SAVANNAH

4 March 2021

# Mina do Barroso Lithium Project Update

## Further Refinements to the Metallurgical Flow Sheet Potential for Lower Capital and Operating Costs

Savannah Resources plc (AIM: SAV, FWB: SAV and SWB: SAV) ('Savannah' or the 'Company'), the AIM quoted resource development company, which is focused on becoming Europe's most significant producer of spodumene lithium from its Mina do Barroso Project in Portugal ('Mina do Barroso', 'MdB' or the 'Project'), is pleased to announce that its ongoing metallurgical test work programme continues to successfully improve and refine the process flowsheet.

**Highlights**

- Excellent progress made with metallurgical test work, underlining the Project's potential to become a key supplier of spodumene lithium to the European battery value chain.
- Initial results from pilot scale Dense Media Separation ('DMS') indicate 20% to 25% of the plant feed can be rejected utilising a single stage of DMS pre-concentration, with only minor losses of contained lithia (Li2O).
- The results are significant, indicating that a large portion of the waste material can be rejected via the DMS before the spodumene flotation stage of the process.
- Reducing the volume of ore to be processed has the potential to reduce the capital and operating costs associated with the concentrator.
- Savannah continues to de-risk the Project by building up a comprehensive understanding of how best to manage the metallurgical outcomes for the various Mina do Barroso orebodies.
- Minsol Engineering Pty Ltd ('Minsol') has been appointed to further aid the Company in identifying an optimal metallurgical testing process.
- Significant scope remains to further optimise and improve upon these results during the ongoing metallurgical test work programmes - further results will be announced as they become available.

**Savannah's CEO, David Archer said:** *"These initial results from the latest phase of the Mina do Barroso metallurgical test work programme are very encouraging. Removal of up to one quarter of the ore feed going into the flotation circuit could have significant positive implications for the capital and operating costs of this section of the concentrator and the Project overall.*

*"This release marks the first of a number of announcements we expect to make regarding metallurgical test work for Mina do Barroso during the year, as we look to optimise the processing route and engage with potential equipment suppliers for the Mina do Barroso plant. In the months ahead, the option of introducing a pre-concentration step will be thoroughly evaluated along with all other aspects of the process, including the use of environmentally friendly reagents and water collected from on-site sources.*

*"To help us in our efforts to identify a metallurgical process which prioritises both the environment and delivery of a high spec product to our commercial partners, such as Galp, we have appointed Minsol Engineering Pty Ltd to advise us on the programme. Minsol's principals have been involved in the design of both lithium concentrators and lithium chemical plants in Australia, so will provide Savannah with a wealth of experience and knowledge for this crucial part of the Project.*

*"The global lithium market has enjoyed a resurgence in recent months with raw material prices rising rapidly as demand from the battery and electric vehicle markets grow. Against this backdrop, 2021 is going to be a very busy year for Savannah as we look to secure Mina do Barroso's position in the rapidly evolving European lithium battery value chain. We will continue to make regular updates to the market on our progress."*

Test work Programme

Savannah has appointed MinSol Engineering Pty Ltd to design and supervise a detailed metallurgical test programme, to be undertaken at Nagrom Laboratories in Perth, Western Australia. Minsol's Principals have significant experience in the lithium sector, having been involved in the development of numerous Lithium Concentrator Plants and Lithium Hydroxide Processing Plants in Western Australia and overseas over the past 15 years.

The test work has been designed to build on the work previously undertaken and reported and to confirm the final process flowsheet, process design criteria and product quality for subsequent project development activities. The test work will treat a master drill core composite sample from Grandao previously used in test work reported in March 2019 and assayed at 1.3% $Li_2O$ content.

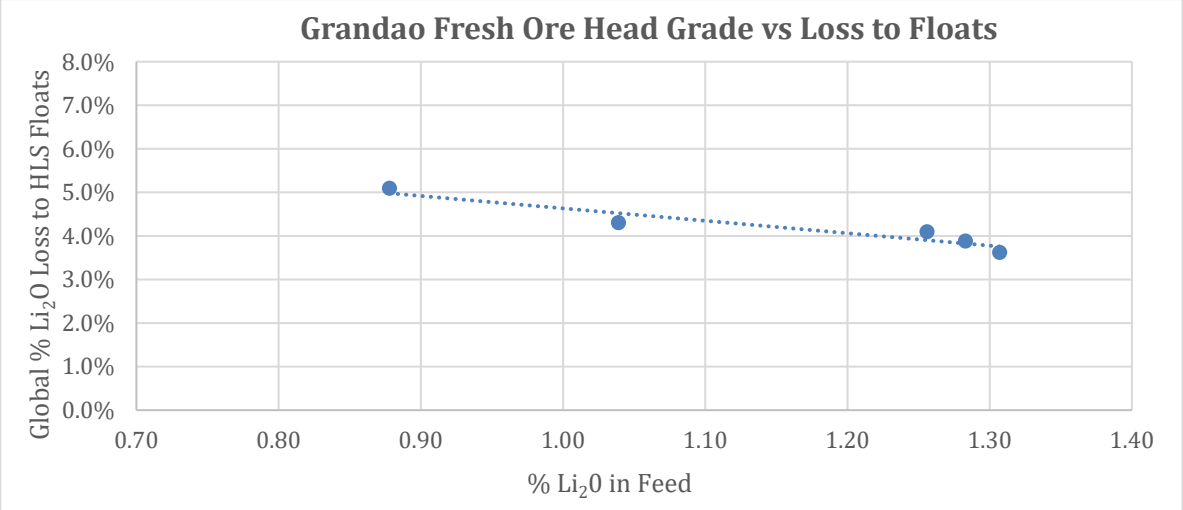
Test work will initially focus on fresh Grandao ore. Grandao is expected to provide approximately 65% of the total ore to be mined and the majority of the ore scheduled for treatment in the first ten years of operation.

Initial results from pilot scale Dense Media Separation have indicated:

- 20% to 25% of the plant feed can be rejected utilising a single stage of DMS pre-concentration.
- Global Lithia loss in the DMS step to floats will be as low as 3.5% to 5.0% of the total contained lithia.
- The pilot scale results are consistant with Heavy Liquid Separation (HLS) and DMS work from historical testwork.

Correlation between the DMS and HLS results indicate a clean test sample yielding high separation efficiency.

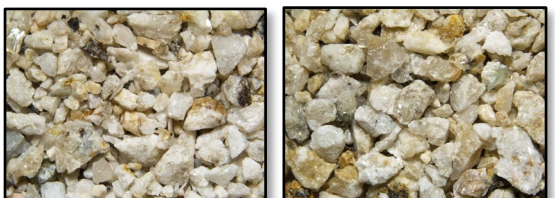
Based on the historical and current test results for pre-concentration at SG2.65, a relationship between the reject losses and the ore head grade is shown below.




The DMS results are highly encouraging and have the potential to reduce the capital and operating costs for the project, through lower ore treatment rates for milling, flotation, filtration and water circuits.

**Nagrom DMS100 Test Plant**

**Nagrom DMS100 Test Plant - Left Bucket SG2.65 Float (Waste Material) Right Bucket SG2.65 Sinks (Spodumene Concentrate)**



**Left Photo SG2.65 Float (Waste Material) Right Photo SG2.65 Sinks (Spodumene Concentrate)**

The test programme is ongoing, with the primary objectives as follows:

- Optimise flotation configuration and conditions.
- Develop a flotation reagent and processing chemical regime with low environmental impact.
- Establish the impact on the flotation process of using water sourced on site.
- Generate samples for subsequent testing with select equipment suppliers for the purpose of detailed equipment selection and sizing.
- Generate product samples for downstream lithium conversion test work for production of lithium hydroxide.

Results from the ongoing programme will be reported as they become available and the overall findings will be fed into the Definitive Feasibility Study on the Project. Product samples will be supplied to Galp Energia, SGPS, S.A, and other potential commercial partners, for their own evaluation of Mina do Barroso's concentrate product and planning purposes.

**Competent Person Statement**

The information in this announcement that relates to exploration results is based upon information compiled by Mr Dale Ferguson, Technical Director of Savannah Resources Limited. Mr Ferguson is a Member of the Australasian Institute of Mining and Metallurgy (AusIMM) and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the December 2012 edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves" (JORC Code). Mr Ferguson consents to the inclusion in the report of the matters based upon the information in the form and context in which it appears.

The information in this release that relates to metallurgy and metallurgical test work has been reviewed by Mr Robert Simmons, MAusIMM, B. Eng. (Chemical Engineering). Mr Simmons is not an employee of the company, he is employed as a contract consultant. Mr Simmons is a Member of the Australasian Institute of Mining and Metallurgy, he has sufficient experience with the style of processing response and type of deposit under consideration, and to the activities undertaken, to qualify as a competent person as defined in the 2012 edition of the "Australian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves" (The JORC Code). Mr Simmons consents to the inclusion in this report of the contained technical information in the form and context as it appears.

**Regulatory Information**

This announcement contains inside information for the purposes of Article 7 of Regulation (EU) 596/2014.

****ENDS****

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**About Savannah**

Savannah is a diversified resources group (AIM: SAV) with two development stage projects, a hardrock lithium project in Portugal which has the largest spodumene lithium resource in Europe, and the world-class Mutamba Heavy Mineral Sands Project in Mozambique, which is being developed in a consortium with the global major, Rio Tinto. The Board is committed to serving the interests of its shareholders and to delivering outcomes that will improve the lives of the communities we work with and our staff.

The Company is listed and regulated on AIM and the Company's ordinary shares are also available on the Quotation Board of the Frankfurt Stock Exchange (FWB) under the symbol FWB: SAV, and the Börse Stuttgart (SWB) under the ticker "SAV".