

# **ASX RELEASE**

7 September 2023

# **CSAMT Survey Identifies Multiple Areas Highly Prospective for Lithium Brine at Mito Tenement**

#### HIGHLIGHTS

- . CSAMT Survey identifies multiple zones considered highly prospective for lithium enriched brines.
- Two distinct resistivity layers identified including a large, deep and contiguous extremely low resistivity layer located from 200m depth to approximately 600m.
- PUR targeting drilling programe at Mito upon conclusion of the maiden drilling program at the on salar group of tenements.

Pursuit Minerals Ltd (ASX: PUR) ("PUR", "Pursuit" or the "Company") is pleased to announce the completion of the Controlled Source Audio Magneto Telluric (CSAMT) Geophysical survey by Quantec Geosciences Argentina (Quantec) at the Rio Grande Sur Project in Salta, Argentina which has yielded significant results identifying multiple resistivity layers considered highly prospective for Lithium enriched brines.

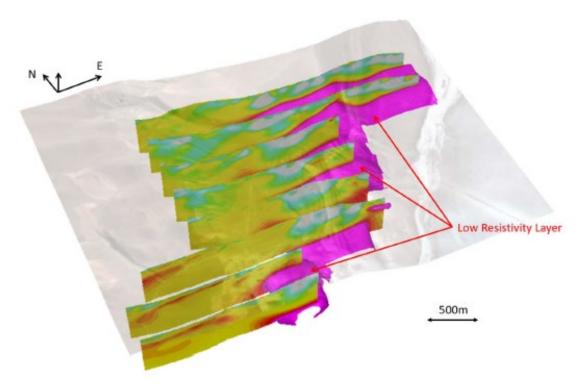


Figure 1 – 3D rendering of Low Resistivity Layer on the Mito Tenement.





In relation to the CSAMT Survey results, Pursuit Managing Director & CEO, Aaron Revelle, said:

"The results of the CSAMT survey have continued in line with our expectations that the Rio Grande Sur Project has potential to host a significant resource of Lithium brine which now extends to the Mito tenement. The CSAMT data has outlined multiple low resistivity (high conductivity) layers from approximately 150m to 500m in depth at the Mito tenement. These layers are below the current Canadian National Instrument 43-101 (NI43-101) Inferred Resource drilling which extended to 100m. The data additionally suggests that the area is conductive and could yield similar results to a company which drilled ~2km to the north-east of the Mito tenement off the Rio Grande Salar and yielded exceptionally high grades averaging 773mg/Li with several samples returning in excess of 850mg/Li from ~300m below the surface."

#### **Background to the Rio Grande Sur Project**

The Rio Grande Salar hosts an Inferred Resource of 2.1 million tonnes LCE at an average grade of 370mg/Li to a depth of 100m reported as part of an existing NI43-101 report (LSC Lithium Corporation of Canada, 2018). CSAMT surveys have identified interpreted brines to a depth of 500m, and planned drilling to this depth is expected to significantly increase the resource. A portion of Pursuit's Rio Grande Sur tenements (~3,000ha) cover a section of this resource.

The mineral resource compiled in accordance with NI43-101, is a foreign mineral resource estimate which was not compiled in accordance with the JORC code. The Competent Person has not done sufficient work to classify this foreign mineral resource estimate as a Mineral Resource in accordance with the JORC Code. It is uncertain that following evaluation and/or further exploration work that the foreign mineral resource estimate will be able to be reported as Mineral Resources in accordance with the JORC code.

Pursuit holds five tenements collectively known as the Rio Grande Sur Project that are prospective for lithium located west of Salta, Argentina. The five tenements cover approximately 9,233 hectares ("Tenements").

The Tenement details are set out below:

Table One - Tenement Schedule

	Tenement	Hectares	File Number
1	Maria Magdalena	73.26	3571
2	Isabel Segunda*	59.25	16626
3	Sal Rio II*	298.26	21942
4	Sal Rio I*	142.19	21941
5	Mito	8,660.00	23704

<sup>\*</sup> Vendors of Tenements 2, 3 and 4 retain a 1.5% net smelter royalty in respect of the relevant Tenements







Figure 2 - Rio Grande Sur Lithium Project Map

#### **CSAMT Survey Results**

Quantec was on site in late July 2023 and undertook a CSAMT survey, an electromagnetic geophysical method applied for mapping subsurface resistivity. The primary factors that determine the resistivity of the subsurface are the porosity, saturation, and the pore salinity of the rocks. This technique allowed the identification of the lithologies associated with aquifers containing Lithium brine, as well as geological structures within the Mito tenement, reaching depths of up approximately 750 m (dependent on local geology and grid geometry). This CSAMT survey followed up on the recently completed Transient Electromagnetic (TEM) survey which indicated the presence of lithium-bearing brines at depths of 250-300m at the 4 tenements located on the Rio Grande Salar. The CSAMT survey forms valuable insights into the underground geology and hydrogeology of the tenement, particularly within the 500m range, which will be important in assisting with identification of the best drilling locations for the proposed campaign in 2024.

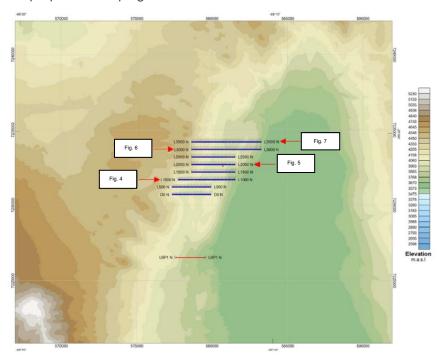


Figure 3 – Survey coverage map, receiver lines (blue) and transmitter bipole (red)





The CSAMT results support previous interpretations of the geology on the fringes of the Rio Grande Salar as being potential hosts to brine deposits. The Mito tenement is located on the margins of the salar and the CSAMT indicates the presence of a thick conductive layer (i.e. low resistivity) located nearest to the margins of the Salar which is considered highly prospective for lithium brine. Intercalation of volcanics, alluvial fan sediment and halite are characteristic of the margins of the mature salars (such as Hombre Muerto), and this is supported by the CSAMT data.

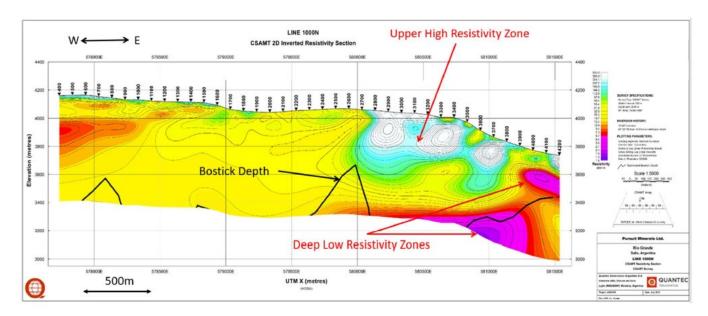


Figure 4 – 2D inversion Resistivity Section: 1000 North.

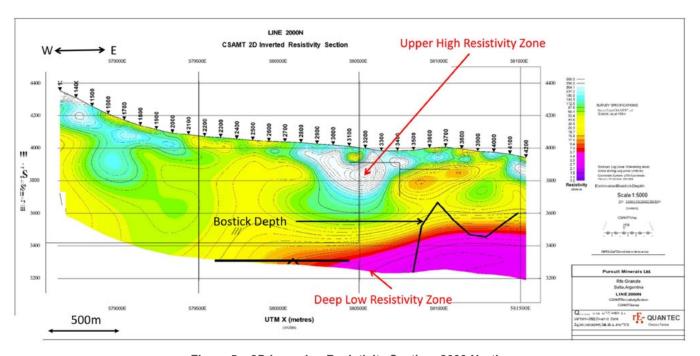


Figure 5 – 2D inversion Resistivity Section: 2000 North.





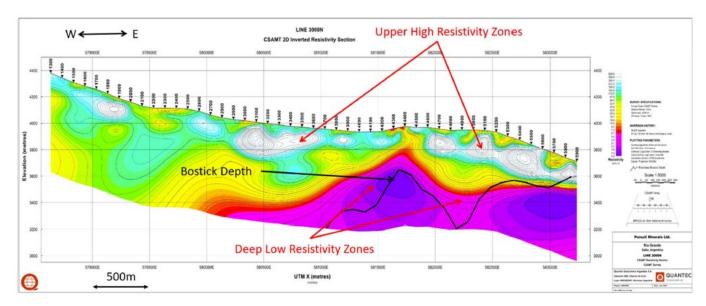


Figure 6 – 2D inversion Resistivity Section: 3000 North.

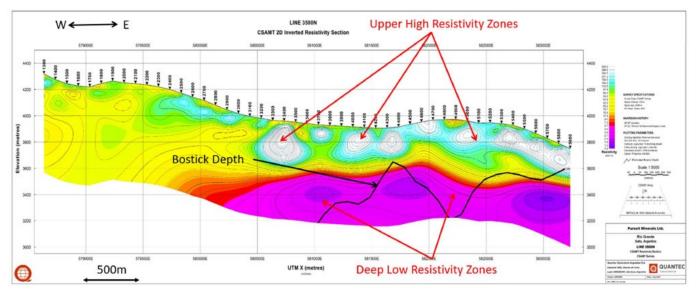


Figure 7 – 2D inversion Resistivity Section: 3500 North.

The geology of the Mito tenement is interpreted from the CSAMT to include:

#### Upper High Resistivity Layer

The average thickness of the high resistivity layer is approximately 100m to 200m in the CSAMT data. It is possibly composed of interbedded alluvial fan clastic sediments (e.g., silt, fine sand) observed on the surface. Relatively high values of resistivity are likely related to brine diluted by fresh or brackish water coming from the western margin of the salar basin. The presence of significant quantities of fresh water suggests that the host lithologies are promising for future brine extraction.

#### Low Resistivity Layer

The CSAMT lines on the Mito tenement are uniformly characterised by a large, thick and contiguous extremely low resistivity layer located from 200m depth to approximately 600m (Figure 3-6). The very high conductivity of this layer limits the estimated Bostick depths and therefore the confidence of any collected CSAMT data





below the low resistivity layers. The high conductivity layers identified in the data are all proximal to the salar margin, consistent with the geological interpretation of Rio Grande as a mature salar sequence. This layer is possibly composed of interbedded clastic sediments (e.g., silts, sands) or fractured volcanic rocks. The low resistivity of these layers suggest it is porous and potentially host to high concentration brines.

The thickness and contiguity of the high conductivity layers identified in the CSAMT data on these tenements make them a high priority target for future lithium brine exploration activities. The proposed Stage I forward works program for 2023 currently consists of drilling four exploration drill holes, one for each of the Sal Rio I, Sal Rio II, Maria Magdelena and Isabel Segunda tenements in addition to a pumping well with the location to be decided at the time of the drilling campaign.

Additional drill holes on the Mito Tenement are planned for 2024 to test the potential for brine in the low resistivity layers identified from the CSAMT data. Actual locations and nominal depths will be confirmed and established prior to drilling.

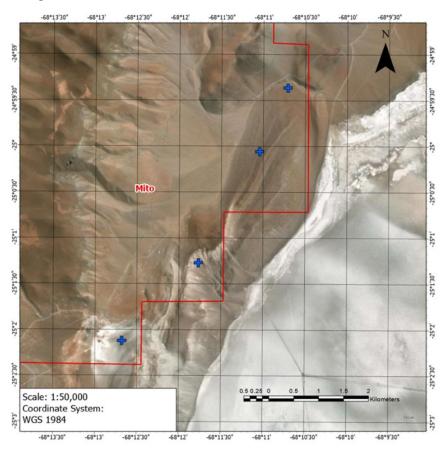


Figure 8 – Proposed Drill Hole Location for Mito Drilling Campaign

Once exploration drilling has been complete and the presence of brine confirmed, a pumping well will be drilled, constructed, and tested to confirm the extractability of brine to support development of a Mineral Resource Estimation for the Mito tenement.

This release was approved by the Board.

- ENDS -





#### For more information about Pursuit Minerals and its projects, contact:

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#### Competent Person's Statement

Statements contained in this announcement relating to exploration results, are based on, and fairly represents, information and supporting documentation prepared by Dr. Brian Luinstra, BSc honours (Geology), PhD (Earth Sciences), MAIG, PGeo (Ontario). Dr Luinstra is a Principal Consultant of SRK Consulting (Australasia) Pty Ltd and a consultant to the Company. Dr. Luinstra has sufficient relevant experience in relation to the mineralisation style being reported on to qualify as a Competent Person for reporting exploration results, as defined in the Australian Code for Reporting of Identified Mineral Resources and Ore Reserves (JORC) Code 2012. Mr Luinstra consents to the use of this information in this announcement in the form and context in which it appears. Mr Luinstra confirms that the information in this announcement provided under listing rules 5.12.2 to 5.12.7 is an accurate presentation of the available data and studies for the material mining project.

#### Forward looking statements

Statements relating to the estimated or expected future production, operating results, cash flows and costs and financial condition of Pursuit Minerals Limited's planned work at the Company's projects and the expected results of such work are forward-looking statements. Forward-looking statements are statements that are not historical facts and are generally, but not always, identified by words such as the following: expects, plans, anticipates, forecasts, believes, intends, estimates, projects, assumes, potential and similar expressions. Forward-looking statements also include reference to events or conditions that will, would, may, could or should occur. Information concerning exploration results and mineral reserve and resource estimates may also be deemed to be forward-looking statements, as it constitutes a prediction of what might be found to be present when and if a project is actually developed.

These forward-looking statements are necessarily based upon a number of estimates and assumptions that, while considered reasonable at the time they are made, are inherently subject to a variety of risks and uncertainties which could cause actual events or results to differ materially from those reflected in the forward-looking statements, including, without limitation: uncertainties related to raising sufficient financing to fund the planned work in a timely manner and on acceptable terms; changes in planned work resulting from logistical, technical or other factors; the possibility that results of work will not fulfil projections/expectations and realize the perceived potential of the Company's projects; uncertainties involved in the interpretation of drilling results and other tests and the estimation of gold reserves and resources; risk of accidents, equipment breakdowns and labour disputes or other unanticipated difficulties or interruptions; the possibility of environmental issues at the Company's projects; the possibility of cost overruns or unanticipated expenses in work programs; the need to obtain permits and comply with environmental laws and regulations and other government requirements; fluctuations in the price of gold and other risks and uncertainties.





## 1. JORC Code, 2012 Edition – Table 1 report template

### 1.1 Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
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 handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul> <li>A series of CSAMT profiles were measured at the Mito tenement at the Rio Grande Sur Project. Data was collected using a the transverse magnetic mode parallel to; and magnetic fields orthogonal to survey lines. The receiver coil was located at the centre of a standard 400m for 4 dipole array. Measurements were made over a frequency range of 1Hz to 9192.</li> <li>48 frequencies were sampled for each station and readings accepted or rejected according to their repeatability and standard error of measurement.</li> <li>The CSAMT system was calibrated by the contractor (Quantec Geoscience) prior to commencement of the survey. All digital data was inspected daily by the survey crew and the Company's consultant geophysicist. Data from some stations were repeated due to noise caused by strong winds.</li> <li>CSAMT surveys are an industry standard practice in testing for conductive buried aquifers which are likely to host economic lithium concentrations.</li> </ul>
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, facesampling bit or other type, whether core is oriented and if so, by what method, etc).	Not applicable - No drilling has been undertaken.
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to</li> </ul>	Not applicable - No drilling has been undertaken.



Criteria	JORC Code explanation	Commentary
	preferential loss/gain of fine/coarse	
	material.	
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.	Not applicable for geophysical surveys.
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	
	<ul> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	
Sub- sampling techniques and sample	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> </ul>	Not applicable for geophysical surveys.
preparation	<ul> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> </ul>	
	<ul> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> </ul>	
	<ul> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> </ul>	
	<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>	
	<ul> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	
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.	<ul> <li>Controlled Source Audio-Magneto-Telluric (CSAMT) profiles were completed for 8 profiles along east-west lines spaced approximately 500m apart across the tenement.</li> <li>48 frequencies were sampled for each station and readings accepted or rejected according to their repeatability and standard error of measurement.</li> </ul>
	<ul> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> </ul>	<ul> <li>The CSAMT system was calibrated by the contractor (Quantec Geoscience) prior to commencement of the survey. All digital data was inspected daily by the survey crew and the Company's consultant geophysicist. Data from some stations were repeated due to noise caused by strong winds</li> </ul>
	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.	



Criteria	JORC Code explanation	Commentary
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.	CSAMT digital data was collected, stored, and processed initially by the contractor company before being supplied to the Company.
, ,	The use of twinned holes.	
	<ul> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> </ul>	
	Discuss any adjustment to assay data.	
Location of data points	Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.	<ul> <li>The locations provided are the field locations measured with differential GPS (=/- 10cm) or hand-held GPS device with horizontal accruacy is +/- 4 m which is adequate for early stage exploration.</li> <li>The location is in zone 3 of the Argentine Gauss Kruger coordinate system, using the Argentine POSGAR datum.</li> </ul>
	Specification of the grid system used.	
	<ul> <li>Quality and adequacy of topographic control.</li> </ul>	
Data spacing and	<ul> <li>Data spacing for reporting of Exploration Results.</li> </ul>	<ul> <li>500m line spacing is considered appropriate for the depth of investigation and for development of drilling targets.</li> <li>The data will not be used directly in a Mineral Resource</li> </ul>
distribution	Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.	Estimate.  No compositing has been applied.
	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.	<ul> <li>The salar deposits that host lithium-bearing brines consist of sub-horizontal beds and lenses of halite, clay and sand. The geophysical data collected as part of this program are essentially perpendicular to these units, intersecting their true thickness.</li> </ul>
	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.	
Sample security	The measures taken to ensure sample security.	Not applicable for geophysical surveys.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	Geophysical data was reviewed in situ during collection and during post-processing by qualified geophysicists.
		<ul> <li>SRK reviewed the geophysical data and the geological interpretations.</li> </ul>

1.2 Section 2 Reporting of Exploration Results



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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.	The Mito tenement is located on the North West margin of the Rio Grande Salar located in the Salta Province of Argentina. The tenements are owned by Wombat Minerals S.A, an Argentine incorporated subsidiary of Pursuit Minerals Limited.
	<ul> <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>	
Exploration done by other parties	<ul> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul> <li>Exploration has been carried out in adjacent properties by the Canadian Company LSC Lithium in 2018 who have defined an extensive Resource on their adajcaent properties, reported as part of and NI43-101 compliant report.</li> <li>ADY Resources / Enirgi Group Corporation carried out drilling and sodium sulphate exploration in 2011.</li> </ul>
Geology	Deposit type, geological setting and style of mineralisation.	<ul> <li>The sediments within the salar and the salar margin consist of multi-layered halite, clay and sand which have accumulated from terrestrial sedimentation and evaporation of brines within the salar. These units are interprested to be essentially flat lying, with semi-confined aquifier conditions close to surface and confined conditions at depth.</li> <li>Brines within the salar are formed by solar concentration and mineralised brines saturating the entire sedimentary sequence.</li> <li>The sedimentary units have varying aquifer transmissitvities: fractured halite and sandy-aquifers may support direct extraction while clay-dominant and massive halite units will not. Lateral variation of salar units is noted which will requie additional drilling to define brine extractability.</li> </ul>
Drill hole Information	<ul> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:</li> <li>easting and northing of the drill hole collar</li> </ul>	<ul> <li>There are no new or unreported drill holes.</li> <li>All drillhole data has previously been reported in announcements by LSC Lithium (2018) and Enirgi Group Corporation (2011).</li> </ul>
	<ul> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> </ul>	
	o dip and azimuth of the hole	
	<ul> <li>down hole length and interception depth</li> </ul>	
	o hole length.	
	If the exclusion of this information	



Criteria	JORC Code explanation	Commentary
	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	<ul> <li>In reporting Exploration Results, weighting 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> <li>Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low-grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> <li>The assumptions used for any reporting of metal equivalent.</li> </ul>	<ul> <li>No averaging or compositing has been applied.</li> <li>No top cuts have been applied.</li> <li>No metal equivalent values are reported.</li> </ul>
Relationship between mineralisation widths and intercept lengths	<ul> <li>reporting of metal equivalent values should be clearly stated.</li> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> </ul>	Is reasonably assumed that the brine layers lie sub- horizontally and that any two-dimensional geophsyical survey interpreatations would be of true thickness.
	<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>	
Diagrams	<ul> <li>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</li> </ul>	Provided refer to figures and tables in the document.
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.	The geological data is based only on the extrapolation of adjacent drilling and geological exploration completed by LSC Lithium (2018) and Enirgi Group Corporation (2011).
Other substantive	Other exploration data, if meaningful and material, should be reported including (but not)	All relevant and material data and results are reported.



Criteria	JORC Code explanation	Commentary
exploration data	limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	
Further work	<ul> <li>The nature and scale of planned further work (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, provided this information is not commercially sensitive.</li> </ul>	<ul> <li>Exploration progamme comprising up to 6 drill holes consisting of 5 diamond drill holes and 1 pumping wells up to depths of 600m is planned.</li> <li>Drilling and testing will cover core and brine sample recovery, laboratory assays and testing to confirm hydraulic properties.</li> </ul>