SAYONA MINING LIMITED

ASX ANNOUNCEMENT

ASX: **SYA**

1 March 2022

SAYONA DOUBLES QUÉBEC LITHIUM RESOURCE BASE AMID SURGING DEMAND

Highlights

- **Sayona's Québec lithium resource base swells following upgraded estimates for the combined North American Lithium (NAL) and Authier projects, with total JORC combined Measured, Indicated and Inferred Mineral Resource of 119.1 million tonnes (Mt) @ 1.05% Li_2O (refer table and notes below)**

- **JORC Mineral Resource estimate for NAL, the first since its acquisition in 2021, identifies a total Measured, Indicated and Inferred Mineral Resource of 101.9 Mt @ 1.06% Li_2O**

- **Expanded combined NAL-Authier resource base to support significant upgrade to integrated definitive feasibility study, amid surging demand for lithium supply in North America.**

Emerging lithium producer Sayona Mining Limited (ASX:SYA; OTCQB:SYAXF) has further enhanced its leading position in North America's lithium sector following new and upgraded Mineral Resource estimates for its flagship North American Lithium and Authier Lithium Projects in Québec, Canada.

Following independent studies by consultants BBA Inc and SGS Canada Inc, the JORC compliant lithium resource base for the two projects has approximately doubled to **119.1 Mt @ 1.05% Li_2O** (refer Table 1 and resource statement notes), with the total Canadian National Instrument 43-101 Measured and Indicated Mineral Resource statement rising to 87.8 Mt @ 1.05% Li_2O.

The identification of the first underground constrained resources at NAL, taking advantage of higher grade mineralisation at depth, together with significant inferred mineralisation within the open pit constrained estimation offers scope for further future resource increases under the NI 43-101 reporting code.

Sayona's Managing Director, Brett Lynch said: "*This expansion is a major achievement for Sayona as we further enlarge our leading lithium resource base in North America. Since the start of 2020, we have now grown our Québec resource base nearly six times and with further increases expected soon from Moblan.*

"With lithium prices surging on the back of an increasing structural supply deficit, our upcoming definitive feasibility study for an integrated NAL-Authier operation, expected in coming weeks, is set to show significantly enhanced profitability for the benefit of shareholders."

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Mineral Resource Estimates: NAL & Authier

JORC Code (2012) compliant and NI43-101 Mineral Resource estimates for the NAL and Authier deposits have been prepared for release to ASX and Canadian markets respectively and are presented in Tables 1 and 2 below.

Table 1: JORC Mineral Resource Estimates, NAL and Authier.

NAL – Open Pit Constrained Mineral Resource Statement using a 0.6% Li_2O cut-off			
Category	**Tonnes**	**Li_2O %**	**Contained Li_2O (t)**
Measured	1,471,000	0.99	14,600
Indicated	52,806,000	1.01	533,300
Measured and Indicated	54,277,000	1.01	548,200
Inferred	13,874,000	0.96	133,200
NAL – Underground Constrained Mineral Resource Statement using a 0.8% Li_2O cut-off			
Category	**Tonnes**	**Li_2O %**	**Contained Li_2O (t)**
Measured			
Indicated	19,398,000	1.18	228,900
Measured and Indicated	19,398,000	1.18	228,900
Inferred	14,372,000	1.19	171,000

NAL – Total Open Cut and Underground Mineral Resource Statement			
Category	**Tonnes**	**Li_2O %**	**Contained Li_2O (t)**
Total JORC Resource (Measured, Indicated and Inferred)	**101,921,000**	**1.06**	**1,081,300**

Authier – Open Pit Constrained Mineral Resource Statement using a 0.55% Li_2O cut-off			
Category	Tonnes	Li_2O %	Contained Li_2O (t)
Measured	6,042,000	0.98	59,200
Indicated	8,098,000	1.03	83,400
Measured and Indicated	14,140,000	1.01	142,800
Inferred	2,996,000	1.00	30,000
Authier – Total Mineral Resource Statement			
Category	**Tonnes**	**Li_2O %**	**Contained Li_2O (t)**
Total JORC Resource (Measured, Indicated and Inferred)	**17,136,000**	**1.01**	**173,000**

Total Mineral Resource Statement NAL and Authier			
Category	**Tonnes**	**Li_2O %**	**Contained Li_2O (t)**
NAL and Authier JORC Mineral Resource Estimate (Measured, Indicated and Inferred)	**119,057,000**	**1.05**	**1,250,000**

JORC Mineral Resource Statement Notes – NAL

- Mineral Resources were prepared in accordance with the JORC Code (2012)
- Mineral Resources that are not mineral reserves do not have demonstrated economic viability. There is no certainty that all or any part of the Mineral Resources estimated will be converted into Mining Reserves.
- Effective date 14 February 2022.

- This estimate of Mineral Resources may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant issues.
- Open pit Mineral Resource statement is reported at a cut-off grade of 0.60 % Li_2O
- The underground Mineral Resource statement is reported at a cut-off grade of 0.80% Li_2O
- Cut-off based on a spodumene concentrate prices of US$970/tonne for a 6% Li_2O concentrate
- Exchange rate of 1.32 CAD/USD
- Drillhole composites average 2m in length.
- Block size is 5 x 5 x 5m with sub-blocking.
- Estimation was completed using ordinary kriging in Datamine™ software with dynamic anisotropy search ellipse.
- Appropriate mining costs, processing costs, metal recoveries, and inter ramp pit slope angles were used by BBA to generate the pit shell.
- Numbers rounded to the closest 100t. Rounding may result in apparent summation differences between tonnes, grade, and contained metal content.
- Tonnage and grade measurements are in metric units.

JORC Mineral Resource Statement Notes – Authier

- The Mineral Resource estimate has been estimated in accordance with the JORC Code (2012)
- Mineral Resources that are not mineral reserves do not have demonstrated economic viability. There is no certainty that all or any part of the Mineral Resources estimated will be converted into Mining Reserves.
- Bulk density of 2.71 t/m^3 is used.
- Effective date 6 October 2021.
- Only Blocks centroids had to be inside the pit to be considered.
- Pit used: Authier20210821_977.dxf
- Rounded to the nearest thousand. Rounding may result in apparent summation differences between tonnes, grade, and contained metal content.
- This estimate of Mineral Resources may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant issues.
- Open pit Mineral Resource statement is reported at a cut-off grade of 0.55 % Li_2O
- Cut-off based on a spodumene concentrate prices of US$977/tonne for a 6% Li_2O concentrate
- Exchange rate of 1.32 CAD / USD
- Drillhole composites average 1.5m in length.
- Block size is 3 x 3 x 3m.
- The retained grade interpolation for the Authier lithium Mineral Resource block model is the inverse distance square (ID2) methodology.
- Revised pit optimisation parameters were provided by BBA to generate the pit shell.

The NI43-101 compliant Foreign Estimates of mineralisation for the NAL and Authier deposits are tabulated below.

Table 2: NI43-101 Mineral Resource Estimates, NAL and Authier.

NAL – Open Pit Constrained Mineral Resource Statement using a 0.6% Li_2O cut-off			
Category	**Tonnes**	**Li_2O %**	**Contained Li_2O (t)**
Measured	1,471,000	0.99	14,600
Indicated	52,806,000	1.01	533,300
Measured and Indicated	54,277,000	1.01	548,200
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NAL – Underground Constrained Mineral Resource Statement using a 0.8% Li_2O cut-off			
Category	**Tonnes**	**Li_2O %**	**Contained Li_2O (t)**
Measured			
Indicated	19,398,000	1.18	228,900
Measured and Indicated	19,398,000	1.18	228,900
Inferred	14,372,000	1.19	171,000
NAL – Total Open Cut and Underground Mineral Resource Statement			
Category	**Tonnes**	**Li_2O %**	**Contained Li_2O (t)**
Total NI43-101 Measured and Indicated	73,675,000	1.05	777,100
Total NI43-101 Inferred	28,246,000	1.08	304,200

Authier – Open Pit Constrained Mineral Resource Statement using a 0.55% Li_2O cut-off			
Category	**Tonnes**	**Li_2O %**	**Contained Li_2O (t)**
Measured	6,042,000	0.98	59,200
Indicated	8,098,000	1.03	83,400
Measured and Indicated	14,140,000	1.01	142,800
Inferred	2,996,000	1.00	30,000
Authier – Total Mineral Resource Statement			
Category	**Tonnes**	**Li_2O %**	**Contained Li_2O (t)**
Total NI43-101 Measured and Indicated	**14,140,000**	**1.01**	**142,800**
Total NI43-101 Inferred	**2,996,000**	**1.00**	**30,000**

Total Mineral Resource Statement NAL and Authier			
Category	**Tonnes**	**Li_2O %**	**Contained Li_2O (t)**
Total NI43-101 Measured and Indicated	**87,815,000**	**1.05**	**919,900**
Total NI43-101 Inferred	**31,242,000**	**1.07**	**334,200**

Cautionary Note: National Instrument 43-101 is a national instrument for the Standards of Disclosure for Mineral Projects within Canada. The Mineral Resources stated are foreign estimates and are not reported in accordance with JORC Code. See Table 1 above for JORC (2012) Resource Reporting for the NAL and Authier projects.

Mineral Resource Statement Notes – NAL

- Mineral Resources were prepared in accordance with NI 43-101, Definition Standards (2014)
- Mineral Resources that are not mineral reserves do not have demonstrated economic viability.
- This estimate of Mineral Resources may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant issues.
- Open pit Mineral Resource statement is reported at a cut-off grade of 0.60 % Li_2O
- The underground Mineral Resource statement is reported at a cut-off grade of 0.80% Li_2O
- Cut-off based on spodumene concentrate prices of US$970/tonne for a 6% Li_2O concentrate
- Exchange rate of 1.32 CAD/USD
- Drillhole composites average 2m in length.
- Block size is 5 x 5 x 5m with sub-blocking.
- Estimation was completed using ordinary kriging in Datamine™ software with dynamic anisotropy search ellipse.
- Appropriate mining costs, processing costs, metal recoveries, and inter ramp pit slope angles were used by BBA to generate the pit shell.
- Rounding may result in apparent summation differences between tonnes, grade, and contained metal content.
- Tonnage and grade measurements are in metric units.

Mineral Resource Statement Notes – Authier

- The Mineral Resource estimate has been estimated using the Canadian Institute of Mining, Metallurgy and Petroleum (CIM) Definitions Standards for Mineral Resource and Mineral Reserve in accordance with National Instrument 43-101 – Standards of Disclosure for Mineral Projects)
- Mineral resources that are not mineral reserves do not have demonstrated economic viability.
- Bulk density of 2.71 t/m^3 is used.
- Effective date 6 October 2021.
- Only Blocks centroids had to be inside the pit to be considered.
- Pit used: Authier20210821_977.dxf
- Rounded to the nearest thousand.
- This estimate of mineral resources may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant issues.
- Open pit Mineral Resource statement is reported at a cut-off grade of 0.55 % Li_2O
- Cut-off based on a spodumene concentrate prices of US$977/tonne for a 6% Li_2O concentrate
- Exchange rate of 1.32 CAD / USD
- Drillhole composites average 1.5m in length.
- Block size is 3 x 3 x 3m.
- The retained grade interpolation for the Authier lithium Mineral Resource block model is the inverse distance square (ID2) methodology.
- Revised pit optimisation parameters were provided by BBA to generate the pit shell.

NAL Resource Calculations

The Mineral Resource statements for the NAL deposit are based on 2.m composite analytical data, no top-cut, and a 0.60% Li_2O cut-off grade for open pit and 0.80% Li_2O cut-off for underground.

The estimation was based on an Ordinary Kriging (OK) interpolation in Datamine™ software.

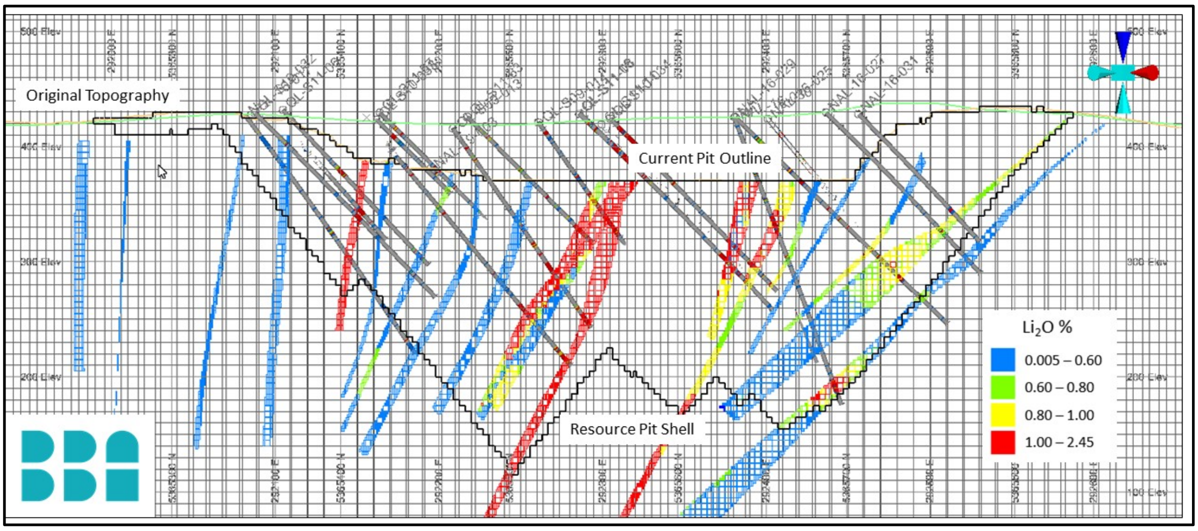

Figure 1: NAL Drillhole Cross Section (centred 292800E, 5365600N) with Lithium Grade Block Model

A block size of 5m (N-S) by 5m (E-W) by 5m (vertical) with sub-celling was selected for the resource block model of the project based on drill hole spacing, width and general geometry of mineralisation. The model is rotated 50° around the Z axis to align with the general strike of the pegmatite dykes.

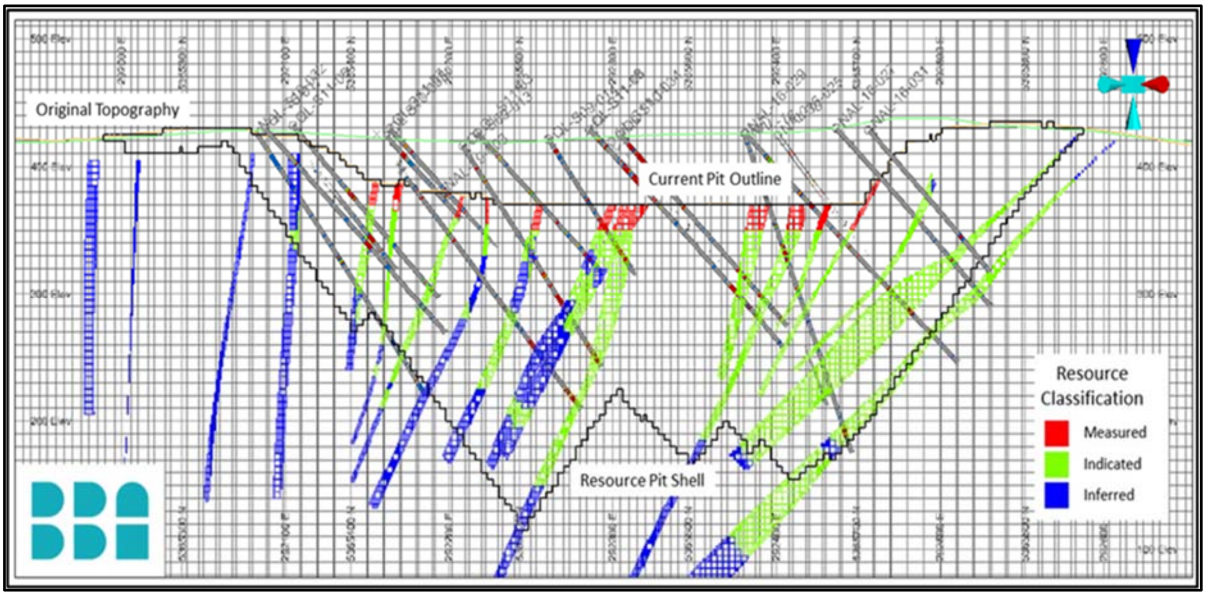

Figure 2: NAL Drillhole Cross Section (centred 292800E 5365600N) with Resource Classification Block Model

Three dimensional mineralised wireframes were generated in Leapfrog™ software to domain the Li_2O data using the pegmatite and aplite geology code over a minimum drill hole interval length of 2m. Variable search ellipse orientations using dynamic anisotropy was used to interpolate the blocks with a search criterion of a minimum number of composites, maximum number of composites and maximum number of composites per drillhole.

For the Measured Resource category, the blocks were within 20m of the current pit limit. For the Indicated category, all remaining blocks in the first search pass not classified as measured or any blocks in the second search ellipse with more than eight composites were classified as Indicated. All remaining blocks were in the Inferred category.

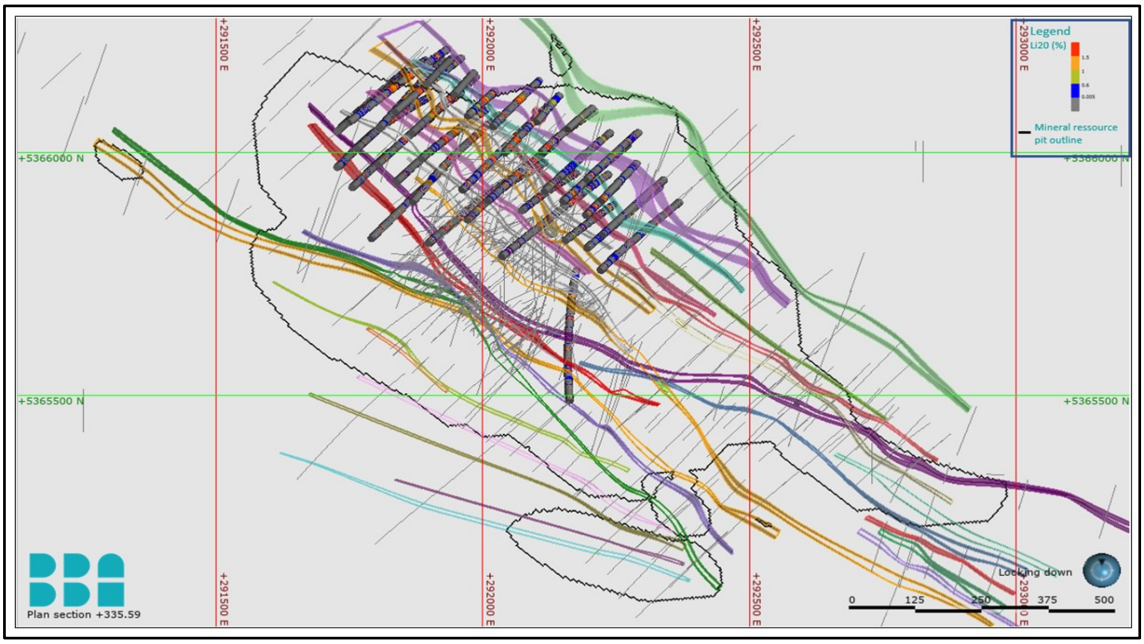

Figure 3: Plan View of NAL Open Pit, Drillholes and Pegmatites

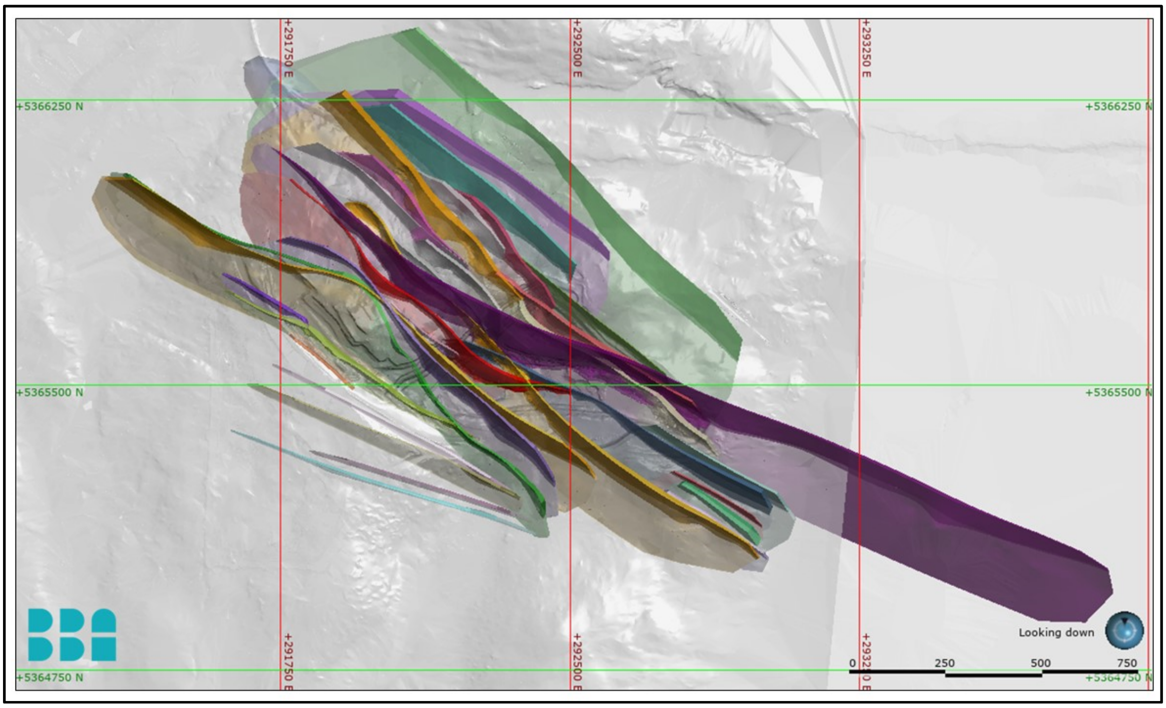

Figure 4: Plan 3D view of NAL Pegmatite Models

NAL Due Diligence

All scientific and technical information in this release has been reviewed and approved by Todd McCracken, P.Geo., Director – Mining and Geology – Central Canada for BBA, Competent Person under the definition of the JORC Code(2012) and the qualified person (QP) under the definitions established by National Instrument 43-101.

__Authier Resource calculations__

Completion of the current updated Mineral Resource Estimate involved the assessment of a drill hole database, which included all data for drilling completed through early 2018, an updated three-dimensional (3D) geologically controlled wireframe model, revised pit optimisation parameters from BBA, review of the classification of the mineral resource estimate (Measured, Indicated and Inferred) and review of available written reports.

The Mineral Resource statement for the Authier deposit is based on 1.5m composite analytical data, and a 0.55% Li_2O cut-off grade for the open pit. The estimation was based on Inverse Distance Squared (“ID2”) restricted to a geologically controlled wireframe model.

A block size of 3m (NE-SW) by 3m (NW-SE) by 3m (vertical) was selected for the resource block model based on drill hole spacing, width and general geometry of mineralisation but primarily by the selected SMU from the advanced feasibility study.

The 3m vertical dimension corresponds to the bench height of a potential small open pit mining operation. The 3m NE-SW dimension corresponds to the selected degree of selectivity for any potential future mining. It also accounts for the variable geometry of the mineralisation in that direction.

Mineralisation was interpolated using a search ellipsoid distance of 50m (long axis) by 50m (intermediate axis) and 25m (short axis) with an average orientation of 90° azimuth (local grid), -55° dip and 0° spin which represents the general geometry of the pegmatites in the deposit.

The final mineral resources include the resource blocks located within the optimised pit shell, below the overburden/bedrock interface and above the cut-off grade of 0.55% Li_2O established by Sayona. Variable search ellipse orientations were used to interpolate the blocks with a search criterion of a minimum number of composites, maximum number of composites and maximum number of composites per borehole.

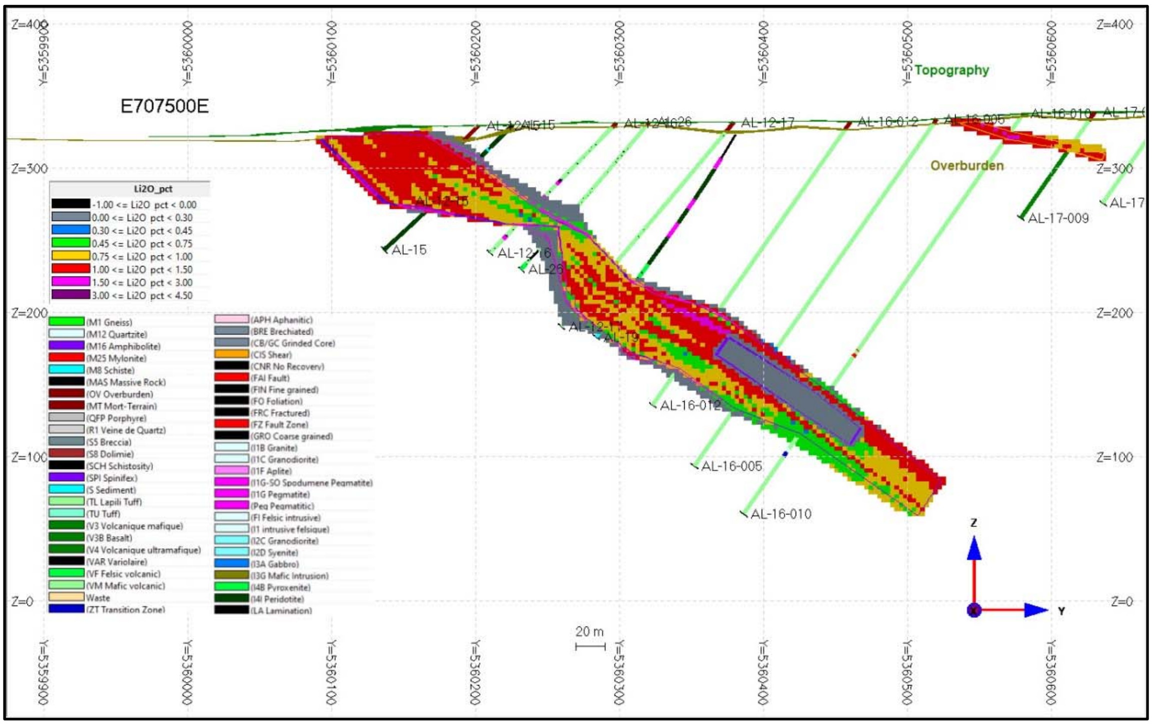

__Figure 5: Authier Drillhole Cross Section 707500E with Lithium Grade__

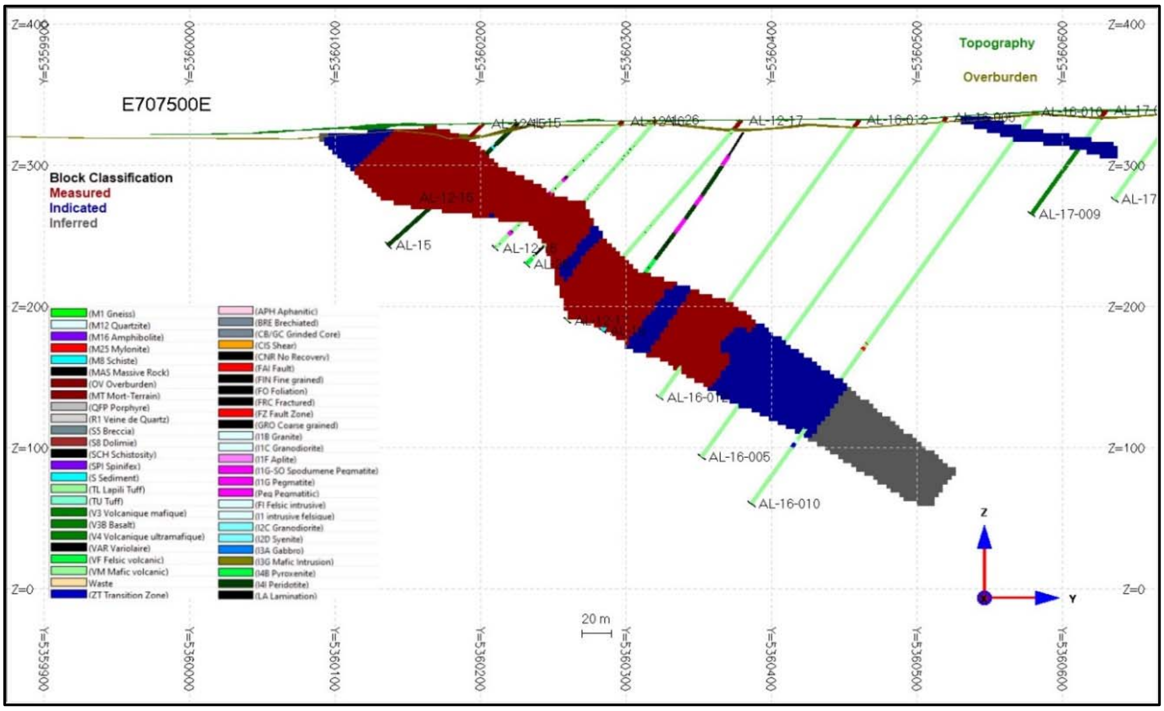

Figure 6: Authier Drillhole Cross Section 707500E with Resource Classification Block Model

An ellipse fill factor of 55% was applied to the measured category i.e., that only 55% of the blocks were tagged as measured within the search ellipse. For the Indicated category, the search ellipsoid was twice the size of the Measured category ellipsoid using the same composite selection criteria. An ellipse fill factor of 55% was applied to the Indicated Category. All remaining blocks were considered to be in the inferred category.

A second classification stage involved the manual addition of indicated block clusters into the Measured category. The objective was to smooth the spotted dog effect most evident in the Measured category and, to take into account the geological continuity and grade. The second stage consisted of the re-assignment of selected Indicated blocks within the Measured category general area into the Measured category. The second classification stage also involved the manual transfer of indicated blocks clusters into the Inferred category. The objective was to assign a more appropriate classification to areas where the density and quality of geological information was insufficient.

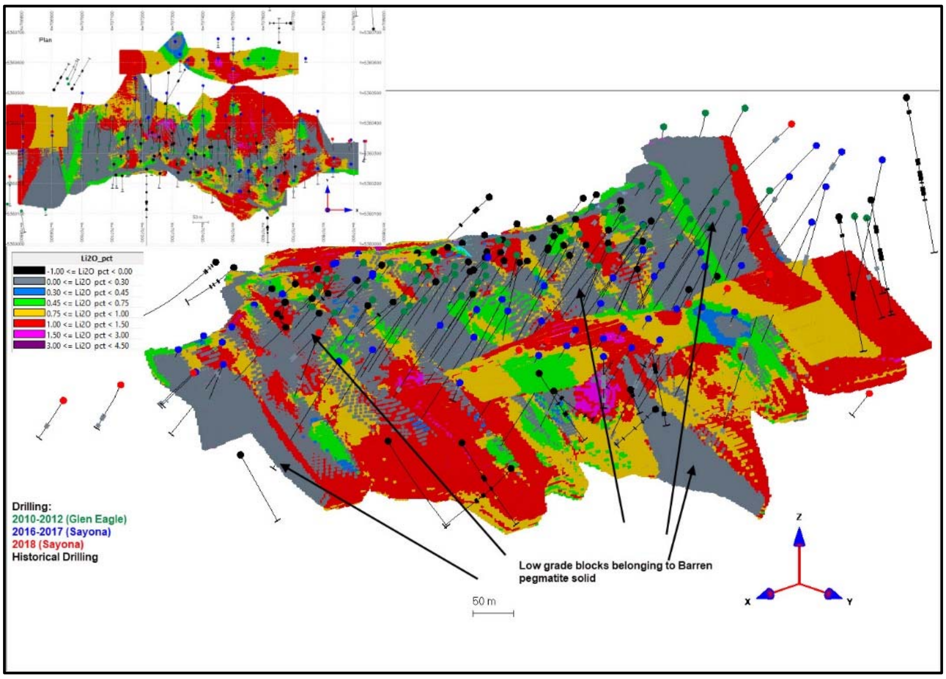

Figure 7: Authier Interpolated Block Model in Plan and Isometric Views

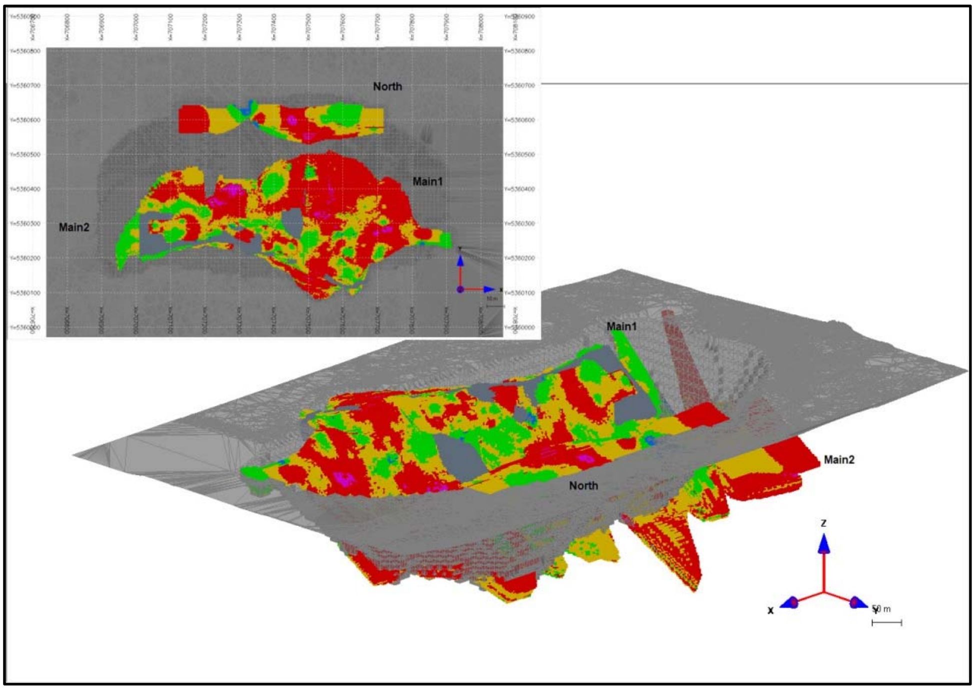

Figure 8: Authier Block Model Displaying Li_2O Block Model and Open Pit Shell

Mineral Resource Estimate – North American Lithium (Summary Information Required by Listing Rule 5.8.1)

Geology and Geological

The pegmatite dykes are hosted within granodiorite of the Lacorne batholith (granodiorite (ca. 2,650-2,760 Ma: Steiger and Wasserburg 1969, Feng and Kerrich 1991) and metavolcanics and minor biotite schists. The principal units are discussed below, but a more complete description can be found in Lavery, M.E. and Stone, M. 2010.

The granodiorite is massive, coarse grained to porphyritic, medium grey to greenish grey in colour and exhibits a salt-and-pepper appearance. Granodiorite locally contains fragments of the same composition or that are slightly enriched in muscovite. The main mineral constituents of granodiorite are light grey to greenish white plagioclase (40-45 vol%), dark green to black amphibole, most likely hornblende (15-20 vol%), mica (20 vol%), represented by biotite and muscovite, grey quartz (10-15 vol%) and minor epidote, chlorite and disseminated sulphides. The grain size ranges from 0.5mm to 5mm.

Volcanic rocks on the property are represented by dark green mafic metavolcanics and medium grey silicified intermediate volcanics. The mafic metavolcanic rocks are medium grey to dark grey-green colour and cryptocrystalline to very fine grained. The metavolcanic rocks are predominantly massive, but locally exhibit compositional banding, in which the amphibole is slightly coarser grained. Some mafic volcanic rocks are weakly to moderately foliated, with minor dark green amphibole-dominant bands and irregular patches that mainly follow the foliation. Overall, the mafic volcanic rocks are very hard to scratch and locally magnetic.

Both mafic and intermediate volcanic rocks are affected by moderate to strong pervasive silicification, minor chloritization and patchy to pervasive lithium alteration. There is alteration of the green hornblende in proximity to the spodumene pegmatite. There are also amphibolites that are fine grained, weakly foliated and dark green. A salt-and-pepper appearance occurs locally where plagioclase is more dominant; amphibolite is hard to scratch. Amphibolites are affected by strong pervasive potassic alteration, visible as biotitization and pervasive or patchy lithium alteration.

Three different types or facies of pegmatite dykes have been identified based on mineralogy and textures: PEG1, PEG2 and PEG3, which are described below. The main differences between the three types of pegmatite dykes are the amount of spodumene in the dyke, the feldspar and quartz content, the texture of the pegmatite and the presence or absence of zoning.

PEG1 dykes are zoned. Five mineralogical/textural zones have been identified and are described as intersected in drill core from stratigraphic top to bottom:

- Border zone: 2cm to 10cm of medium grained white to pale grey pegmatite, mainly composed of plagioclase and quartz without spodumene.
- Spodumene zone: Medium to coarse grained pegmatite, with 35-40 vol% quartz and 40-45 vol% plagioclase, and white to pale yellowish green interstitial crystals of spodumene (5-20 vol%). Spodumene crystals are typically perpendicular to the dyke walls but can be randomly oriented. Spodumene content increases towards the centre of the dyke. The width of the zone varies from several centimetres up to 25m. Rocks with a medium grained, more aplitic appearance are included in this spodumene bearing zone; however, this aplitic rock could be a different generation of vein.
- Quartz core: 5cm to 50cm zone of massive, medium to coarse grained grey quartz, with very rare plagioclase or spodumene crystals. Spodumene near the quartz core is white, elongated, and crystals up to 10cm long and 1cm wide were observed in outcrop.
- Spodumene zone: Medium to coarse grained pegmatite, 35-40 vol% quartz, 40-50 vol% plagioclase, with white euhedral and pale yellowish green interstitial crystals of spodumene (5-20 vol%) and rare aggregates of mica (biotite). The size of the spodumene crystals varies from 0.2cm to 14cm.

- Border zone: 1cm to 10cm fine grained aplitic zone. Distinct change in grain size and colour. The pegmatite becomes fine grained and uniformly grey, mainly composed of quartz-plagioclase-K-feldspar.

PEG2 dykes are not zoned and are coarse to medium grained, light grey and with pale yellowish green crystals of spodumene (5-15 vol%), grey quartz (35-40 vol%), white megacrystals of plagioclase and K-feldspar (40-50 vol% and most likely albite and orthoclase), occasional millimetre-sized garnets, light coloured mica that is possibly lepidolite, flakes of biotite, specks of molybdenite, very rare chalcopyrite surrounded by brownish anhedral mineral with resinous lustre that is possibly sphalerite. The spodumene mineralisation occurs from contact to contact with no apparent zonation; concentration varies from 2-3 vol% to approximately 20 vol%.

Spodumene crystals can be both tabular and needle-shaped within the same intersection. Euhedral crystals are common, while preferred orientations are exhibited by some spodumene crystals and can form both the matrix or fill the interstices between larger quartz, plagioclase and K-feldspar grains as observed in the 2016 drilling campaign and shown in Figure 7.4. In Figure 7.5, spodumene megacrystals in PEG2 are shown oriented perpendicular to the contact in drill hole QL-S09-026. Observed locally, Figure 7.6 shows a preferential orientation for spodumene crystalline clusters.

PEG3 dykes are quartz dominant and contain less than 1% spodumene. They are medium to coarse grained, light pink-grey to medium grey creamy pink colour, with black or grey patches of mica, i.e. biotite and muscovite. Megacrystals of mica form up to 40% of the rock locally. PEG3 dykes are variable in width from 0.4m to 8.0m, contain small vugs and are very hard to scratch and cut.

Over 30 spodumene-bearing dykes have been interpreted on the property, some of which were successfully traced in surface exposures over more than 700m along strike and nearly 70m vertically down pit walls. The dykes intrude the granodiorite from the Lacorne batholith and the mafic volcanics. They are dominantly bearing south easterly and dipping steeply to the SW with splays, splits and bends that were observed, mapped and correlated from bench to bench in the pit. This main structural trend is locally confronted with a secondary structural orientation striking east westerly with dykes and splays developing as conjugated sets.

The dykes were found to be geometrically relatively continuous once exposed over long distances and across several benches in the pit. Figure 7.7 shows dykes exposed in the pit. The spodumene dykes can vary in width from one another going from tens of centimetres, up to 90m, are interpreted to extend for several hundred metres in length and can also vary in thickness. Most of the dykes greater than approximately 3m in width are spodumene-bearing. Occurrences of spodumene are widely yet variably spread throughout the dykes in swarms and licks, displaying faint greenish shades, when present, and sometimes locally revealing large centimetric to decimetric crystal gradation in clusters.

Karpoff (1955) made the following observations on the spodumene within the pegmatite dykes based on surface drilling and underground workings, keeping in mind that the pegmatite dykes dip to the south and the granodiorite-volcanic contact dips to the north:

- The richest concentration of spodumene occurs at or near the granodiorite-volcanics contact;
- At a distance of 500 ft to 600 ft (~150-200m) above the contact in the volcanic rocks, the pegmatite dykes become weak, narrow and low grade;
- In the granodiorite, the pegmatite dykes remain strong and become low in spodumene only at a distance of 1,600 ft (~500m) below the contact;
- The amount of spodumene decreases with an increase in pink orthoclase feldspar. The K-feldspar begins to appear in the dykes within the granodiorite at a distance of about 1600 ft (~500m) below the contact;
- The spodumene is white to light green in the mafic volcanic rocks and buff to light grey in the granodiorite. The spodumene crystals are also finer grained in the mafic volcanic rocks;

- The iron content in the spodumene is higher in the mafic volcanic rocks above the contact than in the granodiorite;
- The grade and uniformity of the spodumene pegmatite dykes are affected by the degree of orientation of the crystals. The parts of the dykes in which the crystals lie at any direction, i.e. have random orientation, are lower than the well-oriented sections;
- Structural considerations suggest that the zone of pegmatitic dykes will have a depth extension of some 2,500 ft (~760m) down the contact.

The current interpreted mineralised system extends more than 2km in the NW-SE direction, over a width of approximately 800m and remains largely open at depth. There appears to be one persistent subset of dykes that strikes obliquely, east westerly, to this main orientation.

Drilling Techniques and Hole Spacing

Sayona Mining has not conducted any drilling on the property since acquiring it. All drilling was conducted by previous operators.

A total of 1,232 diamond drillholes have be completed on the property, with 586 drilled on surface and 646 drilled from underground. Of the holes drilled, 434 were used to interpret the dyke geology and 270 used in the grade estimation. Only holes drilled after 2008 were used in the grade estimation. All drillholes used in the grade estimation are NQ core diameter size.

The drillhole programs have downhole survey measured by the drill operators, approximately every 15m, using a Flexit testing instrument while the hole was being drilled. Upon completion of the hole, Multishot tests were recorded every 3m down the hole.

Surface holes were typically drilled perpendicular to the strike of the mineralised pegmatite to provide high confidence in the grade, strike and vertical extensions of the mineralisation.

In the 2009 drilling program, six main spodumene dykes were tested, and their locations confirmed. Enough information was obtained in this program to support the historical geological model and the conceptual target. Part of this program was specifically designed to twin old (LV) holes. This program consisted of 38 NQ-sized diamond drill holes (DDH) and one wedge. Approximately 9,646m were drilled, surveyed, and sampled. Nine holes were abandoned because of technical difficulties or inappropriate down hole deviation and were re-drilled (~ 470m).

The 2010 drilling program consisted of 45 NQ-sized diamond drill holes. Approximately 6,938m were drilled, surveyed, and sampled during the second quarter of 2010. Additionally, eight geotechnical drill holes were drilled, surveyed, and sampled.

The holes were drilled on 14 sections intersecting spodumene pegmatite dykes, approximately perpendicular to their strike (overall NW-SE); hole bearings were approximately 45°. The dykes generally dip 70° to 75° toward the south or southwest.

The 2011 drilling program consisted of 63 NQ-sized diamond drill holes totalling 12,003m. The holes were drilled on 14 sections intersecting spodumene pegmatite dykes, approximately perpendicular to their strike (overall NW-SE); hole bearings were approximately 45°. The dykes generally dip 65° to 75° toward the south or southwest.

Upon gaining ownership of the property, North American Lithium Corp. launched an infill and extension drilling program in the fall of 2016.

Starting in October 2016 and ending shortly before year end, this program consisted of 50 NQ-sized diamond drill holes, including four redrills, totalling approximately 8,911m.

The holes were drilled along nine sections targeting the Naud dyke, a new body of mineralisation first encountered during the excavation of the pit in 2012-2014, and along 13 sections targeting dyke extensions to the eastern fringe of the deposit, where the pit could likely expand. Most holes intersected mineralisation except for two drill holes posing as condemnation drill holes placed to test the southernmost portion of the system under a waste pile on the southern edge of the pit. The drill holes intersected several spodumene pegmatite dykes, which largely conformed with the revised interpretation, giving further credence and support to the geological model. The holes were invariably drilled on bearings of 45° and approximately perpendicular to the general strike and dip of the mineralised dyke bodies; overall NW-SE and generally dipping 70° to 75° south or southwest.

North American Lithium Corp launched a drilling campaign in May 2019 to define Phase 2 of the open pit. The program consisted of 42 NQ-sized diamond drill holes totalling 11,487m. Of the 1,487m drilled, surveyed, and logged, 3,976 samples totalling approximately 4,471m were collected. Due to financial constraints only 308 samples were sent for analysis.

The most recent geological model was largely well supported by the results of the 2019 drilling. The deposit comprises a series of steeply-dipping, spodumene-bearing pegmatite dykes that bifurcate and coalesce in a pattern locally suggesting a broad conjugate fracture system. Dyke true thicknesses were found to range from decimetric to decametric as observed in outcrops and in the pit, where they were mapped systematically.

Sampling and Sub-Sampling

Drill core HQ diameter samples were cut to two halves, with one half placed in a new plastic bag along with the sample tag sent for analysis. The other half was replaced in the core box with the second sample tag for reference.

Sampling boundaries are based in geological contacts of spodumene-bearing pegmatite with host rock.

Sample sizes are considered appropriate with regards to the grain size of the sampled material.

Sample Analysis Method

From 2009 to 2011, a primary laboratory and a check laboratory were used for the analyses. In 2009, the core samples were prepared at SGS Lakefield and analysed either in Lakefield or at the Toronto, Ontario, laboratories using a sodium peroxide fusion with atomic absorption spectrometry, method 9 8 40, to determine the % Li content. SGS monitored the quality of the assays with internal pulp duplicates, blanks and standards for every batch. SGS uses NBS-181 and NBS-183 standards as ore grade lithium internal standards. Check samples were prepared for selected samples from a split from the pulps remaining after primary analysis. These samples were packaged by SGS Lakefield and sent by couriers to the ALS Vancouver laboratory.

Both SGS (Lakefield and Toronto) and ALS are accredited for ISO/IEC 17025:2005 and ISO 9001 by the Standards Council of Canada.

In 2010, the primary laboratory was ALS and the check laboratory were AGAT Laboratories Ltd. (AGAT). The samples were prepared at ALS Val-d'Or and analysed in Vancouver using a four-acid digestion with ICP-AES finish, method Li-OG63, to determine the % Li content of the pulverised core samples. ALS monitored the quality of the assays with internal pulp duplicates, blanks and standards for every batch. ALS uses NBS-181 as an ore grade lithium internal standard. Check analyses were completed on specially selected samples from a split from the pulps remaining after the pulps were returned to CLQ in Val-d'Or. The check samples were sent by courier to AGAT's laboratory in Mississauga, Ontario, and were also analysed by ICP-AES following four-acid digestion, which is AGAT's method 201070 and determines the Li (ppm) content for the pulverised core samples. Replicate analyses and blanks were used by AGAT to monitor assay quality. AGAT is also accredited for ISO/IEC 17025:2005 and ISO 9001 by the Standards Council of Canada. In 2011, ALS remained the primary laboratory and CLQ continued to use AGAT Laboratories for the umpire samples. The procedures used were the same as in 2010.

In 2016 and 2019, for sample preparation and primary analysis, the primary laboratory was Techni-Lab SGB (ActLabs), which operates a laboratory facility in Sainte-Germaine-Boulé, Quebec. The samples were delivered to the lab where they were prepared and analysed using a four-acid digestion with ICP-AES finish, method ICP-OES, to determine the % Li content of the pulverised core samples. Techni-Lab monitored the quality of the assays with internal pulp duplicates, blanks and standards for every batch. Coarse rejects and pulps were returned to the NAL mine site for storage and reference.

Check analyses were completed on specially selected samples from a split from the pulps remaining after the pulps were returned to the mine site. These samples were sent by courier to ALS Laboratory Group (ALS) of Vancouver for duplicate analyses. The check samples were also analysed by method Li-OG63, following four-acid digestion, to determine the %Li content for the pulverised core samples.

No geophysical or handheld tools were used.

Quality control protocols ("QA/QC") involve a review of laboratory supplied internal QA/QC and in-house controls, consisting of the insertion of in-house reference standards and samples of "barren" material ("blanks") on a systematic basis.

Mineral Tenement and Land Tenure Status

The NAL lithium property is in the northeast corner of La Corne township, approximately 38km southeast of Amos, 15km west of Barraute and 60km north of Val-d'Or, Quebec, Canada. The property is centred near coordinates 291,964 m E and 5,365,763 m N, Zone 18N as located on the NTS map sheet 32C5 and consists of 20 claims covering 699.9 hectares.

In addition to the mining rights described above, NAL holds five surface leases totalling 394.8 hectares on lands of the domain of the State, which it rents or plans to rent from the MERN for utilisation during mining operations.

All tenements covering the deposit are in good standing and there are no known impediments to obtaining a license to operate.

Estimation Methodology

The Mineral Resource Estimate for the NAL deposit is based on 2.0m composite analytical data, no top-cut, and a 0.60% Li_2O cut-off grade. The estimation was based on an Ordinary Kriging interpolation. A total of 434 drillholes were used for the solid modelling and 270 drillholes were used for the resource estimate (MRE).

A block size of five (5) m (N-S) by five (5) m (E-W) by five (5) m (vertical) rotated -50° around the Z axis. The block size was selected for the resource block model of the project, based on general geometry of mineralisation but primarily by the selected SMU for the open pit.

Thirty-two geological wireframes were generated using Leapfrog to define pegmatites over a minimum drill hole interval length of 2.5m. Wireframes were based on pegmatite lithology regardless of grade and contained interval of internal dilution (granodiorites or volcanics) to allow for geological continuity.

The interpolation process was conducted using three successive passes with more inclusive search conditions from one pass to the next until most blocks were interpolated. Variable search ellipse orientations were used to interpolate the blocks. The general dip direction and strike of the mineralised pegmatite were modelled on each section and then interpolated in each block. During the interpolation process, the search ellipse was orientated following the interpolation direction (azimuth-dip (dip direction) and spin (strike direction) of each block, hence better representing the dip and orientation of the mineralisation. Two search ellipses were created from variogram models based on the general trends of the dykes. The first search ellipsoid distance of 180m (long axis) by 70m (intermediate axis) and 70m (short axis). The second search ellipsoid distance of 90m (long axis) by 55m (intermediate axis) and 40m (short axis).

The first pass was interpolated using search conditions defined by a minimum of five composites, a maximum of 15 composites and a maximum of three composites per hole (minimum of two holes). The second pass used an ellipsoid twice the size of the first pass and used search conditions defined by a minimum of four composites, a maximum of 12 composites and a maximum of three composites per hole (minimum of two holes).

The third pass used an ellipsoid four times the size of the first pass and used search conditions defined by a minimum of four composites, a maximum of 12 composites and a maximum of three composites per hole (minimum of two holes).

All mined out blocks in the existing open pit and underground stopes were flagged as mines and are not included in the resource statement.

A default bulk density value was assigned to all pegmatite blocks based on samples collected and analysed by the water immersion method.

Resource Classification

The NAL Mineral Resource was classified as a Measured, Indicated and Inferred, based on sample spacing and geological/mineralisation continuity in accordance with the Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC 2012).

For the Measured resource category, blocks within the pegmatite are within 20m of the current open pit. The represent approximately two benches of potential production. For the Indicated category, blocks estimated in the first or second pass with a minimum of eight composites. All remaining blocks were assigned in the inferred category.

The input data is comprehensive in its coverage of the mineralisation and does not favour or misrepresent in-situ mineralisation. The definition of mineralised zones is based on high level geological understanding producing a model of mineralised domains. Validation of the block model shows good correlation of the input data to the estimated grades.

The Mineral Resource estimates appropriately reflect the view of the Competent Person.

Cut-off Grade

The Open Pit Mineral Resource has been reported at a 0.60% Li_2O cut-off. The Open Pit cut-off grade is based on the detailed economic analysis performed in the Pre-Feasibility Study and the target to generate a 6.0% Li_2O concentrate. The Underground Mineral Resource has been reported at a 0.80% Li_2O cut-off. The Underground cut-off grade is based on the economic analysis at a scoping study and the target to generate a 6.0% Li2O concentrate.

Mining and Metallurgical Methods and Parameters and Other Modifying Factors

Considering the geometry and the depth of the mineralised zone, the NAL Lithium deposit will be mined using open-pit mining methods. There is a reasonable prospect additional resources could be extracted from underground.

Based on the metallurgical test work conducted at Authier, a 6% Li_2O concentrate can be produced using conventional flotation technology suitable for a pegmatite orebody. The processing plant comprised seven key areas including three-stage crushing, grinding, magnetic separation, mica-flotation, spodumene flotation, concentrate filtration, and tailings thickening and filtration.

No dilution or ore loss factors have been taken into account in the JORC Resource.

SAYONA MINING LIMITED

Mineral Resource Estimate - Authier (Summary Information Required by Listing Rule 5.8.1)

Geology and Geological

The Authier property is located in the Southern Volcanic Zone of the Abitibi Greenstone Belt within the Superior Province of the Canadian Shield. The pegmatite dykes and other aplitic dykes and veins observed in the region are genetically derived from the late peraluminous plutons. In the project area the spodumene-bearing pegmatites observed on the property are genetically related to the Preissac-La Corne batholith, located 40km northeast of the city of Val-d'Or.

The property geology comprises intrusive units of the La Motte pluton to the north and Preissac pluton to the south, with volcano-sedimentary lithologies of the Malartic Group in the centre. The volcano-sedimentary stratigraphy is generally oriented east-west and ranges between 500m and 850m in thickness (north-south).

The northern border of the Preissac pluton, composed of granodiorite and monzodiorite, runs east-west along the southern edge on the property. To the north, muscovite monzogranitic units of the La Motte pluton cover the property. Numerous small pegmatites generally composed of quartz monzonite are intruding the volcanic stratigraphy including the larger spodumene-bearing pegmatite which is the focus of the current Mineral Resource estimate.

Mineralisation is hosted within spodumene-bearing pegmatite intrusions. The Authier project hosts two separate mineralised pegmatite systems, including:

- Authier Main - 1,100m long striking east-west, with an average thickness of 25m (ranging from 4m to 55m), dipping 40 to 50 degrees to the north. The deposit outcrops in the eastern sector and then extends up to 10m under cover in the western sector. The deposit remains open in all directions; and
- Authier North - 500m long striking east-west, with an average thickness of 7m (ranging from 6m to 8m), dipping at 15 degrees to the north. The Authier North pegmatite appears at shallow levels (15 to 25m vertical depth). The deposit remains open in all directions.

The lithium mineralisation at the Authier project is related to multiple pulses of spodumene bearing quartz-feldspar pegmatite. Higher lithium grades are related with high concentrations of mid-to-coarse spodumene crystals (up to 4cm long) in a mid-to-coarse grained pegmatite facies.

Drilling Techniques and Hole Spacing

The Authier drill database includes 192 drillholes for 31,123m with 5,049 assay intervals. Between 2010 and 2012, Glen Eagle completed 8,990m of diamond drilling in 69 DDH of which 7,959m were drilled on the Authier deposit; 609m (five DDH) were drilled on the northwest and 422m on the south-southwest of the property.

Sayona Mining has completed three phases of drilling totalling 11,367m in 81 DDH including metallurgical test works drill holes and condemnation drill holes). All the holes completed by Sayona and included in the Mineral Resource Estimate (MRE) were DDH, HQ or NQ diameter, standard tube and bit.

Sayona's Phase 1 (19 holes for 3,967m, September to November 2016) and Phase 2 (31 holes for 4,117 metres, January / May 2017) were performed using HQ diameter.

Sayona´s Phase 3 resource expansion drilling (17 holes for 2,170.45m, January to March 2018) was performed using NQ core diameter size.

Phase 3 drilling included a separate metallurgical diamond drilling programme completed in November to December 2017 encompassing seven holes for 769.5m (including 680m PQ core diameter and 89.5m of HQ core diameter) where five tonnes of pegmatite sample were collected and used in the pilot plant metallurgical test performed for this DFS. Metallurgical drilling core in Phase 3 was not included in the resource.

Phase 3 drilling also included Condemnation drilling which was performed in April 2018 consisting of six diamond core holes NQ diameter for 342.65m.

Sayona's diamond core was oriented using a Reflex ACT III tool for Phase 1 and Phase 2 whereas Phase 3 diamond core was not oriented. All core drilling before 2016 was NQ core diameter size, standard tube and bit, not oriented.

The new Mineral Resource Estimate has as a database cut-off date of 31 August 2021 and does not include the Sayona Phase 4 drilling which was completed after this date.

Holes were typically drilled perpendicular to the strike of the mineralised pegmatite to provide high confidence in the grade, strike and vertical extensions of the mineralisation.

Holes were drilled on grid patterns ranging from 30m x 30m up to 50m x 50m. The grid pattern is considered an adequate spacing for establishing geological and grade continuity along strike and down dip and therefore appropriate for defining Measured, Indicated and Inferred Resource categories within the resource area.

The drilling programs have been subject to robust QA/QC procedures.

Sampling and Sub-Sampling

Drill core HQ and NQ diameter samples were cut to two halves, with one half placed in a new plastic bag along with the sample tag sent for analysis. The other half was replaced in the core box with the second sample tag for reference. 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 on geological contacts of the spodumene-bearing pegmatite with the host rock.

In general, at least two host rock samples were collected each side of the contact with the mineralised pegmatite.

Sample preparation of drill core samples collected during the 2016, 2017 and 2018 drilling programs were completed at the SGS Canada Inc laboratory ("SGS") facilities in Sudbury, Ontario and follows industry best practice, involving oven drying, crushing and pulverising there to respect the specifications of the analytical protocol and then shipped to SGS Mineral Services laboratories in Lakefield, Ontario, for analysis.

Sample sizes are considered appropriate with regards to the grain size of the sampled material.

For sample preparation and sub-sampling techniques, and details of drill core samples before 2016, please refer to Table 1 of ASX release "Authier JORC Resource Estimate", 7 July 2016.

Sample Analysis Method

Assaying of all 2016, 2017 and 2018 drilling sample received at SGS were processed according to the following procedure at the SGS preparation facilities in Sudbury, 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. Sample material is crushed to 75% passing 10 mesh (2mm), split to obtain a 250g sub-sample which is then pulverised to 85% passing 200 mesh (75 microns).

The analyses of all 2016, 2017 and 2018 drilling sample were conducted at the SGS laboratory located in Lakefield, Ontario, which is an accredited laboratory under ISO/IEC 17025 standards accredited by the Standards Council of Canada.

The analytical protocol used at SGS Lakefield is the GE ICP91A 29 element analysis-sodium peroxide fusion, which involves the complete dissolution of the sample in molten flux for ICP-AES analysis. The detection limits for lithium are 10 ppm (lower) and 10,000 ppm (upper).

No geophysical or handheld tools were used.

Quality control protocols ("QA/QC") involve a review of laboratory supplied internal QA/QC and in-house controls, consisting of 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.

For Quality of Assay Data and Laboratory Tests of all samples before 2016, please refer to Table 1 of ASX release "Authier JORC Resource Estimate", 7 July 2016.

Mineral Tenement and Land Tenure Status

The project comprises 24 claims covering 884 hectares in a single contiguous block of mineral tenements located at the border between the La Motte Township and the Preissac township. The property extends 3.4km in the east-west direction and 3.1km north-south. Approximately 75% of the mineral resources are present inside the 3 claims (CDC 2183455, 2194819 and 2116145) and the rest in inside claims 2183454 and 2187652.

All tenements covering the deposit are in good standing and there are no known impediments to obtaining a license to operate.

Estimation Methodology

The Mineral Resource Estimate for the Authier deposit includes Authier Main and Authier North pegmatites and is based on an Inverse Distance Squared (ID2) interpolation, 1.5m composite analytical data no top-cut, and a 0.55% Li2O cut-off grade. A total of 192 drill holes were used for the solid modelling and updated resource estimate (MRE).

A block size of 3m (N-S) by 3m (E-W) by 3m (vertical) was selected for the resource block model of the project based on drill hole spacing, width and general geometry of mineralisation but primarily by the selected SMU from the advanced feasibility study. Three-dimensional mineralisation wireframes were modelled based on a nominal 0.4 % Li_2O lower cut-off at start and end of each mineralised interval over a minimum drill hole interval length of 2 metres as guideline to define the width of mineralised interpretations on sections. Based on the statistical analysis there is no need for grade capping. Sample data was composited to 1.5m down hole lengths.

An orientated 'ellipsoid' search was used to select data and was based on the observed lens geometry. The search ellipsoid was orientated to the average strike, plunge, and dip of pegmatite body.

Variable search ellipse orientations were used to interpolate the blocks. The general dip direction and strike of the mineralised pegmatite were modelled on each section and then interpolated in each block. During the interpolation process, the search ellipse was orientated following the interpolation direction (azimuth-dip (dip direction) and spin (strike direction) of each block, hence better representing the dip and orientation of the mineralisation.

Mineralisation was interpolated using a search ellipsoid distance of 50m (long axis) by 50m (intermediate axis) and 25m (short axis) with an average orientation of 90° azimuth (local grid), -55° dip and 0° spin which represents the general geometry of the pegmatites in the deposit.

The final mineral resources include the resource blocks located within the optimised pit shell, below the overburden/bedrock interface and above the cut-off grade of 0.55% Li2O established by SYA. Variable search ellipse orientations were used to interpolate the blocks with a search criterion of a minimum number of composites, maximum number of composites and maximum number of composites per borehole.

An ellipse fill factor of 55% was applied to the measured category i.e., that only 55% of the blocks were tagged as measured within the search ellipse. For the Indicated category, the search ellipsoid was twice the size of the Measured category ellipsoid using the same composite selection criteria. An ellipse fill factor of 55% was applied to the Indicated Category. All remaining blocks were considered to be in the inferred category.

The parent block dimensions used were 3m (N-S) by 3m (E-W) by 3m (vertical).

The block model size used in the Mineral Resource estimate was based on drill hole spacing, width and general geometry of mineralisation but primarily by the selected SMU from the advanced feasibility study.

Resource Classification

The Authier Lithium Mineral Resource was classified as a Measured, Indicated and Inferred, based on drilling density, sample spacing and geological/mineralisation continuity in accordance with the Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC 2012).

The Authier MRE presented in this report include the resource blocks located within the optimised pit shell, below the overburden/bedrock interface and above the cut-off grade of 0.55% Li2O established by Sayona. Variable search ellipse orientations were used to interpolate the blocks with a search criterion of a minimum number of composites, maximum number of composites and maximum number of composites per borehole.

The input data is comprehensive in its coverage of the mineralisation and does not favour or misrepresent in-situ mineralisation. The definition of mineralised zones is based on high level geological understanding producing a robust model of mineralised domains. This model has been confirmed by infill drilling which supported the interpretation. Validation of the block model shows good correlation of the input data to the estimated grades.

The Mineral Resource estimates appropriately reflect the view of the Competent Person

Cut-off Grade

The Mineral Resource has been reported at a 0.55% Li_2O cut-off. The cut-off grade is based on the detailed economic analysis performed in the Definitive Feasibility Study. The figure below demonstrates the grade and tonnage sensitivity to variation in the cut-off grade.

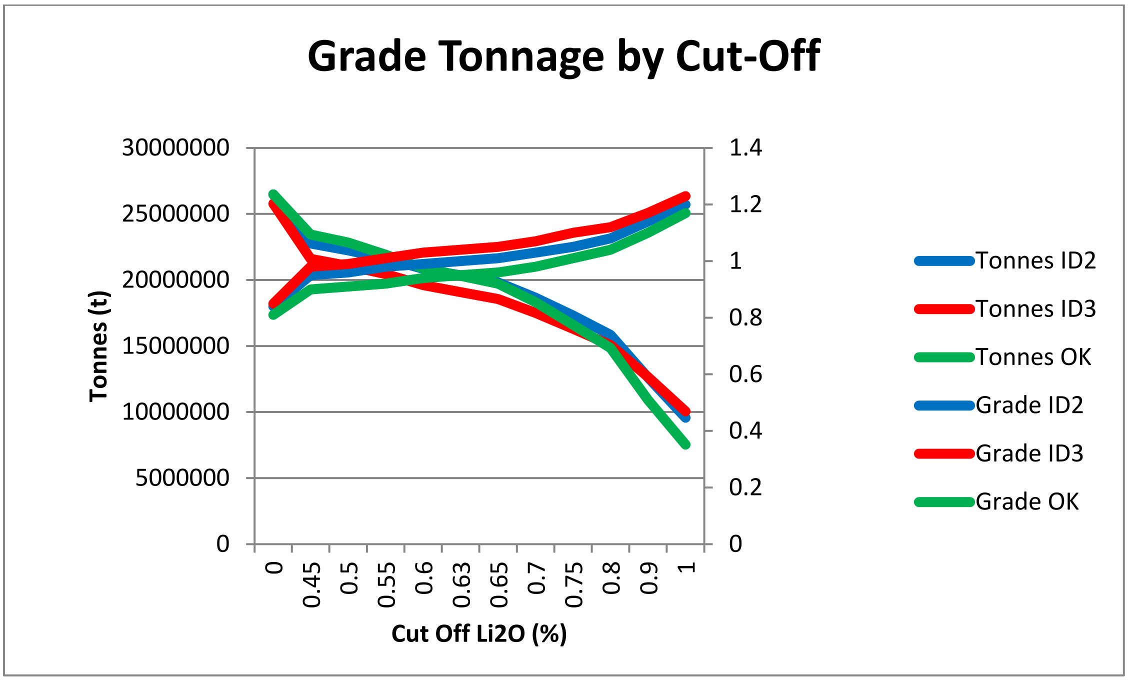

Figure 9 Grade Tonnage Curve depending on Type of Estimation

Mining and Metallurgical Methods and Parameters and Other Modifying Factors

Taking into account the geometry and the depth of the mineralised zone, the Authier Lithium deposit will be mined using open-pit mining methods.

Based on the metallurgical test work conducted at Authier, a 6% Li_2O concentrate can be produced using conventional flotation technology suitable for a pegmatite orebody. The processing plant comprised seven key areas including three-stage crushing, grinding, magnetic separation, mica-flotation, spodumene flotation, concentrate filtration, and tailings thickening and filtration.

No dilution or ore loss factors have been taken into account in the JORC Resource.

The locations of Sayona's Québec lithium projects are shown below.

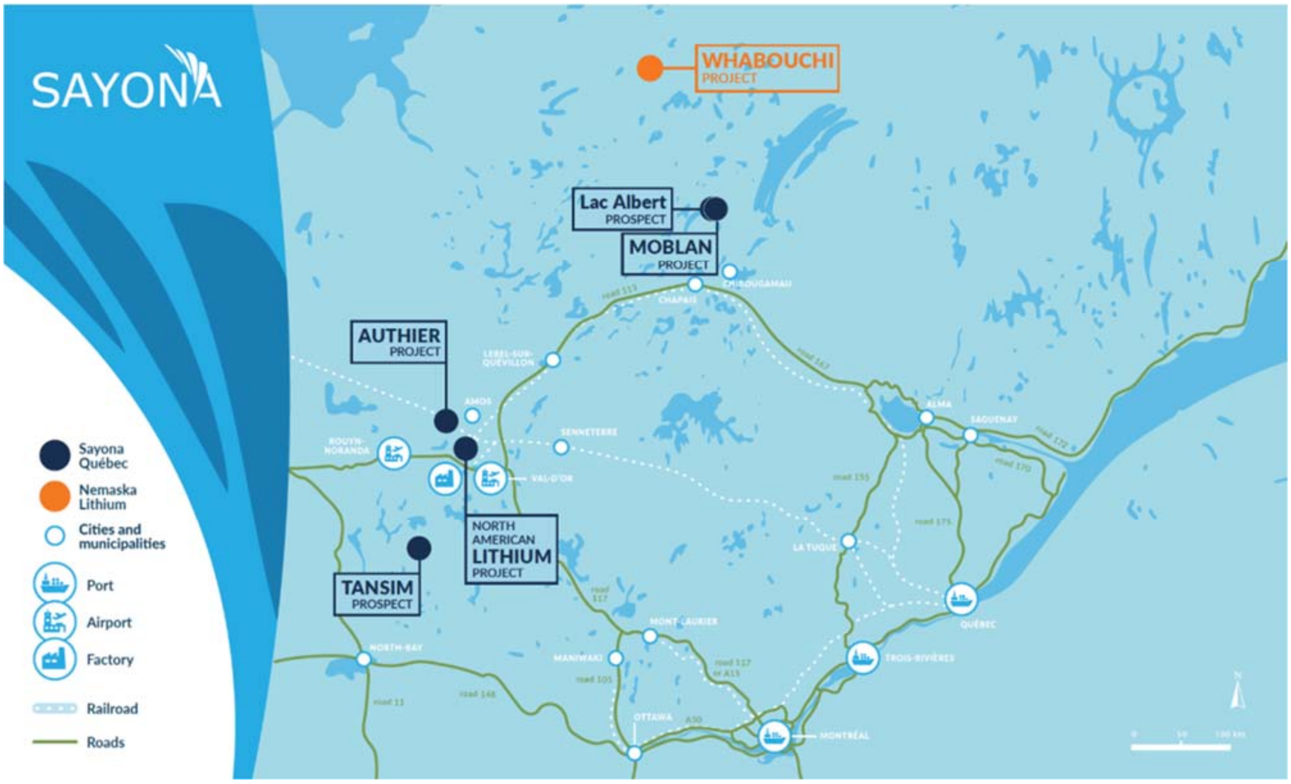

Figure 10 NAL and Authier Project Location Plan, Quebec

Corporate update – Acuity Capital facility

As part of the Company's capital management strategy, Sayona and Acuity Capital have agreed to increase the facility size of the At-the-Market Subscription Agreement ("**ATM**") (previously referred to as a Controlled Placement Agreement- see announcements on 29 October 2019, 26 October 2020, 29 April 2021 and 30 June 2021).

Sayona and Acuity Capital have agreed to increase the ATM facility size from $15 million to $50 million of standby equity capital to better reflect Sayona's increased market capitalisation on the Australian Securities Exchange.

As previously announced, to date the Company has utilised the ATM to raise a total of $6,450,000 (see announcement dates above). Following the increase in the ATM facility size to $50 million, the remaining standby equity capital available under the ATM is $43.55 million. The ATM expiry date remains 31 July 2023.

There is no requirement on Sayona to utilise the ATM and there were no fees or costs associated with the increase in and extension of the ATM. Further, no additional security has been provided or required in relation to the increased ATM limit.

The Board continues to monitor and manage Sayona's capital requirements to protect and enhance shareholder value.

Issued on behalf of the Board.

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About Sayona Mining

Sayona Mining Limited is an emerging lithium producer (ASX:SYA; OTCQB:SYAXF), with projects in Québec, Canada and Western Australia.

In Québec, Sayona's assets comprise North American Lithium together with the Authier Lithium Project and its emerging Tansim Lithium Project, supported by a strategic partnership with American lithium developer Piedmont Lithium Inc. (Nasdaq:PLL; ASX:PLL). The Company also holds a 60% stake in the Moblan Lithium Project in northern Québec.

In Western Australia, the Company holds a large tenement portfolio in the Pilbara region prospective for gold and lithium. Sayona is exploring for Hemi-style gold targets in the world-class Pilbara region, while its lithium projects are subject to an earn-in agreement with Morella Corporation (ASX:1MC).

For more information, please visit us at **www.sayonamining.com.au**

COMPETENT PERSON STATEMENTS

The information in this report that relates to Mineral Resources for the NAL project is based on information compiled by Mr Todd McCracken, a member of the Association of Professional Geoscientists of Ontario (PGO). Mr McCracken is a full time employee of BBA Inc, 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 qualifyas 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."

Mr McCracken supervised the preparation of the technical information in this release and has relevant experience and competence in the subject matter. Mr McCracken, as competent person for this announcement, has consented to the inclusion of the information in the form and context in which it appears herein.

The information in this report that relates to Mineral Resources for the Authier project is based on information compiled by Mr Maxime Dupéré, B.Sc., géo. a member of the Ordre des Géologues du Québec (OGQ). Mr Dupéré is an employee of SGS Geological Services, part of SGS Canada Inc, 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."

Mr Dupéré supervised the preparation of the technical information in this release and has relevant experience and competence in the subject matter. M. Dupéré, as competent person for this announcement, has consented to the inclusion of the information in the form and context in which it appears herein.

The information in this announcement that relates to Metallurgical Testwork for the Authier project is based on information compiled by Dr Jarrett Quinn, P.Eng., Ph.D., a registered member of the Ordre des Ingénieurs du Québec.

Dr Quinn is an independent consultant, employed by Jarrett Quinn Consultant Inc., 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 Quinn supervised the preparation of the technical information in this release and has relevant experience and competence in the subject matter. Dr Quinn, as competent person for this announcement, has consented to the inclusion of the information in the form and context in which it appears herein.

Appendix A

JORC Code, 2012 Edition – Table 1
North American Lithium (NAL) Project

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	▪ *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.* ▪ *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.*	▪ Historic information from a NI 43-101 prepared for a previous owner and discussion with NAL staff. ▪ Sampling was completed using core drilling sampling. During the 2009,2010,2011, 2016 and 2019 drill programs, core was laid in wooden boxes at the drill site, sealed with a lid and strapped with plastic binding. At the owner's core facility, the core was washed, logged, and split using a diamond blade saw under the on-site supervision of the geologist. After cutting, the core samples were sealed with a plastic cable tie in labelled plastic bags with their corresponding sample tag. The plastic bags were placed in large rice sacks and secured with tape and a plastic cable tie for shipping to the laboratory. ▪ Standards and blanks were inserted into the samples sequence prior to shipping. ▪ The drill core was washed, photographed, and logged prior to sampling for the majority of the holes.
Drilling techniques	▪ *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).*	▪ Historic information from a NI 43-101 prepared for a previous owner and discussion with NAL staff. ▪ Core Drilling ▪ Historical drilling includes drilling program in 2009 and 2010 by CCIC geologists, in 2011 by M.E. Lavery, P.Geo., and completed by two independent contract geologists. The same protocols for logging, core cutting, and sampling were used. ▪ In 2016, a drill program of 50 drillholes of NQ size was carry out for a total of 8,911m. This campaign was supervised by NAL Chief geologist Rémi Asselin, P. Eng., and two independent geologists. ▪ In 2019, a drill program of 42 drillholes of NQ size was carried out for a total of 11,487m. The campaign was supervised by the geology team of NAL.
Drill sample recovery	▪ *Method of recording and assessing core and chip sample recoveries and results assessed.* ▪ *Measures taken to maximise sample recovery and*	▪ Historic information from a NI 43-101 prepared for a previous owner and discussion with NAL staff. ▪ Core recovery for these programs, was typically

Criteria	JORC Code explanation	Commentary
	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.*	over 95%, with only occasional areas of sheared core with poor recovery. Inspection by the CP of the core confirms a high core recovery. ▪ Lengths were adjusted as necessary to reflect geological and/or mineralisation contacts, which periodically created the samples of less than 1m length. Pegmatite veins that were 0.4 m to 10 m in thickness were also sampled if spodumene was visible, except during the 2019 drill campaign. Longer sample lengths were taken of strongly sheared core or sections with poor core recoveries.
Logging	▪ *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.*	▪ Historic information from a NI 43-101 prepared for a previous owner and discussion with NAL staff. ▪ Core samples were logged geologically and geotechnically logged. ▪ Photograph of the core were taken systematically after core boxes were opened and laid out on the platform and, prior to any marking or cutting taking place, rock quality designation (RQD) measurements were generally taken at regular intervals of 6m, with the fracturing and recovery data being recorded. ▪ Logging was both quantitative and qualitative. ▪ In 2009, core logging was carried out by CCIC geologists and geological description and geotechnical information was recorded directly into core view v.5.0.0. software (Visidata Pty Ltd.) which was exported and backed up nightly on a secure data server. ▪ In 2010 the drill program, the nominal sample interval was 1m with more than 99.7% of the samples being 1 m or less. ▪ In 2011, the nominal sample interval was 1 m with more than 93% of the samples being 1 m or less. ▪ In 2016 drill program, the sample interval was 1m with more than 59% of the sample being 1 m or less. ▪ In 2019 drill program, the sample interval was 1m with more than 42% of the sample being 1 m or less.
Sub-sampling techniques and sample preparation	▪ *If core, whether cut or sawn and whether quarter, half or all core taken.* ▪ *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* ▪ *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* ▪ *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* ▪ *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.* ▪ *Whether sample sizes are appropriate to the grain size*	▪ Historic information from a NI 43-101 prepared for a previous owner and discussion with NAL staff. ▪ Core samples were sawn in half, with one half of the sample interval submitted for lithium analysis and the remainder kept for future testing and/or reference. ▪ Sampling protocol generally followed the procedures below: - Sample labels are placed at the start of each sample interval and the limits of these are clearly indicated by the geologist using coloured arrows red only. The footage should also be shown next to the red lines. From

Criteria	JORC Code explanation	Commentary
	of the material being sampled.	samples to determine their lithium (Li) + 28 other elements are collected systematically during the campaign. - To create representative samples and homogeneous, sampling must respect lithological contacts, i.e. no sample must not cross a major lithological limit, alteration limit or limit of mineralisation. - Samples are numbered in consecutive order using label booklets samples containing digital sequences of 50 durable sample labels in three pre-labelled copies (three labels per sheet). The first of the labels (part left) must remain in the label booklet and include the drillhole number and the interval. The second label should be stapled at the start of the sample directly on the core box to indicate the position of the sample in the box, for reference. She must indicate the limits of the interval. And the third tag should be inserted inside the bag samples and contain no information except the sample number already indicated.
Quality of assay data and laboratory tests	▪ *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* ▪ *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* ▪ *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.*	▪ Historic information from a NI 43-101 prepared for a previous owner and discussion with NAL staff. ▪ From 2009-2011 and 2016, a primary and a check laboratory were used for analyses. ▪ In 2009, the core sample were prepared and analysed either in Lakefield or at the Toronto, Ontario, laboratories using a sodium peroxide fusion with atomic absorption spectrometry, method 9-8-40, to determine the %Li content. ▪ For 2009, Check samples were prepared for selected samples from a split from the pulps remaining after primary analysis. The samples were packaged by SGS Lakefield and sent by couriers to the ALS Vancouver laboratory. ▪ In 2010-11, The primary laboratory was ALS and the check laboratory was AGAT Laboratories Ltd. The sample were prepared at ALS Val d'Or and analysed in Vancouver using four-acid digestion with ICP-AES finish, method Li-OG63, to determine the %Li content of the pulverised core sample. ▪ In 2016, the primary analysis was Techni-Lab. The samples were prepared and analysed using a four-acid digestion with ICP-AES finish, method ICP-OES, to determine the %Li content of the pulverised core samples. ▪ The check laboratory for 2016 was ALS Vancouver. ▪ The quality of the assay was monitored using internal pulp duplicates, blanks, and standards for every batch. QA/QC protocols included the insertion of standards and blanks, i.e. silica sand, directly into the sample sequence. CLQ created

Criteria	JORC Code explanation	Commentary
		customised lithium standards, i.e. ST-L (low grade) and ST-H (high grade), by the dilution of spodumene concentrate from the Tanco pegmatite mine in Manitoba with pulverised quartz. The spodumene concentrate was sent to Geoscience Laboratories for dilution, pulverisation to < 200 mesh and homogenisation. Additionally, several pulps were sent to a secondary laboratory as a check. ▪ In 2016, three standards were created mine material with pulps from the 2013 and 2014 NAL production drillholes. ▪ In 2019, a mobile SGS lab was set-up directly on site… The sample were prepared at SGS on site lab and analysed at SGS on site lab to determine the %Li content of the pulverised core sample.
Verification of sampling and assaying	▪ *The verification of significant intersections by either independent or alternative company personnel.* ▪ *The use of twinned holes.* ▪ *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* ▪ *Discuss any adjustment to assay data.*	▪ Historic information from a NI 43-101 prepared for a previous owner and discussions with NAL staff. ▪ In 2016, the firm InnovExplo were retained to perform a due diligence review of the drilling, core handling, sampling and QA/QC protocols elaborated by NAL. ▪ The 2009-2010 twinning program showed that due to logistics issues, some of the holes were not being true twins. ▪ BBA acknowledged InnovExplo findings and further investigated NAL's QA/QC protocol and data produced as part of the QP's due diligence review and documented the 2016 control charts. ▪ Insertion of sterile mine material labelled as "blank" in the sample stream to control contamination and sample handling errors. ▪ Insertion into the sample stream customised reference materials labelled as standards A, B and C, representing low grade (0.336% Li_2O0, about cut off grade (0.878% Li_2O) and high grade (1.567% Li_2O) material, respectively. These were sent to the primary laboratory alternatively to cover a range of values and material representative of the mineralisation at the mine. ▪ Each sample batch included one blank insertion and the insertion of standards (A, B and C), with QA/QC sample inserts accounting for 5 to 10% of the total material submitted. ▪ The results of the analyses were received by email in the form of signed certificates(.pdf) by the chemist and as Excel files, facilitating data capture. The latter were then easily imported into the Geotic Log database and then processed. ▪ The QA/QC reference data is converted in terms of %Li_2O, rather than % Li. ▪ As a conclusion, the sample preparation, security, analytical procedures, and results appear reasonable, diligently executed and in keeping with

Criteria	JORC Code explanation	Commentary
		the industry accepted practices.
Location of data points	▪ *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.* ▪ *Specification of the grid system used.* ▪ *Quality and adequacy of topographic control.*	▪ Historic information from a NI 43-101 prepared for a previous owner and discussion with NAL staff. ▪ 2016 and 2019 holes were first positioned and oriented by NAL personnel using a Trimble TSC3 precision GPS instrument, and collars were precisely surveyed by J.L Corriveau, a local surveying contractor. ▪ Drillhole deviation was punctually measured by the drill operator, approximatively every 15 m using a Flexit testing instrument, while multishot tests were recorded every 3 m along the hole upon closure. ▪ GPS coordinates of all collar locations were recorded and tied into the exploration grid.
Data spacing and distribution	▪ *Data spacing for reporting of Exploration Results.* ▪ *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.* ▪ *Whether sample compositing has been applied.*	▪ Historic information from a NI 43-101 prepared for a previous owner and discussion with NAL staff. ▪ The combination of all drilling from 2009 to 2019 results in a drill spacing of approximately 50m x 50m in the area of the deposit which constitutes the Pit Resources. However, the underground workings of the mine in the years 1955-65 made it difficult to respect this pattern. ▪ In this type of mineralisation, a 50m x 50m drilling pattern allows to clearly define the geological continuity of lithiniferous pegmatites, as much geometrical as by grade.
Orientation of data in relation to geological structure	▪ *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* ▪ *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.*	▪ Historic information from a NI 43-101 prepared for a previous owner and discussion with NAL staff. ▪ From the 2009 drilling Program, the holes drilled on eight sections intersecting spodumene pegmatite dykes, approximately perpendicular to their strike; overall NW-SE, hole bearing were typically 18 or 45 degrees. The dykes generally dip 70 to 75 degrees toward the south or southwest. Holes were angled typically at 45 or 60 degrees to cut the interpreted true width of the dyke in a close to normal intersection. ▪ From the 2010 drilling Program, the composite body extends more than 1.5 km in approximately a NW-SE direction over a width of approximately 500m. There appears to be one main persistent set of dykes that strikes obliquely to this main orientation. ▪ The majority of holes from 2009 to 2019 were drilled with an azimuth of N045, which is perpendicular to the mineralisation contained in the pegmatite dykes. The dip of the dykes at 70 degrees to the southwest was intersected by surface drilling with a dip of -45 to -65 in general, which optimises the intersection of the mineralised structures. ▪ Thus, the orientation and the dip of the drillholes

Criteria	JORC Code explanation	Commentary
		make the unbiased sampling of the core.
Sample security	▪ *The measures taken to ensure sample security.*	▪ Historic information from a NI 43-101 prepared for a previous owner and discussions with NAL staff. ▪ In 2009, 2010 and 2011, the drilling core were laid in wooden core boxes at the drill site, sealed with a lid and strapped with plastic bindings. Core samples were packed and sealed into labelled plastic bags and tied with a plastic cable tie. The core was transported either by the drill contractor or CLQ personnel to CLQ's core facility in Val d'Or. ▪ In 2016 campaign, the drilling core were placed in wooden boxes, respecting the drilling sequence, with wooden markers indicating depth. Once filled, lids were sealed on the boxes, which the contractors the delivered to NAL personnel for transportation to the core shack located at Amos. ▪ Once arrived at the core shack, the drill core is taken care of by the company's team of technicians and geologists. The technicians measure the boxes and take pictures of the core. Geologists describe the geology and mineralisation is well identified to be sampled. Under the supervision of the geologist, the sawing team split the core in half and each sample is well numbered. The samples are clearly identified in their respective bags without risk of contamination. Transport to the laboratory is carried out by a technician from the company.
Audits or reviews	▪ *The results of any audits or reviews of sampling techniques and data.*	▪ Historic information from a NI 43-101 prepared for a previous owner and discussions ▪ The 2009 drill hole data was audited by Ms. Stone, P.Geo.(CCIC), before use in the development of the geological model on the property. The data audit included review of assay certificates, down hole deviation, hard copy records of the down hole survey results, logging codes for mineralised pegmatite and checked for data logged, sampled or measured. Errors were corrected in the database, with the resulting 2009 drill hole and assay database being considered of high quality and acceptable for use in resource estimation. ▪ AMC conducted an audit and evaluated the mineral resources in compliance with NI 43-101 guidelines. They reported a first estimate in May 2011 and, upon completion of infill drilling, pursued validation work leading to an updated resource model and estimate in December 2011. ▪ In 2016, the firm SGS audited the drilling data including those of 2016. An assessment of Resources was carried out by SGS in April 2017. An assessment of Reserves by BBA followed in May 2017. ▪ In 2021, BBA audited the drilling data completed by NAL in 2019.

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	▪ *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.* ▪ *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	▪ Historic information from a NI 43-101 prepared for a previous owner and discussion with NAL staff. ▪ The North American lithium Project is in the municipality of La Corne, Quebec. ▪ The project was built as an open pit hard rock mine and exploited lithium-bearing pegmatite dyke, with mineral processing and lithium carbonate production facilities. ▪ The 19 claims are all map designated since the dates of their registration during 2008 and as such, their boundaries don't have to be physically identified in the field. The claims have since been renewed. ▪ The Mining Lease was granted to the QLI on May 29, 2012, on the basis of a prefeasibility study (PFS) pit field at the time in support of the application to be granted such a lease. ▪ The Mining Lease has an initial term of 20 years, expiring on May 28, 2032. ▪ The MERN website concerning the identity of the holder of the claims is consistent with the 2016 acquisition of the property by NAL. ▪ There are no royalties applicable to any mineral substances that may eventually be extracted from the lands subject to the aforementioned mining titles. ▪ NAL received authorisation for the reconnection of the public access road deviation and its commissioning in January 2017. The company has obtained an authorisation for deforestation of the future development of the current pit to the east. ▪ There are no known significant issues that are believed to materially impact the mine's ability to operate.
Exploration done by other parties	▪ *Acknowledgment and appraisal of exploration by other parties.*	▪ Historic information from a NI 43-101 prepared for a previous owner ▪ Exploration and production done, starting in 1942 by Sullivan Mining Group, Quebec Lithium Corporation, Cambrior Inc., Canada Lithium Corp. which merged later with Sirocco Mining Inc to form RB Energy Inc. ▪ Between 2008 and 2012, Canada Lithium Corp. carry out exploration work on the property. This work consisted of geological compilation, surface mapping, outcrop channel sample, diamond drilling and metallurgical tests. All this work is detailed in the first NI 43-101 report of 2012. ▪ In 2016, NAL carried out a surface drilling campaign to the east of the pit. ▪ In 2019, during the Companies' Creditors Arrangement Act, NAL carried out a surface drilling campaign, surface stripping and mapping.
Geology	▪ *Deposit type, geological setting and style of mineralisation.*	▪ Historic information from a NI 43-101 prepared for a previous owner and discussion with NAL staff.

Criteria	JORC Code explanation	Commentary
		▪ The project is located in the region of The Archean Preissac-Lavorne which is a syn- to post-tectonic intrusion that was emplaced in the southern Volcanic Zone of the Abitibi Greenstone Belt of the Superior Province of Quebec. ▪ The spodumene pegmatites on the property are very poorly exposed. ▪ The rocks are split between granodiorite of the Lacorne batholith, volcanics and some biotite shists, as well as the pegmatites dykes that mainly intrude the granodiorite and the volcanics. ▪ Volcanic rocks on the property are represented by dark green mafic metavolcanics and medium grey silicified intermediate volcanics. The mafic rocks are medium grey to dark grey-green colour and cryptocrystalline to very fine grained. ▪ Both mafic and intermediate volcanic rocks are affected by moderate to strong pervasive silicification, minor chloritization and patchy to pervasive lithium alteration. There is alteration of the green hornblende in proximity to the spodumene pegmatite. There are also amphibolites that are fine grained, weakly foliated and dark green. ▪ The granodiorite is medium grey to greenish grey, massive coarse grained to porphyritic, and exhibits a salt-pepper appearance. The main mineral constituents of granodiorites are light grey to greenish white plagioclase (40-45 vol%), dark green to black amphibole, most likely hornblende (15-20 vol%), mica(20 vol%), represented by biotite and muscovite, grey quartz (10-15%vol) and minor epidote, chlorite and disseminated sulphide. ▪ Three different types of facies of pegmatites dykes have been identified based on mineralogy and textures: PEG1, PEG2 and PEG3. The main differences between the three types of pegmatite dykes are the amount of spodumene in the dyke, the feldspar and the quarts content, the texture of the pegmatite and the presence of zoning.
Drill hole Information	▪ *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:* o *easting and northing of the drill hole collar* o *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* o *dip and azimuth of the hole* o *down hole length and interception depth* o *hole length.* ▪ *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*	▪ From the period of 2008 to 2019, a total of 519 holes were drilled for a total of 76,721 meters. ▪ In 2009-19, drilling program, the holes were roughly perpendicular to the direction of the pegmatites which are oriented in the whole NW-SE. Holes were angled typically at -45 to -60 degrees to cut the interpreted true width of the dyke. ▪ Down hole survey was conducted at approximatively 50m intervals. ▪ The same drilling pattern was done in 2019.

Criteria	JORC Code explanation	Commentary
	Competent Person should clearly explain why this is the case.	
Data aggregation methods	▪ *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.* ▪ *Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low-grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* ▪ *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	▪ In the exploration work of the property, there is no metal equivalent values.
Relationship between mineralization widths and intercept lengths	▪ *These relationships are particularly important in the reporting of Exploration Results.* ▪ *If the geometry of the mineralization 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').*	▪ The geometry of the mineralisation with respect to the drill hole angle is known. ▪ The holes were drilled on bearings of 45 degrees and approximately perpendicular to the general strike and dip of the mineralised dyke bodies.
Diagrams	▪ *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.*	▪ Maps and geological as well as plan views with drill hole collar locations are included in the main body of this report.
Balanced reporting	▪ *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced avoiding misleading reporting of Exploration Results.*	▪ Exploration results are presented in the next Criteria (Other substantive exploration data)
Other substantive exploration data	▪ *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.*	▪ After its re-start in 2017, the North American Lithium mine has been in operation until March 2019. During this time, the mine extracted 1.7Mt of mineralised material to produce 165 000 tonnes of spodumene concentrate at 5.5% Li_2O. ▪ The NI 43-101 Technical Report prepared in 2017 for a previous owner included a Mineral Resource and Ore Reserve Statement. The previous report's Statements are not considered valid.
Further work	▪ *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* ▪ *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	Sayona recommended to complete the following work: ▪ Continued resource definition drilling to upgrade the classification of resource material. ▪ Exploration drilling on the property to expand the resource in the lateral extensions of the pit and potential underground extraction.

Criteria	JORC Code explanation	Commentary
		▪ Collect additional bulk density samples of the pegmatite, granodiorite, and metavolcanics to accurately estimate the tonnage of future mining. ▪ Continuously sample and assay the intervals between the main pegmatite dyke to collect the grades of the dilution

Section 3 Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	JORC Code explanation	Commentary
Database integrity	▪ *Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.* ▪ *Data validation procedures used.*	▪ The digital drill hole database was audited by the CP using validation tools for: collar location, azimuth, dip, hole length, survey data and analytical values. There were no relevant errors or discrepancies noted during the validation.
Site visits	▪ *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* ▪ *If no site visits have been undertaken indicate why this is the case.*	▪ For the NAL new MRE, the CP conducted a site visit from November 2 and 3, 2021. ▪ The CP inspected drill hole collars, diamond core, geology within the open pit and reviewed geological maps and sections with NAL site geological staff. ▪ General logging and sampling procedures, analytical procedures were reviewed.
Geological interpretati on	▪ *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.* ▪ *Nature of the data used and of any assumptions made.* ▪ *The effect, if any, of alternative interpretations on Mineral Resource estimation.* ▪ *The use of geology in guiding and controlling Mineral Resource estimation.* ▪ *The factors affecting continuity both of grade and geology.*	▪ The confidence in the geological interpretation of the pegmatites at NAL deposit is good and is based on the open pit mapping, historical underground mapping and diamond drilling. The mineralisation is related to multi phase pegmatite intrusive within metavolcanics and granodiorite ▪ The pegmatite dykes contain various amounts spodumene associated with elevated lithium content. ▪ Pegmatite dykes contain intercalated units of granodiorite and metavolcanics as “internal: dilution.
Dimensions	▪ *The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	▪ The NAL Mineral Resource includes 32 pegmatites striking approximately northwest and have variable dips from subvertical to 50 degree to the southwest. ▪ The NAL pegmatite dykes have been delineated over a strike length of approximately 1,800 m and to a depth of approximately 400 m vertical. Dyke have variable widths from 2.5 m to 90 m.
Estimation and modelling techniques	▪ *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.* ▪ *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.* ▪ *The assumptions made regarding recovery of by-products.*	▪ The Resource Estimate was based on an Ordinary kriging (OK) interpolation using Datamine Studio RM, 2 m composite analytical data no top-cut. ▪ Three-dimensional mineralisation wireframes were modelled based on a pegmatite geology over a minimum drill hole interval length of 2.5 metres as guideline to define the width of mineralised interpretations. ▪ Based on the statistical analysis there is no need for grade capping. ▪ Three orientated ‘ellipsoid’ search was used to select data and was based on the observed lens geometry. The search ellipsoid was orientated to the average strike and dip of pegmatite dykes.

Criteria	JORC Code explanation	Commentary
	▪ *Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).* ▪ *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.* ▪ *Any assumptions behind modelling of selective mining units.* ▪ *Any assumptions about correlation between variables.* ▪ *Description of how the geological interpretation was used to control the resource estimates.* ▪ *Discussion of basis for using or not using grade cutting or capping.* ▪ *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.*	▪ Variable search ellipse orientations (dynamic anisotrppy) were used to interpolate the blocks. The general dip direction and strike of the mineralised pegmatite were modeled on each section and then interpolated in each block. During the interpolation process, the search ellipse was orientated following the interpolation direction (azimuth-dip (dip direction) and spin (strike direction) of each block, hence better representing the dip and orientation of the mineralisation. ▪ The parent block model has 5 x 5 x 5 m blocks with up to 2 sub-blocks (1.25 x 1.25 x 1.25 m). ▪ The block model is rotated -50 degrees around the Z axis. ▪ Lithium and iron values were modelled into blocks using a multi-pass estimation with a search criteria of a minimum, maximum, and maximum composite per drillhole. ▪ The mineral resources include the resource blocks located within the pit shell above the cut-off grade of 0.60% Li_2O and the contiguous resource blocks amenable to underground mining located below the pit shell above the cut-off grade of 0.80% Li_2O.
Moisture	▪ *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	▪ Tonnages and grades were estimated on a dry in situ basis
Cut-off parameters	▪ *The basis of the adopted cut-off grade(s) or quality parameters applied.*	▪ The Mineral Resource has been reported at a 0.60% Li_2O cut-off for the open pit material and 0.80% Li_2O for the underground material. ▪ Cut-off based on a spodumene concentrate prices of US$970/tonne for a 6% Li_2O concentrate and an exchange rate of 1.32 CAD/USD. ▪ Appropriate mining costs, processing costs, metallurgical recoveries, and inter ramp pit slope angles were used by to generate the pit shell.
Mining factors or assumptions	▪ *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.*	▪ The geometry and the depth of the mineralised dykes is amenable to be mined using open-pit mining methods. ▪ Appropriate dilution or ore loss factors have been considered to generate the pit shell to constrain the JORC mineral resource statement. ▪ JORC mineral resource statement is reported as in-situ.
Metallurgical factors or assumptions	▪ *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous.*	▪ Significant metallurgical test work has been conducted on the mineralisation. ▪ The NAL project has an existing mineral processing plant on site designed to process the material feed from an open pit.

Criteria	JORC Code explanation	Commentary
	Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	
Environmen-tal factors or assumptions	▪ *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.*	▪ The NAL project has existing environmental permits for mining operations including the disposal of waste rock, storage of tailing, drawing water for process and the release of treated water to the environment. ▪ The mineral resource has been constrained to not encroach on the lake located northeast of the pit.
Bulk density	▪ *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.* ▪ *The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.* ▪ *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	▪ Bulk density measurements were collected on diamond drill core using the wet immersion method. ▪ The median value of 2.71 g/cm^3 was assigned to all pegmatite dykes.
Classification	▪ *The basis for the classification of the Mineral Resources into varying confidence categories.* ▪ *Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).* ▪ *Whether the result appropriately reflects the Competent Person's view of the deposit.*	▪ The NAL resource classification is in accordance with the CIM Definition Standards on Mineral Resources and Reserves (2014). ▪ The NAL MRE was classified as Measured for blocks within 20 m of the existing open pit. ▪ The NAL MRE was classified as Indicated for blocks estimated in the first of second pass with 8 or more composites used to estimate the block. ▪ the NAL MRE was classified as Inferred for all remaining estimated blocks not classified as measured or indicted. ▪ The Mineral Resource estimates appropriately reflect the view of the Competent Person.
Audits or reviews	▪ *The results of any audits or reviews of Mineral Resource estimates.*	▪ An internal audit has been conducted on the current NAL mineral resource identifying opportunities to improve the resource model, including areas requiring additional drilling, the collection of surface channel samples, the use of downhole optical televiewer to understand dyke geometry and areas where geological solids could be adjusted to reduce dilution. ▪ No external audit has been undertaken on the current NAL mineral resource estimate.
Discussion of relative	▪ *Where appropriate a statement of the relative accuracy and confidence level in the Mineral*	▪ The pegmatite geometry and continuity has been adequately interpreted to reflect the applied level of

Criteria	JORC Code explanation	Commentary
accuracy/ confidence	*Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.* ▪ *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* ▪ *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	Measured, Indicated and Inferred Mineral Resource. The data quality is good, and the drill holes have detailed logs produced by qualified geologists. All diamond core used in the estimate is properly stored, and mineralised intervals can be reviewed when required. Recognised laboratories have been used for all analyses. ▪ The Mineral Resource statement relates to global estimates of tonnes and grade constrained with a pit shell and contiguous minable sahpes.

Authier JORC Study JORC Table 1

JORC Code, 2012 Edition – Table 1 - Section 1 Sampling Techniques and Data
(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	▪ 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. ▪ 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.	▪ 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. Sayona´s Phase 4 diamond drilling sampling in pegmatites includes lengths lower than 1.0 metres. ▪ High to low grade lithium-bearing mineralisation (spodumene) is visible during geological logging and sampling. ▪ The core selected for sampling was split and samples of half core were dispatched to a certified commercial laboratory for preparation and analysis of lithium according to industry standard practices. ▪ Sample preparation and assaying techniques are within industry standard and appropriate for this type of mineralisation.
Drilling techniques	▪ 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).	▪ Sayona´s phase 4 (2021) Diamond core drilling, core diameter size NQ. Standard tube and bit but are not included in the new MRE reported in this release. ▪ Sayona´s phase 1 (2016) and phase 2 (2017) Diamond core drilling, core diameter size HQ. Standard tube and bit. ▪ Sayona´s phase 3 (2018) Diamond core drilling, core diameter size NQ. Standard tube and bit. ▪ Sayona´s phase 3 metallurgical drilling (2017), core diameter size PQ, standard tube and bit for 680 metres and 89.5 metres of HQ core diameter size. ▪ Diamond core for phase 4 drilling (2021) was not oriented. ▪ For Sayona´s phase 1 (2016) and phase 2 (2017) drilling campaigns, diamond core was oriented using a Reflex ACT III tool . ▪ Core was not oriented for Sayona´s phase 3 drilling (2018) including metallurgical and condemnation drilling. ▪ All core drilling before 2016 was NQ core diameter size, standard tube and bit, not oriented.

Drill sample recovery	▪ 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.	▪ 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 98%. ▪ 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	▪ 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.	▪ Geological logging, RQD measurements and core recovery completed for all holes done in phase 4 (2021) by Sayona. ▪ Geological logging, RQD measurements, core recovery, alpha and beta angles of structures as core orientation using reflex tool completed for all holes done in phase 1 (2016) and phase 2 (2017) by Sayona. ▪ Geological logging, RQD measurements and core recovery completed for all holes done in phase 3 (2018), metallurgical drilling in 2017, condemnation drilling in 2018 by Sayona. ▪ Geological logging of main characteristics such as rock type, spodumene abundance, mica abundance, etc has occurred in summary and detail at the pegmatite intervals and surrounding host rock. ▪ Detailed geotechnical logging including RQD, orientation data (alpha and beta angles) for structures (faults, fractures, etc), point load tests (1 each 10 metres average) has been undertaken for diamond holes in phase 1 (2016) and phase 2 (2017) drilling. ▪ The geological and geotechnical logging is at an appropriate level for the stage of development drilling being undertaken. ▪ The logging of the geological features was predominately qualitative. Parameters such as spodumene abundance 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.
Sub-sampling techniques and sample preparation	▪ If core, whether cut or sawn and whether quarter, half or all core taken. ▪ If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. ▪ For all sample types, the nature, quality and appropriateness of the sample preparation technique.	▪ Drill core HQ and NQ diameter samples cut to two halves with one half placed in a new plastic bag along with the sample tag sent for analysis; the other half was replaced in the core box with the second sample tag for reference. ▪ Full core PQ diameter samples were sampled metre by metre and placed in a plastic bag along with the

	▪ Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. ▪ 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. ▪ Whether sample sizes are appropriate to the grain size of the material being sampled.	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 of drill core samples collected during the 2021, drilling program completed at the SGS Canada Inc laboratory ("SGS") facilities in Val d'Or, Quebec follows industry best practice, involving oven drying, crushing and pulverising there to respect the specifications of the analytical protocol and then shipped to SGS Mineral Services laboratories in Burnaby, British Columbia, Canada, for analysis ▪ Sample preparation of drill core samples collected during the 2016, 2017 and 2018 drilling programs completed at the SGS Canada Inc laboratory ("SGS") facilities in Sudbury, Ontario follows industry best practice, involving oven drying, crushing and pulverising there to respect the specifications of the analytical protocol and then shipped to SGS Mineral Services laboratories in Lakefield, Ontario, for analysis ▪ 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 pulverising to respect the specifications of the analytical protocol. ▪ Sample sizes are considered appropriate regarding to the grain size of the sampled material ▪ For sample preparation and sub-sampling techniques details of drill core samples before 2016 please refer to Table 1 of ASX release "Authier Lithium Project JORC Resource Estimate" 7 July 2016.
Quality of assay data and laboratory tests	▪ The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. ▪ For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. ▪ 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.	▪ Assaying of phase 4, 2021 drilling samples received at SGS were processed according to the following procedure at the SGS preparation facilities in Val d'Or, Quebec. All samples are inspected and compared to the chain of custody (COC) and logged into the SGS laboratory management system, then weighted and dried. Sample material is crushed to 75% passing 10 mesh (2mm), split to obtain a 250 g sub-sample which is then pulverised to 85% passing 200 mesh (75 microns). ▪ Assaying of phase 1, 2016, phase 2, 2017 and phase 3, 2018 drilling samples received at SGS were processed according to the following procedure at the SGS preparation facilities in Sudbury, Ontario. All samples are inspected and compared to the chain of custody (COC) and logged into the SGS laboratory management system, then weighted and dried. Sample material is crushed to 75% passing 10 mesh (2mm), split to obtain a 250 g sub-sample which is

		then pulverised to 85% passing 200 mesh (75 microns). ▪ The analyses of 2021 drilling sample were conducted at the SGS laboratory located in Burnaby, British Columbia, Canada, which is an accredited laboratory under ISO/IEC 17025 standards accredited by the Standards Council of Canada. ▪ The analyses of all 2016 and 2018 drilling sample were conducted at the SGS laboratory located in Lakefield, Ontario, which is an accredited laboratory under ISO/IEC 17025 standards accredited by the Standards Council of Canada. ▪ For 2021 drilling, the analytical protocol used at SGS Burnaby is the GE ICP90A 29 element analysis - sodium peroxide fusion, which involves the complete dissolution of the sample in molten flux for ICP-AES analysis. The detection limits for Li are 10 ppm (lower) and 50,000 ppm (upper). ▪ For 2016 to 2018 drilling (phase 1 to phase 3) the analytical protocol used at SGS Lakefield is the GE ICP91A 29 element analysis - sodium peroxide fusion, which involves the complete dissolution of the sample in molten flux for ICP-AES analysis. The detection limits for Li are 10 ppm (lower) and 10,000 ppm (upper). ▪ For metallurgical sampling, 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. ▪ For Phase 4 drilling (2021) Quality control protocol ("QA/QC") involve a review of laboratory supplied internal QA/QC and in-house controls consisting in the insertion of reference standards supplied by OREAS (high and low grade) and samples of "barren" rock material (blanks), on a systematic basis with the samples shipped to SGS. ▪ For Phase 1, 2, and 3 (2016, 2017 and 2018 respectively) of drilling, Quality control protocol ("QA/QC") involve a review of laboratory supplied internal QA/QC and 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. ▪ For the metallurgical program Sayona did not perform in-house QAQC controls. ▪ For Quality of Assay Data and Laboratory Tests of all samples before 2016 please refer to Table 1 of ASX release "Authier Lithium Project JORC Resource Estimate" 7 July 2016.

Verification of sampling and assaying	▪ The verification of significant intersections by either independent or alternative company personnel. ▪ The use of twinned holes. ▪ Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. ▪ Discuss any adjustment to assay data.	▪ 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 Sayona´s 2021 drilling program was logged by 1 Sayona´s employee geologist and managed by 1 Sayona´s employee and 1 consultant geologist belonging to BBA and using technicians contracted from Technominex ("Technominex") at Rouyn-Noranda city. Technominex provided the office, core logging and storage facilities to Sayona which and is located around 60 km east from the Authier project. ▪ The entire drilling program conducted by Sayona from 2016 to 2018 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 for 2021 drilling were photographed and are available for verification at North American Lithium ("NAL") facilities, around 28 km east from the Authier project, where all the core from Authier project is stored. ▪ No twinned holes were drilled during the 2016 and 2017 drilling campaign by Sayona. ▪ All PQ drill holes were drill in same drilling pad than both previous Sayona´s and historical holes showing a fair to good correlation between the metallurgical vs recent and historical drill holes when it was possible (for further information please refer to chapter 11 of Authier DFS report). ▪ Primary data was recorded on laptop computers directly into standardised Excel logging templates with built in look-up codes. This information is merged with the assay certificate data into a Sayona´s in-house database ▪ No adjustments to assay data have been undertaken.. ▪ For Verification of Sampling and Assaying details of all samples before 2016 please refer to Table 1 of ASX release "Authier Lithium Project JORC Resource Estimate" 7 July 2016.
Location of data points	▪ 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. ▪ Specification of the grid system used. ▪ Quality and adequacy of topographic control.	▪ Drill collars were surveyed by professional surveyor at the end of the 2021 drilling campaign similarly than Sayona´s phase 1, 2 and 3 drilling from 2016 to 2018. ▪ Collar positions before 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. ▪ Downhole surveys (dip and azimuth) for 2021 drilling were collected as single shot readings each 3 metres downhole up to the end of hole length using a Reflex tool.

		▪ Downhole surveys (dip and azimuth) were collected as multiple shot readings using a Gyro tool for deep holes AL-17-03 to AL-17-08; AL-17-13 to AL-17-14; AL-17-22, AL-17-26 and AL-17-28. Downhole surveys (dip and azimuth) were collected as multiple shot readings using a Reflex tool for deep holes AL-17-01 and AL-17-02. Azimuth readings were affected by rock magnetism therefore the reflex tool was replaced by gyro tool for deep holes. Downhole surveys we not done for shallow holes done in 2017. Holes AL-17-29 and AL-17-30 were not downhole surveyed because hole stability was compromised by faulting. ▪ 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. ▪ 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.
Data spacing and distribution	▪ Data spacing for reporting of Exploration Results. ▪ 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. ▪ Whether sample compositing has been applied.	▪ 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 at the main mineralised pegmatite 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.
Orientation of data in relation to geological structure	▪ Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. ▪ 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.	▪ Drilling grid orientation is perpendicular to the strike of the mineralisation determined by previous mapping and historical drilling. ▪ No bias attributable to orientation of sampling upgrading of results has been identified.
Sample security	▪ The measures taken to ensure sample security.	▪ 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. ▪ For details on Sample Security of all samples before 2016 please refer to Table 1 of ASX release “Authier Lithium Project JORC Resource Estimate” 7 July 2016.
Audits or reviews	▪ The results of any audits or reviews of sampling techniques and data.	▪ 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. ▪ For details on Audits or reviews of all samples before 2016 please refer to Table 1 of ASX release "Authier Lithium Project JORC Resource Estimate" 7 July 2016.

JORC Code, 2012 Edition – Table 1 - Section 2 Reporting of Exploration Results
(Criteria in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	▪ 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. ▪ 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.	▪ 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, totalling 24 claims covering 884 ha. The Property extends 3.4 km in the east-west direction and 3.1 km north-south. ▪ From the 24 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 2187652 located along strike to the east of the main Authier deposit. ▪ 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.
Exploration done by other parties	▪ Acknowledgment and appraisal of exploration by other parties.	▪ 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 around 36,000 metres of drilling in 260 diamond holes including 7 holes PQ diameter drilled to collect 5 tonnes of pegmatite sample for pilot plant metallurgical testing. ▪ The project was initially drilled between 1991 and 1999 by Raymor Resources, 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 totalling 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. ▪
Geology	▪ Deposit type, geological setting and style of mineralisation.	▪ Mineralisation is hosted within spodumene-bearing pegmatite intrusions. The Authier project hosts two separate mineralised pegmatite systems, striking east-west and dipping to the north: Authier Main and Authier North. ▪ Authier Main area extends over a strike length of 1,100 m, has an average width of 25 m (ranging from 4 metres to 55 metres) typically extends down below 250 metres vertical depth, and dips 40 - 50 degrees to the north. ▪ Authier North area extends over a strike length of 500 m, has an average width of 7 m and dips 15 degrees to the north. The Authier North pegmatite appears at shallow levels (15 to 25 metres vertical depth) ▪ Both pegmatites remain open in all directions. ▪ The lithium mineralisation at the Authier project is related to multiple pulses of spodumene bearing quartz-feldspar pegmatite. Higher lithium grades are related with high concentrations of mid-to-coarse spodumene crystals (up to 4 cm long) in a mid-to-coarse grained pegmatite facies.
Drill hole Information	▪ 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: ▪ easting and northing of the drill hole collar ▪ elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar ▪ dip and azimuth of the hole ▪ down hole length and interception depth ▪ hole length. ▪ If the exclusion of this information is justified on the basis that the information is not Material and this	▪ New MRE released in this report is based in historical drilling as well as three phases of drilling conducted from 2016 to 2018 by Sayona totalling 11,367 metres of drilling in 81 holes (including metallurgical test works drill holes and condemnation drill holes). ▪ Phase 4 drilling program completed in 2021 was not included in the new MRE. ▪ Phase 3 diamond drilling program was conducted in separate stages starting as metallurgical drilling during November/December 2017 (7 diamond holes PQ and HQ for 769.5 metres, collecting five tonnes of core for pilot metallurgical testing); Followed by the resource expansion and definition drill holes during January / March 2018 of 19 holes NQ diameter totalling 2,170.45 metres; and finally in April 2018, condemnation drilling, 6 holes NQ diameter for 342.65 metres.

	exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	▪ Drill hole details for the resource expansion and definition holes of phase 3 conducted in 2018 were reported in the body of the Authier ASX announcement 24 September 2018.
Data aggregation methods	▪ 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. ▪ Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. ▪ The assumptions used for any reporting of metal equivalent values should be clearly stated.	▪ No weight averaging or high-grade cut has been applied to any of the sample assay results. ▪ Reported intercepts have been calculated as arithmetic averages using a 0.4 % Li20 lower cut-off grade, as described in the body text of previous press releases. ▪ The majority of the lithium assay results show a simple normal population, and it is not believed the reporting of intercepts is skewed by the inclusion of high and low grade results. ▪ Metal equivalent values have not been reported.
Relationship between mineralisation widths and intercept lengths	▪ 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').	▪ 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	▪ 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.	▪ A Collar Plan and typical cross-sections are presented in the body of this report.
Balanced reporting	▪ 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.	▪ The reporting is considered to be balanced.
Other substantive exploration data	▪ 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.	▪ The Sayona´s Phase 4 diamond drilling campaign was conducted after Sayona´s Phase 1, 2016; Phase 2, 2017 and Phase 3 2018 drilling campaigns and the Glen Eagle 2010-2012 diamond drilling campaign which was 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.

		▪ Details of metallurgical test work are described in Sayona DFS ASX releases dated on August 29, 2017 and February 16, 2017.
Further work	▪ The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling). ▪ Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	▪ Sayona´s Project Development strategy is detailed as follows: ▪ Converting the inferred mineral resources to measured and indicated through further higher density drilling; ▪ Continue testing the western resource expansion potential highlighted by Phase 4 drilling; ▪ Exploring for extensions to the existing mineral resources and other potential mineralisation within the tenement package; ▪ Consolidating other potential resources / mineralisation in the district; ▪ Consolidating lithium hub with NAL. ▪ Completion of Environmental studies and Definitive Feasibility Studies; ▪ Negotiating production off-take agreements; and ▪ Sourcing development finance and constructing the project.

JORC Code, 2012 Edition – Table 1 - Section 3 Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	JORC Code explanation	Commentary
Database integrity	▪ Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes. ▪ Data validation procedures used.	▪ The digital drill hole database was audited by the QP using validation tools for: collar location, azimuth, dip, hole length, survey data and analytical values. There were no relevant errors or discrepancies noted during the validation. ▪ For details on Database Integrity before 2016 please refer to Table 1 of ASX release "Authier Lithium Project JORC Resource Estimate" 7 July 2016.
Site visits	▪ Comment on any site visits undertaken by the Competent Person and the outcome of those visits. ▪ If no site visits have been undertaken indicate why this is the case.	▪ For the Authier new MRE included in this report the CP conducted site visit and reviewed drill hole collars, diamond core and general logging and sampling procedures. It was concluded that these were being conducted to best industry practice ▪ Completion of the current updated Mineral Resource Estimate involved the assessment of a drill hole database, which included all data for drilling completed through early 2018, an updated three-dimensional (3D) geologically controlled wireframe model, revised pit optimisation parameters from BBA, review of the classification of the mineral resource estimate (Measured, Indicated and Inferred) and review of available written reports. ▪ For the September 2018 JORC estimate, Sayona´s CP was stationed on site and was responsible for the overall management, coordination and execution of the drilling programs. ▪ Sayona´s CP was stationed on site and was responsible for the overall management, coordination and execution of Sayona Phase 1 drilling program in 2016 (approximately

		10 weeks); Phase 2 drilling program in 2017 (approximately 11 weeks); and Phase 3 drilling program (approximately 12 weeks) ▪ Sayona´s CP visited Authier Lithium deposit during 28 and 29 May 2016 prior to the project acquisition. For the July 2016 JORC Resource, the Author reviewed drill hole collars, surface geology and mineralised diamond core intervals stored at project field facilities and it was concluded that these were being conducted to best industry practice ▪ Sayona´s CP visited Authier Lithium deposit during June 10th, 2021 for the 2021 JORC Resource, the Author reviewed drill hole database, collars, surface geology and limited number of mineralised diamond core intervals stored at project field facilities and it was concluded that these were being conducted to best industry practice
Geological interpretation	▪ Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit. ▪ Nature of the data used and of any assumptions made. ▪ The effect, if any, of alternative interpretations on Mineral Resource estimation. ▪ The use of geology in guiding and controlling Mineral Resource estimation. ▪ The factors affecting continuity both of grade and geology.	▪ The confidence in the geological interpretation at Authier Lithium deposit is considered to be good and is based on the drilling density and well known geological features. ▪ Drill hole logging by Glen Eagle and Sayona's geologists, through direct observation of drill core samples have been used to interpret the geological setting. ▪ The continuity of the main mineralised body is clearly observed by Li2O grades correlated with spodumene rich pegmatite within the drill holes. The nature and continuity along strike of the lithium mineralisation would indicate that alternate interpretations would have little impact on the overall Mineral Resource estimation. ▪ The mineralisation is related to a pegmatite intrusive with multiple phases of spodumene mineralisation.
Dimensions	▪ The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.	▪ The Authier Lithium Mineral Resource includes two pegmatites striking east-west and dipping to the north: Authier Main and Authier North. ▪ Authier Main area extends over a strike length of 1,100 m, has an average width of 25 m (ranging from 4 metres to 55 metres) typically extends down below 250 metres vertical depth, and dips 40 - 50 degrees to the north. ▪ Authier North area extends over a strike length of 500 m, has an average width of 7 m and dips 15 degrees to the north. The Authier North pegmatite appears at shallow levels (15 to 25 metres vertical depth) ▪ Both pegmatites remain open in all directions.
Estimation and modelling techniques	▪ The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used. ▪ The availability of check estimates, previous estimates and/or mine	▪ The Resource Estimate was based on an Inverse Distance Squared (ID2) interpolation, 1.5 m composite analytical data no top-cut, and a 0.55% Li2O cut-off grade. ▪ Three-dimensional mineralisation wireframes were modelled based on a nominal 0.4 % Li_2O lower cut-off at start and end of each mineralised interval over a minimum drill hole interval length of 2 metres as guideline to define the width of mineralised interpretations on sections. ▪ Based on the statistical analysis there is no need for grade capping. ▪ An orientated 'ellipsoid' search was used to select data and was based on the observed lens geometry. The search

	production records and whether the Mineral Resource estimate takes appropriate account of such data. ▪ The assumptions made regarding recovery of by-products. ▪ Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation). ▪ In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed. ▪ Any assumptions behind modelling of selective mining units. ▪ Any assumptions about correlation between variables. ▪ Description of how the geological interpretation was used to control the resource estimates. ▪ Discussion of basis for using or not using grade cutting or capping. ▪ The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.	ellipsoid was orientated to the average strike, plunge, and dip of pegmatite body. ▪ Variable search ellipse orientations were used to interpolate the blocks. The general dip direction and strike of the mineralised pegmatite were modelled on each section and then interpolated in each block. During the interpolation process, the search ellipse was orientated following the interpolation direction (azimuth-dip (dip direction) and spin (strike direction) of each block, hence better representing the dip and orientation of the mineralisation. ▪ Mineralisation was interpolated using a search ellipsoid distance of 50 m (long axis) by 50 m (intermediate axis) and 25 m (short axis) with an average orientation of 90° azimuth (local grid), -55° dip and 0° spin which represents the general geometry of the pegmatites in the deposit. ▪ The final mineral resources include the resource blocks located within the optimised pit shell, below the overburden/bedrock interface and above the cut-off grade of 0.55% Li2O established by SYA. Variable search ellipse orientations were used to interpolate the blocks with a search criterion of a minimum number of composites, maximum number of composites and maximum number of composites per borehole. ▪ An ellipse fill factor of 50% was applied to the measured category i.e., that only 50% of the blocks were tagged as measured within the search ellipse. For the Indicated category, the search ellipsoid was twice the size of the Measured category ellipsoid using the same composite selection criteria. An ellipse fill factor of 85% was applied to the Indicated Category. All remaining blocks were considered to be in the inferred category. ▪ The parent block dimensions used were three (3) m (N-S) by three (3) m (E-W) by three (3) m (vertical). ▪ The block model size used in the Mineral Resource estimate was based on drill hole spacing, width and general geometry of mineralisation but primarily by the selected SMU from the advanced feasibility study.
Moisture	▪ Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	▪ Tonnages and grades were estimated on a dry in situ basis. ▪ A table in the body of the report demonstrates the grade and tonnage sensitivity to variation in the cut-off grade
Cut-off parameters	▪ The basis of the adopted cut-off grade(s) or quality parameters applied.	▪ The Mineral Resource has been reported at a 0.55% Li2O cut-off.
Mining factors or assumptions	▪ Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and	▪ Taking into account the geometry and the depth of the mineralised zone, the Authier Lithium deposit will be mined using open-pit mining methods. ▪ No dilution or ore loss factors have been taken into account in the JORC Resource.

	parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.	
Metallurgical factors or assumptions	▪ The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	▪ Various metallurgical testing at Authier Lithium deposit was conducted in; 1991, 1997, 1999, 2012, 2016, 2017, and 2018. ▪ In 1991 and 1997, Raymor Resources Ltd. undertook bench-scale and pilot-scale flotation testing ▪ In 1999, Bumigeme Inc., processing consultants, conducted metallurgical testing on a 40-t bulk sample and produced concentrate grades between 5.78% and 5.89% Li_20 at metallurgical recoveries between 68% and 70%, with an average head assay of 1.14% Li_2O. At an average head grade of 1.35% Li_2O, test work demonstrated a recovery of 75% and a concentrate grade of 5.96% Li_2O. ▪ In 2012, Glen Eagle tested a 270 kg sample from drill core. Attractive results production of a 6.44% Li_2O concentrate at 85% recovery was achieved with three stages of cleaning. ▪ In 2016, Sayona completed a metallurgical testing program using core from twenty-three historical diamond holes totalling 430 kilograms, representing the entire deposit geometry (including the anticipated 5% mine ore dilution), at SGS Lakefield in Canada. Concentrate grades varied from 5.38% to 6.05% Li_2O at recoveries between 71% and 79%. Mineralogical (using QEMSCAN) analysis of the final concentrates demonstrated that the ore dilution had a negative impact on flotation performance. ▪ In 2017, two representative samples were prepared and flotation testing undertaken using different test conditions including diluted and un-diluted, and with site water. The program demonstrated the ability to produce concentrate grades over 6% at metallurgical recoveries over 80% Li_2O. ▪ In 2018, a pilot plant program was operated at SGS. Continuous testing with an optimised flotation flowsheet produced concentrate grading between 5.8% to 6.2% Li_2O at recoveries ranging from 67% to 79% recovery. The flowsheet incorporated grinding, magnetic separation, de-sliming, mica and spodumene flotation. ▪ Optimisation batch testwork was undertaken at SGS in 2019 to further confirm the flotation flowsheet.
Environmental factors or assumptions	▪ Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the	▪ An Environmental Baseline Studies (EBS) have been completed in October 2017 for the Authier project and results will be available over the following months. However, previous studies were conducted during 2012 by Dessau and GFE and didn't return environmental issues. Activities by DESSAU and GFE were performed to determine constraints linked to water and sediments quality and to environmental (physical, biological, human) impact. ▪ According to public databases and from field inventories lead during this study by Dessau and GFE, no endangered species or habitats were found

	status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.	▪ A plan regarding proposed waste and process residue facilities management and disposal has been prepared and included in the DFS report. ▪ Sayona Mining conducted a geochemical characterisation study of ore, waste rock and tailings samples. The program allows the classification of waste rock and tailings according to provincial authority's regulations standard for acid mine drainage and leachability, and identify any chemical that could potentially affect the surface or groundwater quality. No evidence of sulfides has been observed in the ore or in the waste rock. ▪ A rehabilitation and closure plan is a requirement under the "Loi sur les mines". It must be approved before the mining lease is issued, and a financial guarantee to fully implement the plan must be provided in three payments in the first two years following the approval of the plan. ▪ A Community Relations Program is being developed to approach and engage local stakeholders. This program will include information sessions and consultations with municipalities, landowners, First Nation community, non-governmental environmental organisations and recreational associations.
Bulk density	▪ Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples. ▪ The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit. ▪ Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.	▪ As part of the 2010 independent data verification program, SGS Geostat conducted specific gravity ("SG") measurements on 38 mineralised core samples collected from drill holes AL-10-01 and AL-10-11. The measurements were performed using the water displacement method (weight in air/volume of water displaced) on representative half core pieces weighting between 0.67 kg and 1.33 kg with an average of 1.15 kg, results average SG value of 2.71 t/m3. ▪ In 2017, an independent data verification program performed by ALS Val d'Or was conducted to assess specific gravity ("SG") measurements on waste material using 14 mineralised core samples. The measurements were performed using the water displacement method (weight in air/volume of water displaced) on representative half core and resulted in an average SG value of 2.90 t/m3.
Classification	▪ The basis for the classification of the Mineral Resources into varying confidence categories. ▪ Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data). ▪ Whether the result appropriately reflects the Competent Person's view of the deposit.	▪ New MRE have been classified in accordance with the National Instrument 43-101 and JORC standard of disclosure and industry best practice. ▪ The Authier Lithium MRE was classified as Measured, Indicated and Inferred Mineral resource based on drilling density, sample spacing and geological / mineralisation continuity. ▪ The Authier MRE presented in this report include the resource blocks located within the optimised pit shell, below the overburden/bedrock interface and above the cut-off grade of 0.55% Li2O established by SYA. Variable search ellipse orientations were used to interpolate the blocks with a search criterion of a minimum number of composites, maximum number of composites and maximum number of composites per borehole. ▪ An ellipse fill factor of 55% was applied to the measured category i.e., that only 55% of the blocks were tagged as measured within the search ellipse. For the Indicated

		category, the search ellipsoid was twice the size of the Measured category ellipsoid using the same composite selection criteria. An ellipse fill factor of 55% was applied to the Indicated Category. All remaining blocks were considered to be in the inferred category. ▪ A second classification stage involved the manual addition of indicated block clusters into the Measured category. The objective was to smooth the spotted dog effect most evident in the Measured category and, to take into account the geological continuity and grade. The second stage consisted of the re-assignment of selected Indicated blocks within the Measured category general area into the Measured category. ▪ The second classification stage also involved the manual transfer of indicated blocks clusters into the Inferred category. The objective was to assign a more appropriate classification to areas where the density and quality of geological information was insufficient. ▪ The input data is comprehensive in its coverage of the mineralisation and does not favour or misrepresent in-situ mineralisation. The definition of mineralised zones is based on high level geological understanding producing a robust model of mineralised domains. This model has been confirmed by infill drilling which supported the interpretation. Validation of the block model shows good correlation of the input data to the estimated grades. ▪ The Mineral Resource estimates appropriately reflect the view of the Competent Person.
Audits or reviews	▪ The results of any audits or reviews of Mineral Resource estimates.	▪ Prior to Sayona's acquisition of Authier, Internal audits have been completed by SGS Geostats at the request of Glen Eagle Resource Inc in a NI43-101 Technical Report, Preliminary Economic Assessment, 22 January 2013 ▪ No external audits have been undertaken on the Sayona JORC Resource estimate. However, SGS in Canada who are assisting with the preparation of the 2016 Authier Pre-Feasibility Study has reviewed the data for mine planning purposes.
Discussion of relative accuracy/ confidence	▪ Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate. ▪ The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to	▪ The pegmatite geometry and continuity has been adequately interpreted to reflect the applied level of Measured, Indicated and Inferred Mineral Resource. The data quality is good and the drill holes have detailed logs produced by qualified geologists. All diamond core obtained by Glen Eagle and Sayona drilling campaigns are properly stored and mineralised intervals can be reviewed when required. Recognised laboratories have been used for all analyses. ▪ The Mineral Resource statement relates to global estimates of tonnes and grade.

	technical and economic evaluation. Documentation should include assumptions made and the procedures used. ▪ These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	