

MARKET ANNOUNCEMENT

EIA Approvals Now Granted for All Solaroz Lithium Project Concessions – Exploration Underway

KEY HIGHLIGHTS

- Government approvals now received for exploration and drilling to commence at ALL concessions at Lithium Energy's Solaroz Lithium Brine Project in Argentina
- With all 8 Solaroz concessions (totalling 12,000 hectares) now approved, a major exploration programme is underway which will comprise comprehensive geophysical surveys and a significant drilling programme
- Solaroz 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)
- Historical Olaroz North AMT Line Survey indicate the likely presence of conductive brines extending underneath Lithium Energy's adjacent Solaroz *Chico I*, *Chico V* and *Payo 2 (South)* concessions
- The interpreted paleo channel through which brines are interpreted to have likely flowed into the producing aquifer lies under Lithium Energy's Solaroz *Payo 1* and *Payo 2* concessions
- Lithium Energy has already commenced exploration at Solaroz, with passive seismic completed (and results being analysed) on the *Payo* concession
- Geophysical surveys (passive seismic and TEM surveys) are scheduled for all concessions, followed by rotary and diamond drilling campaigns
- Executive Chairman William Johnson, has recently completed a successful visit to Argentina, meeting key stakeholders, including local Government mining authorities and drilling contractors, and establishing a new local office in Jujuy to support exploration operations

William Johnson, Executive Chairman:

The receipt of the final set of Government approvals for exploration at Solaroz is a significant milestone and major value catalyst for Lithium Energy. In our view, there is no better address in the world to be exploring for lithium than the prolific lithium triangle, and our ground is directly adjacent to or principally surrounded by two of the largest lithium discoveries globally owned by Allkem and Lithium Americas.



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Furthermore, Allkem's recent (April 2022) upgrade to their Olaroz Resource in concessions adjacent or nearby to those held by Lithium Energy has provided further support for the Company's conceptual Exploration Target for Solaroz.

Exploration activity is already underway and will include geophysical studies and drilling across all of the highly prospective Solaroz concessions, with the objective of establishing a maiden JORC Mineral Resource of contained lithium in brine at Solaroz.

There has been significant M&A activity in the area showing the global interest in the district and lithium brines in particular, and we are very excited to now be in a position to ramp up our exploration efforts at Solaroz.

On behalf of Lithium Energy, I would like to thank the Jujuy Mining Secretary Miguel Soler and Mining Director Jose Gomez for their support and endorsement of the development of Solaroz.

All Exploration Approvals Now Received for Solaroz Concessions

Lithium Energy Limited (ASX:LEL) (**Lithium Energy**) is pleased to report that it has received the final set of Environmental Impact Assessment (EIA) approvals from the local Jujuy Provincial Government Mining Authority to undertake exploration works at its Solaroz Lithium Brine Project in Argentina (**Solaroz**).

An EIA approval has been received from the Provincial Authority to commence exploration works on the *Payo I, Payo 2, Chico I, Chico V, Chico VI, Silvia Irene* concessions which are located at the north-west section of the Salar de Olaroz basin (**Olaroz Salar**) (refer Figures 2 and 4).

This approval follows the recent approvals received for the *Payo*¹ and *Mario Angel*² concessions and means all 8 Solaroz concessions (totalling 12,000 hectares) have now received EIA approvals.

This last set of Government approval paves the way for Lithium Energy to advance a programme of geophysics and drilling over all concessions, with the objective of validating the previous exploration target announced by the Company and delineating a maiden JORC Mineral Resource.

Exploration Programme to Validate Exploration Target

As previously announced to the market, following a detailed review of reported results from various geophysical surveys and drilling data previously undertaken in the Olaroz Salar by its neighbours Allkem Limited (ASX/TSX:AKM) (formerly Orocobre Limited) (**Allkem**)³ and Lithium Americas Corporation (TSX/NYSE:LAC) (**Lithium Americas**), Lithium Energy believes that its Solaroz concessions lie over the same lithium rich aquifer within the Olaroz Salar from which Allkem has been extracting and processing lithium-rich brine for sale as lithium carbonate since 2015 and from which Lithium Americas plans to draw upon for its neighbouring Cauchari-Olaroz development project.

Lithium Energy proposes to test the proposition that the aquifer which supplies the lithium-rich brine being extracted by Allkem extends under the Company's Solaroz concessions. This will be tested by geophysical work and drilling with a view to fast tracking production of lithium carbonate dependent upon these works being successfully concluded.

Lithium Energy is now finalising arrangements with local geophysics and drilling contractors to prepare for the advancement of exploration works across the whole Solaroz project.

1 Refer LEL ASX Announcement dated 7 February 2022: Lithium Energy Receives First EIA Approval for Exploration to Commence at Solaroz Lithium Project

2 Refer LEL ASX Announcement dated 6 April 2022: Lithium Energy Receives Further EIA Approval for Exploration at Solaroz Lithium Project

3 Orocobre Limited (former ASX:ORE) changed its name to Allkem Limited (ASX:AKE) with effect on 6 December 2021

An extensive work programme will be conducted, aimed at locating potentially lithium bearing brines of economic interest and obtaining preliminary information related to the hydrogeological and geochemical characteristics of the brine rich aquifer that comprises the Olaroz Salar underneath the Solaroz concessions.



Figure 1: North-Western section of the Olaroz Salar, where Lithium Energy exploration programme is set to commence

The first stage of the geophysical surveys will be the completion of passive seismic programmes across all the Solaroz concessions, which will be used to determine the depth of the underlying basement rock (i.e. the theoretical limit of potential lithium mineralisation) underneath the concessions.

Passive seismic survey fieldwork has already been undertaken at the *Payo* concession in the south-east corner of the Olaroz Salar and is currently being interpreted. Lithium Energy is now planning to mobilise a team during May to undertake passive seismic work across the remaining Solaroz concessions.

The Company is also planning to undertake a programme of TEM geophysics commencing in May, to identify the location and thickness of potential lithium-hosting conductive brines underneath the concessions.

The TEM survey will be followed by an exploration drilling campaign, based on the results from previous work, to assess the distribution and geochemistry of the brine and to obtain data related to basic physical parameters of the different hydrogeological units.

Lithium Energy is in discussions with several local drilling contractors, with the objective of securing suitable rigs to undertake 2,500 – 5,000 metres of rotary and diamond-core drilling once the interpretation of the geophysical surveys referred to above is complete.

In addition to the above works, Lithium Energy 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 Mineral Resource.

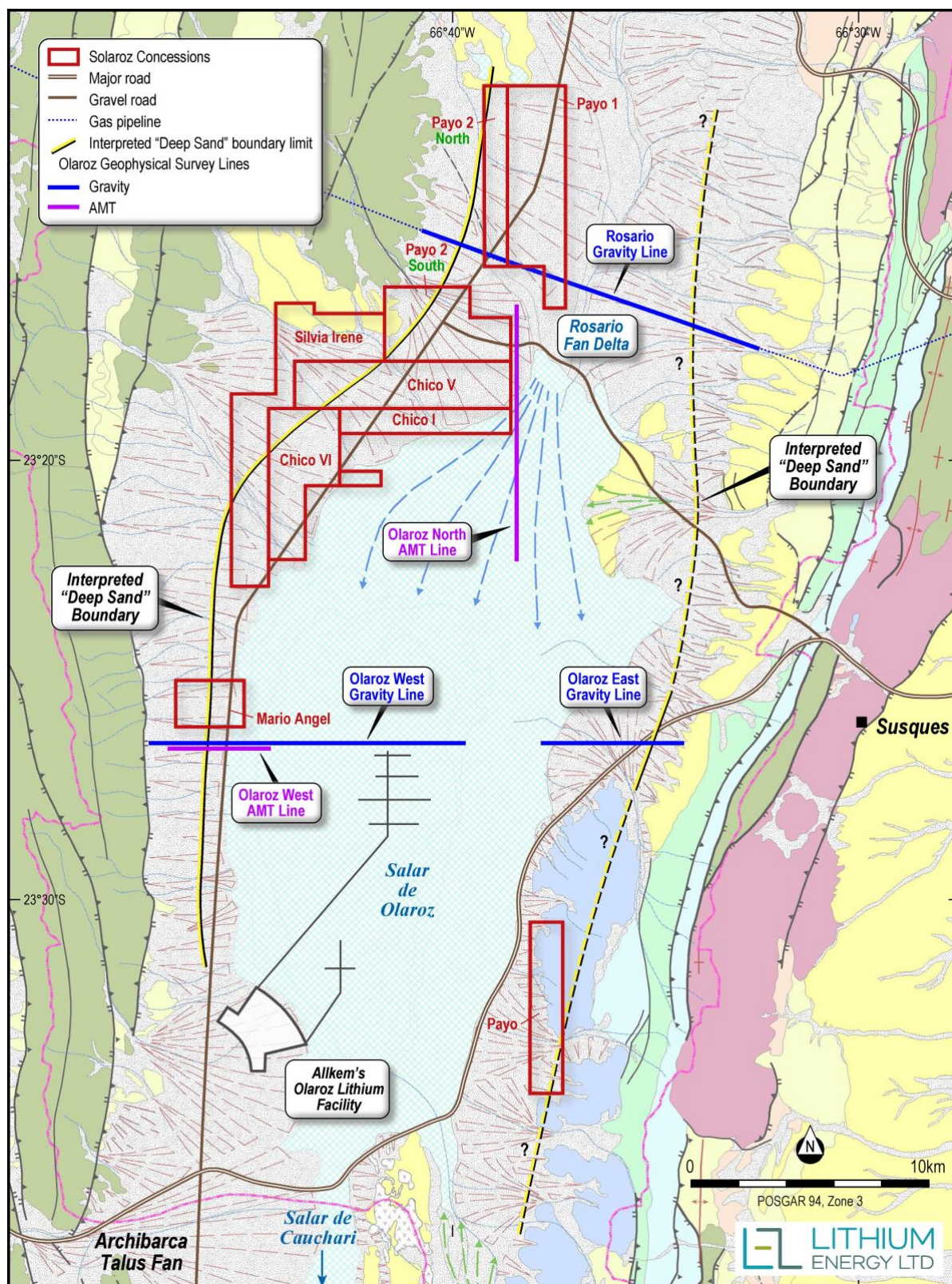


Figure 2: Geology of the Olaroz Salar with Location of the Solaroz Concessions and Location of Geophysical Surveys undertaken by Allkem Limited⁴

4 Source: Salfity Geological Consultants - www.salfitygeologicalconsultant.com

Establishment of Local Solaroz Office in Jujuy

Executive Chairman William Johnson recently undertook a visit to Argentina, during which he held highly productive meetings with prospective local contractors and key stakeholders, including local Government mining authorities in the provincial capital of San Salvador de Jujuy and community leaders at the Olaroz Salar.

A local office has now been established in San Salvador de Jujuy to be the base for Solaroz operations, with several key local staff already employed and further appointments pending.

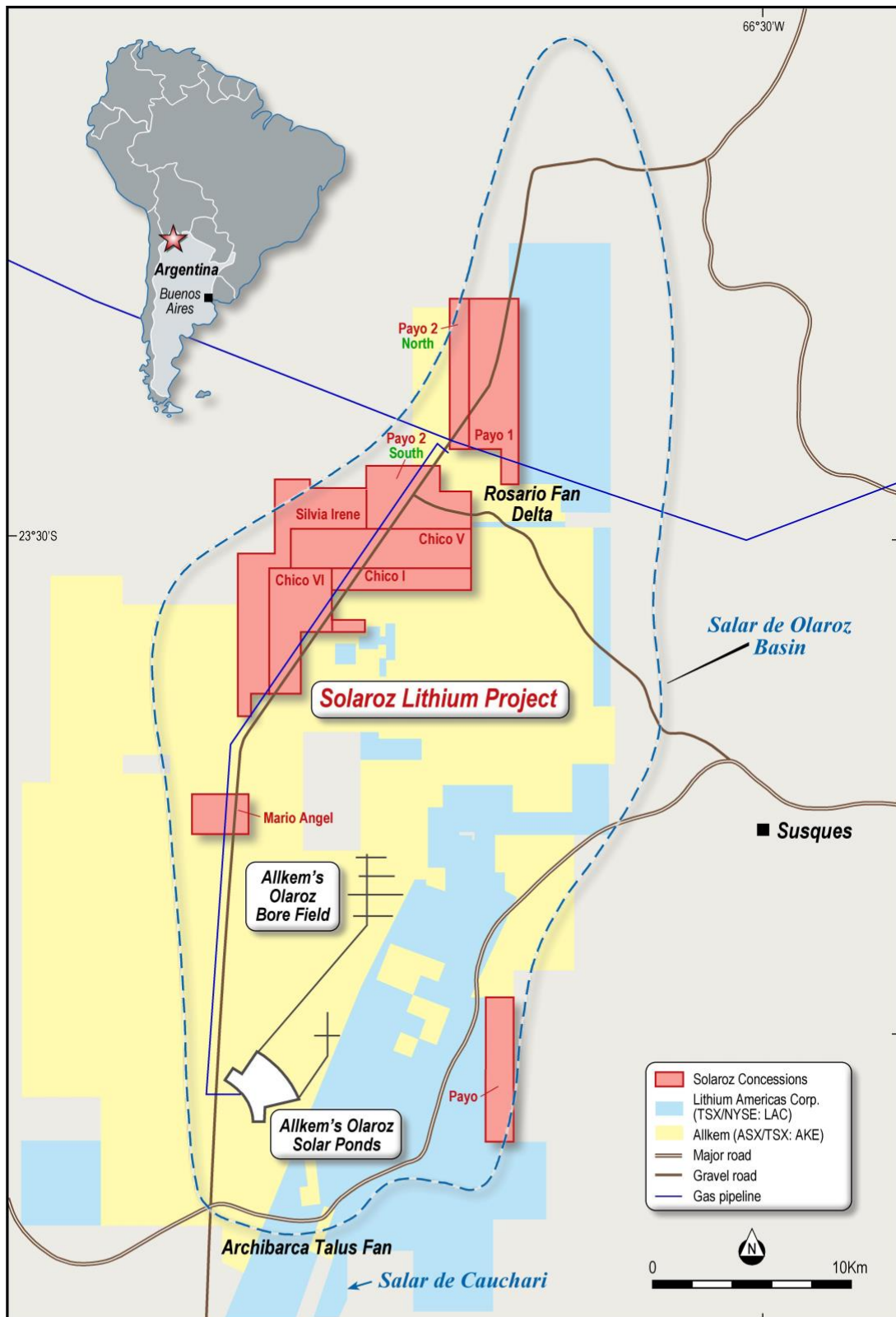


Figure 3: Executive Chairman William Johnson (right) with Jujuy Mining Secretary Miguel Soler and Jujuy Mining Director Jose Gomez

Solaroz Project Background

Lithium Energy's flagship Solaroz Project comprises 8 mineral concessions totalling approximately 12,000 hectares, located approximately 230 kilometres north-west of the provincial capital city of Jujuy within South America's 'Lithium Triangle' in North-West Argentina in the Olaroz Salar.

The highly prospective nature of the Solaroz Project is highlighted by its close proximity to two world class Lithium brine assets, being the flagship Olaroz Lithium Facility of Allkem Limited (ASX/TSX:AKE) (formerly Orocobre Limited) (under a joint venture with Tokyo Stock Exchange listed Toyota Tsusho Corporation (TYO:8015)) and the advanced Cauchari-Olaroz development project held by Lithium Americas Corporation (TSX/NYSE:LAC) (under a joint venture with Ganfeng Lithium).



Solaroz Lithium Project, Argentina Solaroz Concessions Location Plan

Figure 4: Solaroz Concession Locations Adjacent to Allkem and Lithium Americas Concessions in Olaroz Salar

Solaroz Exploration Target

Lithium Energy has established a conceptual Exploration Target for the Solaroz Project of⁵:

1.5 to 8.7 million tonnes (Mt) of contained Lithium Carbonate Equivalent (LCE)
based on a range of lithium concentrations of between circa **500 mg/L Lithium (Li)** and **700 mg/L Li**

Brine Area (km ²)	SOLARAZ EXPLORATION TARGET					
	Thickness of Deep Sand Unit (m)	Lithium (mg/L)	Average Specific Yield (Sy) (%)	Brine Volume (million m ³)	Contained Lithium (Mt)	Contained LCE (Mt)
Upper Assumption Estimate						
78	150	700	20	2334	1.6	8.70
Lower Assumption Estimate						
78	75	500	10	584	0.3	1.5

Notes:

- (1) 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.
- (2) Brine Volume ranges are approximations derived from an interpretation of open file geological and geophysical data.
- (3) Porosity are approximations based upon open file information contained within Houston et al (13 May 2011), Allkem (23 October 2014) and Lithium Americas (30 September 2020).
- (4) Lithium grade ranges have been approximated from a review of open file information (Houston et al (13 May 2011), Allkem (23 October 2014)).
- (5) Percentage values have been rounded (to the nearest 1,000 unit) in relevant calculations.
- (6) A conversion factor of 5.323 has been adopted to convert elemental Li to Li₂CO₃ ((LCE).
- (7) For further details in relation to the Exploration Target, refer to Lithium Energy's ASX Announcement dated 8 June 2021: Substantial Lithium Exploration Target Identified at the Solaroz Project in Argentina.

Lithium Energy notes that Allkem recently released an update to their Olaroz Resource⁶, in which they substantially expanded the resource in the Olaroz Salar and confirmed strong project economics for expansion of production. The results from this update provide further support for Lithium Energy's conceptual Exploration Target, with the area defined by Allkem for their Updated 2022 Resource Outline extending close or adjacent to concessions held by Lithium Energy.

⁵ Refer LEL ASX Announcement dated 8 June 2021: Substantial Lithium Exploration Target Identified at the Solaroz Project in Argentina

⁶ Refer Allkem's ASX/TSX Announcement dated 4 April 2022: Olaroz resource upgraded 2.5x to 16.2 million tonnes LCE – Confirmation of strong project economics for Olaroz stage 2

Solaroz Deep Sand Unit

Lithium Energy’s interpretation of the Olaroz Salar basin architecture is that the aquifer which supplies the lithium-rich brine being extracted by Allkem and forming the lithium mineralisation upon which the Lithium Americas project is based, is contained in a Deep Sand Unit of the Olaroz Salar which extends to the north and west under the Talus Alluvial Wedge and the Solaroz concessions (refer Figure 5).

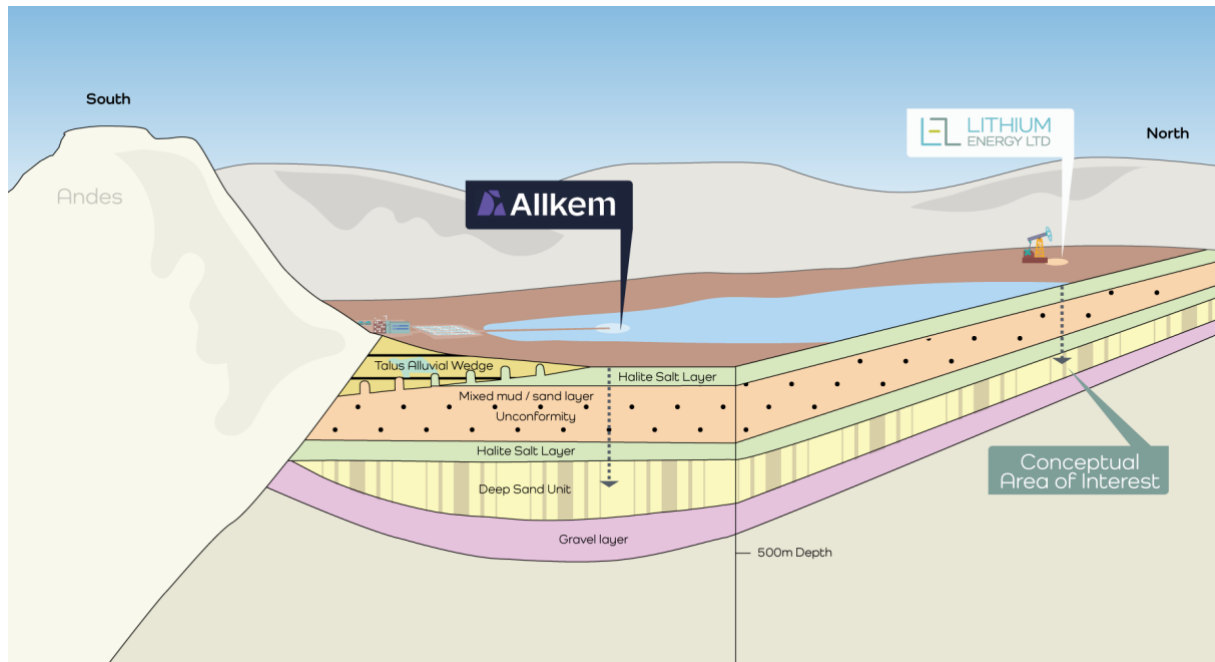


Figure 5: Solaroz Geological Exploration Concept

The presence of the Deep Sand Unit in the Olaroz Salar has been confirmed by exploration works undertaken by Allkem and Lithium Americas. The Company notes that the Rosario Fan Delta at the northern end of the Olaroz Salar and over which the *Payo 1* and *Payo 2* concessions are situated (refer also Figures 2 and 4), contains the interpreted paleo channel through which brines are interpreted to have likely flowed from the north into the Deep Sand Unit within both the Olaroz Salar and neighbouring Salar de Cauchari to the south.

Lithium Energy’s interpretation of the Deep Sand Unit and paleo channel is conceptual in nature, there has been insufficient exploration to estimate a JORC Mineral Resource in respect of the same and it is uncertain if further exploration will result in the estimation of a JORC Mineral Resource.

The Company has also analysed a number of Gravity and AMT surveys conducted by Allkem, some of which were undertaken over or closely adjacent to Lithium Energy’s Solaroz concessions. Figure 2 outlines the location of Lithium Energy’s Solaroz concessions relative to the historical geophysical surveys that have been conducted by Allkem.

Gravity modelling at the Rosario Gravity Line shows that the depth to basement within the *Payo 1* concession is approximately 400m (refer Figure 6).

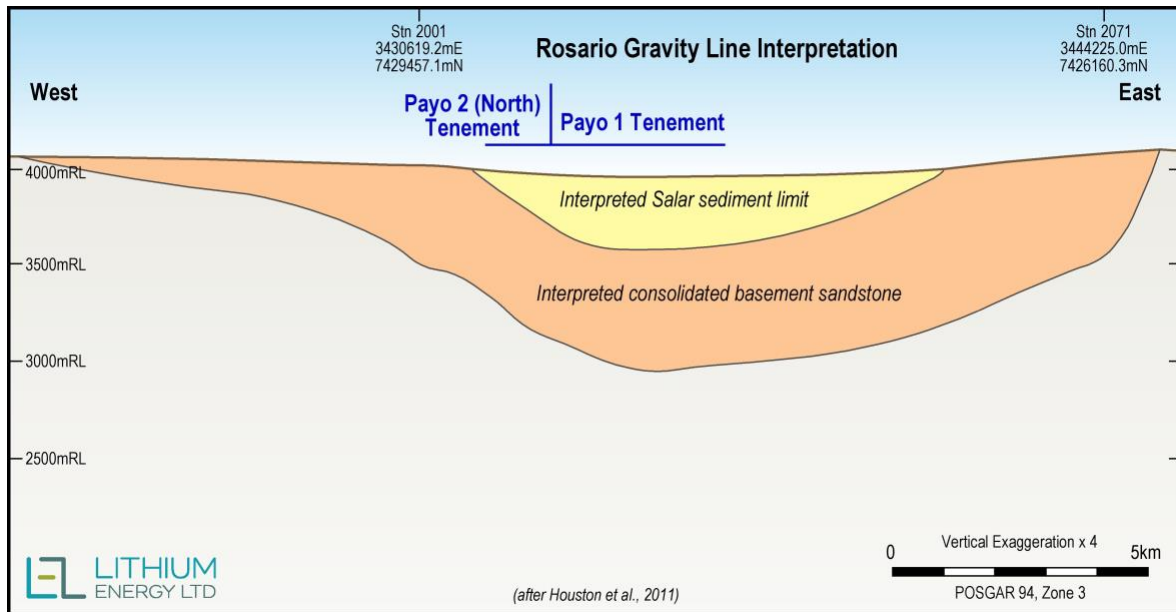


Figure 6: Olaroz Salar - Rosario Gravity Line across Solaroz Concessions

AMT modelling shows the interfaces between resistive material (i.e brackish water and lack of conductive salt rich brine) and the conductive brine. The AMT modelling at the Olaroz North AMT Line shows a thickening wedge of resistive material underlain by a conductive layer (interpreted to be conductive Brine), whilst the thickening wedge of resistive material above it comprises more recent Rosario sediments, which host brackish water at shallow depths, the nominal depths of which can be determined from the modelled section (refer Figure 7).

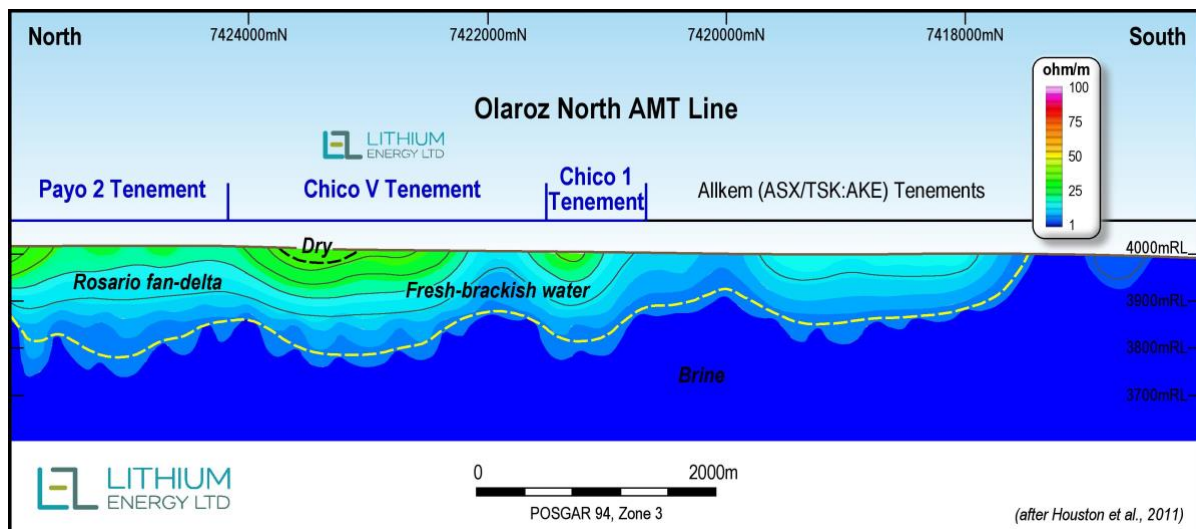


Figure 7: Olaroz Salar - Olaroz North AMT Survey Line

Similar interpretations can be applied (as annotated by Allkem in Houston et al, 13 May 2011) to the Olaroz East and West Gravity Lines and also the Olaroz West AMT Line to determine the location of the bounding fault (refer Figure 8).

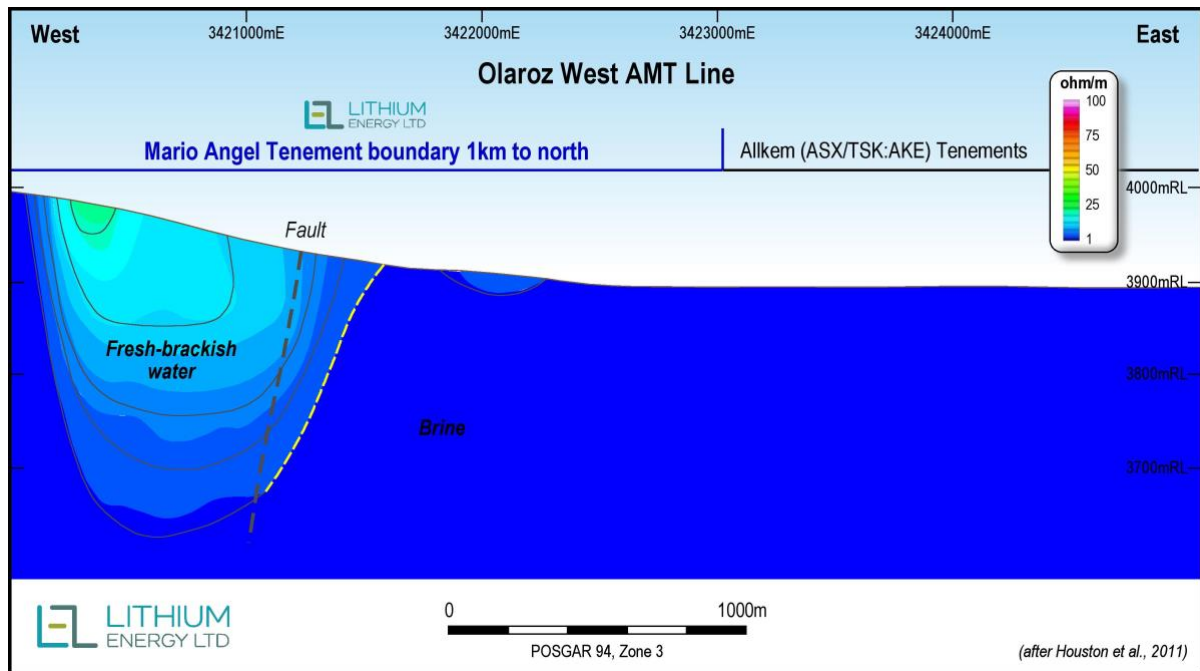


Figure 8: Olaroz Salar - Olaroz West AMT Survey

The interpreted location of the Deep Sand Unit have been superimposed on the gravity line interpretation and has assisted in determining the minimum and maximum thickness assumptions used in the Solaroz Exploration Target.

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) (formerly Orocobre Limited) 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 STATEMENT

The information in this document that relates to Exploration Targets and 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.