# **LITHUM** ENERGY LTD

Monday, 9 May 2022

ASX Code : LEL

# **MARKET ANNOUNCEMENT**

## **Geophysics Expanded Across all Concessions to Refine Drill Targets at Solaroz Lithium Project**

#### **KEY HIGHLIGHTS**

- Lithium Energy's Solaroz Lithium Brine Project is located in the highly prospective Lithium Triangle in Argentina and is directly adjacent to or principally surrounded by lithium majors Allkem Limited (ASX/TSX:AKE) and Lithium Americas Corporation (TSX/NYSE:LAC)
- High priority drill targets are now being finalised through a geophysics programme at Solaroz for the upcoming drilling program
- Passive Seismic will be used initially to identify and determine the depth of the underlying basement rock, being the theoretical lower limit of potential lithium mineralisation
- Passive Seismic has already been completed on the Payo concession with the results encouragingly consistent with previous geophysical results published by lithium majors Allkem Limited and Lithium Americas Corporation over nearby areas in the Olaroz Salar
- The passive Seismic programme is now being expanded to the other 7 concessions and which is expected to be completed in the next ~3 to 5 weeks
- TEM surveys will then be used to identify the best location and greatest widths of potential lithium-hosting conductive brines for drilling
- Executed agreement with a Geophysics company to commence TEM surveys across all Solaroz concessions in the second half of May 2022
- In the process of finalising arrangements with drilling contractors for a ~5,000 metre drilling programme to commence after the TEM surveys are completed

Lithium Energy Limited (ASX:LEL) (Lithium Energy or the Company) is pleased to update on the progress of its exploration programme at its highly prospective flagship Solaroz Lithium Brine Project located in Argentina in the heart of South America's Lithium Triangle (Solaroz Project).

The objective of the exploration programme is to define a maiden JORC Mineral Resource of lithium from its 12,000 hectare concession area on the Salar de Olaroz basin (**Olaroz Salar**), where Allkem Limited (ASX/TSX:AKE) (formerly Orocobre Limited) has been producing lithium since 2015 (under a joint venture with Toyota Tsusho Corporation (TYO:8015)) and Lithium Americas Corporation (TSX/NYSE:LAC) is advancing its Cauchari-Olaroz development project (under a joint venture with Ganfeng Lithium).

The location of Lithium Energy's Solaroz concessions (relative to the Allkem and Lithium Americas concessions) on the Olaroz Salar is outlined in Figure 1.



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Lithium Energy has previously defined an Exploration Target for Solaroz of:

## <u>1.5 to 8.7 million tonnes</u> of contained Lithium Carbonate Equivalent <u>(LCE)</u> based on a range of lithium concentrations of between circa <u>500 mg/L Lithium (Li) and 700 mg/L Li<sup>1</sup></u>,

based primarily on the results of previous exploration work undertaken by Allkem and Lithium Americas in the neighbouring area on the Olaroz Salar.

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

The current exploration programme is planned to validate the underlying conceptual model behind the Exploration Target and upgrade the target to a maiden JORC Mineral Resource.

The first stage of the programme comprises Passive Seismic surveys to determine the base of the underlying basement rock beneath the whole of the concession package, with the basement defining the theoretical limit of potential lithium mineralisation.

A Passive Seismic survey has already been completed on the *Payo* concession in the south-east corner of the Olaroz Salar. Interpretation of the results from this survey have confirmed the depth of the basement underneath this concession of up to approximately 150 metres, which is encouragingly consistent with the Company's understanding of the Olaroz Salar geometry based upon previous exploration work by Allkem and Lithium Americas.

Passive Seismic surveys across the remaining concessions are planned to commence shortly, with the site surveys expected to take approximately 2 - 3 weeks to complete. Once the survey and associated processing and interpretation are complete, the Company expects to have a detailed three-dimensional model of the geometry of the basin underneath its extensive concession area.

The Company is also pleased to report that it has executed a contract with a geophysics contractor to undertake a programme of Transient Electromagnetic geophysics (**TEM**) over the Solaroz concessions, commencing in the second half of May 2022.

The TEM survey will comprise sampling at approximately 500 metre spacing across the concession package. TEM measures electrical conductivity at depth and will be used to identify the depth of conductive brines (i.e. salty water with low electrical resistivity) beneath the Solaroz concessions. Conductive brines are a key pathfinder for the occurrence of lithium in the Olaroz Salar.

The TEM programme across the Solaroz concessions is expected to take approximately 4 - 6 weeks to complete. Once results from the TEM have been interpreted, the Company will expect to have a detailed three-dimensional model of the location and extent of conductive brines prospective for lithium mineralisation, for targeting with drilling.

Lithium Energy is expecting to then undertake a drilling programme of approximately 5,000 metres, with a combination of diamond and rotary holes.

The drilling will test the extent and grades of lithium mineralisation, porosity and flow rates across the layer(s) of conductive brines. This information will then be interpreted to develop a maiden JORC Mineral Resource for Solaroz.

<sup>1</sup> Refer LEL ASX Announcement dated 8 June 2021: Substantial Lithium Exploration Target Identified at the Solaroz Project in Argentina



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Lithium Energy has met with and received proposals from a number of suitably qualified drilling contractors based in Argentina that have experience in drilling salar hosted brines, with the objective of securing a rig or rigs to undertake a approximately 5,000 metre drilling programme once the TEM survey has been completed.

William Johnson, Executive Chairman:

"The commencement of exploration activities on Lithium Energy Solaroz concessions is a very exciting phase in the growth of the Company. The current exploration programme which seeks to validate the Exploration Target for Solaroz will bring to focus the highly prospective nature of the project and its world class potential to host a significant lithium brine deposit."



Figure 1: 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 Orocobre Limited (ASX/TSX:ORE) 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. LEL was spun out of Strike Resources Limited (ASX:SRK) via a \$9 million IPO; Strike remains a major (43%) shareholder of the Company.

### **JORC CODE COMPETENT PERSON'S STATEMENTS**

The information in this document that relates to Exploration Results (in relation to the passive seismic geophysics work on the *Payo* concession) 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:

- 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 the Australian Institute of Geoscientists (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 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' (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).

### FORWARD LOOKING STATEMENTS

This document contains "forward-looking statements" and "forward-looking information", including statements and forecasts which include without limitation, expectations regarding future performance, costs, production levels or rates, mineral reserves and resources, the financial position of Lithium Energy, industry growth and other trend projections. Often, but not always, forward-looking information can be identified by the use of words such as "plans", "expects", "is expected", "is expecting", "budget", "scheduled", "estimates", "forecasts", "intends", "anticipates", or "believes", or variations (including negative variations) of such words and phrases, or state that certain actions, events or results "may", "could", "would", "might", or "will" be taken, occur or be achieved. Such information is based on assumptions and judgements of management regarding future events and results. The purpose of forward-looking information is to provide the audience with information about management's expectations and plans. Readers are cautioned that forward-looking information involves known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements of Lithium Energy and/or its subsidiaries to be materially different from any future results, performance or achievements expressed or implied by the forward-looking information. Such factors include, among others, changes in market conditions, future prices of minerals/commodities, the actual results of current production, development and/or exploration activities, changes in project parameters as plans continue to be refined, variations in grade or recovery rates, plant and/or equipment failure and the possibility of cost overruns. Forward-looking information and statements are based on the reasonable assumptions, estimates, analysis and opinions of management made in light of its experience and its perception of trends, current conditions and expected developments, as well as other factors that management believes to be relevant and reasonable in the circumstances at the date such statements are made, but which may prove to be incorrect. Lithium Energy believes that the assumptions and expectations reflected in such forward-looking statements and information are reasonable. Readers are cautioned that the foregoing list is not exhaustive of all factors and assumptions which may have been used. Lithium Energy does not undertake to update any forward-looking information or statements, except in accordance with applicable securities laws.



Geophysics Expanded Across all Concessions to Refine Drill Targets at Solaroz Lithium Project

### **APPENDIX A**

### 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	<ul> <li>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.</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. 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.</li> </ul>	<ul> <li>Sampling was carried out with TROMINO® Passive Seismic equipment.</li> <li>TROMINO® is a small (1 dm<sup>3</sup>, &lt; 1 kg) all-inone instrument, equipped with:</li> <li>3 velocimetric channels (adjustable dynamic range)</li> <li>3 accelerometric channels</li> <li>1 analog channel</li> <li>GPS receiver</li> <li>built-in radio transmitter/receiver (for synchronization among different units)</li> <li>radio triggering system (for MASW surveys and similar)</li> <li>TROMINO® works in the [0.1, 1024] Hz range.</li> <li>Samples were collected for a 20 minute duration at station spacing of 250m.</li> </ul>
Drilling techniques	<ul> <li>Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method etc.).</li> </ul>	The Company has yet to conduct any drilling at Solaroz and therefore, no drilling techniques are reported.
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed</li> <li>Measurements 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>	The Company has yet to conduct any drilling at Solaroz and therefore, no drill sample recovery data are reported.
Logging	<ul> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel etc.) photography.</li> <li>The total length and percentage of the relevant intersections logged</li> </ul>	The TROMINO <sup>®</sup> Passive Seismic equipment works in the [0.1, 1024] Hz range.
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 riffles, tube sampled, rotary split, etc. and whether sampled wet or dry.</li> <li>For all sample types, quality and appropriateness of</li> </ul>	No sub sampling was carried out as the Passive Seismic method is not invasive and is passive in nature.



Criteria	Explanation	Comments
	<ul> <li>the sample preparation technique.</li> <li>Quality control procedures adopted for all sub- compliant stances to maximize conceptivity of</li> </ul>	
	sampling stages to maximise representivity of samples.	
	<ul> <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> </ul>	
	• Whether sample sizes are appropriate to the grain size of the material being sampled.	
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> </ul>	Individual readings are continuous in nature, at up to 1000Hz, and can be statistically processed to optimise the
	• 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.	data quality.
	<ul> <li>Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</li> </ul>	
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.     The use of twinned below	The TROMINO <sup>®</sup> Passive Seismic equipment is equipped with internal and external GPS and is processed by external
	<ul> <li>The use of twinned holes</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physically and electronic) protocols.</li> </ul>	consultants proficient in passive seismi data collection and processing.
	• Discuss any adjustment to assay data.	
Location of data points	<ul> <li>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resources estimation.</li> </ul>	The TROMINO® Passive Seismic equipment is equipped with internal and external GPS, and is processed to present the data in POSGAR Argentine Zone 3 co-
	<ul><li>Specification of the grid system used.</li><li>Quality and adequacy of topographic control.</li></ul>	ordinates (a local Argentinian Grid format similar to a UTM grid).
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Reserve and Ore Reserve estimation procedure(s) and classifications applied.</li> </ul>	Passive Seismic data spacing is on lines selected nominally perpendicular to known Geology, and at station spacing of 250m.
	• 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.	Passive Seismic data spacing is on lines selected nominally perpendicular to known Geology, and at station spacing of 250m.
	<ul> <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>	
Sample security	• The measures taken to ensure sample security.	Data collection is stored digitally, and uploaded daily to the external consultant for processing.
Audits or reviews	• The results of and audits or reviews of sampling techniques and data.	No external audit or review of the data has taken place



#### **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	<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 interest, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul>	<ul> <li>The Solaroz Lithium Brine Project comprises 8 concessions totalling approximately 12,000 hectares (Solaroz Concessions) located in the Jujuy Province in northern Argentina:</li> <li>(1) Mario Angel – File N°1707-S-2011 (542.92ha)</li> <li>(2) Payo – File N°1514-M-2010 (987.62ha)</li> <li>(3) Payo 1 – File N°1516-M-2010 (1973.24ha)</li> <li>(4) Payo 2 – File N°1515-M-2010 (2192.63ha)</li> <li>(5) Chico I – File N°1229-M-2009 (835.24ha)</li> <li>(6) Chico V – File N°1312-M-2009 (1800ha)</li> <li>(7) Chico VI – File N°1313-M-2009 (1400.18ha)</li> </ul>
		(8) Silvia Irene, File N°1706-S-2011 (2348.13ha) The Company has a 90% shareholding in Solaroz S.A. (formerly Han anta 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:
		<ul> <li>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</li> </ul>
		<ul> <li>Orocobre Limited ASX/TSX Announcement dated 23 October 2014 entitled "Olaroz Project - Large Exploration Target Defined Beneath Current Resource"</li> </ul>
		<ul> <li>Reidel, F., Technical Report on Cauchari JV Project – Updated Mineral Resource Estimate, prepared for Advantage Lithium Corporation, 19 April 2019</li> </ul>
		<ul> <li>Orocobre Limited ASX/TSX Announcement dated 10 January 2019 entitled "Cauchari Drilling Update – Phase III Drilling Complete"</li> </ul>
		<ul> <li>Burga, E. et al, Technical Report - Updated Feasibility Study and Mineral Reserve Estimation to support 40,000 tpa Lithium</li> </ul>



Criteria	Explanation	Comments
		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 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





Criteria	Explanation	Comments
		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:	No drilling results are being presented. The Company has yet to conduct any drilling at Solaroz and therefore, no drillhole information is reported.
	• 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 interception depth	
	Hole length	
	<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>	
Data aggregation methods	<ul> <li>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.</li> </ul>	The Company has yet to conduct any brine or core sampling at Solaroz and no data aggregation has taken place and hence no aggregation methods have been carried out. Elemental lithium has been converted to Lithium
	<ul> <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> </ul>	Carbonate Equivalent ( <b>LCE</b> ) 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.
	<ul> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	
Relationship between	• These relationships are particularly important in the reporting of Exploration Results.	The interpretations made by the Company are conceptual in nature. The Company has yet to
mineralisation widths and intercept lengths	<ul> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> </ul>	conduct any drilling and/or sampling of existing well infrastructure at Solaroz and hence geometry and intersection qualifications of open file information
	<ul> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known')</li> </ul>	cannot be made or validated.
Diagrams	<ul> <li>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</li> </ul>	The Company has yet to conduct any drilling or brine or core sampling at Solaroz hence and no plans or cross section representations of drilling have been reported.
	appropriate sectional views.	Plans and cross-section of the passive seismic undertaken at the <i>Payo</i> concession in February/March 2022 and its interpreted cross- sections are presented in Figures 3 and 4 (in Appendix B) with appropriate scale bars.
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>	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.





Criteria	Explanation	Comments
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</li> </ul>	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
	density, groundwater, geotechnical and rock characteristics; potential deleterious or containing substances.	and highly encouraging for the Company to develop in greater detail an exploration outline for the Solaroz Concessions.
		Figure 2 (in Appendix B) outlines the location of the Solaroz Concessions relative to the historical geophysical surveys that have been conducted by Orocobre.
		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.
<ul> <li>(e.g. tests for lateral extensions or dept extensions or large-scale step- out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the mai geological interpretations and future drillin</li> </ul>	<ul> <li>(e.g. tests for lateral extensions or depth extensions or large-scale step- out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, providing this information is not</li> </ul>	A major exploration programme is underway comprising comprehensive 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 passive seismic programmes across all the Solaroz Concessions will be used to determine the depth of the underlying basement rock (i.e. the theoretical limit of potential lithium mineralisation) underneath the concessions.	
		Transient Electromagnetic geophysics ( <b>TEM</b> ) will seek to identify the location and thickness of potential lithium-hosting conductive brines underneath the Solaroz Concessions.
		The TEM survey will be followed by an exploration 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.



Geophysics Expanded Across all Concessions to Refine Drill Targets at Solaroz Lithium Project

### **APPENDIX B**



Figure 2: Geology of the Olaroz Salar with Location of the Solaroz Concessions and Location of Geophysical Surveys undertaken by Allkem Limited<sup>2</sup>

<sup>&</sup>lt;sup>2</sup> Source: Salfity Geological Consultants - <u>www.salfitygeologicalconsultant.com</u>

**Geophysics Expanded Across all Concessions** to Refine Drill Targets at Solaroz Lithium Project



Figure 3: Passive Seismic Interpretation Payo Line 1



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**ENERGY LTD** 



**Geophysics Expanded Across all Concessions** to Refine Drill Targets at Solaroz Lithium Project



Figure 4: Passive Seismic Interpretation Payo Line 2



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