

29 January 2021

# POSITIVE ASSESSMENT OF LONG-TERM PUMPING DATA AT RINCON

## HIGHLIGHTS

- Independently prepared assessment of long-term pumping data at Rincon Lithium Project confirms positive results exceed previous results used in PEA
- Aquifer transmissivity at Rincon production bore PRP1 is estimated to be 7,500m<sup>2</sup>/day after 120 days of pumping – permeability may be >2.5 times higher than assumed for the PEA
- Assumptions adopted in PEA found to be conservative – bore has performed better than expected
- Results increase confidence that overall aquifer performance will outperform PEA modelled pumping data
- Scope to refine the design to have fewer production bores or increase production
- Results provide further support for planned long term commercial scale development of Rincon Lithium Project

Argosy Minerals Limited (ASX: **AGY**) (“**Argosy**” or “**Company**”) is pleased to announce the assessment of long-term pumping data results - independently prepared by AQ2, for the Rincon Lithium Project, located in Salta Province, Argentina.

Bore PRP1 is currently used to supply lithium brine for the Company’s industrial scale pilot plant operations to produce >99.5% high purity battery quality lithium carbonate product. Long term data on the hydraulic performance of this bore have been reviewed to verify assumptions that were made during the Preliminary Economic Assessment (“PEA”) about the brine extraction scheme for the overall project.

After 120 days of pumping, the aquifer transmissivity at production bore PRP1 is estimated to be 7,500m<sup>2</sup>/day, predominantly for the upper-most halite aquifer. This compares to an average value of 2,800m<sup>2</sup>/day that was derived from short-term pumping data during the PEA, and an average project-wide value of 1,200m<sup>2</sup>/day (for the upper-most halite aquifer), that was used for modelling in support of the PEA.

The results suggest assumptions used in the PEA were (appropriately) conservative and the results increase confidence that the aquifer performance will be consistent with or better than was modelled during the PEA, the proposed brine abstraction scheme is technically appropriate, and that there is scope to optimise the scheme during future stages of the project – thus potentially lowering the development costs when progressing to the larger scale ~2,000tpa and ultimately ~10,000tpa operations.

Argosy Managing Director, Jerko Zuvella said “***We are very pleased with the updated long-term pumping data results, which together with our recent JORC Exploration Target***

## ASX ANNOUNCEMENT

---

*announcement, provides stronger evidence of the substantial scale and development potential at our Project.*

*This is another significant milestone, which together with Argosy's status as an international battery quality lithium carbonate producer and exporter, bodes well for progress towards full commercial scale development of our Rincon Lithium Project."*

The updated long-term pumping data gives the Company great confidence and considerably reduces the associated risks for Argosy for the continued larger scale development of the Rincon Lithium Project.

### BACKGROUND

During the PEA, the conceptual design of the brine abstraction scheme was based on data from:

- 21 brine investigation drill-holes that have been drilled by Argosy, to depths of up to 147m. The bores have been drilled at an average spacing of 950m, and a total of 1,662m of drilling has been completed; drill holes comprise mineral exploration bores and test-production bores.
- Laboratory analysis of core to determine aquifer properties.
- Nine pumping tests that were completed at pumping rates ranging between 4L/s and 28L/s, for periods of 24 to 72 hours (with water level declines of 1m to 9m).
- Dynamic (numerical) groundwater flow modelling to simulate brine development.

The PEA base-case brine abstraction scheme involved 14 production bores operational for a 16.5 year mine-life. Hydrogeological data that have subsequently been collected during operation of the  $\text{Li}_2\text{CO}_3$  industrial scale pilot plant now provide a long-term data set that can be used to add more confidence to the results of the PEA-modelling.

### LONG TERM PUMPING DATA

Since the PEA was completed, production bore PRP1 has been used to supply lithium brine for the industrial scale pilot plant operations. Comprehensive data from a 120-day period of continuous operation have been analysed.

Key aspects of this data are:

- Data are available for a 120-day period from the production bore (PRP1) and associated monitoring bores (PR1 and PR13).
- For the first few minutes of pumping, the recorded pumping rate was 15L/s. Thereafter, the recorded rate increased to 22L/s, and this was sustained for the duration of the monitoring period.
- Brine levels were measured in the pumping bore (PRP1) and nearby observation bores (PR1 and PR13).
- PRP1 is screened across the halite and underlying sand aquifer units. PR13 is screened across the halite aquifer only. PR1 is screened across the deeper sand aquifers only. The monitoring bores are both approximately 100 m from the pumping bore.
- Observed maximum drawdown (i.e., brine level decline) was:
  - 1.4m in the pumped bore (PRP1);
  - 0.16m in PR1;
  - 0.05m in PR13.



## ASX ANNOUNCEMENT

---

### Competent Person's Statement – Rincon Lithium Project

The information contained in this ASX release relating to Exploration Targets, Exploration Results and Mineral Resource Estimates has been prepared by Mr Duncan Storey. Mr Storey is a Hydrogeologist, a Chartered Geologist and Fellow of the Geological Society of London (an RPO under JORC 2012). Mr Storey 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.

Duncan Storey is an employee of AQ2 Pty Ltd and an independent consultant to Argosy Minerals Ltd. Mr Storey 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 exploration at the Rincon Lithium Project.

Chemical Engineer's Statement: The information in this announcement that relates to lithium carbonate processing is based on information compiled and/or reviewed by Mr Pablo Alurralde. Mr Alurralde is the President of Puna Mining S.A. and consents to the inclusion in this announcement of this information in the form and context in which it appears. Mr Alurralde is a chemical engineer with a degree in Chemical Engineering from Salta National University in Argentina. Mr Alurralde has sufficient experience which is relevant to the lithium carbonate and lithium hydroxide processing and testing undertaken to evaluate the data presented.

### ASX Listing Rules Compliance

The PEA results/information contained in this ASX release is extracted from the report entitled "Argosy delivers exceptional PEA results for Rincon Project" dated 28 November 2018, available at [www.argosyminerals.com.au](http://www.argosyminerals.com.au) and [www.asx.com](http://www.asx.com). Argosy confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and, in the case of Mineral Resources or Ore Reserves, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. Argosy confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.

**ENDS**

*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](https://twitter.com/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)

**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



## ASX ANNOUNCEMENT

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.

### Reference to Previous ASX Releases:

This document refers to the following previous ASX releases:

13th Nov 2018 - Argosy Upgrades Lithium Rincon Lithium Project JORC Resource

28th Nov 2018 - Argosy delivers exceptional PEA results for Rincon Project

### 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

