <li>For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.</li> </ul>	<ul> <li>A lithium market analysis has been provided by industry consultants Roskill, who have provided a forecast of lithium carbonate battery and industrial grade prices until 2032. This forecast takes into account the supply and demand and changes in lithium product demands over this period. The trend is for very strong demand expansion for the sector, with factors likely to affect demand consisting principally in the uptake of electric vehicles globally, while supply is dependent of construction of additional mine supply but also refining capacity.</li> <li>The company is well placed to benefit from the market window caused by the significant increase in demand related to electric vehicle uptake.</li> <li>The company is well placed on the cost curve, and will produce a final product, unlike many hard rock competitor companies. The project will fall in the lower part of the cost curve, being competitive with other existing and forecasted new lithium projects.</li> <li>Roskill forecasts average annual prices for lithium carbonate to remain above US\$10,000/t long term on both a nominal and real (inflation adjusted) basis and rise to around US\$20-22,000/t in 2032 (around US\$16-18,000/t adjusting for inflation). This price level reflects the requirement for producers to invest in new capacity to satisfy future consumption and to incentivize the financing of new projects.</li> <li>Lithium carbonate is considered an industrial mineral, with two classes defined, industrial grade and the higher quality battery grade, with the distinction a slight difference in overall lithium content and is principally related to levels of impurities. The project intends to produce principally battery grade, with the provision for 2,000 t/a of industrial grade product.</li> </ul>
Economic	• The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.	<ul> <li>The economic analysis was undertaken by WorleyParsons using information compiled for the project and their extensive database of cost data. The project economics were estimated with discount rates between 6 and 10%, with 8% considered the mid-point base case. This was used to evaluate the range in NPV.</li> </ul>

Criteria	JORC Code explanation	Considerations for Mineral Brine Projects
	• NPV ranges and sensitivity to variations in the significant assumptions and inputs.	<ul> <li>Inflation was considered in the pricing supplied for lithium products by Roskill and the project costs are considered including inflation.</li> </ul>
Social	The status of agreements with key stakeholders and matters leading to social licence to operate.	<ul> <li>The company engaged early in the project assessment process, with communities that could be influenced by the project. This includes local government authorities, and Colla indigenous communities. Meetings were held with the mayors of the three nearest towns, Diego de Almagro, Chañaral and Copiapó, to present the project and to fully understand the concerns and issues of the community, were executed.</li> <li>MSB proposed in its EIA for these communities to receive 0.3 percent of the project sales as stakeholders in the project. All meetings and agreements with these groups have been well documented. It is important to note that the only interaction with the indigenous territories of the Collas during construction and operation of the project is the use of existing public roads that cross their territories. These public roads are also presently being used by other companies, including CODELCO (Chilean government) mine operations.</li> </ul>
Other	<ul> <li>To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:</li> <li>Any identified material naturally occurring risks.</li> <li>The status of material legal agreements and marketing arrangements.</li> <li>The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the Reserve is contingent.</li> </ul>	<ul> <li>The DFS has identified a number of risk factors, both related to the natural environment and other aspects of the project. The natural risks related to landforms, surface water run-off and water supply are considered to be manageable and relatively minor.</li> <li>Material legal agreements are understood to be in good standing. MSB is the owner of the mineral properties, with a minority holder (4%) on the <i>Litio</i> properties. The properties are granted mining leases. There is no current marketing arrangement in place, but an off-take agreement or similar is likely to be negotiated prior to or as part of the project financing.</li> <li>MSB has submitted the project Environmental Impact Assessment (EIA) and the baseline environmental monitoring information and is awaiting approval of the project EIA. MSB is preparing requests for the different permits that are required for project operation once the EIA is reviewed and accepted.</li> <li>MSB holds a CCHEN licence for the production of lithium from the old mining code properties held by the Company. MSB has applied for a CEOL licence for the production of lithium from the <i>Litio</i> properties, which were granted under the current mining code. The CEOL will allow production and exporting of lithium from the project.</li> <li>The company believes there are reasonable grounds to expect that the EIA will be approved and the CEOL obtained, as Chile is a well-established and supportive mining jurisdiction.</li> </ul>
Classification	<ul> <li>The basis for the classification of the Ore Reserves into varying confidence categories.</li> <li>Whether the result appropriately reflects the Competent Person's view of the deposit.</li> <li>The proportion of Probable Ore Reserves that have been derived from Measured</li> </ul>	• The Reserves classified as Proved correspond to Measured Resources in the <i>Cocina</i> and <i>Litio</i> properties. <i>Cocina</i> will be the initial focus of pumping and is located in the north of the salar, with additional Proved Reserves representing

Criteria	JORC Code explanation	Considerations for Mineral Brine Projects
	Mineral Resources (if any).	the initial 7 years of production from the <i>Litio</i> properties. Because there is naturally uncertainty regarding the long term evolution of pumping, Reserves beyond the 7 year time frame for extraction within the <i>Cocina</i> property and the <i>Litio</i> properties (for which a CEOL extraction licence has yet to be granted) have been classified as Probable. As required in the JORC reporting guidelines, all the Indicated Resources in the old mining code properties are classified as Probable Reserves.
Audits or reviews	• The results of any audits or reviews of Ore Reserve estimates.	<ul> <li>The Reserves have not been subject to an audit, however it is noted that the Resource to Reserve conversion factor is in line with those for other brine projects.</li> </ul>
Discussion of relative accuracy/ confidence	<ul> <li>Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the Reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.</li> <li>The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.</li> <li>Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.</li> <li>It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</li> </ul>	<ul> <li>The Mineral Reserve is considered to have a high level of confidence based on the original quality of information collected, the continuity of mineralization and the geostatistics and understanding of the geology, plus the amenability to extract by pumping. This statement relates to the global Reserve, which is based on Measured and Indicated Reserves.</li> <li>Modifying factors include the permitting of the project by the government, which requires approval of the project EIA and the issuing of the project CEOL. The Competent Person believes there is a reasonable probability that these will be approved.</li> </ul>

#### References

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

CIM Best Practice Guidelines for Resource and Reserve Estimation for Lithium Brines.