

ASX ANNOUNCEMENT



22 MAY 2018

COMPLETION OF THE AUTHIER METALLURGICAL PILOT PROGRAM

Highlights:

- Optimised pilot flowsheet produced a 6.0% Li_2O concentrate at 79% lithium recovery
- Final process design completed for the Definitive Feasibility Study
- Further testing will continue over the next six months targeting further optimisation and improvements to the flow sheet and operating parameters

Sayona Mining Limited (ASX: SYA) ("Sayona" or the "Company") is pleased to announce the completion of the Authier lithium project pilot plant operation at SGS Canada Inc. ("SGS").

Approximately 5.5 tonnes of mineralised pegmatite ore was collected during the Phase 3 drilling program in December 2017. The diamond drill core was assayed and stage-crushed to the appropriate particle size to feed the pilot plant. Two composite pilot plant feed samples have been prepared to represent Years 0 to 5 and Years 5+ of the operation.

The pilot plant operated for over 100 hours at a feed rate of 50 kg/hour and produced over 400 kg of spodumene concentrate. The pilot plant flowsheet included grinding, de-sliming, magnetic separation, mica and spodumene flotation (Figure 2). The optimised pilot flowsheet was able to achieve a concentrate grading 6.0% Li_2O at a 79% recovery. The pilot program has confirmed the final process flow sheet and operating parameters for the Definitive Feasibility Study ("DFS").

In addition, prior to the pilot plant operation, a number of batch and locked-cycle testing programs were run to confirm the optimal conditions for the final pilot testing program. The results were similar to historical testing programs incorporated into the Pre-Feasibility Study, including:

- Batch flotation testing – up to 6.0% Li_2O concentrate grade at 82% recovery; and
- Locked cycle testing – composite 1 achieved 5.85% Li_2O concentrate grade at 84% recovery and composite 2 achieved 5.86% Li_2O concentrate grade at 83% recovery.

Dan O'Neill, Managing Director, commented "The Company is pleased with the excellent results achieved during the program, enabling the final design of the plant for the DFS. The program assists in de-risking the metallurgical parameters for the plant construction, commissioning and ramp-up periods. Over the next six months, the Company will continue

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to undertake further testing targeting improvements to the operating parameters of the plant, including a testing program at the McGill University”.

Pilot Program Overview

The objectives of the piloting program were 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.

Approximately 5.5 tonnes of mineralised pegmatite ore was collected during the Phase 3 drilling program in December 2017 (Figures 4, 5 and 6). The diamond drill core was assayed and stage-crushed to the appropriate particle size to feed the pilot plant. Two composite pilot plant feed samples have been prepared to represent Years 0 to 5 and Years 5+ of the operation – see Table 1.

An 80 kilogram sub-sample of each composite was used for batch and locked-cycle testing. Over 40 batch flotation tests were completed assessing variations in grind size, reagents and dosages, and with and without the use of mica flotation. The optimal batch flotation test conditions produced a 6.0% Li₂O concentrate grade at an 82% recovery.

Based on the optimal batch flotation conditions, the two composites were subject to locked cycle flotation testing. The two results included:

- Composite 1 achieved 5.85% Li₂O concentrate grade at 84% recovery; and
- Composite 2 achieved 5.86% Li₂O concentrate grade at 83% recovery.

Based on the optimal flotation conditions from both the batch and locked cycle testing program, the pilot plant program was designed. The two composites were campaign processed through the pilot plant which operated at 50 kg/hour and produced over 400 kg of spodumene concentrate. The pilot plant flowsheet included grinding, de-sliming, magnetic separation, mica and spodumene flotation. The best campaign run produced a 6% Li₂O concentrate at a 79% lithium recovery. During each campaign the test conditions were modified with the aim of maximising the recovery and concentrate grade. As a result there was some variability in the results over the total program. Figure 1 compares the batch, locked-cycle and continuous pilot plant grade-recovery curves. Pilot plant results on the optimized flowsheet resulted in 71-76% lithium recovery for Composite 1 and 73-79% recovery for Composite 2.

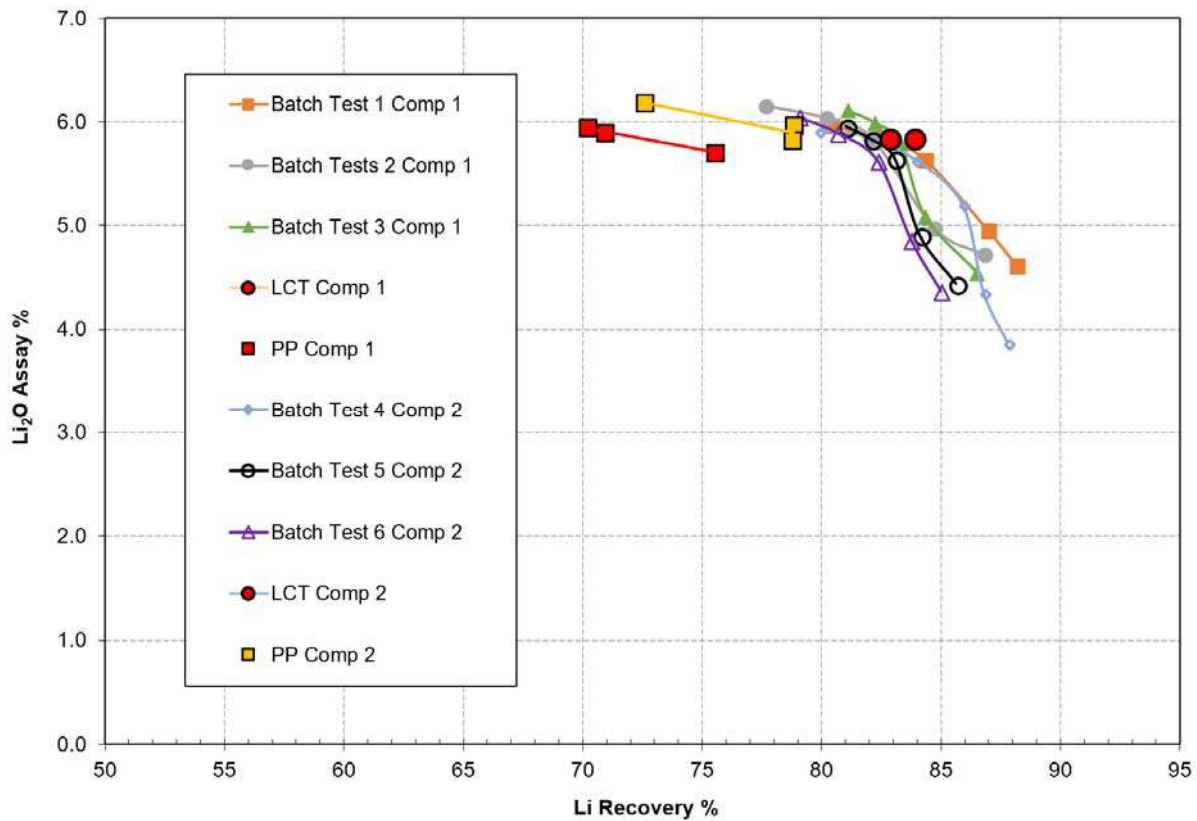


Figure 1: Grade-recovery curves for batch tests, locked-cycle tests (LCT) and pilot plant (PP) for composite 1 and 2

Ongoing Testing Programs

Concentrate and tailings samples from the pilot plant were sent to Pock Industrial Inc. in Salt Lake City, Utah for thickening (floculent screening, static and dynamic settling) and filtration testing. The data produced will be used to size the industrial equipment for the solid-liquid separation.

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

Sayona will continue process optimisation work through a collaboration with Prof. Kristian Waters who specializes in mineral processing at the McGill University in Montréal, Québec. A research project has commenced at the University to further explore the key findings from the pilot plant.

For more information, please contact:

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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, development project, construction forecast to commence in early 2019 and first concentrate production in early 2020.

Please visit us at www.sayonamining.com.au

COMPETENT PERSON STATEMENT

The information in this report that relates to Exploration Results is based on information compiled by Dr Gustavo Delendatti, a member of the Australian Institute of Geoscientists. Dr Delendatti is an independent consultant, and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which it is undertaking to qualify as a Competent Person as defined in the JORC Code (2012 Edition) of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves." Dr Delendatti was responsible for the design and conduct of the Sayona exploration drilling campaigns and supervised the preparation of the technical information and audit of all the historical drilling data contained in this release and has relevant experience and competence of the subject matter. Dr Delendatti, as a competent person for this announcement, has consented to the inclusion of the information in the form and context in which it appears herein.

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Table 1: Pilot Plant feed sample assays

	Composite 1	Composite 2
	Years 0-5	Years 5+
wt %		
Li	0.47	0.48
Li ₂ O	1.01	1.03
SiO ₂	73.5	74.9
Al ₂ O ₃	15.6	15.6
Fe ₂ O ₃	0.79	0.56
MgO	0.39	0.10
CaO	0.25	0.17
Na ₂ O	4.69	4.56
K ₂ O	2.72	2.95
MnO	0.1	0.09

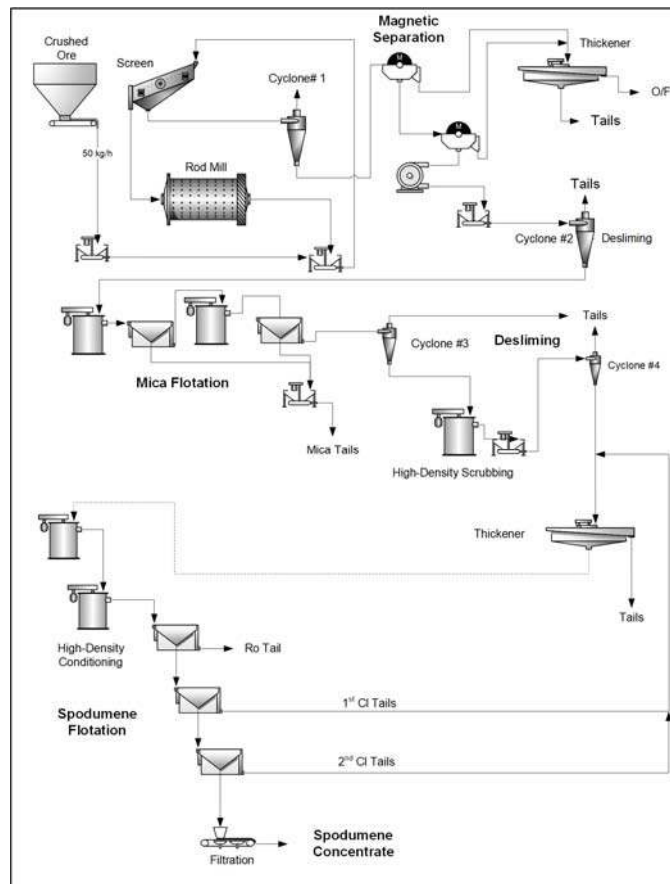


Figure 2: Optimized pilot plant flowsheet

Table 2 – Metallurgical Drill hole collar location and intercept information (downhole intersections in metres)

Drill Hole	East	North	RL	Azimuth	Dip	Depth	From (m)	To (m)	Thickness (m)	Grade (%Li ₂ O)
AL-17-32	707520	5360175	328.8	180	-45	97.5	13	78	65	1.29
including							27	48	21	1.54
AL-17-33	707520	5360240	331.0	180	-45	119.5	53	99	46	1.28
including							54	66	12	1.50
AL-17-34	707550	5360240	331.0	177	-45	96.0	56	91	35	1.09
AL-17-35	707425	5360225	330.43	177	-45	73.5	4.7	42	37.3	0.98
including							27	42	15	1.10
AL-17-36 **	707150	5360350	329.9	180	-52	112	67	81	14	1.47
							83	94.9	11.9	1.57
							104	112	8	1.49
AL-17-37	707218	5360418	330.0	180	-65	186	139	146	7	1.15
							151	167	16	0.54
AL-17-38	707375	5360300	330.0	180	-45	85	34	52	18	0.96
							54	60	6	1.32
							63	65	2	1.30

Note: AL-17-36**: Finished before end of pegmatite due operational problems in the rig

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Figure 3: Spodumene rougher flotation

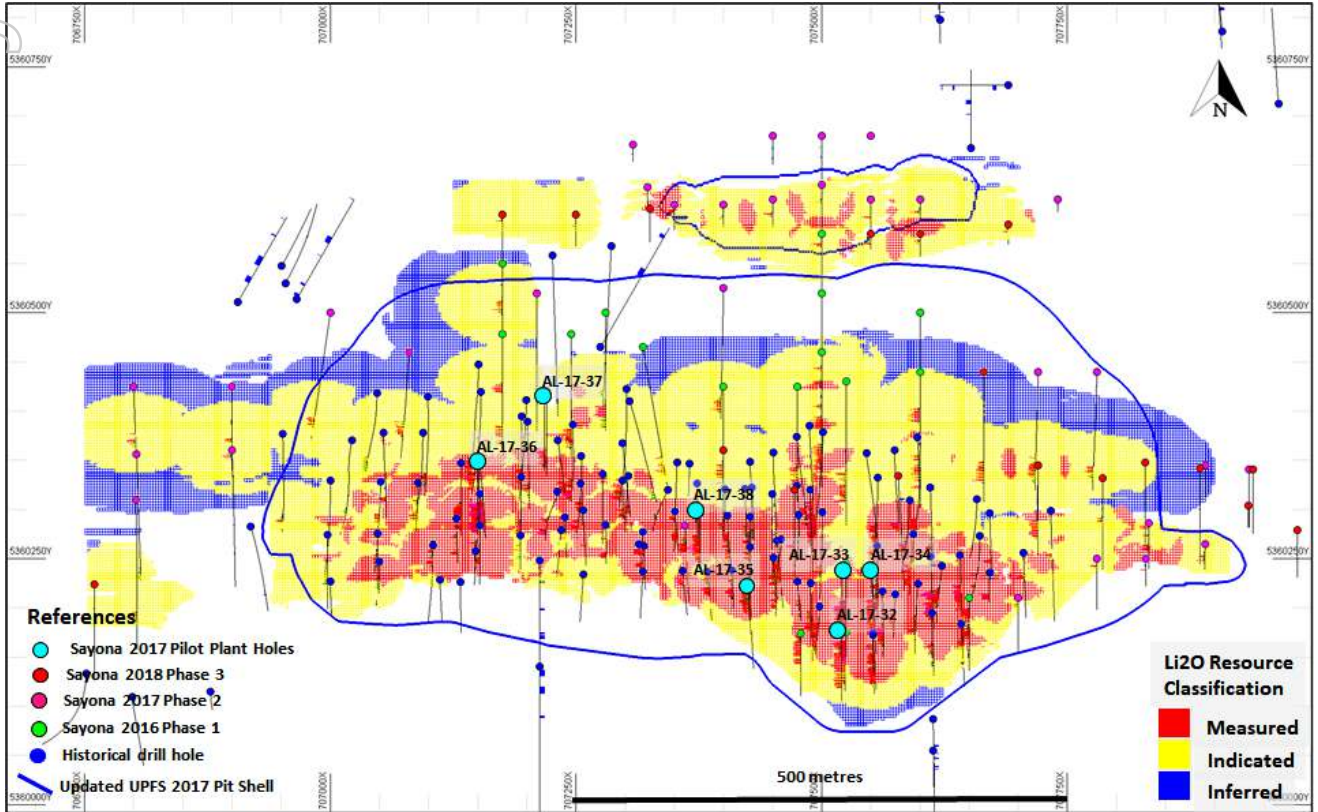


Figure 4: Plan View (305 metres RL) showing Authier Pilot Plant program drill hole location

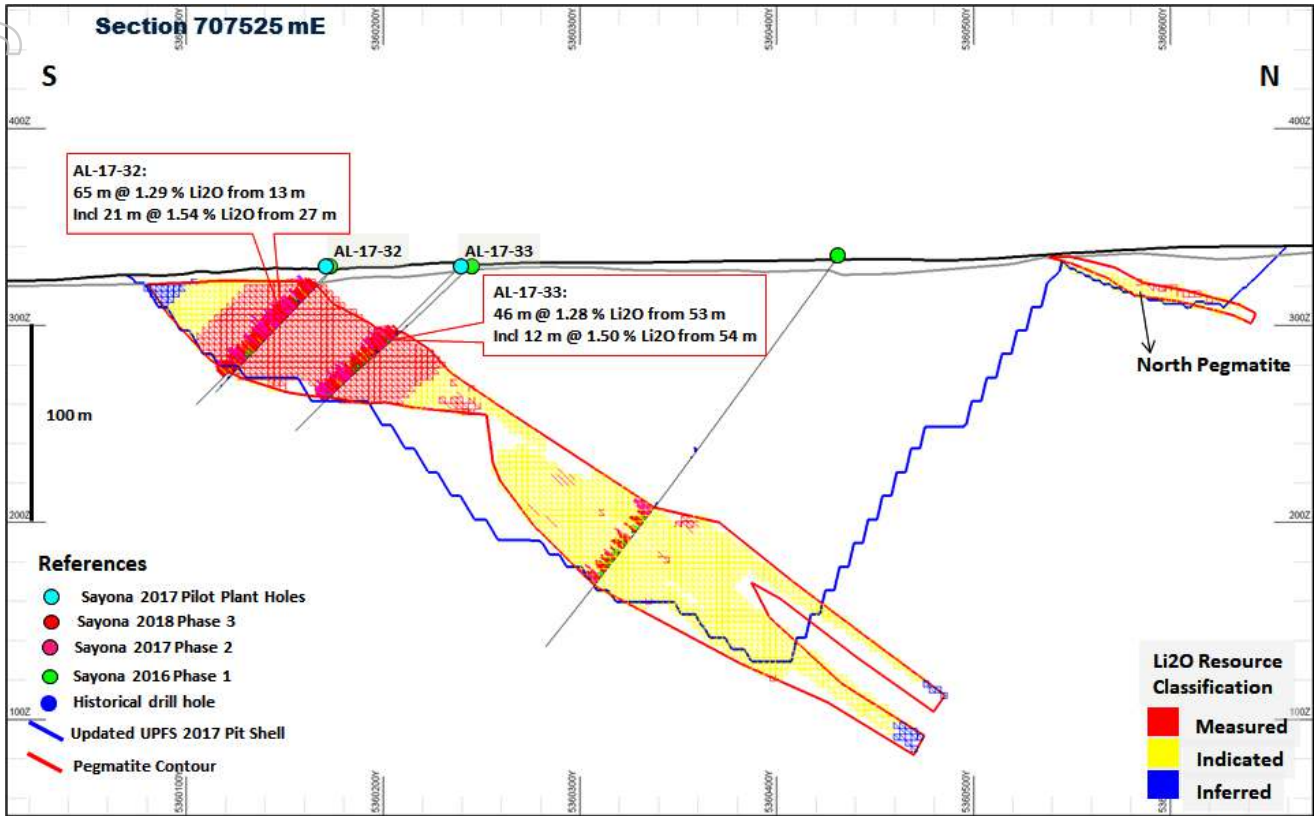


Figure 5: Section 707525 mE (looking west) showing location and mineralized interval for metallurgical PQ diamond holes AL-17-32 (same pad than AL-16-01) and AL-17-33 (same pad than AL-16-02).

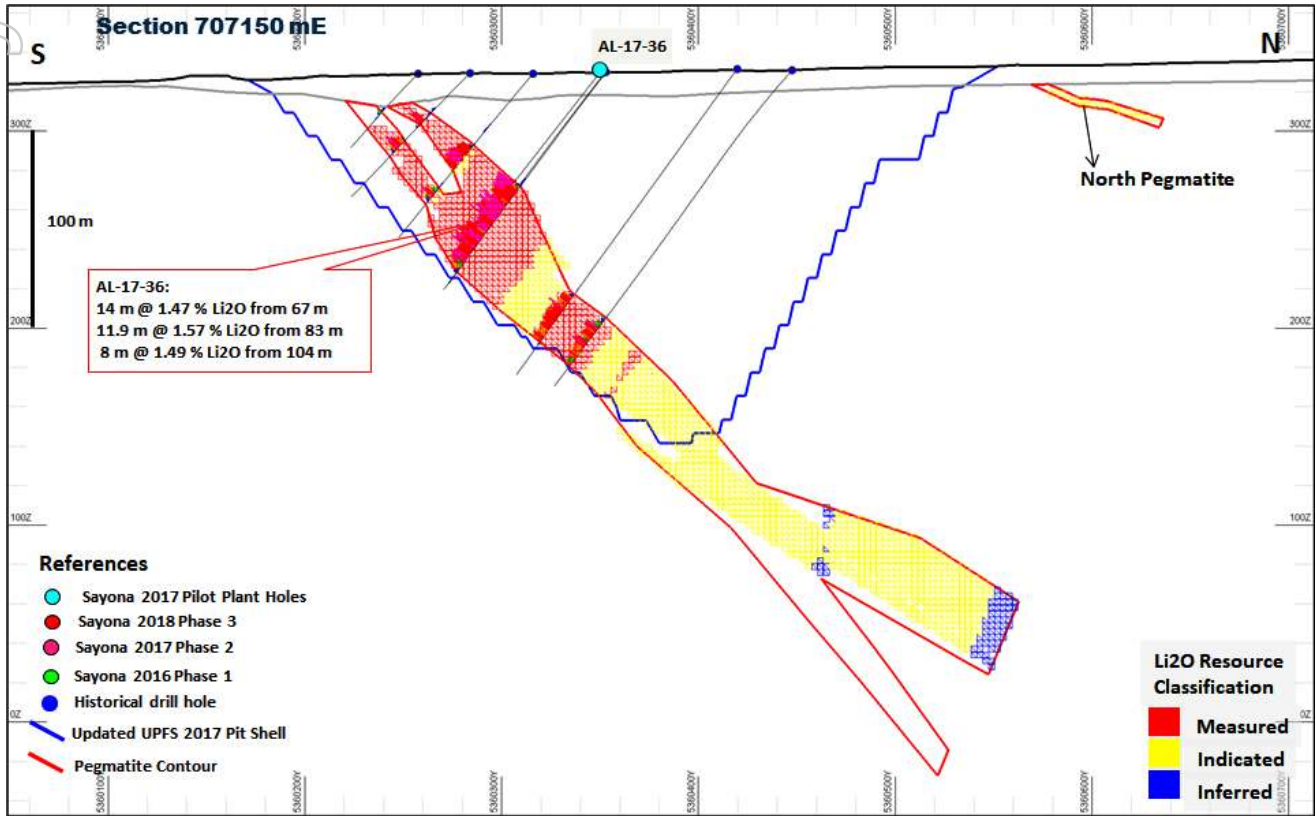


Figure 6: Section 707150 mE (looking west) showing location and mineralized interval for metallurgical PQ diamond holes AL-17-36 (same pad than historical holes AL-10-01 and R-93-25). Hole AL-17-36 was suspended before fully intercept the mineralised pegmatite due to technical problems with the rig and finished in mineralised pegmatite at a depth of 112 m.

Appendix 1 - JORC TABLES

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. 	<ul style="list-style-type: none"> All holes reported in this program have been Diamond Core Drill holes (DDH) Diamond core typical sample length is 1.0 metre starting 2 to 3 metres above and below of the contact of the pegmatite with the barren host rock. High to low grade lithium-bearing mineralisation (spodumene) is visible during geological logging and sampling. The core selected for metallurgical sampling was full core. Full core samples were dispatched to a

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information. 	<p>certified commercial laboratory for preparation and analysis of lithium according to industry standard practices.</p> <ul style="list-style-type: none"> Sample preparation and assaying techniques are within industry standard and appropriate for this type of mineralisation.
Drilling techniques	<ul style="list-style-type: none"> Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc). 	<ul style="list-style-type: none"> Core drilling, core diameter size PQ. Standard tube and bit. Core was not oriented for metallurgical drilling. In previous campaign of Sayona core was oriented using a Reflex ACT III tool. All core drilling before 2016 was NQ core diameter size, standard tube and bit, not oriented.
Drill sample recovery	<ul style="list-style-type: none"> Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material. 	<ul style="list-style-type: none"> Diamond drill hole core recoveries and RQD are logged. Measurements are taken systematically down hole between core blocks i.e. ~3 metre increments. Core recovery has been above 99%. Based on drilling method being diamond core and the near 100% core recovery the sampling is representative. High competence of the core tends to preclude any potential issue of sampling bias
Logging	<ul style="list-style-type: none"> Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. The total length and percentage of the relevant intersections logged. 	<ul style="list-style-type: none"> For this 2018 drilling campaign and for metallurgical sample collection, not oriented core was collected and therefore no alfa and beta angle readings were performed. Geological logging of main characteristics such as rock type, spodumene abundance and grain size, mica abundance, etc. has occurred in summary and detail at the pegmatite intervals and surrounding host rock. For this campaign RQD and core recovery was systematically performed both, pegmatite and host rock. The geological and geotechnical logging is at an appropriate level for the stage of development drilling being undertaken.

Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> • The logging of the geological features was predominately qualitative. Parameters such as spodumene abundance and spodumene grain size are visual estimates by the logging geologist. • Core is photographed after metre marks and sample intervals have been clearly marked on the core. The core was photographed dry and wet. The core boxes were identified with Box Number, Hole ID, From and To using aluminum tags. • The entire target mineralisation type core (spodumene pegmatite) and surrounding barren host rock has been logged, sampled and assayed. The footwall and hanging wall barren host rock has been summary logged.
<p><i>Sub-sampling techniques and sample preparation</i></p>	<ul style="list-style-type: none"> • <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i> • <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i> • <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i> • <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i> • <i>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</i> • <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i> 	<ul style="list-style-type: none"> • Full core PQ diameter samples were sampled metre by metre and placed in a plastic bag along with the sample tag sent for analysis. No remaining sample was left in core box. • Sampling boundaries are based in geological contacts of spodumene-bearing pegmatite with host rock. • In general at least two host rock sample were collected each side from the contacts with the mineralised pegmatite. • Sample preparation and analysis of drill core samples collected during the 2018 metallurgical drilling program was completed at the SGS Canada Inc laboratory ("SGS") facilities in Lakefield, Ontario and follow industry best practice, involving oven drying, crushing and pulverizing to respect the specifications of the analytical protocol. • Sample sizes are considered appropriate with regard to the grain size of the sampled material
<p><i>Quality of assay data and laboratory tests</i></p>	<ul style="list-style-type: none"> • <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i> • <i>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations</i> 	<ul style="list-style-type: none"> • Assaying of all 2018 pilot plant program sample received at SGS were processed according to the following procedure at the SGS preparation facilities in Lakefield, Ontario. All samples are inspected and compared to the chain of custody (COC) and logged into the SGS laboratory management system, then weighed and dried.

Criteria	JORC Code explanation	Commentary
	<p><i>factors applied and their derivation, etc.</i></p> <ul style="list-style-type: none"> • <i>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</i> 	<ul style="list-style-type: none"> • The analytical protocol used at SGS Lakefield is Li using sodium peroxide fusion followed by IC-OES finish and Whole Rock Analysis (major elements) using X-ray fluorescence (XRF76V) with majors by Lithium metaborate fusion. Fusion involves melting the sample with flux and casting it into a glass disc. • No geophysical or handheld tools were used. • Quality control protocol ("QA/QC") involve a review of laboratory supplied internal QA/QC. • For this metallurgical program Sayona did not performed in-house controls consisting in the insertion of in-house reference standards (high and low grade, prepared with material of the project and certified by lab round-robin) and samples of "barren" material (blanks), on a systematic basis with the samples shipped to SGS.
<p><i>Verification of sampling and assaying</i></p>	<ul style="list-style-type: none"> • <i>The verification of significant intersections by either independent or alternative company personnel.</i> • <i>The use of twinned holes.</i> • <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i> • <i>Discuss any adjustment to assay data.</i> 	<ul style="list-style-type: none"> • All the pegmatite intersections and assay results have been reviewed by the Competent Person and Sayona's geologist and personnel. • Lithium (ppm) reported in assays is converted to Li₂O by multiply Li (ppm) X 2.153 (conversion factor) • The entire metallurgical drilling program conducted by Sayona in 2017 was logged by 2 geologists, a Sayona's employee and Sayona's Competent Person using technicians from the Company contracted Services Forestiers et d'Exploration GFE ("Services GFE"). Services GFE provided the office, core logging and storage facilities to the Company which are located less than 4 km southeast from the Authier project near the town of La Motte. • The core boxes were photographed and are available for verification at Services GFE storage facilities less than 4 km southeast from the Authier project. • All PQ drill holes were drill in same drilling pad than both previous Sayona's and historical holes. No comparison has been yet performed. • Primary data was recorded on laptop computers directly into standardized Excel

Criteria	JORC Code explanation	Commentary
		<p>logging templates with built in look-up codes. This information is merged with the assay certificate data into a Sayona's in-house database</p> <ul style="list-style-type: none"> • No adjustments to assay data have been undertaken. •
<p><i>Location of data points</i></p>	<ul style="list-style-type: none"> • <i>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</i> • <i>Specification of the grid system used.</i> • <i>Quality and adequacy of topographic control.</i> 	<ul style="list-style-type: none"> • Drill collar locations coordinates were surveyed using handheld Garmin GPS. Drill collar will be surveyed by professional surveyor at the end of this drilling campaign. • Downhole surveys (dip and azimuth) for 2018 drilling were collected as single shot readings using a Reflex tool. Measurements are made at the beginning (25 m below surface) and at the end of the hole length. An intermediate measure was done when drill hole length exceeded 150 m. • Collar positions previous to 2016 have been surveyed and the survey values are recorded as the final coordinates and hole orientation in the database by an independent and qualified land surveyor. • The grid system used is 1983 North American Datum (NAD83) • The level of topographic control offered by the collar survey is considered sufficient for the work undertaken at its current stage.
<p><i>Data spacing and distribution</i></p>	<ul style="list-style-type: none"> • <i>Data spacing for reporting of Exploration Results.</i> • <i>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</i> • <i>Whether sample compositing has been applied.</i> 	<ul style="list-style-type: none"> • Drill holes were drilled perpendicular to the lithium mineralised pegmatite as shown on the attached plan. • Drill collars were sited to provide the best geological information possible to test the grade, strike and vertical extensions of mineralisation. • The data spacing is sufficient to estimate geological and grade continuity of observed mineralisation and therefore to produce a JORC compliant mineral resource estimate. • Sample compositing has not been applied.
<p><i>Orientation of data in relation to geological structure</i></p>	<ul style="list-style-type: none"> • <i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering</i> 	<ul style="list-style-type: none"> • Drilling grid orientation is perpendicular to the strike of the mineralisation determined by previous mapping and historical

Criteria	JORC Code explanation	Commentary
	<p><i>the deposit type.</i></p> <ul style="list-style-type: none"> <i>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</i> 	<p>drilling.</p> <ul style="list-style-type: none"> No bias attributable to orientation of sampling upgrading of results has been identified.
<i>Sample security</i>	<ul style="list-style-type: none"> <i>The measures taken to ensure sample security.</i> 	<ul style="list-style-type: none"> All reasonable measures have been taken to ensure sample security along the value chain. These measures include the sample collection by company's field personnel, recording of sample dispatch and receipt reports, secure delivering of samples to SGS laboratory facilities.
<i>Audits or reviews</i>	<ul style="list-style-type: none"> <i>The results of any audits or reviews of sampling techniques and data.</i> 	<ul style="list-style-type: none"> No audit or review of the sampling techniques and data for this release has been carried out. The quality control protocols implemented at Authier Lithium deposit are considered to represent good industry practice and allow some assessment of analytical precision and accuracy. The assay data is considered to display acceptable precision.

Section 2 - Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> <i>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</i> <i>The security of the tenure held at the time of reporting along with any known impediments to obtaining a license to operate in the area.</i> 	<ul style="list-style-type: none"> The Authier Lithium Property consists in one block of map designated claim cells located at the border between the La Motte Township and the Preissac Township, totaling 20 claims covering 674.89 ha. The Property extends 3.4 km in the east-west direction and 3.1 km north-south. From the 20 claims composing the Property, 3 claims were acquired by staking on November 27, 2009 (CDC 21955725) and July 9, 2010 (CDC 2240226 and 2240227), 15 claims were acquired through two separate purchasing agreements and one claim is held under an option agreement. On March 17, 2017 Sayona signed and option-to-purchase agreement to acquire 100 % of tenement CDC

Criteria	JORC Code explanation	Commentary
		<p>2187652 located along strike to the east of the main Authier deposit.</p> <ul style="list-style-type: none"> • Sayona is conducting exploration work under valid intervention permits delivered by the Quebec Government, and there is no known environmental liabilities pertaining to the Property. Some of the claims containing mineral resources are subject to mining royalties • Approximately more than 75% of the mineral resources are present inside the 3 claims (CDC 2183454-2183455 and 2194819). About less than 25% of the estimated mineral resources are present inside the claim (CDC2116146). • The spodumene-bearing pegmatite intrusion is located on claims number CDC 2183455, 2194819 and 2116146, and extends at surface between approximately 707,050mE and 707,775mE in the East-West direction, and between 5,359,975 mN and 5,360,275 mN in the North-South direction. • The Property is adjacent to a protected area reserved for groundwater catchment supply located just the north of the Property, which has been excluded for exploration and mining activities. • Sayona is conducting exploration work under valid forest intervention permit delivered by the provincial Ministère des Ressources Naturelles et de la Faune ("MRNF"). As of the date of this report, the Company confirmed having valid work permits.
<p>Exploration done by other parties</p>	<ul style="list-style-type: none"> • <i>Acknowledgment and appraisal of exploration by other parties.</i> 	<ul style="list-style-type: none"> • The Property has been explored in the 1950's and 1960's for volcanic nickel-copper sulfides mineralisation, and later for lithium mineralisation since the late 1960's with the discovery of a significant spodumene-bearing pegmatite intrusion. The Property saw significant amount of exploration work between 1966 and 1980 with delineation drilling programs from 1991 until 1999 with bulk sampling and metallurgical testing programs. • The project has more than 31,000 metres of drilling in 231 diamond holes,

Criteria	JORC Code explanation	Commentary
		<p>including 5 tonnes of pegmatite in 7 holes drilled for metallurgical purposes.</p> <ul style="list-style-type: none"> • The project was initially drilled between 1991 and 1999, and then by Glen Eagle between 2010 and 2012. • In 2010, Glen Eagle secured the mining rights and completed exploration work as well as 1,905 m of diamond drilling totaling 18 holes targeting the deposit. During 2011, Glen Eagle drilled a total of 4,051 m mainly on the Authier pegmatite deposit and other areas. In 2012, Glen Eagle drilled a total of 3,034 m mainly on the Authier Pegmatite deposit and other areas. • Sayona has completed three phases of drilling totalling 11,367 metres of drilling in 81 holes (includes 19 holes for 910 metres at Authier North).
Geology	<ul style="list-style-type: none"> • <i>Deposit type, geological setting and style of mineralisation.</i> 	<ul style="list-style-type: none"> • The deposit is hosted in a spodumene-bearing pegmatite intrusion. The deposit is 1,100 metres long, striking east-west, with an average thickness of 25 metres, minimum 4 metres and maximum 65 metres, dipping 40 degrees to the north.
Drill hole Information	<ul style="list-style-type: none"> • <i>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:</i> <ul style="list-style-type: none"> ○ <i>easting and northing of the drill hole collar</i> ○ <i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i> ○ <i>dip and azimuth of the hole</i> ○ <i>down hole length and interception depth</i> ○ <i>hole length.</i> • <i>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</i> 	<ul style="list-style-type: none"> • In December 2017 Sayona drilled 7 diamond core holes for 769.5 metres, PQ diameter, to collect 5.5 tonnes of pegmatite material for pilot plant test.
Data aggregation methods	<ul style="list-style-type: none"> • <i>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</i> • <i>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for</i> 	<ul style="list-style-type: none"> • No weight averaging or high-grade cut has been applied to any of the sample assay results. • The assays shown in TABLE 1 in the body of this release are direct measurements of each composite sample: Composite 1 (Years 0-5) and Composite 2 (Years 5+) respectively,

Criteria	JORC Code explanation	Commentary
	<p>such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</p> <ul style="list-style-type: none"> The assumptions used for any reporting of metal equivalent values should be clearly stated. 	<p>used to feed the plant.</p> <ul style="list-style-type: none"> Metal equivalent values have not been reported.
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known'). 	<ul style="list-style-type: none"> Drilling has been sited to intersect the lithium mineralisation orthogonally. Drilling widths reported are downhole intercept widths and true width is approximately 90 % of drilling width.
Diagrams	<ul style="list-style-type: none"> Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views. 	<ul style="list-style-type: none"> Results of the Phase 2 Metallurgical Testing Program Drill hole details are reported in the body of this announcement as TABLE 1.
Balanced reporting	<ul style="list-style-type: none"> Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results. 	<ul style="list-style-type: none"> The reporting is considered to be balanced.
Other substantive exploration data	<ul style="list-style-type: none"> Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances. 	<ul style="list-style-type: none"> The Sayona 2018 diamond drilling campaign was conducted after Sayona 2016 Stage 01 and Sayona 2017 Stage 02 drilling campaigns and the Glen Eagle 2010-2012 diamond drilling campaigns which were preceded by prospecting, geochemical sampling and geophysical surveys that covered the Property targeted areas. This work confirmed the presence of several pegmatite occurrences across the Property having a similar geochemical signature to the main Authier pegmatite. Approximately 5.5 tonnes of mineralised pegmatite ore was collected during the Phase 3 drilling program in December 2017. The diamond drill core was assayed and stage-crushed to the appropriate particle size to feed the pilot plant. Two composite pilot plant feed samples have been prepared to represent Years 0 to 5

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Criteria	JORC Code explanation	Commentary
		<p>and Years 5+ of the operation (see Table 1).</p> <ul style="list-style-type: none"> • The pilot plant operated for over 100 hours at a feed rate of 50 kg/hour and produced over 400 kg of spodumene concentrate. The pilot plant flowsheet included grinding, de-sliming, magnetic separation, mica and spodumene flotation (Figure 1). • The optimised pilot flowsheet was able to achieve a concentrate grading 6.0% Li₂O at a 79% recovery. The piloting program has confirmed the final process flow sheet and operating parameters for the Definitive Feasibility Study. • In addition, prior to the pilot plant operation, a number of batch and locked-cycle testing programs were run to confirm the optimal conditions for the final pilot testing program. The results (see Figure 2) were similar to historical testing programs incorporated into the Pre-Feasibility Study, including: <ul style="list-style-type: none"> • Batch flotation testing – up to 6.0% Li₂O concentrate grade at 82% recovery; and • Locked cycle testing – composite 1 achieved 5.85% Li₂O concentrate grade at 84% recovery and composite 2 achieved 5.86% Li₂O concentrate grade at 83% recovery. • Previous to pilot plan program, a Phase 2 metallurgical testing was conducted aiming to improve the overall recovery and grade of the project through optimization of the flotation process. The test work also aimed to reduce processing operating costs. The testing program was managed by DRA/Met-Chem and the test work was completed at SGS Lakefield. • The new metallurgical testing program was undertaken with a new representative sample of the Authier deposit from drill core. The new sample represents the average grade and expected mineralogy of the deposit over the life-of-mine. The sample was collected from four diamond drill cores and totaled approximately 52 kilograms.

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		<ul style="list-style-type: none"> • Additional metallurgical test work / flowsheet optimisation is planned for the Definitive Feasibility Study. Sayona will further evaluate flowsheet variability performance based on weathering and lithology domains. • Details of previous metallurgical test work are described in Sayona PFS ASX releases dated on February 16, 2017.
Further work	<ul style="list-style-type: none"> • <i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i> • <i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i> 	<ul style="list-style-type: none"> • Sayona’s Project Development strategy is detailed as follows: <ul style="list-style-type: none"> ○ Completion of Environmental studies and Definitive Feasibility Studies; ○ Negotiating production off-take agreements; and ○ Sourcing development finance and constructing the project.