ASX Announcement **14 July 2022**

DRILL TARGETS IDENTIFIED AT LORDSBURG LITHIUM PROJECT

Highlights

- **Passive seismics and Titan magnetotelluric electromagnetic surveys have been completed across the Lordsburg Lithium Project, located in South West New Mexico.**
- **The surveys have successfully identified a north trending basin containing targets interpreted to represent potential lithium mineralised brines.**
- **Three drill holes totalling 1,850m have been planned to test these targets.**
- **An application will be lodged with the Las Cruces Bureau of Land Management (BLM) for drilling approval.**
- **First mover opportunity to explore a playa lake system for lithium that is similar in geology and geography to Clayton Valley, Nevada. The only current lithium producing region in the USA.**
- **Lordsburg Lithium Brine Project is located 16km from the 15MW Lightning Dock Geothermal Plant) and conveniently located right next to key interstate highways.**

Figure 1- Arizona Lithium Project Portfolio, including major Li-battery infrastructure in close proximity to Big Sandy and Lordsburg Lithium Projects.

Arizona Lithium Managing Director, Paul Lloyd, commented:

"The encouraging results from the recently completed geophysical surveys at the Lordsburg Lithium Brine Project in New Mexico identifying three priority drill hole locations, have provided the Company with an outstanding opportunity to progress another project concurrently with the sustainable development of the Big Sandy Lithium Project in Arizona. The close proximity to renewable energy

sources, direct access to the interstate highway system and sampled lithium mineralisation at surface, have identified this project to have the potential as a timely contributor to growing lithium supply requirements in the USA."

Arizona Lithium Limited (**ASX:AZL**) ("**Arizona Lithium**", the "**Company**") is pleased to provide an update on lithium exploration at the Company's Lordsburg Lithium Brine Project in the state of New Mexico, USA.

Lordsburg Lithium Brine Project - Geophysics

In consultation with Western Australia-based geophysical consultants, Resource Potentials, the Company completed a passive seismic survey and Titan magnetotelluric electromagnetics to test for potentially lithium mineralised subsurface brines. Similar geophysical methods have been used with success by Galan Lithium Limited on their Hombre Muerto Project in Argentina[1].

The passive seismics HVSR survey was completed across the playa on 14, east north-east trending lines, spaced at 250m with stations at intervals of 50m on lines 8 and 9 and 100m intervals on the remaining lines. Data from all 14 survey lines were gridded to generate a 3D surface and data grid for imaging and contouring, allowing an interpretation of an elongated sediment filled graben (valley). A deepening of the acoustic bedrock is observed towards the centre-east part of the survey area, likely the base of the north-north-west trending palaeo-valley bounded by north north-west trending interpreted faults. North-east and north-west trending depressions in the bedrock topography surface (black dashed lines) could represent palaeo-drainage paths/water flows (Figure 2).

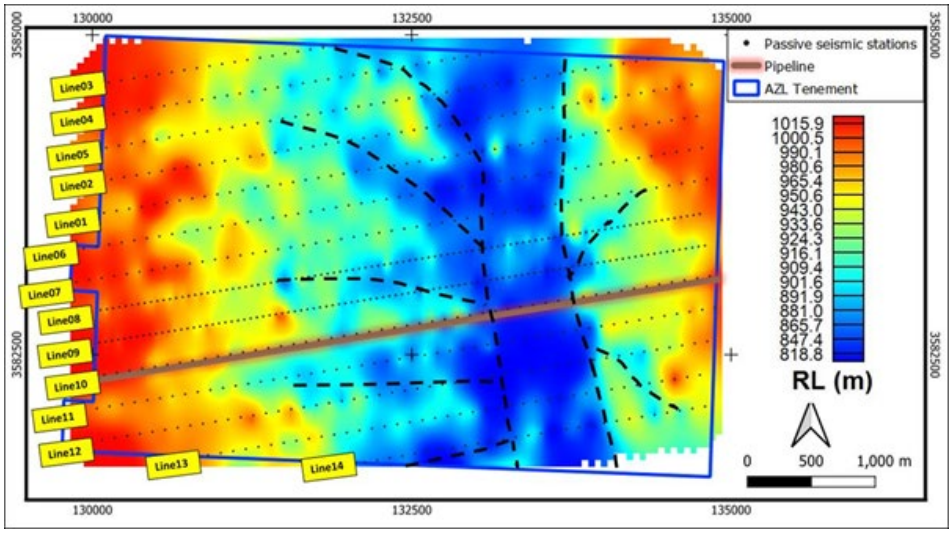

Figure 2 – Passive Seismic Survey Lines and Interpretation

Paleochannel flow is interpreted to be towards the south where there was likely a deeper deposition centre. Overall drainage within the Animas Valley containing the Lordsburg Playa has been interpreted as flowing to the north. This possible flow reversal points to the potential presence of a local closed basin similar to that as observed in other lithium mineralised playa lake systems like the Clayton Valley.

The Titan 24 Magnetotelluric survey (MT) was completed on fifty, 100m spaced sites, along a single east north-east trending line. The Titan survey collects two separate geophysical surveys; DCIP as well

[1] Galan Lithium Ltd, Announcement October 4, 2018: Geophysical Results Define Brine Potential at Candelas Project, Hombre Muerto

as Magnetotelluric (MT). DCIP provides resistivity and chargeability sections and the MT provides a deeper resistivity section.

Based on the results of the geophysical surveys Resource Potentials have proposed three drill holes designed to test geophysical anomalies within the Magnetotelluric Titan (MT) data, as well as local deep anomalies on the acoustic bedrock derived from the passive seismic HVSR survey. These deep anomalies may relate to potentially lithium mineralised brines. The following figure, a 3D visualisation of the proposed drillholes, includes the MT resistivity inversion model (Figure 4). In the figure, the hotter colours (pinks) indicate high conductivity and cooler colours (whites) indicate higher resistivity as defined by the MT, whilst in the passive seismic HVSR hotter colours (yellow to red) indicate shallower acoustic bedrock and cooler colours (green to blue) indicate deeper acoustic bedrock.

Proposed drill holes:

Hole 1 (550m): Tests both the shallow high conductivity layer (purple) in the MT resistivity model (interpreted as brine or clay) and a local acoustic bedrock low defined by the passive seismics (blue).

Hole 2 (500m): Lies north of Hole 1 and targets the shallow high conductivity layer (purple) in the MT resistivity model (interpreted as brine or clay)

Hole 3 (800m): Targets a deep highly conductivity layer (red, likely brine) occurring in the deeper portion of the basin.

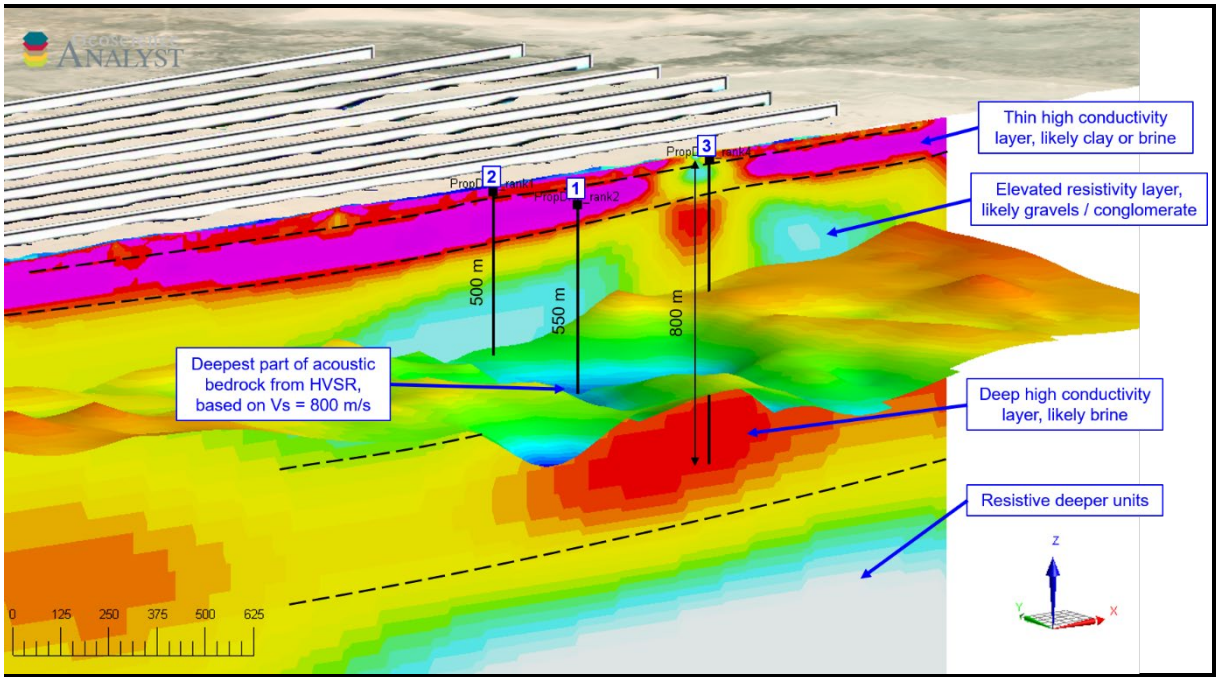

Figure 3 – Geophysical Interpretation – Targets and Drill Holes

Lordsburg Lithium Project

Following a strategic review of the Company's Lordsburg Lithium Project in early 2020, the Company staked a further 96 BLM claims adjacent to its existing 96 claims, doubling the Project landholding to 15.54km^2 (Fig. 4).

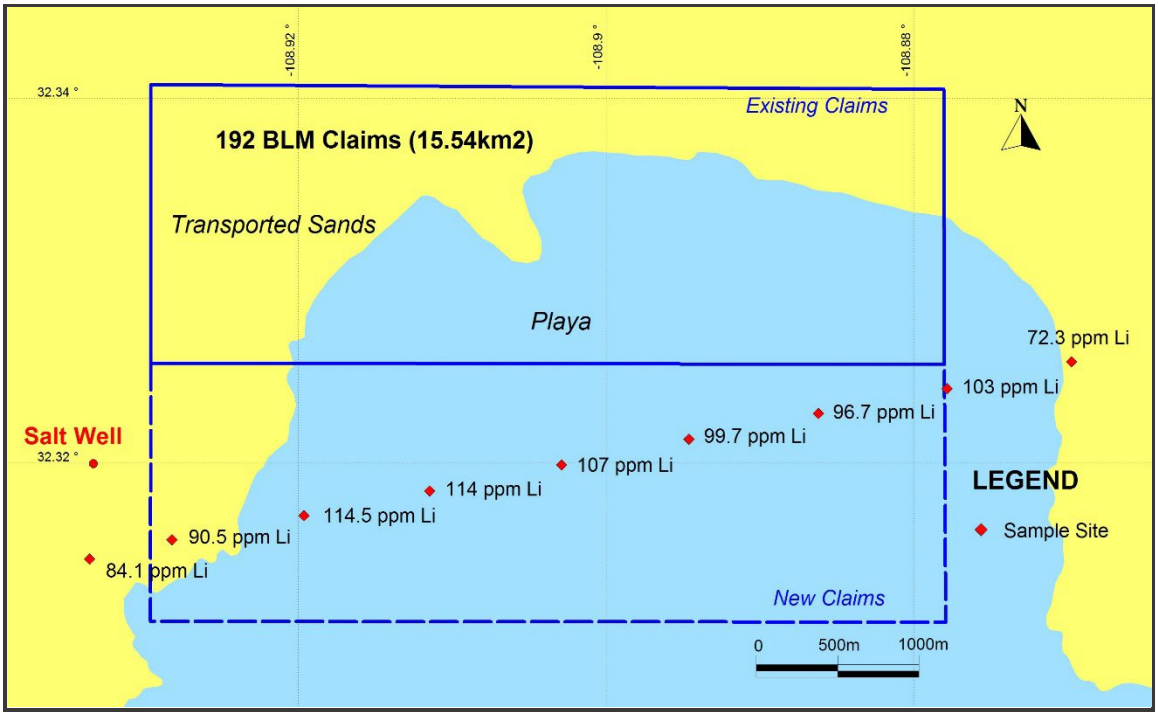

Figure 42 - Lordsburg Project, Playa, Salt Well and Surface Sampling Results

Historical surface sampling acquired by the Company returned values up to 114.5 ppm Li across the playa (Fig. 2)[2]. This grade of lithium is in line with other Clayton Valley projects which show Li grades of 50-150ppm.

The Lordsburg Project lies 15km to the southwest of the town of Lordsburg, New Mexico, within the playa lake system at the northernmost end of the Animas Valley. The basin is an elongated sediment filled graben (valley) surrounded by tertiary volcanic rocks, a similar setting to the Clayton Valley, host to the only producing lithium project in the USA.

Stock wells on the eastern Animas basin margin, south of the Project, intersected steam and hot springs essential in the development of lithium bearing brines. A 1954 US Geologic Survey map shows a windmill just west of the Project, on the western basin margin, labelled as a "salt well" demonstrating the presence of highly saline subterranean water.

Two of the large cost burdens on lithium brine projects are energy costs and transportation costs, however the Lordsburg Lithium Brine Project is located 16km from the 15MW Lightning Dock Geothermal Plant) and conveniently located right next to key interstate highways.

[2] AZL Announcement, 8 Nov 2022, Arizona Lithium Doubles Land Position at Lordsburg Lithium Project

Photos 1 & 2 - The Lordsburg Playa Lakes – Untested Lithium Bearing Playa Lakes in New Mexico

FOR FURTHER INFORMATION PLEASE CONTACT:

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COMPETENT PERSON'S STATEMENT

The information in this report that relates to exploration results is based on and fairly represents information compiled by Mr Greg Smith, a Competent Person whom is a Member of the Australasian Institute of Mining and Metallurgy. Mr Smith is a consultant to the company and holds securities in the Company. Mr Smith has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken 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'. Mr Smith consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Appendix 1: JORC Code, 2012 Edition – Table 1

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code Explanation	Commentary
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 handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.	No sampling was completed
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	No sampling was completed
	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 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.	No sampling was completed
Drilling techniques	Drill type (e.g. core, reverse circulation, open hole hammer, rotary air blast, auger, Bangka,	Not applicable as no drilling undertaken

	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.).	Not applicable as no drilling undertaken
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed.	Not applicable as no drilling undertaken
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	Not applicable as no drilling undertaken
	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.	Not applicable as no drilling undertaken
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 as no drilling undertaken
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography	Not applicable as no drilling undertaken
	The total length and percentage of the relevant intersections logged.	Not applicable as no drilling undertaken
Sub-sampling techniques and sample preparation	If core, whether cut or sawn and whether quarter, half or all core taken.	Not applicable as no drilling undertaken

	If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.	No sampling was completed
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	No sampling was completed
	Quality control procedures adopted for all subsampling stages to maximise representivity of samples.	No sampling was completed
	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.	No sampling was completed
	Whether sample sizes are appropriate to the grain size of the material being sampled.	No sampling was completed
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.	No sampling was completed
	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	No sampling was completed

	accuracy (i.e. lack of bias) and precision have been established.	
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.	Not applicable as no drilling undertaken
Verification of sampling and assaying	The use of twinned holes.	Not applicable as no drilling undertaken
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	
	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.	No sampling was completed
Location of data points Data spacing and distribution	Specification of the grid system used.	
	Quality and adequacy of topographic control.	No sampling was completed
	Data spacing for reporting of Exploration Results.	No sampling was completed
Data spacing and distribution Orientation of data in relation to geological structure	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	No sampling was completed

	estimation procedure(s) and classifications applied.	
	Whether sample compositing has been applied.	No sampling was completed
	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	No sampling was completed
Orientation of data in relation to geological structure Sample security	If the relationship between the drilling orientation and the orientation of key mineralised structures are considered to have introduced a sampling bias, this should be assessed and reported if material.	No sampling was completed
	The measures taken to ensure sample security.	No sampling was completed
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	No sampling was completed

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	The Lordsburg project consists of 192 BLM mining claims of approximately 20 acres each, physically staked on Bureau of Land Management, federally administered land. All indigenous title is cleared and there are no other known

	national park and environmental settings.	historical or environmentally sensitive areas.
	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 claims have been granted and are subject to an annual payment. Other than the payment there is no requirement for minimum exploration or reporting. There is no expiry date on the claims.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	There has been no exploration for lithium mineralisation on this project other than that completed previously by Big Sandy Inc (wholly owned subsidiary of Arizona Lithium Ltd).
Geology	• Deposit type, geological setting and style of mineralisation.	The geology is characterized by a broad flat playa lake lying within a north trending, fault bounded graben basin. The exploration target is the potential of the underlying sedimentary layers below the surface of the playa surface to host Li bearing brines.
Drill hole Information	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: easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole length and interception depth hole length.	Not applicable as no drilling undertaken
	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	This information has not been excluded.

	Competent Person should clearly explain why this is the case.	
Data aggregation methods	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.	No sampling was completed
	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.	No sampling was completed
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	No sampling was completed
Relationship between mineralization widths and intercept lengths	These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralization with respect to the drill hole angle is known, its nature should be reported.	Not applicable as no drilling undertaken
	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').	Not applicable as no drilling undertaken
Diagrams	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery	Appropriate maps are included.

	being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	
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.	This release includes results to date from the playa clay sampling.
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 contaminating substances.	Geophysical surveys including Passive Seismics HVSR and Titan 24 Magnetotelluric Electromagnetics have been completed. The passive seismics was used to map the basin structure while the Titan Magnetotelluric survey maps both resistivity and chargeability identifying subsurface conductors that may represent lithium mineralised brines. No drilling, bulk sampling or metallurgical testwork has been completed. No water table has been identified.
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).	Drill locations have been identified and an application has been lodged with the BLM.
	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	Not applicable as no drilling undertaken