Monday, 1 May 2023 ASX Code : LEL

MARKET ANNOUNCEMENT

Massive Intersections of Lithium Rich Brine Confirm World Class Potential of Solaroz Lithium Project

SUMMARY

- Initial assay results received for Holes 4 (SOZDD004) and 5 (SOZDD005) at the Solaroz Lithium Brine Project show outstanding lithium brine concentrations of up to **508 mg/L** across massive intersections of up to **~400m**, with final brine depth yet to be reached in both holes.
- Holes 4 and 5 currently at depths of **~650m** and **~545m** (respectively) and still in the Deep Sand Unit (lower aquifer), with drilling continuing to test the full depth of lithium mineralisation to basement.
- Hole 4 highlights to date include a massive total of **401.5 metres of conductive brines** across the upper and lower aquifer with assays returning up to **508 mg/l Lithium.**
- Hole 5 highlights to date include a significant total of **369.5 metres of conductive brines** across the upper and lower aquifers with assays returning up to **479 mg/l Lithium.**
- Conductive brines continue to be encountered in the Deep Sand Unit with sampling and assays pending for:
  - a further **~74m** intersection so far in the Deep Sand Unit in Hole 4 from 575.5m to current hole depth (~650m); and
  - a further **~26m** intersection so for in Hole 5 from 518.5m to current hole depth (~545m).

  The potential for these massive intersections of conductive brine to further increase continues as drilling is yet to encounter the aquifer basement.
- Significant intersections of lithium-rich conductive brines now encountered in the upper aquifer and Deep Sand Unit in Holes 1, 3, 4 and 5 (with assays pending for Hole 2), which lie across a ~15km zone in the north-west region of the Olaroz Salar.
- The outstanding intervals and grades of lithium mineralisation encountered across the holes drilled to date support the world class potential of the Solaroz Project.

Lithium Energy Limited (ASX:LEL) (**Lithium Energy** or **Company**) is pleased to advise that initial assays have confirmed massive intersections (of over **400 metres**) of lithium-rich brines of up to **508 mg/L** at the fourth (SOZDD004) and fifth (SOZDD005) holes currently being drilled[1] at the Company's flagship Solaroz Lithium Brine Project in Argentina, in the heart of South America's world renowned Lithium Triangle (**Solaroz**).

1 Refer LEL ASX Announcement dated 19 April 2023: Holes 4 and 5 Encounter Significant Intersections of Conductive Brines at Solaroz Lithium Project

Assays from the initial packer samples collected have returned significant lithium concentrations of up to **508 mg/L** with total (conductive brines) intervals of **401.5 metres** in SOZDD004 and lithium concentrations of up to **479 mg/l** with total (conductive brines) intervals of **369.5 metres** in SOZDD005 encountered in the upper and lower aquifers to date. Assays are still pending on some packer samples and sampling is ongoing as both drill rigs continue drilling within the Deep Sand Unit to basement.

Assay results to date have also confirmed that lithium concentrations are generally increasing at depth indicating a hydraulically linked system with heavier lithium rich brines settling lower into the aquifer. Sampling for lithium mineralisation in the conductive brines at each hole is being progressively undertaken with further field testing and assay results pending.

These results follow the significant lithium discovery made at the first drill hole (SOZDD001, on Mario Angel concession)[2] and the third drill hole (SOZDD003 on the Chico I concession)[3] – drillholes SOZDD004 and SOZDD005 are located along a ~15 kilometre zone between SOZDD001 and SOZDD003 (refer Figure 6).

The results from drillholes 1 to 5 to date (including the intersection widths and grades of conductive/lithium brines, together with the chemical composition and geophysical measurements), when taken together with the interpretation of geophysics surveys undertaken across the Solaroz concessions, support Lithium Energy's geological model of extensive sandstone aquifers hosting lithium-rich conductive brines being present in the northern central section of the Salar de Olaroz basin (the **Olaroz Salar**) below substantial portions of the Company's ~12,000 hectare concession holding at Solaroz.

William Johnson, Executive Chairman:

> *Drillholes SOZDD004 and SOZDD005 have delivered our biggest intersections to date of lithium rich brines at Solaroz, with 401 metres of brines encountered in SOZDD004 and 369 metres in SOZDD005 so far. Further assay results to current drill hole depth are yet to be received, with drilling ongoing in each hole to test the basement depth of the Deep Sand Unit. Therefore, there is potential for the intersections to increase in each hole.*
>
> *The significance of these intersections cannot be overstated. Firstly, the results from these holes, which are located between lithium discovery drillholes SOZDD001 and SOZDD003, together with interpretation of recent geophysics confirms the continuity of lithium rich brines **along a ~15 kilometre zone** between Solaroz drillholes SOZDD001 and SOZDD003.*
>
> *Secondly, these drillholes have demonstrated the potential of the Deep Sand Unit to host substantial volumes of lithium higher in grade compared to the upper aquifer. Drillhole SOZDD004 has intersected over 243 metres of conductive brines in the Deep Sand Unit so far, with reported assays of lithium up to 508 mg/litre and with drilling yet to reach the aquifer basement, and assays pending.*
>
> *Similarly, drillhole SOZDD005 has intersected 206 metres of conductive brines in the Deep Sand Unit, with assay results to date of up to 479 mg/litre. Drilling is still advancing in brines to test the aquifer basement and reported lithium grades are generally increasing with depth. Drilling is yet to reach the aquifer basement, with further sampling and assays pending.*
>
> *These recent results are tremendously exciting, as they provide further confirmation of a potentially world class resource of lithium at Solaroz. A third drilling rig is preparing to mobilise to site and with three rigs soon to be operating concurrently, we are rapidly advancing towards defining our maiden JORC resource at Solaroz.*

2 Refer LEL ASX Announcement dated 10 March 2023: Positive Specific Yields and Significant Averaged Lithium Concentrations in SOZDD001 at Solaroz Lithium Brine Project

3 Refer LEL ASX Announcement dated 14 March 2023: Further Significant Lithium Discovery Extends Mineralisation at Solaroz Lithium Brine Project

Figure 1: Drill Rig at SOZDD004 (Chico I Concession) on Solaroz Salar

Drillhole 4 – SOZDD004 (Chico I concession)

Drillhole 4 (SOZDD004, on the Chico I concession, refer Figure 6) has intersected a current total of **401.5 metres of conductive brines** (across the upper and lower aquifers) with assays returning up to **508 mg/l Lithium** to date (with drilling ongoing), including as follows:

- Significant **158 metre** intersection of conductive brines encountered across the **upper aquifer**, from a depth of 120 to 278 metres, in mostly uniform brine hosting sandstone units and fine gravels - assays have returned Lithium concentrations of up to **288 mg/l**.
- Halite (salt unit) layer of 42 metres encountered, from 278 to 332 metres.
- Beneath the halite layer, drilling has entered the Deep Sand Unit (lower aquifer), intersecting **243.5 metres** of conductive brines from 332 to 575.5 metres (to the depth of the last packer sample taken to date), still in brine hosting sandstone units and fine gravels - assays have returned Lithium concentrations of up to **508 mg/l**.
- Conductive brines are generally increasing in conductivity and density at depth, as ongoing drilling progresses into the Deep Sand Unit, with a current hole depth of ~650 metres.
- Assays are still pending on some packer samples and sampling is ongoing as drilling continues within the Deep Sand Unit to basement.
- The results of the initial packer samples for SOZDD004 (to date) are shown in Table 1.
- The lithology stratigraphy of SOZDD004 (to date) is illustrated in Figure 7.

Figure 2: Drill Rig at SOZDD004 (C.hico I Concession)

Drillhole 5 – SOZDD005 (Chico VI concession)

Drillhole 5 (SOZDD005, on the Chico VI concession, refer Figure 6) has intersected a current total of **369.5 metres of conductive brines** (across the upper and lower aquifers) with assays returning up to **479 mg/l Lithium** to date (with drilling ongoing), including as follows:

- Significant **163 metre intersection** of conductive brines encountered across the upper aquifer, from a depth of 110 to 273 metres, in mostly uniform brine hosting sandstone units and fine gravels - assays have returned Lithium concentrations of up to **433 mg/l**.
- Halite layer of 39 metres encountered, from 273 to 312 metres.
- Beneath the halite layer, drilling has entered the Deep Sand Unit (lower aquifer) intersecting **206.5 metres** of conductive brines from 312 to 518.5 metres (to the depth of the last packer sample taken to date), still in brine hosting sandstone units and fine gravels - assays have returned Lithium concentrations of up to **479 mg/l**.
- Conductive brines are generally increasing in conductivity and density at depth, as ongoing drilling progresses into the Deep Sand Unit, with a current hole depth of ~545 metres, in brine hosting sandstone units and fine gravels.
- Assays are still pending on some packer samples and sampling is ongoing as drilling continues within the Deep Sand Unit to basement.
- The results of the packer samples for SOZDD005 (to date) are shown in Table 2.
- The lithology stratigraphy of SOZDD005 (to date) is illustrated in Figure 8.

Figure 3 :Lithium Energy Chairman (William Johnson) and Solaroz Senior Geologist (Guillermo Luque) at SOZDD004 Drill Rig

Figure 4: Collection of Core Samples for Analysis and Testwork

Figure 5: Collection of Brine Samples for Assaying

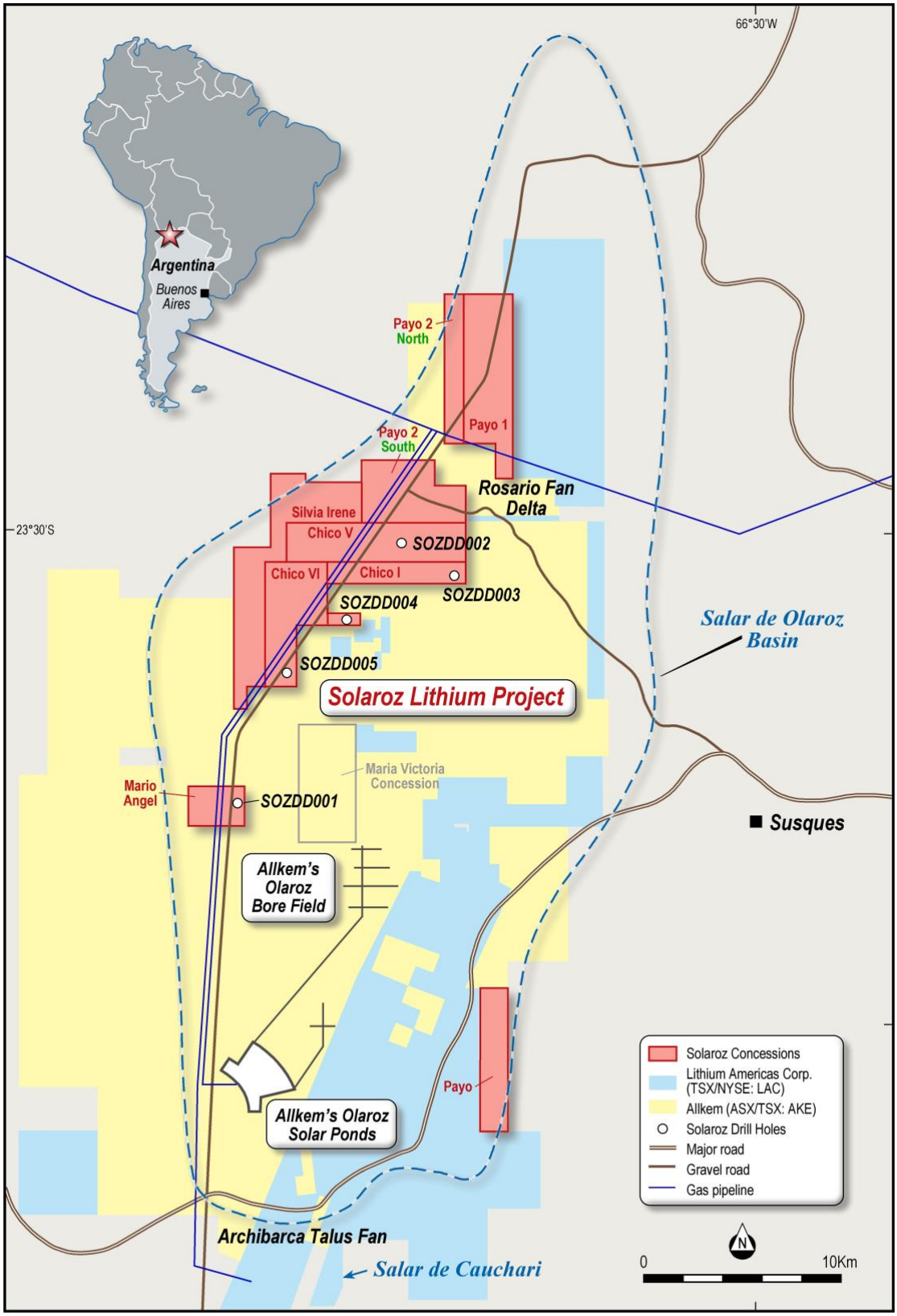

Figure 6: Solaroz Drill Hole Locations within Solaroz Concessions in Olaroz Salar
(Adjacent to Allkem and Lithium Americas Concessions)

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 PERSONS' STATEMENTS

The information in this document that relates to Exploration Results (field analysis and assays of brine samples taken from drillholes SOZDD005 and SOZDD005) in relation to the Solaroz Lithium Brine 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 other Exploration Results and Exploration Targets (as applicable) in relation to the Solaroz Lithium Brine Project is extracted from the following ASX market announcements made by Lithium Energy dated:

- 19 April 2023 entitled "Holes 4 and 5 Encounter Significant Intersections of Conductive Brines at Solaroz Lithium Project"
- 14 March 2023 entitled "Further Significant Lithium Discovery Extends Mineralisation at Solaroz Lithium Brine Project"
- 10 March 2023 entitled "Positive Specific Yields and Significant Averaged Lithium Concentrations in SOZDD001 at Solaroz Lithium Brine Project"
- 27 February 2023 entitled "Drilling Continues to Advance at Solaroz Lithium Brine Project"
- 31 January 2023 entitled "Drilling Continues to Encounter Significant Intersections of Highly Conductive Brines at Solaroz Lithium Project"
- 14 December 2022 entitled "Intersections of Conductive Brines Encountered in Further Drillholes at Solaroz Lithium Project in Argentina"
- 16 November 2022 entitled "Drilling Completed at Maiden Drillhole at Solaroz Lithium Brine Project"
- 1 November 2022 entitled "Further Significant Lithium Concentrations Encountered in Maiden Drillhole at Solaroz Lithium Brine Project"
- 19 October 2022 entitled "Major Lithium Discovery Confirmed In First Drillhole of Maiden Programme at the Solaroz Lithium Brine Project"
- 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 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.

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 pre-collar 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 to obtain representative samples of the stratigraphy and sediments that host brine. Water/brine samples were taken from target intervals, using Double and Single Packer sampling (depending on the condition of the drillhole) 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 each 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. Conductivity and Density tests are taken with a field portable High Range Hanna multi parameter meter. Testing of the chemical composition (including Lithium, Potassium, Magnesium concentrations) of brines will be undertaken at a local laboratory in Argentina. At drillhole SOZDD004 - water/brine samples have been collected from various intervals, as outlined in Table 1, which also reports the available field and assay results of these packer samples. At drillhole SOZDD005 - water/brine samples have been collected from various intervals, as outlined in Table 2, which also reports the available field and assay results of these packer samples.
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 pre-collar from surface was drilled using Tricone drilling method; chips were logged as collected, to a depth of approximately 35m (for SOZDD004) and approximately 45m (for SOZDD0035), these being the pre-collar depths for each hole. The pre-collar was then isolated and drilling continued in HQ Core. 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 to obtain representative samples of the stratigraphy and

Criteria	Explanation	Comments
		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 geologists at each drillhole 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.
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 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.*	Water/brine samples were collected by purging isolated sections of each hole of all fluid in each 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.
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*	Samples are (to be, where applicable) transported to reputable industry standard laboratories for various test work. Testing of the chemical composition (including Lithium, Potassium, Magnesium concentrations) of brines (from packer samples) are being undertaken at a local laboratory in Argentina - the Alex Stewart International Laboratory - 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 laboratory (to date), in respect of SOZDD004.

Criteria	Explanation	Comments
	(i.e. lack of bias) and precision have been established.	Table 2 contains the field brine sampling results and the analytical results from the laboratory (to date), in respect of SOZDD005. Duplicate samples returned comparable values, well within acceptable limits.
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)
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.*	Locations are positioned 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.* • *Whether sample compositing has been applied.*	Water/brine samples were collected within isolated sections of the hole based upon the results of geological logging.
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 each drill site to secure storage at the site 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 campaign is at an early stage, (with 3 holes drilled to date and 2 holes in progress, out of an initial 10 hole programme) 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, owns the Solaroz Concessions - refer also to the Company's ASX announcement dated 31 October 2022 entitled "Early Exercise of Option to Acquire Solaroz Lithium Brine Project Concessions".
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 Salar 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 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,

Criteria	Explanation	Comments
		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 interception depth*
		Drillhole ID: SOZDD004:
		• Easting: 3427663 E (POSGAR Zone 3 East)
		• Northing: 7419410N (POSGAR Zone 3 North)
		• Vertical hole
		• Progress hole depth is ~650m
		• Drilling is on-going (to basement/hole depth)
		
		Drillhole ID: SOZDD005:
		• Easting: 3425076 E (POSGAR Zone 3 East)
		• Northing: 7416791 N (POSGAR Zone 3 North)
		• Vertical hole
		• Progress hole depth is ~545m
		• Drilling is on-going (to basement/hole depth)

Criteria	Explanation	Comments
	• *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 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 lithology stratigraphy and results of field and laboratory testing of Packer Samples at Drillhole SOZDD004 (to date) is presented in Figure 7 and Table 1 respectively. The lithology stratigraphy and results of field and laboratory testing of Packer Samples at Drillhole SOZDD005 (to date) is presented in Figure 8 and Table 2 respectively.

Criteria	Explanation	Comments
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 reporting of Exploration Results.*	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 (progress) results in this announcement are from the fourth (SOZDD004) and fifth (SOZDD005) holes drilled by the Company on the Solaroz Concessions.
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. Further details are in the Company's ASX announcement dated 18 August 2022 entitled "Highly Encouraging Geophysics Paves Way for Commencement of Drill Testing of Brines at Solaroz". The TEM survey lines undertaken across the Solaroz Concessions (also identified) are also shown in Figure 6 of the Company's ASX announcement dated 16 November 2022 entitled "Drilling Completed at Maiden Drillhole at Solaroz Lithium Brine Project". The (field and assay) results of packer sampling and geophysical hole logging at the first drillhole (SOZDD001, located on the Mario Angel concession) at Solaroz has been previously announced – refer to the Company's ASX announcement dated 10 March 2023 entitled "Positive Specific Yields and Significant Averaged Lithium Concentrations in SOZDD001 at Solaroz Lithium Brine Project". The (field and assay) results of packer sampling and geophysical hole logging at the third drillhole (SOZDD003, located on the Chico I concession) at Solaroz has been previously announced – refer to the Company's ASX announcement dated 14 March 2023 entitled "Further Significant Lithium Discovery Extends Mineralisation at Solaroz Lithium Brine Project". The (field) results of initial packer sampling at the second drillhole (SOZDD002, located on the Chico V concession) at Solaroz has been previously announced – refer to the Company's ASX announcement dated 31 January 2023 entitled "Drilling Continues to Encounter Significant Intersections of Highly Conductive Brines at Solaroz Lithium Project"

Criteria	Explanation	Comments
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 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. 5 holes have been drilled to date - SOZDD001 (on the Mario Angel concession), SOZDD002 (on the Chico V concession), SOZDD003 (on the Chico I concession), SOZDD004 (on the Chico I concession) and SOZDD005 (on the Chico VI concession) – out of a planned 10 hole 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. The location of these 5 drill holes are also shown in Figure 6. 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.

Table 1 : Results of Packer Samples at Drillhole SOZDD004

Zones	Intersection Samples	Hole Depth Range From (m)	Hole Depth Range To (m)	Li (mg/l)	Mg (mg/l)	Mg/Li Ratio	Conductivity (mS/cm)	pH	TDS (g/l)	Flow Rate (l/min)	Density (g/ml)
Fresh to Brackish Zone	1	91	100	224	530	2.37	169	7.5	84.4	14.3	1.1
	2	111	120	298	566	1.9	208	7.2	104	14.3	1.146
Upper Aquifer	3	121	144	220	442	2	218	7	108.5	50	1.157
	4	145	168	215	423	1.97	214	7	107.1	14.3	1.16
	5	168	192	215	443	2.06	219.7	6.95	110	40	1.16
	6	193	216	288	593	2.06	223.5	6.8	111.8	33	1.17
	7	241	264.5	288	593	2.06	214.3	6.71	107.3	33	1.17
	8	265	287.5	Assays pending			219.5	6.85	110.3	22	1.187
Halite (Salt) Layer	9	288	312	Assays pending			220	7.15	110	25	1.85
	10	313	336	154	334	2.17	223	7.28	112.2	15.4	1.194
Deep Sand Unit (Lower Aquifer)	11	337	360	**424**	627	1.48	212.7	6.8	106.4	20	1.2
	12	360	384	**508**	655	1.29	221	6.84	111.3	15.4	1.21
	13	384.5	407.5	**500**	638	1.28	219	6.65	108.7	25	1.2
	14	408.5	431.5	**461**	623	1.35	217.1	6.72	108.6	16.6	1.2
	15	432	456.5	**474**	668	1.41	213	6.8	106.5	40	1.198
	16	456	480	Assays pending			213.2	6.67	107.2	33.3	1.195
	17	480	504	Assays pending			222.2	6.77	110.7	28.6	1.2
	18	552.5	575.5	Assays pending			218.2	6.68	109	20	1.2
	Drilling continuing ahead in brines with current depth at ~650m; further sampling ongoing										

Notes:

(1) A tri-cone pre-collar has been isolated at a drill hole depth of ~35 metres, to separate the fresh/brackish water and to prevent dilution with the sampling and assaying of the deeper brines.

(2) Sampling of encountered brines were conducted by the use of single packers; additional sampling via double packers may be undertaken after the completion of drilling to basement/hole depth.

Table 2 : Results of Packer Samples at Drillhole SOZDD005

Zones	Intersection Samples	Hole Depth Range From (m)	Hole Depth Range To (m)	Li (mg/l)	Mg (mg/l)	Mg/Li Ratio	Conductivity (mS/cm)	pH	TDS (g/l)	Flow Rate (l/min)	Density (g/ml)
Fresh to Brackish Zone	1	86.5	110.5	243	473	1.95	194.7	6.8	97.4	20	1.134
Upper Aquifer	2	110	134.5	295	540	1.83	218.6	6.7	109.8	11	1.16
	3	134	158.5	305	562	1.84	219	6.75	109.7	13.3	1.165
	4	158.5	182.5	301	561	1.86	220.3	6.77	110.2	18.2	1.17
	5	182.5	206.5	345	654	1.9	222.5	6.75	111.0	8	1.17
	6	230.50	254.5	**421**	771	1.83	226	6.72	113	11.1	1.18
	7	254	278	**433**	709	1.64	225	6.6	113.1	7.9	1.19
Halite (Salt) Layer	8	278.5	302.5	439	718	1.64	232.4	6.42	116.3	2.7	1.195
Deep Sand Unit (Lower Aquifer)	9	302.5	326	**408**	775	1.9	231.5	6.9	115.8	7	>1.2
	10	326.5	350.5	356	684	1.92	221	6.7	111.1	10	>1.2
	11	350.5	374	**430**	712	1.66	232.6	6.5	116.3	10	>1.2
	12	374.5	398.5	**468**	740	1.58	236.2	6.64	118.1	10	>1.2
	13	398	422	**479**	684	1.42	233	6.7	116.7	6.5	>1.2
	14	422	446	Assays pending			230	6.6	115.3	6.5	>1.2
	15	446	470.5	Assays pending			238.9	6.5	119.2	7.1	>1.2
	16	470	494	Assays pending			224.4	6.84	112.5	11.1	>1.2
	17	494.5	518.5	Assays pending			236.7	6.37	118.1	2.4	>1.2
	18	518.5	542.5	Assays pending			242.2	6.56	121.3	10.9	>1.2
	Drilling continuing ahead in brines with current depth at ~545m; further sampling ongoing										

Notes:

(1) A tri-cone pre-collar has been isolated at a drill hole depth of ~45 metres, to separate the fresh/brackish water and to prevent dilution with the sampling and assaying of the deeper brines.

(2) Sampling of encountered brines were conducted by the use of single packers; additional sampling via double packers may be undertaken after the completion of drilling to basement/hole.

Summary of Sampling and Testing

- A 'pre-collar' is isolated at the top of each hole, to separate the fresh/brackish water and prevent dilution with the sampling of the brines underneath; the depth of this pre-collar varies from hole to hole.
- Sampling of encountered brines are conducted by the use of single packers, double packers and or airlift (pumping), depending on the condition of the drill hole.
- Testing of brines for conductivity, flow rates and density are undertaken in the field, with testing of the chemical composition (eg. Lithium, Potassium, Magnesium concentrations) of brines being undertaken at a local laboratory in Argentina.
- Core samples are also collected for brine extraction and chemical analysis and specific yield and porosity testwork at a US-based laboratory.
- Upon the completion of drilling at each hole, geophysical hole logging is undertaken to provide measurements including total porosity and specific yield (which relates to the amount of brine that can ultimately be extracted), conductivity and spectral gamma.
- The assay results (from brine sampling) are reviewed in conjunction with the geophysical hole logging data (and core sampling results, where applicable) to calculate average lithium and magnesium concentrations across relevant (upper and lower) aquifers with respect to each hole.

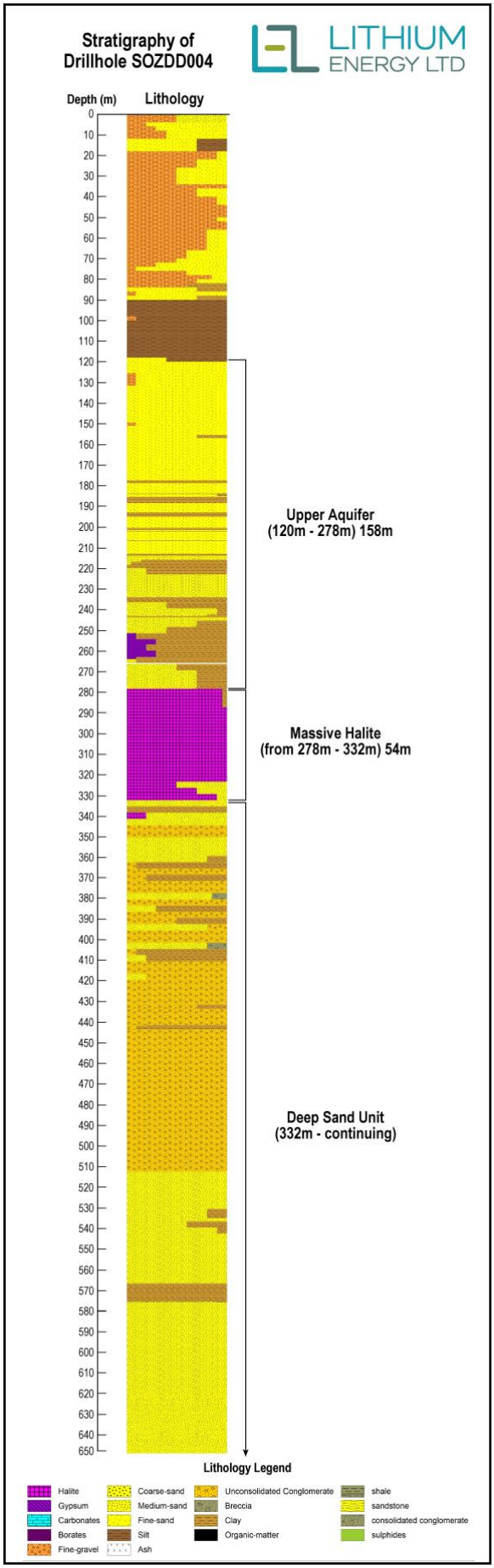

Figure 7: Drillhole (SOZDD004) Stratigraphy to a depth of ~650 metres

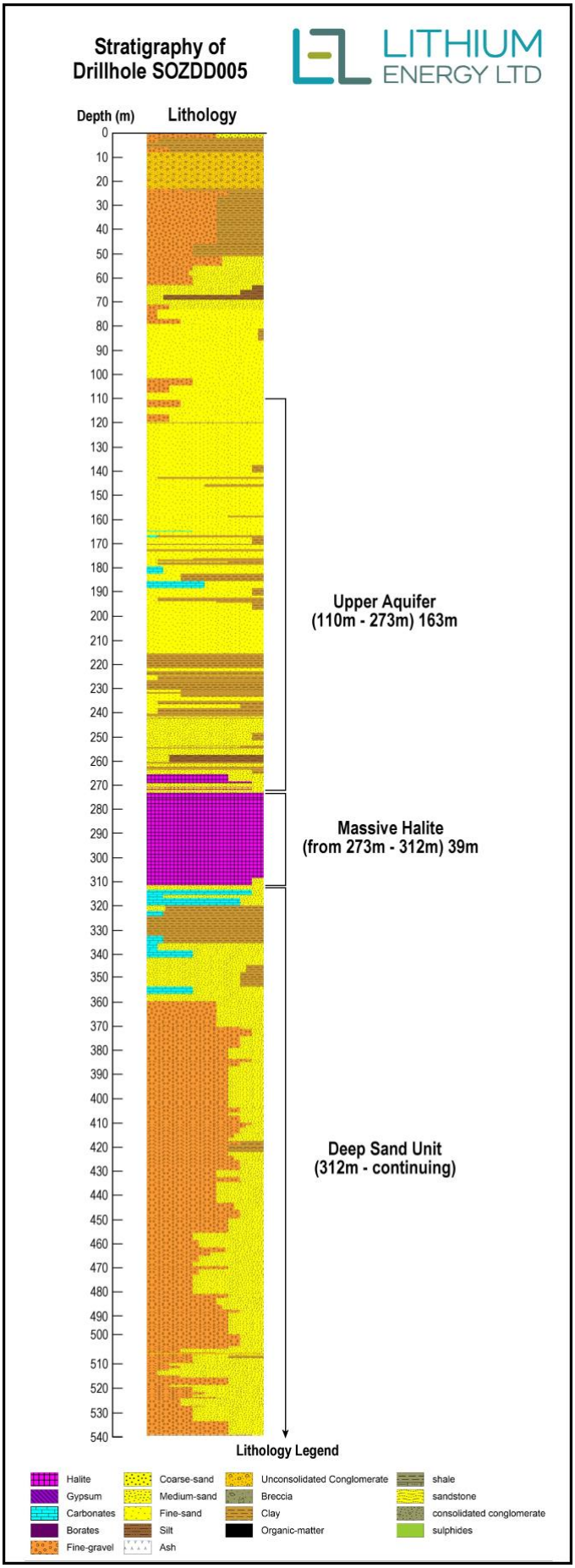

Figure 8: Drillhole (SOZDD005) Stratigraphy to a depth of ~545 metres