



ASX ANNOUNCEMENT



15 FEBRUARY 2018

AUTHIER METALLURGICAL PILOT PROGRAM COMMENCES

Sayona Mining Limited (ASX: SYA) ("Sayona" or the "Company") is pleased to announce the commencement of the pilot plant program for the Authier Lithium Project. The pilot program is being completed by SGS Canada ("SGS") at Lakefield, Ontario. SGS has extensive experience in developing spodumene concentration flowsheets. Over the last ten years, SGS has operated pilot plants for several Canadian hard rock lithium deposits.

Approximately 5.5 tonnes of mineralised pegmatite ore was collected during the Phase 3 drilling program in December 2017 (Figure 1). The diamond drill core was assayed and stage-crushed to the appropriate particle size to feed the pilot plant (Figure 2). Two composite pilot plant feed samples have been prepared to represent Years 0 to 5 and Years 5+ of the operation. The pilot plant flowsheet comprises grinding, de-sliming, magnetic separation, mica and spodumene flotation (Figure 3). The pilot plant is scheduled to operate for 100 hours at a feed rate of 50 kg/hour.

The objectives of the piloting program are to produce a 6% Li₂O concentrate at recoveries of greater than 80% and confirm:

- Finalisation of the flowsheet and processing parameters for spodumene concentrate production developed during the Pre-Feasibility Study;
- Produce engineering data for equipment sizing and plant design; and
- Generation of spodumene concentrate for downstream lithium carbonate testing and marketing purposes.

The data collected from the piloting program will be incorporated into the Definitive Feasibility Study which is expected to be completed during the 2Q 2018.

Corey Nolan, Chief Executive Officer, commented "*The objective of the pilot program is to further refine the design and confirm the operating parameters for the Authier process plant, in order to de-risk the plant construction, commissioning and ramp-up. The Company is focused on the rapid progression of the project towards production to capitalise on the strong projected price outlook for spodumene concentrates*".

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Figure 1: Core sample delivered to the SGS testing facility in Lakefield, Ontario



Figure 2: Preparation of the sample prior to pilot testing

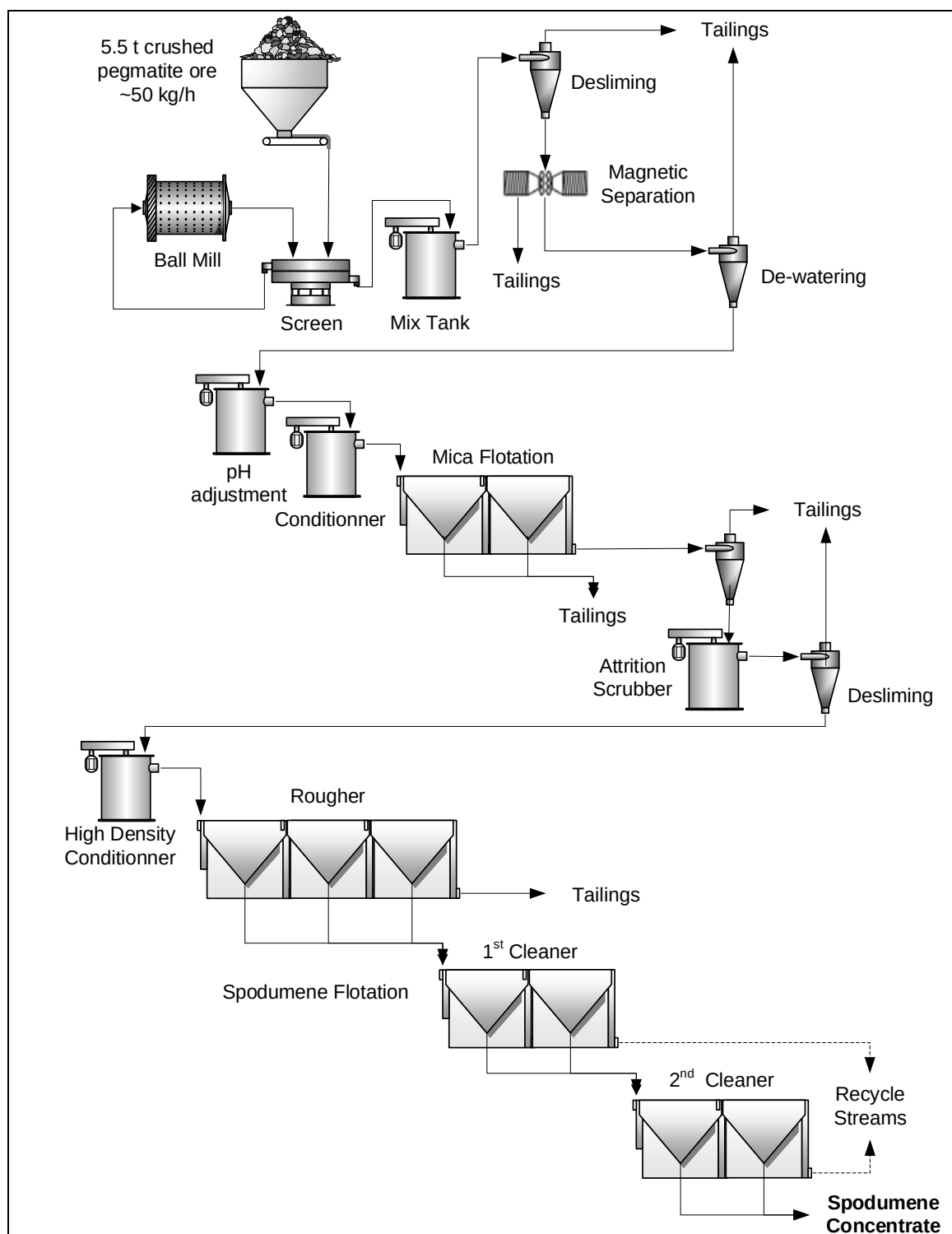


Figure 3: Authier Lithium project pilot plant flowsheet

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Sayona Mining Limited is an Australian-based, ASX-listed (SYA) company focused on sourcing and developing the raw materials required to construct lithium-ion batteries for use in the rapidly growing new and green technology sectors. Sayona's primary objective is developing the Authier lithium project in Quebec, Canada. Authier is an advanced, near term development project, construction forecast to commence in the second half of 2018 and first production in late 2019.

Please visit us as at www.sayonamining.com.au

Reference to Previous ASX Releases

This presentation refers to the following previous ASX releases:

- Authier Phase 3 Drilling Update, 20 December 2017

The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and all material assumptions and technical parameters continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcements.