Sal de Vida Update Delivers Improved Economics, Resource and Reserve

Allkem Limited (ASX|TSX: AKE) (“**Allkem**” or “**the Company**”) is pleased to provide a project update to its wholly owned Sal de Vida Project located in Catamarca Province in Argentina. Allkem has reviewed and updated the project Mineral Resources and Ore Reserves, project cost and schedule estimates, and project economics from the previous technical report dated March 2022 Technical Report (**“previous study”**) released shortly after the merger of Orocobre Limited and Galaxy Resources to form Allkem.

HIGHLIGHTS

Stage 1 and 2 (45,000 lithium carbonate equivalent tonnes per annum)

Financial Metrics

- Material ~82% increase in Pre-tax Net Present Value (“**NPV**”) to US$5.51 billion from US$3.04 billion in the previous study at a 10% discount rate. The Post-tax NPV_{10} is US$3.18 billion
- Operating cost increased from US$3,280 per tonne lithium carbonate equivalent (“**LCE**”) to US$4,003 per tonne LCE due to increases in the price of soda ash, lime and labour costs since the previous study

Mineral Resource and Ore Reserve

- Total Mineral Resource Estimate of 7.17 million tonnes (“**Mt**”) lithium carbonate equivalent (“**LCE**”), a 5% increase from the previous estimate in 2022, with a 41% increase in Measured Mineral Resources
- Total Ore Reserve Estimate of 2.49 Mt LCE supporting a 40-year project life based on Ore Reserves only, a 43% increase from the previous statement due to a revised point of reference for Ore Reserve reporting of ‘brine pumped to the evaporation ponds’

Stage 1 (15,000 lithium carbonate equivalent tonnes per annum)

Financial Metrics

- Increase in Pre-tax NPV from US$1.23 billion in the previous report to US$2.01 billion at a 10% discount rate, representing a ~63% increase in value reflecting an increase in lithium price assumptions and market outlook
- Operating costs increased from US$3,612 per tonne LCE increased to US$4,529 per tonne LCE due to increases in the price of soda ash, lime, natural gas and labour costs since the previous study

Project Cost and Schedule Update

- Increase in the development capital cost estimate (**“CAPEX”**) from US$271 million in the previous study to US$374 million, for mechanical completion, representing a 38% increase which is in line with inflationary conditions
- Substantial mechanical completion, pre-commissioning and commissioning activities are expected in H1 CY25 with first production expected H2 CY25 and ramp up expected to take 1 year

Stage 2 (30,000 tonnes lithium carbonate equivalent per annum)

Project Cost and Schedule Update

- The prefeasibility study update confirms the Stage 2 expansion will be completed on the same design basis as Stage 1 with a twofold modular replication of the Stage 1 design
- CAPEX is estimated at approximately US$657 million, up from US$523 million in the previous study, representing a 25% increase, with Stage 2 benefiting from Stage 1 detailed engineering, established on site infrastructure and established regional construction teams and facilities

- Stage 2 construction is anticipated to commence upon receipt of applicable permits and substantial mechanical completion of Stage 1 with Stage 2 first production approximately 2.5 - 3 years thereafter

Managing Director and Chief Executive Officer, Martin Perez de Solay commented
"The updated study results clearly demonstrate the exceptional value and robustness of this project and its future expansion. As expected, global inflation has resulted in higher capital and operating costs but it remains clear that we will deliver material shareholder value through the development of Sal de Vida. Pleasingly the resource and reserve have continued to grow and will underpin future development."

PROJECT BACKGROUND

Allkem is developing the Sal de Vida Project in Catamarca Province on the Salar del Hombre Muerto, approximately 1,400km northwest of Buenos Aires, Argentina. The Sal de Vida deposit lies within the "lithium triangle", an area encompassing Chile, Bolivia and Argentina that contains a significant portion of the world's estimated lithium resources (Figure 1). Catamarca is a proven mining jurisdiction and home to a number of successful mining operations.

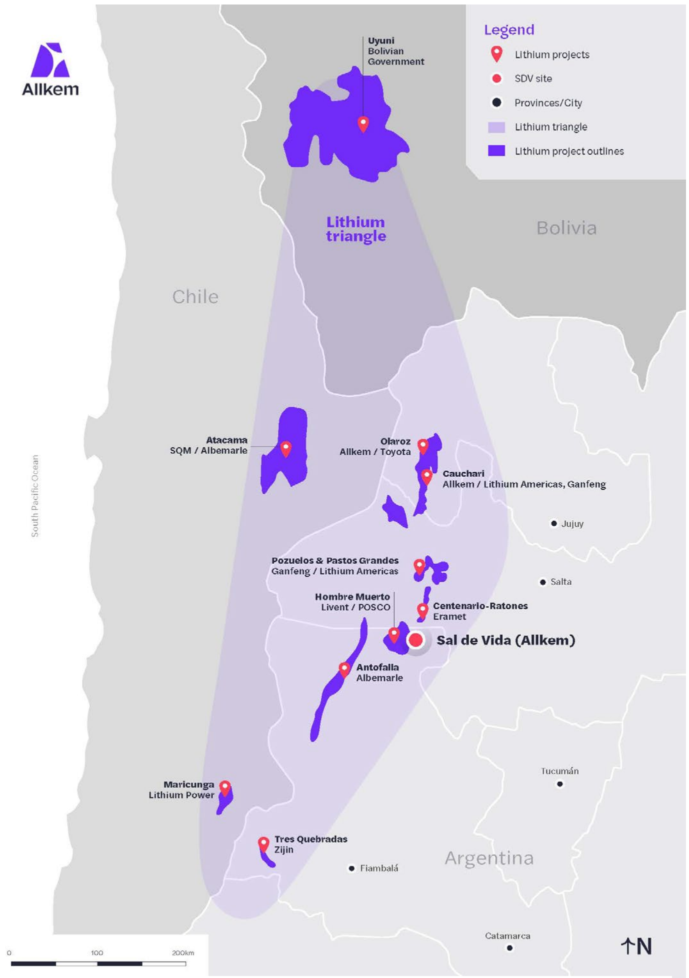


Figure 1: Sal de Vida project location

In 2022, Allkem commenced development of the 15,000 tonne per annum ("**tpa**") Sal de Vida Stage 1 project. Construction is expected to be completed in the first half of 2025. Allkem plans a further 30,000 tpa modular (15,000 tpa + 15,000 tpa) Stage 2 expansion which is currently at a pre-feasibility study phase. The Project aims to produce 45,000 tpa in total from the planned staged expansions.

The Stage 1 wellfield, brine distribution, evaporation ponds, waste (wells and ponds) and Stage 1 process plant cost estimates are Association for the Advancement of Cost Engineering (**"AACE"**) Class 2 ±10%. Costs for the 30,000 tpa Stage 2 are AACE Class 4 +30% / - 20% with no escalation of costs.

Lithium production has not commenced at the Sal de Vida site. As of 31 August 2023, Sal de Vida Stage 1 construction was approximately 32% complete. Detailed engineering, quantity estimation, contractor pricing, permitting and social aspects are sufficiently progressed to report to feasibility study level estimate for Stage 1. The layout and development plan for Stage 1 allows for future expansion for subsequent stages. An update to the pre-feasibility study ("**PFS**") has been completed for Sal de Vida Stage 2.

GEOLOGY & MINERALISATION

The salar system in the Hombre Muerto basin is considered to be typical of a mature salar. Several salars in the lithium triangle contain relatively high concentrations of lithium brine due to the presence of lithium-bearing rocks and local geothermal waters associated with Andean volcanic activity. Such systems commonly have a large halite core with brine as the main aquifer fluid in at least the centre and lower parts of the aquifer system.

Sal de Vida's brine chemistry has a high lithium grade, low levels of magnesium, calcium and boron impurities and readily upgrades to battery grade lithium carbonate. Long-term hydrological pump testing under operating conditions has demonstrated excellent brine extraction rates to support the production design basis.

RESOURCE AND RESERVE ESTIMATES

Production wellfield pumping

The production wellfield drilling program commenced in late 2020 to construct an additional eight wells in the eastern region of the salar for Stage 1 brine production and to explore the resource at depth. The drilling program which also entailed aquifer and pump testing reached completion in October 2021 and was monitored by consultants Montgomery & Associates ("**Montgomery**") and Allkem personnel. Since 2022, intermittent pumping has occurred from the Stage 1 eastern wellfield. Figure 2 shows the total registered pumping between July 2022 and April 2023 and corresponding lithium extracted from the production wells. Figure 3 shows the location of identified resources.

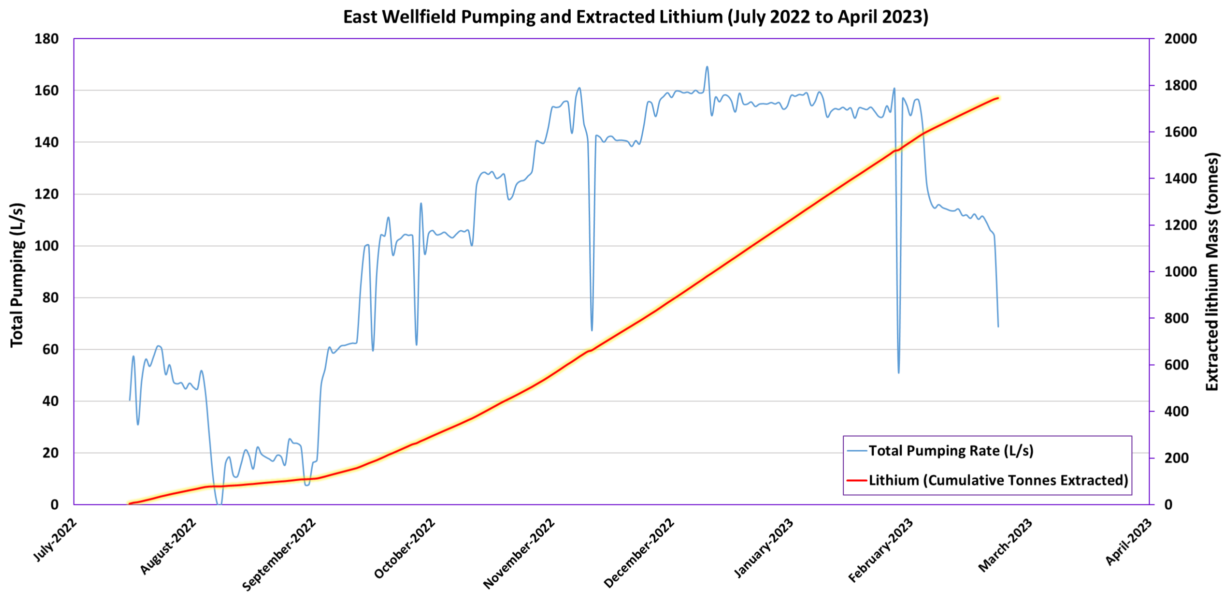
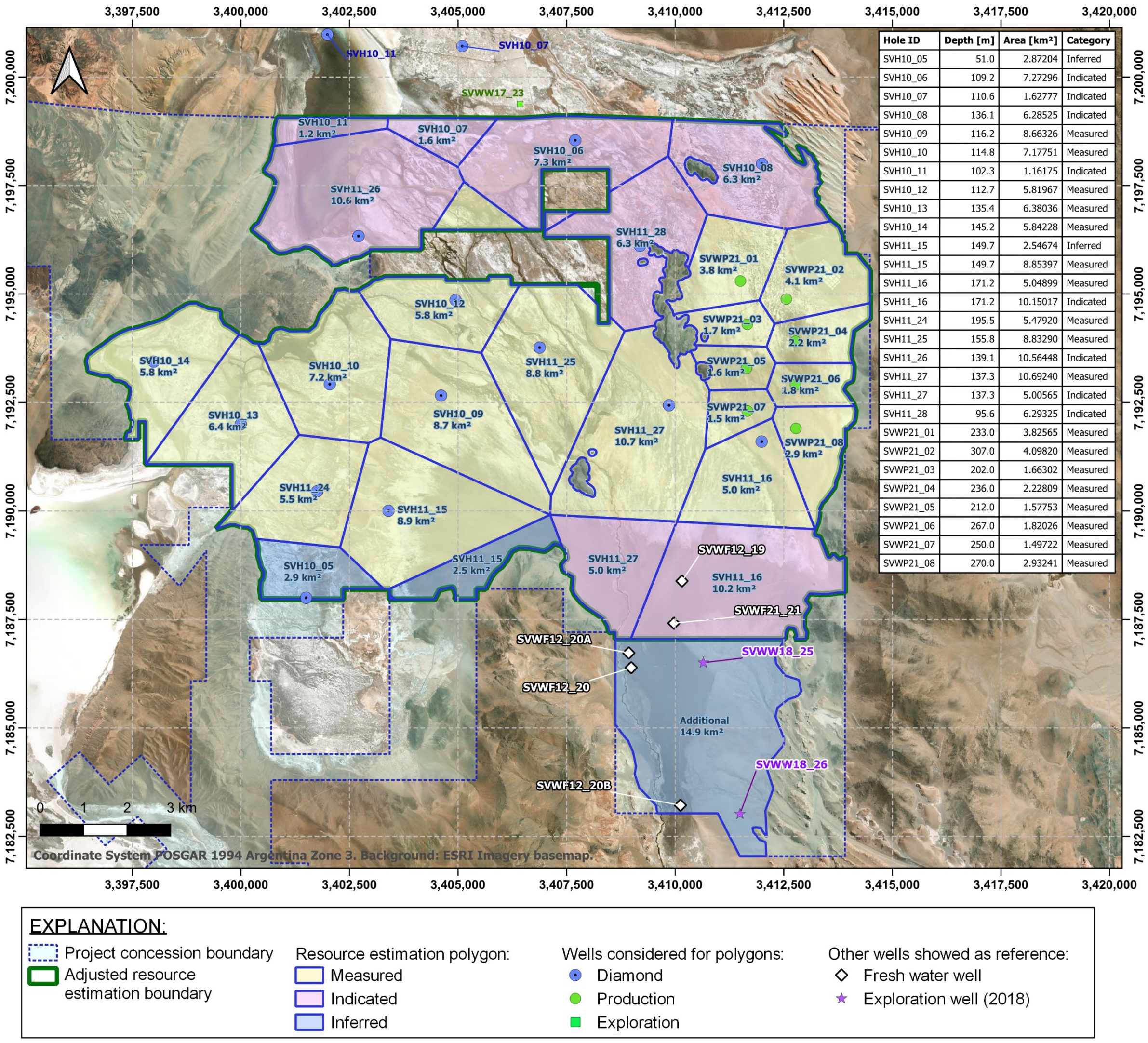


Figure 2: Registered pumping and extracted lithium from the Stage 1 eastern wellfield



Hole ID	Depth [m]	Area [km²]	Category
SVH10_05	51.0	2.87204	Inferred
SVH10_06	109.2	7.27296	Indicated
SVH10_07	110.6	1.62777	Indicated
SVH10_08	136.1	6.28525	Indicated
SVH10_09	116.2	8.66326	Measured
SVH10_10	114.8	7.17751	Measured
SVH10_11	102.3	1.16175	Indicated
SVH10_12	112.7	5.81967	Measured
SVH10_13	135.4	6.38036	Measured
SVH10_14	145.2	5.84228	Measured
SVH11_15	149.7	2.54674	Inferred
SVH11_15	149.7	8.85397	Measured
SVH11_16	171.2	5.04899	Measured
SVH11_16	171.2	10.15017	Indicated
SVH11_24	195.5	5.47920	Measured
SVH11_25	155.8	8.83290	Measured
SVH11_26	139.1	10.56448	Indicated
SVH11_27	137.3	10.69240	Measured
SVH11_27	137.3	5.00565	Indicated
SVH11_28	95.6	6.29325	Indicated
SVWP21_01	233.0	3.82565	Measured
SVWP21_02	307.0	4.09820	Measured
SVWP21_03	202.0	1.66302	Measured
SVWP21_04	236.0	2.22809	Measured
SVWP21_05	212.0	1.57753	Measured
SVWP21_06	267.0	1.82026	Measured
SVWP21_07	250.0	1.49722	Measured
SVWP21_08	270.0	2.93241	Measured

Figure 3: Location map of Measured, Indicated and Inferred Lithium Mineral Resources

Brine Mineral Resource Estimate

Montgomery was engaged to estimate the lithium Mineral Resources and Ore Reserves in brine for various areas within the Salar del Hombre Muerto basin in accordance with the 2012 edition of the JORC code ("**JORC 2012**"). Although the JORC 2012 standards do not address lithium brines specifically in the guidance documents, Montgomery followed the NI 43-101 guidelines for lithium brines set forth by the Canadian Institute of Mining, Metallurgy and Petroleum (CIM 2014) which Montgomery considers complies with the intent of the JORC 2012 guidelines with respect to providing reliable and accurate information for the lithium brine deposit in the Salar del Hombre Muerto.

Long-term pumping and production from the Stage 1 eastern wellfield (Figure 2) has increased confidence in that area of Allkem's concessions. Thus, the east-central Resource polygons have been upgraded from Indicated Mineral Resources to Measured Mineral Resources (Figure 3), leading to an increase in Measured Mineral Resources of 1.03 Mt. Furthermore, a lithium cut-off grade of 300 mg/L was utilised based on a projected LCE price of US$20,000 per tonne over the entirety of the LOM, leading to a total Resource increase of 0.32 Mt LCE. The total revised Mineral Resource estimate of

7.17 Mt LCE (detailed in Table 1) reflects a ~5% total increase to the prior Mineral Resource of 6.85 Mt LCE (Table 2).

The different Mineral Resource categories were assigned based on available data and confidence in the interpolation and extrapolation possible given reasonable assumptions of both geologic and hydrogeologic conditions. Measured, Indicated and Inferred Mineral Resource polygons; totalling 160.9 km^2, are displayed in Figure 3.

Table 1: Sal de Vida Mineral Resource Estimate at August 2023

Category	Brine volume	Average Li	In Situ Li	Li_2CO_3 Equivalent	Li_2CO_3 Variance to 2022
	m³	*mg/l*	*tonnes*	*Tonnes*	*%*
Measured	8.8 x 10^8	752	660,595	3,516,000	41%
Indicated	7.6 x 10^8	742	564,375	3,004,000	-20%
Measured & Indicated	1.6 x 10^9	747	1,224,970	**6,520,000**	5%
Inferred	2.2 x 10^8	556	122,497	652,000	5%
Total	**1.9 x 10^9**	**724**	**1,347,467**	**7,172,000**	5%

Note: Cut-off grade: 300 mg/L lithium. The reader is cautioned that Mineral Resources are not Ore Reserves and do not have demonstrated economic viability. Values are inclusive of Ore Reserve estimates, and not "in addition to".

Table 2: Sal de Vida Mineral Resource Estimate at April 2022

Category	Brine volume	Average Li	In Situ Li	Li_2CO_3 Equivalent
	m³	*mg/l*	*tonnes*	*tonnes*
Measured	6.2 x 10^8	757	467,235	2,487,000
Indicated	8.9 x 10^8	793	703,201	3,743,000
Measured & Indicated	1.5 x 10^9	775	1,170,437	**6,230,000**
Inferred	2.1 x 10^8	563	116,668	621,000
Total	**1.7 x 10^9**	**752**	**1,287,105**	**6,851,000**

Note: Cut-off grade: 500 mg/L lithium. The reader is cautioned that Mineral Resources are not Ore Reserves and do not have demonstrated economic viability. Values are inclusive of Ore Reserve estimates, and not "in addition to".

Additional information for the resource estimation can be found in the Annexures.

Brine Ore Reserve Estimate

The revised Ore Reserve Estimate of 2.49 Mt LCE for 40 years reflects a 43% increase compared to the previous estimate of 1.74 Mt LCE for 40 years. The difference in total tonnage is attributable to the point of reference of the declared reserve which has been aligned with the method used at Olaroz and other major brine deposits. Process efficiency factors were considered in the previous estimate, while the current reserve is reported from a point of reference of brine pumped to the evaporation ponds.

The updated Proved and Probable Ore Reserves are displayed in Table 3, and a comparison to the previous Brine Ore Reserve Statement is presented in Table 4. Based on the modelled hydrogeological system and results of the numerical modelling, the Proved Brine Ore Reserve reflects what is feasible to be pumped to the ponds during the first seven years of operation at each of the wellfields. Compared to the previous estimate, this represents a 1-year increase in the Proved Period which is mainly due to higher certainty from long-term pumping in the eastern wellfield. Furthermore, pumping optimisation was undertaken for the current estimate to extract more brine from wells with higher allowable pumping rates and lithium concentrations.

The model projects that the wellfields will sustain operable pumping for 40 years; the last 33 years of pumping from each wellfield has been categorised as Probable Brine Ore Reserves. The Proved and Probable Ore Reserve estimate of 2.49 Mt LCE represents approximately 38% of the current Measured and Indicated Brine Resource estimate.

Table 3: Sal de Vida Ore Reserve Estimate at August 2023

Category	Wellfield	Time Period	Li Total Mass	Li_2CO_3 Equivalent	Li_2CO_3 Variance to 2022
		years	*tonnes*	*tonnes*	*%*
Proved	Stage I East	1-7	30,541	163,000	81%
Proved	Stage II Expansion	3-9	53,046	282,000	57%
Total Proved		1-9	83,587	445,000	65%
Probable	Stage I East	8-40	146,520	780,000	53%
Probable	Stage II Expansion	10-40	236,947	1,261,000	31%
Total Probable		8-40	383,467	2,041,000	39%
Total Proved and Probable		**40**	467,054	2,486,000	43%

Note: Assumes 300 mg/L Li cut-off grade

Table 4: Sal de Vida Ore Reserve Estimate at April 2022

Category	Wellfield	Time Period	Li Total Mass	Li_2CO_3 Equivalent
		years	*tonnes*	*tonnes*
Proved	Stage I East	1-6	16,908	90,000
Proved	Stage II Southwest	3-8	33,817	180,000
Total Proved		1-8	50,725	270,000
Probable	Stage I East	7-40	95,828	510,074
Probable	Stage II Southwest	9-40	180,365	960,045
Total Probable		7-40	276,193	1,470,118
Total Proved and Probable		40	326,919	1,740,119

Note: Assumes 500 mg/L Li cut-off grade, 70% Li process recovery

Table 5 shows the summary of total pumped brine and projected average grade of the current Proved and Probable Ore Reserves.

Table 5: Total pumped brine and projected average grade of Proved and Probable Ore Reserves at August 2023

Reserve Category	Wellfield	Time Period	Projected Total Brine Pumped	Projected Average Grade Li
		Years	*m^3*	*mg/L*
Proved	Stage I East	1-7	3.90E+07	785
Proved	Stage II Expansion	3-9	6.58E+07	807
Total Proved		**1-9**	**1.05E+08**	**799**
Probable	Stage I East	8-40	2.02E+08	726
Probable	Stage II Expansion	10-40	3.11E+08	763
Total Probable		**8-40**	**5.13E+08**	**748**
Total Proved and Probable		**40**	6.18E+08	757

The current numerical model projections suggest that additional brine could be pumped from the basin from the proposed wellfields past a period of 40 years. However, recalibration of the model would be required after start-up pumping of each wellfield to refine the model and support this projection.

Additional information for the reserve estimation can be found in the Annexures.

BRINE EXTRACTION AND PROCESSING

Front-end engineering design ("**FEED**") work for Stage 1's wellfields to process plant and non-process infrastructure has been completed for an initial production capacity of 15ktpa, later expanding to 45,000ktpa in Stage 2. A summary of the key physicals is displayed in Table 6.

Table 6: Stage 1 - Summary of Stage 1 physicals for a 40-year project life

Key Physicals	UoM	
Lithium Carbonate Produced life of mine	*t LC*	595,385
Lithium Carbonate Produced (annual average) – Stage 1	*t LC*	15,000
Pond grade feed into process plant	*Wt % Li*	1.7
Pond Recovery (entrainment + leakage)	*%*	81
Plant Recovery (liming filter cake)	*%*	89
Average Product grade[1]	*% Li_2CO_3*	>99.65

[1] Product mix entails 80% battery grade, 20% technical grade

The process commences with brine extracted from wells extending to a depth of up to 280m in the salar. Brine is pumped to a series of evaporation ponds, where it is evaporated and will be processed at the onsite lithium carbonate plant.

The wellfields are located on the Salar del Hombre Muerto over the salt pan, with minimal infrastructure residing on the surface. The brine distribution systems traverse the salar to where the evaporation ponds are located. The process plant is located adjacent to the evaporation ponds on colluvial sediments. The waste disposal areas will surround the evaporation ponds.

The process plant consists of a lithium carbonate plant with a liming plant and associated plant infrastructure, such as the power station, fuelling and workshops. Process facilities are divided into four main areas including the wellfield and brine distribution, evaporation ponds, the lithium carbonate plant and discard stockpiles. The process flowsheet is described below and summarised in Figure 4.

As of 30 June 2023, the construction of the first two strings of ponds reached over 98% completion with the first 9 ponds completed and filled with brine and all ponds lined. The engineering for the third string of ponds has been completed and earth works have commenced. The main brine pipeline is complete and the production wells have been commissioned. Camp expansion activities and procurement of long lead items has progressed with the arrival on site of a number of items of proprietary equipment. Detailed engineering of the Process Plant continues, and steady progress has been made on procurement of bulk materials. Process Plant construction has also advanced with the mobilisation of the EPC contractor and continuation of civil works including delivery and installation of pre-cast foundations and associated concrete works.

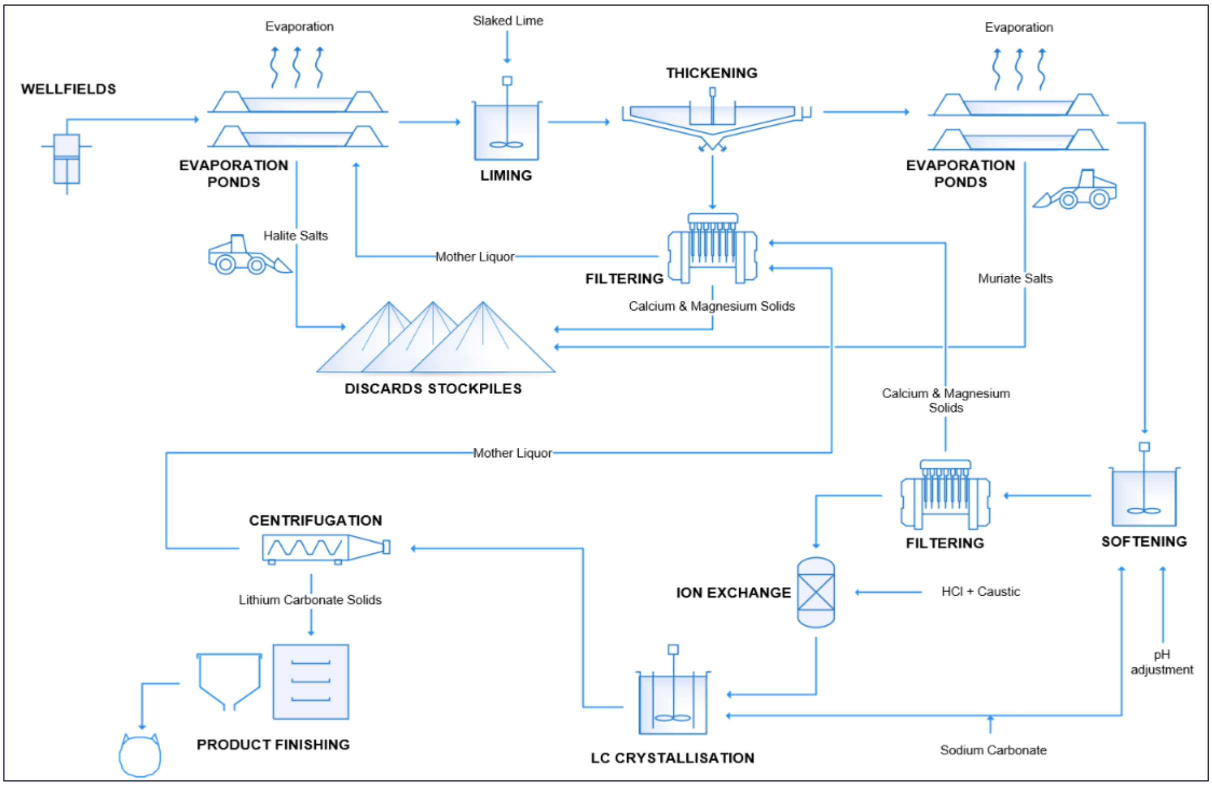


Figure 4: Sal de Vida Simplified Process Flow Diagram

Wellfield and brine distribution

There are two wellfields considered for production; one in the East and one in the Southwest. For Stage 1, only wells from the East wellfield will be used, while Stage 2 will utilise the Southwest wellfield. The locations of production wells were selected to reduce long-term freshwater drawdown and maintain the highest possible brine grade.

Ten wells have been constructed for Stage 1, all wells will be connected through pipelines to a booster station that is be situated in a central location to the wellfield. The booster station combines brines from the different wells and acts as a brine pumping station to reach the ponds and provide a buffer for seasonal flow changes. The average flow from the brine wells to the first evaporation ponds will be approximately 159 litres per second ("**L/s**") for Stage 1.

Evaporation ponds

The solar evaporation pond system consists of a series of halite and muriate (KCl) ponds, which concentrate brine to a Li concentration suitable for feeding the lithium carbonate plant. The ponds for Stage 1 cover a total area of approximately 450 ha and Stage 2 will cover a total of 850 ha. These areas were calculated based on the expected evaporation rates and the production well flow rates.

Halite ponds for Stage 1 are arranged in three strings which operate in parallel, each string contains six cells plus a buffer pond with the flow from one pond to the next in series. Ponds of the same type are connected through weirs, which allow for constant natural flow from one pond to the next, maintaining brine levels in all ponds.

Evaporation results from the combination of solar radiation, wind, temperature and relative humidity. Halite salts (primarily sodium chloride) precipitate at the bottom of the pond, are harvested periodically and stockpiled in accordance with environmental requirements. The muriate ponds will have the same design basis and be located adjacent to the halite ponds. When the brine reaches a Li concentration of 21 g/L, it will be stored in a set of concentrated brine storage ponds, from where the brine will be fed to the lithium carbonate plant.

Liming

The halite ponds will feed evaporated brine to the liming stage to partially remove magnesium. A solution of milk-of-lime will be added to the brine inside mixing tanks, precipitating magnesium and removing other impurities such as boron and sulphates. The solids will be separated from the brine and pumped to a discard facility. The limed brine will be fed to a series of muriate ponds for further concentration. It will then be stored in the concentrated brine storage ponds to act as buffer ponds before feeding the process plant, to accommodate seasonal flow variations and provide consistent feed to the process plant.

Lithium carbonate plant

The lithium carbonate plant is designed to produce 15,000 tpa of lithium carbonate in Stage 1, with Stage 2 enabling the production of an additional 30,000 tpa. The plant design was based on average brine supplies of 26 m3/h for Stage 1 and an additional 52 m3/hr for stage 2 respectively. The design includes an average lithium concentration of 21 g/l in the softening feed. Plants will operate continuously with a design availability of 91%.

Brine from the concentrated brine storage ponds will re-enter the process plant in the softening stage to further remove magnesium and calcium. Solid contaminants will be sent to a filter cake tank to be re-pulped with the liming discards before reporting to the discard facility. Softened brine will report to an ion exchange ("**IX**") circuit feed tank to remove the remaining calcium and magnesium ions and meet battery grade specifications. Lithium-concentrated brine from the IX stage will be combined with sodium carbonate at elevated temperatures to produce lithium carbonate. The lithium carbonate solids will be recovered while the liquor will be recycled back into the process. The lithium carbonate solids will be dried to <1% moisture, before being filtered and cooled. The solids will be micronised and iron contaminants will be removed magnetically. The micronised product will then be bagged for transport and sale.

Salt waste disposal

During the evaporation phase the build-up of solid sodium chloride, magnesium, boron and sulphate salts will occur in the ponds. Over time the solids will build to a level where their removal is required to maintain a working liquid volume within the ponds. All ponds will be harvested on average once per year with the solids placed in storage facilities adjacent to the ponds. The estimated annual total of salt harvested and stockpiled from the halite ponds is 1.4 million tpa, and from the muriate ponds is 79,000 tpa for Stage 1 of the Project. For Stage 2, the annual salt harvest will be 2.8 million tpa and 158,000 tpa for halite and muriate ponds respectively.

The salt disposal facility covers ~300 ha for Stage 1 and 600 ha for Stage 2 and will consist of halite, muriate, and co-disposal stockpiles surrounding the halite ponds. All salt waste is of similar chemistry to the surrounding salar and no adverse environmental impacts are expected.

Final product

Project economics are based on a production and sales volume mix comprising 80% battery grade and 20% technical grade. The operating intention is to maximise the production of battery grade however the 20% allowance for lower grade products is a prudent approach at this stage of the development.

SITE LAYOUT & INFRASTRUCTURE

The Project's tenements cover 26,253 ha and all process facilities will be located in the southeastern sector of the Salar del Hombre Muerto. As seen in Figure 5, the East Wellfield for Stage 1 is located on the eastern sub-basin of the Salar del Hombre Muerto over the salt pan, and the ponds for Stage 1 are located in two areas directly south. Stage 2 will be located southeast of the Southwest wellfield.

The brine distribution system traverses the salar towards where the evaporation ponds are located. The location of the ponds has been determined based on a number of factors including optimal constructability properties and minimising earthworks, environmental impact and risk of flooding.

The processing plant for all stages is located adjacent to Stage 1's evaporation ponds. A road system, including ramps and causeways, connects the processing facilities and provides access to all working areas.

Supporting infrastructure & logistics

The following main facilities are planned for the Project:

- Raw water system
- Power generation and distribution
- Fuel storage and dispensing
- Construction camp to accommodate up to 900 people
- Sewage treatment plant
- Fire protection system
- Buildings for the process plant, reagent and product storage
- Various buildings for administration and site services
- Site roads, causeways and river crossings
- Communications and mobile equipment
- Steam generation, water heating and compressed air system
- Drainage system

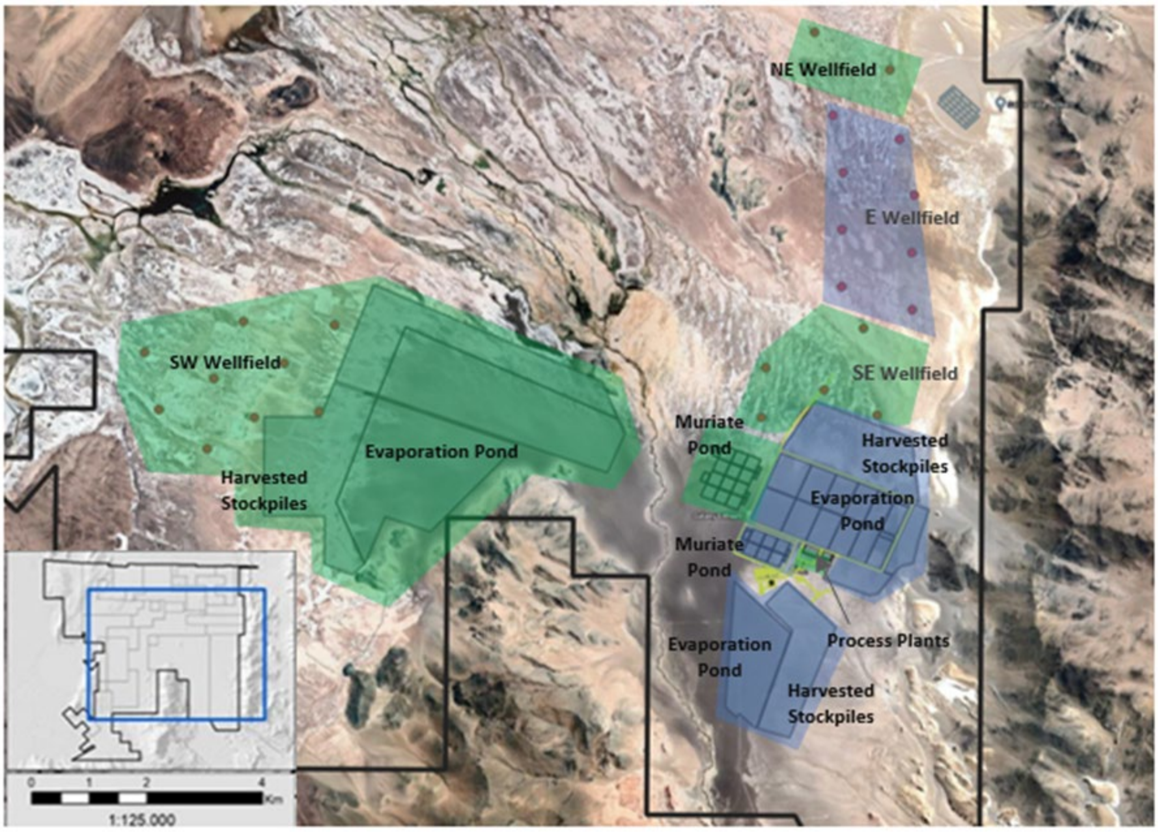


Figure 5: Site layout for Stage 1 (blue) and Stage 2 expansion (green)

The main route to the Project site is from the city of Catamarca via national route 40 to Belen, then provincial route 43 through Antofagasta de la Sierra to the Salar del Hombre Muerto. The road is mostly paved to Antofagasta de la Sierra and continues unpaved for the last 145 km to Salar del Hombre Muerto. This road is well maintained and also serves Livent Corporation's Fenix lithium operations and Galan Lithium Ltd.'s Hombre Muerto Project. The Project is also serviced by key infrastructure including major roads, rail, air and multiple seaports in Argentina and Chile.

The Ferrocarril Belgrano railway line is located 100 km to the north of the Project and the use of rail during later project stages is a possibility. A public airstrip is located in Antofagasta de La Sierra and a private airstrip is located at Livent's Salar del Hombre Muerto operations.

International cargo for Sal de Vida could use a combination of ports in Buenos Aires, Argentina and Chile. The Ports of Antofagasta and Angamos consist of deep-water port facilities serving the mining industry in northern Chile. The Ports of Rosario, Campana and Buenos Aires consist of large port facilities serving multiple industries in Argentina's main economic hubs.

FINANCIAL PERFORMANCE

Development Capital and Operating Costs

Project development capital expenditure (**"CAPEX"**) for both stages combined producing 45,000 tpa lithium carbonate is estimated to be US$1,031 million. Further details are summarised in Table 7.

Table 7: Stage 1 and 2 - Summary of Development Capital Cost

Development Capital Cost	Units	Stage 1 Feasibility Study	Stage 2 Pre-feasibility Study	Total
Direct Cost				
General Engineering & Studies	*US$M*	11	34	**46**
Wellfield & Brine Distribution	*US$M*	13	25	**37**
Evaporation Ponds & Waste	*US$M*	68	141	**209**
Lithium Carbonate Plant	*US$M*	182	342	**524**
Utilities	*US$M*	9	16	**25**
Infrastructure	*US$M*	23	13	**36**
Total Direct CAPEX	***US$M***	**306**	**571**	**877**
Owners Cost + Contingency	*US$M*	69	86	**154**
TOTAL CAPEX	***US$M***	**374**	**657**	**1,031**

Minor discrepancies may occur due to rounding

The Stage 1 project development CAPEX estimated to be US$374 million up to mechanical completion, this represents a 38% increase from US$271 million in the previous study. The estimate includes wellfields to ponds, the lithium carbonate plant, non-process infrastructure and various indirect costs detailed in Table 7. The increase includes a 'new' foreign goods and services tax (Decree 377/2023) (US$11 million), a schedule extension (US$29 million), regional inflation and FX adjustments (US$38 million), and a re-estimate of contingency (US$21 million) on the remainder of the project.

Stage 2 CAPEX is estimated at approximately US$657 million, up from US$523 million in the previous study, representing a 26% increase. The development CAPEX estimate for Stage 2 is supported by the design basis of Stage 1 with the fundamental approach to replicate Stage 1 twofold in the Stage 2 design with increased wells, pumps, evaporation ponds and plant capacity. The future project will benefit from Stage 1 through detailed engineering, established on site infrastructure and established regional construction teams and facilities. Intangible benefits include the continuity of people, systems and processes, engineering efficiencies and the targeted allocation of contingency.

Operating expenditure (**"OPEX"**) is estimated to be US$4,529 per tonne LCE for Stage 1 from US$3,612/t LC in the previous study due to material increases in the price of soda ash, lime and labour costs.

Operating cost for all stages is estimated to average US$4,003 per tonne LCE, a 12% decrease compared to Stage 1 on a standalone basis. Further details are summarised in Table 8.

Table 8: Stage 1 and 2 - Summary of Operating Cost

Operating Cost	Units	Stage 1 Feasibility Study	Stage 2 Pre-feasibility Study	Total
Reagents	*US$/t LCE*	1,681	1,844	**1,680**
Labour	*US$/t LCE*	703	257	**411**
Energy	*US$/t LCE*	608	603	**605**
General and Administration	*US$/t LCE*	801	432	**529**
Consumables and Materials	*US$/t LCE*	561	415	**603**
Transport and Port	*US$/t LCE*	175	175	**175**
TOTAL OPERATING COST	***US$/ t LCE***	**4,529**	**3,726**	**4,003**

Minor discrepancies may occur due to rounding

For SDV Stage 2, operational synergies are expected with labour, reagents and product handling.

Lithium carbonate price forecast

Lithium has diverse applications including ceramic glazes, enamels, lubricating greases, and as a catalyst. Demand in traditional sectors grew by approximately 4% CAGR from 2020 to 2022. Dominating lithium usage is in rechargeable batteries, which accounted for 80% in 2022, with 58% attributed to automotive applications. Industry consultant, Wood Mackenzie ("**Woodmac**") estimates growth in the lithium market of 11% CAGR between 2023-2033 for total lithium demand, 13% for automotive, and 7% for other applications.

Historical underinvestment and strong EV demand have created a supply deficit, influencing prices and investment in additional supply. Market balance remains uncertain due to project delays and cost overruns. The market is forecast to be in deficit in 2024, have a fragile surplus in 2025, and a sustained deficit from 2033.

Prices have fluctuated in 2022-2023, with factors like plateauing EV sales, Chinese production slowdown, and supply chain destocking influencing trends. Woodmac notes that battery grade carbonate prices are linked to demand growth for LFP cathode batteries and are expected to decline but rebound by 2031. Lithium Hydroxide's growth supports a strong demand outlook, with long-term prices between US$25,000 and US$35,000 per tonne (real US$ 2023 terms).

PROJECT ECONOMICS

An economic analysis was developed using the discounted cash flow method and was based on the data and assumptions for capital and operating costs detailed in this report for brine extraction, processing and associated infrastructure. The evaluation was undertaken on a 100% equity basis.

The basis of forecast lithium carbonate pricing was provided by Woodmac for the period 2023 to 2035, with a longer-term price of US$28,000/t and US$26,000/t used for battery grade and technical grade lithium carbonate from 2035 onwards.

A royalty agreement with the Catamarca Provincial Government has been executed, confirming a life of project royalty rate at 3.5% of net sales revenue (revenue less taxes). This agreement applies to both the SDV Stage 1 and Stage 2 expansion.

The key assumptions and results of the economic evaluation are displayed in Tables 9 and 10 below.

Table 9: Key assumptions utilised in the project economics

Assumption	Units	Stage 1	Stage 2
Project Life Estimate	*Years*	40	40
Discount Rate (real)	*%*	10	10
Provincial Royalties [1,2]	*% of LOM net revenue*	3.5	3.5
Corporate Tax[2]	*%*	35	35
Annual Production[3]	*tonnes LCE*	15,000	30,000
CAPEX	*US$M*	374	657
Operating Cost	*US$/tonne LCE*	4,529	3,726
Average Selling Price[4]	*FOB US$/tonne LCE*	27,081	26,922

[1] Provincial royalty agreement at 3.5%, export duties, incentives and other taxes are not shown.

[2] There is a risk that the Argentina Government may, from time to time, adjust corporate tax rates, export duties and incentives that could impact the Project economics.

[3] Based on 80% battery grade, 20% technical grade lithium carbonate of annual production.

[4] Based on price forecast provided from Wood Mackenzie and targeted production grades stated in Footnote 3 above.

The study update for all stages demonstrates strong financial outcomes with a pre-tax NPV at a 10% discount rate of US$5.51 billion, this represents a ~82% increase from US$3.04 billion in the previous study. SDV Stage 1 reflects an increase in pre-tax NPV from US$1.23 billion in the previous report to US$2.01 billion at a 10% discount rate, representing a ~63% increase in value.
Further project economics are summarised in Table 10.

Table 10: Stage 1 and 2 – Summary of financials over a 40-year project life

Financial Summary	Units	Stage 1 Feasibility Study	Stage 2 Pre-feasibility Study	Total
NPV @ 10% (Pre-tax)	*US$M*	2,006	3,509	**5,515**
NPV @ 10% (Post-tax)	*US$M*	1,152	2,028	**3,180**
IRR (Pre-tax)	*%*	45.5	50.3	**47.7**
IRR (Post-tax)	*%*	32.5	35.3	**33.9**
Payback Period[1]	*Years*	2.6	2.4	**3.7**
Development Capital Intensity	*US$ / tpa LC*	24,959	21,891	**22,914**

[1] Payback period is from date of first commercial production

Sensitivity Analysis

As displayed in Table 10, the SDV Stage 1 study update demonstrates strong financial outcomes with a post-tax NPV at 10% discount rate of US$1,152 million and post-tax IRR of 32.5%. Figure 6 analyses the impact on post-tax NPV when pricing, operating cash costs and development CAPEX fluctuate between +/- 25 %.

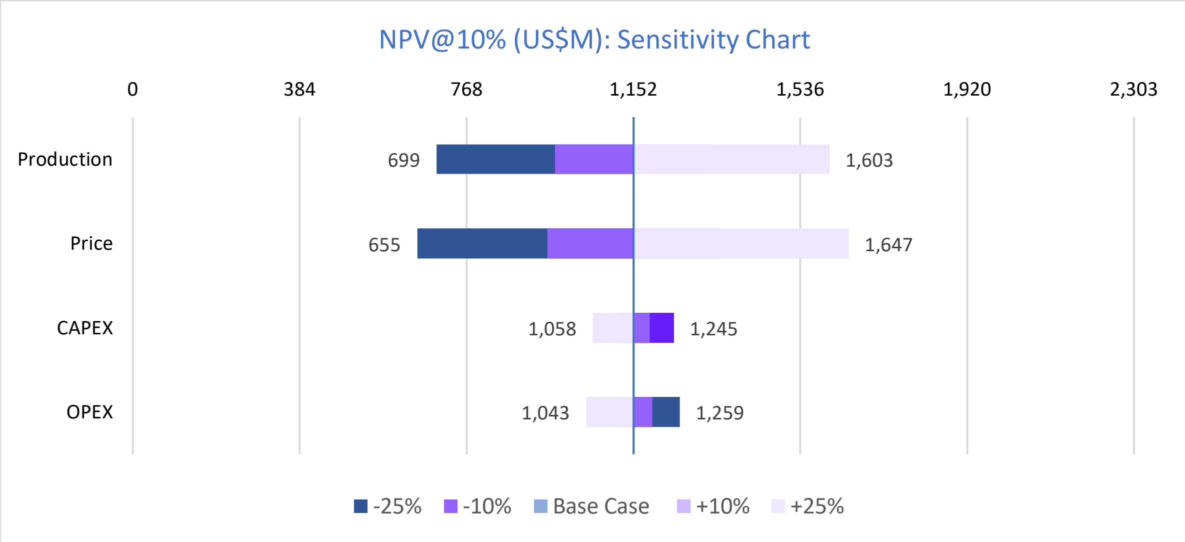


Figure 6: NPV Sensitivity Analysis

ENVIRONMENTAL AND SOCIAL IMPACTS

Carbon emissions management

Allkem is committed to the transition to net zero emissions by 2035 and is progressively implementing actions across the group to achieve this target.

Power generation at Sal de Vida is designed to be sourced initially from diesel generators, and then from gas generators, whilst maximising a photovoltaic energy solution. A standalone study is being undertaken with the intention of replacing all remaining site-based diesel generated power with natural gas. Allkem is targeting 30% of power generation for Stage 1 production to be sourced from photovoltaic energy generated by a site-based solar farm. The Company is currently in a tender process to install this hybrid solution for day 1 of Stage 1 production.

Environment

Allkem is committed to the responsible use of water resources and minimising environmental impacts. The internally developed process flowsheet was selected partly on the basis it consumed significantly less energy and water than other conventional technologies.

The Sal de Vida Project will consume minor amounts of raw water, equivalent to 1-2% of the total groundwater recharge to the system. There is no expected loss of water to communities with either their groundwater or surface water usage. Water monitoring takes place at seven different control points alongside nearby rivers in addition to periodic sampling to test flow rates, chemical and physical properties.

An environmental baseline study was performed covering areas such as water, flora, fauna, hydrogeology, hydrology, climate, landscape, ecosystem characterisation, and socio-economic considerations. This study was used to support the EIA and is being used to monitor any impacts from construction activities and/or operations. Collaborative and community water sampling continues with local communities and provincial regulators.

A physical climate change impact risk study was completed in 2020. Overall, no material climate change risks were identified, and projections will continue to be used to inform project design and operations management.

Community engagement

Allkem is committed to regularly engaging with community stakeholders and providing positive, lasting benefits through employment opportunities, local procurement, and educational and health initiatives. As part of a two-year corporate social responsibility program agreed in 2019, the Company funded three projects to support the communities nearest to Sal de Vida. This included the construction of a high school in El Peñón village, expansion of a primary school in Antofagasta de la Sierra and construction of a first aid facility in Cienaga La Redonda. A community office was established in Antofagasta de la Sierra in January 2020. Separately, a social baseline study including a perception test returned positive results about the Company and the Sal de Vida Project.

Since 2021, Sal de Vida has been developing a "Completion of Education" programme that benefits employees of the project, the communities of Ciénaga Redonda and Antofalla. This programme is carried out jointly through an agreement signed with Catamarca Education Ministry. Allkem aims to support local communities by maximising health, wellbeing and the procurement of local goods and services whilst upskilling and providing future employment opportunities.

As of 30 June 2023, over 70% of the local employees are from Catamarca and Stage 1 will create approximately 900 full-time positions in the peak of construction.

Further engagement with the provincial government and stakeholders, including the communities of Antofagasta de La Sierra, continue in relation to project updates.

Regulations and permitting

Sal de Vida Stage 1 (15kpta production capacity) is fully permitted after receiving approval from regulators in December 2021 (for 10.7ktpa production capacity) and subsequently in December 2022 (for 15ktpa production capacity, which included an additional third string of evaporation ponds which covers ~150ha). These permits are being used for construction activities which commenced in January 2022 to build the first two strings of ponds, the brine distribution system, additional camp capacity, process plant and non-process infrastructure. In addition, water easements have been issued and a resolution was issued permitting construction of the solar farm.

Stage 2 will require a new EIA approval that will be submitted once the front-end engineering design and technical studies for this stage are completed. A ground water permit is also in place, providing sufficient supply of water for all stages of operations.

EXECUTION STRATEGY

Project Schedule

SDV Stage 1 pond construction commenced in January 2022. The project has been divided into a number of work packages, namely: well field and brine distribution, evaporation ponds, process plant and utilities, and an energy package.

As of 31 August 2023, construction of the first two string of ponds was completed, and the third string had reached 59% of construction completion. The process plant engineering is at 59%, procurement progress at 63% and construction progress at 9%. Camp construction was also complete with 888 beds available. Long lead equipment procurement is well advanced with the majority of equipment forecast for arrival prior to end of CY23.

Substantial mechanical completion, pre-commissioning and commissioning activities are expected by H1 2025 with first production expected in H2 2025 and ramp up expected to take 1 year.

The schedule change for SdV relates improved understanding of the current execution plan, the ongoing import challenges and delays experienced in country by Allkem and it contractors and vendors as well as an improved understanding of regional productivity factors.

The prefeasibility study update for SDV Stage 2 confirms the expansion will be completed on the same design basis as Stage 1 with a twofold modular replication of the Stage 1 design. Stage 2 construction is anticipated to commence upon receipt of applicable permits and substantial mechanical completion of Stage 1 with Stage 2 first production approximately 2.5 - 3 years thereafter.

Funding

Funding is expected to be provided through one or more of the following:

- existing corporate cash;
- existing or new corporate debt or project finance facilities;
- cash flow from operations.

Offtake Strategy

Allkem continues discussions with prospective customers. In line with the Project execution schedule, these discussions are expected to advance to negotiations throughout the course of the project. Interest and demand remains strong against the backdrop of a tight market, and Allkem seeks to target high growth regions and determine the optimal contracting arrangement at the time of product qualification.

ENDS

This release was authorised by Mr Martin Perez de Solay, CEO and Managing Director of Allkem Limited.

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Forward Looking Statements

Forward-looking statements are based on current expectations and beliefs and, by their nature, are subject to a number of known and unknown risks and uncertainties that could cause the actual results, performances and achievements to differ materially from any expected future results, performances or achievements expressed or implied by such forward-looking statements, including but not limited to, the risk of further changes in government regulations, policies or legislation; risks that further funding may be required, but unavailable, for the ongoing development of the Company's projects; fluctuations or decreases in commodity prices; uncertainty in the estimation, economic viability, recoverability and processing of mineral resources; risks associated with development of the Company Projects; unexpected capital or operating cost increases; uncertainty of meeting anticipated program milestones at the Company's Projects; risks associated with investment in publicly listed companies, such as the Company; and risks associated with general economic conditions.

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Competent Person Statement

The information in this report that relates to Sal de Vida's Exploration Results, Mineral Resources and Reserves is based on information compiled by Michael Rosko, MS PG, and Brandon Schneider, MS PG, both of whom are Competent Persons and Registered Members of the Society for Mining, Metallurgy and Exploration, Inc (SME), a 'Recognised Professional Organsation' (RPO) included in a list posted on the ASX website from time to time. Mike Rosko and Brandon Schneider are both employees of Montgomery and Associates and have sufficient experience that is relevant to the style of mineralisation 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'. Mike Rosko and Brandon Schneider consent to the inclusion in this announcement of the matters based on their information in the form and context in which it appears.

The scientific and technical information contained in this announcement has been reviewed and approved by, Michael Rosko, MSc. Geology (Montgomery and Associates) and Brandon Schneider, MSc. Geological Sciences (Montgomery and Associates), as it relates to geology, modelling, and resource and reserve estimates; Michael Gunn, BSc. Chemical Engineering (Gunn Metals), as it relates to processing, facilities, infrastructure, project economics, capital and operating cost estimates. The scientific and technical information contained in this release will be supported by a technical report to be prepared in accordance with National Instrument 43-101 – Standards for Disclosure for Mineral Projects. The Technical Report will be filed within 45 days of this release and will be available for review under the Company's profile on SEDAR at www.sedar.com.

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ANNEXURE A

ADDITIONAL MINERAL RESOURCE & ORE RESERVE INFORMATION

Additional information for the resource estimation

Diamond drill cores were obtained in the field for both drainable and total porosity. Porosity samples were sealed in plastic tubes and shipped to Core Laboratories in Houston, Texas, for analysis. Depth-specific brine samples were collected from the in-situ formation, ahead of the core bit. Four additional methods were used to obtain brine samples. Brine samples used to support the reliability of the depth-specific samples included analyses of brine centrifuged from core samples, brine obtained from low flow sampling of the exploration core holes, brine samples obtained near the end of the pumping tests in the exploration wells, and brine samples obtained during reverse- circulation air drilling. After the samples were sealed on site, they were stored in a cool location, then shipped in sealed containers to the laboratories for analysis.

Borehole and well spacing is in general about 4 km in most areas, and is consistent with guidelines determined by Houston et al., 2011 for evaluation of brine-based lithium resources in salar-type systems. The drilling density was sufficient to demonstrate a high degree of confidence in the understanding of the location and nature of the aquifer, and brine grade both horizontally and vertically. The Sal de Vida area has been drilled and logged with vertical exploration boreholes and wells.

The Mineral Resource was estimated using the polygon method. To estimate total amount of lithium in the brine, the basin was first sectioned into polygons based on the location of exploration drilling. Polygon sizes were variable. Each polygon block contained one diamond drill exploration hole that was analysed for both depth specific brine chemistry and drainable porosity. Boundaries between polygon blocks are generally equidistant from diamond drill holes. For some polygon blocks, outer boundaries are the same as basin boundaries, as discussed above.

Within each polygon shown on the surface, the subsurface lithologic column was separated into hydrogeologic units. Each unit was assigned a specific thickness based on core descriptions and was given a value for drainable porosity and average lithium content based on laboratory analyses of samples collected during exploration drilling. Correlation between depth and lithium concentration in the brine was observed further increasing confidence in the method. The computed resource for each polygon was the sum of the products of saturated hydrogeologic unit thickness, polygon area, drainable porosity and lithium content.

A cut-off grade of 300 mg/L of lithium was used. Hydrogeologic units within each polygon with lithium content less than cut-off grade were not included in the lithium Mineral Resource calculations. The Mineral Resource computed for each polygon is independent of adjacent polygons, but adjacent borehole geology was used to confirm stratigraphic continuity of the units surrounding each borehole.

Mining methodology ultimately would be via well pumping in areas identified as favourable for brine extraction. An on-site pilot plant demonstrated the ability to extract the lithium from the brine.

Drilling information from the production well extensions have resulted in the increased depth of the basement model and have increased the volume of the lithium brine hosting aquifer. Locations of all drill holes used for the estimation is shown in in the table below.

Table 2: Location of drill holes

Hole ID	Easting (m)	Northing (m)	Elevation (masl)	Depth (m)	Drilling Method	Azimuth	Dip
SVH10_05	3,401,501	7,187,997	3,967	51	Diamond	0	-90º
SVH10_06	3,407,698	7,198,544	3,966	109.21	Diamond	0	-90º
SVH10_07	3,405,096	7,200,713	3,972	110.60	Diamond	0	-90º
SVH10_08	3,412,000	7,198,004	3,970	136.10	Diamond	0	-90º
SVH10_09	3,404,610	7,192,659	3,969	116.17	Diamond	0	-90º
SVH10_10	3,402,046	7,192,921	3,967	114.76	Diamond	0	-90º
SVH10_11	3,401,991	7,200,980	3,969	102.35	Diamond	0	-90º
SVH10_12	3,404,945	7,194,862	3,968	112.72	Diamond	0	-90º
SVH10_13	3,399,997	7,192,002	3,966	135.37	Diamond	0	-90º
SVH10_14	3,397,992	7,193,440	3,966	145.15	Diamond	0	-90º
SVH11_15	3,403,401	7,190,002	3,969	149.00	Diamond	0	-90º
SVH11_16	3,411,992	7,191,599	3,974	171.23	Diamond	0	-90º
SVH11_24	3,401,757	7,190,453	3,967	195.54	Diamond	0	-90º
SVH11_25	3,406,876	7,193,763	3,970	155.77	Diamond	0	-90º
SVH11_26	3,402,708	7,196,334	3,966	139.09	Diamond	0	-90º
SVH11_27	3,409,861	7,192,435	3,973	137.31	Diamond	0	-90º
SVH11_28	3,409,188	7,196,108	3,969	95.62	Diamond	0	-90º
SVH11_28	3,409,188	7,196,108	3,969	95.62	Diamond	0	-90º
SVWP21-01	3,411,502	7,195,299	3,972	240	Rotary	0	-90º
SVWP21-02	3,412,559	7,194,884	3,973	307	Rotary	0	-90º
SVWP21-03	3,411,664	7,194,301	3,974	202	Rotary	0	-90º
SVWP21_04	3,412,788	7,193,901	3,973	236	Rotary	0	-90º
SVWP21_05	3,411,643	7,193,289	3,973	212	Rotary	0	-90º
SVWP21_06	3,412,771	7,192,906	3,974	267.7	Rotary	0	-90º
SVWP21_07	3,411,663	7,192,303	3,974	250	Rotary	0	-90º
SVWP20_08	3,412,781	7,191,991	3,976	307	Rotary	0	-90 º

Note: Easting and Northing shown using Gauss Krüger coordinate system, Posgar 94 datum. masl = meters above sea level.

Additional information for the Ore Reserve estimation

The methodology used to develop the estimated resources, is different to the methodology used to estimate the reserves, but consistent with the informal guidelines for lithium brines developed by Houston et al., 2012. Their document provides informal guidelines for estimation of Brine Mineral Resources and Brine Ore Reserves, and their methodology is consistent with industry standards for characterisation of aquifers and wellfields.

The document states that key variables, "*hydraulic conductivity, recovery, brine behaviour and grade variation over time, etc. and fluid flow simulation models*" are considered when estimating the Brine Reserve and determining economic extraction. Given the nature of brine, the same guidelines regarding well spacing and grade cannot be applied as if the deposit was a stationary (i.e. static) orebody. The guidelines regarding lithium brine deposits, as suggested by the Ontario Securities Commission (2011), were considered acceptable and applied by Montgomery during construction of the groundwater flow model used to estimate the reserve.

Where previous methods were used to estimate the total amount of brine, and therefore lithium in storage that could be theoretically drained in the entire mining concession, the method used for reserve estimation is completely different and focuses on the potential for retrieval of lithium via wellfield pumping in selected areas where pumping at relatively large abstraction rates have been demonstrated. As the brine is a mobile fluid, it is necessary to use a calibrated numerical groundwater flow model, respective of fluid density, to project future wellfield production and projected future brine grade.

Due to various levels of uncertainty in conceptualising any hydrogeological system, all groundwater flow and transport models incorporate inherent uncertainty. To lessen the effects of uncertainty, good model calibration to observed field conditions is essential for judging confidence in model projections. However, even with reasonable short-term model calibration to 30-day, hydraulic testing of the brine aquifer that was conducted in late 2012 and in 2020, long-term model projections are less certain because of outstanding variables. These variables include locations of aquifer boundaries, lateral continuity of key aquifer zones, presence of fresh and brackish water that have the potential to dilute the brine in the wellfield area, and the uniformity of aquifer parameters within specific aquifer units. Although the numerical model was constructed to be reasonably conservative when data are scarce or assumed (i.e., law of parsimony), there is always a level of uncertainty associated with projections of long-term outcomes. Therefore, it is appropriate to categorise the pumping from the first seven years of pumping at each wellfield as a Proved Brine Ore Reserve. Although projections of long-term pumping past the first seven years from the wellfields are less certain. There is a reasonable understanding of the hydrogeological system that over the long-term the projected pumped brine can be categorised as a Probable Brine Ore Reserve for the remaining 33 years of pumping at each wellfield.

It is standard in the industry to recalibrate and update numerical groundwater models after start-up and during operation of the production wellfields. As the wellfields are pumped, long-term data for pumping rates, water levels, and brine chemistry are generated; calibration to these new data will improve the reliability and predictive capabilities of the model. Future Probable Ore Reserve estimates may also be modified based on production pumping results, and projections from the recalibrated model may result in confidence category upgrades of Probable Brine Ore Reserves to Proved Brine Ore Reserves.

Statement of Brine Ore Reserves

The groundwater model simulates concentrations of TDS, which are used to derive concentrations of lithium by linear relationships developed for each wellfield. It is assumed that the relationship between TDS and lithium content is constant during 40-year period of brine production from the East and Southwest wellfields. In this manner, the concentrations of lithium on model projections of TDS in the brine produced from pumping wells in each production wellfield are estimated.

Using the numerical groundwater flow model projections, total lithium to be extracted from the proposed Southwest and East wellfields was calculated for a total period of 40 years, considering the two stages of the project, and taking into account that each wellfield will be pumping for 40 years with a gap of two years between wellfields (Stage 1 East and Stage 2 Expansion). The model projections used to determine the Brine Ore Reserve that assumed increasing pumping from both wellfields, indicate that the proposed wellfields should be able to produce a reliable quantity of brine at an average annual rate of approximately 315 L/s in the case of the eastern wells and about 191 L/s in the case of southwestern wells. The average grade at start-up calculated from the initial model simulations used to estimate the Brine Ore Reserve is expected to be about 805 mg/L of lithium in the Stage 1 East Wellfield and 815 mg/L for the southwest wells of Stage 2; the average final grade after 40 years of pumping is projected to be approximately 750 mg/L of lithium (considering all wellfields) due to dilution. Depending on how the wellfields are ultimately operated, these rates and grades may be different.

Using the groundwater model, the average TDS content of brine was estimated for each pumping cycle for each wellfield. After estimating the total lithium content for each time step and summing the amounts of lithium projected to be pumped during those time steps, a total mass of unprocessed lithium to be pumped from the wellfields was estimated. The results are summarised in Table 12.

Table 3: Summary of total projected LCE pumped during 40 years of wellfield operations.

Time Period	Years	Active Wellfield	Lithium Total Mass (Tonnes)	Li_2CO_3 Equivalent (Tonnes)
1	1-2	Stage 1 East	8,052	42,857
2	3-40	Stage 2 Expansion	459,002	2,443,173
Total			467,054	2,486,030

Total mass values in 1,000-kilogram units (tonnes) of lithium were then converted to LCE units using 5.3228 as the conversion factor. Therefore, the amount of lithium in the brine supplied to the ponds in 40 years of pumping is estimated to be about 2.48 Mt LCE.

Modelling results indicate that during the 40-year pumping period, brine will be diluted by fresh and brackish water, so the pumping rates increase slightly with time, to meet the anticipated LCE tonnes per year for each wellfield.

During the evaporation and concentration process of the brines, there will be anticipated losses of lithium. The total amounts provided in Table 12 do not include anticipated loss of lithium due to process losses and leakages after brine is pumped to the evaporation ponds. The amount of recoverable lithium from the various processing phases is calculated to be 70% of the total brine supplied to the ponds.

ANNEXURE B

JORC Table 1 – Section 1 Sampling Techniques and Data related to Sal de Vida (SDV) exploration drilling
(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *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.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report.* • *In cases where 'industry standard' work has been done this would be relatively simple (eg '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 (eg submarine nodules) may warrant disclosure of detailed information.*	• Drainable porosity and brine sampling was conducted at accredited laboratories. Drill cuttings were described and stored in labelled plastic cutting boxes onsite. Sampled wells include diamond drillholes (for the analysis of drainable porosity and brine chemistry) as well as reverse circulation wells (to analyze brine chemistry). Core was described at 1-m intervals. Downhole geophysical logging was completed for the Phase 2 to Phase 5 programs, and consisted of gamma ray, resistivity, spontaneous-potential surveys, and borehole magnetic resonance and spectral gamma ray. • Neither porosity (core) nor chemistry (brine) samples were subjected to any further preparation prior to shipment to participating laboratories. After the samples were sealed on site, they were stored in a cool location, and then shipped in sealed containers to the laboratories for analysis. • Brine samples were handled by experienced geoscientists with a rigorous QA/QC program in place. An accredited laboratory was selected as the primary laboratory to assay the brine samples, and 5 secondary QA/QC labs were used throughout the drilling programs. • -For drainable porosity sampling, Full diameter core with no visible fractures was selected and submitted for laboratory analyses. The selected sleeved core samples were capped with plastic caps, sealed with tape, weighed, and stored for shipment. The typical sample length was 15 – 40 cm. -Brine samples were collected by drive-point samplers, centrifuge to confirm the drive-point sampling methodology, low-flow pumping and directly collected from the discharge line near the end of each pumping test for reverse circulation wells.
Drilling techniques	• *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard*	• -Throughout the 6 phases of drilling, a range of drill types and sizes were used. Each phase is broken out here. -Phase 1: Core holes (6.4cm and 4.8cm) and conventional circulation mud-rotary drills were used

Criteria	JORC Code explanation	Commentary
	tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).	(4.8cm). -Phase 2: Core holes (6.4cm and 4.8cm) and conventional circulation mud-rotary drill were used (20.3cm). -Phase 3: All wells were drilled by conventional mud rotary circulation. Drilled borehole diameters were 17.5 inches (444.5 mm), 12.25 inches (311.2 mm) and 8 inches (203.2 mm). -Phase 4: rotary drill rig and completed with 10-inch PVC casing and gravel pack filter. -Phase 5: rotary drill rig and completed with 8-inch PVC casing and gravel pack filter. -Phase 6: The wells were drilled by conventional mud rotary circulation. Drilled borehole diameters were 24 inches (609.6 mm), 16 inches (406.4 mm) and 8.75 inches (222.25 mm). Once drilling was completed, production wells were cased with 10-inch (254 mm) blank PVC casing and a PVC well screen (slot size 0.75 mm). Gravel pack (1 – 2 mm and 1 – 3 mm diameters sand) was installed in the annular space surrounding the well screen. A bentonite seal was installed above the gravel pack, then cement and fill material were placed to the level of the land surface.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	• -Unwashed and washed drill cuttings from the exploration and RC wells were described and stored in labelled plastic cutting boxes. Core was described at 1-m intervals. -Recovery percentages of drill core were recorded for each core hole; percent recovery was excellent for the majority of the samples obtained, except for weakly cemented, friable clastic sediments. -The core holes descriptions are qualitative and quantitative. It allows the geoscientist to qualify the lithology, while quantitatively providing porosity measurements. Cutting samples were not analysed chemically and descriptions were a qualitative evaluation of the lithologies encountered in the hole. There is no relationship between sample recovery and ion concentrations in the brine in this case.
Logging	• *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*	• Exploration to date has identified the Sal de Vida brine, and has used exploration methodology conventional to brine exploration, such as geophysics and surface sampling, in addition to the drilling programs. In the CP’s opinion, the drill data and hydrogeological studies

Criteria	JORC Code explanation	Commentary
	metallurgical studies. • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	are acceptable to support the Brine Mineral Resource and Ore Reserve estimates. • -The core logging has been both qualitative and quantitative, and accomplished to a level appropriate for the resource estimation. Field logging is considered qualitative, where the lab analyses for drainable porosity is quantitative. -Cuttings logging is of a qualitative nature and results were compared with the quantitative geophysical logs to interpret the lithologies encountered in the hole. • All intersections with sample recovery were logged, and total drilled lengths and percent recovery recorded.
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *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.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• Brine samples were collected by drive-point samplers, micro samples were centrifuged from core to confirm the drive-point sampling methodology, low-flow pumping and directly collected from the discharge line near the end of each pumping test for reverse circulation wells. • Neither porosity (core) nor chemistry (brine) samples were subjected to any further preparation prior to shipment to participating laboratories. After the samples were sealed on site, they were stored in a cool location, and then shipped in sealed containers to the laboratories for analysis. • Analytical quality for the brine samples was monitored through the use of randomly inserted quality control samples, including standard reference materials (SRMs), blanks and duplicates, as well as check assays at independent laboratories. Each batch of samples submitted to the laboratory contained at least one blank, one low-grade SRM, one high-grade SRM and sample duplicates. Approximately 38% of the samples submitted for analysis were quality control samples. • Duplicates, Standards and Blanks were used in the QA/QC program as well as up to 5 external laboratories to verify the data. • Both brine and core samples were determined by the laboratories to be of adequate size for reliable analyses.
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining*	-The total porosity was measured with the core plug samples from the drainable porosity test. The procedure is to oven dry the sample and calculate the weight loss. -The brine chemistry tests are based upon American Public Health Association (APHA), Standard Methods for Examination of Water and Wastewater, Environmental Protection Agency (EPA), and American Society for Testing Materials (ASTM) protocols. -Physical parameters, such as pH, conductivity, density,

Criteria	JORC Code explanation	Commentary
	the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. • *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.*	and TDS are directly determined from the brine samples. Analysis of lithium, potassium, calcium, sodium and magnesium is achieved by fixed dilution of filtered samples and direct aspiration into atomic absorption (AA) or inductively coupled plasma (ICP) instruments. All methods are considered to be industry standard methods. • All tools used were in accordance with the ISO 9001 accreditation and consistent with ISO 17025 methods at other laboratories. All laboratories used to analyse samples for the Resource Estimate were/are independent of Allkem. • -Analytical quality was monitored through the use of randomly inserted quality control samples, including standard reference materials (SRMs), blanks and duplicates, as well as check assays at independent laboratories. Each batch of samples submitted to the laboratory contained at least one blank, one low-grade SRM, one high-grade SRM and two sample duplicates. Approximately 38% of the samples submitted for analysis were quality control samples. -The relative standard deviation values for the Standard Reference Materials ranged from 3.7 to 7.5, indicating good overall analytical reproducibility for the standard analyses conducted. -The relative standard deviation values for the blanks range from 3.0 to 7.4, indicating good overall analytical reproducibility for standard analyses conducted at Alex Stewart. -Sample and laboratory duplicate analyses indicated acceptable precision for lithium, potassium, and magnesium analyses conducted at Alex Stewart. -The round robin analytical program conducted by the previous owner Lithium One at the beginning of the 2010 – 2011 drill program indicated comparable accuracy and precision to that achieved by Alex Stewart. For this reason, the University of Antofagasta was chosen as the check analysis laboratory for the 2010 drill program. Due to turnaround time delays using the University of Antofagasta, ACME was used as the check analysis laboratory for the 2011 drill program.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage*	• Verification by the CP Montgomery & Associates Consultores Limitada covered field exploration and drilling and testing activities. These included descriptions of drill core and cuttings, laboratory results for drainable porosity and chemical analyses, including quality control results, and review of surface and borehole geophysical surveys.

Criteria	JORC Code explanation	Commentary
	(physical and electronic) protocols. • *Discuss any adjustment to assay data.*	• No holes were twinned, duplicate brine samples were presented to the laboratories. • -In the early phases of the Project, all data were transferred into a central data repository managed by Montgomery & Associates and other consultants. The database was originally located In Denver, Colorado and later synchronised with a data repository in the Project offices in Argentina, and a separate data repository at Montgomery and Associates' offices In Tucson, Arizona. Currently, Allkem manages the main database. -Raw data from the Project were transferred into a customised Access database and used to generate reports as needed. -Field data were transferred by Field personnel into customised data entry templates. Field data were verified before being uploaded into the Access database using the methodology of crosschecking data between Field data sheets and Excel tables loaded in the server. data contained in the templates were loaded using an import tool, which eliminated data reformatting. Data were reviewed after database entry. -Laboratory assay certificates were directly loaded into the Access database. Quality control reports were automatically generated for every imported assay certificate and reviewed by to ensure compliance with acceptable Quality control standards. Failures were reported to the Laboratory for correction. -The drainable porosity and chemistry data used to support the Brine Resource estimates were verified. These verifications confirmed that the analytical results delivered by the participating laboratories and the digital exploration data were sufficiently reliable for Brine Resource estimation purposes. No adjustments to assay data are recorded. • No adjustments to assay data are recorded.
Location of data points	• *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.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• All drill hole collar were surveyed using Trimble differential GPS instruments, handheld GPS or differential GNSS instrument. The North and East coordinates, elevation above ground level, elevation at the wellhead and stick-up elevation were provided through the RTK method and were linked to the official reference system and reference frame. • Coordinates on UTM system (Universal Transverse Mercator), Datum GAUSS KRÛGGER-POSGAR 07

Criteria	JORC Code explanation	Commentary
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *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.* • *Whether sample compositing has been applied.*	• -Exploration holes in general are spaced on a <1000m spacing in several locations over the site. • Exploration to date has identified the Sal de Vida brine, and has used exploration methodology conventional to brine exploration, such as geophysics and surface sampling, in addition to the drilling programs. In the CP's opinion, the drill data and hydrogeological studies are acceptable to support the Brine Mineral Resource and Ore Reserve estimates. • The samples taken during the pumping tests are composite samples, sourced from a single well, but pumped from multiple aquifer zones within that one well.
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *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.*	• The salar deposits that host lithium-bearing brines consist of sub-horizontal beds and lenses of sand, silt, halite, clay and minor gravels, depending on the location within the salar. Drill holes are vertical and essentially perpendicular to these units intersecting close to their true thickness.
Sample security	• *The measures taken to ensure sample security.*	• All samples were labelled with permanent marker, sealed with tape and stored at a secure site until transported to the laboratory for analysis. Labels were hand-written in accordance with the chain-of-custody field data sheets. Samples were packed into secured boxes with chain-of- custody forms and shipped to the relevant laboratory.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• Geochemical Applications International has conducted laboratory audits of Alex Stewart as part of a round robin analysis for the 2010-2011 drill program.

Section 2 - Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *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.* • *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.*	• - Sal de Vida (latitude 25° 24' 33.71" South, longitude 66° 54' 44.73" West) is located approximately 200 kilometres south of the Olaroz Project, Allkem's operating mine in the high-altitude Puna ecoregion of the Altiplano of northwest Argentina at approximately 4,000 meters above sea level. Sal de Vida is within Salar del Hombre Muerto in the Province of Catamarca. -Allkem's mining tenement interests in the Sal de Vida Project are held by Galaxy Lithium (Sal de Vida) S.A., a wholly owned subsidiary of Galaxy Resources Ltd. (Australia) which in turn is 100% owned by Allkem Ltd since August 2021. -Allkem currently has mineral rights over 26,253 ha at Salar del Hombre Muerto, which are held under 31 mining concessions. Allkem has been granted easements related to water, camps, infrastructure and services enabling commencement of Stage 1 construction. The Project is not subject to any known environmental liabilities other than those actions and remedies indicated in the Environmental Impact Study approval process. -All the mining concessions for the Sal de Vida Project were secured under purchasing agreements with pre-existing owners and claimants. In some cases, sellers retained usufruct rights (a legal right accorded to a person or party that confers the temporary right to use and derive income or benefit from someone else's mining property) and commercial rights (third-party rights) for the development of ulexite (borates) at surface. -Pursuant to Argentinian Law 4757 (as amended), Catamarca Mining royalty is limited to 3% of the mine head value of the extracted ore, which consist in the sales price less direct cash costs related to exploitation (excluding fixed asset depreciation, the "Mining Royalty"). -On December 20, 2021, GLSSA and the Governor of the Province of Catamarca subscribed a Royalties Commitment Deed (the "Royalty Agreement"),

Criteria	JORC Code explanation	Commentary
		pursuant to which GLSSA agrees to pay to the Province of Catamarca a maximum amount of 3.5% of the “net monthly revenue” from the Project, as follows: -The “Mining Royalty” will be paid as indicated by the provincial Royalty Regime. -An “Additional Contribution” of 3.2% less the Mining Royalty and the applicable water canon; and -0.3% shall be paid as a “Corporate Social Responsibility (CSR) Contribution”. -The validity of the Royalty Agreement is subject to the approval of the Legislature of the Province of Catamarca, which is in due course to be obtained. -The payment of Mining Royalty is due once the commercial production of the Sal de Vida Project commences and the payment of the Additional Contribution and CSR Contribution is due once the Province of Catamarca (through the relevant authority) grants GLSSA the relevant water concession pursuant to Section 7 of the Water Law No. 2577, as amended. -The Additional Contribution and CSR Contribution will be paid through a Trust, pursuant to provincial legislation to be enacted. -The 3.5% maximum amount shall be the maximum amount payable by GLSSA to the province of Catamarca, for any reason whatsoever, for the whole life of the Project (including any expansions). -The “net monthly revenue” will be calculated by reference to the amounts invoiced by GLSSA each month for the sale of lithium products produced from the Project, and for the Mining Royalty, less (i) any taxes, duties, levies included on those invoiced amounts and (ii) any sales reimbursement. • -Legal opinion provided supports that Allkem currently holds an indirect 100% interest in the Sal de Vida Project through its subsidiary Galaxy Lithium (Sal de Vida) S.A. -Legal opinion provided supports that the mineral tenures held are valid and sufficient to support declaration of Brine Mineral Resources and Brine Ore Reserves. -Social and permitting applications have sufficiently progressed to permit the commencement of Stage 1 construction. The CP is not aware of any significant environmental, social, or permitting issues that would prevent future exploitation of the Sal de Vida Project, other than as discussed in this Report.

Criteria	JORC Code explanation	Commentary
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• No exploration by other parties is known for lithium carbonate. • Prior mining was done on site for ulexite, within 5m of surface.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• -The regional geological setting is the Altiplano Puna plateau, an area of uplift that began during the middle to late Miocene (10 – 15 Ma). Red-bed sediments formed during the early to middle Miocene in areas of structural depressions. During the middle to late Miocene, a combination of thrust faulting, uplift and volcanism led to the sedimentary basins becoming isolated. The Cordilleras and major watersheds bound the Puna area to the west and east. Sedimentation in these basins began with the formation of alluvial fans at the feet of the uplifted ranges and continued with the development of playa sandflats and mudflat facies. -In basin areas, the watersheds are within the basins; there are no outlets from the basins. Ongoing runoff, both surface and underground, continued solute dissolution from the basins and concentration in their centres where evaporation is the only outlet. Evaporite minerals occur both as disseminations within a clastic sequence and as discrete beds. -The Salar system in the Hombre Muerto basin is considered a typical mature salar. The Hombre Muerto basin has an evaporite core that is dominated by halite. Basin margins are steep and are interpreted to be fault controlled. The east basin margin is predominantly Pre-Cambrian metamorphic and crystalline rocks belonging to Pachamama formation. Volcanic tuff and reworked tuffaceous sediments, most likely from Cerro Galan complex, together with tilted Tertiary rocks, are common along the western and northern basin margins. In the Sal de Vida Project area, the dip angle of Tertiary sandstone is commonly about 45º to the southeast. Porous travertine and associated calcareous sediments are common in the subsurface throughout the basin and are flat lying; these sediments appear to form a marker unit that is encountered in most core holes at similar altitudes. Several exploration boreholes located near basin margins completely penetrated the flat-lying basin-fill deposits, and have bottoms in tilted Tertiary sandstone, volcanic tuff, and micaceous schist.

<table>
<tr><th>Criteria</th><th>JORC Code explanation</th><th>Commentary</th></tr>
<tr><td>Drill hole Information</td><td>

- *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:*
  - *easting and northing of the drill hole collar*
  - *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar*
  - *dip and azimuth of the hole*
  - *down hole length and interception depth*
  - *hole length.*
- *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.*

</td><td>
<table>
<tr><th rowspan="2">Borehole ID</th><th colspan="3">Well Coordinates[a]</th><th colspan="2">Borehole</th></tr>
<tr><th>Northing</th><th>Easting</th><th>Altitude (masl)[b]</th><th>Dia. (in)</th><th>Depth Drilled (m bls)[c]</th></tr>
<tr><td rowspan="4">SVWP21_01</td><td rowspan="4">7,195,299</td><td rowspan="4">3,411,502</td><td rowspan="4">3,972.40</td><td>24</td><td>0 – 102</td></tr>
<tr><td>17</td><td>0 – 102</td></tr>
<tr><td>16</td><td>102 – 233</td></tr>
<tr><td>8 ¾</td><td>0 – 240</td></tr>
<tr><td rowspan="3">SVWP21_02</td><td rowspan="3">7,194,884</td><td rowspan="3">3,412,559</td><td rowspan="3">3,972.70</td><td>24</td><td>0 – 91</td></tr>
<tr><td>16</td><td>0 – 303</td></tr>
<tr><td>8 ¾</td><td>0 –307</td></tr>
<tr><td rowspan="3">SVWP21_03</td><td rowspan="3">7,194,301</td><td rowspan="3">3,411,664</td><td rowspan="3">3,973.70</td><td>24</td><td>0 – 65</td></tr>
<tr><td>16</td><td>0 – 182</td></tr>
<tr><td>8 ¾</td><td>0 – 202</td></tr>
<tr><td rowspan="3">SVWP21_04</td><td rowspan="3">7,193,909</td><td rowspan="3">3,412,798</td><td rowspan="3">3,973.80</td><td>24</td><td>0 – 84</td></tr>
<tr><td>16</td><td>0 – 226.7</td></tr>
<tr><td>8 ¾</td><td>0 – 236</td></tr>
<tr><td rowspan="3">SVWP21_05</td><td rowspan="3">7,193,289</td><td rowspan="3">3,411,643</td><td rowspan="3">3,973.10</td><td>24</td><td>0 – 87.5</td></tr>
<tr><td>16</td><td>0 – 208.3</td></tr>
<tr><td>8 ¾</td><td>0 – 212</td></tr>
<tr><td rowspan="3">SVWP21_06</td><td rowspan="3">7,192,906</td><td rowspan="3">3,412,771</td><td rowspan="3">3,973.80</td><td>24</td><td>0 – 86</td></tr>
<tr><td>16</td><td>0 – 264</td></tr>
<tr><td>8 ¾</td><td>0 – 267.7</td></tr>
<tr><td rowspan="3">SVWP21_07</td><td rowspan="3">7,192,294</td><td rowspan="3">3,411,658</td><td rowspan="3">3,973.60</td><td>24</td><td>---</td></tr>
<tr><td>16</td><td>0 – 12</td></tr>
<tr><td>8 ¾</td><td>0 – 58</td></tr>
<tr><td rowspan="4">SVWP20_08</td><td rowspan="4">7,191,901</td><td rowspan="4">3,412,781</td><td rowspan="4">3,975.60</td><td>24</td><td>0 – 92</td></tr>
<tr><td>18</td><td>92 – 98</td></tr>
<tr><td>16</td><td>0 – 280</td></tr>
<tr><td>8 ¾</td><td>0– 307</td></tr>
<tr><td rowspan="3">SVWF21_21</td><td rowspan="3">7,187,411</td><td rowspan="3">3,409,970</td><td rowspan="3">3,980.00</td><td>24</td><td>---</td></tr>
<tr><td>16</td><td>0 – 42</td></tr>
<tr><td>8 ¾</td><td>0 – 36</td></tr>
</table>

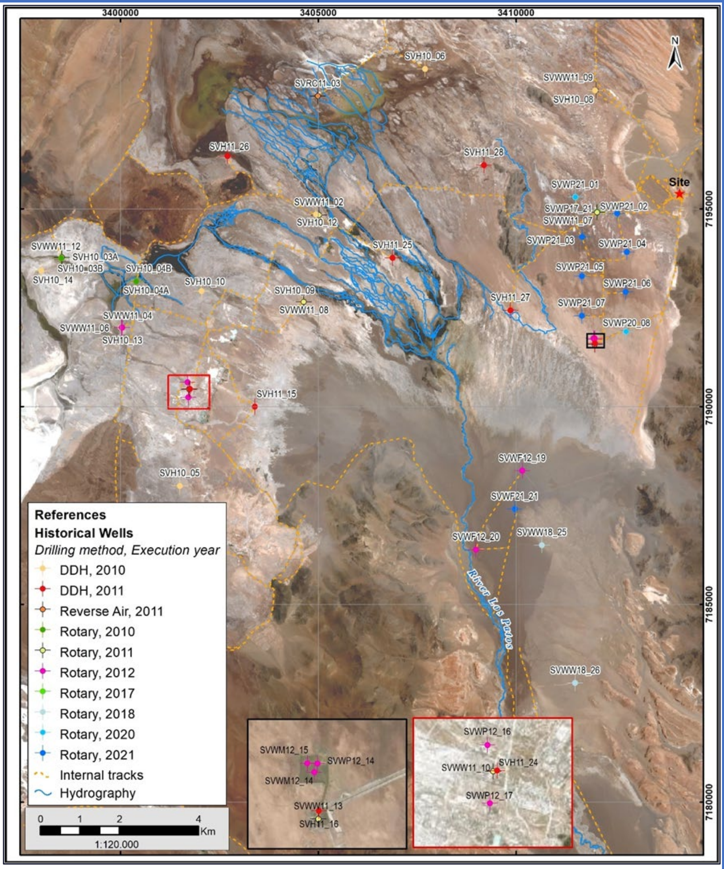
Notes: a = Coordinates on UTM system (Universal Transverse Mercator), Datum GAUSS KRÛGGER-POSGAR 07.
b = metres, amsl = above mean sea level
c = metres, bls = below land surface
All drill holes are vertical (dip -90, azimuth 0 degrees)
d = the table presents recent wells from Allkem (Lithium One exploration wells are not included)
</td></tr>
<tr><td>Data aggregation methods</td><td>

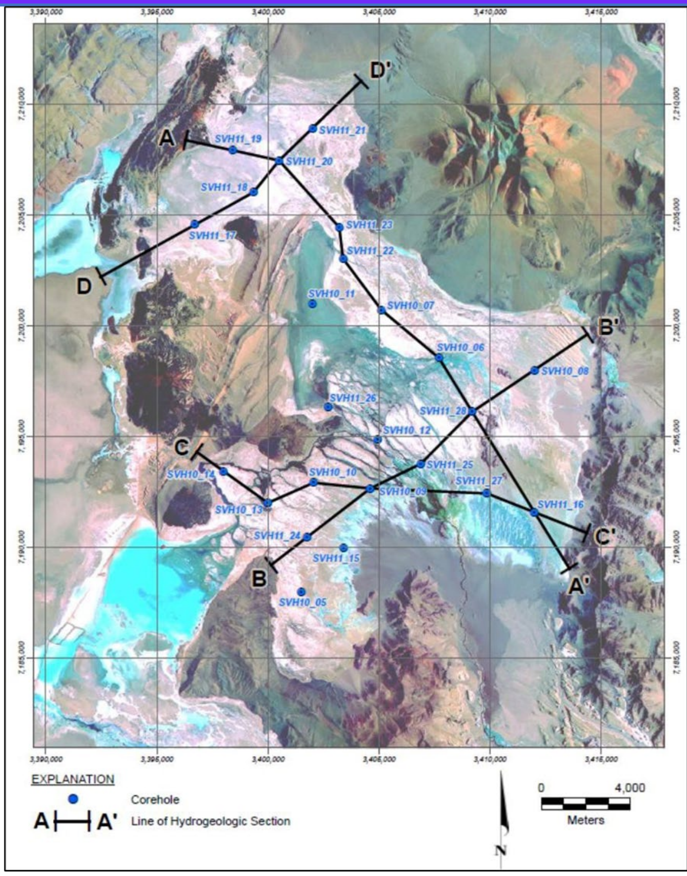
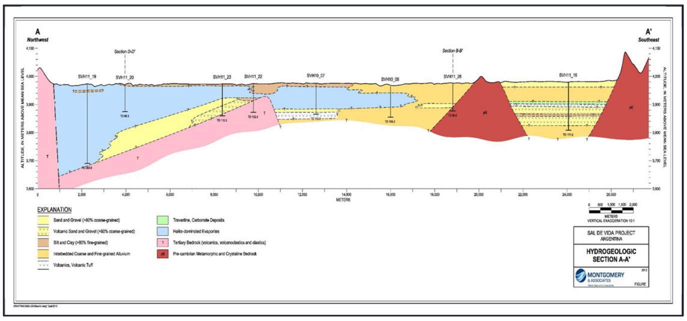
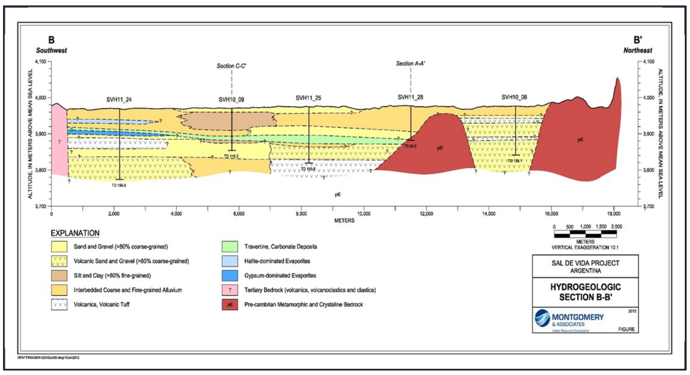
- *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.*
- *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.*
- *The assumptions used for any reporting of metal equivalent*

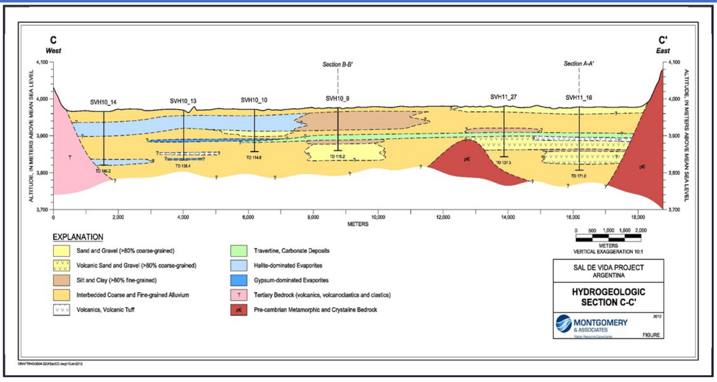
</td><td>

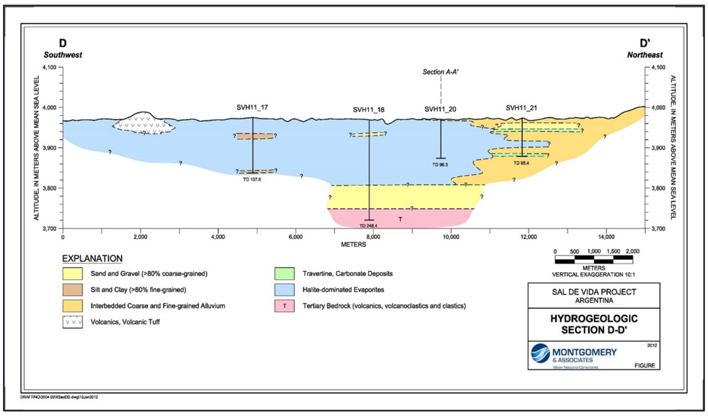
- The pumping well samples are composite samples that reflect inflows from different levels within the wells, which are screened at multiple levels throughout their depth. The lithium concentration in the pumped samples is an average of the concentration from different units with relatively higher and lower values than the average. More permeable units contribute a higher proportion of the brine in the pumped samples.
- No other aggregate methods were used.
- Lithium carbonate equivalent (LCE) values are reported but are directly proportional to the amount of lithium in the resource brine. Therefore, they are not considered to be “equivalent” values as commonly defined in mining.

</td></tr>
</table>

Criteria	JORC Code explanation	Commentary
	values should be clearly stated.	
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	• The sediments hosting brine are interpreted to be essentially perpendicular to the vertical drill holes, representing true thicknesses in drilling. Except in those areas where fresh water occurs in the upper part of the aquifer, the entire thickness of sediments is believed to be mineralized with lithium brine, with the water table within approximately 1 metre of surface in most part of the salar. Lithium is hosted in brine in pores within the different terrestrial sedimentary units in the salt lake sequence.
Diagrams	• *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.*	 *Location map of exploration boreholes.*

Criteria	JORC Code explanation	Commentary
		 Hydrogeological Cross-Section Locations (Plan View).  Hydrogeological Cross-Section A-A'.  Hydrogeological Cross-Section B-B'

<table>
<tr><th>Criteria</th><th>JORC Code explanation</th><th>Commentary</th></tr>
<tr><td></td><td></td><td>

Hydrogeological Cross-Section C-C'.


Hydrogeological Cross-Section D-D'.</td></tr>
<tr><td>Balanced reporting</td><td>• 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.</td><td>• Exploration results are presented from all areas of the Sal de Vida mine concessions and are believed to representative. Reported results have not been screened, disregarded, or specifically selected to mislead the reader.</td></tr>
<tr><td>Other substantive exploration data</td><td>• 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.</td><td>• -A number of geophysical surveys have been completed and are summarized in the Geophysical Survey table below. The gravity survey locations are shown in Location of Year 2021 Gravity Survey Lines, the vertical electric sounding point locations in Location Map, Vertical Electric Sounding Points, transient electromagnetic survey profile line locations in Location Map, Transient Electromagnetic Survey Profiles, and 2D and 3D reinterpretation of depth to basement rock at Sal de Vida Project is shown in 2D Plan View of Sal de Vida Basement Map and 3D Model Update of the Cerro Ratones Northeast Edge, respectively.</td></tr>
</table>

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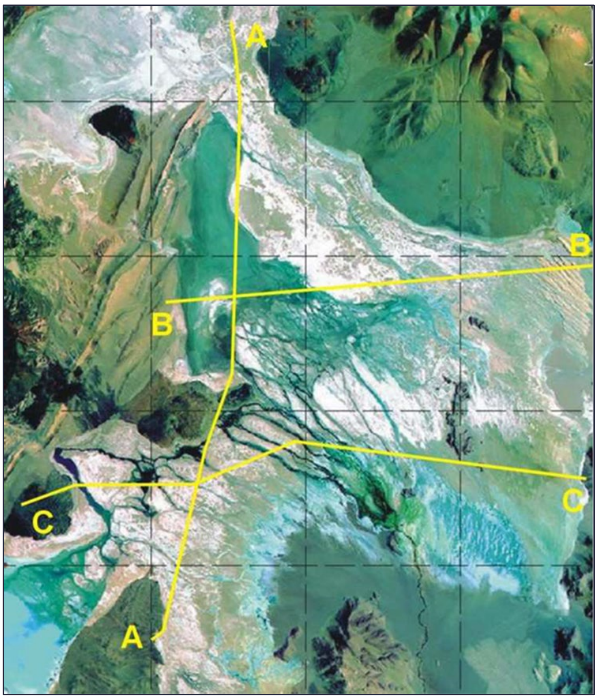
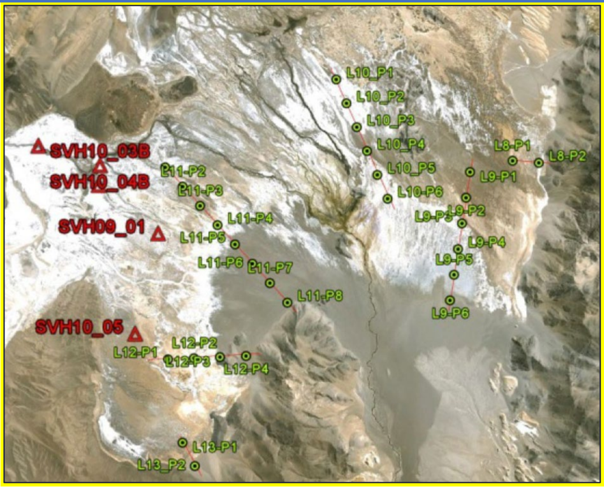
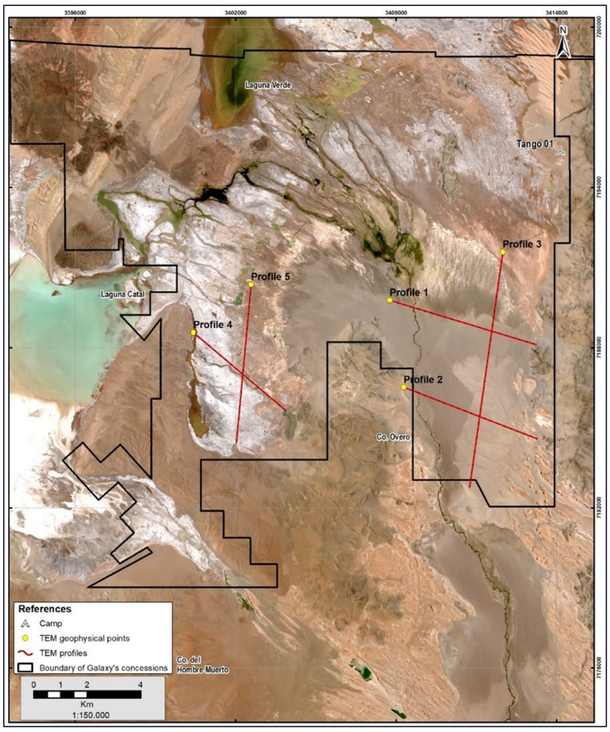
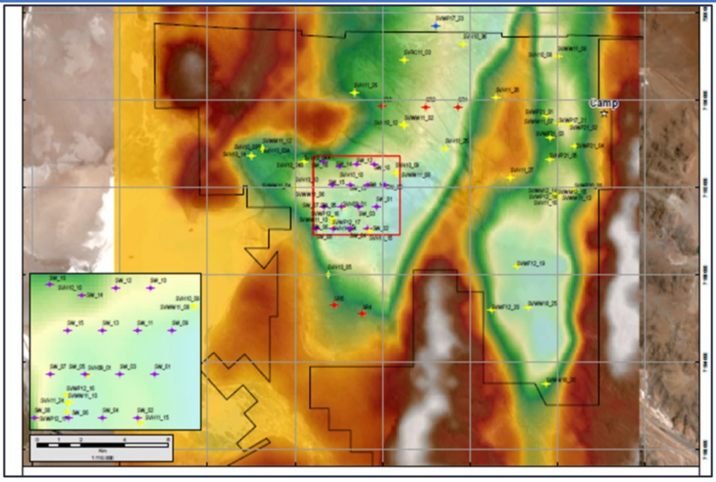
Geophysical Surveys

Operator/Contractor	Survey Type	Date	Note
Quantec Ltd.	Gravity	2009, 2010	96 linear km across the eastern sub-basin to provide information on bedrock by density. Results suggested that the deepest part of the basin was in the centre of the western sub-basin, where salar deposits may be as much as 380 m thick.
Geophysical Exploration and Consulting S.A.	Vertical electrical sounding	2010	Conducted to investigate brackish or raw water–brine interface conditions beneath the margins of the Hombre Muerto basin, along alluvial fans, and adjacent to the Río de los Patos. Data interpretations suggest that highly-conductive material, possibly brine, is present beneath alluvial fans along the basin margins. The following resistivity ranges were used for brackish water/salt water- bearing formations and brines: 1 ohm-metre (ohm-m) < apparent resistivity < 15 ohm-m: brackish water-bearing formations; apparent resistivity < 1 ohm-m: sea water, geothermal fluids and brine-bearing formations.
Quantec Geoscience Argentina S.A.	Transient electro-magnetic	2018	127 measurements in five profiles. The acquired data are of high quality, and the inversion results provide a good representation of the subsurface resistivity distribution to depths ranging from approximately 100 – >400 m, varying in association with the conductivity. The surveys detected resistivity ranging from <1 ohm- m to approximately 1,000 ohm-m. Several conductive zones of resistivity of <1 ohm-m were detected.
Mira Geoscience	3D Gravimetry	2021	Objective of Project was to generate a revised depth to basement interpretation of gravity data for the Sal de Vida area in Argentina, using geologically constrained 3D gravity forward modelling and inversion techniques. Interpretation was constrained by supporting data, including outcrop, drilling, transient electromagnetics (TEM), and DC resistivity soundings (Vertical Electric Soundings, VES). All supplied data were imported and registered in GOCAD Mining. Data compiled comprised is: - Topographic data - Geological maps showing basement outcrop - Interpreted cross-sections - Drill data, including petrophysical data on drillhole samples (density and porosity) - Surface sample petrophysical data (Sharpe, 2010). - Geophysical data - TEM - Gravity - VES

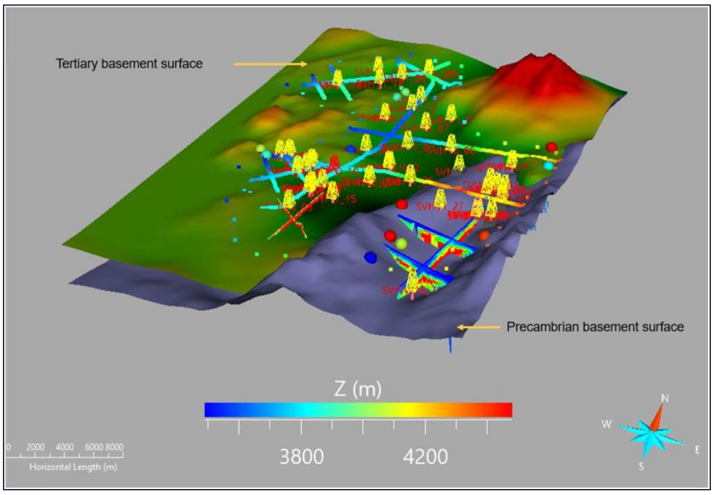


Location of Year 2021 Gravity Survey Lines.

Criteria	JORC Code explanation	Commentary
		 Location Map, Vertical Electric Sounding Points (Note: Figure from GEC Geophysical Exploration & Consulting S.A., 2010. Green represents VES readings and red proposed drill holes. Red triangles represent core holes).  Location Map, Transient Electromagnetic Survey Profiles.



2D Plan View of Sal de Vida Basement Map (Note: Tertiary Basement is indicated in green and in the Precambrian Basement is indicated in brownish yellow).



3D Model Update of the Cerro Ratones Northeastern Outcrop (Note: Tertiary Basement is indicated in green and the Precambrian Basement in gray with a 1:3 vertical exaggeration).

-During the exploration program, downhole electrical conductivity surveys were conducted at many of the wells after completion and boreholes to identify fresh water and brine-bearing parts of the aquifer. Electrical conductivity is a measure of the water's ability to conduct electricity and is an indirect measure of the water's ionic activity and dissolved solids content. Electrical conductivity is positively correlated with brine concentration. The purpose of the profiles was to:

-Determine the electrical conductivity profile and

Criteria	JORC Code explanation	Commentary
		identify potential freshwater influence and low density, and -Provide additional verification for the chemistry profiles generated from depth-specific samples. -Short-term pumping tests under operating conditions have demonstrated excellent brine extraction and aquifer recharge rates to support the production design basis. -Long-term pumping tests under operating conditions at each wellfield did not show any significant or obvious change in the aquifer water chemistry entering the wellfields during the pumping period.
Further work	• *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• -Exploration should be conducted to better identify and potentially demonstrate additional extractable brine in other parts of the basin. Favourable exploration results represent Project upside potential. The following additional investigations are recommended: -Geophysical surveys: perform additional gravity, magnetic, and resistivity surveys over the east, south and west sub-basins to supplement the existing surveys. -Core drilling: additional wells in the southwest and eastern portions of the mine concessions that are deeper than 300 m. -Downhole sampling of any additional wells to obtain brine chemistry and drainable porosity results. -Additional 30-day pumping tests to identify potential for new wellfields. -Quality assurance and quality control (QA/QC) measures should be continued for all collected brine samples including the use of blanks, duplicates, standards, and secondary (external) laboratories to increase confidence in the obtained data. 10% to 20% of the collected samples should be analysed for QA/QC purposes, and a round-robin analysis of brine samples is recommended. The determination of drainable porosity should be confirmed with two independent methodologies including the analysis of core samples and indirect measurements (e.g., borehole magnetic resonance), among others.

Section 3 Estimation and Reporting of Mineral Resources

Criteria	JORC Code explanation	Commentary
Database integrity	• *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.* • *Data validation procedures used.*	• Verification and validation of the assay data was performed for the 51 sample sites. Verification includes pH, density, conductivity, TDS, sulphate, Cl, alkalinity, B, Ca, K, Li, Mg and Na. Verification of the location of trenches and samples collected by use of differential GPS was also conducted. • For the Feasibility Study, Montgomery and Associates personnel verified the drainable porosity and chemistry data used for the Brine Mineral Resource estimates. These verifications support that the analytical results delivered by the participating laboratories and the digital exploration data were sufficiently reliable for the Brine Mineral Resource and Brine Ore Reserve estimations outlined in this Report. -A customized Access database was generated after integration between original database and raw data from the project. It included a crosschecking methodology, assays certificates, quality control standards. -Database lithium grades include QA/QC procedures where standards, duplicates, blanks and check analysis were used. -The CPs concluded that the information was acceptable to support Brine Resource estimation.
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits have been undertaken indicate why this is the case.*	• Consulting firm Montgomery & Associates Consultores Limitada is assigned as Qualified Persons and have supervised the technical report and take responsibility for its contents. • Consulting firm Montgomery & Associates Consultores Limitada is responsible for the Mineral Resources estimates and they have visited the site in numerous occasions, from 2010 to the present, and have reviewed the exploration activities. The last visit was conducted from July 31 to August 02, 2023, where the pumping wells and pilot ponds were also reviewed.
Geological interpretation	• *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.* • *Nature of the data used and of any assumptions made.* • *The effect, if any, of alternative interpretations on Mineral Resource estimation.* • *The use of geology in guiding*	• There is a high level of confidence in the geological model for the Project. Six Hydrogeological units are defined based on five dominating lithologies where drainable porosity and brine chemistry analysis were performed. Sal de Vida's brine chemistry has a high lithium grade, low levels of magnesium, calcium and boron impurities and readily upgrades to battery grade lithium carbonate. • Interpretation is based on drill core and cuttings, drilling and test results, brine chemistry and porosity

Criteria	JORC Code explanation	Commentary
	and controlling Mineral Resource estimation. • *The factors affecting continuity both of grade and geology.*	laboratory analysis, aquifer testing results, geophysical survey and other information available from the work carried out between 2009 to date. Porosity samples were collected during 2010, 2011, and 2012 from intact HQ and NQ-core. Full diameter core with no visible fractures was selected and submitted to Core Laboratory Petroleum Servicios, Texas. • In addition to the depth-specific brine samples obtained by drive-points during coring, brine samples used to support the reliability of the depth-specific samples included analyses of brine centrifuged from core samples, brine obtained from low flow sampling of the exploration core holes and brine samples obtained near the end of the pumping tests in the exploration and production wells. Brine chemistry samples were sent to Alex Steward lab, duplicates samples were sent to University of Antofagasta lab and ACME Santiago lab was used for check analysis. Duplicate samples were sent to ALS Chemex lab, Argentina. • In the CP's opinion, and based on the brine system deposit model, knowledge of the geological setting of the Salar and associated hydrogeological systems, all drill data and hydrogeological studies are acceptable to support the Brine Mineral Resource and Ore Reserve estimates.
Dimensions	• *The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	• The deposit type is a brine aquifer within a salar basin. The extent of the active model resources covers an area of 146 km^2 for Measured and Indicated Mineral Resources plus an area of 14.9 km^2 for Inferred Mineral Resources, with a total of 160.9 km^2.
Estimation and modelling techniques	• *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.* • *The availability of check*	• The employed methodology for Mineral Resources is polygon based where every polygon contains at least 1 diamond drill exploration or exploration well. The boundaries between polygon blocks are generally equidistant from diamond drill holes. The depth of each polygon is based on the total depth of each borehole, and the subsurface lithological column was separated into hydrogeologic units which vary with depth based on the lithologic logs and other available field information. • Each polygon is given a representative value for drainable porosity and average lithium content based on laboratory analyses of samples collected during exploration drilling.

Criteria	JORC Code explanation	Commentary
	estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data. • *The assumptions made regarding recovery of by-products.* • *Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).* • *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.* • *Any assumptions behind modelling of selective mining units.* • *Any assumptions about correlation between variables.* • *Description of how the geological interpretation was used to control the resource estimates.* • *Discussion of basis for using or not using grade cutting or capping.* • *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.*	• The Mineral Resource was estimated by summing the aquifer volume multiplied by drainable porosity and lithium grade for each interval of the individual polygons and resource category. • No deleterious elements have been modelled as part of the brine feed.
Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	• Moisture content of the cores was measured (porosity and density measurements were made), but because brine is extracted by pumping, the sediment moisture is not a relevant parameter for the Resource Estimate.
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	• A cut-off grade of 300 mg/l was conservatively used based on a breakeven cut-off grade for a projected lithium carbonate equivalent (LCE) price of US$20,000 per tonne over the entirety of the Life of Mine (LOM), as well as a grade tonnage curve.

Criteria	JORC Code explanation	Commentary
Mining factors or assumptions	• *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.*	• The Mineral Resource has been quoted in terms of brine volume, concentration of lithium and their product lithium carbonate (LCE). • No mining or recovery factors have been applied (although the use of the drainable porosity and exclusion of polygon intervals below the 300 mg/L lithium cut-off grade supports the reasonable prospects for eventual economic extraction with the proposed mining methodology). It should be noted that conversion of resources to reserves for brine deposits is lower than that for hard rock deposits. -Dilution of brine concentrations may occur over time and typically there are lithium losses in both the ponds and processing plant in brine mining operations. -The conceptual mining method is recovering brine from the salt lake via a network of wells, the established practice on existing lithium brine projects. -Detailed hydrologic studies of the salar have been undertaken (catchment and groundwater modelling) to evaluate the extractable resources and potential extraction rates.
Metallurgical factors or assumptions	• *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.*	• Lithium carbonate and potassium chloride is projected to be produced on site via conventional brine processing techniques and evaporation ponds to concentrate the brine prior to processing as currently Allkem's Olaroz operation does. Brine composition from Sal de Vida (SDV) could be processed using similar processing technology to that applied in the Olaroz production facility, which has been successfully applied to produce lithium carbonate in the Allkem (Previously Orocobre) facilities.
Environmental factors or assumptions	• *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*	• -Impacts of the lithium carbonate production operation at the SDV salar include surface disturbance from the creation of extraction/processing facilities and associated infrastructure, accumulation of various salt tailings impoundments and extraction from brine and freshwater aquifers regionally. Lime is used to increase precipitation of impurities like magnesium

Criteria	JORC Code explanation	Commentary
	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.	and calcium solids. Precipitated salts are collected in ponds and later returned to the salar. -A small fraction of waste solids is generated in the lithium carbonate plant, that are mainly impurities removed from the brine. The main solids are a mixture of magnesium hydroxide and calcium carbonate. Waste disposals areas will surround the evaporation ponds to the north, east and southeast. -Waste disposals areas will surround the evaporation ponds to the north, east and southeast. This facility will consist of halite, muriate, and co-disposal stockpiles surrounding the halite ponds and will cover a total area of approximately 300 ha for Stage 1 and 600 ha for Stage 2. -The project has fulfilled the required environmental and social assessments to progress into construction of Stage 1. The project is permitted by the provincial mining authorities and has provincial and federal permits. The project reflects positive, social and socio-economic benefits for local communities. Expansion Stage 2 permitting application process is still to commence.
Bulk density	• *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.* • *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.* • *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	• 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 mining of sediments is to be carried out, as brine is to be extracted by pumping. Consequently, sediments are not mined but the lithium and potassium are extracted by pumping. • No bulk density was applied to the estimates because resources are defined by volume, rather than by tonnage. • The salt unit can contain fractures and possibly voids which host brine and add to the drainable porosity.
Classification	• *The basis for the classification of the Mineral Resources into varying confidence categories.* • *Whether appropriate account has been taken of all relevant factors (ie relative confidence*	• The Mineral Resource has been classified in Measured, Indicated and Inferred Mineral Resource categories based on the confidence in the estimation and specific information available. For Measured and Indicated Mineral Resources, the following factors are considered: Level of understanding and reliability of

Criteria	JORC Code explanation	Commentary
	in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data). • *Whether the result appropriately reflects the Competent Person's view of the deposit.*	the basin stratigraphy and the local hydrogeologic characteristics of the aquifer system, density of drilling and testing in the salar and uniformity of the results within the area, and available pumping test and historical production information. • The CP believes that the amount of exploration information and understanding of the deposit supports the Mineral Resource classification. The CP also believes that there is substantial upside potential for increasing both the Mineral Resource categories, and also by increasing the total Mineral Resource volume by drilling in unexplored areas, and by drilling deeper.
Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	• A preliminary audit was conducted by SRK Consultants in 2022.
Discussion of relative accuracy/ confidence	• *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 Mineral 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.* • *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.* • *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	• Main uncertainties of the Mineral Resource include the location of aquifer boundaries and shallower than anticipated bedrock near hard rock outcrops. Furthermore, uncertainties include the lateral continuity of key aquifer zones, presence of fresh and brackish water that have the potential to dilute the brine in the wellfield area and assumed uniformity of average aquifer parameters within specific aquifer units. Even though these uncertainties exist, the CP conservatively assigned resource categories in a manner aligned with industry practices for lithium brine projects. • The level of understanding and reliability of the basin stratigraphy, level of understanding of the local hydrogeologic characteristics of the aquifer system, density of drilling and testing in the Salar and general uniformity of results within an area are the main factors that could support an upgrade of the Mineral Resource categories. • It is recommended that a resource block model be created instead of the polygon method to estimate the Lithium Brine Mineral Resource. • To the extent known by the CP, there are no known environmental, permitting, legal, title, taxation, socioeconomic, marketing, political or other relevant factors that could affect the Mineral Resource estimate which are not discussed.

Section 4 Estimation and Reporting of Ore Reserves

Criteria	JORC Code explanation	Commentary
Mineral Resource estimate for conversion to Ore Reserves	• *Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.* • *Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.*	• The Mineral Resource used as the basis for the Ore Reserve Estimate was based on the information in Section 3 of this Table 1. • Mineral Resources are reported inclusive of Ore Reserves.
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits have been undertaken indicate why this is the case.*	• Consulting firm Montgomery & Associates Consultores Limitada is assigned as Qualified Persons and have supervised the technical report and take responsibility for its contents. • Consulting firm Montgomery & Associates Consultores Limitada is responsible for the Ore Reserves Estimates and they have visited the site in numerous occasions, from 2010 to the present, where they have reviewed the exploration activities. The last visit was conducted from July 31 to August 02, 2023, where the pumping wells and pilot ponds were also reviewed.
Study status	• *The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.* • *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.*	• The Sal de Vida Project in Stage 1 is based on a Feasibility Study. The Stage 2 considers an expansion of the Project, and it is under a current Pre-Feasibility Study.
Cut-off parameters	• *The basis of the cut-off grade(s) or quality parameters applied.*	• A cut-off grade of 300 mg/L was conservatively applied based on a long-term estimated LCE price of US$20,000 per tonne. Results for Proved and Probable Ore Reserves indicate an average extracted grade of 757 mg/L throughout the life of the project, which far exceeds the 300 mg/L cut-off grade, demonstrating that production is economically viable.
Mining factors or assumptions	• *The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral*	• The life of mining is project to 40 years. Mining production for the years 1 and 2 is taken from Stage 1 in the East wellfield, and for the following years 3-40, production will incorporate Stage 2 from the SW, SE

Criteria	JORC Code explanation	Commentary
	Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design). • *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.* • *The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling.* • *The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).* • *The mining dilution factors used.* • *The mining recovery factors used.* • *Any minimum mining widths used.* • *The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.* • *The infrastructure requirements of the selected mining methods.*	and N well areas. Currently, well depths are down to approximately 200m only and this can change when new deeper exploration wells are drilled. All production wells will be connected through pipelines to centrally positioned booster ponds. The East Wellfield (Stage 1) is designed with 8 operating wells plus one on standby. • Projections for Ore Reserves indicates that average annual rate production of brine from the east is set in 315 L/s and 191 L/s from the southwest. The initial average grade is expected to be roughly 805 mg/L and 815 mg/L, respectively. • Extraction using wells is the appropriate extraction choice in salt lakes, as the lithium is dissolved in brine (fluid) and mining of unconsolidated sediments is not contemplated. • Geotechnical parameters for brine extraction are different to hard rock mining, thus detailed geotechnical studies are not required. Due to the fact that the mining of this type of deposit does not involve excavations or underground workings (as with hard rock deposits), it is not necessary to carry out detailed geotechnical studies of the soil and rock strength parameters. • Pit slope is not relevant for brine mining. • Dilution of brine during pumping is simulated within the numerical model for the conversion of Mineral Resources into Ore Reserves. • There are no minimum mining widths, as brine mining is not a selective mining method. • The Inferred Mineral Resources are not included in current mining studies but are considered a possible source of future brine extraction when their resource classification is upgraded. • Brine mining requires the provision of electricity and pipelines to the sites of wells from which brine is extracted. The pipelines pump brine to centralised collection ponds, from where it is pumped to the evaporation pond network. The brine is subject to the addition of lime in the evaporation ponds. Pumps are required to move brine between ponds and pump brine into the plant, where lithium carbonate product is produced. Electricity generators for wellfields and boosters will be used during the pre-production (1 year) and then will be fed by a power line.
Metallurgical factors or assumptions	• *The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.*	• The metallurgical process utilised for the production of lithium carbonate is based on solar evaporation of brine, prior to reacting lithium with carbon dioxide in the plant to produce lithium carbonate. In this way,

Criteria	JORC Code explanation	Commentary
	• *Whether the metallurgical process is well-tested technology or novel in nature.* • *The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.* • *Any assumptions or allowances made for deleterious elements.* • *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.* • *For minerals that are defined by a specification, has the Ore Reserve estimation been based on the appropriate mineralogy to meet the specifications?*	much of the energy required for the process is provided naturally by the sun. Lithium preferentially remains within the brine, and other elements precipitate from the brine in response to their increasing concentration and saturation in the brine. Lime is added to the ponds to facilitate the precipitation of magnesium from the brine. Although more recent direct extraction processing techniques are more widely available pond evaporation provides a cost-effective processing method. • The Sal de Vida process design is approximated from previously completed Allkem operated Olaroz Project test work, results and performance. The Olaroz process design has been successfully proven to produce lithium carbonate since 2015. • Modifications to the Olaroz process technology mean that salts will be drained and harvested in all ponds. Transfer pumps will be used to transfer concentrated brine from a lower grade pond into a higher-grade pond. A second liming stage will be installed to maximise magnesium ion removal before brine enters the production facilities and an ion-exchange stage will be installed to remove remaining calcium and magnesium ions before precipitating battery grade lithium carbonate. • Lithium Carbonate is sold as both battery and technical grade product, depending on the concentration of impurities. The project produces both grades of product. • Pilot testing was conducted during 2020 and 2021; purpose-built pilot ponds and pilot plant validate laboratory test work and explore operational considerations. Future drilled production wells showed a higher concentration grade and lower impurity than pilot testing. • Deleterious elements have been identified and measurement will be taken to mitigate the risks. Sodium carbonate will be ionized captured before being fed into the crystallisation circuit and magnets will be used to capture are remove impurities related to iron equipment.
Environmental	• *The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of*	• - The project has an approved DIA (Impact Assessment Declaration) from 2014 being the legal instrument to explore, construct and perform exploitation activities. This document is subject and based on a series of commitments and obligations and has been updated

Criteria	JORC Code explanation	Commentary
	potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.	every 2 years. -An Environmental Impact Assessment report is currently underway, with the aim of the Regulatory submission in August 2023 to renewal of the Stage 1 environmental mining permit (DIA). -A series of approvals and permits relate to environment, chemicals, groundwater and freshwater use, waste management, hazardous and others, are finished and others underway.
Infrastructure	• *The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed.*	• The project is located in a flat plain at an altitude of about 4,000m above land surface. The main route to the Project site is from the city of Catamarca via national route 40 to Belen, and provincial Route 43 through Antofagasta de la Sierra to Salar del Hombre Muerto. The road is paved all the way to Antofagasta de la Sierra and continues unpaved for the last 145 km to Salar del Hombre Muerto. The shortest route to the Project site is from Salta via San Antonio de los Cobres. The access road is paved for the first 75 km to San Antonio de los Cobres and continues unpaved for 215 km to Salar del Hombre Muerto. The total distance between the city of Salta and the Sal de Vida Project is 390 km. • Site infrastructure will consist of the main processing facilities including brine well fields and pumping, evaporation ponds, process plant and waste storage. Allkem's current operations at the Olaroz Project are of similar nature and process. Internal company policies, standard operating procedures, management systems and structures will allow sufficiently rigid establishment of initial operations at the Project site and reduce commissioning and ramp-up risk. • The brine production wellfields will be located on two sectors of the Salar de Hombre Muerto, one in the East wellfield for Stage 1 where production will start, and a subsequent stage called the Stage 2 Expansion. This Stage 2 will expand the original area of Stage 1 to the west, south and north. Brine wells will be connected through pipelines to centrally positioned booster ponds. The wells will be equipped with pumps and manifolds to the distribution pipeline. • The evaporation ponds for Stage 1 will cover 450 ha while the halite evaporation pond of Stage 2 will cover approximately 850 ha while Muriate evaporation ponds for this Stage 2 will cover 50 ha. • The processing plant will consist of a liming plant to

Criteria	JORC Code explanation	Commentary
		support evaporation pond processes, and a lithium carbonation plant to produce final product. The processing plant will be supported by service infrastructure such as reagents mixing, fuel and storage facility, sulfuric acid preparation, compressors and boilers, water treatment plants and workshops. • The Project's accommodation camp will be built next to the process plant area. The camp building will be based on prefabricated material to accommodate up to 900 people. The process facility, support services and accommodation infrastructure are deemed adequate to support the planned facility operation and production rate. • Electricity for the Plant involves diesel independent generators for electricity and connection to a power line. Shift from diesel generation to natural gas will be available in case natural gas is available for the future. The camp will also have renewable energy. • The Project support infrastructure has been reviewed and is deemed adequate by the CP to support the processing infrastructure and process operations described in this report.
Costs	• *The derivation of, or assumptions made, regarding projected capital costs in the study.* • *The methodology used to estimate operating costs.* • *Allowances made for the content of deleterious elements.* • *The derivation of assumptions made of metal or commodity price(s), for the principal minerals and co- products.* • *The source of exchange rates used in the study.* • *Derivation of transportation charges.* • *The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.* • *The allowances made for royalties payable, both Government and private.*	• Capital and operating cost estimates were prepared using AACE International guidelines. The cost estimate was compiled by Allkem management team. • Commodity price is based on market studies conducted by well-known international consultancy Wood McKenzie. • Provincial mining royalty is considered based on the mine head value of the extracted ore. In addition, the Federal Argentine government receives an export duty on the FOB while the company exports lithium products. • Corporate tax rate is set at 35%. • All estimates disclosed herein are expressed in US dollars. Allkem uses US dollars as reporting currency in all statements and reports. Allkem's subsidiaries use US dollars as reporting currency and operational currency. Argentine Peso is used as a transactional currency for local payments within the country. • Transportation charges are estimates based on historical actuals. • Lithium Carbonate is sold as a final product to end users. The pricing is based upon the projections of production for the three product types, Prime (close to battery grade specification), Purified (exceeds battery

Criteria	JORC Code explanation	Commentary
		grade) and Micronized.
Revenue factors	• *The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.* • *The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.*	• The lithium cut-off grade set at 300 mg/L is based on a projected LCE price of US$20,000 per tonne. • During the 40-year Ore Reserve simulation, extracted lithium grades from individual production wells vary between approximately 815 and 520 mg/L due to dilution over the LOM. The average lithium grade of the Proved and Probable Ore reserves corresponds to 757 mg/L and represents the flux-weighted composite brine collected before processing. Extracted grades at individual production wells and the average Proved and Probable Ore reserve concentration are well above the 300 mg/L cut-off grade, demonstrating the production is economically viable.
Market assessment	• *The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.* • *A customer and competitor analysis along with the identification of likely market windows for the product.* • *Price and volume forecasts and the basis for these forecasts.* • *For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.*	• Lithium is a commodity with a strong growth profile and increasing demand. The growth trend for Lithium carbonate demand for compound annual growth rate (CAGR) of 14% until 2033 supporting strong market dynamics until at least 2033. • The company expects to sell the lithium carbonate combing Stage 1 with a 15,000 tpa of production and Stage 2 will incorporate 30,000 tpa more, begin maximum of production 45,000 tpa. Sell considers a combination of long- and short-term contacts, based around forecasts of price provided by industry consultants Wood McKenzie. • As of the date of this Technical Report, Allkem has no existing formalized commercial agreements in place for the sale of lithium carbonate from the Sal de Vida Project. Allkem remains in discussions with potential customers. In line with the Project execution schedule, these discussions are expected to advance to negotiations throughout the course of the Project.
Economic	• *The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.* • *NPV ranges and sensitivity to variations in the significant assumptions and inputs.*	• The inputs to the financial model are based on the construction and operating economics parameters for the project and evaluation of deviation from budgeted costs. • NPV ranges and sensitivity to variations shows that the commodity price has the most significant impact on the Sal de Vida Project's NPV, followed by production levels, OPEX, and CAPEX. Variation of 10% on Lithium price has an impact of 18% in NPV. This analysis considers only Stage 1. • Financial considers 100% equity and is reported on a 100% project owner basis.

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Social	• *The status of agreements with key stakeholders and matters leading to social licence to operate.*	• -Allkem has been actively involved in community relations. Although there are minimal inhabitants in the area of the Salar, Allkem has consulted extensively with the local communities and employs members of these communities in the current exploration activities. -The company has performed continuous surveys on social perception with local communities, social economics baseline updates, survey of local suppliers and study of local competencies. -The company has evaluated positive and negative impacts of the project within the company. Based on social commitments and compliance with local mining authority, SDV has participated in training and improve skills of people from local communities, prioritize the hiring of local operators and technicians in the area of influence, work with the university of Catamarca and technical schools to develop professionals for future positions, consider gender and diversity perspectives in the processes of hiring local labour and in community projects. • The company has implemented a Community Relations Plan (PRC) between SDV and the communities to develop programs to maximise positive effects of the project and optimize relationship, to minimize the risks of misunderstandings, to encourage families, residents, and institutions to take advantage of sustainable opportunities and to establish an information and consultation system open to the community. • The company has increased new programs internal procedures to improve community management, has implemented a territorial community management approach and has been developing a Completion of Education with the Ministry of Education of Catamarca. As of March 31, 2022, more than 70% of local employees are from Catamarca and Stage 1 will create approximately 900 full-time positions at peak construction and 170 full-time positions during stable Stage 1 operations. • Other successful community programs include: Implementation programs of University Technique in Lithium Brine, strengthening program for local rural producers, community medical visits program, community infrastructure program and community infrastructure program. • Agreements with communities have been set in place, which include internet system installation and hiring of

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		people currently working in various areas of SDV. • Allkem has a strong commitment to hiring local labour, which favours the socioeconomic development of populations near the SDV Project. The growing activity derived from the construction and operation of the Project will have a positive impact on the revitalization of the local and regional economy. Local communities in the area of influence will be able to access jobs with social benefits, medical services, retirement contributions and good contracting conditions.
Other	• *To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:* • *Any identified material naturally occurring risks.* • *The status of material legal agreements and marketing arrangements.* • *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 Ore Reserve is contingent.*	• For surface rights, SDV is located within fiscal lands owned by the Province of Catamarca with no private land holders. For water rights, the Governor of the Province agrees to grant the relevant water concession. For third parties' rights, all the mining concessions for the Sal de Vida Project were secured under purchasing agreements with pre-existing owners and claimants. • Easement acquirements by the company include water, camp, infrastructure and services. • Presently, Allkem is the operating joint venture partner of the Sales de Jujuy Olaroz lithium carbonate facility and operator of the Mt Cattlin spodumene mine and concentration project. • As of the date of the reproduction of this JORC Table 1, Allkem has no existing commercial offtake agreements in place for the sale of lithium carbonate from the Sal de Vida Project. • Allkem's Galaxy Lithium Sal de Vida S.A. (GLSSA) provides to pay a royalty to the Province of Catamarca based on a Mining Royalty, and Additional Contribution and a CSR Contribution.
Classification	• *The basis for the classification of the Ore Reserves into varying confidence categories.* • *Whether the result appropriately reflects the Competent Person's view of the deposit.* • *The proportion of Probable*	• The Ore Reserves are classified as a both Proved and Probable. Projected production wells were all placed in Measured Resource zones. • Proved Ore Reserves are specified for the first 7 years of operation (years 1-7) in the Stage 1 East Wellfield and years 3-9 for the Stage 2 Expansion Wellfield given that short-term model results have higher confidence due to the current model calibration, and also the initial portion of the projected LOM has higher

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	Ore Reserves that have been derived from Measured Mineral Resources (if any).	confidence due to less expected short-term changes in extraction, water balance components, and hydraulic parameters. • Probable Ore Reserves are conservatively assigned after 7 years of operation (years 8-40 in the Stage 1 East Wellfield and years 10-40 for the Stage 2 Expansion Wellfield) because the numerical model will need to be recalibrated and improved in the future due to potential changes in neighbouring extraction, water balance components, and hydraulic parameters. • From the point of reference of brine pumped to the evaporation ponds, the Ore Reserves correspond to 0.44 million tonnes of LCE for the Proved Ore category and 2.04 million tonnes of LCE for the Probable Ore category, with a total of 2.48 million tonnes of LCE. • The total estimated Proved and Probable Ore Reserves represent about 38% of the total Measured and Indicated Resources. • Given that projected production wells were placed in Measured Resource zones, a majority of the Probable Ore Reserves (approximately 80%) have been derived from Measured Mineral Resources. However, uncertainties in the modifying factors were considered when classifying the Ore Reserves, namely model updates which will be needed as mining progresses. • The Competent Person (CP) believes that the Proved and Probable Ore Reserves were adequately categorized based on industry standards for lithium brine projects and the reliability of the model projections.
Audits or reviews	• *The results of any audits or reviews of Ore Reserve estimates.*	• A preliminary audit was conducted by SRK Consultants in 2022. Minor additional monitoring points were recommended to improve baseline water levels and chemistry.
Discussion of relative accuracy/ confidence	• *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*	• In the opinion of the CP, each phase of the Project was conducted in a logical manner, and results were supportable using standard analytical methodologies. In addition, calibration of the numerical model against long-term pumping tests provides solid support for the conceptual hydrogeologic model developed for the Project. Thus, there is a reasonably high-level confidence in the ability of the aquifer system to yield the quantities and grade of brine estimated as Proved and Probable Ore Reserves. • The estimated Brine Mineral Resources and Brine Ore Reserves summarized in this Report may have upside

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	an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate. • *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.* • *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.* • *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.*	potential for tonnage increases based on results from the ongoing production well drilling, and aquifer testing of the recently constructed Eastern wellfield production wells. • Two of the already-drilled production wells have reached bedrock at about 220 meters below land surface (m bls), and one has been drilled to over 300 m bls without reaching bedrock. Previous exploration drilling allowed for a maximum depth of the Brine Resource to about 170 m bls. These deeper drill holes have upside potential to extend the limit of the Brine Resource estimates at depth. • To the extent known by the CP, there are no known environmental, permitting, legal, title, taxation, socioeconomic, marketing, political or other relevant factors that could affect the Ore Reserve estimate which are not discussed.