

29 September 2021

# TONOPAH LITHIUM PROJECT

## LITHIUM BRINE TARGETS CONFIRMED

### HIGHLIGHTS

- MT survey data interpretation and analysis completed – delineating three MT targets prospective for lithium brine accumulation
- Next step exploration targeting works to identify lithium brine prospectivity and then drilling works to determine lithium brine potential – adjacent to Albemarle’s Silver Peak lithium operation
- Significant opportunity to leverage Argosy’s lithium brine processing technology at strategic USA project

Argosy Minerals Limited (ASX: **AGY**) (“**Argosy**” or “**Company**”) is pleased to advise that interpretation and analysis of the magnetotelluric (MT) resistivity survey data has been completed for the Tonopah Lithium Project (“Tonopah”) located in Nevada, USA.

Argosy contracted a Perth-based MT specialist geophysical consultant to process the MT survey data, and conduct analysis and interpretation works to delineate potential lithium brine targets within the project area – adjacent to Albemarle’s Silver Peak lithium operation.

The modelling works have defined a major conductive anomaly – interpreted as a potential lithium brine aquifer, with depth to the top of this feature varying between 300m to 700m (along the profile). The variations in depth (and compartmentalisation within the unit) may be attributable to basin faults, which are important targets for lithium brine accumulation.

From within the main anomaly, three MT targets (refer Figure 1) have been identified that may define a closed basin and have the potential for lithium brine accumulation. Target 1 is the deepest and most conductive target, and will require drill testing to a depth of ~1000-1500m. Targets 2 and 3 are shallower and less conductive, and will require drill testing to a depth of between ~800-1200m. Table 1 provides location & depth ranges of the MT targets.

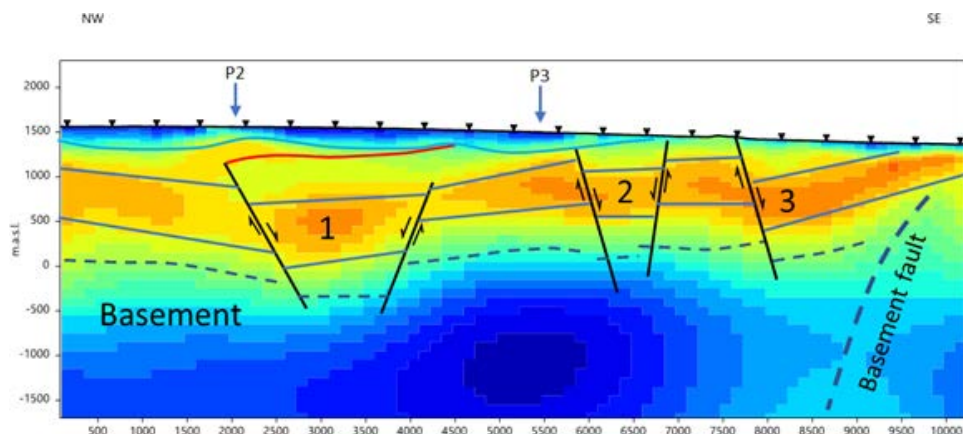


Figure 1. Tonopah Lithium Project – Interpretation (along profile 1) with MT Targets

**ASX ANNOUNCEMENT**

Target	X	Y	Z Range (meters)
			Surface RL; Top of conductor-bottom of conductor RL
1	439850	4190850	1540m; 750m-200m
2	442300	4188700	1450m; 900m-600m
3	443800	4187400	1400m; 975m-400m

Table 1. Tonopah Lithium Project – Drill Target Coordinates & Depth Ranges

The delineated MT targets correlate very well when overlain with the previously interpreted gravity targets (refer Figure 2), providing further confidence for future drill testing works.

Argosy will now consider potential exploration target works to assist with identifying the lithium brine prospectivity at Tonopah, and then consider drilling works to test the MT targets to determine the lithium brine potential within our project area.

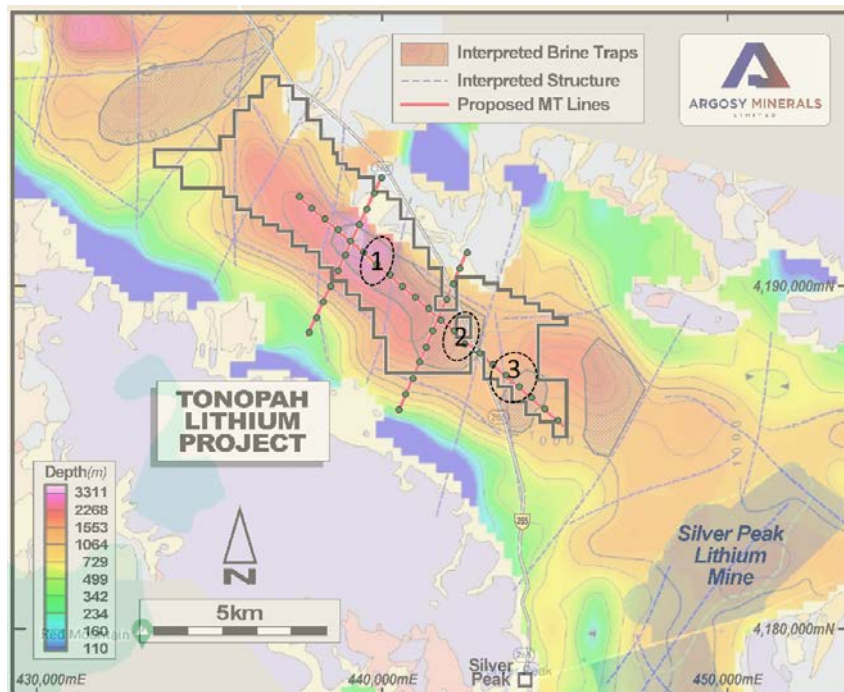


Figure 2. Tonopah Lithium Project – Location of MT Targets (overlying gravity targets)

Argosy Managing Director, Jerko Zuvela said *“The geophysical works conducted at Tonopah have succeeded in delineating lithium brine targets within our project area. We now look forward to progressing works to realise the potential of our strategic project in an established tier 1 mining region.*”

*The significant impetus for local lithium supply in the USA has become critical, and our Tonopah Lithium Project is in prime position and enhances Argosy’s value to all strategic groups across the battery and EV industry supply chain.”*

Argosy considers the opportunity to develop our highly prospective Tonopah Lithium Project – strategically located near Albemarle’s Silver Peak lithium operation – in a jurisdiction supportive of the commercial development of lithium, as a strategic position to further develop Argosy into a world-class lithium producer.

ENDS

## ASX ANNOUNCEMENT

*This announcement has been authorised by Jerko Zuvela, the Company's Managing Director*

For more information on Argosy Minerals Limited and to subscribe for regular updates, please visit our website at [www.argosyminerals.com.au](http://www.argosyminerals.com.au) or contact us via [admin@argosyminerals.com.au](mailto:admin@argosyminerals.com.au) or Twitter @ArgosyMinerals.

### For further information:

Jerko Zuvela  
Managing Director

T | +61 8 6188 8181

E | [admin@argosyminerals.com.au](mailto:admin@argosyminerals.com.au)

W | [www.argosyminerals.com.au](http://www.argosyminerals.com.au)

**Competent Person's Statement:** The information contained in this ASX release relating to Exploration Results has been prepared by Mr Jerko Zuvela. Mr Zuvela is a Member of the Australasian Institute of Mining and Metallurgy, and 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 Zuvela is the Managing Director of Argosy Minerals Ltd and consents to the inclusion in this announcement of this information in the form and context in which it appears. The information in this announcement is an accurate representation of the available data from the Tonopah Lithium Project.

**Forward Looking Statements:** Statements regarding plans with respect to the Company's mineral properties are forward looking statements. There can be no assurance that the Company's plans for development of its mineral properties will proceed as expected. There can be no assurance that the Company will be able to confirm the presence of mineral deposits, that any mineralisation will prove to be economic or that a mine will successfully be developed on any of the Company's mineral properties.

### ABOUT ARGOSY MINERALS LIMITED

Argosy Minerals Limited (ASX: AGY) is an Australian company with a current 77.5% (and ultimate 90%) interest in the Rincon Lithium Project in Salta Province, Argentina and a 100% interest in the Tonopah Lithium Project in Nevada, USA.

The Company is focused on its flagship Rincon Lithium Project – potentially a game-changing proposition given its location within the world renowned "Lithium Triangle" – host to the world's largest lithium resources, and its fast-track development strategy toward production of LCE product.

Argosy is committed to building a sustainable lithium production company, highly leveraged to the forecast growth in the lithium-ion battery sector.

### Appendix 1: AGY's Argentina Project Location Map



# JORC Code, 2012 Edition – Table 1 report template

## Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> <li>Nature and quality of sampling (eg 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 (eg '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 (eg submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul style="list-style-type: none"> <li>No drilling conducted.</li> <li>Magnetotelluric data acquired at 41 locations acquired on a 500m nominal station spacing along three profile lines totalling ~20 lineal kilometres.</li> </ul>
Drilling techniques	<ul style="list-style-type: none"> <li>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</li> </ul>	<ul style="list-style-type: none"> <li>No drilling conducted.</li> </ul>
Drill sample recovery	<ul style="list-style-type: none"> <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 preferential loss/gain of fine/coarse material.</li> </ul>	<ul style="list-style-type: none"> <li>No drilling conducted.</li> </ul>
Logging	<ul style="list-style-type: none"> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> </ul>	<ul style="list-style-type: none"> <li>N/A</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <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> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul style="list-style-type: none"> <li>N/A</li> </ul>
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <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> <li>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</li> </ul>	<ul style="list-style-type: none"> <li>Magnetotelluric data was acquired by Zonge International using broad band ZEN MT receivers.</li> <li>Data acquired at each sounding from a frequency of 1,000Hz to approximately 0.003Hz. Each site occupied for a minimum of 12 hours.</li> <li>E-field sensors use Cu-CuSO4 porous pot electrodes.</li> <li>A remote reference site was installed approximately 20km away from the survey area.</li> </ul>
Verification of sampling and assaying	<ul style="list-style-type: none"> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul style="list-style-type: none"> <li>Raw data acquired by ZEN MT receivers then processed to EDI format.</li> </ul>
Location of data points	<ul style="list-style-type: none"> <li>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul style="list-style-type: none"> <li>WGS84 UTM Zone 11N.</li> <li>The GPS receivers utilize the Wide Area Augmentation System (WAAS) and horizontal accuracy typically ranges from 2-5 meters.</li> <li>Good quality and adequate.</li> </ul>
Data spacing	<ul style="list-style-type: none"> <li>Data spacing for reporting of Exploration Results.</li> </ul>	<ul style="list-style-type: none"> <li>500m site spacing along three profile lines totalling ~20 lineal</li> </ul>

Criteria	JORC Code explanation	Commentary
<i>and distribution</i>	<ul style="list-style-type: none"> <li>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.</li> <li>Whether sample compositing has been applied.</li> </ul>	kilometres.
<i>Orientation of data in relation to geological structure</i>	<ul style="list-style-type: none"> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</li> </ul>	<ul style="list-style-type: none"> <li>Two profile lines orientated perpendicular to geological strike, and one profile line orientated parallel to geological strike.</li> </ul>
<i>Sample security</i>	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>N/A</li> </ul>
<i>Audits or reviews</i>	<ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul style="list-style-type: none"> <li>No audits conducted.</li> <li>Work carried out by geophysical survey contractor Zonge International, and QC performed by Moombarriga Geoscience.</li> </ul>

## Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary																								
<i>Mineral tenement and land tenure status</i>	<ul style="list-style-type: none"> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul>	<ul style="list-style-type: none"> <li>The Tonopah Lithium Project is located in Nevada, USA, and comprises 425 claims covering an area of ~34.25km<sup>2</sup>.</li> <li>The claims are in good standing, with payments made to relevant government departments.</li> <li>There are no known impediments to maintain the claims and operate in the area.</li> </ul> <table border="1"> <thead> <tr> <th>Tenement ID</th> <th>Location</th> <th>Interest</th> </tr> </thead> <tbody> <tr> <td>NMC1162672 - 1162935</td> <td>Nevada, USA</td> <td>100%</td> </tr> <tr> <td>NMC1131801 - 1131815</td> <td>Nevada, USA</td> <td>100%</td> </tr> <tr> <td>NMC1131817 - 1131827</td> <td>Nevada, USA</td> <td>100%</td> </tr> <tr> <td>NMC1131830 - 1131837</td> <td>Nevada, USA</td> <td>100%</td> </tr> <tr> <td>NMC1131842 - 1131852</td> <td>Nevada, USA</td> <td>100%</td> </tr> <tr> <td>NMC1131856 - 1131868</td> <td>Nevada, USA</td> <td>100%</td> </tr> <tr> <td>NMC1131871 - 1131973</td> <td>Nevada, USA</td> <td>100%</td> </tr> </tbody> </table>	Tenement ID	Location	Interest	NMC1162672 - 1162935	Nevada, USA	100%	NMC1131801 - 1131815	Nevada, USA	100%	NMC1131817 - 1131827	Nevada, USA	100%	NMC1131830 - 1131837	Nevada, USA	100%	NMC1131842 - 1131852	Nevada, USA	100%	NMC1131856 - 1131868	Nevada, USA	100%	NMC1131871 - 1131973	Nevada, USA	100%
Tenement ID	Location	Interest																								
NMC1162672 - 1162935	Nevada, USA	100%																								
NMC1131801 - 1131815	Nevada, USA	100%																								
NMC1131817 - 1131827	Nevada, USA	100%																								
NMC1131830 - 1131837	Nevada, USA	100%																								
NMC1131842 - 1131852	Nevada, USA	100%																								
NMC1131856 - 1131868	Nevada, USA	100%																								
NMC1131871 - 1131973	Nevada, USA	100%																								

Criteria	JORC Code explanation	Commentary
Exploration done by other parties	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>Lithium Consolidated Ltd previously owned the project and conducted basic exploration works to determine lithium prospectivity.</li> </ul>
Geology	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul style="list-style-type: none"> <li>The lithium brine deposit model has the following key geological features: <ul style="list-style-type: none"> <li>Closed basin structures, with lithium bearing host rocks in an area of high evaporation;</li> <li>Basin fill that includes clay, sand and ash horizons that can act as traps and lithium-brine reservoirs;</li> <li>Expected presence of key stratigraphic marker horizons, including the Bishop Tuff, which is the key lithium brine-hosting horizon at Silver Peak Mine;</li> <li>Known active and paleo geothermal activity and recent faulting;</li> <li>Anomalous lithium in the surface sediments and near-surface waters;</li> <li>Little to no drilling has penetrated the key buried, paleo brine targets; and</li> <li>The commercial viability of the in-situ lithium mineralisation is established by continuous production at the Silver Peak Mine.</li> </ul> </li> </ul>
Drill hole Information	<ul style="list-style-type: none"> <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: <ul style="list-style-type: none"> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</li> </ul>	<ul style="list-style-type: none"> <li>N/A</li> </ul>
Data aggregation methods	<ul style="list-style-type: none"> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg 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</li> </ul>	<ul style="list-style-type: none"> <li>No holes drilled or samples taken.</li> <li>No data aggregation methods used.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<p><i>such aggregations should be shown in detail.</i></p> <ul style="list-style-type: none"> <li><i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></li> </ul>	
<i>Relationship between mineralisation widths and intercept lengths</i>	<ul style="list-style-type: none"> <li><i>These relationships are particularly important in the reporting of Exploration Results.</i></li> <li><i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i></li> <li><i>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</i></li> </ul>	<ul style="list-style-type: none"> <li>No holes drilled.</li> </ul>
<i>Diagrams</i>	<ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>See main body of report.</li> </ul>
<i>Balanced reporting</i>	<ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>All information reported.</li> </ul>
<i>Other substantive exploration data</i>	<ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>2D and 3D inversion using RLM3D code (CGG) were applied to the geophysical dataset. Images shown in main body of report.</li> </ul>
<i>Further work</i>	<ul style="list-style-type: none"> <li><i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></li> <li><i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></li> </ul>	<ul style="list-style-type: none"> <li>Test MT targets defined from modelling works of the survey data.</li> </ul>