

30 April 2019

# **QUARTERLY ACTIVITIES REPORT – MARCH 2019**

#### **HIGHLIGHTS**

- Sales Agreement executed with Mitsubishi Corporation RtM Japan Ltd, a subsidiary of Mitsubishi Corporation
  - Continuous pilot plant operations targeted to commence mid-2019, following delivery of chemical reagents and preparations to scale up the operational workforce
- Submitted permitting applications to Salta Province Mines Department, currently targeting approvals for an initial ~2,000tpa commercial operation module
- Preparing applications for full commercial scale (~10,000tpa) project development approvals/permits
- → Total of ~\$9.1 million raised from significantly oversubscribed entitlement offer, shortfall shares and oversubscriptions
- Argosy has undertaken high purity lithium hydroxide (LiOH) processing works at its pilot plant and in-house laboratory for customer sample testing following interest by major Korean battery group
  - Laboratory analysis results confirm 56.84% LiOH content value (standard battery grade LiOH is 56.5%) that corresponds to a purity of 99.61% lithium hydroxide monohydrate
  - Lithium hydroxide samples being produced for customer quality confirmation and verification
- Argosy has the lithium processing expertise and knowledge to consider a complementary commercial lithium hydroxide production strategy
- Continued progress with Asian based LCE end-users for potential commercial scale off-take and investment

## **KEY OBJECTIVES FOR JUNE 2019 QUARTER**

- Prepare industrial scale pilot plant for commencement of continuous lithium processing operations to produce LCE product for Mitsubishi RtM sales agreement
- Firm-up scale to progress with next stage of commercial development and towards commercial stage funding solution
- → Targeting receipt of development approvals/permits for 2,000tpa operation
- Further engagement with potential strategic off-take partners





#### **EXECUTIVE SUMMARY**

Argosy Minerals Limited ("Argosy" or the "Company") continued its fast-track development strategy at the Rincon Lithium Project in Argentina, achieving significant milestones during the Quarter, including execution of a Sales Agreement with Mitsubishi Corporation RtM Japan Ltd, where the Agreement covers a preliminary arrangement for Argosy's initial supply of lithium carbonate product from its industrial scale pilot plant

In addition, the Company submitted regulatory documents and permitting applications for the development of an initial ~2000tpa commercial operation module lithium carbonate processing plant and associated operations at the Rincon project site.

Furthermore, the Company is currently preparing applications for the full commercial scale project development approvals/permits for a 10,000tpa operation.

The Company also conducted high purity lithium hydroxide (LiOH) processing works for customer sample testing by a major Korean battery group, where laboratory analysis results confirmed 56.84% LiOH content value (standard battery grade LiOH is 56.5%), which corresponds to a purity of 99.61% lithium hydroxide monohydrate.

The Company raised a total of ~\$9.1 million from a significantly oversubscribed entitlement offer, shortfall shares and oversubscriptions, which puts Argosy in a strong financial position to progress the commercial development of the Rincon Lithium Project.

Argosy continued to progress its strategic investor and off-take process, with Company executives attending strategic meetings in Asia, to further advance interest from such strategic parties for the potential full commercial or modular scale project development and associated capex funding/investment.

The milestones achieved this Quarter reinforces the Company is genuinely and continues delivering on its 'fast-track' lithium development strategy, providing additional options to consider accelerating the scale-up development timeframe of the project. Argosy remains confident that key upcoming milestones will prove successful to demonstrate the long-term sustainability and progress toward commercial scale development at the Rincon Lithium Project.

Rincon Lithium Project – Argentina (77.5% JV interest, earning up to 90%)

The Rincon Lithium Project is the flagship asset in Argosy's lithium development strategy, located within the Salar del Rincon in Salta Province, Argentina, in the world renowned "lithium triangle". The Project is a JV partnership with pre-eminent lithium processing expert Pablo Alurralde. His extensive historical works within the Project area and the Salar, together with successful works completed to date have established a well-defined pathway to target commercial production of battery grade LCE product.







Figure 1. Rincon Lithium Project - Preparation for Continuous Pilot Plant Processing Works

A brief summary of works conducted during the Quarter is noted below.

## Mitsubishi RtM Sales Agreement

Argosy executed a Sales Agreement with Mitsubishi Corporation RtM Japan Ltd for the supply of an initial 100 metric tonnes of lithium carbonate product over a 12-month period from the Rincon Lithium Project.

The sales price for each cargo will be determined using a set formula agreed between the parties that references an industry standard benchmark index LCE product price, netting off in-country taxes, adjustments for product specifications, all associated shipping costs and Mitsubishi RtM commission fees.

The strategic arrangement will enable Argosy to utilise the industrial scale pilot plant for small-scale commercial lithium carbonate production and product sales to a major international conglomerate, following comprehensive processing and sample test-works carried out utilising the Company's pilot plant and proven industrial scale proprietary chemical process solution.

The Company confirms there is flexibility in the Sales Agreement to extend the terms of the contract by mutual agreement for additional deliveries, following preliminary customer integration of the initial lithium carbonate product delivered.

Argosy is targeting commencement of continuous operations during mid-2019 for production of lithium carbonate product for delivery into the Sales Agreement. The Company is currently hiring additional plant technicians and procuring necessary chemical reagents for the commencement of continuous pilot plant operations.





The Company is also currently conducting trial-runs on complementary plant equipment to assist in gaining efficient product output for the continuous operations, given the batch-scale and manual nature of the industrial scale pilot plant, to then target ongoing, steady-state operations and production from the pilot plant for LCE product supply to Mitsubishi RtM.

The Sales Agreement reinforces the relationship Argosy has established with Mitsubishi RtM following their first site visit in November 2017, and further strengthens the commitment for future potential commercial associations.

The industrial scale pilot plant was first commissioned in April 2018, with first battery grade 99.5% lithium carbonate confirmed in June 2018.



Figure 2. Rincon Lithium Project - Procuring Chemicals for Continuous Pilot Plant Processing Works

## Commercial Project Development Approvals/Permitting Process

During the Quarter, the Company conducted works to advance the next stage development approvals process via preparation and submission of necessary regulatory documents and permitting applications for the development of an initial ~2,000tpa commercial operation module lithium carbonate processing plant and associated operations at the Rincon project site.





The regulatory approvals process for the 2,000tpa development plans is currently pending and the Company is hopeful to receive the necessary approvals and permits as soon as possible.

Furthermore, Company executives in Salta discussed with Salta Province Mines Department regulatory officials the prospect of advancing the Project direct to 10,000tpa scale development and the associated approvals and permitting requirements. Noting this, the Company is conducting works to prepare the necessary applications for the full commercial scale project development approvals/permits for a 10,000tpa operation.



Figure 3. Rincon Lithium Project - Project Development Planning Works

As part of these works, the Company has engaged its evaporation pond construction contractor (who completed the current 38 hectares of evaporation ponds) and conducted pond design plans and cost estimation works for the full commercial-scale operation. These plans will be part of the applications process submission documents.

This design plan estimates a total of ~300 hectares of evaporation ponds within Mina Romulo made up of 21 ponds. Ponds 1 – 9 are designed to receive the raw lithium brine via pumping operations from the production wells, where the lithium brine becomes further concentrated via several concentration stages in the remaining evaporation ponds.





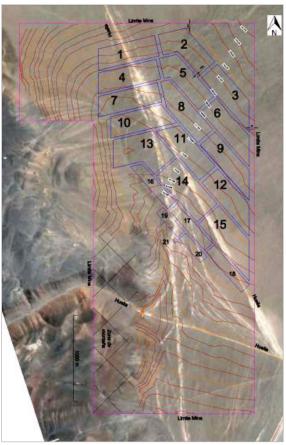


Figure 4. Rincon Lithium Project - Commercial Scale Evaporation Pond Design Plan

## <u>Lithium Hydroxide Processing and Testing Works</u>

During meetings in South Korea during the Quarter, the Company received interest to prepare high purity lithium hydroxide samples for a large Korean battery industry participant.

Whilst conducting on-going LCE product chemical processing works and generating a build-up of lithium carbonate product at the industrial scale pilot plant, the Company prepared lithium hydroxide customer samples from its in-house laboratory.

The first test sample confirmed a laboratory analysis result of 56.84% LiOH content value, using an industry standard indirect calculation method (determined by ICP, gravimetric and titration analysis), and confirms a purity of 99.61% lithium hydroxide monohydrate {Li(OH).H<sub>2</sub>O}. These results compare favourably to the industry standard of 56.5% for battery grade LiOH.







Figure 5. Rincon Lithium Project - Pilot Plant Processing Works

The Company is continuing processing works to prepare the specified customised lithium hydroxide samples for delivery to the Korean battery group.

This may provide the Company with a potential complementary lithium hydroxide production pathway, in addition to the lithium carbonate strategy and successful chemical process solution achieved to date.

This further reinforces the Company's lithium processing expertise and forms a strong position to establish its credentials well before many other lithium companies, given the successful development milestones achieved to-date by Argosy at the Rincon Project.

#### Strategic Investment & Commercial Off-take Arrangements

With the major 2018 project milestones accomplished – these being:

- constructing and commissioning the industrial scale pilot plant and associated site works,
- developing an exclusive and proprietary successful industrial scale chemical process solution to produce ≥99.5% Li<sub>2</sub>CO<sub>3</sub> product using the industrial scale pilot plant; and
- the PEA (and associated Indicated Mineral Resource estimate) completed,

the Company has continued to focus on securing a strategic relationship/partnership(s) to ensure the successful commercial development of the Rincon Lithium Project.





The aim of these strategic engagements is to provide battery quality LCE product samples preferentially customised for the specific requirements of the end-user and confirm the viability of an economic pathway for long-term commercial scale production of LCE product. This will be supported via the independent validation of estimated project capital expenditure items and on-going operational costs.



Figure 6. Rincon Lithium Project - Pilot Plant Processing Works

The PEA results are currently being reviewed by several potential strategic investor groups and Argosy has conducted advanced discussions with these strategic parties for potential full commercial or modular scale capex funding/investment.

The Company has continued discussions with Mitsubishi RtM, with both parties currently considering various matters to ensure a successful and long-term relationship.

In addition, the Company is concurrently discussing a potential strategic partnership with a South Korean group interested in commercial scale long-term product off-take and an accompanying capex funding solution.

Current factors under consideration with these groups involves off-take product pricing particulars, terms and related arrangements, LCE product specification requirements, scale of initial and longer-term commercial operations and associated funding requirements, and structure and framework of the strategic relationship.

In parallel with the strategic investment considerations, Argosy will look to make a decision on the scale of next stage commercial development (pending funding solution), to then commence development works for the selected production strategy.





### <u>Lithium Brine Evaporation Pond Works</u>

The current combined total of ~38 hectares of lithium brine evaporation ponds are operational and providing concentrated lithium brine for use in the Company's operating industrial scale pilot plant. The current area of evaporation ponds is capable of generating concentrated lithium brine at a scale that can support processing operations for a plant capacity of ~1,500tpa of lithium carbonate product.

The new smaller ponds, which will be utilised for storing concentrated lithium brine from the larger ponds (in the latter stages of the ~12 month lithium brine concentration period) are planned for lining during the current Quarter and will fully complete the evaporation pond works.



Figure 7. Rincon Lithium Project - Current Operational 38Ha Evaporation Ponds (smaller ponds to be lined this Quarter)

#### Lithium Product Market Update

The lithium product market has experienced price volatility, with lithium prices generally tracking downwards earlier in the current Quarter, led by decreases across lithium hydroxide sales, particularly into Asia, however more recently, market stability saw import prices steady. Limited movement in recent weeks for Chinese domestic carbonate may indicate that the seaborne market may not experience a massive shift any time soon.

However, the pressure on chemical prices during the Quarter was compounded by negative sentiment surrounding spodumene feedstock supplies and the promise of major new chemical conversion capacities reaching the market in H2 2019. Production increases during a period of relatively stable demand growth from the battery sector suggest buyers having strong leverage in negotiations, and this buyers' market will be further compounded by confirmation that China will cut its EV subsidies in H2 2019.





This may lead to the EV environment in China becoming increasingly competitive and is likely to see some consolidation across the supply chain. However, in the short-term there could be a push to secure higher subsidies during the transition period this Quarter. Furthermore, cathode producers have reported low stock levels, which may result in their return to the market this Quarter as they look to secure the supply chains for capacity expansions. Unfortunately, any potential short-term upturn in the market is unlikely to be reflected in pricing, with consumers still pushing for a reduction in the premium of hydroxide prices over carbonate.

The price of lithium carbonate stayed relatively strong from South American operations, where producers were able to retain higher prices into battery consumers, but were forced to compete with lower-priced Chinese exports in technical markets. Sustained lower-pricing will create a challenging environment for new market entrants, however established majors have pushed ahead once again with expansion plans, with SQM notably receiving environmental approval for its 180,000tpa LCE capacity expansion in Chile - though part of its production will be diverted to build up its strategic inventories.

Recent prices from South America producers were stable, however the range of prices in the market widened to \$11,500 - \$14,500/tonne. The lower end of this range was largely reflective of technical grade sales. Better prices were reported for battery-grade sales into the Asian market, where average CIF prices moved up marginally to an average of \$13,250/tonne. In China, EXW prices fell marginally to \$9,900-\$10,650/tonne for technical grade sales and \$11,400-\$12,150/tonne for battery grade material of low volumes (source: Benchmark Mineral Intelligence, "BMI").

The current Chinese viewpoint suggests a preference for such low quality product, with incountry product refinement occurring to improve the product specification, or used for conversion to battery quality lithium hydroxide product.

Given Argosy is working on and achieving such product specification, the Company is confident in the long term, sustainable lithium price forecasts, as supplied by BMI.

The key takeaway that the Company has formed in the medium term is that 'battery quality' lithium products sourced from reputable international suppliers (outside China) via longer term contracts will not enter into an over-supply position, given the projected rising demand for such product by Asian and European end-users ( and this being the window within which Argosy aims to enter full commercial production). In addition, new supply is not entering the market as quickly as predicted or estimated, noting delays in several Australian based operations.

This is evidenced by sales of new energy vehicles [NEV] in China continued to grow during the Quarter, as internal combustion engine vehicle sales stuttered, as per the latest data from the China Association of Automobile Manufacturers showed. Sales of passenger cars in China fell 17.4% year on year to February (to 1.22 million units, according to CAAM - a similar drop to that seen in January). However, CAAM data showed that China's sales of NEV's in February increased 53.6% from a year earlier. Figures recorded in March indicate NEV output and sales at 128,000 and 126,000 units respectively, up 88.6% and 85.4% on February - taking total output and sales for Q1 2019 to 304,000 and 299,000, up 102.7% and 109.7% year on year.

age 10 of 1.



## Corporate

Subsequent to the Quarter end, the Company raised a total of ~\$9.1 million from a significantly oversubscribed entitlement offer, shortfall shares and oversubscriptions.

The proceeds will be used to progress next stage development works at Rincon and put the Company in a strong financial position to finalise a strategic relationship/partnership for the commercial development of the Rincon Lithium Project.

The Company lodged its Notice of Annual General Meeting scheduled to be held on 29 May 2019.

## **Schedule of Tenements**

The schedule of tenements held by the Company at the end of the Quarter is shown below.

Tenement	Location	Beneficial Percentage held
File 7272 (Telita) <sup>1</sup>	Salta, Argentina	77.5% (JV, earning up to 90%)
File 14342 (Chiquita 2) <sup>1</sup>	Salta, Argentina	77.5% (JV, earning up to 90%)
File 22850 (Romulo) <sup>1</sup>	Salta, Argentina	77.5% (JV, earning up to 90%)
File 22955 (Frodo) <sup>1</sup>	Salta, Argentina	77.5% (JV, earning up to 90%)
File 1414 (Talisman) <sup>1</sup>	Salta, Argentina	77.5% (JV, earning up to 90%)
File 1904 (Nelly) 1	Salta, Argentina	77.5% (JV, earning up to 90%)
File 1905 (Angelica) <sup>1</sup>	Salta, Argentina	77.5% (JV, earning up to 90%)
File 2889 (Maria) 1	Salta, Argentina	77.5% (JV, earning up to 90%)
File 2890 (Irene) <sup>1</sup>	Salta, Argentina	77.5% (JV, earning up to 90%)
File 6343 (Tigre) <sup>1</sup>	Salta, Argentina	77.5% (JV, earning up to 90%)
File 6345 (Puma) <sup>1</sup>	Salta, Argentina	77.5% (JV, earning up to 90%)
File 100561 (Praga I) <sup>1</sup>	Salta, Argentina	77.5% (JV, earning up to 90%)
File 100562 (Praga II) <sup>1</sup>	Salta, Argentina	77.5% (JV, earning up to 90%)
File 100625 (Praga III) <sup>1</sup>	Salta, Argentina	77.5% (JV, earning up to 90%)
File 10626 (Praga IV) <sup>1</sup>	Salta, Argentina	77.5% (JV, earning up to 90%)
File 17902 (Reyna) <sup>1</sup>	Salta, Argentina	77.5% (JV, earning up to 90%)
File 62308 (Tincal) <sup>1</sup>	Salta, Argentina	77.5% (JV, earning up to 90%)
File 6681 (San Marcos) <sup>1</sup>	Salta, Argentina	77.5% (JV, earning up to 90%)
File 7215 (Jujuy) <sup>1</sup>	Salta, Argentina	77.5% (JV, earning up to 90%)
File 14970 (San Jose) 1	Salta, Argentina	77.5% (JV, earning up to 90%)
Mining easement right (File 4128) 1	Salta, Argentina	77.5% (JV, earning up to 90%)
Mining easement right (File 15698) <sup>1</sup>	Salta, Argentina	77.5% (JV, earning up to 90%)

<sup>&</sup>lt;sup>1</sup> Interest in mining tenement held 100% by Puna Mining S.A.

#### **ENDS**

For more information on Argosy Minerals Limited and to subscribe for regular updates, please visit our website at <a href="www.argosyminerals.com.au">www.argosyminerals.com.au</a> or contact us via <a href="mailto:admin@argosyminerals.com.au">admin@argosyminerals.com.au</a> or Twitter <a href="mailto:admin@argosyminerals.com.au">admin@argosyminerals.com.au</a> or Twitter <a href="mailto:admin@argosyminerals.com.au">admin@argosyminerals.com.au</a> or Twitter <a href="mailto:admin@argosyminerals.com.au">admin@argosyminerals.com.au</a> or Twitter





#### For further information:

Jerko Zuvela Managing Director

T | +61 8 6188 8181

E | admin@argosyminerals.com.au

W | www.argosyminerals.com.au

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.

The PEA information in this announcement is extracted from the report entitled "Argosy Delivers Exceptional PEA Results for Rincon Lithium Project" dated 28 November 2018, and the Mineral Resources information in this announcement is extracted from the report entitled "Argosy Upgrades Lithium Rincon Lithium Project JORC resource" dated 13 November 2018, both announcements are available at www.argosyminerals.com.au and <a href="https://www.asx.com">www.asx.com</a>.

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

The information contained in this ASX release relating to 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.

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 exploration at the Rincon Lithium Project.

Chemical Engineer's Statement: The information in this announcement that relates to lithium carbonate processing and test-works is based on information compiled and/or reviewed by Mr Pablo Alurralde. 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.





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.

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

