Wednesday, 19 October 2022 ASX Code : LEL

MARKET ANNOUNCEMENT

Major Lithium Discovery Confirmed in First Drillhole of Maiden Programme at the Solaroz Lithium Brine Project

SUMMARY

- The first hole of the maiden 10 hole drilling programme at the Solaroz Lithium Brine Project in the Lithium Triangle in Argentina has confirmed a major new lithium discovery
- Initial assay samples returned from conductive brines encountered in the upper aquifer returned significant lithium concentrations in excess of 400 mg/L
- Core logging across the whole of the upper aquifer zone has confirmed a total of ~173 metres of sandstones and fine gravels to ~228 metres, with sampled conductive lithium brines from ~55m to ~177m and the same lithological units extending to ~228m
- Highly encouraging that significant lithium concentrations have already been encountered prior to reaching primary target zone of interpreted Deep Sandstone lower aquifer
- Proposed drill hole depth now extended from ~300m to 400m as drilling progresses to test primary target Deep Sandstone lower aquifer.
- Brines encountered are contained mostly in sandstones, which are considered favourable (due to their porosity and permeability) for potential future brine extraction.

Lithium Energy Limited (ASX:LEL) (**Lithium Energy** or **Company**) is pleased to confirm that initial assay results confirm significant levels of Lithium brine concentrations **in excess of 400 mg/l** hosted in the porous sandstones encountered between ~55 to ~228 metres depth in the first drillhole at Lithium Energy's flagship Solaroz Lithium Brine Project, located in Argentina in the heart of South America's world renowned Lithium Triangle (**Solaroz**). Solaroz is located directly adjacent to or principally surrounded by lithium majors Allkem Limited (ASX/TSX:AKE) and Lithium Americas Corporation (TSX/NYSE:LAC) on the Salar de Olaroz basin (**Olaroz Salar**) (refer Figure 1).

Lithium Energy is highly encouraged by these early assay results, especially the significant Lithium concentrations and low Mg/Li ratios, both of which are positive in relation to future potential processing options.

The Company is also pleased to note that these significant lithium grades have been encountered prior to drilling penetrating the primary target zone contained in the previously interpreted "Deep Sandstone" lower aquifer.

Drilling is now advancing in the first hole to test this primary target beneath a thick mudstone (seal) unit located from ~230 metres depth, which effectively has isolated the upper aquifer from the previously interpreted "Deep Sandstone" lower aquifer unit.

William Johnson, Executive Chairman:

> *To confirm the discovery of high concentrations of lithium in the brines in the upper aquifer of our first drill hole at Solaroz is a watershed moment for Lithium Energy. It further confirms the potential for the Solaroz Project to host a significant resource of lithium brines in what is probably the best location globally to have a lithium discovery. With assay results showing that lithium concentrations in this first hole increase at depth, the Company is now looking forward to assay results from sampling the target lower aquifer, as drilling continues to its target depth of 400 metres.*

Initial Assay Results

Drilling at the first diamond drill hole (borehole SOZDD001) within the Mario Angel concession at Solaroz has currently reached a depth of ~250 metres. Whilst Lithium Energy commenced drilling with an initial target depth of ~300 metres, the proposed hole depth to the basement of the interpreted Deep Sandstone lower aquifer has now been increased to ~400 metres based upon a review of recent geophysics data.

Initial assay results for this first hole have now been received, for samples taken from ~65 to 170 metres in depth. These results have confirmed that lithium rich brines exist as part of an 'upper aquifer' hosting lithium concentrations of up to 416 mg/l. These lithium rich brines are contained mostly in sandstones and fine gravels, which have porosity and permeability levels that are typically favourable for brine extraction.

Sampling of encountered brines in the upper aquifer were conducted by the use of double packers. Samples were sent to a local laboratory to test the chemical composition (particularly Lithium, Potassium, Magnesium concentrations). Core samples will be sent to a separate US-based laboratory for centrifuge brine extraction and porosity testwork.

The results of the packer sampling are shown in Table 1 (which includes previously announced conductivity measurements, measured flow rates and density[1]).

Table 1 : Results of Packer Sampling at Drillhole SOZDD001 to Drillhole Depth of 177 metres (3 October 2022)

Intersection Samples	Hole Depth Range		Li (ppm)	K (ppm)	Mg (ppm)	Mg/Li Ratio	Conductivity (mS/cm)	Flow Rate (l/min)	Density (g/ml)
	From (m)	To (m)							
1 *	72.6	74.1	158	1359	363	2.30	199	14.3	1.132
2 *	75.6	79.4	101	844	226	2.24	215	15.4	1.156
3	93.6	97.1	**399**	3121	931	2.33	215	13.1	1.158
4	111.6	115.1	**414**	3249	968	2.34	216.1	7.36	1.166
5	129.6	133.1	**416**	3232	962	2.31	230.2	17.2	1.17
6 **	147.6	153.3	270	2178	650	2.41	208.3	11.5	1.141

* *Sampling affected by dilution due to packer leakage allowing fresh water to penetrate.*

** *Sampling for this intersection was for approximately half the time of the other intersections and accordingly, the well fluids may not have flushed out fully prior to sampling.*

Lithium Energy notes the increase in Lithium concentration, conductivity and density at depth (in Samples 1 to 5), which is encouraging as it indicates a hydraulically linked system with heavier brines (potentially with higher concentrations of lithium) sinking to the bottom of the aquifer.

1 Refer LEL ASX Announcement dated 5 October 2022: Significant Intersection of Highly Conductive Brines in Maiden Drillhole at Solaroz Lithium Brine Project

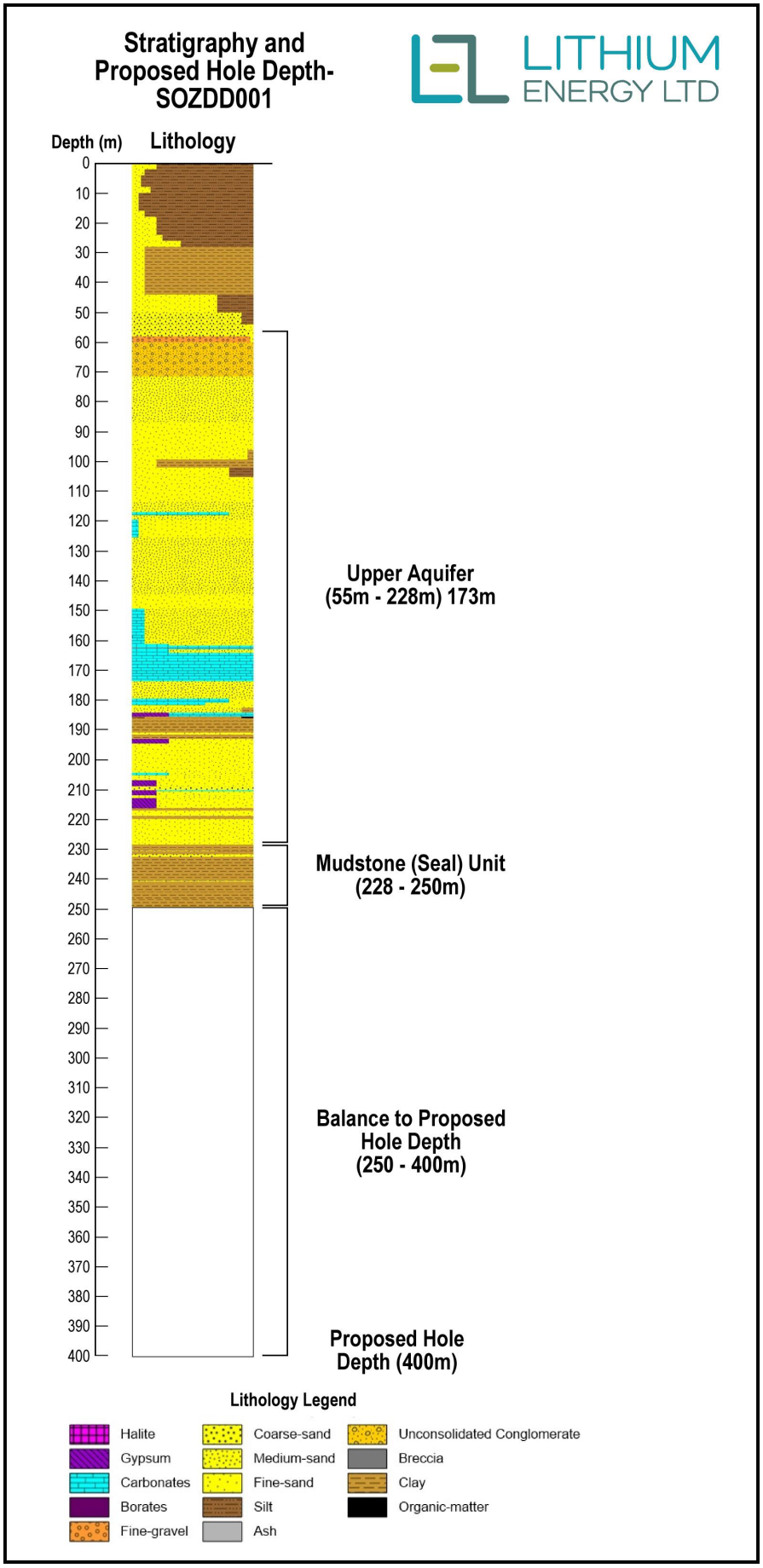


Figure 1: Drillhole SOZDD001 Stratigraphy to Depth of 250m and Proposed Depth (400m)

Subsequent drilling below ~177 metres to 228 metres has confirmed the existence of further significant zones of porous sandstones. Core logging has now been completed across the whole of the upper aquifer zone, confirming a total of ~173 metres of sandstones and fine gravels between ~55 to 228 metres (refer Figure 1), with the majority of the units being uniform sandstone units, with localised banding of thin mudstones and carbonate layering. Sandstones and fine gravels have porosity and permeability levels that are typically favourable for potential brine extraction (refer Figure 1).

As previously announced[2], a pre-collar has been cemented in place at a drill hole depth of ~50 to 60 metres, to isolate the fresh/brackish water and to prevent dilution with the sampling and assaying of the deeper brines.

Lithium Energy notes that drilling has yet to penetrate a mudstone (seal) unit which separates the primary target Deep Sandstone lower aquifer unit from the upper aquifer. Once the drilling penetrates the mudstone unit, if the lithology of the lower aquifer is consistent with that of the upper aquifer and lithium concentrations increase with depth as expected to a basement level of ~400 metres, this could present as a further significant lithium brine intersection.

Updated Geophysics at Location of Drillhole SOZDD001

Lithium Energy has also recently completed a review of Passive Seismic geophysics survey undertaken at the SOZDD001 drillhole location, to determine the base of the underlying basement rock, with the basement defining the theoretical depth limit of potential lithium mineralisation. In conjunction with the previously completed TEM[3] surveys (including at the location of the SOZDD001 drillhole)[4], Lithium Energy has updated its assessment of the volumes of interpreted conductive brines across the Mario Angel concession (refer Figures 2 and 3):

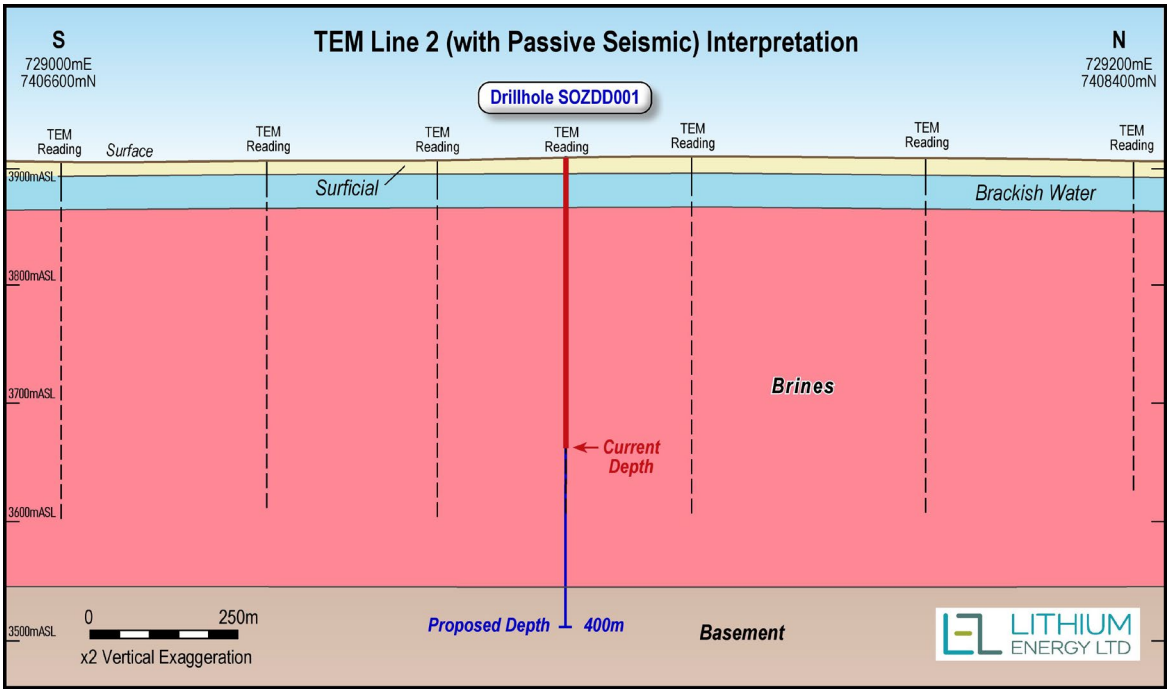


Figure 2: Drillhole SOZDD001 shown on cross-section along (North-South) TEM Survey Line 2 across Mario Angel concession, interpreted from Passive Seismic and TEM Survey data

2 Refer LEL ASX Announcement dated 21 September 2022: Drilling of First Hole Advancing on Schedule at Solaroz Lithium Brine Project in Argentina

3 Transient Electromagnetic geophysics (**TEM**) measures electrical conductivity at depth and are being used to identify the depth of conductive brines (i.e. salty water with low electrical resistivity) above the basement rocks identified by the Passive Seismic programme.

4 Refer LEL ASX Announcement dated 18 August 2022: Highly Encouraging Geophysics Paves Way for Commencement of Drill Testing of Brines at Solaroz

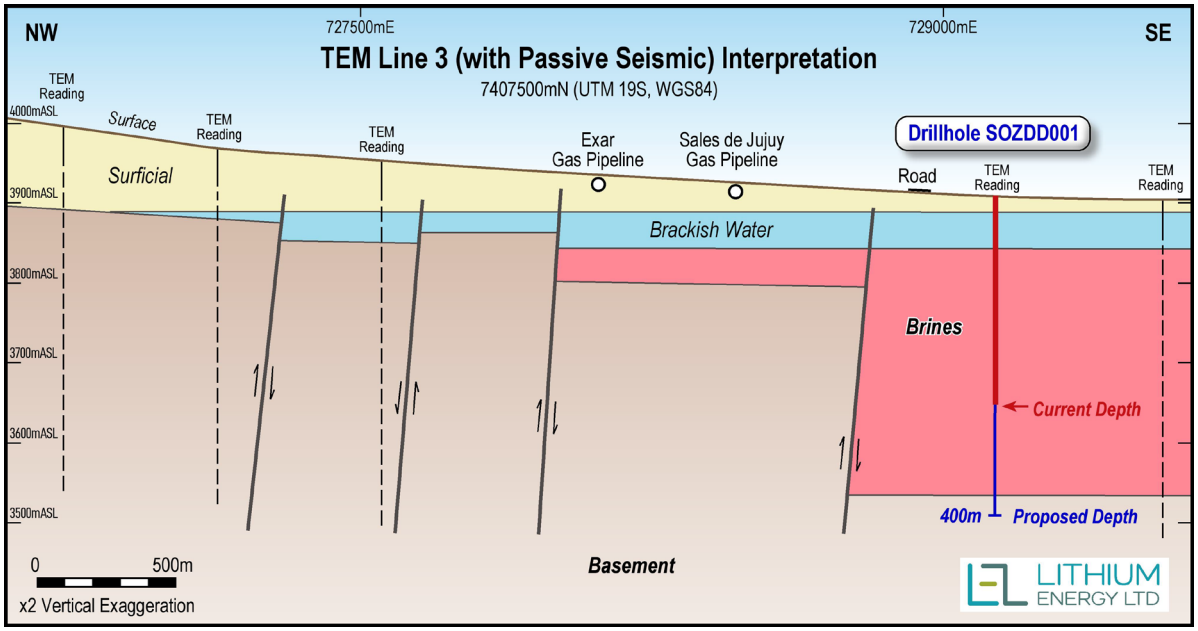


Figure 3: Drillhole SOZDD001 shown on cross-section along (West-East) TEM Survey Line 3 across Mario Angel concession, interpreted from Passive Seismic and TEM Survey data

Lithium Energy is highly encouraged by the initial assay results at SOZDD001, as they support the conceptual geological model for Solaroz, which was principally based upon previous exploration undertaken by Allkem on concessions neighbouring the Solaroz concession areas by Allkem. Lithium Energy's conceptual geological model posits that the geological structures which host the lithium rich brines which are currently being mined by Allkem at the Olaroz Salar, extend under the Solaroz concession area (refer Figure 4) .

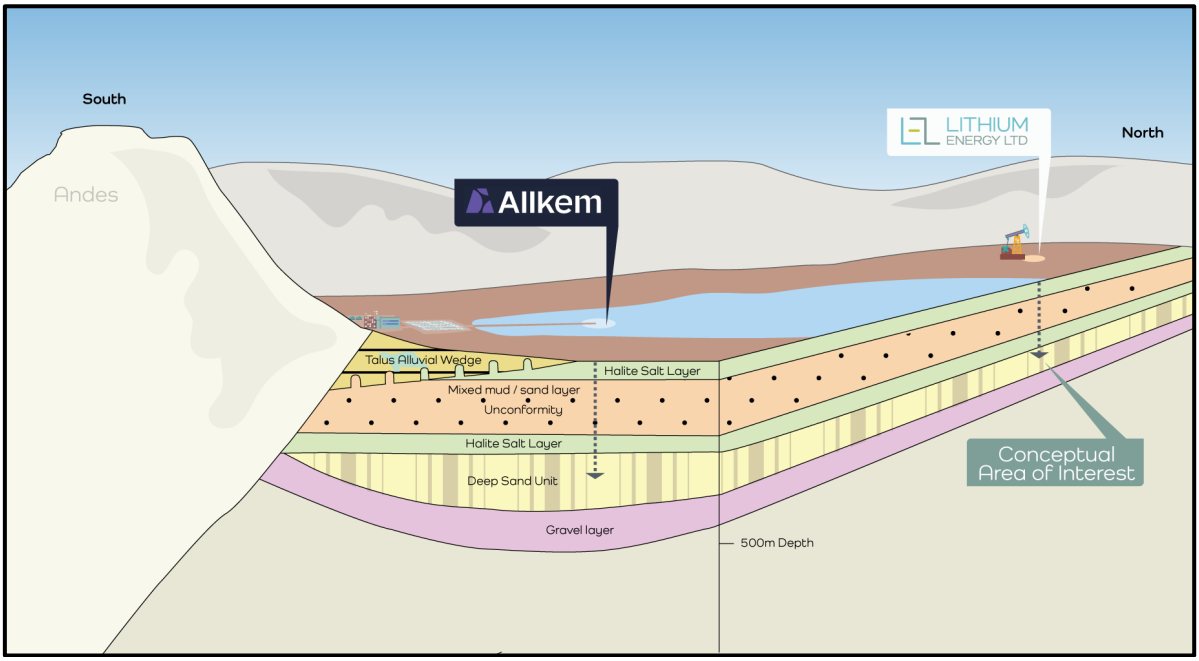
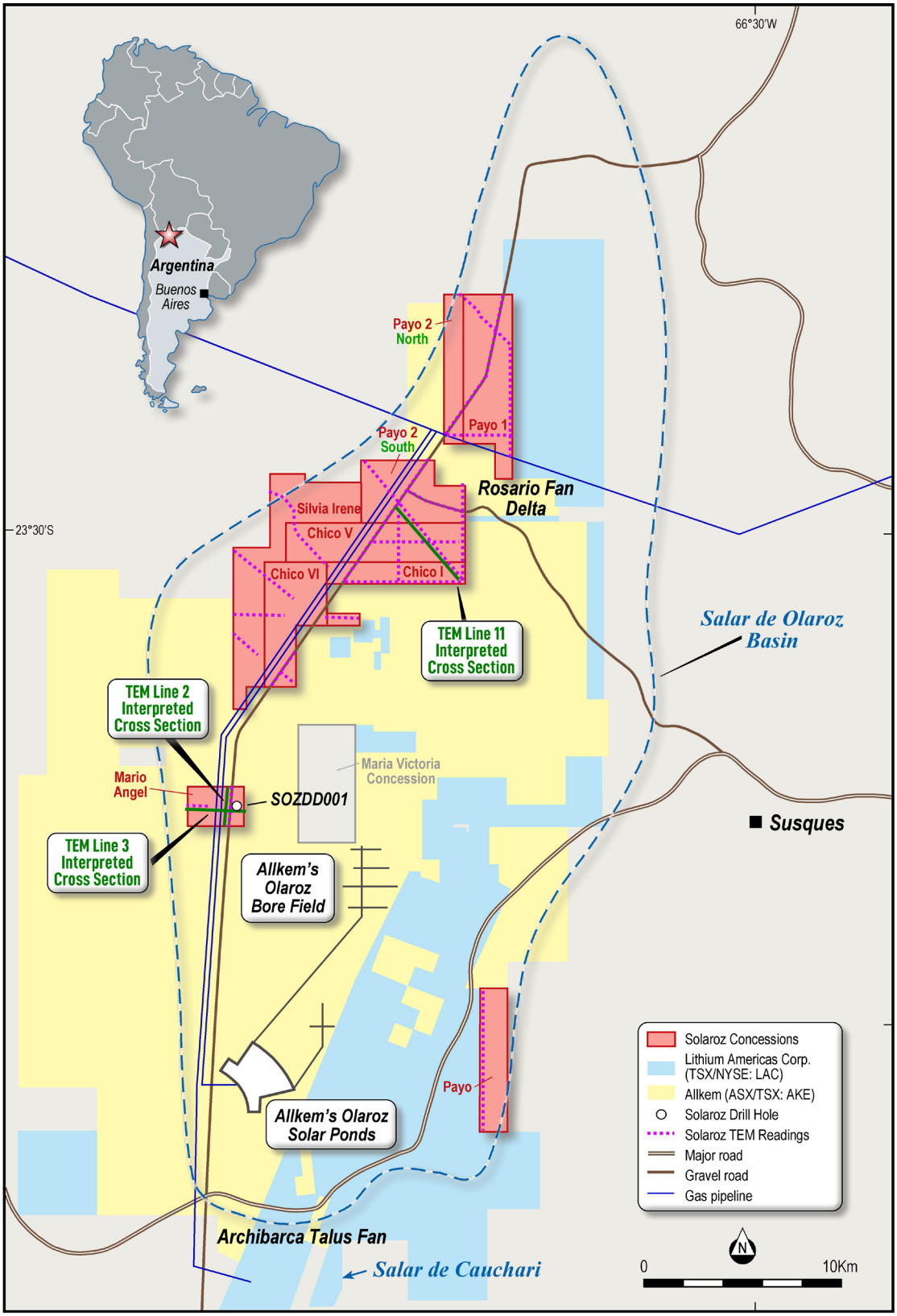


Figure 4: Lithium Energy's Conceptual Geological Model for Solaroz

The Exploration Target's potential quantity and grade is conceptual in nature, there has been insufficient exploration to estimate a Mineral Resource and it is uncertain if further exploration will result in the estimation of a Mineral Resource.



Solaroz Lithium Project, Argentina
Solaroz Concessions Location Plan

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Figure 5: Maiden Drillhole SOZDD001 Location and TEM Survey Lines at Solaroz
(Solaroz Concession Locations Adjacent to Allkem and Lithium Americas Concessions in Olaroz Salar)

AUTHORISED FOR RELEASE - FOR FURTHER INFORMATION:

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ABOUT LITHIUM ENERGY LIMITED (ASX:LEL)

Lithium Energy Limited is an ASX listed battery minerals company which is developing its flagship Solaroz Lithium Brine Project in Argentina and the Burke Graphite Project in Queensland. The Solaroz Lithium Project (LEL:90%) comprises 12,000 hectares of highly prospective lithium mineral concessions located strategically within the Salar de Olaroz Basin in South America's "Lithium Triangle" in north-west Argentina. The Solaroz Lithium Project is directly adjacent to or principally surrounded by mineral concessions being developed into production by Allkem Limited (ASX/TSX:AKE) and Lithium Americas Corporation (TSX/NYSE:LAC). The Burke Graphite Project (LEL:100%) contains a high grade graphite deposit and presents an opportunity to participate in the anticipated growth in demand for graphite and graphite related products.

JORC CODE COMPETENT PERSON'S STATEMENTS

The information in this document that relates to Exploration Results (field analysis of brine samples taken from drillhole SOZDD001) in relation to the Solaroz Lithium Project are based on, and fairly represents, information and supporting documentation prepared by Mr Peter Smith, BSc (Geophysics) (Sydney) AIG ASEG. Mr Smith is a Member of the Australian Institute of Geoscientists (**AIG**) and an Executive Director of the Company. Mr Smith has the requisite experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' (the **JORC Code**). Mr Smith consents to the inclusion in this document of the matters based on his information in the form and context in which it appears.

The information in this document that relates to Exploration Targets and other Exploration Results in relation to the Solaroz Lithium Project is extracted from the following ASX market announcements made by Lithium Energy dated:

- 5 October 2022 entitled "Significant Intersection of Highly Conductive Brines in Maiden Drillhole at Solaroz Lithium Brine Project"
- 18 August 2022 entitled "Highly Encouraging Geophysics Paves Way for Commencement of Drill Testing of Brines at Solaroz"
- 9 May 2022 entitled "Geophysics Expanded Across all Concessions to Refine Drill Targets at Solaroz Lithium Project"
- 8 June 2021 entitled "Substantial Lithium Exploration Target Identified at the Solaroz Project in Argentina"
- 26 May 2021 entitled "Geophysical Data Supports Highly Encouraging Exploration Potential for Solaroz"

The information in the original announcements is based on, and fairly represents, information and supporting documentation prepared and compiled by Mr Peter Smith (BSc (Geophysics) (Sydney) AIG ASEG). Mr Smith is a Member of AIG and a Director of the Company. Mr Smith has the requisite experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the JORC Code. The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements (referred to above). The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcements (referred to above).

JORC CODE (2012 EDITION)
CHECKLIST OF ASSESSMENT AND REPORTING CRITERIA FOR EXPLORATION RESULTS

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections)

Criteria	Explanation	Comments
Sampling techniques	• *Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or 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 (e.g. 'reverse circulation drilling was used to obtain 1m samples from which 3kg was pulverised to produce a 30g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.*	The Precollar from surface was drilled using Tricone drilling method, and chips were logged as collected, to a depth of 60m, this being the pre-collar depth. The pre-collar was then cemented in and HQ Core drilled. Core recovery from the HQ was carefully measured by comparing the measured core to the core runs, and then a total recovery per section determined. HQ Drill core sampling was undertaken along the entire length of the hole to obtain representative samples of the stratigraphy and sediments that host brine. Representative samples of the core will be sent to a US-based laboratory for porosity and centrifuge extractions of brine held within the core, to cross check against Packer derived samples. Water/brine samples were taken from target intervals, using Double Packer sampling where brine is collected by purging isolated sections of the hole of all fluid for a total of ~1500L to minimize the possibility of contamination by drilling fluid. The hole was then allowed time to re-fill with ground water, where a sample for laboratory analysis is collected (~1.5L). The casing lining the hole ensures contamination with water from higher levels in the borehole is likely prevented. Samples were taken from the relevant section based upon geological logging and conductivity testing of water. At the time of writing, six (6) water/brine samples have been collected in total from the following intervals: 71-75m, 75-79m, 93m-97m, 111m-115m, 129m - 133m and 148m - 152m (refer Table 1 for the results of this packer sampling). Conductivity, and Density tests are taken with a field portable High Range Hanna multi parameter meter. Passive Seismic sampling was carried out with TROMINO® Passive Seismic equipment. TROMINO®is a small (1 dm3, < 1 kg) all-in-one instrument, equipped with: • 3 velocimetric channels (adjustable dynamic range) • 3 accelerometric channels • 1 analog channel • GPS receiver • built-in radio transmitter/receiver (for synchronization among different units)

Criteria	Explanation	Comments
		• radio triggering system (for MASW surveys and similar) TROMINO®works in the [0.1, 1024] Hz range. Samples were collected for a 20 minute duration at station spacing of 250m.
Drilling techniques	• *Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method etc.).*	The Precollar from surface was drilled using Tricone drilling method, and chips were logged as collected, to a depth of 60m, this being the pre-collar depth. The pre-collar was then cemented in and HQ Core drilled. Core recovery from the HQ was carefully measured by comparing the measured core to the core runs, and then a total recovery per section determined. HQ Drill core sampling was undertaken along the entire length of the hole to obtain representative samples of the stratigraphy and sediments that host brine.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed* • *Measurements 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.*	Core recovery from the HQ was carefully measured by comparing the measured core to the core runs, and then a total recovery per section determined.
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 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*	Lithium Energy has 5 Geologists on site logging the drill core 24/7. The core is logged by a senior geologist and contract geologists (who are overseen by the senior geologist). The senior geologist also supervises the taking of samples for laboratory analysis. Logging is both qualitative and quantitative in nature. The relative proportions of different lithologies which have a direct bearing on the overall porosity, contained and potentially extractable brine are noted, as are more qualitative characteristics such as the sedimentary facies. Cores are photographed. Where the core is being sent for centrifuge, brine extraction is encased to prevent loss of fluid. All core is logged by a geologist. The TROMINO® Passive Seismic equipment works in the [0.1, 1024] Hz range. The TEM equipment was operated at 2.5Hz and 25 Hz.
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffles, tube sampled, rotary split, etc. and whether sampled wet or dry.* • *For all sample types, quality and appropriateness of the sample preparation*	Water/brine samples were collected by purging isolated sections of the hole of all fluid in the hole, to minimize the possibility of contamination by drilling fluid, then allowing the hole to re-fill with ground water. Samples were then taken from the relevant section.

Criteria	Explanation	Comments
	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.*	Where the core is being sent for centrifuge, brine extraction is encased to prevent loss of fluid. As the Passive Seismic method is not invasive and is passive in nature, no sub sampling was carried out.
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 analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* • *Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.*	Samples are (to be, where applicable) transported to reputable industry standard laboratories both in country (Argentina) and in the USA for various test work. Brine samples were sent to the Alex Stewart International Laboratory in Argentina, where detailed chemistry is being processed. The laboratory is ISO 9001 and ISO 14001 certified and specialises in the chemical analysis of brines and inorganic salts, with considerable experience in this field. Table 1 contains the field brine sampling results and the analytical results from the Alex Stewart International Laboratory. Core samples will also be sent to a laboratory (expected to be in the USA) for porosity test work. Duplicate samples returned comparable values, well within acceptable limits. Individual Passive Seismic readings are continuous in nature, at up to 1000Hz, and can be statistically processed to optimise the data quality.
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 (physically and electronic) protocols.* • *Discuss any adjustment to assay data.*	Field duplicates, standards and blanks will be used to monitor potential contamination of samples and the repeatability of analyses. Duplicate and blank samples are planned to be sent to the laboratories in due course as unique samples (blind duplicates). The TROMINO® Passive Seismic equipment is equipped with internal and external GPS and is processed by external consultants proficient in passive seismic data collection and processing.
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 Resources estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	The survey locations were located using modern Garmin handheld GPS units with an accuracy of +/- 5m. The grid system used is : POSGAR 94, Argentina Zone 3. Topographic control was obtained by handheld GPS units and the topography is mostly flat with very little relief.
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 Reserve and Ore Reserve estimation procedure(s) and classifications applied.*	Water/brine samples were collected within isolated sections of the hole based upon the results of geological logging.

Criteria	Explanation	Comments
	• *Whether sample compositing has been applied.*	
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 brine concentrations being explored for generally occur as sub-horizontal layers and lenses hosted by conglomerate, gravel, sand, salt, silt and/or clay. Vertical diamond drilling is ideal for understanding this horizontal stratigraphy and the nature of the sub-surface brine bearing aquifers
Sample security	• *The measures taken to ensure sample security.*	Data was recorded and processed by trusted employees and contractors and overseen by senior management ensuring the data was not manipulated or altered. Samples are transported from the drill site to secure storage at the camp on a daily basis
Audits or reviews	• *The results of and audits or reviews of sampling techniques and data.*	No audits or reviews have been conducted to date. The drilling is at a very early stage, however, the Company's independent Competent Person (in respect of the potential delineation of a JORC Mineral Resource in the future) has approved the procedures to date and visited the site to review first-hand the drilling practice and all logging, sampling, QA/QC controls and data management.

Section 2 Reporting of Exploration Results

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

Criteria	Explanation	Comments
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 interest, 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.*	The Solaroz Lithium Brine Project comprises 8 concessions totalling approximately 12,000 hectares (**Solaroz Concessions**) located in the Jujuy Province in northern Argentina: (1) Mario Angel – File N°1707-S-2011 (542.92ha) (2) Payo – File N°1514-M-2010 (987.62ha) (3) Payo 1 – File N°1516-M-2010 (1973.24ha) (4) Payo 2 – File N°1515-M-2010 (2192.63ha) (5) Chico I – File N°1229-M-2009 (835.24ha) (6) Chico V – File N°1312-M-2009 (1800ha) (7) Chico VI – File N°1313-M-2009 (1400.18ha) (8) Silvia Irene, File N°1706-S-2011 (2348.13ha) The Company has a 90% shareholding in Solaroz S.A. (formerly Hananta S.A.), an Argentine company which, in turn, has an option to acquire the Solaroz Concessions from the local owner – refer to Sections 8.1, 15.3 and 15.4 of the Company's Prospectus (dated 30 March 2021) for further details.
Exploration done by other parties	• *Acknowledgement and appraisal of exploration by other parties.*	Extensive open file drilling, geochemistry, geophysical and development work from exploration to development, and operating mine have been carried out by Allkem Limited (ASX/TSX:AKE) (formerly Orocobre Limited) (**Allkem** or **Orocobre**) and Lithium Americas Corporation (TSX/NYSE:LAC) (**Lithium Americas**). The Company has reviewed the relevant open file published documents and images relating to the Salara de Olaroz and from this review made its interpretations relating to the Company's Solaroz Concessions. The published data upon which the geological model for the Company's Solaroz Project has been developed includes the following works: • Houston, J., Gunn, M., Technical Report on the Salar De Olaroz Lithium-Potash Project, Jujuy Province, Argentina. NI 43-101 report prepared for Orocobre Limited, 13 May 2011 • Orocobre Limited ASX/TSX Announcement dated 23 October 2014 entitled "Olaroz Project - Large Exploration Target Defined Beneath Current Resource" • Reidel, F., Technical Report on Cauchari JV Project – Updated Mineral Resource Estimate, prepared for Advantage Lithium Corporation, 19 April 2019 • Orocobre Limited ASX/TSX Announcement dated 10 January 2019 entitled "Cauchari Drilling Update – Phase III Drilling Complete" • Burga, E. et al, Technical Report - Updated Feasibility Study and Mineral Reserve Estimation to support 40,000 tpa Lithium Carbonate Production at the Cauchari-Olaroz Salars, Jujuy Province, Argentina, prepared for Lithium Americas Corporation, 30 September 2020 • Salfity Geological Consultants Map for Salar de Olaroz
Geology	• *Deposit type, geological settings and style of mineralisation.*	The Salar de Olaroz originated as a structurally bounded, closed basin during the late Paleogene-Early Neogene. During much of the Miocene it appears to have slowly filled

Criteria	Explanation	Comments
		with medium to coarse grained alluvial fans and talus slopes eroded from the surrounding mountain ranges. As accommodation space was filled the sediments became progressively finer grained, braidplain, sandflat, playa and fluvial architectures are noted in the Upper Miocene and Pliocene. As the climate became more arid during the Pliocene evaporitic deposits first appeared. Normal faulting created additional accommodation space probably initiated at this time too. The lowest drilled sediments indicate an arid climate with abundant halite. These Units are probably Pleistocene in age and are likely contiguous with the lowest drilled and reported sediments in the Salar de Olaroz originated as a structurally bounded, closed basin during the late Paleogene-Early Neogene. During much of the Miocene it appears to have slowly filled with medium to coarse grained alluvial fans and talus slopes eroded from the surrounding mountain ranges. As accommodation space was filled the sediments became progressively finer grained, braidplain, sandflat, playa and fluvial architectures are noted in the Upper Miocene and Pliocene. As the climate became more arid during the Pliocene evaporitic deposits first appeared. Normal faulting created additional accommodation space probably initiated at this time too. The lowest drilled sediments indicate an arid climate with abundant halite. These Units are probably Pleistocene in age and are likely contiguous with the lowest drilled and reported sediments in the Salar de Cauchari to the south, suggesting the two basins operated as a continuous hydrologic entity at that stage. Succeeding Units suggest continued subsidence in the center of the basin, with a climate that was variable, but never as arid as during period dominated by the 'Deep Sand Unit' and abundant Halite development. Influx of water and sediment is primarily from the Rosario catchment at the north of Salar de Olaroz. At depth a thick highly porous sandstone aquifer has been intersected in both the Salar de Cauchari (by Lithium Americas) and the Salar de Olaroz (by Orocobre). Due to its depth the aquifer has only been intersected in a few holes, as of the 23 October 2014 Orocobre announcement. The significance of the 'Deep Sand Unit' is that "Sands of this type have free draining porosity of between 20 and 25% based on previous testwork, and the sand unit could hold significant volumes of lithium-bearing brine which could be added to the resource base by future drilling" (per Orocobre's 23 October 2014 announcement).

Drill hole Information	• *A summary of all information material for 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) and the drill hole collar*
	  • *Dip and azimuth of the hole*
	  • *Down hole length and*
		Drillhole ID: SOZDD001:
		• Easting: 3422471 E (POSGAR Zone 3 East)
		• Northing: 7409972 N (POSGAR Zone 3 North)
		• Vertical hole
		• Progress hole length is ~250m, with drilling incomplete and on-going.

Criteria	Explanation	Comments
	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.*	
Data aggregation methods	• *In reporting Exploration results, weighing averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually material and should be stated.* • *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 values should be clearly stated.*	The Company has not undertaken data aggregation and hence no aggregation methods have been carried out. Mg/Li Ratio's have been reported which is a standard representation. Elemental lithium has been converted to Lithium Carbonate Equivalent (**LCE**) using a conversion factor of 5.323 to convert Li to Li_2CO_3); reporting lithium values in LCE units is a standard industry practice.
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 (e.g. 'down hole length, true width not known')*	It is assumed that the brine layers lie sub-horizontal and, given that the drillhole is vertical, that any intercepted thicknesses of brine layers would be of true thickness.
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts would be included for any significant discovery being reported. These should include, but not be limited too plan view of drill hole collar locations and appropriate sectional views.*	The stratigraphy to a current progress depth of 250 metres is presented in Figure 1. The results of Packer Sampling at Drillhole SOZDD001 is presented in Table 1. The TEM survey lines undertaken across the Solaroz concessions (also identified) are shown in Figure 5. Interpreted cross-sections of TEM Survey Lines 2 and 3 (across the Mario Angel concession, where Drillhole SOZDD001 is located) are presented in Figures 2 and 3 respectively (with appropriate scale bars). Drillhole SOZDD001 is also shown in Figures 2 and 3.
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading*	Historical and open file reports have been collated and are consistent across numerous companies and the Company has no reason to doubt the balanced reporting of the various technical open file reports. The results are from the initial stages of the first and only drillhole to be drilled at Solaroz to date.

Criteria	Explanation	Comments
	reporting of Exploration Results.	
Other substantive exploration data	• *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 containing substances.*	As part of the review of exploration results in the Olaroz Salar, the Company has analysed a number of Gravity and AMT surveys conducted by Orocobre, some of which were undertaken over or closely adjacent to the Solaroz Concessions. The proximity of these surveys has been very useful and highly encouraging for the Company to develop in greater detail an exploration outline for the Solaroz Concessions. The Gravity Line surveys undertaken by Orocobre were conducted principally to determine the depth below surface to the basement rock in the Olaroz Salar, which practically sets the lowest depth limit to which lithium-rich brines could be encountered in the basin. The AMT Line surveys (which measure resistivity) were conducted to identify the interfaces between fresh water and the more conductive brines, facilitating the identification of the location and extent of potentially lithium-rich brines occurring above the basement rock. The Company has undertaken its own geophysics programme across all the Solaroz Concessions, comprising: • Passive seismic surveys, to determine the depth of the underlying basement rock (i.e. the theoretical limit of potential lithium mineralisation) underneath the concessions; and • Transient Electromagnetic geophysics (**TEM**), to identify the location and thickness of potential lithium-hosting conductive brines underneath the Solaroz Concessions. The TEM survey lines undertaken across the Solaroz Concessions (also identified) are shown in Figure 5.
Further work	• *The nature and scale of planned further work (e.g. 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, providing this information is not commercially sensitive.*	A major exploration programme is underway comprising the comprehensive interpretation and modelling of results from recently completed geophysical surveys (passive seismic and TEM surveys) and a significant (rotary and diamond) drilling programme, aimed at locating potentially lithium bearing brines of economic interest, obtaining preliminary information related to the hydrogeological and geochemical characteristics of the brine rich aquifer that comprises the Olaroz Salar underneath the Solaroz Concessions, and delineating a maiden JORC Mineral Resource. The current drillhole (SOZDD001 on the Mario Angel concession) is the first in a planned 10 drillhole drilling campaign to assess the distribution and geochemistry of the brine and to obtain data related to basic physical parameters of the different hydrogeological units underneath the Solaroz Concessions. In addition to the above works, the Company will be undertaking an assessment of relevant mine economic criteria to assist in developing a pathway to the completion of feasibility study(s), including the delineation of a maiden JORC Mineral Resource.