

3 August 2023

RINCON TEST PUMPING RESULTS

HIGHLIGHTS

- ✦ **Pumping tests confirm that brine can be economically abstracted from the deep sand aquifer**
- ✦ **Test pumping results increase confidence that the black sand aquifer performance during future brine-abstraction will be consistent or better than previously modelled**
- ✦ **Higher than previously estimated hydraulic conductivity from the current pumping tests presents opportunities for borefield optimisation and efficiency-gains during production forecasting and/or reserve modelling**

Argosy Minerals Limited (ASX: **AGY**) ("**Argosy**" or "**Company**") is pleased to provide the results of test pumping works conducted at the Rincon Lithium Project, located in Salta Province, Argentina.

The Company conducted production well rotary drilling works in late-2022, with two deep brine-production bores – PRP-3 and PRP-4, both drilled to a depth of 350m.

Pump testing and brine sampling works were completed for both wells, with associated works and results to facilitate the preparation of a brine Ore Reserve estimate and subsequent completion of an upgraded feasibility study.

The test pumping works involved a step rate test (SRT) and constant rate test (CRT), with data from these tests assessed to compare/verify aquifer parameters adopted for the black sand aquifer unit (the deep aquifer) in previous resource modelling.

From the current tests, the black sand hydraulic conductivity is estimated to be approximately 1m/d. This compares to the adopted hydraulic conductivity of 0.5m/d that was used for previous modelling.

The results suggest the hydraulic conductivity adopted for the black sand unit in previous resource modelling works was conservative. The results increase confidence that the performance of the black sand aquifer during future brine-abstraction, will be consistent or better than that previously modelled.

Argosy Managing Director, Jerko Zuvela said **"We are pleased with the updated long-term pumping test results, which provide stronger evidence of the substantial scale and development potential at our Project."**

The Company is looking forward to finalising other upcoming significant milestones that confirm Argosy's ambitions and near-term growth phase toward commercial production operations."

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Step Rate Test

Step rate test analysis data indicates that both pumping bores are highly efficient when pumped at the discharge rates of the step test. PRP-3 had an apparent efficiency of 96.5% during the final step (22 L/s), while PRP-4 had an apparent efficiency of 94.5% during the final step (22.6 L/s). This provides confidence in the adopted drilling and bore-construction methods during future expansion of the brine-borefield.

Constant Rate Test

Constant rate test analysis data indicates:

- For PRP-3, hydraulic conductivity (K) ranges from 0.6 – 2.5m/day, with an average K of 1m/day. Transmissivity estimates range from 130 – 550m²/day, with an average of 260m²/day.
- For PRP-4, hydraulic conductivity ranges from 0.2 – 2.4m/day, with an average K of 1.2m/day. Transmissivity estimates range from 34 – 420m²/day, with an average of 270m²/day.
- Hydraulically, the deep sand aquifer shows a semi-confined leaky response.

Comparison with Previous Modelling

The two pumping tests completed indicate that:

- Hydraulic conductivity values for the deeper sand aquifer may be greater than those previously adopted, as high as 1m/d.
- The monitored response of the aquifer during pumping confirms key elements of the conceptual hydrogeological model that underpinned the current Mineral Resource estimate and PEA. Namely, that the deep sediments function as a semi-confined, transmissive aquifer and that depressurisation of the deep sand by pumping will induce leakage of brine from overlying and interbedded less-transmissive units, increasing overall brine recovery.
- The previous modelling completed is likely to be suitably conservative with respect to brine abstraction rates from deep sand pumping bores. The pumping tests confirm that brine can be economically abstracted from the deep sand aquifer.

The results from these pumping tests present opportunities for borefield optimisation and efficiency-gains, during production forecasting and/or reserve modelling, as the project develops.

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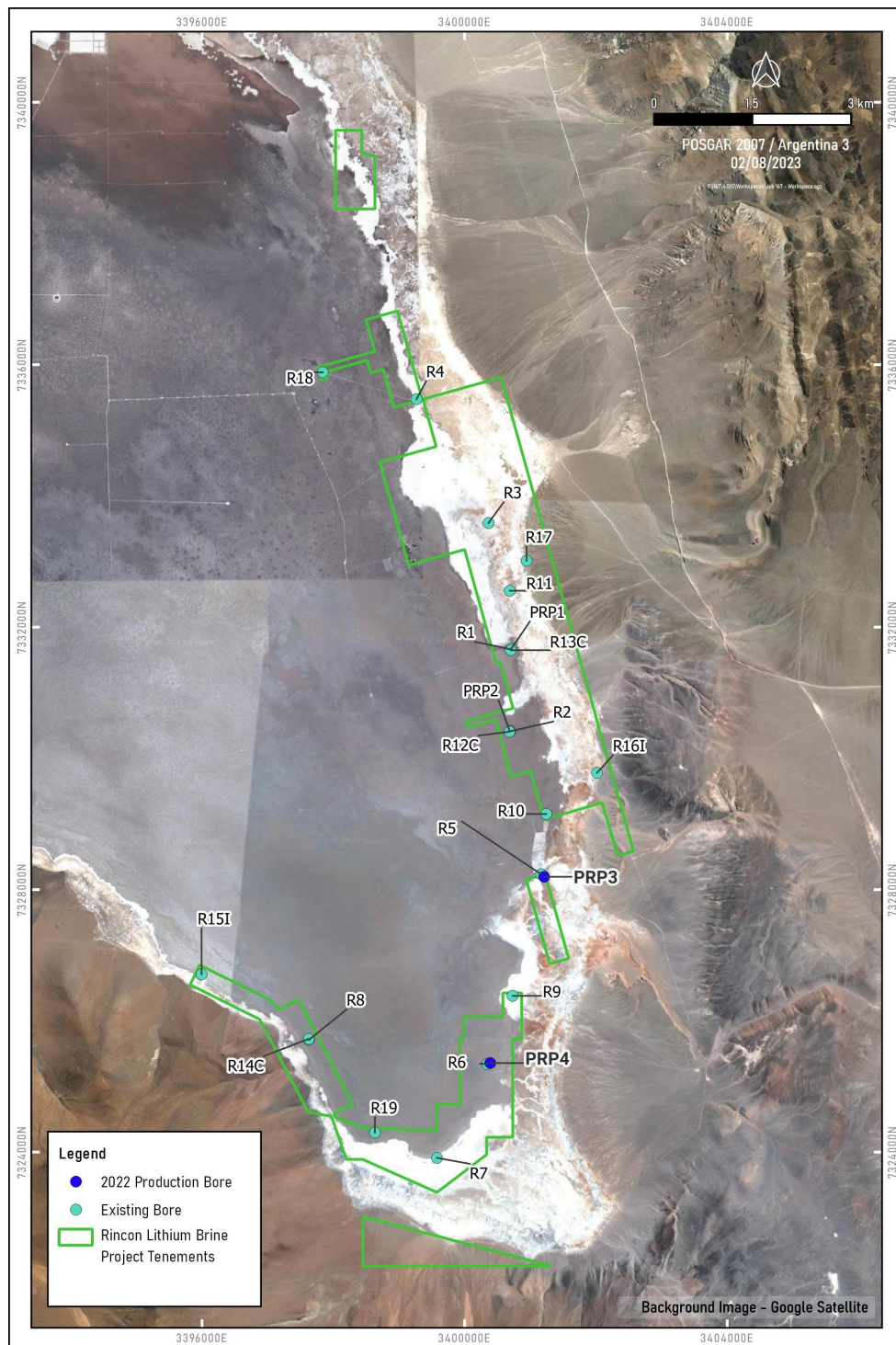


Figure 1. Rincon Lithium Project – Borefield Location Plan

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 or contact us via admin@argosyminerals.com.au or Twitter @ArgosyMinerals.

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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.

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.

ASX Listing Rules Compliance

Argosy advises references to the Company's current target of producing 2,000tpa of high purity battery quality lithium carbonate product at the Rincon Lithium Project should be read subject to and clarified by the Company's current intention that the 2,000tpa production target does not extend beyond a two-year period from the Clarifying Announcement (lodged 10th February 2021, available at www.argosyminerals.com.au and www.asx.com).

At the conclusion of the two-year period, it is the Company's current intention that, subject to feasibility, finance, market conditions and completion of development works at the Rincon Lithium Project, the Company's 10,000tpa production target will apply. The current 2,000tpa production target is intended to form a modular part of the 10,000tpa operation from its commencement.

Argosy further advises that references in this ASX release in relation to the 10,000tpa production target are extracted from the report entitled "Argosy delivers exceptional PEA results for Rincon Project" dated 28 November 2018, available at www.argosyminerals.com.au and www.asx.com. Argosy confirms that it is not aware of any new information or data that materially affects the information included in the Announcement and, in the case of the Production Target, Mineral Resources or Ore Reserves contained in the Announcement, that all material assumptions and technical parameters underpinning the estimates in the PEA 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 PEA announcement.

Competent Person's Statement

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.

Reference to Previous ASX Releases:

This document refers to the following previous ASX releases:

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

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11th Jan 2021 - Rincon Project JORC Exploration Target
8th Feb 2021 - \$30M Placement to Fund 2,000tpa Production
10th Feb 2021 - Clarifying Announcement

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: Rincon Lithium Project Location Map

