

**ASX RELEASE**

LPI: ASX - 22 January 2019

**DEFINITIVE FEASIBILITY STUDY CONFIRMS POSITIVE OUTCOME FOR  
MARICUNGA LITHIUM BRINE PROJECT**

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**Highlights**

- ✓ The Maricunga Lithium Brine project's Definitive Feasibility Study (DFS) supports 20,000 tonnes per annum (t/a) production of Lithium Carbonate Equivalent (LCE) over 20 years.
- ✓ Project NPV<sup>1</sup> (leveraged basis) of US\$1.302B before tax at 8% discount rate, providing an IRR of 29.8% and a 3.5 year Payback.
- ✓ Project operating cost places Maricunga among the most efficient producers, with OPEX of US\$3,772 per tonne (/t) without credits from a potassium chloride (KCl) by-product. KCl production was not considered in the DFS.
- ✓ Project's direct development cost estimated at US\$456M, with indirect costs of US\$45M and contingency costs of US\$63M, providing a total CAPEX of US\$563M.
- ✓ Maiden Mining Reserve estimate, reported in accordance with JORC and NI 43-101 guidelines, accounts for a total pumping extraction of 742,000 tonnes of LCE<sup>2</sup> prior to processing, exceeding the project mine life production estimate.
- ✓ Project infrastructure, including water rights, are secured through long term contracts for project construction and operation. Access to the National Power Grid has been granted by the Chilean authorities, thus future power supply is assured.
- ✓ DFS completed by Tier-1 engineering consultancy WorleyParsons to international standards (the Reserve estimate was prepared by FloSolutions). Accuracy of operating and capital cost estimates expected within a +/- 15% range.
- ✓ Discussions with major Chilean and international financial institutions to secure project development finance have commenced and are expected to be finalized during 2019. Approaches from international companies have been received regarding off-take agreements and future participation.
- ✓ The Company continues to work closely with the Chilean Government and other corporate bodies to finalize all remaining licenses, agreements and operational relationships.

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<sup>1</sup> Assumes a 50% leverage. On a "100% Equity Basis", the NPV is US\$1.286B, providing an IRR of 23.8% and a 4.1 year Payback.

<sup>2</sup> Adjusted for 58% lithium process recovery efficiency for total production of 430,000 tonnes.

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 Definitive Feasibility Study (DFS), now completed, for its Maricunga lithium brine project in northern Chile.

Access to the full DFS report prepared by WorleyParsons, is available on the LPI website <http://lithiumpowerinternational.com/>

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

"The Company is very pleased to advise of the successful completion of the Definitive Feasibility Study to international standards, on its Maricunga lithium brine project, with highly experienced engineering company WorleyParsons. The strong economics detailed in the DFS confirms the project's overall attractiveness as previously identified in the Preliminary Economic Assessment (PEA) study. The project, through its Joint Venture management company, Minera Salar Blanco S.A., is poised to advance to the next stages of development. Priorities will now shift to secure finance for the project and off-take agreements for the high purity lithium carbonate output."

## Definitive Feasibility Study and Key Highlights

The Definitive Feasibility Study (DFS) Reserve estimates of 742,000 tonnes of LCE (203,000 Proved - 539,000 Probable), supports the 20,000 tonnes per annum (t/a) projected for Maricunga throughout its 20 year mine life (Table 1). Resources have been updated to a total of 2,070,000 tonnes of LCE, now all are classified as Measured or Indicated (Table 2). Both Reserve and Resource estimates are prepared in accordance with JORC and NI 43-101 international reporting standards.

**Table 1: Mining Reserve for Pumped Lithium and Lithium Carbonate (LCE)**

Concession	Category	Extraction Years	Brine Vol. (Mm3)	Avg Li Conc. (mg/l)	Li Metal (tonnes)	LCE (tonnes)
Old Mining Code	Proved	1-7	21	1,051	22,000	115,000
	Probable	1-18	42	1,068	45,000	241,000
New Mining Code (Litio 1-6)	Proved	7-14	14	1,184	17,000	88,000
	Probable	14-23	48	1,170	56,000	298,000
Total 20 years production			117		130,000	692,000
Mining Reserve			125		139,000	742,000

**Table 2: Updated December 2018 Mineral Resource Estimate for Lithium Metal (Li) and Potassium**

	Measured (M)		Indicated (I)		M+I	
	Li	K	Li	K	Li	K
Property Area (Km2)	18.88		6.43		25.31	
Aquifer volume (km3)	3.05		1.94		5	
Mean specific yield (Sy)	0.04		0.11		0.07	
Brine volume (km3)	0.13		0.21		0.35	
Mean grade (g/m3)	48	349	128	923	79	572
Concentration (mg/L)	1,175	8,624	1,153	8,306	1,167	8,500
<b>Resource (tonnes)</b>	<b>146,000</b>	<b>1,065,000</b>	<b>244,000</b>	<b>1,754,000</b>	<b>389,000</b>	<b>2,818,000</b>

Notes to the Resource estimate: 1. JORC and CIM definitions were followed for Mineral Resources; 2. The Qualified Person for this Mineral Resource estimate is Frits Reidel, CPG; 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 December 24, 2018.

**Table 3: December 2018 Lithium Carbonate (LCE) and Potash Mineral Resource Estimate**

	Total Resource (M+I)	
Product	LCE (Li <sub>2</sub> CO <sub>3</sub> )	Potash (KCl)
Tonnes	2,070,000	5,383,000

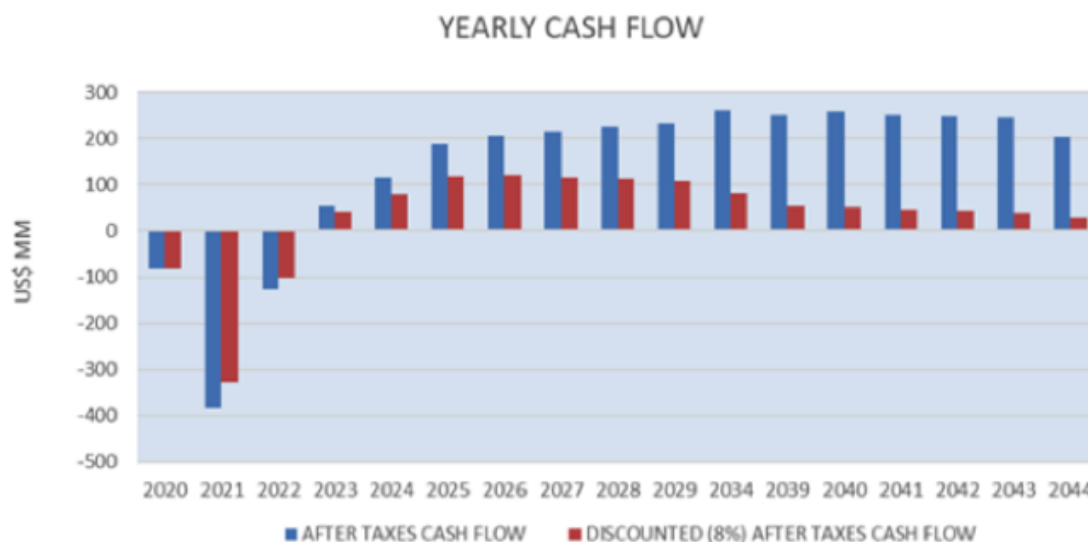
The strong economics of the project confirms the attractiveness of the project, with a leveraged NPV on a pre-tax basis (8% discount) of US\$1,302B, providing an IRR of 29.8% and a payback of 3.5 years. On a pure equity basis, the NPV is US\$1,286B with an IRR of 23.8% (Table 4).

**Table 4: Financial Model Summary (NPV, IRR, Payback)**

NPV Discount Rate	Levered (50%)		Pure Equity	
	Pre-Tax US\$M	After-Tax US\$M	Pre-Tax US\$M	After-Tax US\$M
NPV 8%	1,302	940	1,286	908
IRR	29.8%	26.7%	23.8%	21.0%
Project Payback (Yrs.)	3.5	3.5	4.1	4.2

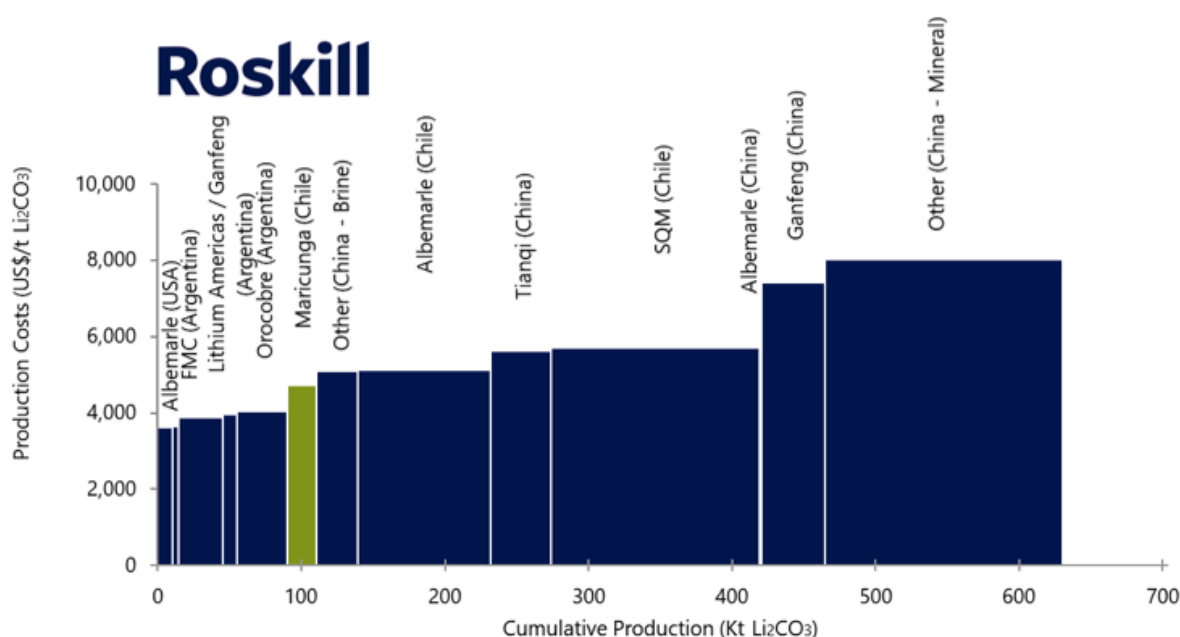
The project has a potential to generate 20 years of operational revenues of US\$6.93B and operating cash flow (EBITDA) of US\$5.07B. Annual Cash Flow profile (8% discount rate) is shown on Figure 1.

Figure 1: Annual Cash Flow

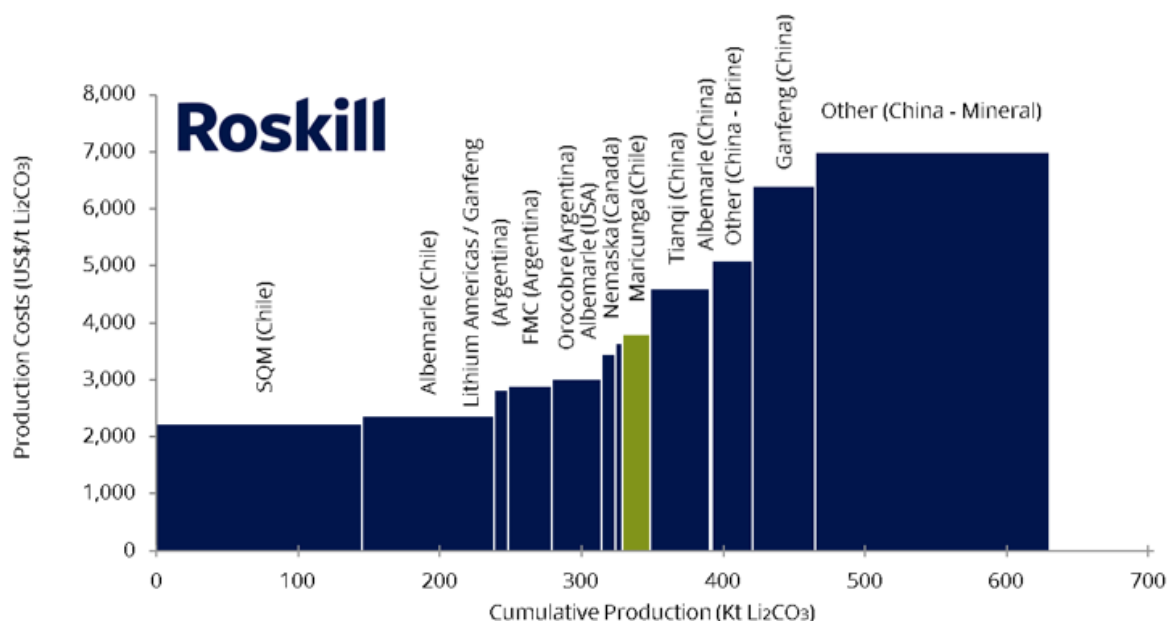


Operating cost (OPEX) of US\$3,772 per tonne, will place Maricunga among the most efficient lithium producers (Figure 2 and Figure 3). Production process design, as well as a future supply contract for the equipment and production plant, was awarded to Tier-1 German company GEA Messo (GEA), one of the leading suppliers to the lithium industry.

Figure 2: Lithium carbonate cash cost curve, including royalties, 2027 (US\$/t)



**Figure 3: Lithium carbonate cash cost curve, excluding royalties, 2027 (US\$/t)**



DFS price estimates were delivered by Roskill Consulting Group Ltd (Roskill). Roskill forecasts that the average annual price (in real terms) during the operational life of the project for battery grade lithium carbonate will be US\$14,400 /t.

All the necessary project infrastructure including water and power supply as well as road and port access, has now been secured. Priorities will shift to secure construction financing for the project. Discussions with major Chilean and international financial institutions to secure project finance for the project have commenced and are expected to be finalized during 2019. Moreover, a number of international companies have approached the Joint Venture Company for off-take agreements and potential equity participations.

## Forward Looking Statements

The DFS is based on forward looking information subject to both known and unknown risks and uncertainties that could cause actual future outcomes to differ materially from those defined in the DFS information presented in this document. This forward looking information includes details of the proposed production plant, lithium recovery rates, projected brine concentrations, capital and operating costs, permitting and approvals, levies, the project development timeline and exchange rates, amongst others.

This announcement was prepared based on the requirements of the JORC Code (2012) and the ASX listing rules. Material assumptions on which the DFS outcomes are based, are disclosed in this

announcement for the ASX and for exploration, Resource and Reserves in the JORC Table 1 of this report. Information on the updated project Mineral Resource and maiden Mineral Reserve is included in this announcement.

The LPI Board believes there is a reasonable basis for making these forward looking statements in this ASX release, with what is classified as a production target (the proposed 20 Kt/a lithium carbonate production) and financial forecasts. The Board considers that the Measured and Indicated Resources, the Proved and Probable Reserves and the current understanding of the modifying factors, as well as the extensive experience of the MSB management and project team's understanding of the context of operating mining projects in Chile, set a reasonable basis for the definition of the proposed production from the project.

## Key Project Risks - as shown in the DFS Report

- The risk of obtaining final environmental approvals from the necessary authorities in a timely manner;
- The risk of obtaining all the necessary licenses and permits on acceptable terms, in a timely manner or at all;
- Risks associated with pending government regulation with respect to lithium exploitation, especially with regards to royalty rates;
- The risk of changes in laws and their implementation, impacting activities on the properties;
- The risk of activities on adjacent properties having an impact on the Maricunga project.

## Definitive Feasibility Study - Key Parameters

The project plan is to produce 20,000 t/a of lithium carbonate (LCE), with key operating and capital costs summarized in Tables 5 and 6.

The study is based on extraction of an average 173 litres per second (l/s) of brine throughout the project life of 20 years, with a peak extraction rate of 300 l/s during the initial two years of the project, to allow filling of the ponds. The brine commences approximately 10 cm below the salt lake surface and extends below the base of the proposed well field at 200 m below the surface. A deeper hole drilled during the 2017 drilling campaign confirmed the presence of brine to a depth of at least 360 m. Brine will be extracted from a minimum of 12 individual wells, pumping via two central collection ponds to the evaporation ponds.

In the evaporation ponds, the brine will be concentrated through evaporation and chemical saturation, with precipitation of different salts, such as halite, sylvinite and carnallite. All salts that precipitate will be periodically harvested from the ponds and stored in designated stockpiles.



The sylvinite and carnallite salts will be sent directly to the KCl processing plant where, through processes of size reduction and classification, flotation, leaching, drying and packaging, KCl fertilizer, potash, will be obtained. The production of KCl was not included in the DFS and will involve additional engineering design at some time in the future.

Concentrated lithium brine from the evaporation ponds will be pumped to the reservoir ponds, which will feed a Salt Removal Plant. This plant will remove calcium impurities such as calcium chloride and tachyhydrite from the brine. This process will be achieved through consecutive evaporation and crystallization steps, and it allows a higher concentration of lithium in the input brine to the Lithium Carbonate Plant.

The concentrated lithium brine obtained from the Salt Removal Plant will be fed to the Lithium Carbonate Plant, where purification, solvent extraction and filtration remove remaining impurities including calcium, magnesium and boron. The concentrated lithium brine will then be fed to a carbonation stage, where through the addition of soda ash, the lithium carbonate precipitates. This precipitated lithium carbonate will then be fed to a centrifuge for water removal, and final drying, size reduction and packaging. The lithium and potash products will be exported from ports in the second region of Chile, near Antofagasta.

The project has excellent existing infrastructure. The project is located beside one of the international roads connecting Chile and Argentina. High capacity electricity infrastructure is also available nearby, providing the power supply option for the project development.

With the DFS completed and the project Environmental Impact Assessment (EIA) submitted, the Company is at the point of evaluating investment and project financing options and potential project offtake to proceed to a final project financial investment decision.

The Mineral Resource estimate consists of 100% Indicated and Measured Resources, totaling 2.07 Mt of LCE. The estimated Mineral Resources used in the study have been prepared by Competent Persons in accordance with requirements in the JORC code.

A hydrogeological model was developed to define a maiden brine Reserve for the project, taking into account the actual brine recovery from the aquifers. An overall Mining Reserve of 742,000 tonnes of LCE has been defined from brine extracted from the aquifers and pumped to the evaporation ponds, of which 203,000 is classified as Proved and 539,000 as Probable.

When lithium pond and process recovery of 58% is applied, this is equivalent to total production of 430,000 tonnes of LCE. Only 400,000 tonnes is required for the 20 year project mine life rate of 20,000 t/a LCE production.

**Table 5: Summary of operating costs per tonne (excluding KCl)**

Description - Operation Costs	US\$ / Tonne Li <sub>2</sub> CO <sub>3</sub> Battery Grade	US\$ / Tonne Li <sub>2</sub> CO <sub>3</sub> Technical Grade	Total 000 US\$ pa
<b>DIRECT COSTS</b>			
Chemical Reactives and Reagents	1,040	1,040	20,799
Salt Removal	486	486	9,727
Energy	1,028	1,028	20,552
- Electrical	370	370	7,398
- Thermal	658	658	13,154
Manpower	458	458	9,160
Catering & Camp Services	105	105	2,100
Maintenance	295	295	5,899
Transport	237	237	4,740
<b>DIRECT COSTS SUBTOTAL</b>	<b>3,649</b>	<b>3,649</b>	<b>72,977</b>
<b>INDIRECT COSTS</b>			
General & Administration - LOCAL	123	123	2,702
<b>INDIRECT COSTS SUBTOTAL</b>	<b>123</b>	<b>123</b>	<b>2,702</b>
<b>TOTAL PRODUCTION COSTS</b>	<b>3,772</b>	<b>3,772</b>	<b>75,679</b>

**Table 6: Summary of capital cost items (all inclusive)**

Area	Description	US\$'M
	<b>Direct Costs</b>	
1000	Brine Extraction Wells	39.4
2000	Evaporation Ponds	115.3
3000	Potassium Chloride Plant (Cost not included)	
4000	Carnalite Plant (Cost not included)	
5000	Removal of Salts	66.4
6000	Lithium Carbonate Plant	71.6
8000	General Services	103.3
9000	Infrastructure	60
	<b>Total Direct Cost</b>	<b>456</b>
	<b>Total Indirect Cost (10% of direct costs)</b>	<b>44.8</b>
	<b>Total Direct &amp; Indirect Costs</b>	<b>500.9</b>
	<b>Contingencies (14% of direct costs)</b>	<b>62.6</b>
	<b>TOTAL</b>	<b>563.4</b>



The Chilean Government has awarded the Company a licence for lithium production (CCHEN licence) for the grand-fathered old mining code properties. No CCHEN licence is required for the new code properties, however a CEOL agreement or a similar government approved contract, for production from the new mining code properties is required. MSB is currently in negotiation with the government and relevant corporate entities regarding approval of the CEOL.

As with all mining projects in Chile, acceptance of the project Environmental Impact Assessment (EIA) is required to obtain operating licences for the project. All of the properties have already been granted mining licences. The project EIA was submitted in 4Q18 and is progressing through the approvals process. The EIA will be reviewed in detail throughout 2019 by various Chilean government authorities, and MSB employees will respond to any queries raised, before final environmental approvals are granted.

It is envisaged that construction on the mine and lithium production plant will begin in 2020, with first production of lithium in 2023.

Through its interaction with various third party institutional and corporate entities, the Company believes there is a reasonable basis to expect it will be able to fund project development, via a mix of debt and equity. This view takes into account the quality of the project and very strong prospects and demand for lithium in the near future.

## Detailed Definitive Feasibility Study Information

### Project Background

The Maricunga lithium brine project is a salt lake where lithium (Li, for battery production) and potassium (KCL, for production of potassium chloride fertilizer – Potash) are dissolved in brine hosted in pore spaces within the lake sediments. MSB's Maricunga project is considered to be one of the highest grade lithium brine projects in existence.

The Maricunga project is located in northern Chile, home to the largest and highest grade lithium brine mines in the "Lithium Triangle" (Figure 4) and source of the world's lowest cost lithium production. Maricunga is regarded as one of the highest quality pre-production lithium brine development projects globally.

The 2016-18 drilling programs defined Measured and Indicated Resources comprising 2.07 Mt LCE defined to only 200 m (refer to the announcement on Resources and Reserves on January 21, 2019). During the drilling program one deep hole (S19) was drilled to 360 m, which together with the seismic, AMT and gravity geophysics executed over the area, gives the Company a high degree of confidence there is a continuation to a depth of around 500 m of the aquifers hosting lithium Resources above 200 m.

It is important to note there are fundamental differences between salt lake brine deposits and hard rock metal deposits. Brine is a fluid hosted in porous sediment and has the ability to flow in response to pumping or use of a natural hydraulic gradient. Brine projects almost always have lower operating costs than hard rock projects, because there is no need to crush rock and sell a low grade concentrate for refining. Instead, brine operations directly produce and sell a high grade saleable lithium carbonate product.

MSB has now completed extensive test work optimizing the production process and the Salt Removal Plant with leading global equipment providers GEA of Germany and Veolia. Test work has refined the process and quantities of chemical reagents, to produce the best possible estimate of project operating costs. The operation costs fully reflect the cost of operation of the Salt Removal Plant in addition to the Lithium Carbonate Plant.

### **Capital Costs**

Capital expenditures are based on an annual operating capacity of 20,000 t of Lithium Carbonate Equivalent (LCE). The project has the potential to produce 74,000 t of KCl, however the capital cost of this plant is not included in the capital estimate, as a decision to commence KCl production would be taken after two years of project operation when the first potassium salts would be harvested. Capital equipment costs have been obtained from budget price information solicited by engineering consultants WorleyParsons (WP).

The estimates are expressed in US\$ as of Q418. No provision has been included to offset future cost escalation since expenses, as well as revenue, are expressed in constant dollars. Accuracy of the estimate is expected to be within a +/- 15% range (plus indirect and contingency costs – of which LPI's part would be 51%).

The capital costs include direct and indirect costs for:

- Brine production well fields and the pipeline delivery system;
- Evaporation ponds, platforms, cutting and filling;
- Salt Removal Plant;
- Lithium Carbonate Plant;
- General services;
- Infrastructure.

The capital investment for the project, including direct costs such as equipment, materials, indirect costs and contingencies during the construction period, is estimated to be approximately US\$563M

excluding the KCl plant (which is not included in the CAPEX, OPEX or project financial analysis).

The total direct project costs of the capital investment represent US\$456M; indirect project costs represent US\$44.8M (10% on direct costs) with a conservative provision for contingencies of US\$62.6M (14% on direct costs). Total capital expenditures are summarized in Table 6.

### **Operating Costs**

The operating cost estimate for 20,000 t/a LCE is based upon process definition, laboratory work, tests at equipment suppliers and reagents consumption rates determined by engineers and consultants to the Company. Vendor quotations have been used for chemical reagent costs. Expense estimates, as well as manpower levels are based on WP engineers experience on lithium projects and additional information delivered by MSB. Prices for electricity and diesel fuel correspond to quoted costs for products delivered at the project's location.

Chemical reactives and reagents are the major operating costs of the project, closely followed by energy costs. Overall, 90% of the chemical costs correspond to soda ash, of which 20,000 t/a are required to produce 20,000 t/a of LCE, with the long term soda ash price averaging US\$938/t of LCE produced. Other important expense items are salt removal (excavating salt from ponds and transporting to waste dumps, so pond walls do not need to be raised), manpower and maintenance. The LCE production costs are summarized in Table 5.

### **Financial Analysis**

To carry out the project's economic evaluation, pre-tax and after tax cash flow models were developed. Inputs for these models were the capital and operating cost estimates, as well as a production plan and flow sheet based on the development of a production well field layout and the hydrogeological model for Resource extraction, with lithium carbonate pricing as forecast by industry consultants Roskill.

Model results include the project's NPV at different discount rates (between 6 and 10%), IRR and payback period. These parameters were calculated for different scenarios; in addition, a sensitivity analysis on the most important revenue/cost variables (CAPEX, sale price, production tonnage and OPEX) was performed. An 8% discount rate was used as a mid-range scenario for the project, when looking at a 100% equity financing position for the project and a 50/50 leveraged scenario. With the forecast lithium market demand there are opportunities for debt financing (which the Company will be pursuing) for future low-cost lithium brine producers such as the Maricunga project. The 8% figure was used as a nominal selection for the DFS, based on the extensive experience of WorleyParsons in working on similar projects.

For economic evaluation purposes, it has been assumed that 100% of capital expenditures, including pre-production expenses and working capital are financed solely with owner's equity. Given the level

of rates of return obtained (23.8% pre-tax, 21% post tax), leverage further improves these rates of return, particularly once the debt/equity ratio of the project financing is finalized.

Income tax rate for corporations such as MSB have been set at 27%. In the case of long lead projects, such as Maricunga, Chilean VAT law allows for direct recovery from the government of VAT paid during the construction period. Additionally, in the case of companies that export all or nearly all of their production, they can recover directly from the government VAT paid on all supplies.

### **Key Assumptions and Sensitivity Analysis**

Key material assumptions used for the DFS include a defined production flow sheet; assumptions regarding evaporation and rainfall rates – based on available data; and assumptions regarding future royalties (7.5% applied). For lithium carbonate sales pricing over the life of the project real (inflation adjusted) price estimates were obtained from well-established mineral industry consultants Roskill. Battery grade pricing shows an increase from US\$13,262 in 2023 to US\$17,616 in 2032 and beyond. Industrial grade pricing shows an increase from US\$12,270 in 2023 to US\$16,191 in 2032 and beyond. Information used to derive capital expenditures is based on the experience of WorleyParsons and the process proposed by experienced consultants working for MSB.

Sensitivity analysis has been carried out using a range of parameters (Tables 7 and 8), such as lithium and potassium prices, production volumes, operating costs, capital expenditures and royalties. This analysis shows that the project is most sensitive to the production rate, and the lithium carbonate price, followed by project operating expenses, with less sensitivity to capital expenditure and the assumptions on the future royalty rate.

### **Project Properties and Chilean Mining Law**

The Maricunga Lithium Project consists of the *Litio 1-6 (1,438 ha) and adjacent Cocina 19-27 (450 ha), San Francisco, Salamina and Despreciada (675 ha together)* mining properties (Figure 6). The *Cocina 19-27, San Francisco, Despreciada and Salamina* concessions were constituted under the 1932 Chilean mining law and have grand-fathered rights for the production and sale of lithium products; unlike the *Litio 1-6* concessions which were constituted under the 1983 Chilean mining law and require additional government permits, such as a CEOL or other types of agreements with Government bodies, for the production and sale of lithium.

Chilean regulation requires that the Chilean Nuclear Energy Commission (CCHEN in Spanish) authorize a quota of production and commercialization of lithium salts (products) for any company in the country. MSB has received the necessary CCHEN permit for the grand-fathered properties.

According to MSB's interpretation of the relevant legislation, the 1932 Chilean mining law concessions are exempt from any special royalties on lithium carbonate production and would be subject to royalties only under the general mining regime. If this is case, and if MSB could produce 100% of the

brine required for the plant from the old properties, yearly royalties would amount to approximately US\$3.3M per year. This is equivalent to about 1% of annual sales.

**Table 7: Unleveraged Financial model summary sensitivity information NPV**

Pre Tax Situation							
Driver Variable	Base Case Values		Project NPV (MUS\$)				
			75%	90%	100%	110%	125%
CAPEX	MUS\$	563	1,417	1,338	1,286	1,234	1,156
Price (max)	US\$/tonne	17,280	671	1,040	1,286	1,532	1,901
Production	Tonne/yr	20,000	832	1,105	1,286	1,467	1,737
OPEX	US\$/tonne	3,772	1,440	1,348	1,286	1,225	1,133
Post Tax Situation							
Driver Variable	Base Case Values		Project NPV (MUS\$)				
			75%	90%	100%	110%	125%
CAPEX	MUS\$	563	1,014	950	908	864	800
Price (max)	US\$/tonne	17,280	450	725	908	1,090	1,363
Production	Tonne/yr	20,000	572	774	908	1,041	1,239
OPEX	US\$/tonne	3,772	1,023	954	908	862	792

**Table 8: Unleveraged Financial model summary sensitivity information IRR**

Pre Tax Situation							
Driver Variable	Base Case Values		IRR				
			75%	90%	100%	110%	125%
CAPEX	MUS\$	563	29%	26%	24%	22%	19%
Price	US\$/tonne	17,280	17%	21%	24%	26%	29%
Production	Tonne/yr	20,000	19%	22%	24%	25%	28%
OPEX	US\$/tonne	3,772	25%	24%	24%	23%	22%
Post Tax Situation							
Driver Variable	Base Case Values		IRR				
			75%	90%	100%	110%	125%
CAPEX	MUS\$	563	25%	23%	21%	20%	18%
Price	US\$/tonne	17,280	15%	19%	21%	23%	26%
Production	Tonne/yr	20,000	17%	20%	21%	22%	24%
OPEX	US\$/tonne	3,772	22%	22%	21%	20%	20%

The Chilean government is currently reviewing a future regime for lithium production for the country which will probably include a royalty structure. It needs to be noted that MSB fully owns its mineral concessions and will not be exposed to additional payments for example: long term lease payments as the ones CORFO, owner of the Atacama salar, collects from SQM and Albemarle. For the DFS a conservative potential royalty rate of 7.5% of sales was applied for the project.

**Figure 4: Maricunga project location in the Lithium Triangle in Chile**





## **Project Study Team**

A team of experienced consultants were assembled by the Company (Table 9 below) for the DFS working with MSB management. The DFS is based on data collection that began in 2011 and continues today.

Tier-1 engineering consultancy WorleyParsons (WP) undertook the project engineering, continuing on from the work they did on the project PEA. Given their extensive experience with both lithium feasibility projects and lithium operations WP was responsible for the engineering design, pond design, geotechnical evaluation and cost compilation. Tier-1 environmental consultancy Stantec (formerly MWH) undertook the environmental baseline and EIA report preparation for the project, with internal review by MSB staff of engineering and environmental reports prepared by consultants.

Experienced lithium process engineer Peter Ehren coordinated process evaluations and optimization by major global equipment developer and supplier GEA for the lithium production processes.

Infrastructure studies were commissioned to specialist consultancies, each an expert in their fields. The project Mineral Resources were estimated by FloSolutions, a specialist groundwater consultancy that also developed the hydrogeological model for the project with personnel from DHI, the developer of the Feflow groundwater modelling software. The optimization of the hydrogeological model was completed in Q418, with information from the model used as a key input to the Project EIA and to define lithium brine Reserves. Working with MSB to act as a counterpart to FloSolutions throughout the development of the hydrogeological model was Dr Carlos Espinosa, a highly experienced Hydrogeologist who has been involved with government water agencies for many years.

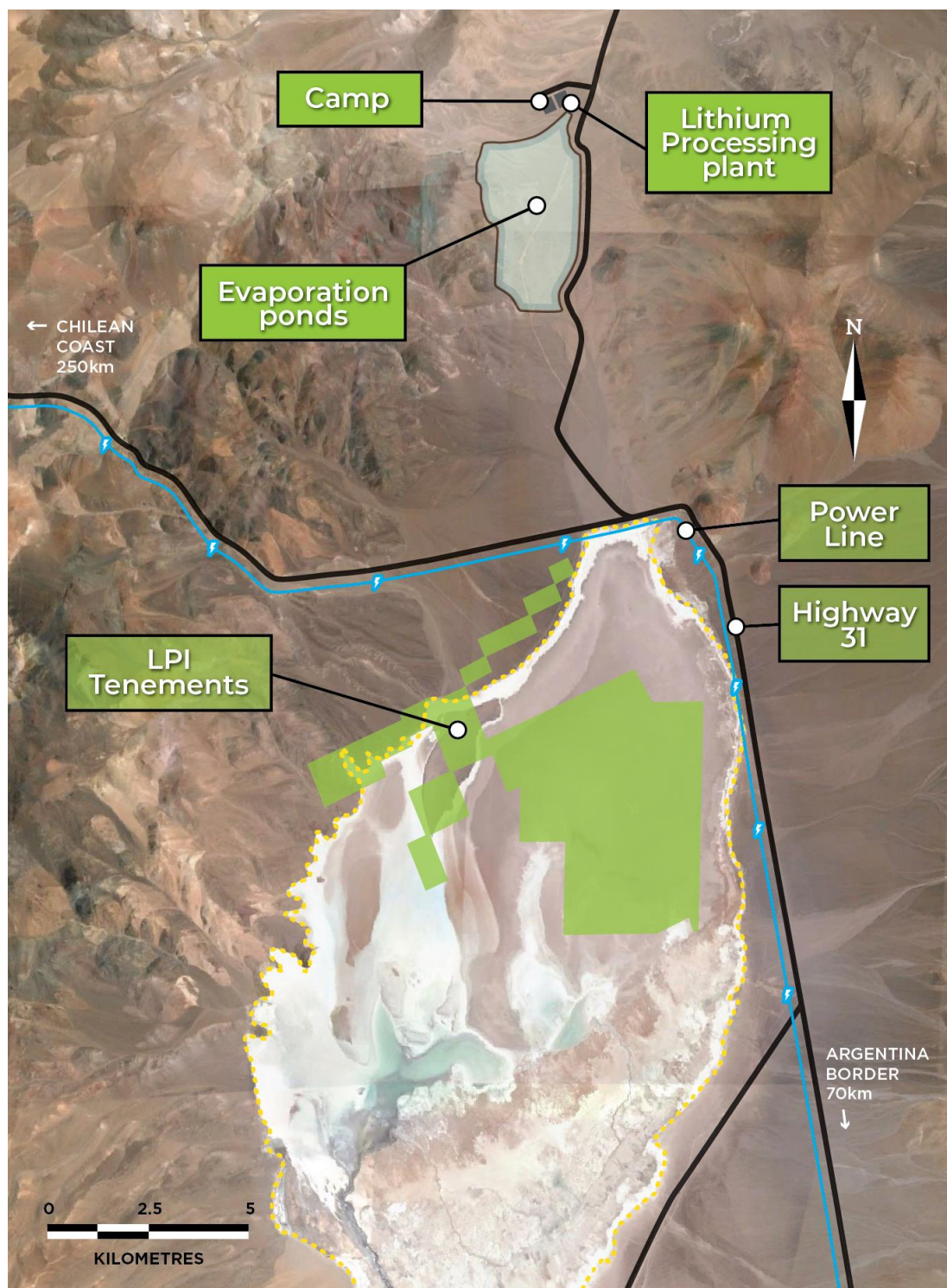
## **Mineral Resources and Reserves**

MSB completed a drilling and testing program from 4Q16 through 2Q17, following on from previous drilling and pumping tests conducted in 2012 and 2015 respectively. These investigations culminated in the release of an updated lithium and potash Resource for the project in July 2017. As 20% of the Mineral Resource was in the Inferred category, defined below 150 m in the *Litio* properties, two additional sonic holes were drilled in 2H18 to a depth of 200 m, to convert this Inferred Resource to Indicated classification. The reader is referred to the recent announcement made by the Company on 21 January 2019, outlining the updated project Resource and maiden project Reserve.

The Measured category comprises 37% of Resources and the Indicated category 63% of Resources with the total Measured and Indicated Resources depth comprising the 2.07 Mt LCE Resource defined to only 200 m (Table 10) depth. The conversion of the lithium and potassium content to LCE and potash is shown in Table 11.



Figure 5: Maricunga JV properties



**Table 9: Responsibilities for individual components of the DFS**

Responsibility	Consultants	Office location
Project Engineering	WorleyParsons	Santiago, Chile
Process Engineering	PEC – Peter Ehren	La Serena, Chile
Lithium pilot plant/Process equipment	GEA Messo	Düsseldorf, Germany
Geotechnical Evaluation	WorleyParsons	Santiago, Chile
Evaporation pond design	WorleyParsons & PEC	Santiago, Chile
Environmental baseline & reporting	Stantec (formerly MWH)	Santiago, Chile
Process water supply	FloSolutions	Santiago, Chile
Mineral Resource Estimation	FloSolutions	Santiago, Chile
Hydrogeological Modelling	FloSolutions	Santiago, Chile
Hydrogeological review	Dr Carlos Espinosa	Santiago, Chile

**Table 10: July 2017 Maricunga JV Mineral Resource Estimate**

	Measured (M)		Indicated (I)		M+I	
	Li	K	Li	K	Li	K
Property Area (Km2)	18.88		6.43		25.31	
Aquifer volume (km3)	3.05		1.94		5	
Mean specific yield (Sy)	0.04		0.11		0.07	
Brine volume (km3)	0.13		0.21		0.35	
Mean grade (g/m3)	48	349	128	923	79	572
Concentration (mg/L)	1,175	8,624	1,153	8,306	1,167	8,500
<b>Resource (tonnes)</b>	<b>146,000</b>	<b>1,065,000</b>	<b>244,000</b>	<b>1,754,000</b>	<b>389,000</b>	<b>2,818,000</b>

Notes to the Resource estimate: 1. CIM definitions were followed for Mineral Resources; 2. The Qualified Person for this Mineral Resource estimate is Frits Reidel, CPG; 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 December 24, 2018.

**Table 11: July 2017 Maricunga JV Mineral Resource Estimate**

	Total Resource (M+I)	
Product	LCE (Li <sub>2</sub> CO <sub>3</sub> )	Potash (KCl)
Tonnes	2,070,000	5,383,000

The calibrated Reserve model is used to simulate a brine extraction system that will meet the brine feed requirements for the evaporation ponds for an annual lithium carbonate (LCE) production target of 20,000 t/a. It is assumed that the project has a lithium process recovery efficiency of 58%. Therefore, to meet the target LCE production rate of 20 kilotonnes per year (Kt/a), the brine abstraction from the production wellfield in the salar needs to be at a rate of 34.6 Kt/a.

The Reserve model predicts that the proposed brine extraction system can extract a cumulative average of 34.6 Kt/a of LCE.

The mining Reserve for the project to a depth of 200 m takes account of modifying factors applicable to the Maricunga project at the point of brine production, such as brine pumping limitations. Additional modifying factors related to the pond and processing efficiency (considered to be 58% for brine pumped to pond and exiting the plant as lithium carbonate) correspond to 430,000 tonnes of LCE product, supporting the 20,000 tons per annum (t/a) projected for Maricunga throughout its 20 years mine life. The Reserve is summarized in Table 12.

**Table 12: Lithium Reserve Estimate (adjusted for 58% lithium process recovery efficiency)**

Lithium Brine Mining Reserve Estimate - dated January 15, 2019						
Concession area	Category	Year	Brine Vol	Ave Li conc (mg/l)	Li metal	LCE
			(Mm3)		(tonnes)	(tonnes)
Old code	Proved	1-7	21	1,051	22,000	115,000
	Probable	1-18	42	1,068	45,000	241,000
Litio 1-6	Proved	7-14	14	1,184	17,000	88,000
	Probable	14-23	48	1,170	56,000	298,000
Total		1-23	125	1,117	139,000	742,000
Lithium Brine Available for Production (accounting for 58% lithium pond and process recovery efficiency) - dated January 15, 2019						
Concession area	Category	Year	Brine Vol	Ave Li conc (mg/l)	Li metal	LCE
			(Mm3)		(tonnes)	(tonnes)
Old code	Proved	1-7	21	1,051	13,000	67,000
	Probable	1-18	42	1,068	26,000	140,000
Litio 1-6	Proved	7-14	14	1,184	10,000	51,000
	Probable	14-23	48	1,170	32,000	173,000
Total		1-23	125	1,117	81,000	430,000

### Wells and Pipelines

A minimum of 12 wells are planned for the project, based on the flow rates observed in pump tests to date and the results of the groundwater model, with which an optimized wellfield location was established for brine extraction. The well field consists of 44 wells over the life of the project (Figure 6), with no more than 15 wells pumping at any one time. Wells are between 11 and 208 m deep, although 200 m deep wells are predominant. The total includes wells that allow for normal mechanical and electrical availability and utilization purposes.

Production wells will pump brine from both the upper halite aquifer and the lower aquifer (gravel, volcanoclastic units). However, extraction from the very high grade upper halite aquifer is relatively limited, to minimize any impact of pumping from this unit on water in the gravels surrounding the salar. The pumping rate will vary seasonally to take advantage of the periods of peak evaporation, consequently pumping rates will vary between 55 and 234 l/s, with an average flow rate of 173 l/s throughout the project life. The well field will obtain a maximum pumping rate of 300 l/s during the first two years of the project, when the evaporation ponds are filled.

Operation of the wells will also require periodic maintenance to clean wells and pumps due to a buildup of crystalline salts. The brine from individual wells will be pumped via two centralized open pond locations, then to the pond area for evaporation and later processing.

The Reserve model separately tracks brine that originates outside of the property boundary. It predicts that a small amount (4%) of the lithium produced by the wellfield may originate outside the project properties.

### **Evaporation Pond Design**

The function of the ponds is to promote solar concentration of the brine extracted from the salar. The evaporation ponds comprise three types; solar evaporation ponds proper, discard ponds and the lithium brine pool or reservoir. The construction of the ponds will be done by cut and fill construction, so the base of the ponds is horizontal and the pond walls of constant height with ponds approximately 2 m deep. The ponds will be lined with an HDPE membrane for waterproofing. The membrane specification will ensure long term resistance to impacts and punctures for operation as non-harvestable and harvestable evaporation ponds.

Brine transfer from one pond to the next is done by gravity. However, when this is not possible, a pumping station will be installed. In this case power supply is aerial. All ponds will have access roads for monitoring and maintenance activities. In addition, contour channels will be constructed where required in order to divert the rain waters of the zone. Geotechnical studies and site evaluation have been undertaken in the area where the evaporation ponds will be located.

WorleyParsons has designed the evaporation ponds, working with Peter Ehren of PEC. The ponds are to be located beginning ~5km to the north of the salar (Figure 6), where they can be constructed taking advantage of the modest natural slopes, and gravel and sand that can be easily shaped into pond embankments.

### **Salt Removal Plant**

The brine that comes from the ponds is in a first instance fed to the Salt Removal Plant, which, through the processes of evaporation and crystallization, allows the concentration of the lithium contained in the brine, and at the same time enables the elimination of excess calcium and other impurities from



the brine in the form of tachyhydrite and calcium chloride. This stage allows feeding of more concentrated brine to the following stages of processing, improving their efficiency and producing salts that may have market potential. It additionally generates water recovery that is used in the process.

### **Process Plants**

MSB has worked with experienced suppliers Veolia, GEA, Andritz and FLSmidth and their laboratories, with GEA undertaking the final more detailed pilot plant test work using Maricunga brine. Concentrated brine from the Salt Removal Plant is sent to the Lithium Carbonate Plant, which by means of purification processes, solvent extraction, carbonation and drying, removes the remaining contaminants present in the brine, such as boron, magnesium and calcium. In this manner, lithium carbonate is obtained as the final product.

The facilities that make up the plant comprise a solvent extraction building, a brine purification building which includes a magnesium and calcium abatement section, storage of sodium sulphate, and the lithium carbonate building which includes a wet area, filtering, drying, packaging and storage of products. The simplified process flow sheet diagram can be seen in Figure 7. The project has a defined 2 year ramp-up stage and a long term planned production of 18,000 t/a of battery grade and 2,000 t/a of industrial.

### **Project Infrastructure**

WorleyParsons has conducted designs and costing for the project infrastructure, the project construction facilities, and long term camp facility.

Site infrastructure consists of:

- Power and water supplies;
- Project accommodation camp and offices, laboratory, parking, workshops, general warehousing, weighing station and local access roads;
- Reagent preparation building (includes solvent extraction reagent warehouse, hydrochloric acid reception, caustic soda preparation), storage and preparation of soda ash;
- Fuel plant and station;
- Storage and distribution of sulfuric acid and lime plant;
- Compressors room; boiler room; water conditioning plant; and
- Lithium Carbonate Plant.

### **Power Supply**

The project initially requires 14.6 MW of electrical power. The Chilean government Electric Coordinator has already given MSB the authorization to consume 7.5 MW connecting to the existing 23 kV transmission line that passes by the project from the substation at the La Coipa mine. This existing line was originally built with 66 kV capacity by gold miner Kinross to allow for future mining projects but is only being operated at 23 kV. Consequently, the Company plans to change the transformers at the substation and increase the capacity of the existing electricity line. Figure 8 shows electricity infrastructure along the initial section of the international road to the project.

### **Water Supply**

The Company has negotiated access to an established water well in the area on the eastern side of the salar, known as CAN-6. This well will provide the necessary volume of water for the lithium carbonate production.

The water supply will be pumped from the well CAN-6 nearby to the salar to an industrial water storage pool at the plant site. Industrial water will be treated in a reverse osmosis plant located inside the plant. This plant will feed tanks that will supply water to the process and purify the water for the camp. The rejection from the reverse osmosis plant will be used as dilution water for the pumps in the evaporation ponds.

### **Transportation**

The Ultramar Logistics Group was hired to provide initial advice on haulage and storage options for materials being transported to and from the Maricunga project, including lithium carbonate and potash products, and particularly inbound soda ash. This recommended any future potash production can be shipped from site in bulk haulage transport and potentially sold to SQM. The lithium carbonate exports can be made through the port of Angamos and the sodium carbonate (soda ash) imports can be made through the port of Antofagasta. Existing public roads for heavy haulage are available close by for the Maricunga project's needs to and from the coast.

### **Marketing Study**

MSB commissioned commodity market consultants Roskill to provide a report on lithium market dynamics, market supply and demand and forward pricing. This suggests robust future pricing, although there may be short term variability. Roskill suggest battery grade lithium carbonate will range between US\$13,263 in 2023 and US\$17,616 in 2032 in inflation adjusted terms, with industrial grade pricing estimated at US\$12,270 to US\$16,191 over the same period. From 2032 to 2044 the price has been treated as constant.

Lithium and potassium are industrial minerals and as such the prices for sale of these products may not be readily quoted in financial media. The lithium market is growing very strongly through the use of lithium in electronic applications and the predicted very significant expansion of electric vehicles and batteries for large scale energy storage. Both these applications will include demand for a significant volume of lithium products and consequently the quoted long term and spot prices for lithium have increased significantly in the last two years. However, traditional users of lithium such as glass and grease manufacturers remain a viable market sector for sales.

It should be noted that the lithium and potash markets have a high degree of producer concentration and the value of lithium and potash products is a function of product quality, volume of supply to the market, production costs and transport and handling. As lithium products are high value products, transportation and sales make up much less of the total production cost than that of potash (KCl).

### **Environmental Impact Assessment**

All the engineering done by WorleyParsons (WP) was provided to Stantec to complete the Environmental Impact Assessment (EIA) of the project covering the construction, operation and closure of the mine. The final EIA document was submitted to the government authorities and has passed the initial 45 day assessment period, with assessment by government agencies ongoing. The baseline study and EIA includes assessments of: climate and meteorology, air quality, noise and vibrations geology, geomorphology and natural risks, hydrogeology, water balance, soil, flora, fauna, archaeology, landscape, tourism and facilities and human environment.

The EIA also includes the construction and operation of a KCl plant, while the DFS only provides engineering for a Lithium Carbonate Plant, with KCl production to be considered in the future, once potassium salts have been accumulated.

### **Community Relations**

MSB engaged early in the project assessment process, with communities that could be influenced by the project (Figure 9). This includes local and 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.

MSB has concluded agreements with the indigenous Colla community, and the local towns whereby these communities 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.



## **Project Funding**

The Company has continued to increase confidence in the project by completing a Definitive Feasibility Study and developing Mineral Reserves for the project, optimizing engineering design, improving the accuracy of the project capital and operating costs, together with delivering the supporting project infrastructure studies, submitting the project EIA and working with local communities to ensure they benefit adequately from the project.

Given the quality of the project, the mining jurisdiction and the global demand for lithium, the Company is confident that appropriate funding will be obtained to take the Company forward to development. LPI as operator and 51% owner of the project would be required to fund US\$287M of the project development.

**Figure 6: Location of planned project infrastructure**

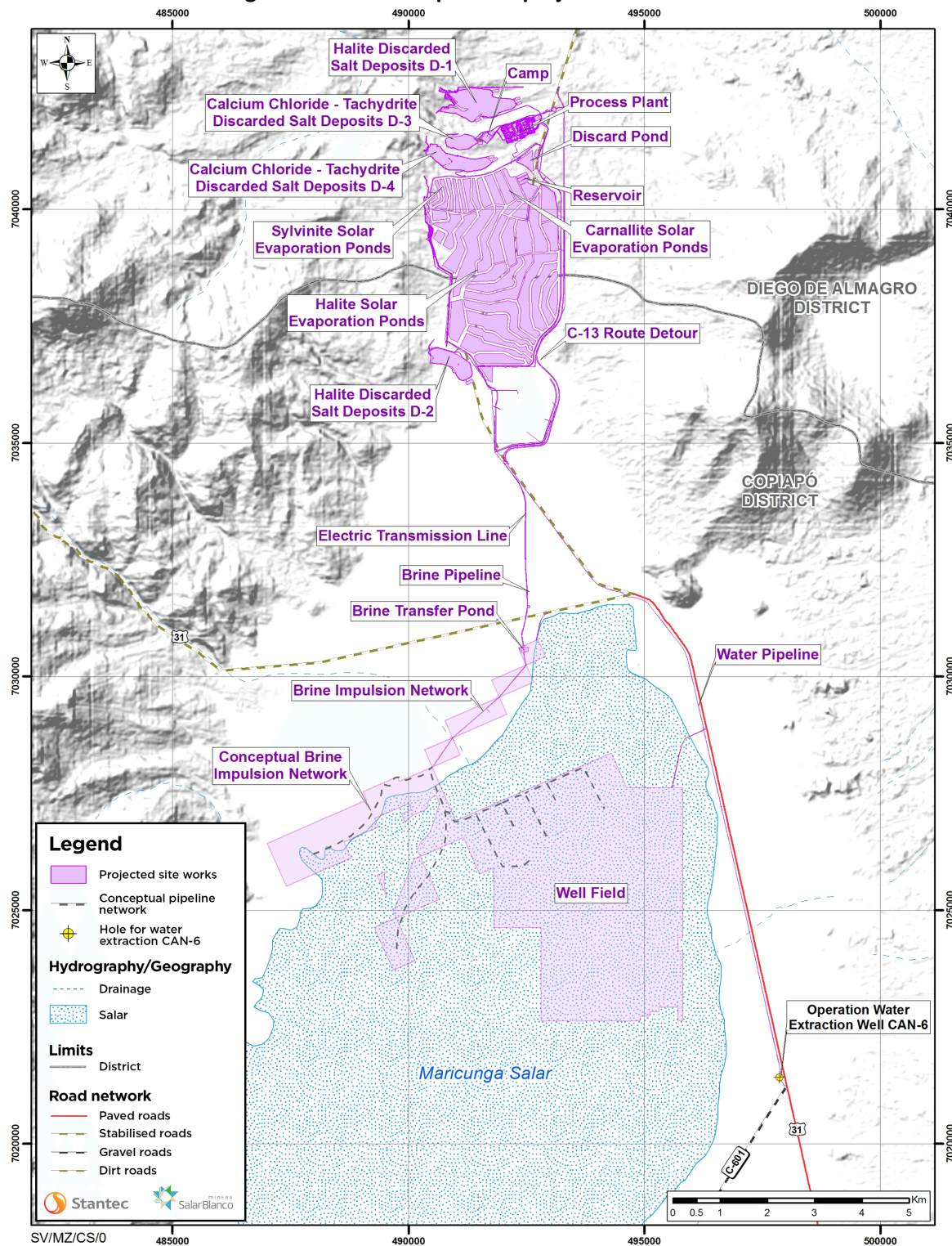


Figure 7: Simplified project flow sheet

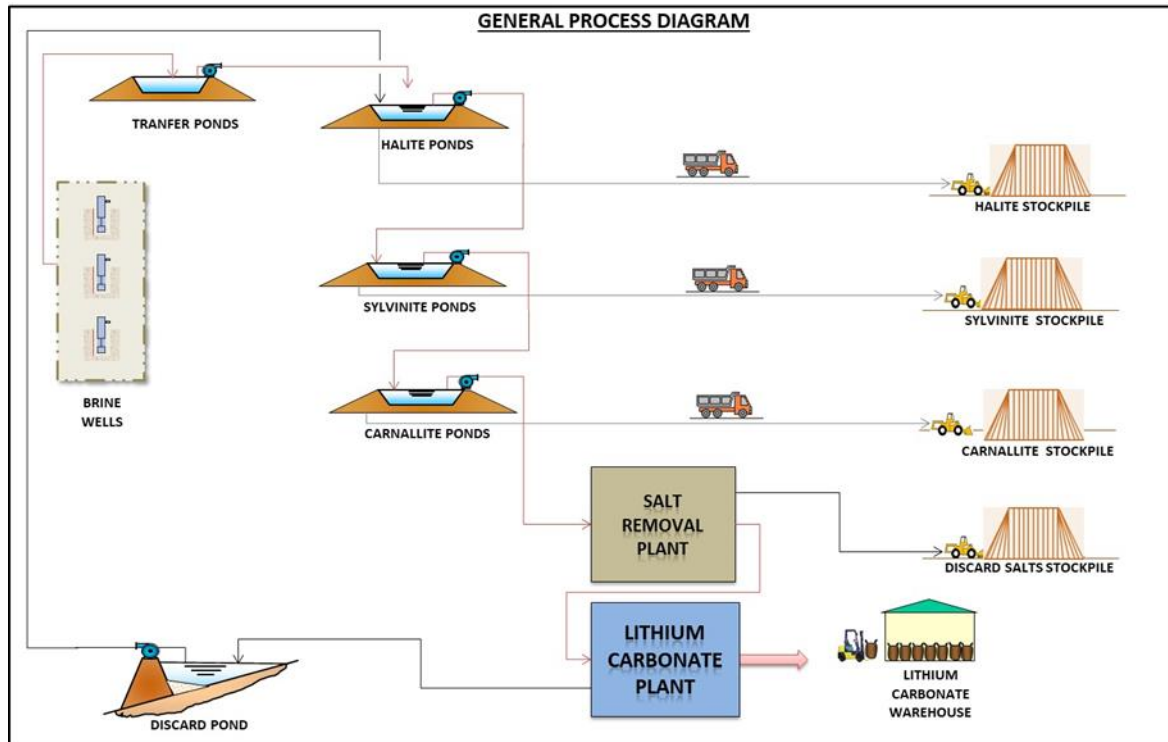


Figure 8: Existing electricity infrastructure along the road to Maricunga





**Figure 9: Community meeting with Community stakeholders**



### **Planned Activities**

The DFS shows a highly positive outcome for the project and both the MSB and LPI Boards are currently evaluating the potential funding opportunities that would result in project development. Despite recent share market uncertainty, many manufacturers with long term lithium requirements continue to look for and fund quality lithium projects.

In parallel with evaluation of financing options, the necessary additional operational permits will be obtained for the project and agreements with future suppliers firmed up to allow a rapid transition to construction.

### **Competent Person Statements**

The information contained in this ASX release relating to project engineering has been compiled by the WorleyParsons Santiago, Chile team. The report by WorleyParsons (WP) was reviewed by Marek Dworzanowski, Pr.Eng, BSc (Hons), FSAIMM of WP. Mr Dworzanowski is a Competent Person (CP) and is independent of MSB. WP is responsible for the engineering design for the project. WP has consented to the presentation of the information in the form it is presented in this announcement. The WP team has been externally supervised by the MSB representatives highly experienced Process Engineer Peter Ehren and Engineer Hugo Barrientos. Mr Ehren and Mr Barrientos are independent of the Company and MSB and consent to the inclusion in this announcement of this information in the form and context in which it appears.

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 JORC compliance of the Resource estimation undertaken by FloSolutions 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 information contained in this ASX release relating to Reserves has been compiled by Frits Reidel. Mr Reidel is a Hydrogeologist and is a Certified Professional Geologist of the American Institute of Professional Geologists (AIPG). Mr Reidel 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). The Reserve estimation was undertaken by FloSolutions of Santiago, Chile working with DHI of Lima, Peru.

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
<b>Sampling techniques</b>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <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>
<b>Drilling techniques</b>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <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>
<b>Drill sample recovery</b>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <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
	<i>material.</i>	<ul style="list-style-type: none"> <li>Sonic drill core was recovered in alternating 1.5 m length lexan tubes and 1.5 m length tubular plastic bags.</li> </ul>
<b>Geologic Logging</b>	<ul style="list-style-type: none"> <li><i>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.</i></li> <li><i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i></li> <li><i>The total length and percentage of the relevant intersections logged.</i></li> </ul>	<ul style="list-style-type: none"> <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>
<b>Sub-sampling techniques and sample preparation</b>	<ul style="list-style-type: none"> <li><i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></li> <li><i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i></li> <li><i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></li> <li><i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></li> <li><i>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.</i></li> <li><i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></li> </ul>	<ul style="list-style-type: none"> <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 is undertaken in the field. Fluorescein tracer dye was used to distinguish drilling 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>
<b>Quality of assay data and laboratory tests</b>	<ul style="list-style-type: none"> <li><i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></li> <li><i>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.</i></li> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <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>
<b>Verification of sampling and assaying</b>	<ul style="list-style-type: none"> <li><i>The verification of significant intersections by either independent or alternative company personnel.</i></li> <li><i>The use of twinned holes.</i></li> <li><i>Documentation of primary data, data entry procedures, data verification, data</i></li> </ul>	<ul style="list-style-type: none"> <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 samples, and by check analysis at an</li> </ul>



Criteria	JORC Code explanation	Considerations for Mineral Brine Projects
	<p><i>storage (physical and electronic) protocols.</i></p> <ul style="list-style-type: none"> <li><i>Discuss any adjustment to assay data.</i></li> </ul>	<p>independent (or umpire) laboratory.</p> <ul style="list-style-type: none"> <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>
<b>Location of data points</b>	<ul style="list-style-type: none"> <li><i>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.</i></li> <li><i>Specification of the grid system used.</i></li> <li><i>Quality and adequacy of topographic control.</i></li> </ul>	<ul style="list-style-type: none"> <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>
<b>Data spacing and distribution</b>	<ul style="list-style-type: none"> <li><i>Data spacing for reporting of Exploration Results.</i></li> <li><i>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.</i></li> <li><i>Whether sample compositing has been applied.</i></li> </ul>	<ul style="list-style-type: none"> <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>
<b>Orientation of data in relation to geological structure</b>	<ul style="list-style-type: none"> <li><i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i></li> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <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>
<b>Sample security</b>	<ul style="list-style-type: none"> <li><i>The measures taken to ensure sample security.</i></li> </ul>	<ul style="list-style-type: none"> <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>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li><i>The results of any audits or reviews of sampling techniques and data.</i></li> </ul>	<ul style="list-style-type: none"> <li>No audits or reviews have been conducted at this point in time.</li> </ul>

## Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Considerations for Mineral Brine Projects
<b>Mineral tenement and land tenure status</b>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <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</i>, <i>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>
<b>Exploration done by other parties</b>	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>SLM <i>Litio</i> drilled 58 vertical holes in the <i>Litio</i> properties on a 500 m x 500 m grid in February 2007. Each hole was 20 m deep. The drilling covered all of the <i>Litio 1 – 6</i> 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> <li>Prior to this the salar was evaluated by Chilean state organization Corfo, using hand dug pit samples.</li> </ul>
<b>Geology</b>	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul style="list-style-type: none"> <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>
<b>Drill hole Information</b>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <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> </ul>	<ul style="list-style-type: none"> <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> </ul>

Criteria	JORC Code explanation	Considerations for Mineral Brine Projects
	<ul style="list-style-type: none"> <li>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</li> </ul>	<ul style="list-style-type: none"> <li>Drill hole collars, surveyed elevations, dip and azimuth, hole length and aquifer intersections are provided in tables within the text.</li> </ul>
<b>Data aggregation methods</b>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <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>
<b>Relationship between mineralisation widths and intercept lengths</b>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <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>
<b>Diagrams</b>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <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>
<b>Balanced reporting</b>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <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>
<b>Other substantive exploration data</b>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <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>
<b>Further work</b>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <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
<b>Database integrity</b>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <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>
<b>Site visits</b>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <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>
<b>Geological interpretation</b>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <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>
<b>Dimensions</b>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <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
<b>Estimation and modelling techniques</b>	<ul style="list-style-type: none"> <li><i>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.</i></li> <li><i>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</i></li> <li><i>The assumptions made regarding recovery of by-products.</i></li> <li><i>Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).</i></li> <li><i>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</i></li> <li><i>Any assumptions behind modelling of selective mining units.</i></li> <li><i>Any assumptions about correlation between variables.</i></li> <li><i>Description of how the geological interpretation was used to control the Resource estimates.</i></li> <li><i>Discussion of basis for using or not using grade cutting or capping.</i></li> <li><i>The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</i></li> </ul>	<ul style="list-style-type: none"> <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 as for lithium. However, the final production of potassium requires independent processing from the lithium brine. The potassium recovery 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.</li> <li>Estimation of Resources used the average drainable porosity value 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 of the thinner units inside the geological model.</li> <li>No assumptions were made regarding selective mining units and selective mining can be difficult to apply in brine deposits, where the brine flows in response to pumping.</li> <li>No assumptions were made about correlation between variables. Lithium and potassium were estimated independently.</li> <li>The geological interpretation was used to define each geological unit and the property limit was used to enclose the reported Resources. The lithium and</li> </ul>



Criteria	JORC Code explanation	Considerations for Mineral Brine Projects
		<p>potassium concentration is not necessary related to a particular lithology.</p> <ul style="list-style-type: none"> <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>
<b>Moisture</b>	<ul style="list-style-type: none"> <li>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</li> </ul>	<ul style="list-style-type: none"> <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>
<b>Cut-off parameters</b>	<ul style="list-style-type: none"> <li>The basis of the adopted cut-off grade(s) or quality parameters applied.</li> </ul>	<ul style="list-style-type: none"> <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>
<b>Mining factors or assumptions</b>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <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> <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>

Criteria	JORC Code explanation	Considerations for Mineral Brine Projects
<b>Metallurgical factors or assumptions</b>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <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>
<b>Environmental factors or assumptions</b>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <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>
<b>Bulk density</b>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <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>
<b>Classification</b>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <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 Houston et. al., 2011 and the CIM Best Practice Guidelines.</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>The results of any audits or reviews of Mineral Resource estimates.</li> </ul>	<ul style="list-style-type: none"> <li>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.</li> </ul>

Criteria	JORC Code explanation	Considerations for Mineral Brine Projects
<b>Discussion of relative accuracy/confidence</b>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <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 style="list-style-type: none"> <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 style="list-style-type: none"> <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 style="list-style-type: none"> <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 style="list-style-type: none"> <li>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.</li> </ul>
Study status	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <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 installation of 44 wells over the life of the study, with different wells operating in different periods of the mine life.</li> </ul>
Cut-off parameters	<ul style="list-style-type: none"> <li>The basis of the cut-off grade(s) or quality parameters applied.</li> </ul>	<ul style="list-style-type: none"> <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</li> </ul>

Criteria	JORC Code explanation	Considerations for Mineral Brine Projects
		to the limits of the properties owned by the company.
Mining factors or assumptions	<ul style="list-style-type: none"> <li><i>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).</i></li> <li><i>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.</i></li> <li><i>The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling.</i></li> <li><i>The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).</i></li> <li><i>The mining dilution factors used.</i></li> <li><i>The mining recovery factors used.</i></li> <li><i>Any minimum mining widths used.</i></li> <li><i>The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.</i></li> <li><i>The infrastructure requirements of the selected mining methods.</i></li> </ul>	<ul style="list-style-type: none"> <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 extraction is the establishment of the proposed wellfield and the associated pumps and pipework to allow the brine to be transported to the evaporation ponds.</li> </ul>
Metallurgical factors or assumptions	<ul style="list-style-type: none"> <li><i>The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.</i></li> <li><i>Whether the metallurgical process is well-tested technology or novel in nature.</i></li> <li><i>The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.</i></li> <li><i>Any assumptions or allowances made for deleterious elements.</i></li> </ul>	<ul style="list-style-type: none"> <li>The metallurgical process proposed is conventional pond evaporation, followed 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> </ul>

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	<ul style="list-style-type: none"> <li><i>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.</i></li> <li><i>For minerals that are defined by a specification, has the Ore Reserve estimation been based on the appropriate mineralogy to meet the specifications?</i></li> </ul>	<ul style="list-style-type: none"> <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	<ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <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	<ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li><i>The derivation of, or assumptions made, regarding projected capital costs in the study.</i></li> <li><i>The methodology used to estimate operating costs.</i></li> <li><i>Allowances made for the content of deleterious elements.</i></li> <li><i>The derivation of assumptions made of metal or commodity price(s), for the principal minerals and co- products.</i></li> <li><i>The source of exchange rates used in the study.</i></li> <li><i>Derivation of transportation charges.</i></li> <li><i>The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.</i></li> <li><i>The allowances made for royalties payable, both Government and private.</i></li> </ul>	<ul style="list-style-type: none"> <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> <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</li> </ul>



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		<p>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.</p> <ul style="list-style-type: none"> <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 China included in the operations costs. These costs include trucking the 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 projects. Because there remains some uncertainty regarding royalties covering privately owned lithium properties in Chile, certain assumptions have been made regarding the royalty regime. The uncertainty exists because Maricunga is the most advanced lithium project in Chile outside of operations in the Salar de Atacama, which are operated on properties where the government agency CORFO owns the properties and producers lease them – as distinct from private mineral properties in Chile. Overall royalties to be paid during the full project horizon are equivalent to 5.5% of total sales, with the advantage that the lower 1.3% rate is the one that applies during the initial half-life of the project. The Main reasons to expect a lower royalty rate for the project than for Salar de Atacama producers are that the company owns the mining properties outright; the company has paid for the exploration of the properties (unlike at Atacama), it is difficult for the government to set different conditions for the company to those granted to government agency CODELCO.</li> </ul>
Revenue factors	<ul style="list-style-type: none"> <li><i>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.</i></li> <li><i>The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.</i></li> </ul>	<ul style="list-style-type: none"> <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> <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</li> </ul>

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		<p>0.85 has also been used in some calculations.</p> <ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>• <i>The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.</i></li> <li>• <i>A customer and competitor analysis along with the identification of likely market windows for the product.</i></li> <li>• <i>Price and volume forecasts and the basis for these forecasts.</i></li> <li>• <i>For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.</i></li> </ul>	<ul style="list-style-type: none"> <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	<ul style="list-style-type: none"> <li>• <i>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.</i></li> <li>• <i>NPV ranges and sensitivity to variations in the significant assumptions and inputs.</i></li> </ul>	<ul style="list-style-type: none"> <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> <li>• Inflation was considered in the pricing supplied for lithium products by Roskill and the project costs are considered including inflation.</li> </ul>
Social	<ul style="list-style-type: none"> <li>• <i>The status of agreements with key stakeholders and matters leading to social licence to operate.</i></li> </ul>	<ul style="list-style-type: none"> <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</li> </ul>

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		<p>community, were executed.</p> <ul style="list-style-type: none"> <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>
<i>Other</i>	<ul style="list-style-type: none"> <li><i>To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:</i></li> <li><i>Any identified material naturally occurring risks.</i></li> <li><i>The status of material legal agreements and marketing arrangements.</i></li> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <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>
<i>Classification</i>	<ul style="list-style-type: none"> <li><i>The basis for the classification of the Ore Reserves into varying confidence categories.</i></li> <li><i>Whether the result appropriately reflects the Competent Person's view of the deposit.</i></li> <li><i>The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).</i></li> </ul>	<ul style="list-style-type: none"> <li>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 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.</li> </ul>

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Audits or reviews	<ul style="list-style-type: none"> <li>The results of any audits or reviews of Ore Reserve estimates.</li> </ul>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <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 style="list-style-type: none"> <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.