North American Lithium Mineral Resource increases 51% to 88Mt

- Major resource expansion for Sayona's North American Lithium Project (NAL), with JORC Measured, Indicated and Inferred Resource of 87.9 million tonnes (Mt) @ 1.13% Li_2O (0.60% Li_2O cut-off grade).
- Contained lithium increased 39% across Measured, Indicated, and Inferred categories.
- Measured and Indicated tonnage increased 188% to 72.1 million tonnes @ 1.14% Li_2O.

North American lithium producer Sayona Mining Limited ("Sayona") (ASX:SYA; OTCQB:SYAXF) announced today results from an updated Mineral Resource Estimate (2024 MRE) at its North American Lithium operation (Sayona 75%; Piedmont Lithium 25%), demonstrating the potential of this highly strategic asset.

Sayona has significantly expanded its Quebec lithium resource base, with this updated JORC Mineral Resource Estimate (MRE) for its North American Lithium (NAL) Project. Results from the updated MRE reinforce the project's status as the centrepiece of Sayona's Abitibi-Témiscamingue hub in western Quebec and highlights the potential to further develop the operation.

NAL has now a total estimated JORC Measured, Indicated and Inferred Mineral Resource of 87.9 million tonnes @ 1.13% Li_2O (0.60% Li_2O cut-off grade) which represents one of North America's single largest lithium resources. Around 82% of the tonnage is in the higher confidence Measured and Indicated categories with 72.1 million tonnes @ 1.14% Li_2O.

The increase in mineral resources at North American Lithium reflects the addition and integration of the drilling results from the 2023 program and the 2024 drilling results received by 28 June 2024 (addition of 198 drillholes for 56,790 m).

This increase in North American Lithium's mineral resources is likely to have a significant influence on any future update of economic and technical studies of the operation.

Sayona has commenced further testing the extent of mineralisation through 30,000 m of additional drilling to be completed by the end of 2024. This drilling will utilise Flow Through Shares funding that was raised in March 2023 specifically for exploration and resource definition drilling as allowed under the *Income Tax Act* (Canada) (refer ASX release 7 March 2023).

Sayona's Managing Director and CEO, Lucas Dow commented: *"Today's announcement of the updated Mineral Resource Estimate at our North American Lithium operation underscores the immense potential of this strategically significant asset. The expansion of our Quebec lithium resource base, with 87.9 million tonnes @ 1.13% Li_2O, firmly establishes this project as a cornerstone of Sayona's Abitibi-Témiscamingue hub in western Quebec.*

"This achievement builds on the successful restart and ramp-up of NAL operations over the last 17 months and is a testament to the hard work and dedication of the NAL team. Their relentless effort has revitalised the NAL operation and positioned Sayona as a leader in the North American lithium market.

"We look forward to further developing this asset and delivering exceptional value to our stakeholders."

North American Lithium JORC Mineral Resource Estimate Statement

The MRE was prepared in accordance with the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the "JORC Code") and this report complies with the JORC Code disclosure. The breakdown of 2024 MRE results by category is shown in Table 1.

North American Lithium's pegmatite dykes have been delineated over a strike length of approximately 3,500 m and to a depth of approximately 700 m vertical. Dykes have variable widths up to 50 m. The model comprises 109 mineralised dykes which are generally more than 2 m in thickness (Figure 1). The North American Lithium MRE includes all available data on the Project including additional drilling coverage up to 28th June 2024 from the 2023 and 2024 drilling programs. The MRE database includes assay data from 441 surface drill holes (totalling 112,988m), drilled between 2009 and June 2024.

Table 1 – North American Lithium – Mineral Resource Estimates (0.60% Li_2O cut-off grade for open pit and underground methods)

Classification	Measured		Indicated		Mea. + Ind.		Inferred		Mea. + Ind. + Inf.	
Method	Tonnes (Mt)	Li_2O %	Tonnes (Mt)	Li_2O %	Tonnes (Mt)	Li_2O %	Tonnes (Mt)	Li_2O %	Tonnes (Mt)	Li_2O %
Open pit	0.9	1.11	71.1	1.14	72.1	1.14	13.7	1.08	85.7	1.13
Underground	-	-	-	-	-	-	2.2	0.87	2.2	0.87
Total	**0.9**	**1.11**	**71.1**	**1.14**	**72.1**	**1.14**	**15.8**	**1.05**	**87.9**	**1.13**

JORC Mineral Resource Statement notes:

1. *The independent Competent Person (CP) for the Mineral Resource Estimate (MRE), as defined by JORC, is Pierre-Luc Richard, P.Geo., of PLR Resources Inc. The effective date of the estimate is August 27, 2024. The Competent Person is responsible for the preparation of this Mineral Resources Estimate. Melissa Jarry, P.Eng., of BBA, contributed to the Pitshell optimisation and cut-off grade calculation. Patricia Dupuis, P.Eng., of BBA, contributed to the Process aspects of the MRE.*
2. *These mineral resources are not mineral reserves as they do not have demonstrated economic viability. The quantity and grade of reported Inferred resources in this MRE are uncertain in nature and there has been insufficient exploration to define these resources as Indicated or Measured; however, it is reasonably expected that the majority of Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration.*
3. *The MRE was prepared in accordance with the JORC Code (2012);*
4. *A total of 109 dykes of lithium pegmatites were modelled in Leapfrog using implicit modelling. The model comprises 109 mineralised dykes, most with a minimum thickness of 2 m;*
5. *Based on the statistical analysis, capping value was set at 3.00% Li_2O and applied after compositing. Compositing of 1.5m in length was completed using the grade of the adjacent material when assayed or a value of zero when not assayed;*
6. *The mineral resources were estimated using Leapfrog ™ 2023.2 using hard boundaries on composited assays. The OK method was used to interpolate a sub-blocked model (parent block size = 5m x 5m x 5m and subblocks of 1.25 m);*
7. *The Measured category is limited to 10 m below the current exposed pit. The Indicated category was defined for blocks that are informed by a minimum of two (2) drillholes where drill spacing is less than 80 m. The Inferred category was assigned to blocks where drill spacing is less than 150 m. Where needed, some materials have been either upgraded or downgraded to avoid isolated blocks and spotted-dog effects;*
8. *Fixed density values were established on a per unit basis, corresponding to the median of the SG data of each unit ranging from 2.74 g/cm3 to 3.10 g/cm3 (2.74 g/cm^3 for all pegmatite dykes, 3.01 g/cm^3 for the Volcanics, 3.10 g/cm^3 for the Gabbro, 2.75 g/cm^3 for the Granodiorite). A fixed density of 2.00 t/m3 was assigned to the overburden.*
9. *Resources are presented undiluted, pit constrained and within stope shapes, and are considered to have reasonable prospects for economic extraction.*
10. *The pit optimisation was done using Deswik mining software. The constraining pit shell was developed using pit slopes varying from 45.7 to 52.6 degrees. The topography used is a combination of three Lidar survey dated from October 2023 to July 2nd, 2024. The survey covering the current pit area was taken on June 28th, 2024.*
11. *The 'reasonable prospects for eventual economic extraction' standard is met by having used reasonable cut-off grades for an open pit extraction scenario and constraining pit shells. The estimate was calculated using a price of US$1,665 per tonne of 5.4% Li_2O concentrate, a USD:CAD exchange rate of 1.32, a recovery of 67.4%, a mining cost of C$6.30/t for hard rock mineralisation, C4.87/t for hard rock waste, C$2.56/t for overburden, a G&A cost of C$21.87/t processed, a processing cost (including water treatment and tailing management) of C$31.83/t processed and a concentrate transportation cost of C$138.86/t concentrate. The Mineral Resource Estimate has been reported within a conceptual pit shell at a cut-off grade of 0.60% Li_2O, which is based on geological, technical and metallurgical considerations. Mining costs are increased by 100% in a 10m buffer zone around historical openings. The cut-off grade for underground resources was calculated at 0.60% Li_2O; it used identical costs and recoveries, except for mining costs being at C$100/t. Cut-off grades will be re-evaluated in light of future prevailing market conditions, metallurgical performance and costs;*
12. *The number of tonnes has been rounded to the nearest thousand and the number of contained Li_2O tonnes was rounded to the nearest hundred. Any discrepancy in the totals is due to rounding effects;*
13. *The Competent Persons are not aware of any problem related to the environment, permits or mining titles, or related to legal, fiscal, socio-political, commercial issues, or any other relevant factor that could have a significant impact on this MRE.*

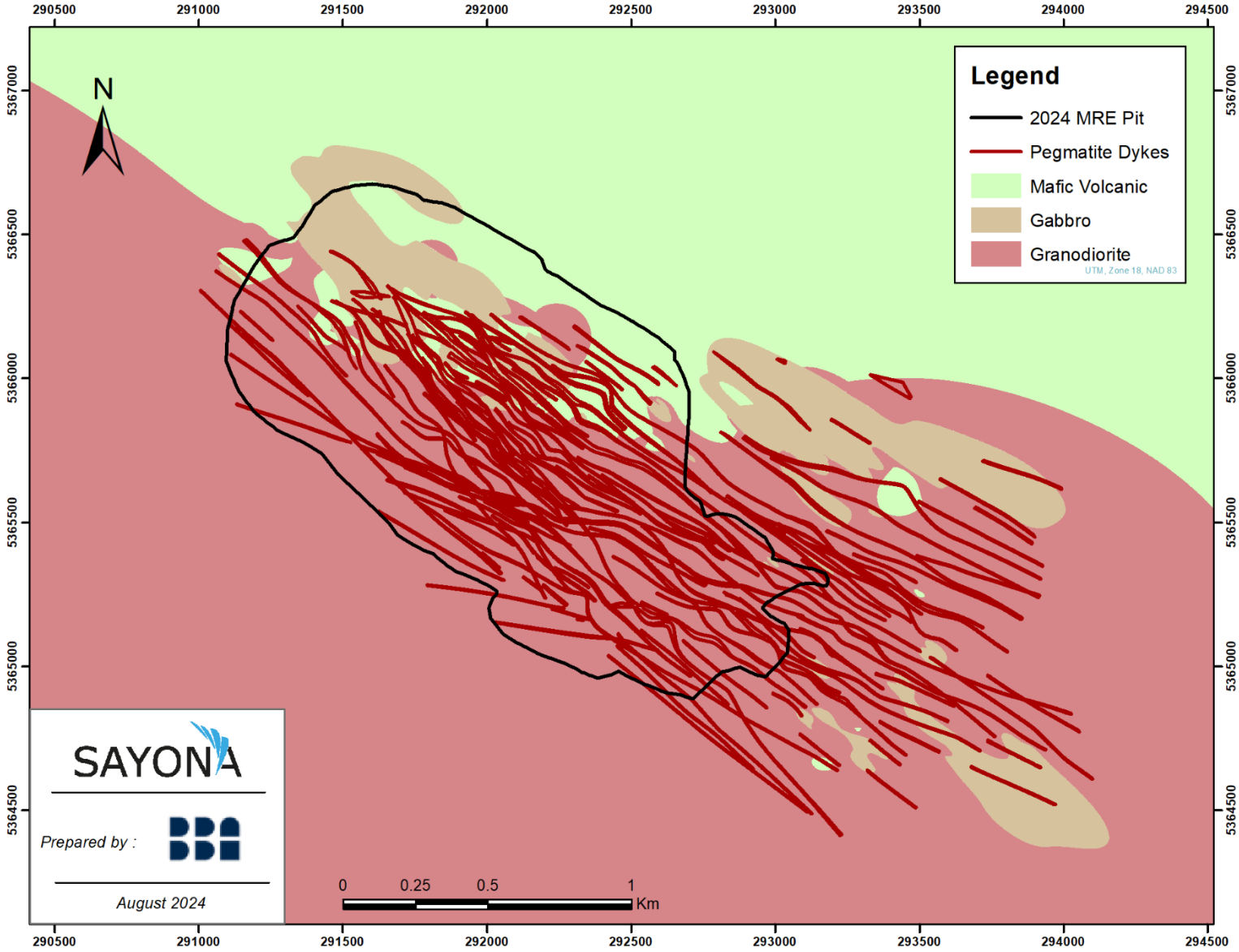

Figure 1- Plan view illustrating the pegmatite dykes, the host rock and the 2024 Mineral Resource Estimate pit for the North American Lithium operation.

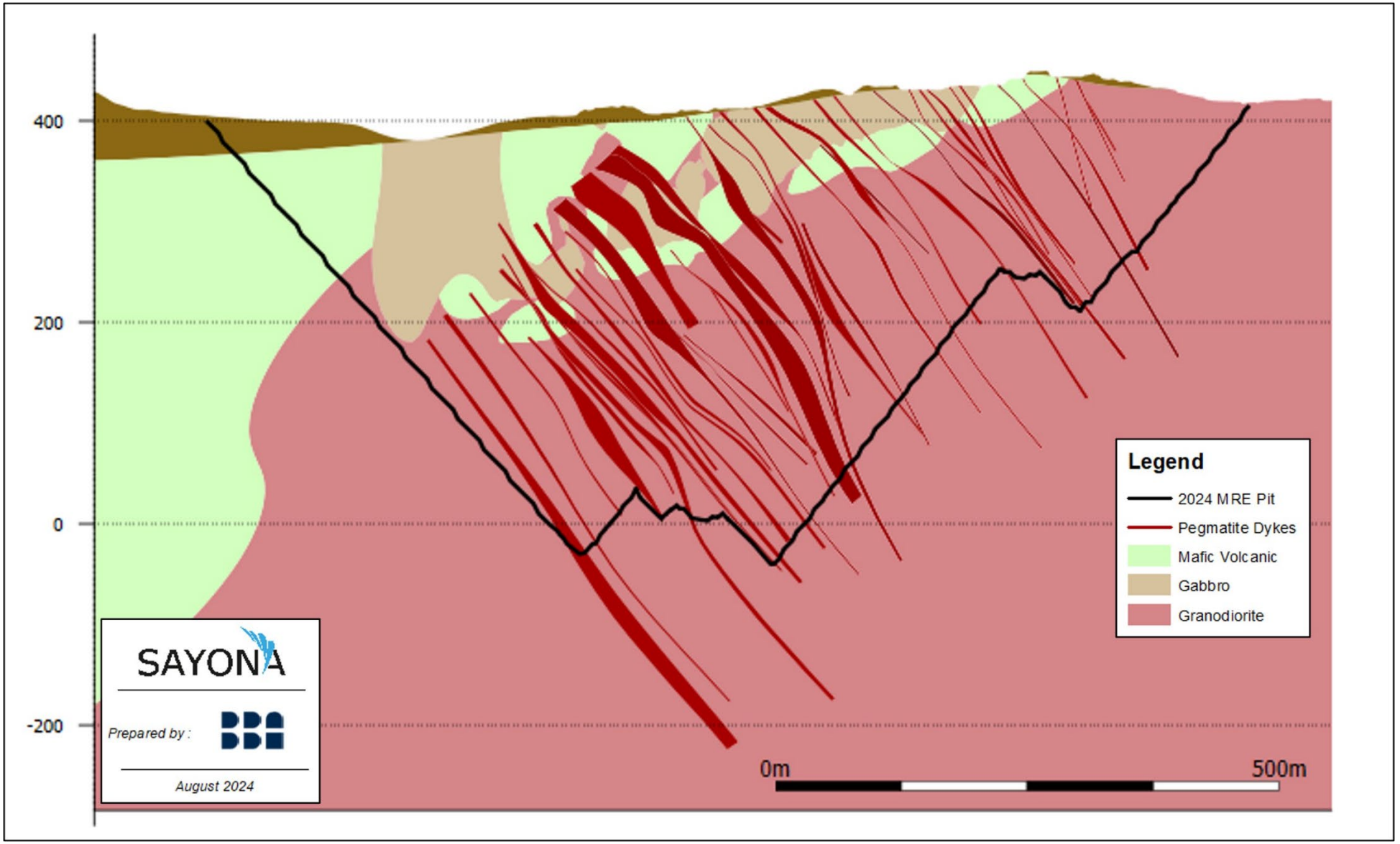

Figure 2- NE-SW cross section for the 2024 Mineral Resource Estimate for the North American Lithium operation.

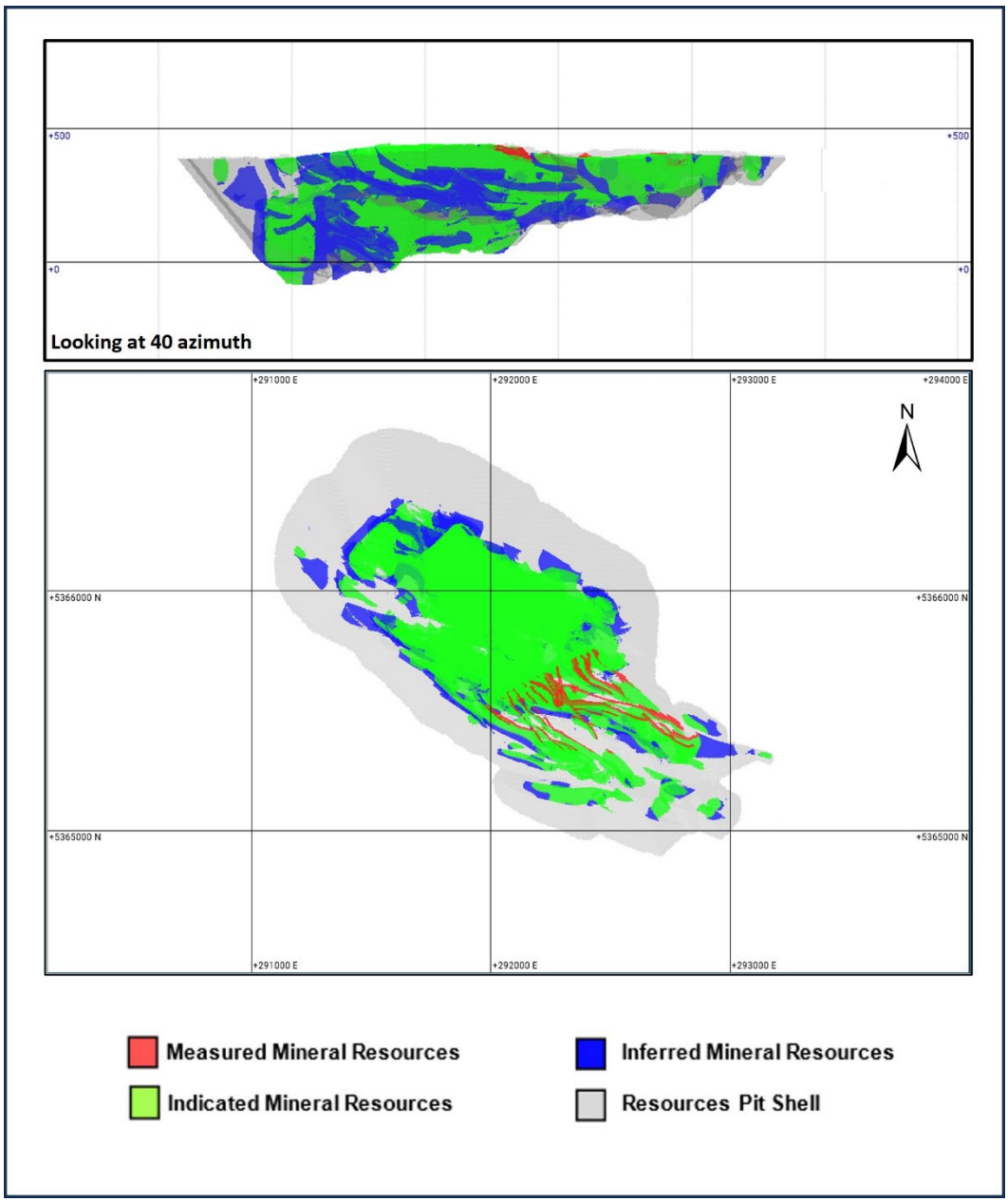

Figure 3- Longitudinal and Plan Views illustrating Measured, Indicated and Inferred Mineral Resources from 2024 MRE

North American Lithium JORC – Sensitivities Analysis (Pit constrained)

Each iteration of the cut-off grade sensitivity study was pit constrained only. Sensitivity has not been run on the underground portion of the MRE. Table 2 presents the sensitivity of the current open-pit portion of the MRE at different cut-off grades.

Tonnages and grade are presented at 0.20% Li_2O, 0.30% Li_2O, 0.40% Li_2O, 0.50% Li_2O, 0.60% Li_2O, 0.70% Li_2O, and 0.80% Li_2O cut-off grade within the official MRE pit shell.

Table 2 - Cut-off sensitivity analysis

Classification	Measured		Indicated		Mea. + Ind.		Inferred		Mea.+ Ind.+ Inf.	
Cut-off Grade Li_2O %	Tonnes (Mt)	Li_2O %	Tonnes (Mt)	Li_2O %	Tonnes (Mt)	Li_2O %	Tonnes (Mt)	Li_2O %	Tonnes (Mt)	Li_2O %
0.20	1.3	0.89	93.6	0.97	95.0	0.96	20.7	0.85	115.7	0.94
0.30	1.2	0.95	88.1	1.01	89.3	1.01	19.0	0.90	108.4	0.99
0.40	1.1	1.00	82.6	1.05	83.7	1.05	17.4	0.95	101.1	1.04
0.50	1.0	1.06	77.1	1.10	78.1	1.10	15.6	1.01	93.7	1.08
0.60	**0.9**	**1.11**	**71.1**	**1.14**	**72.1**	**1.14**	**13.7**	**1.08**	**85.7**	**1.13**
0.70	0.8	1.16	64.6	1.19	65.4	1.19	11.6	1.15	77.0	1.19
0.80	0.7	1.23	57.9	1.24	58.6	1.24	9.8	1.22	68.4	1.24

The reader is cautioned that the values provided in this table should not be interpreted as a mineral resource statement. The reported quantities and grade estimates at different cut-off grades are presented for the sole purpose of demonstrating the sensitivity of the mineral resource model to varying cut-off grades.

Listing Rule 5.8.1
Summary of Resource Estimation Parameters for North American Lithium MRE

As per ASX Listing Rule 5.8.1 and the 2012 JORC Code, a summary of the material information used to estimate the Mineral Resource is detailed below. Further details can be found in the Appendices to meet the criteria of the Listing 5.8.2 (Section 1, 2 and 3; JORC Table).

North American Lithium operation

The North American Lithium operation is located in La Corne Township area in the Abitibi-Témiscamingue region, approximately 38 km southeast of Amos, 15 km west of Barraute and 60 km north of Val-d'Or in the Province of Québec, Canada. The site is approximately 550 km north of Montreal and is serviced by road, rail and air. 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 (Figure 4).

The North American Lithium property consists of a contiguous group of 42 mineral titles (41 claims, 1 mining lease). All the claims are registered in the name of Sayona Québec Inc. for a total area of 1,493 ha. The mining lease was granted to Quebec Lithium Corp (QLI) on 29 May 2012, on the basis of a Pre-Feasibility Study (PFS) filed 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 28 May 2032. The entirety of the MRE is located within this property.

Sayona also holds a 18.75% position in 28 claims surrounding NAL. These claims are registered in the names of Consolidated Lithium Metals (75%) and North American Lithium Inc. (25%).

Two claims have a 1% net smelter return (NSR) royalty. None of the mineral resources is contained within these claims.

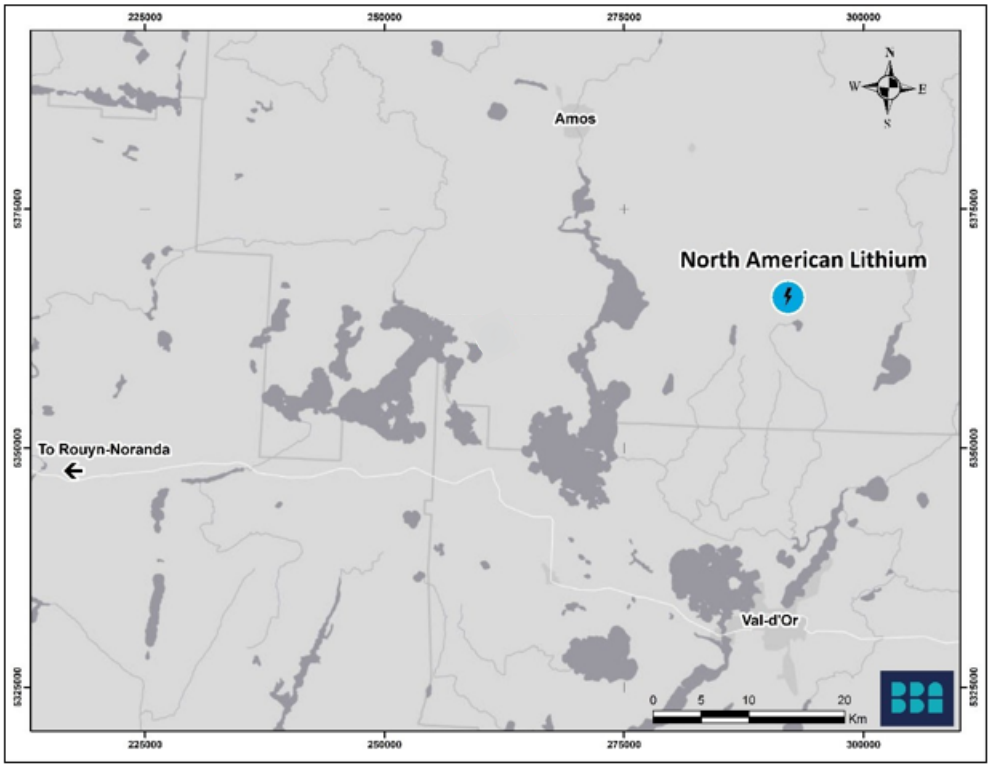

Figure 4- Location of the North American Lithium operation

Geology and Geological Interpretation

Spodumene pegmatites are exposed on the property following mining over a number of years and pre-stripping work since 2019, however most of the information on the spodumene dykes was acquired by diamond drilling.

Mining commenced in 1955 and although the three-dimensional nature of the dykes became more evident as mining continued, the characteristics identified during exploration programs remained more or less the same. The background rock formations are split between granodiorite of the La Corne batholith, volcanics, and gabbro. The pegmatite dykes mainly intrude the granodiorite and the volcanic units. Figure 1 shows the property geology, displaying the surface projection of spodumene-bearing dykes.

The project is located in the region of The Archean Preissac-Lacorne syn- to post-tectonic intrusion that was emplaced in the southern Volcanic Zone of the Abitibi Greenstone Belt of the Superior Province of Québec. The rocks are split between granodiorite of the Lacorne batholith, volcanics, and gabbro 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, and cryptocrystalline to very fine grained. Both mafic and intermediate volcanic rocks are affected by moderate to strong pervasive silicification, minor chloritisation and patchy to pervasive lithium alteration.

The granodiorite is medium grey to greenish grey, massive, coarse grained to porphyritic, and exhibits a salt-pepper appearance. The main mineral constituents 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.

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, feldspar and quartz in the dyke, the texture of the pegmatite, and the presence or absence of zoning. Pegmatite mineralisation occurs as a swarm of dykes ranging in thickness from 1.5 m to 60 m, generally striking NW-SE and dipping subvertical to 50 degrees SW.

Results demonstrate that North American Lithium is a major extensively mineralised lithium system. The primary metal is lithium and is mainly associate with spodumene, a lithium bearing pyroxene. Pegmatites also contains domains with tantalum, which could potentially be extracted as a by-product.

Sampling and Sub-sampling Techniques

Analytical data is sourced from sampling of diamond core drilling. Sample preparation involved a geologist marking the samples by placing a unique ID tag at the end of each core sample interval. Core sample lengths vary from 0.5 m to 1.5 m and were adjusted as necessary to reflect geological and/or mineralisation contacts, which periodically created samples of less than 0.5 m length. Longer sample lengths were taken of strongly sheared core or rare sections with poor core recovery. During sampling, a technician sawed each marked sample in half lengthwise. One-half of the core was placed in a plastic bag along with a detached portion of the unique bar-coded sample tag. The other half of the core was returned to the core box, and the remaining tag portion was stapled to the box. The core boxes were stored in outdoor core racks for future reference and safekeeping in La Corne, Quebec. Individual sample bags and the sample list were placed in rice bags. According to the geologist's instructions, QA/QC samples were prepared and bagged ahead of time by core shack personnel and batched at the core shack. The drill core was photographed (most of the holes) and logged prior to sampling of the holes.

Drilling Techniques

All the drilling carried out at NAL is diamond core drilling. The North American Lithium deposit has been drilled using diamond drilling over many campaigns by several companies. Diamond drill core is NQ size (47.6 mm core diameter) from surface to final depth. Core recovery is typically over 95%, with only occasional areas of sheared rock with poor recovery.

Historical drilling includes drilling programs of 50 drillholes of NQ size carried out for a total of 8,911 m in 2009, 2010 and in 2016. In 2019 a drill program of 42 drillholes of NQ size was carried out for a total of 11,487. In 2023, a drill program of 172 holes of NQ size was carried out for a total of 48,077 m. In 2024 a drill program of 26 holes of NQ size was carried out for a total of 8,713 m.

Criteria used for Classification, including Drill and Data Spacing and Distribution

The MRE comprises Measured, Indicated, and Inferred Mineral Resources.

The classification takes into account the following criteria:

- Interpolation passes;
- Distance to closest information;
- Number of drill holes used to estimate the block's grade.

The Measured category was assigned to blocks within the modelled lithium pegmatites and falling within 10 m of the bottom of the current pit surface where pegmatite dykes are observed and currently being mined. The Indicated category was assigned to blocks informed by a minimum of two drillholes where drill spacing is less than 80 m inside the conceptual resource pit shell. The Inferred category was assigned to blocks when the drill spacing was 150 m or less. Classification volumes are created around contiguous blocks at the stated spacing criteria with consideration for the selected mining method. Geological and grade continuity is also taken into consideration during the classification process.

Over the years, the geological model that underpins the NAL Mineral Resource Estimate was significantly improved to reflect both the host rock lithologies and the thickness, orientation, lateral and down-dip continuity of the pegmatite dyke swarm. The enhancements were made possible by the integration of new sampling data, a detailed review of relationships between pegmatites and diluting host rock, additional drilling, and through discussions with internal and external experts. The model accuracy was also validated against historical mining voids, past production average grades and trends observed in historical grade control data.

The model refinement for the NAL deposit enabled a more precise segregation between the spodumene-bearing pegmatites, and the high-Fe waste rock.

Sample Analysis Method

In 2009, core samples were prepared and analysed either in Lakefield or in Toronto, Ontario, SGS laboratories using a sodium peroxide fusion with atomic absorption spectrometry, method 9-8-40, to determine the %Li content. Check samples were prepared for selected samples from a split of the remaining pulps after primary analysis. The samples were packaged by SGS Lakefield and sent by couriers to the ALS Vancouver laboratory.

In 2010 and 2011, the primary laboratory was ALS and the check laboratory was AGAT Laboratories Ltd. Samples were prepared at ALS Val d'Or and assayed in Vancouver using four-acid digestion with ICP-AES finish, method Li-OG63, to determine the %Li content.

In 2016, the primary laboratory was Techni-Lab. The samples were prepared and assayed using a four-acid digestion with ICP-AES finish, method ICP-OES, to determine the %Li content. The check laboratory for 2016 was ALS Vancouver.

The quality of the analysis was monitored using blanks (one for approximately every 20 samples), and standards (one for approximately every 20 samples). Site technical personnel created customised lithium standards, i.e. ST-L (low grade) and STH (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 using pulps from the 2013 and 2014 production drillholes.

In 2019, a mobile SGS lab was set-up directly on site. The samples were prepared and assayed by SGS to determine the %Li content of the core samples.

In 2023 and up to June 28th 2024, samples were sent to ALS Laboratories. The samples were prepared and assayed using super trace DL Na2O2 with ICP-MS Inductively Coupled Plasma Mass Spectrometry to determine the %Li content of the core samples.

Estimation Methodology

Compositing was done every 1.5 m. Unsampled intervals were assigned a zero grade. Based on the statistical analysis, the capping value was set at 3.00% Li_2O and applied after compositing. Hard boundaries between individual pegmatite dykes were used during interpolation.

Variography was done in Supervisor. All pegmatite domains were estimated using ordinary kriging (OK) and using Leapfrog Edge. All the pegmatite domains were also estimated using Inverse Distance Square (ID2) and Nearest Neighbour (NN), also using Leapfrog Edge, for comparison and validation purposes. The estimation results using ordinary kriging were similar to the estimation results from the other methods.

A search ellipsoid was used to select data and interpolate Li_2O grades in two successively less restrictive passes. The ellipse sizes and anisotropies were based on variography, drillhole spacing, and pegmatite geometry. The ellipsoid was 140 m x 160 m x 50 m. The first pass has a minimum of four composites and a maximum of 12 composites and a minimum of two holes were needed to interpolate. The second pass has a minimum of two composites and a maximum of 12 composites.

Variable search ellipse orientations (dynamic anisotropy) were used during interpolation. Using Leapfrog Edge's Variable Orientation tool, the search ellipsoid follows the trend of the central reference plane of each dyke.

Parent blocks of 5 m x 5 m x 5 m, sub-blocked four times in each direction (for minimum sub-blocks of 1.25 m in each direction) were used. Sub-blocks are triggered by the geological model, mining voids, overburden, topography, and classification. Li_2O grades are estimated on the parent block and automatically populated to sub-blocks.

Validation of the block model included alternative scenarios using inverse distance square and nearest neighbour grade estimations, global means comparisons, and by visual inspection in 3D and along plan views and cross-sections.

Cut-off Grades, including the Basis for the Selected Cut-off Grades

Specific extraction methods were used to establish a reasonable cut-off grade ("COG") for the deposit. A COG of 0.60% Li_2O is used for the MRE due to processing limitations and should be viewed as a mill-feed cut-off grade for open pit scenario. The cut-off grade used for underground resources is 0.60% Li_2O; it used identical costs and recoveries, except for mining costs being at C$100/t. The COG must be evaluated in light of metal price, exchange rate, mining method, related costs, etc. the North American Lithium 2024 MRE satisfies the requirement of 'reasonable prospects of eventual economic extraction' ("RPEEE").

The MRE has been reported within a conceptual pit shell based on a selling price of US$1665 per tonne of Li_2O concentrate at 5.4% grade and a cut-off grade of 0.6 % Li_2O. The geometry and the depth of the mineralised dykes are amenable to being mined using the mining method for which they are reported (open-pit or underground).

Stope Optimiser shapes (DSO) with a minimum of 3 m were used for reporting underground resources. All material within the shapes, including internal dilution below the cut-off grade, was reported.

The open-pit cut-off grade and pit optimisation were calculated using the following parameters:

Economic assumptions:

- Selling price: US$1,665 /t conc. 5.4% Li_2O
- CAD:USD exchange rate: 1.32

Process:

- Processing cost: C$31.93 /t processed
- Transport cost: C$138.86 /t concentrate
- % Li_2O in concentrate: 5.4%
- Li_2O metallurgical recovery: 67.4%

Administration:

- G&A: C$21.87 /t processed

Mining (open pit):

- Mining cost – Mineralised material: C$6.30 /t mined
- Mining cost – Waste material: C$4.87 /t mined
- Mining cost – Overburden: C$2.56 /t mined
- Mining costs are increased by 100% in a 10m buffer zone around historical openings.

Mining (underground):

- Mining cost – C$100.00/t mined

Mining and Metallurgical Methods and Parameters, and other Material Modifying Factors considered to date

An open pit and an underground scenario were considered for the MRE. An optimised pit shell was constrained within North American Lithium claim limits. Remaining tonnages outside of the optimised pit shell were included in the underground scenario. A crown pillar of 50 m below topography and below the bottom of the conceptual pit shell was applied and excluded from reporting. The pit shell extends to a depth of approximately 400m.

Mineral Tenement and Land Tenure Status

The North American lithium Project is in the municipality of La Corne, Québec. The project was built as an open pit hard rock mine and exploited lithium-bearing pegmatite dykes, with a mineral processing facility.

The NAL property consists of a contiguous group of 42 mineral titles (41 claims, 1 mining lease). All the claims are registered in the name of Sayona Québec Inc. for a total area of 1,493 ha. Gestim, the Québec government's online portal for mining titles was consulted and NAL is the registered owner of these claims. The entirety of the MRE is located within this property. The Mining Lease was granted to QLI on May 29, 2012 and has an initial term of 20 years, expiring on May 28, 2032 and can be renewed subject to regulatory approvals.

Sayona also holds a 18.75% position in 28 claims surrounding NAL. These claims are registered in the names of Consolidated Lithium Metals (75%) and North American Lithium Inc. (25%). None of the mineral resources is contained within these claims. Two claims have a 1% NSR.

There are no known significant issues that are believed to materially impact the mine's ability to operate.

Environmental Factors

The NAL project has existing environmental permits for mining operations including the disposal of waste rock, storage of tailings, drawing water for process and the release of treated water to the environment.

The extension of mineral resources under Lac Lortie will require the approval from the Ministère des Ressources naturelles et des Forêts (MRNF) for the expansion of the existing mining lease. The MRNF could require the approval of the Closure and Rehabilitation Plan submitted at the end of 2022 before the approval of the mining lease modification.

Mining activities are located in a recreational zoning class as per the Municipality of La Corne zoning by-law. However, mining activities are accepted for this zoning class and no modification of zoning by-laws will be required. Nevertheless, social acceptability is required since mining activities may impact Mont-Vidéo's recreational and tourism activities. Finally, impact on Harricana moraine will be documented.

Comprehensive provincial and federal environmental review procedures could be triggered due to the increase in the whole NAL project footprint as future resources are developed. The footprint of additional mining activities (tailings management facilities, mine waste rock dump, etc.) will be evaluated during the future mineral reserve assessment.

In addition, provincial and federal approvals will also be required. Approvals will be subject to adoption of the compensation plan associated with the destruction of fish habitat.

A former tailings facility, under the responsibility of the State since 2010, is located within the mineral resource footprint. The management of tailings from previous mining operations will be subjected to specific conditions, depending on their geochemical characteristics. The MRNF has stated in 2010 that these tailings do not show acid rock drainage potential. However, the Ministère de l'Environnement, de la Lutte contre les changements climatiques, de la Faune et des Parcs (MELCCFP) requirements for geochemical characterisation have increased since 2020 and a more comprehensive characterisation will be required.

Finally, the responsibility for historical infrastructure will be assessed and discussed with the MRNF as additional resources beyond current permits are accessed.

Infrastructure

The NAL property is located in an established mining district and supported by the city of Val d'Or (60 km to the south) and the city of Amos (35 km to the northwest). The project is readily accessible by the national highway and a high-quality rural road network. Other infrastructure in close proximity to the project includes:

- And extensive rail network throughout Canada (Canadian National Railway). The rail network connects to Montreal and Québec City, and to the west through the Ontario Northland Railway and North American rail system;
- Québec is a major producer of electricity as well as one the largest hydropower generators in the world. Green and renewable energy is well distributed through a reliable power network; and
- Val d'Or is serviced several times daily by various airlines from Montreal.

Current site infrastructure includes:

- Open pit;
- Processing plant;
- ROM ore pad;
- Waste stockpile;
- Conventional tailings facility;
- Overburden stockpile;
- Administration facility, including offices and personnel changing area (dry);
- Workshop, tyre change, warehouse and storage areas;
- Fuel, lube and oil storage facility; and
- Reticulated services, including power, lighting and communications, raw water and clean water for fire protection, sewage collection, treatment and disposal.

Marketing and Pricing

Sayona has relied upon the Q2 2024 price forecast from consultancy Benchmark Mineral Intelligence (BMI) to assess pricing assumption for the spodumene price.

About Sayona Mining

Sayona Mining Limited is a North American 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 the Tansim Lithium Project, supported by a strategic partnership with American lithium developer Piedmont Lithium Inc. Sayona 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 include Company-owned leases and those subject to a joint venture with Morella Corporation.

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

Competent and Qualified Person Statement

The information in this report that relates to Mineral Resources for the NAL project is based on information compiled by Mr Pierre-Luc Richard, a member of the Ordre des Géologues du Québec (OGQ). Mr Richard is a full-time employee of PLR Resources Inc. and contracted by BBA to prepare this MRE. Mr Richard has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the JORC Code (2012 Edition) of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves." Mr Richard reviewed the technical information related to the MRE in this release and has relevant experience and competence in the subject matter. Mr Richard has consented to the inclusion of the information in the form and context in which it appears herein.

Forward Looking Statements

This press release contains certain forward-looking statements. Such statements include, but are not limited to, statements relating to "reserves" or "resources". Forward-looking statements are based on certain assumptions and involve known and unknown risks, uncertainties and other factors, many of which are beyond Sayona's control. Actual events or results may differ materially from the events or results expressed or implied in any forward-looking statement. There can be no assurance that such information will prove to be accurate as actual results and future events could differ materially from those anticipated in such forward-looking statements.

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APPENDIX A – JORC TABLES

JORC Code, 2012 Edition – Table 1

Section 1: Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	Nature and quality of sampling (e.g. 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.	Historic information is compiled from NI 43-101 Technical Reports prepared for the current owner and previous owners and from discussion with NAL staff. The drill core was photographed (most of the holes) and logged prior to sampling of the holes.
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	Since 2009, 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 bags and secured with tape and a plastic cable tie for shipping to the laboratory.
	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 (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g aliquot 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 (e.g. submarine nodules) may warrant disclosure of detailed information.	Sample preparation and assaying methods are industry-standard and appropriate for this type of mineralisation. The Project is supported by core samples taken by diamond drilling (no other sampling methods were used). Standards and blanks were inserted into the samples sequence prior to shipping.

Drilling techniques	Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. 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 is compiled from NI 43-101 Technical Reports prepared for the current owner and previous owners and from discussion with NAL staff. All data used for the mineral resource estimate come from diamond drilling. Historical drilling includes drilling programs of 50 drillholes of NQ size carried out for a total of 8,911 m in 2009 and 2010, managed by M.E. Lavery, P.Geo., and completed by two independent contractor geologists, in 2016. 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 11,487 m. The campaign was supervised by the geology team of NAL. In 2023, a drill program of 172 holes of NQ size was carried out for a total of 48,077 m. The campaign was supervised by the geology team of NAL. In 2024 a drill program of 26 holes of NQ size was carried out for a total of 8,713 m. 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.	Historic information is compiled from NI 43-101 Technical Reports prepared for the current owner and previous owners and from discussion with NAL staff. Core recovery is typically over 95%, with only occasional areas of sheared rock with poor recovery. Inspection by the CP of the core confirms a high core recovery.
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	Sample lengths were adjusted as necessary to reflect geological and/or mineralisation contacts, which periodically created samples of less than 0.5 m length. Longer sample lengths were taken of strongly sheared core or rare sections with poor core recoveries.
	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.	There is no correlation or bias between the grades obtained and core recovery.
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.	Historic information is compiled from NI 43-101 Technical Reports prepared for the current owner and previous owners and from discussion with NAL staff. Core was logged geologically and geotechnically. Photographs of the wet 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 6 m, with the fracturing and recovery data being recorded. In 2009, core logging was carried out by CCIC geologists. Geological and geotechnical information was recorded directly into core view v.5.0.0 software (Visidata Pty Ltd.) which was exported and backed up every night on a secure data server
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.	Logging was both quantitative and qualitative. Lithology contacts, textures, alterations, and structural features were logged.
	The total length and percentage of the relevant intersections logged.	Overall, the mineral resource estimate includes 441 holes totalling 112,988m.

Sub-sampling techniques and sample preparation	If core, whether cut or sawn and whether quarter, half or all core taken.	Historic information is compiled from NI 43-101 Technical Reports prepared for the current owner and previous owners and from discussion with NAL staff. After logging, core was marked by a geologist with sample intervals, and core samples were sawn in half. One half of the sample interval was submitted for analysis and the remainder kept for future testing and/or reference.
	If non-core, whether riffled, tube sampled, rotary split, etc., and whether sampled wet or dry.	There was no sampling method other than diamond drilling (core drilling).
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	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 red-coloured arrows. The footage is also shown next to the red lines
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	The core samples have been selected by visual logging methods and are considered appropriate for the analytical work being carried out in an industry-standard manner.
	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.	The remaining half-cores, crushed samples (rejects) and pulverised samples (pulps) are retained for further analysis and quality control checks.
	Whether sample sizes are appropriate to the grain size of the material being sampled.	Sample sizes are considered appropriate for the style of mineralisation.

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.	Historic information is compiled from NI 43-101 Technical Reports prepared for the current owner and previous owners and from discussion with NAL staff. In 2009, the core samples were prepared and analysed either in Lakefield or in Toronto, Ontario, SGS laboratories using a sodium peroxide fusion with atomic absorption spectrometry, method 9-8-40, to determine the %Li content. Check samples were prepared for selected samples from a split from the remaining pulps after primary analysis. The samples were packaged by SGS Lakefield and sent by couriers to the ALS Vancouver laboratory. In 2010 and 2011, The primary laboratory was ALS and the check laboratory was AGAT Laboratories Ltd. Samples were prepared at ALS Val d'Or and assayed in Vancouver using four-acid digestion with ICP-AES finish, method Li-OG63, to determine the %Li content. In 2016, the primary laboratory was Techni-Lab. The samples were prepared and assayed using a four-acid digestion with ICP-AES finish, method ICP-OES, to determine the %Li content. The check laboratory for 2016 was ALS Vancouver. In 2019, a mobile SGS lab was set-up directly on site. The sample were prepared and assayed by SGS to determine the %Li content of the core samples. In 2023 and up to June 28th 2024, samples were sent to ALS Laboratories. The samples were prepared and assayed using super trace DL Na2O2 with ICP-MS Inductively Coupled Plasma Mass Spectrometry to determine the %Li content of the core samples.
	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.	There was no sampling method other than diamond drilling. No geophysical tools or XRF instruments have been used in determining mineralisation.

	Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	The quality of the assay was monitored using blanks (one for approximately every 20 samples), and standards (one for approximately every 20 samples). The site created customised lithium standards, i.e. ST-L (low grade) and STH (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 using pulps from the 2013 and 2014 production drillholes. Four different Lithium standard types were used during the 2023 and up to June 28th 2024 drilling campaign. representing low grade (0.496% Li_2O, low-medium grade (1.01% Li_2O), medium grade (1.52% Li_2O) and high grade (2.19% Li_2O) material for peroxide Fusion ICP. The material used for the blank comprise a mix of white, decorative, crushed stones, composed of 90-95% quartzite with 5-10% intermediate metamorphic rocks (Extracted from Sitec Quarry, Charlevoix). The assaying techniques and quality control protocols used are considered appropriate for the data to be reported in its current form and for the estimation of mineral resources.
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.	Sampling intervals defined by the geologist were assigned sample identification numbers prior to core cutting. The results have been reviewed by multiple geologists. The company conducts internal data verification protocols, which have been followed. Significant intersections were verified by company personnel and CPs. There are no currently known drilling, sampling, recovery, or other factors that could materially affect the accuracy or reliability of the data.
	The use of twinned holes.	No twinned holes have been drilled.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	All sampling and assay information were stored in a secure GeoticLog database with restricted access. Assay results from the laboratory with corresponding sample identification are loaded directly into the GeoticLog database. Overall, the sample preparation, security, analytical procedures, and results appear reasonable, diligently executed and aligned with industry best practices.
	Discuss any adjustment to assay data.	Historic information is compiled from NI 43-101 Technical Reports prepared for the current owner and previous owners and from discussion with NAL staff. In 2016, the firm InnovExplo was retained to perform a due diligence review of the drilling, core handling, sampling and QA/QC protocols elaborated by NAL. BBA further investigated NAL's QA/QC protocol and data produced. Procedures included insertion of sterile material labelled as "blank" in the sample stream to control contamination and sample handling errors, insertion of customised reference materials labelled as standards A, B and C, representing low grade (0.336% Li_2O, average cutoff grade (0.878% Li_2O) and high grade (1.567% Li_2O) material, respectively. These were sent to the primary laboratory in alternation 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. Li% has been converted to Li_2O% for reporting purposes. The conversion used is Li_2O = Li x 2.1527.

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.	2016 and 2019 holes were first positioned and oriented by mine-site personnel using a Trimble TSC3 precision GPS instrument, and collars were precisely surveyed by J.L Corriveau, a local surveying contractor. Drillhole deviation was regularly measured by the drill operator, approximately every 15 m using a Flexit testing instrument, while multishot tests were recorded every 3 m along the hole upon closure. In 2023, drillhole deviation was regularly measured by the drill operator, approximately every 10 m using three instruments (EZ-Trac, SPRINT-IQ and DEVI-GYRO) and using the instrument Reflex Sprint-IQ up to June 28th in 2024. Multishot tests were recorded every 3 m along the hole upon closure. The topography is a combination of three Lidar survey dated from October 2023 to July 2nd 2024. The survey covering the current pit area was taken on June 28th, 2024.
	Specification of the grid system.	The grid system is UTM NAD83 Zone 18.
	Quality and adequacy of topographic control.	The quality and adequacy of the topographic control and drill hole database are considered appropriate for the work undertaken, and the data is suitable for use in mineral resource estimation.
Data spacing and distribution	Data spacing for reporting of Exploration Results.	The average drill spacing is approximately 100 m x 100 m in the area of the deposit, with local definition up to 50 m x 50 m, mostly within the conceptual pit shell.
	Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserves estimation procedure(s) and classifications applied.	Drill spacing is sufficient to establish geological and grade continuity, and to support the current Mineral Resource classifications.
	Whether sample compositing has been applied.	Samples have been composited to 1.5 m intervals.
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.	Historic information is compiled from NI 43-101 Technical Reports prepared for the current owner and previous owners and from discussion with NAL staff. The majority of holes from 2009 to 2024 were drilled with an azimuth of N045, which is perpendicular to most of 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.
	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.	The orientation and dip of the drillholes do not create any bias during core sampling.

Sample security	The measures taken to ensure sample security.	Historic information is compiled from NI 43-101 Technical Reports prepared for the current owner and previous owners and discussion with NAL staff. In 2009, 2010 and 2011, drill core was 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 drilling contractor or the previous owner' personnel to their core facility in Val d'Or. In the 2016 campaign, drill core was placed in wooden boxes, respecting the drilling sequence, with wooden markers indicating depth. Once filled, lids were sealed on the boxes, and NAL personnel transported the core to NAL's core shack located in the nearby town, Amos. In 2023 and up to June 28th 2024, drill core was placed in wooden boxes, respecting the drilling sequence, with wooden markers indicating depth. Once filled, lids were sealed on the boxes, and NAL personnel transported the core to the core shack located in the nearby town, Val-d'Or. Upon delivery to the core shack, the drill core was taken care of by the company's team of technicians and geologists. The samples were clearly identified in their respective bags without risk of contamination. Transport to the laboratory was carried out by a technician from the company. All sampling is supervised by a geologist. Pulps and rejects are returned to site and properly stored
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	Historic information is compiled from NI 43-101 Technical Reports prepared for the current owner and previous owners and from discussion with NAL staff. 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 audit included review of assay certificates, down hole deviation, hard copy records of the down hole survey results, logging codes for mineralised pegmatite and checks 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 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, SGS audited the drilling data including those of 2016. A Resource Estimate 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. In 2024, BBA audited the drilling data completed by NAL in 2023 and up to June 28th, 2024 (Database closed on June 28th, 2024).

Section 2: Reporting of Exploration Results

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.	Historic information is compiled from NI 43-101 Technical Reports prepared for the current owner and previous owners and from discussion with NAL staff. The North American lithium Project is in the municipality of La Corne, Québec. The project was built as an open pit hard rock mine and exploited lithium-bearing pegmatite dykes, with mineral processing and lithium carbonate production facilities. The NAL property consists of a contiguous group of 42 mineral titles (41 claims, 1 mining lease). All the claims are registered in the name of Sayona Québec Inc. for a total area of 1,493 ha. Gestim, the Québec government's online portal for mining titles was consulted and NAL is the registered owner of these claims. The entirety of the MRE is located within this property. The Mining Lease was granted to QLI on May 29, 2012 and has an initial term of 20 years, expiring on May 28, 2032 and can be renewed under some conditions. Sayona also holds a 25% position in 28 claims surrounding the NAL. These claims are registered in the names of Consolidated Lithium Metals (75%) and Sayona Québec Inc. (25%). None of the mineral resources is contained within these claims. Two claims have a 1% NSR. None of the mineral resources is contained within these claims. There are no known significant issues that are believed to materially impact the mine's ability to operate.
	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.	All claims are in good standing as of July 2024. There are no impediments that have been identified for operating in the Project areas.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	Historic information is compiled from NI 43-101 Technical Reports prepared for the current owner and previous owners and from discussion with NAL staff. Exploration started in 1942 by Sullivan Mining Group, followed by Quebec Lithium Corporation, Cambior Inc., Canada Lithium Corp., which merged later with Sirocco Mining Inc to form RB Energy Inc. Between 2008 and 2012, Canada Lithium Corp. carried out exploration work on the property. This work consisted of geological compilation, surface mapping, outcrop channel sampling, diamond drilling and metallurgical tests. All this work is detailed in the first NI 43-101 Report in 2012. In 2016, NAL carried out a surface drilling campaign east of the current pit. In 2023 NAL carried out a surface drilling campaign northwest and southeast of the current pit. In 2024, up to June 28th 2024, NAL carried out a surface drilling campaign mostly to the southeast of the pit with few drill holes to the west and to the north.

Criteria	JORC Code explanation	Commentary
Geology	Deposit type, geological setting and style of mineralisation.	The project is located in the region of The Archean Preissac-Lacorne syn- to post-tectonic intrusion that was emplaced in the southern Volcanic Zone of the Abitibi Greenstone Belt of the Superior Province of Québec. The rocks are split between granodiorite of the Lacorne batholith, volcanics, and gabbro 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, and cryptocrystalline to very fine grained. Both mafic and intermediate volcanic rocks are affected by moderate to strong pervasive silicification, minor chloritisation and patchy to pervasive lithium alteration. The granodiorite is medium grey to greenish grey, massive, coarse grained to porphyritic, and exhibits a salt-pepper appearance. The main mineral constituents 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. 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, feldspar and quartz in the dyke, the texture of the pegmatite, and the presence or absence of zoning. Pegmatite mineralisation occurs as a swarm of dykes ranging in thickness from 1.5 m to 60 m, generally striking NW-SE and dipping subvertical to 50 degrees NE.
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.	From the period of 2008 to 2019, a total of 519 holes were drilled for a total of 76,721 m with an average of 148 m per hole. From 2023 up to June 28th 2024, a total of 210 holes were drilled for a total of 59,591 m with an average of 283 m per hole. During all drilling programs, holes were roughly perpendicular to the direction of the pegmatites which are generally oriented NW-SE. Holes were angled typically at -45 to -60 degrees to cut as much as possible the interpreted true width of the dyke.
	If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	The Project is at a stage of production, with a reported mineral resource, ongoing engineering studies, and a substantial database of 441 surface drill holes (112,988m). All the details are therefore not presented in table form.

Criteria	JORC Code explanation	Commentary
Data aggregation methods	In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.	Exploration results are not being reported.
	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.	Data aggregation methods were not used for this Project. Mineralisation shows a very low nugget effect, low grade variation, and low COV.
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	No metal equivalent values were used.
Relationship between mineralisation widths and intercept lengths	These relationships are particularly important in the reporting of Exploration Results.	The geometry of the mineralisation with respect to the drill hole angle is known.
	If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.	The holes were drilled on bearings of 45 degrees and approximately perpendicular to the general strike and dip of the mineralised dykes.
	If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').	Pegmatite intercepts (%Li_2O over m) are expressed over downhole length (not over true 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.	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 to avoid misleading reporting of Exploration Results.	Exploration results are presented as a whole in the Mineral Resource Estimate. There are no specifically released exploration results.

Criteria	JORC Code explanation	Commentary
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.	There are no other meaningful and material exploration data to be reported.
Further work	The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).	It is recommended to complete the following work: Continued resource definition drilling within the conceptual resource pit shell to upgrade the Inferred resources to the Indicated category. Collect additional bulk density samples of the pegmatite, granodiorite, and metavolcanics to accurately estimate the tonnage of future mining. Continuously sample and assay both pegmatite dykes and country rock to collect Fe grade of the diluting host rock material.
	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	Refer to the figures in previous exploration releases (ASX Announcements of 2023 and 2024) for illustrations of previously reported holes and assays.

Section 3: Estimation and reporting of mineral resources

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.	Drillhole data is securely stored in a Geotic Log database located on the Sayona server located at site. The server is backed up daily and backups are stored in a different building, also on site. Sayona staff supplied the CPs with an MS Excel export of the final drilling and surface trenching database, which included collars, deviations, assays and geology.
	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.

Criteria	JORC Code explanation	Commentary
Site visits	Comment on any site visits undertaken by the Competent Person and the outcome of those visits.	The CP conducted site visits on July 18, 2022, July 25, 2022, and more recently on July 4, 2024. The CP inspected drill hole collars, core, and geology within the open pit. General logging and sampling procedures, analytical procedures were reviewed and the CP concluded that on-site geologists and technical team were following Best Practices.
	If no site visits have been undertaken indicate why this is the case.	Site visits were completed.
Geological interpretation	Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.	The level of confidence in North American Lithium geological model is high. The geological model proposed for this update is based on drillholes, open pit mapping, and historical underground voids. The mineralisation is composed of multi-phase pegmatite dykes crosscutting metavolcanics, granodiorite and gabbro. The pegmatite dykes generally contain various amounts (5% to 25%) of spodumene. Only lithium grades within the pegmatite dykes were used to interpolate within the dykes. Host rocks were also modelled in 3D to support the pegmatite interpretation and to provide information for mine planning.
	Nature of the data used and of any assumptions made.	The model is essentially based on lithological descriptions and geochemical results.
	The effect, if any, of alternative interpretations on Mineral Resource estimation.	The drill hole geological controls do not allow for any or few alternative interpretations. Local differences in interpretation would not be material to the Project.
	The use of geology in guiding and controlling Mineral Resource estimation.	The model is not based on Li_2O content alone; lithological descriptions was used to create 3D volumes for each of the individual pegmatite dykes (109 pegmatite dykes).
	The factors affecting continuity both of grade and geology.	Geological and grade continuities are tested and supported by substantial drilling, assays and geological observations in the field and during core logging.
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 model includes 109 pegmatite dykes striking approximately northwest and have variable dips from subvertical to 50 degrees to the southwest. The NAL pegmatite dykes have been delineated over a strike length of approximately 3,500 m and to a depth of approximately 700 m vertical. Dykes have variable up to 50 m.

Criteria	JORC Code explanation	Commentary
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.	Compositing was done every 1.5 m. Unsampled intervals were assigned a zero grade. Variography was done in Supervisor. All pegmatite domains were estimated using ordinary kriging (OK), using Leapfrog Edge. All the pegmatite domains were also estimated using Inverse Distance Square (ID2) and Nearest Neighbour (NN), also using Leapfrog Edge, for comparison and validation purposes. The estimation results using ordinary kriging was similar to the estimation results from the other methods. A search ellipsoid was used to select data and interpolate Li_2O grades in two successively less restrictive passes. The ellipse sizes and anisotropies were based on variography, drillhole spacing, and pegmatite geometry. The ellipsoid was 140 m x 160 m x 50 m. The first pass has a minimum of four composites and a maximum of 12 composites and a minimum of two holes were needed to interpolate. The second pass has a minimum of two composites and a maximum of 12 composites. Variable search ellipse orientations (dynamic anisotropy) were used during interpolation. Using Leapfrog Edge's Variable Orientation tool, the search ellipsoid follows the trend of the central reference plane of each dyke. The block model is rotated -50 degrees around the Z axis. Hard boundaries between individual pegmatite dykes were used during interpolation.
	The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.	Validation of the block model included alternative scenarios using inverse distance square and nearest neighbour grade estimations, global means comparisons, and by visual inspection in 3D and along plan views and cross-sections.
	The assumptions made regarding recovery of by-products.	The potential to recover Ta as by-product still needs to be evaluated.
	Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).	Fe grades were assigned to the block model based on the median value of individual lithologies.
	In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.	Parent blocks of 5 m x 5 m x 5 m, sub-blocked four times in each direction (for minimum sub-blocks of 1.25 m in each direction) were used. Sub-blocks are triggered by the geological model, mining voids, overburden, topography, and classification. Li_2O grades are estimated on the parent block and automatically populated to sub-blocks.
	Any assumptions behind modelling of selective mining units.	The SMU used for this estimation is driven by the width of the dykes. The dykes which have a minimum thickness of 2 m, with exceptions below 2 m.
	Any assumptions about correlation between variables.	Not applicable.
	Description of how the geological interpretation was used to control the resource estimates.	The geological interpretation (lithium pegmatites) provided hard boundaries for the estimation domains.

Criteria	JORC Code explanation	Commentary
	Discussion of basis for using or not using grade cutting or capping.	Based on the statistical analysis, capping value was set at 3.00% Li_2O and applied after compositing.
	The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.	The block model validation was done by visually comparing the results of the OK, NN and ID2 estimates against the composited and raw assay data.
Moisture	Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	All tonnages are calculated and reported on a dry tonne basis.
Cut-off parameters	The basis of the adopted cut-off grade(s) or quality parameters applied.	Economic assumptions: • Selling price: $US1,665 /t conc. 5.4% Li_2O • Exchange rate: 1.32 Process: • Processing cost: C$31.93 /t processed • Transport cost: C$138.86 /t concentrate • % Li_2O in concentrate: 5.4% • Li_2O metallurgical recovery: 67.4% Administration: • G&A: C$21.87 /t processed Mining (open pit): • Mining cost – Mineralised material: C$6.30 /t mined • Mining cost – Waste material: C$4.87 /t mined • Mining cost – Overburden: C$2.56 /t mined • Mining costs are increased by 100% in a 10m buffer zone around historical openings. Mining (underground): • Mining cost – C$100.00/t mined
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	The model comprises 109 mineralised dykes which mostly have thickness of 2 m or higher, with exceptions below 2m. The Mineral Resources are reported using a cut-off grade of 0.60% Li_2O, based on both geological and metallurgical considerations. The geometry and the depth of the mineralised dykes are amenable to be mined using the mining method for which they are reported (open-pit or underground). Appropriate dilution or mineralization loss factors have been considered to generate the pit shell to constrain the Mineral Resource Estimate. Stope Optimiser shapes (DSO) with a minimum of 3 m were used for reporting underground resources. All material within the shapes, including internal dilution below the cut-off grade, was reported. A crown pillar of 50 m below topography and below the bottom of the conceptual pit shell was applied and excluded from reporting. Mineral Resources are reported in-situ.

Criteria	JORC Code explanation	Commentary
	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.	Previous studies have successfully completed feasibility-level test work. No additional test work has been conducted since then. It is now assumed that the samples from the prior test program accurately represent the updated resource estimates and that the results from this earlier work can be utilized for the current Mineral Resource Estimate (MRE) purposes. Based on those test results, and assuming that a 5.4% Li_2O concentrate will be generated, an average of 67.4% lithium recovery is assumed.
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 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 extension of mineral resources under Lac Lortie will require the approval from the MRNF for the expansion of the existing mining lease. The MRNF could require the approval of the Closure and Rehabilitation Plan submitted at the end of 2022 before the approval of the mining lease modification. Mining activities will be located in a recreational zoning class as per the Municipality of La Corne zoning by-law. However, mining activities are accepted for this zoning class and no modification of zoning by-law will be required. Nevertheless, social acceptability will be required since mining activities may interfere with Mont-Vidéo's recreational and tourism activities. Finally, impact on Harricana moraine will have to be documented. Comprehensive provincial and federal environmental examination procedures could be triggered due to the increase in the whole NAL project footprint. Footprint of the additional mining activities (tailings management facilities, mine waste rock dump, etc.) will be evaluated during the future mineral reserve assessment. In addition, provincial and federal authorisations will also have to be obtained. Authorisations will be subject to approval of the compensation plan associated with the destruction of fish habitat. A former tailings facility, under the responsibility of the State since 2010, is located within the mineral resource's footprint. The management of tailings from previous mining operation will be subjected to specific conditions, depending on their geochemical characteristics. The MRNF has stated in 2010 that these tailings do not show acid rock drainage potential. However, the MELCCFP requirements for geochemical characterization have increased since 2020 and a more comprehensive characterization will be required. Finally, the responsibility for historical infrastructure will have to be assessed and discussed with the MRNF.

Criteria	JORC Code explanation	Commentary
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.	Density assignments in the block model are appropriate and supported by measurements.
	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.	Bulk density measurements were collected on diamond drill core using the wet immersion method. In 2022, at the request of the CP, 492 samples were sent to SGS Laboratories to improve the density measurement database. Representative samples were selected for pegmatites and waste rock. The median value of 2.74 g/cm3 was assigned to all pegmatite dykes. Surrounding lithologies were assigned the following density (median of all collected data): Granodiorite (2.75 g/cm3), Volcanics (3.01 g/cm3), Gabbro (3.10 g/cm3). Overburden was assigned 2.00g/cm3.
	Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.	The median value for each lithology was used as a fixed value.
Classification	The basis for the classification of the Mineral Resources into varying confidence categories.	The MRE has been classified as Measured, Indicated and Inferred mineral resources, reflecting varying confidence categories.
	Whether appropriate account has been taken of all relevant factors (i.e. 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).	Mineral resource classification is in accordance with the JORC 2012 reporting guidelines. All reported Mineral Resources have reasonable prospects for eventual economic extraction. Blocks were classified as Inferred when the drill spacing was 150 m or better. Blocks were classified as Indicated when the drill spacing was 80 m or better inside the conceptual resources pit shell. Blocks were classified as Measured if they fell within 10 m of the bottom of the current pit surface where pegmatite dykes are observed and currently being mined at the mine. Classification volumes are created around contiguous blocks at the stated spacing criteria with consideration for the selected mining method. Geological and grade continuity is also taken into consideration during the classification process. The Mineral Resource estimates appropriately reflect the view of the Competent Person.
	Whether the result appropriately reflects the Competent Person's view of the deposit.	The classification as Measured, Indicated and Inferred mineral resources appropriately reflects the view of the independent CPs.

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Audits or reviews	The results of any audits or reviews of Mineral Resource estimates.	An internal audit was conducted by the CP between the recent PFS and FS reports, identifying opportunities to improve the resource model. The 2023 MRE, conducted by the CP, was significantly improved to reflect both the host rock lithologies, the thickness, orientation, and lateral and down-dip continuity of the pegmatite dyke swarm. The enhancements were made possible by the integration of new sampling data, a detailed review of relationships between pegmatites and diluting host rock, and through discussions with internal and external experts. The model accuracy was also validated against historical mining voids, past production average grades and trends observed in historical grade control data. The current MRE kept this approach.
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 pegmatite geometry and continuity has been adequately interpreted to reflect the applied level of Measured, Indicated and Inferred Mineral Resource.
	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.	The data quality is good, and the drill holes have detailed logs produced by qualified geologists. All core used in the estimate is properly stored, and mineralised intervals can be reviewed when required. Certified laboratories have been used for all analyses.
	These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	Discussions with on-site geologists and engineers allowed to confirm that the current model honours what is being encountered on a day-to-day basis confirming the robustness of the current model.