

# Sal de Vida Resource & Reserve Update

Galaxy Resources Limited (ASX: GXY, "Galaxy" or the "Company") is leveraging its portfolio of world-class development assets to create a sustainable, large scale, global lithium chemicals business. Galaxy advises a Resource & Reserve update at its wholly owned, Sal de Vida Project ("Sal de Vida" or the "Project") in Catamarca, Argentina.

### Highlights

- Assessment of hydrogeological data from the drilling of two production wells leads to an increase in Resources & Reserves
- Revised Brine Resource of 6.2 million tonnes of lithium carbonate equivalent ("LCE") a 27% increase from the prior estimate
- Revised Reserve estimate of 1.3 million tonnes of recoverable LCE, a 13% increase
- Higher grade brine recovered in both wells (average lithium concentration of 933 mg/L) compared to average resource of 754 mg/L
- Production drilling will continue to test the aquifer at depth and a further update to the Resource & Reserve is expected in Q3 2021

### PRODUCTION WELLFIELD DRILLING

Wellfield drilling in the east sub-basin commenced in late 2020 to construct an additional eight production wells for the Sal de Vida project. The program also entails aquifer and pump testing and exploratory drilling targeting depths deeper than all previous drilling campaigns.

The first two production wells have successfully been drilled, reamed, cased and pumps installed and tested. Whilst drilling the wells, further exploration and aquifer data on the hydrogeological settings of the salar was obtained. Wells, SVWP20-08 and SVWP21-04, were drilled to depths of 307m and 236m respectively where the fractured bedrock basement was encountered, The lithium concentrations recorded were significantly higher than the average lithium resource grade of 754 mg/L and the reserve grade of 802 mg/L (for years 1-10). Well head brine samples were collected and analysed at the onsite laboratory via Atomic Absorption (AA) and Inductively coupled plasma optical emission spectroscopy (ICP-OES). Wells SVWP20-08 and SVWP20-04 returned average Lithium concentrations of 911 mg/L and 955 mg/L respectively.

The drilling program was monitored by consultants Montgomery & Associates ("**Montgomery**") and Galaxy personnel. Once drilling was completed, 10-inch diameter PVC casing, and slotted PVC well screen was installed. The constructed wells were air-lifted and clean brine samples were collected at the well head. Further drilling information and analytical results from the two production wells are displayed in Table 1. Detailed assay data is listed in Appendix 2. A schematic of the North-South section is displayed in Figure 1 and the well locations are displayed in Figure 2.

Mall			Bore	hole	Cas	ing	Screened	Li assay
Well Identifier	Easting	Northing	Diameter (inches)	Depth (m, bls)	Diameter (inches)	Depth (m)	Interval (m)	Li (mg/L) AAS
SVWP20-08	3,412,781	7,191,901	24, 18, 16, 8 <sup>3/4</sup>	307	18, 10	270.4	111.9–159 170.8–264.3	911
SVWP21-04	3,412,770	7,193,910	24, 18, 16, 8 <sup>3/4</sup>	236	18, 10	226.7	87.8 -129.1 134.9-217.5	955

Table 1: Production well location, construction and head brine samples

Note: Easting and Northing shown using Gauss Krüger coordinate system. Posgar 07 is an Argentinian datum. Drilled diameter was 8<sup>34</sup> Inch for the pilot holes. Then consecutive reaming process was conducted to 24 and 18-inch for the surface casing and 16-inch for the final borehole. 18-inch diameter steel surface casing was installed. Once drilling was completed, 10 Inch blank PVC casing, and slotted PVC well screen was installed.

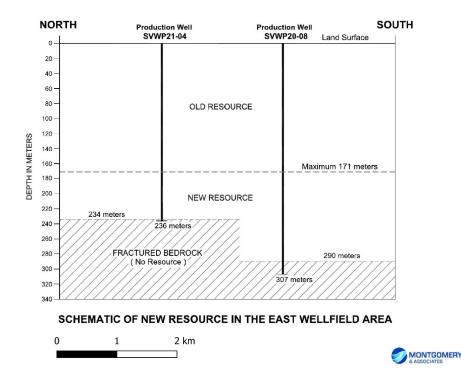


Figure 1: Schematic cross section of production wellfield drilling

### **RESOURCE AND RESERVE ESTIMATES**

#### Mineral Resource Estimate

Montgomery were engaged to estimate the lithium resources and 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.

Drilling results from the initial two production wells increased the depth of the basement model and the size of the brine aquifer, leading to an increase in Inferred Mineral Resources of 1.3Mt. The revised Mineral Resource estimate of 6.2Mt LCE (detailed in Table 2) reflects a 27% increase to the prior Resource of 4.9Mt LCE.

The different 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 resource polygons; totalling 146.06 km<sup>2</sup>, are displayed in Figure 2.

#### Table 2: 2021 Sal de Vida Brine Resource

Resource Category	Brine Volume (m³)	Avg. Li (mg/l)	In situ Li (tonnes)	Li <sub>2</sub> CO <sub>3</sub> Equivalent (tonnes)	Li2CO3 Variance from 2018 Resource
Measured	4.9 x 10 <sup>8</sup>	759	369,000	1,964,000	-
Indicated	6.8 x 10 <sup>8</sup>	717	485,000	2,583,000	-
Measured & Indicated	1.2 x 10 <sup>9</sup>	735	854,000	4,546,000	-
Inferred	3.9 x 10 <sup>8</sup>	811	316,000	1,684,000	348%
Total	1.6 x 10 <sup>9</sup>	754	1,170,000	6,230,000	27%

Note: Cut-off grade: 500 mg/L lithium. The reader is cautioned that mineral resources are not mineral reserves and do not have demonstrated economic viability. Values are inclusive of Reserve estimates, and not "in addition to". Values many add due to rounding

#### Table 3: 2018 Sal de Vida Mineral Resource

Resource Category	Brine Volume (m <sup>3</sup> )	Avg. Li (mg/l)	In situ Li (tonnes)	Li <sub>2</sub> CO <sub>3</sub> Equivalent (tonnes)
Measured	4.9 x 10 <sup>8</sup>	759	369,000	1,964,000
Indicated	6.8 x 10 <sup>8</sup>	717	485,000	2,583,000
Inferred	1.0 x 10 <sup>8</sup>	706	71,000	376,000
Total	1.3 x 10 <sup>9</sup>	732	925,000	4,923,000

Note: for the purpose of this announcement, potassium has been excluded from this table



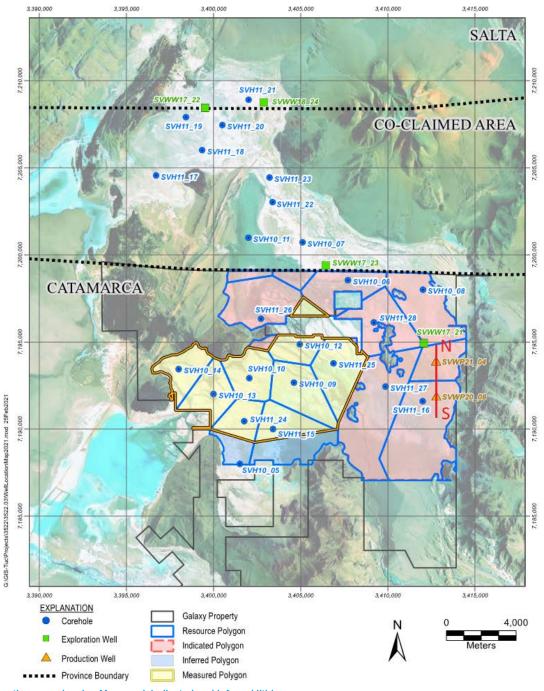


Figure 1: Location map showing Measured, Indicated and inferred lithium resources

#### Ore Reserve Estimate

The revised reserve estimate of 1.3Mt LCE for 44 years reflects a 13% increase compared to the previous estimate of 1.1 Mt LCE for 40 years. The increase and difference of four years reflects updated assumptions and Galaxy's staged development approach detailed in the 2021 Feasibility Study.<sup>1</sup>

The updated proven and probable lithium brine reserves are displayed in Table 4 and compared to the previous brine reserve statement as shown in Table 5. Based on the modelled hydrogeological system and results of the numerical modelling, the Proven Brine Reserve reflects what is feasible to be pumped to the ponds and recovered through the process plant during the first six years of operation at each of the wellfields.

The model projects that the wellfields will sustain operable pumping for 44 years; thus, 34 years of pumping from each wellfield has been categorised as a Probable Brine Reserve. The Proven and Probable Reserve estimate of 1.3 Mt LCE represents approximately 28% of the current Measured and Indicated Brine Resource estimate.

<sup>&</sup>lt;sup>1</sup> For more information see announcement titled 'Sal de Vida Development Plan,' dated 14 April 2021, available at www.gxy.com.au and www.asx.com.au



#### Table 4: 2021 Sal de Vida Brine Reserves

Brine Reserve Category		Time Period (Years)	Li Total Mass (Tonnes)	Li <sub>2</sub> CO <sub>3</sub> Equivalent Tonnes
Proven	East	1-6	11,892	63,297
Proven	Southwest (South)	3-8	12,344	65,707
Proven	Southwest (North)	5-10	12,323	65,591
Total Proven		1-10	36,559	194,595
Probable	East	7-40	65,554	348,927
Probable	Southwest (South)	9-42	69,533	370,108
Probable	Southwest (North)	11-44	70,752	376,599
Total Probable		7-44	205,839	1,095,635
Total		44 Years	242,397	1,290,229

Note: Assumes 500 mg/L Li cut-off, 68.7% Li process recovery.

#### Table 5: 2018 Sal de Vida Brine Reserves

Brine Reserve Category	Time Period (Years)	Li Total Mass (Tonnes)	Li <sub>2</sub> CO <sub>3</sub> Equivalent (Tonnes)
Proven	1 - 6	34,000	181,000
Probable	7 - 40	180,000	958,000
Total	40 years	214,000	1,139,000

Note: for the purpose of this announcement, potassium has been excluded from this table

Table 6 shows the summary of total pumped brine and projected average grade of the latest Probable and Proven brine reserves.

#### Table 6: Total pumped and projected average grade of probable and proven brine reserves

Reserve Category		Time Period (Years)	Projected Total Brine Pumped (m <sup>3</sup> )	Projected Average Grade Li (mg/L)
Proven	East	1-6	22,343,356	776
Proven	Southwest (South)	3-8	22,064,684	814
Proven	Southwest (North)	5-10	22,006,313	815
Total Proven		1-10	66,414,353	802
Probable	East	7-40	136,862,412	699
Probable	Southwest (South)	9-42	128,159,720	790
Probable	Southwest (North)	11-44	128,259,304	803
Total Probable		7-44	393,281,435	764
Total		44 Years Total	459,695,789	770 <sup>1</sup>

<sup>1</sup> Average grade Li for the 44 Years

The hydrogeological model does not project excessive drawdown in either wellfield at the end of 44 years and pumped brine is projected to still be above the resource cut-off grade of 500mg/L after the 44 year period. The current numerical model projections suggest that additional brine could be pumped from the basin from the proposed wellfields past a period of 44 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 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 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 500 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 resource calculations. The 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 Figure 2 and collar information is detailed in Table 7.

Hole ID	Easting	Northing	Elevation	Depth	Drilling Method	Azimuth	Dip
SVH10_05	3,401,501	7,187,997	3,967	51	Diamond	0	-90°
SVH10_06	3,407,698	7,198,544	3,966	109.21	Diamond	0	-90°
SVH10_07	3,405,096	7,200,713	3,972	110.60	Diamond	0	-90°
SVH10_08	3,412,000	7,198,004	3,970	136.10	Diamond	0	-90°
SVH10_09	3,404,610	7,192,659	3,969	116.17	Diamond	0	-90°
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	-90°
SVH10_13	3,399,997	7,192,002	3,966	135.37	Diamond	0	-90°
SVH10_14	3,397,992	7,193,440	3,966	145.15	Diamond	0	-90°
SVH11_15	3,403,401	7,190,002	3,969	149.00	Diamond	0	-90°
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
SVWP20_08	3,412,781	7,191,991	3,975	307	Rotary	0	-90°
SVWP21_04	3,412,788	7,193,901	3,973	236	Rotary	0	-90°

#### Table 7: Location of drill holes

Note: Easting and Northing shown using Gauss Krüger coordinate system, Posgar 94 datum.

#### Additional information for the 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 Resources and Brine 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 models necessarily 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 categorize the pumping from the first six years of pumping at each wellfield as a Proven Brine Reserve. Although projections of long-term pumping past the first six 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 categorized as a Probable Brine Reserve for the remaining 34 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 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 Reserves to Proven Brine Reserves.

### Statement of Brine 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 44-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 44 years, considering the three 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 (East, Southwest (South) and Southwest (North)). The model projections used to determine the Brine 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 10,000 m<sup>3</sup>/d (about 116 L/s) in the case of the East wellfield and 18,000 m<sup>3</sup>/d in the case of Southwest wellfield (about 208 L/s). The average grade at start-up calculated from the initial model simulations used to estimate the Brine Reserve is expected to be about 810 mg/L of lithium (East wellfields); average final grade after 44 years of pumping is projected to be 790 mg/L of lithium (Southwest wellfield). 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 8.

Time Period	Years	Active Wellfield	Lithium Total Mass (Tonnes)	Li <sub>2</sub> CO <sub>3</sub> Equivalent (Tonnes)
1	1–2	East	5,881	31,301
2	3–4	East + Southwest (South)	11,761	62,603
3	5–6	E + Southwest (South) + Southwest (North)	17,642	93,904
4	7–40	E + Southwest (South) + Southwest (North)	299,909	1,596,353
5	41–42	Southwest (South)	11,761	62,602
6	43–44	Southwest (North)	5,881	31,301
Total			352,835	1,878,063

Table 8: Summary of total projected lithium carbonate pumped during 44 years of wellfield operations.

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 44 years of pumping is estimated to be about 1.88 Mt LCE, assuming no losses during processing.



Modelling results indicate that during the 44-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. Therefore, because the total amounts provided in Table 7 do not include anticipated loss of lithium due to process losses and leakages, those values cannot be used for determination of the economic reserve. The amount of recoverable lithium in the brine feed is calculated to be about 68.7% of the total brine supplied to the ponds. Table 3 gives results of the Proven and Probable LCE Reserves from the initial two wellfields when these percent estimated processing losses are factored.

### ENDS

This release was authorised by Mr. Simon Hay, Chief Executive Officer of Galaxy Resources Limited.

#### For more information

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### About Galaxy (ASX: GXY)

Galaxy Resources Limited is an international company with lithium production facilities, hard rock mines and brine assets in Australia, Canada and Argentina. It wholly owns and operates the Mt Cattlin mine in Ravensthorpe Western Australia, which is currently producing spodumene and tantalum concentrate.

Galaxy is advancing development of the wholly owned Sal de Vida lithium brine project in Argentina situated in the lithium triangle (where Chile, Argentina and Bolivia meet), which is currently the source of more than 40% of global lithium production. Sal de Vida has excellent potential as a low-cost brine-based lithium carbonate production facility.

Galaxy's diversified project portfolio also includes the wholly owned James Bay lithium pegmatite project in Quebec, Canada. James Bay will provide additional expansion capacity to capitalise on future lithium demand growth.

Lithium compounds are used in the manufacture of ceramics, glass, pharmaceuticals and are an essential cathode material for long life lithiumion batteries used in hybrid and electric vehicles, as well as mass energy storage systems and consumer electronics. Galaxy is bullish about the global lithium demand outlook and is aiming to become a major producer of lithium products.

### **Caution Regarding Forward Looking Information**

This document contains forward looking statements concerning Galaxy. Statements concerning mining reserves and resources may also be deemed to be forward looking statements in that they involve estimates based on specific assumptions.

Forward-looking statements are not statements of historical fact and actual events and results may differ materially from those described in the forward-looking statements as a result of a variety of risks, uncertainties and other factors. Forward-looking statements are inherently subject to business, economic, competitive, political and social uncertainties and contingencies. Many factors could cause the Company's actual results to differ materially from those expressed or implied in any forward-looking information provided by the Company, or on behalf of the Company. Such factors include, among other things, risks relating to additional funding requirements, metal prices, exploration, development and operating risks, competition, production risks, regulatory restrictions, including environmental regulation and liability and potential title disputes.

Forward looking statements in this document are based on Galaxy's beliefs, opinions and estimates of Galaxy as of the dates the forward-looking statements are made and no obligation is assumed to update forward looking statements if these beliefs, opinions and estimates should change or to reflect other future developments. There can be no assurance that Galaxy's plans for development of its mineral properties will proceed as currently expected. There can also be no assurance that Galaxy will be able to confirm the presence of additional mineral deposits, that any mineralization will prove to be economic or that a mine will successfully be developed on any of Galaxy's mineral properties. Circumstances or management's estimates or opinions could change. The reader is cautioned not to place undue reliance on forward-looking statements. Data and amounts shown in this document relating to capital costs, operating costs, potential or estimated cashflow and project timelines are internally generated best estimates only. All such information and data is currently under review as part of Galaxy's ongoing operational, development and feasibility studies. Accordingly, Galaxy makes no representation as to the accuracy and/or completeness of the figures or data included in the document.

#### **Competent Person**

The information in this report that relates to Sal de Vida's Exploration Results, Mineral Resources and Ore Reserves is based on information compiled by Mike Rosko, MS PG, a Competent Person who is a Registered Member of the Society for Mining, Metallurgy and Exploration, Inc (SME), a 'Recognised Professional Organisation' (RPO) included in a list posted on the ASX website from time to time. Mike Rosko is a full time employee of E.L Montgomery and Associates and has 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 consents to the inclusion in this announcement of the matters based on his information in the form and context in which it appears.

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### **APPENDIX 1**

# JORC Code, 2012 Edition – Table 1 Report

### Section 1 Sampling Techniques and Data

	Criteria in this section apply to a	
Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <li>Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (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.</li> </ul>	<ul> <li>Diamond drill cores were obtained in the field for both drainable and tota porosity. Porosity samples were sealed in plastic tubes and shipped to Core Laboratories in Houston, Texas, for analysis.</li> <li>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 the following: <ul> <li>brine centrifuged from core samples,</li> <li>brine obtained from low flow sampling of the pumping tests in the exploration wells, and</li> <li>brine samples obtained during reverse-circulationair drilling</li> </ul> </li> <li>Neither porosity samples (core) nor chemistry samples (brine) 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, then shipped in sealed containers to the laboratories for analysis.</li> </ul>
Drilling techniques	<ul> <li>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</li> </ul>	Core size was either HQ or NQ. For each drill core, recovery percentage was recorded. Core was logged on site and stored in labeled plastic core boxes. Once drill operation is completed, 2-inch schedule 80 PVC, and Slot 40 (1 mm) PVC screen is installed in the coreholes. Production wells SVWP20-08, SVWP21-04 and SVWP21-01 were drilled by conventional circulation mud rotary. Drilling fluid was polymer mixed with native brine and bentonite. A 5-meter length of 39-inch diameter steel surface casing was installed in the wells. Drilled diameter was 8 <sup>34</sup> inch for the pilot borehole. Then consecutive reaming process was conducted to 24 and 18 inch for the surface casing, and 16 inch for the final borehole. For each exploration well, time to drill 1 meter was recorded to monitor penetration rate. Once drilling was completed, 10-inch blank PVC casing, and slotted PVC well screen was installed in the annular space surrounding the well screen. Above the gravel pack a bentonite seal was installed and fill material was installed to land surface.
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	Diamond core and RC cuttings recoveries were monitored closely, recorded and assessed regularly over the duration of the drilling programs. Diamond core is drilled slowly to maximise recovery; core loss is recorded in the field. In general, decreased clay content and cementation result in increased core loss. Therefore, some of the most permeable and porous aquifer



Logging	<ul> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies</li> </ul>	zones may not be represented in the drainable porosity samples due to inability to conduct testing on loose sediment. However, this would tend to underestimate the average drainable porosity values, resulting in conservatively smaller values. Core and chip samples were logged in accordance with guidelines developed by the hydrogeologists. All drill holes were logged in full. Geological logging was qualitative.
	<ul> <li>and metallurgical studies.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	Recording of core recovery was quantitative. All DD core was photographed. Representative 2m samples of drill cuttings from rotary drilling were collected in chip trays for future reference and photographed.
Sub-sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	Only un-split core samples were submitted for testing due to the nature of the laboratory porosity analysis. The sample sizes and integrity of the core samples submitted for testing were considered appropriate by the laboratory for the analytical methods used. Sub-sampling of brine samples only occurred at the laboratory as needed to obtain specific sample size required for analyses. Sample sizes for brine submitted for chemical analyses were in accordance with recommended volumes required by the laboratory.
Quality of assay data and laboratory tests	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> <li>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</li> </ul>	Porosity analyses were conducted by Core Laboratories Petroleum Services Division, Houston, Texas. Selected representative samples were submitted for laboratory analyses. Brine chemistry samples from Sal de Vida were analysed by Alex Stewart Assayers of Jujuy, Argentina, who have extensive experience analysing lithium-bearing brines. Selected duplicate samples were sent to the University of Antofagasta, Chile, and other labs as part of the QA/QC procedure. Standard analyses indicate acceptable accuracy and precision through the expected range of grades for analyses conducted at Alex Stewart laboratory. Sample and laboratory duplicate analyses indicate acceptable precision for Li, K and Mg analyses conducted at Alex Stewart laboratory. The Alex Stewart analyses also show acceptable accuracy and precision, and anion-cation balance for resource estimation. Analytical quality was monitored through the use of randomly inserted quality control samples, including standards, blanks and duplicates, as well as check assays at independent laboratories. Each balch of samples submitted to the laboratory contained at least one blank, one low grade standard, one high grade standard and two sample duplicates. Approximately 38 percent of the samples submitted for analysis were quality control samples.
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	Significant intersection of brine at depth was verified internally through the implementation of several different methods to verify aquifer chemistry with respect to depth. These methods included depth-specific sampling (primary), micro samples of brine obtained from centrifuge of core submitted to the laboratory for porosity valuation, down-hole electrical conductivity logging (correlated to total dissolved solids and lithium concentration), low flow sampling of near surface water, and brine samples obtained during reverse-circulation air drilling. Brine chemistry was also confirmed by analysis fluid produced during 24-hour and 30-day pumping tests. Although twinned holes were not specifically used, adjacent boreholes and wells typically demonstrated good correlation both stratigraphically and with respect to depth grade of lithium and potassium values.
		Galaxy implements a series of industry standard routine verifications to



		<ul> <li>ensure the collection of reliable exploration data. Documented exploration procedures exist to guide most exploration tasks to ensure the consistency and reliability of exploration data. The data generated in the field are transferred by the field personnel into customized data entry templates. Field data are verified before being loaded into the Access Database.</li> <li>The Access Database was reviewed by Galaxy, Montgomery &amp; Associates, and by Geochemical Applications International.</li> <li>Laboratory assay certificates are loaded directly into the Access database by use of an import tool. Quality Control reports are generated automatically for every imported assay certificate and reviewed by the Qualified Person to ensure compliance acceptable quality control standards. The Qualified Persons have verified the drainable porosity and chemistry data.</li> <li>In addition to the use of randomly inserted quality control samples, including standards, blanks and duplicates, brine samples sent to the Alex Stewart analyses show acceptable accuracy and precision for Li and K analyses resource estimation based on check analyses at University of Antofagasta and ACME that validated the results.</li> </ul>
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.	The topographic surveys were carried out by PDOP-Topografia Minera of Salta using differential GPS. Equipment included two Trimble R3 units with a minimum horizontal precision of 10 mm (±0.5 parts per million (ppm)) and a minimum vertical precision of 20 mm (±1.0 ppm). Data was obtained and processed according to the GPS Geodetic Standard of 1996 and Trimble Navigation Standards (www.trimble.com). The survey was tied-in to P.A.S.M.A. Punto 08-008 (Vega del Hombre Muerto) of the Argentine grid, using POSGAR 94 with the Gauss-Kruger Projection. The coordinates for this point are:
		• 7,179,539.06 meters North
		• 3,400,524.96 meters East
		• Elevation: 4,018.827 meters above land surface(masl)
		The following locations were professionally surveyed using the Trimble differential GPS:
		• coreholes SVH10_05 through SVH11_28,
		• exploration wells SVWW11_01 through SVWW11_13,and
		• reverse circulation boreholes SVRC11_02 and SVRC11_03
		<ul> <li>observation and production wells SVWM12_14,SVWP12_14 through SVWP12_17, and</li> </ul>
		• fresh water wells SVWF12_19 and SVWF12_20.
		The remaining exploration wells and fresh water well SVWF12_18 were surveyed using hand-held portable GPS equipment.
Data spacing and of the second	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.	Borehole and well spacing is in general 4 kilometres or less 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 confidencein the understanding of the location and nature of the aquifer, and brine grade both horizontally and vertically.
Orientation of data in • relation to geological	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which	The Sal de Vida area has been drilled and logged with vertical exploration boreholes and wells. Because salar sediments are effectively deposited

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structure	<ul> <li>this is known, considering the deposit type.</li> <li>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</li> </ul>	horizontally, angled boreholes were determined to be of little value. No sampling bias has been identified based on drilling orientation.
Sample security	The measures taken to ensure sample security.	Core samples for porosity evaluation were not subjected to any preparation prior to shipment to the participating laboratories. The samples were sealed on site and stored in a cool location, then shipped in sealed coolers to the laboratory for analysis.
		All brine samples were labelled with permanent marker, sealed with tape and stored at a secure site until transported to the laboratory for analysis. Samples were packed into secured boxes with chain of custody forms and shipped to laboratories in Jujuy and Mendoza, Argentina.
Audits or reviews	<ul> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	An internal peer review of the existing Mineral Resource Estimates was conducted by Montgomery & Associates to verify the calculated values. In addition, a 3 <sup>rd</sup> party review was conducted by a Qualified Person experienced in lithium brine resources in Argentina.

### 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	<ul> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul>	The majority of the land controlled for the Sal de Vida project was secured under agreement with pre-existing owners and claimants. The first such agreement involved securing mining licenses (minas) covering an area of some 13,560 hectares. The minas were secured under a purchase option from a local ulexite miner focused on the exploration for, exploitation and marketing of ulexite, a sodium-calcium borate mineral mainly used for the production of boric acid. Ulexite is produced from shallow surface mining, not by extraction of brines. The mineral rights to the brine on the miner's claims are transferred 100 percent to Galaxy under this agreement; there is no retained royalty. Most of the agreements follow the same model. Only one of the properties has an associated royalty.
		Seven of the twenty agreements include usufructs or terms for rights to continue surface ulexite mining by the original owners/operators. The Company has retained the option to buy out any of these usufructs should it be necessary.
		An additional 9,496 hectares have been secured by acquiring or staking new exploration cateos. One such group of cateos in Catamarca province was acquired by outright purchase from the holder, three others in Salta province were secured by application directly by Galaxy's predecessor, Lithium One. Cateo Vittone was converted to Mina Montserrat in May 21, 2012.
		There is no habitation on the Resource area.
		Galaxy is not aware of the extent of wilderness, historical sites, national parks or environmental settings over the areas.
		The license is in good standing and there are no known impediments to obtaining a license to operate in the area. Galaxy announced a sale of tenements in Salta Province on 28 August, 2018. Please refer to (ASX:GXY dated 28 August, 2018) for detail.
		Galaxy has 26,253 ha of tenure in Catamarca Province.
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N°	File	Tenement	Date	Area (Hectare
1	78-1986	La Redonda 4	1986	599.39
2	210-1994	Los Patos	1994	549.65
3	261-1997	Centenari o	1997	89.18
4	77-1999	Barreal 1	1999	599.49
5	27-2000	Maktub XXIII	2000	968.78
6	54-2000	Aurelio	2000	399.66
7	55-2000	La Redonda I	2000	599.45
8	56-2000	Don Carlos	2000	499.10
9	161-2002	Redonda 5	2002	399.73
10	162-2002	Don Pepe	2002	499.56
11	168-2002	Agostina	2002	205.30
12	185-2002	Chachita	2002	553.84
13	398-2003	Delia	2003	99.90
14	787-2005	Juan Luis	2005	199.98
15	788-2005	Maria Lucia	2005	99.81
16	913-2005	Maria Clara	2005	479.20
17	914-2005	Maria Clara 1	2005	593.82
18	1178-2006	El Tordo	2006	1864.96
19	754-2009	Sonqo	2009	987.63
20	1198-2006	Quiero Retruco	2009	775,22
21	1197-2006	Truco	2006	956,97
22	1279-2006	Agustin	2006	2828.3
23	1280-2006	Luna Blanca	2006	160,83
24	1281-2006	Fidel	2006	409.53
25	1430-2006	Meme	2006	2298.13
26	657-2009	Rodolfo	2009	100
27	709-2009	Luna Blanca II	2009	1530.60
28	814-2009	Luna Blanca VI	2009	399.25
29	65-2016	Montserrat I	2016	2949.62
30	254-2011	Montserrat	2011	3499.99
31	45-2020	Luna Blanca Oeste	2020	105,88

Exploration done by other parties

 Acknowledgment and appraisal of exploration by other parties.

All known exploration for lithium at Sal de Vida properties was conducted by Galaxy or by Galaxy's predecessor Lithium One.



Criteria	JORC Code explanation	Commentary
Geology	<ul> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	The average elevation of the Puna is 3,700 masl (meters above sea level) and covers parts of the Argentinean provinces of Jujuy, Salta, Catamarca, La Rioja y Tucuman. The Altiplano-Puna Volcanic Complex (APVC) is located between the Altiplano and Puna, and is associated with numerous stratovolcanoes and calderas. Recent studies have shown that the APVC is underlain by an extensive magma chamber at 4-8 km depth (de Silva et al., 2006). It is likely that this could be the ultimate source of the anomalously high values of lithium in the area.
		Northern Argentina has experienced a semi-arid to arid climate since at least 150 Ma as a result of its stable location relative to the Hadley circulation (Hartley et al., 2005), but as a result of Andean uplift almost all flow of moisture from Amazonia to the northeast has been blocked, leading to increased aridity since at least 10-15 Ma. Consequently, given the zonally high radiation and evaporation levels, the reduction in precipitation has lead to the development of increased aridity in the Puna. The combination of internal drainage and arid climate led to the deposition of evaporite precipitates in many of the Puna basins. The physiography of the region is characterized by basins separated by ranges, with marginal canyons cutting through the Western and Eastern Cordillera. Abundant dry salt lakes (salares) fill many basins, and these basins contain subsurface brines.
		Brine prospects differ from solid phase industrial mineral prospects by virtue of their fluid nature. Therefore, the term 'mineralization' is not strictly relevant to a brine prospect. Because of the mobility of the brine, the flow regime and other factors such as the hydraulic properties of the aquifer material are considered to be just as important as the chemical constituents of the brine. The clastic, basin fill sediments in Salar de Hombre Muerto are the target units for brine retrieval.
Drill hole Information	<ul> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:</li> <li>easting and northing of the drill hole collar</li> </ul>	Drilling and sampling occurred in several phases, including corehole drilling and sampling, and well construction and testing. Drilling and sampling that has occurred solely in the current Galaxy holdings include:
	<ul> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> </ul>	$\cdot$ 15 diamond drill holes ranging in depth from 51 to 195.54 m, cased with 2-inch PVC
	<ul> <li>down hole length and interception depth</li> <li>hole length.</li> </ul>	$\cdot$ 208 diamond core samples analysed for drainable porosity
	<ul> <li>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</li> </ul>	220 depth specific brine samples collected from diamond coreholes usingdrivepoint sampling; 17 of the cased diamond drillholes were also pumped and sampled using a shallow set small diameter submersible electric pump.
		$\cdot$ Downhole electrical conductivity and temperature surveys were conducted at 17 of the cased diamond drill holes
		$\cdot$ 13 brine exploration wells were constructed, ranging in depth from 51 to 165 m, cased with 6-inch and 8-inch PVC
		$\cdot$ 1 reverse circulation boreholes with brine samples collected by airlift during drilling, cased with 2-inch PVC
		<ul> <li>Pumping equipment was installed in the brine exploration wells, and 12 short-term pumping tests were conducted to determine aquifer transmissivity and to obtain composite aquifer brine samples</li> </ul>
		Four additional monitor wells and two production wells were completed and tested in proposed wellfield locations; and long-term pumping tests were conducted in proposed wellfield areas.
		All drillholes and wells are vertical. Collar elevations are not tabulated as all wells and coreholes were constructed on a salar surface of low relief.



Criteria	JORC Code explanation	Commentary
		Depths for all down-hole samples have been recorded. This update includes three additional wells, SVWP20-08, SVWP21-04 and SVWP21-01 During long-term pumping tests at wells SVWP17_21, two brine samples were collected. During testing well SVWP20_08, four brine samples were collected. East wellfield production well SVWP21_04 is currently being tested and sampled.
Data aggregation methods	<ul> <li>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.</li> <li>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	Calculations for in-situ drainable porosity and brine chemistry were made using averages of discrete drainable porosity and depth-specific brine samples collected by drivepoint from coreholes at multiple depths during construction. Brine chemistry was confirmed by centrifuge brine extraction from selected core samples, low-flow pumping of coreholes, and construction and testing of wells, including long-term (30-day) tests. No metal equivalents have been reported.
Relationship between mineralisation widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</li> </ul>	The Mineral Resource and Mineral Reserves reported for Sal de Vida project occur as brine. As stated previously, brine prospects differ from solid phase industrial mineral prospects by virtue of their fluid nature. The relationship between mineralization width and intercept length has no meaning in this context.
Diagrams	<ul> <li>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</li> </ul>	Explanatory maps are included in the text above
Balanced reporting	<ul> <li>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</li> </ul>	These results are from wells SVWP20-08 and SVWP21-04
Other substantive exploration data	<ul> <li>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</li> </ul>	<ul> <li>Brine sampling from trenches, and gravity and vertical electrical sounding (VES) surveys have been conducted at the Sal de Vida project.</li> <li>A total of 249 brine samples from trenches were collected.</li> <li>Gravity surveys were conducted in two phases, in 2009 (53.6 km) and 2010 (42.7 km), by Quantec Ltda. A total of 50 vertical electric soundings (SEV) were conducted in August 2010, by Geophysical Exploration and Consulting S.A., (GEC), Mendoza, Argentina (GEC, 2010).</li> <li>No new geophysical surveys are reported in this release.</li> <li>Along with lithium and potassium, the pumped brine is projected to contain significant quantities of magnesium, calcium, sulfate, and to a lesser degree, boron. These constituents must be removed from the brine to enable effective retrieval of the lithium and potassium.</li> </ul>
Further work	<ul> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	Further wellfield development drilling in progress.



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

### (Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	(Criteria listed in section 1, and where relevant in JORC Code explanation	section 2, also apply to this section.) Commentary
Database integrity	· ·	All data produced in the Sal de Vida project were transferred into a central
Database integrity	<ul> <li>Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.</li> <li>Data validation procedures used.</li> </ul>	data repository managed by Galaxy lithium and located in Denver, Colorado. Data for the Sal de Vida project was then synchronized with a data repository in the Galaxy office in Catamarca, Argentina, and a separate data repository at Montgomery & Associates in Tucson, Arizona. Raw data from the project were transferred into a customized Access Database, and used to generate diverse types of reports as needed.
		The data generated in the field were transferred by the field personnel into customized data entry templates. Field data were verified before being loaded into the Access database. The data contained in the templates is loaded by use of an import tool, which eliminates reformatting of the data. Data were reviewed after entry into the database.
		Laboratory assay certificates were loaded directly into the Access database,by use of an import tool. Quality Control reports were generated automatically for every imported assay certificate and reviewed by the Competent Persons to ensure compliance acceptable quality control standards. Failures were reported to the laboratory for correction.
Site visits	<ul> <li>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</li> <li>If no site visits have been undertaken indicate why this is the case.</li> </ul>	Regular site visits were undertaken by Mr. Michael Rosko and Dr. Jeff Jaacks over the duration of the project. Mike Rosko visited the property four times during the course of the program. April 5 to 10, 2010, August 11 to 16, 2010, January 16 to 26, 2011 and June 22 to 28, 2011 and again during August 15 - 20, 2011 to oversee aspects of all drilling techniques, logging, sampling and other technical procedures. Jeff Jaacks visited the property on October 11-19, 2009 and again on January 18-22, 2011 to review sampling procedures, quality assurance programs and sample storage protocols. Michael Rosko visited the project areas again in September, 2018.
Geological interpretation	<ul> <li>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</li> <li>Nature of the data used and of any assumptions made.</li> <li>The effect, if any, of alternative interpretations on Mineral Resource estimation.</li> <li>The use of geology in guiding and controlling Mineral Resource estimation.</li> <li>The factors affecting continuity both of grade and</li> </ul>	The salar is developed in a graben-like intermontane basin in the foreland of the greater Andes. It comprises a complex architecture of recent alluvial fan and volcanoclastic rocks that are either aquifers or aquitards depending on grain size and cementation. The lithium and potassium bearing brine occurs in the pore space of sediments and test work has established the relationships between brine chemistry, brine density and total dissolved solids. Horizontal effective permeability is ~10x vertical permeability.
	geology.	Considerable efforts have gone into the development of the conceptual geological and hydrogeological model for the basin. Stratigraphic correlation of units was considered sufficient to establish a high degree of confidence in the conceptualization.
		Geological interpretation of cross sections was prepared by Montgomery & Associates using available drilling results. Geologic information then imported into a block model to create a three dimensional geological model of the lithologies and hydrogeologic units which was ultimately used to assist in construction of the numerical groundwater flow model.
		The current geological interpretation is believed to be robust and it is not considered that an alternative interpretation would have a significant impact on the outcome of the Resource.
		Geologic factors do not affect grade, but do affect the Resource estimation as the Resource estimation is partially controlled by the hydraulic conductivity of hydrogeologic units. Lithology of hydrogeologic units affects both volume of brine in storage and the ability to remove brine via pumping.
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.	Because the Resource is a mobile brine, the dimensions are effectively the identified aquifer located in the eastern half of the Salar de Hombre Muerto basin. Galaxy has mineral rights ownership of a total 38,159.04 hectares in the east half of Salar del Hombre Muerto. The Resource calculation was restricted to only brine located within the mineral rights ownership area. Hard rock areas on the basin edges were considered no-flow boundaries. Maximum depth drilled was 307 meters; however, the Resource was computed for polygons only to the maximum depth drilled at that location, even though additional aquifer may occur at a greater depth. The brine field is constrained by crystalline basement to the east and Tertiary hard rock to the west, possibly fault bounded.



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 estimates, previous estimates and/or mine production records and whether the	The resource was estimated using the polygon method and a spreadsheet. To estimate the total amount of lithium the brine was first sectioned the basin into polygons based on 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 aregenerally equidistant from diamond drill holes. For some polygon blocks, outer boundaries are the same as basin boundaries, as discussed above.
	•	Mineral Resource estimate takes appropriate account of such data. The assumptions made regarding recovery of by- products.	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
	٠	Estimation of deleterious elements or other non-grade	samples collected during exploration drilling. Correlation

Criteria	JORC Code explanation	Commentary
	<ul> <li>variables of economic significance (eg sulphur for acid mine drainage characterisation).</li> <li>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</li> <li>Any assumptions behind modelling of selective mining units.</li> <li>Any assumptions about correlation between variables.</li> <li>Description of how the geological interpretation was used to control the resource estimates.</li> <li>Discussion of basis for using or not using grade cutting or capping.</li> <li>The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</li> </ul>	between depth and lithium concentration in the brine was observed and lent increased 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 cutoff grade of 500 mg/L of lithium was used. Hydrogeologic units within each polygon with lithium content less than cutoff grade were not included in the lithium resource calculations. The resource computed foreach polygon is independent of adjacent polygons, but adjacent borehole geology was used to confirm stratigraphic continuity of the units surroundingeach borehole.
Moisture	<ul> <li>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</li> </ul>	Resource values are computed based on total amount of lithium in the extractable brine volume.
Cut-off parameters	The basis of the adopted cut-off grade(s) or quality parameters applied.	A conservatively high cut-off grade of 500 mg/L in the brine was selected based on the projection that brine with 500 mg/L or large would be available for a 44-year period.
Mining factors or assumptions	<ul> <li>Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.</li> </ul>	Mining/extraction methodology ultimately would be via well pumping in areas identified as favourable for brine extraction.
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.	An on-site pilot plant demonstrated the ability to extract the lithium from the brine.



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 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.	An industrial process has been designed for the removal of magnesium, calcium sulfate and boron.
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	Density for the brine containing over 500 mg/L ranged from 1.14 to 1.21 Kg/L. Concentration of lithium is linearly correlated total dissolved solids, and with brine density.

Criteria	JORC Code explanation	Commentary
	<ul> <li>between rock and alteration zones within the deposit.</li> <li>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</li> </ul>	
Classification	<ul> <li>The basis for the classification of the Mineral Resources into varying confidence categories.</li> <li>Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).</li> <li>Whether the result appropriately reflects the Competent Person's view of the deposit.</li> </ul>	Relevant factors include the spatial positioning of lithium brine concentrations, spatial understanding of hydrogeologic units, measured values for specific yield (drainable porosity), location of boundaries, and location of fresh and brackish water with low lithium concentration. Because several measurement techniques were used to obtain samples and evaluate the key parameters a high level of confidence in the values used to estimate the Resource, particularly the spatial location for the target brine has been achieved. In addition, statistical evaluation of the measurements has been done to provide additional support for the methods used. In the opinion of the competent person responsible for the production of the Mineral Resource Estimates, the results appropriately reflect the view of the deposit.
Audits or reviews	The results of any audits or reviews of Mineral Resource estimates.	An internal peer review of the existing Mineral Resource Estimates was conducted by Montgomery & Associates to verify the calculated values. In addition, a 3 <sup>rd</sup> party review was conducted by a Qualified Person experienced in lithium brine resources in Argentina.
Discussion of relative accuracy/ confidence	<ul> <li>Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.</li> <li>The statement should specify whether it relates to global or local estimates, and, if local, state the relevant ton technical and economic evaluation. Documentation should include assumptions made and the procedures used.</li> <li>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</li> </ul>	The relative accuracy of the Mineral Resource estimate is reflected in the reporting of the Mineral Resource as per the guidelines of the 2012 JORC Code. In general, where key evaluation parameters were sparse or lacking, standard values (such as specific capacity) used in hydrogeological analyses were used. However, in all cases, the values selected were considered to be conservatively low, as to not artificially increase the Resource.

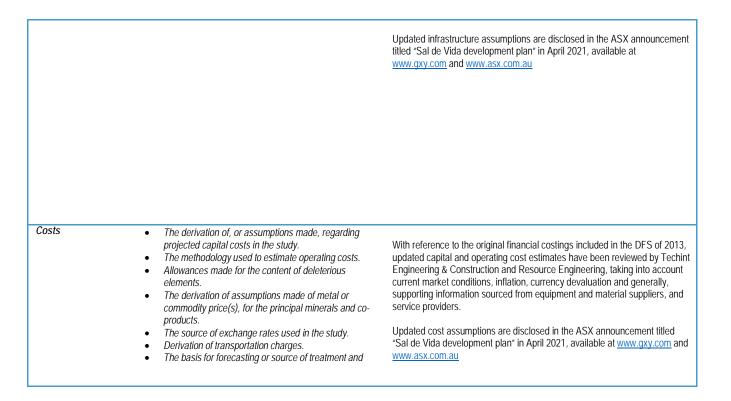


### Section 4 Estimation and Reporting of Ore Reserves

(Cri Criteria	teria listed in section 1, and where relevant in sec JORC Code explanation	tions 2 and 3, also apply to this section.) Commentary
Mineral Resource estimate for conversion to Ore Reserves	<ul> <li>Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.</li> <li>Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.</li> </ul>	As brines are fluids and mobile in the subsurface, the Reserve values have been determined using the groundwater numerical flow model for the Sal De Vida project covering the areas included in the Mineral Resource estimate. The Reserve values provided are included in the Resource estimates; they are not "in addition to" the Resource values.
Site visits	<ul> <li>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</li> <li>If no site visits have been undertaken indicate why this is the case.</li> </ul>	Regular site visits were undertaken by Mr. Michael Rosko and Dr. Jeff Jaacks over the duration of the project.
Study status	<ul> <li>The type and level of study undertaken to enable Mineral Resources to be converted to Ore</li> <li>Reserves.</li> <li>The Code requires that a study to at least Pre- Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.</li> </ul>	In addition to the understanding of the aquifer during the exploration phases of the project as detailed above, 12 short-term aquifer tests and two 30-day aquifer tests were conducted, in the basin and in the proposed west and eastwellfields. Results from these tests provide important technical support and input parameters that allowed transient calibration of the numerical groundwater flow model, and ultimately development of that Resrve.
Cut-off parameters	<ul> <li>The basis of the cut-off grade(s) or quality parametersapplied.</li> </ul>	A conservatively high cut-off grade of 500 mg/L in the brine was selected based on the projection that brine with 500 mg/L or large would be available for a 44-year period. Numerical model simulations show that lithium grade for brine pumped from each wellfield during the simulated life of the mine does not fall below the cut-off grade of 500 mg/L.

Criteria	JORC Code explanation	Commentary
	<ul> <li>Any assumptions or allowances made for deleterious elements.</li> <li>The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole.</li> <li>For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?</li> </ul>	During the evaporation and concentration process of the brines, there will be anticipated losses of both lithium and potassium. With reference to the pilot plant testing work, which adopted the same lithium carbonate flowsheet, the estimated amount of recoverable lithium in the brine feed is calculated to be about 68.7% of the total brine supplied tothe ponds
Environmental	<ul> <li>The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.</li> </ul>	The objectives of the Environmental Impact Study of the Sal de Vida Project were in accordance with Nacional Law N° 24,585, consisting of the following: a) to prepare the Environmental and Social Impact Study for the "Implementation of Sal de Vida Project", Galaxy Lithum (Sal de Vida) S.A. b) to comply with National Law N°24,585- Mining Code- Environmental Protection for Mining Activities, c) to conduct a comprehensive survey of the environmental manage plan and monitoring work.
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.	Infrastructure has been considered and evaluated in two distinct categories; on-site and off-site. On-site infrastructure includes the accommodation camp, workshops, power station, utilities, site roads, water supply, water treatment plant and sewage treatment. Off-site infrastructure includes access roads, natural gas pipeline from Pocitos, airstrip, lime kiln at Los Tilianes and communication systems that support the site.
		The labour policy is to recruit from Catamaca, in accordance to requests from the provincial governments for contracting local labour. In general, recruitment will follow the principals of competitive selection against specified job performance criteria (ie "best person for the job"). Selection processes will be non discriminatory: gender, culture and religious orientation neutral. Both provinces (Salta and Catamarca) have universities which may provide technical training in areas relevant to the company's needs, including technical and administrative degrees.





Criteria	JORC Code explanation	Commentary
	refining charges, penalties for failure to meet specification, etc. The allowances made for royalties payable, both Government and private.	
Revenue factors	<ul> <li>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.</li> <li>he derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.</li> </ul>	Updated revenue assumptions are disclosed in the ASX announcement titled "Sal de Vida development plan" in April 2021, available at <u>www.gxy.com</u> and <u>www.asx.com.au</u>
Market assessment	<ul> <li>The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.</li> <li>A customer and competitor analysis along with the identification of likely market windows for the product.</li> <li>Price and volume forecasts and the basis for these forecasts.</li> <li>For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.</li> </ul>	The market for Lithium is well established and the price is increasing as the demand for Lithium batteries increases. Lithium is not sold on the open market and as such there is no public information available regarding the price. The actual product price achieved depends on negotiated contracts. Updated market assumptions are disclosed in the ASX announcement titled "Sal de Vida development plan" in April 2021, available at www.gxy.com and www.asx.com.au
Economic	<ul> <li>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.</li> <li>NPV ranges and sensitivity to variations in the significant assumptions and inputs.</li> </ul>	The economic analysis included revenue inputs from assumed pricing scenarios for lithium carbonate, major cost inputs included those for reagents, transportation costs, energy, manpower, as well as general and administrative costs – the source of these estimates were based on supporting information from equipment and material suppliers, and other service providers. NPV analysis was reviewed for sensitivity assuming varying discount rates, tax and pricing scenarios.
		"Sal de Vida development plan" in April 2021, available at <u>www.gxy.com</u> and <u>www.asx.com.au</u>
Social	• The status of agreements with key stakeholders and	Not applicable.



	<ul> <li>To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:</li> <li>Any identified material naturally occurring risks.</li> <li>The status of material legal agreements and marketing arrangements.</li> <li>The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility of reasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.</li> </ul>	No material naturally occurring risks have been identified. No material legal or marketing agreements have been entered into. Mining leases over the tenements containing the Ore Reserves have been approved. The project has been under development since October 2009 with all necessary approvals.
Classification	<ul> <li>The basis for the classification of the Ore Reserves into varying confidence categories.</li> <li>Whether the result appropriately reflects the Competent Person's view of the deposit.</li> <li>The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).</li> </ul>	Although the numerical model was constructed to be reasonably conservative when data are scarce or assumed, there is always a level of uncertainty associated with projections of long-term outcomes. Therefore, it is believed that it is appropriate to categorize the pumping from the first, 6- year pumping cycle as a Proven Reserve. Although projections of long-term pumping past the first 6-year cycle from the well fields are less certain, as a reasonable understanding of the hydrogeologic system has been obtained, it is believed that over the long-term the projected pumped brine resource can be categorised as a Probable reserve for the remaining 34 years of pumping. The estimated Reserves are, in the opinion of the Competent Persons, appropriate for this deposit.

Criteria	JORC Code explanation	Commentary						
Audits or reviews	<ul> <li>The results of any audits or reviews of Ore Reserve estimates.</li> </ul>	An internal peer review of the existing Mineral Reserve Estimate was conducted by Montgomery & Associates to verify the calculated values						
Discussion of relative accuracy/ confidence	<ul> <li>Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.</li> <li>The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.</li> <li>Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.</li> <li>It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</li> </ul>	JORC has not provided guidance for evaluation of brine prospects. Therefore, the methodology used to calculate the Mineral Reserve is consistent with the NI 43-101 guidelines for lithium brines developed by the Corporate Finance Branch of the Ontario Securities Commission (OSC, 2011). Their document provides guidelines for calculation of brine resource and reserves and follows NI 43-101 standards. The document states that key variables, "hydraulic conductivity, recovery, brine behaviour and grade variation over time, etc. and fluid flow simulation models" be considered when computing the reserve estimate and determining economic extraction. Because of the nature of brine, the same guidelines regarding well spacing and grade cannot be applied as if the deposit was a stationary orebody. The guidelines regarding lithium brine deposits as suggested by the OSC (2011) have been adopted. The reserve values provided in this section are included in the resource estimates; they are not "in addition to" the resource values provided in earlier reports. Similar methodology for evaluation of brine prospects has been recommended in peer-reviewed journals. See Houston, J., Butcher, A., Ehren, P., Evans, K., and Godfrey, L., 2011, The Evaluation of Brine Prospects. Economic Geology.						



## APPENDIX 2 Assay Results

### Table 9: SVWP20\_08 Assay Results

	Samples	Date	Time	Li +	Ca +2	Mg +2	B +3	K⁺	SO₄⁼	Sr+2	Na+	Cł	рН.	Conductivity	Density	Temperature	Mg+²/Li*	Analyst
Code	Method Units			A.A. mg/L	ICP-OES mg/L	ICP-OES mg/L	ICP-OES mg/L	ICP-OES mg/L	ICP-OES mg/L	ICP-OES mg/L	A.A. mg/L	Volumetry mg/L	pH metro	Conductímetro mS/cm	Densimeter g/mL	Thermometer °C	Relationship	
Initial	SVWP20_08	29/01/2021	17:20:00	903	751	2603	576	9458	7448	14	117725	188183	6.44	262	1.205	20	2.9	ROS
1	SVWP20_08	29/01/2021	22:30:00	910	767	2807	576	9761	7872	14	116609	187829	6.42	261	1.206	20	3.1	ROS
2	SVWP20_08	29/01/2021	22:30:00	914	763	2774	577	9301	7652	14	112094	188537	6.40	262	1.206	20	3.0	ROS
3	SVWP20_08	29/01/2021	23:00:00	907	762	2782	576	9616	7899	14	110516	188183	6.42	262	1.205	20	3.1	ROS
4	SVWP20_08	30/01/2021	00:00:00	916	764	2785	583	9382	7689	14	117031	189246	6.42	262	1.206	20	3.0	ROS
5	SVWP20_08	30/01/2021	10:00:00	915	751	2769	576	9327	7447	14	113474	185702	6.44	262	1.206	20	3.0	ROS

#### Table 10: SVWP21\_04 Assay Results

Samples	Date	Time	Li *	Ca +2	Mg +2	B +3	K⁺	SO₄⁼	Na+	Cŀ	рН.	Density	Temperature	Mg+²/Li*	Analyst
Method			A.A.	ICP-OES	ICP-OES	ICP-OES	ICP-OES	ICP-OES	A.A.	Volumetry	рН metro	Densimeter	Thermometer	Relationship	
Units			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L		g/mL	°C		
SVWP21_04	07/03/2021	21:32:00	940	797	2839	575	10497	7256	105460	182817	6.45	1.206	20	3.0	ROS
1hs de Bombeo	07/03/2021	20:30:00	942	755	2845	537	9977	7279	105303	184207	6.42	1.206	19.1	3.0	ROS
116,5 m	06/03/2021	06:35:00	964	809	2870	531	10748	7278	105680	182817	6.54	1.204	19.8	3.0	ROS
151,5 m	06/03/2021	12:35:00	952	799	2853	535	10516	7281	103680	182122	6.48	1.205	19.8	3.0	ROS
191,5 m	07/03/2021	17:17:00	970	799	2882	540	10732	7286	104842	179341	6.52	1.205	19.9	3.0	ROS