

# Further high-grade drilling results at North American Lithium

- Latest results for 36 new drillholes totalling 8,803 m for Sayona's North American Lithium (NAL) operation, Québec, Canada with highlights including:
  - North-West Extension New Pegmatites
    - 21.00m @ 1.55% Li<sub>2</sub>O from 352.90m in drillhole LAN-24-153A
    - 25.50m @ 1.64% Li<sub>2</sub>O from 308.20m in drillhole LAN-24-156
    - 25.35m @ 1.76% Li<sub>2</sub>O from 269.25m in drillhole LAN-24-159
    - **18.40m @ 1.54% Li<sub>2</sub>O** from 356.05m in drillhole LAN-24-159
  - o Resources Area Potential Resources Upgrade or Conversion
    - 26.05m @ 1.66% Li<sub>2</sub>O from 324.25m in drillhole LAN-23-010-W1
    - 19.90m @ 1.52% Li<sub>2</sub>O from 52.20m in drillhole LAN-23-072
- All assay results of the 2023 drilling campaign are now completed, validated and released (24 holes for 4,900<sup>1</sup> m in this release)
- High-grade results were obtained from the first 2024 drillholes (12 drillholes and wedges totalling 3,903 m).
- Further drilling program totalling approximately 30,000 m to be completed at NAL throughout 2024.

North American lithium producer Sayona Mining Limited ("Sayona") (ASX:SYA; OTCQB:SYAXF) announced today the results from 36 new drillholes totalling 8,803 metres at the Company's North American Lithium (NAL) operation (Sayona 75%; Piedmont Lithium 25%) in Québec, Canada, demonstrating the high-grade nature of this strategic asset.

All the drilling results from the 2023 exploration program are now complete, validated and released and the first results from the 2024 exploration drilling program, which is currently underway, are reported in this release. The 2023 drill program has been a successful in demonstrating the potential to increase the mineral resource base at NAL. The 2023 drill program was designed to test extensions to mineralisation and provide in-fill data for the upgrade of Mineral Resource categories. The latest drilling results include the identification of high-grade lithium mineralisation outside the Mineral Resource estimate (MRE) pit shells, particularly in the North-West and South-East extensions, and support potential conversion of some of the Inferred resources to Indicated category within the MRE pit shells.

Sayona's Interim CEO, James Brown commented: "We are delighted to have another strong set of drilling results from North American Lithium which continue to highlight the superb quality of this mine.

"The results reported today have shown that mineralisation continues outside of the existing MRE pit shells so the next key step will be to complete a recalculation of the MRE to include recent drilling.

"Additionally, we will also complete a further 30,000 metres of drilling throughout 2024 to better understand the full potential of the NAL mineralisation."

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<sup>&</sup>lt;sup>1</sup> Hole LAN-23-010-w1 includes 308m of the parent hole to where the wedge hole commenced.

Table 1 - Drillhole Best Intercepts - All New Results above a Metal Factor greater than 10

Drillhole	From (m)	To (m)	Length (m)	Li <sub>2</sub> O %	Description						
North-West Exten	North-West Extension - New Pegmatites										
LAN-24-153A	352.90	373.90	21.00	1.55	21.00m @ 1.55% Li <sub>2</sub> O from 352.90m						
LAN-24-156	308.20	333.70	25.50	1.64	25.50m @ 1.64% Li <sub>2</sub> O from 308.20m						
LAN-24-159	269.25	294.60	25.35	1.76	25.35m @ 1.76% Li <sub>2</sub> O from 269.25m						
_	356.05	374.45	18.40	1.54	18.40m @ 1.54% Li <sub>2</sub> O from 356.05m						
_	380.80	394.85	14.05	0.76	14.05m @ 0.76% Li <sub>2</sub> O from 380.80m						
_	489.50	501.65	12.15	0.86	12.15m @ 0.86% Li <sub>2</sub> O from 489.50m						
South-East Extens	sion - New Pegn	natites									
LAN-23-079	16.95	23.95	7.00	1.43	7.00m @ 1.43% Li <sub>2</sub> 0 from 16.95m						
Resources Area -	Potential Resou	rces Upgrad	e or Conversion								
LAN-23-010- W1	309.00	322.20	13.20	0.95	13.20m @ 0.95% Li <sub>2</sub> 0 from 309.00m						
	324.25	350.30	26.05	1.66	26.05m @ 1.66% Li <sub>2</sub> O from 324.25m						
LAN-23-072	52.20	72.10	19.90	1.52	19.90m @ 1.52% Li <sub>2</sub> O from 52.20m						

Notes (1): Table 1 presents all new results above a Metal Factor greater than 10. Bold text indicates Metal Factor greater than 25.

Notes (2): Methodology for calculating all drilling intercepts presented in the tables and figures in this press release. Drillhole intercepts guery and calculations are made automatically using the economic composite tool in Leapfrog software (v.2023.2.1). The selection algorithm was applied to all the drilling results and may not represent true thickness. Calculations are made according to the following steps. Step no. 1: Assigned lithology code (ex: pegmatites, gabbro, granodiorite) to each individual sample based on majority code (i.e. rule of 51%). Step no.2: Assignment of a 0% Li<sub>2</sub>O content to all lithologies other than spodumene pegmatites (e.g. "waste lithologies" such as gabbro and volcanic rocks). Step no. 3: Calculation of intercepts based on a minimum grade of 0.25% Li<sub>2</sub>O over a minimum core length of 2m (and no maximum length), with a tolerance allowing the inclusion of 2m waste gap up to a maximum of 20m cumulative length of waste inside an intercept. Step no.4: Selection of the drilling results highlights based on grades, lengths, and Metal Factor (Li<sub>2</sub>O grade (%) x core length (m)).

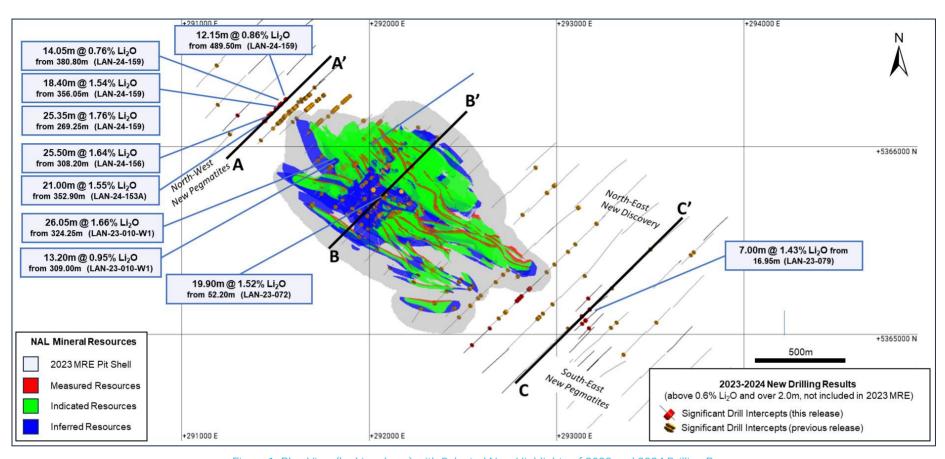


Figure 1- Plan View (looking down) with Selected New Highlights of 2023 and 2024 Drilling Program

Notes: Text boxes for all new results with Metal Factor (grade \* thickness) greater than 10 (this release).

# **North-West Extension - New Pegmatites**

Highlights from the North-West Extension - New Pegmatites are presented in Table 2. New drilling intersected pegmatite dykes with assays from thicker sections returning intercepts of 1.55%  $\text{Li}_2\text{O}$  over 21.00m for the drillhole LAN-24-153a, 1.64%  $\text{Li}_2\text{O}$  over 25.50m for the drillhole LAN-24-156, and 1.76%  $\text{Li}_2\text{O}$  over 25.35m for the drillhole LAN-24-159 (see Figures 1 and 2).

Previous and new results confirm the presence of wide pegmatite dykes and many others of smaller parallel-trending dykes that may extend to the North-West of NAL lithium mineral resources shell. These additional diamond drillholes in the North-West area will potentially add mineral resources in a future mineral resource estimate update.

Table 2 − North-West Extension - New Pegmatites (intervals above 0.6% Li<sub>2</sub>O over 2m)

Drillhole	From (m)	To (m)	Length (m)	Li <sub>2</sub> O %	Description	Area
LAN-23-055	156.40	159.90	3.50	1.05	3.50m @ 1.05% Li <sub>2</sub> 0	
LAN-24-153a	161.25	164.85	3.60	0.63	3.60m @ 0.63% Li <sub>2</sub> 0	_
	188.80	193.55	4.75	1.29	4.75m @ 1.29% Li <sub>2</sub> 0	_
	228.05	230.45	2.40	0.98	2.40m @ 0.98% Li <sub>2</sub> 0	_
	352.90	373.90	21.00	1.55	21.00m @ 1.55% Li <sub>2</sub> O	_
LAN-24-156	179.20	181.75	2.55	1.48	2.55m @ 1.48% Li <sub>2</sub> O	North-West
	288.00	295.75	7.75	1.16	7.75m @ 1.16% Li <sub>2</sub> 0	Area
	308.20	333.70	25.50	1.64	25.50m @ 1.64% Li <sub>2</sub> O	Potential New
	124.10	128.85	4.75	0.70	4.75m @ 0.70% Li <sub>2</sub> 0	Resources
LAN-24-159	141.00	145.00	4.00	0.63	4.00m @ 0.63% Li <sub>2</sub> 0	_
	269.25	294.60	25.35	1.76	25.35m @ 1.76% Li <sub>2</sub> O	_
	356.05	374.45	18.40	1.54	18.40m @ 1.54% Li <sub>2</sub> O	_
	380.80	394.85	14.05	0.76	14.05m @ 0.76% Li <sub>2</sub> O	_
	399.50	402.15	2.65	0.88	2.65m @ 0.88% Li <sub>2</sub> 0	_
	405.30	418.85	13.55	0.73	13.55m @ 0.73% Li <sub>2</sub> O	_
	478.50	480.70	2.20	1.02	2.20m @ 1.02% Li <sub>2</sub> 0	_
	484.35	486.40	2.05	1.30	2.05m @ 1.30% Li <sub>2</sub> O	_
	489.50	501.65	12.15	0.86	12.15m @ 0.86% Li <sub>2</sub> O	

Notes: Table 2 presents all intervals above 0.6%  $Li_2O$  over 2m. Bold text indicates Metal Factor greater than 10. See Notes (2) (Table 1) for drilling intercept calculation methodology.

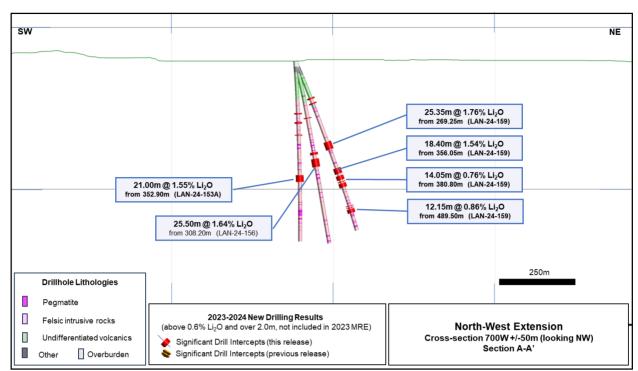


Figure 2- North-West Extension – New Pegmatites (Section A-A' cross-section view, 700 W +/-50m)

#### **South-East Extension - New Pegmatites**

Highlights from the South-East Extension - New Pegmatites are presented in Table 3. Previous and additional drilling confirms the extension of pegmatite dykes in the South-East extension of NAL lithium deposit. Several near-surface pegmatite dykes were identified in the area (previously and this release), with values up to 7.00m @ 1.43%  $\text{Li}_2\text{O}$  from 16.95m in drillhole LAN-23-079. Previous and new intercepts will also potentially add mineral resources in a future mineral resource estimate update.

Table 3 - South-East Extension -New Pegmatites (intervals above 0.6% Li<sub>2</sub>O over 2m)

Drillhole	From (m)	To (m)	Length (m)	Li <sub>2</sub> O %	Description	Area
LAN-23-079	16.95	23.95	7.00	1.43	7.00m @ 1.43% Li <sub>2</sub> O	
	108.00	110.00	2.00	1.22	2.00m @ 1.22% Li <sub>2</sub> 0	
LAN-23-105	32.50	37.00	4.50	1.32	4.50m @ 1.32% Li <sub>2</sub> O	
	53.40	56.20	2.80	0.85	2.80m @ 0.85% Li <sub>2</sub> 0	South-East
	65.40	68.25	2.85	0.61	2.85m @ 0.61% Li <sub>2</sub> O	Area
	85.35	87.80	2.45	0.71	2.45m @ 0.71% Li <sub>2</sub> 0	Potential New
	90.70	92.85	2.15	0.79	2.15m @ 0.79% Li <sub>2</sub> O	Resources
	164.95	167.90	2.95	1.06	2.95m @ 1.06% Li <sub>2</sub> O	
	175.90	186.55	10.65	0.73	10.65m @ 0.73% Li <sub>2</sub> 0	
LAN-23-125	93.10	95.20	2.10	0.85	2.10m @ 0.85% Li <sub>2</sub> O	
	290.50	293.20	2.70	0.99	2.70m @ 0.99% Li <sub>2</sub> O	
LAN-24-158	87.00	89.30	2.30	1.60	2.30m @ 1.60% Li <sub>2</sub> O	
	123.00	133.20	10.20	0.91	10.20m @ 0.91% Li <sub>2</sub> 0	
LAN-24-160	122.95	125.70	2.75	1.16	2.75m @ 1.16% Li <sub>2</sub> 0	_
LAN-24-162	147.30	149.55	2.25	1.39	2.25m @ 1.39% Li <sub>2</sub> 0	-

Notes: Table 3 presents all intervals above 0.6% Li<sub>2</sub>O over 2m. Bold text indicates Metal Factor greater than 10. See Notes (2) (Table 1) for drilling intercept calculation methodology.

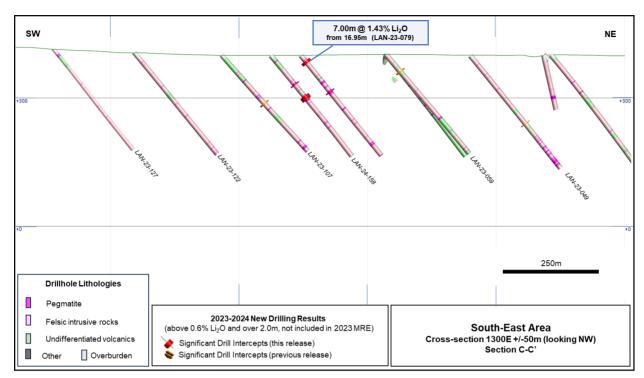


Figure 3- South-East Extension - New Pegmatites (Section C-C' cross-section view, 1300 E +/-50m)

#### **Resources Area - Potential Resources Upgrade or Conversion**

Highlights from the Resources Area - Potential Resources Upgrade or Conversion are presented in Table 4. Significant wide new intercepts include 1.66%  $\text{Li}_2\text{O}$  over 26.05m from 324.25m in drillhole LAN-23-010-W1 and 1.52%  $\text{Li}_2\text{O}$  over 19.90m from 52.20m in drillhole LAN-23-072. Numerous previous and new drilling results confirm the potential for converting Inferred resources into the Measured and/or Indicated categories within the NAL pit shell. Results confirm the continuity of the mineralisation.

Table 4 - Resources Area - Potential Resources Upgrade or Conversion (intervals above 0.6% Li<sub>2</sub>O over 2m)

Area	Description	Li <sub>2</sub> O %	Length (m)	To (m)	From (m)	Drillhole
	13.20m @ 0.95% Li <sub>2</sub> 0	0.95	13.20	322.20	309.00	LAN-23-010-W1
Resources Area	26.05m @ 1.66% Li <sub>2</sub> O	1.66	26.05	350.30	324.25	
Potential	4.65m @ 1.77% Li <sub>2</sub> 0	1.77	4.65	366.00	361.35	
Upgrade or	5.35m @ 1.79% Li <sub>2</sub> 0	1.79	5.35	14.85	9.50	LAN-23-072
 Conversion	19.90m @ 1.52% Li <sub>2</sub> 0	1.52	19.90	72.10	52.20	

Notes: Table 4 presents all intervals above 0.6%  $Li_2O$  over 2m. Bold text indicates Metal Factor greater than 25. See Notes (2) (Table 1) for drilling intercept calculation methodology.

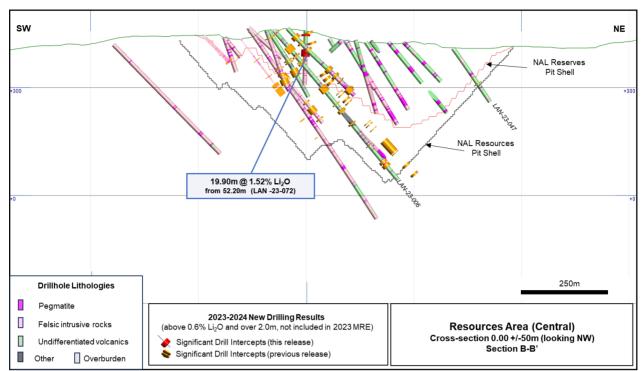


Figure 4- Resources Area - Potential Resources Upgrade or Conversion (Section B-B' cross-section view, 0.00 +/-50m)

NAL comprises a contiguous group of 42 mineral titles (41 claims, one mining lease) spanning 1,493 hectares, situated near La Corne township in Québec's Abitibi-Temiscamingue region. NAL also owns 25% interest in the adjacent Vallee lithium claims. The operation has a lithium mine and concentrator, with production of spodumene concentrate having recommenced in March 2023. The project lies 60 kilometres north of the city of Val d'Or, a major mining service centre, with access to road and rail infrastructure together with skilled labour.

Issued on behalf of the Board.

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#### **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 <a href="https://www.sayonamining.com.au">www.sayonamining.com.au</a>

#### **References to Previous ASX Releases**

- New high-grade zones discovered at North American Lithium 13 May 2024
- New high-grade zones encountered in NAL drilling 2 November 2023
- DFS confirms NAL value with A\$2.2B NPV 14 April 2023

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

#### **Competent and Qualified Person Statement**

The information in this announcement relating to Exploration Results is based on, and fairly represents, information and supporting documentation prepared by Mr. Carl Corriveau, PGeo, VP Exploration of Sayona, Mr Alain Carrier, PGeo, independent consultant (InnovExplo) and Mr Ehouman N'Dah, PGeo, Exploration Manager of Sayona who are all members of the Quebec Order of Geologists, a Registered Overseas Professional Organisation as defined in the ASX Listing Rules, and has sufficient experience which is relevant to the style of mineralisation and type of deposits under consideration and to the activity which has been undertaken to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves" and are Qualified Person as defined by National Instrument 43-101 – Standards of Disclosure for Mineral Projects. Mr Carrier, Corriveau and N'Dah consent to the inclusion in this release of the matters based on the information in the form and context in which they appear.

## **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.

Table 5 - Drillhole Collar Data

#### North-East Area - New Pegmatites

Drillhole	East (m)	North (m)	Elevation (m)	Azimuth	Dip Degrees	End of Hole (m)
LAN-23-144	293,316.40	5,365,683.20	400.60	45	-50	3.00
LAN-23-147	293,652.40	5,365,381.80	384.10	45	-45	24.00
LAN-23-151	293,784.21	5,365,500.89	399.84	43	-50	300.00
			Sub-total	3	drillholes	327.00

#### North-West Extension - New Pegmatites

Drillhole	East (m)	North (m)	Elevation (m)	Azimuth	Dip Degrees	End of Hole (m)
LAN-23-055	291,219.51	5,366,084.47	396.30	43	-44	301.00
LAN-23-061	291,132.84	5,365,932.26	396.72	45	-45	30.00
LAN-23-081	291,534.79	5,366,536.80	398.42	53	-46	325.00
LAN-23-082	291,561.10	5,366,385.00	398.00	45	-45	30.00
LAN-23-082a	291,562.95	5,366,384.88	398.36	42	-44	301.00
LAN-23-090	291,730.74	5,366,340.62	400.03	49	-47	253.00
LAN-23-093	291,636.93	5,366,242.43	400.77	41	-44	250.00
LAN-23-128	291,079.05	5,366,318.43	393.00	45	-45	13.00
LAN-23-140	291,350.84	5,366,599.22	393.79	45	-45	301.00
LAN-23-141	291,356.09	5,366,391.34	396.12	46	-44	301.00
LAN-24-153	291,430.12	5,366,133.49	395.95	52	-85	33.00
LAN-24-153a	291,430.12	5,366,133.49	395.95	49	-86	558.00
LAN-24-156	291,430.30	5,366,133.67	395.94	46	-76	573.00
LAN-24-159	291,430.23	5,366,133.65	397.18	46	-66	558.00
			Sub-total	14	drillholes	3,827.00

#### South-East Extension - New Pegmatites

Drillhole	East (m)	North (m)	Elevation (m)	Azimuth	Dip Degrees	End of Hole (m)
LAN-23-079	293,125.29	5,365,086.54	399.02	47	-51	300.00
LAN-23-105	292,772.70	5,365,160.98	413.84	43	-50	304.00
LAN-23-125	292,504.00	5,364,900.32	427.37	47	-50	301.00
LAN-23-126	292,602.83	5,364,793.33	422.79	47	-51	301.00
LAN-23-127	292,708.55	5,364,685.95	414.90	44	-51	301.00
LAN-23-145	293,587.46	5,364,903.40	400.90	47	-50	307.00
LAN-23-146	293,549.20	5,364,663.50	394.90	45	-50	9.00

#### South-East Extension - New Pegmatites

Drillhole	East (m)	North (m)	Elevation (m)	Azimuth	Dip Degrees	End of Hole (m)
LAN-24-154	293,060.59	5,364,779.03	399.56	46	-49	305.85
LAN-24-157	293,069.41	5,364,902.23	399.08	44	-50	301.00
LAN-24-152	293,089.46	5,364,731.86	399.71	46	-50	313.00
LAN-24-158	293,094.93	5,365,017.84	398.54	45	-50	301.00
LAN-24-162	293,101.05	5,365,122.26	398.60	45	-49	304.00
LAN-24-160	293,117.80	5,364,974.81	398.93	45	-50	301.00
LAN-24-155	293,146.96	5,364,792.54	399.43	53	-50	36.00
LAN-24-155a	293,146.96	5,364,792.54	399.43	45	-50	319.00
			Sub-total	15	drillholes	4,003.85

# Resources Area – Potential Upgrade or Conversion

Drillhole	East (m)	North (m)	Elevation (m)	Azimuth	Dip Degrees	End of Hole (m)
LAN-23-010-w1	291,658.83	5,365,861.81	431.02	46	-57	414.00
LAN-23-072	292,033.40	5,365,702.12	458.12	265	-89	151.00
LAN-23-074	292,355.00	5,365,590.00	370.00	52	-57	19.00
LAN-23-113	292,131.57	5,366,097.75	405.07	44	-59	61.00
			Sub-total	4	drillholes	645.00
			Total	36	drillholes	8,802.85

Notes: The coordinates are in metres in UTM NAD83 Zone 18 and elevation are above sea level. Hole LAN-23-010-w1 includes 308m of the parent hole to where the wedge commenced.

# **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.	Samples are obtained from diamond drilling (NQ and HQ diameter core).  Sample database has been established in UTM coordinates (NAD 83 Zone 18).
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	Geological logging of recovered drill core visually identified pegmatites and its constituent mineralogy to determine the intervals for sampling. Lithium bearing spodumene is easily identified. The drill core was photographed and logged prior to sampling. Sampling has been determined on geological characteristics and ranges from between 0.25m and 1m in length. Core was cut using a diamond saw core-cutter and half core sampled. All pegmatite material intersected downhole has been sampled.
	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 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 (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). Reference materials (standards and blanks) as well as core twin and pulp duplicates were added to the sequence prior to shipping.

Drilling techniques	Drill type (e.g. core, reverse circulation, openhole 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.).	Drilling from surface was carried out by diamond drilling methods, using standard tubes to recover NQ and HQ sized core (no other drilling methods were used). Core was not oriented. Downhole drill azimuth and dip has been determined by TN-14 azimuth aligner and downhole Reflex EZ-TRAC, Reflex Srint-IQ or Reflex Devi-Gyro multi and single shot recording instruments.
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed.	Drilling was completed directly into the hard (fresh) rock, starting at the surface, and core recovery approximates 100% (no other sampling methods were used).
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	To ensure representative nature of the samples, core has been marked up, and core recovery and RQD measurements recorded. Core recoveries were typically high and are considered acceptable and it is not believed a bias has been introduced into the sampling system.
	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.	All drill core has been geologically logged to a level of detail appropriate for the project. Geological logging, RQD measurements and structural information have been completed. The logging is qualitative and is supported by core photography of marked up core. The logging and its level of detail was of sufficient quality and appropriate to support Mineral Resource estimation, mining studies and metallurgical studies.
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.	Geological logging recorded qualitative descriptions of lithology, alteration, mineralisation, veining and structure. Logging also includes measurement of core recovery and RQD.
	The total length and percentage of the relevant intersections logged.	All the drilled footage for holes in the current release has been described and included in the database.
Sub-sampling techniques and sample preparation	If core, whether cut or sawn and whether quarter, half or all core taken.	Drill core has been cut in half by diamond saw with half-core samples packaged, grouped into bulk bags for dispatch to the laboratory.  Half core sampling is considered an appropriate method to ensure a sufficient quantity of sample is collected for it to be representative of the drilled material and appropriate for the grain size of the material being sampled.
	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, sample preparation and quality control protocols are considered appropriate for the material being sampled.

Sample preparation was conducted in an independent accredited laboratory (ALS Laboratories in Val-d'Or, Quebec).

Each core sample is dried and weighed, and the entire sample is crushed to 70% passing 2mm. A split of up to 250g is taken using a riffle splitter and pulverised to better than 85% passing 75um.

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.

The core samples have been selected by visual logging methods which are considered appropriate for the analytical work being carried out and, in an industry standard way.

Remaining half core, crushed sample (reject) and pulverised sample (pulp) are retained for further analysis and quality control checks.

Samples sizes are considered appropriate for the style of mineralisation.

The nature, quality and appropriateness of Quality of assay data the assaying and laboratory procedures and laboratory tests 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.

All samples were analysed at independent accredited laboratories (in Val-d'Or, Quebec). All samples were analysed by ME-MS-89L Sodium Peroxide Fusion and ICP-MS finish using a 0.2g aliquot of pulverised material. Sayona has regularly inserted 3rd party reference control samples and blank samples in the sample stream to monitor assay and laboratory performance. Assaying was completed by ALS Laboratories, Vancouver.

It is believed the sampling, assaying and laboratory procedures are representative of the drilled material and appropriate for the project.

There was no sampling method other than diamond drilling. No geophysical tools or XRF instruments have been used in determining grade of the 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.	Assay sample of Certified Reference Material, half core duplicate sampling and insertion of blanks into the sample sequence has been undertaken to ensure QA/QC. Protocols include systematic insertion of CRM standards at approximately 1 in every 25 samples and alternating blank samples of quartz and core duplicate samples for every 1 in 25 samples in previous operator programs (SOQUEM). Since June 2022, Sayona's protocols have switched to a control sample insertion of every 1 in 20 samples.  The CRM material used for monitoring lithium values are OREAS 750, OREAS 751, OREAS 752 and OREAS 753. These standards have been selected to reflect the target mineralisation. Assays of quality control samples were compared with reference samples in a database and verified as acceptable prior to use of data from analysed batches.  The assaying techniques and quality control protocols used are considered appropriate for the data to be reported in its current form and 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 have 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. The verification of significant intersections has been completed by company personnel and Qualified Persons.  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 completed.
	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. This data has been verified against original laboratory assay results.  Assay results from the laboratory with corresponding sample identification are loaded directly into the GeoticLog database.
	Discuss any adjustment to assay data.	Li% has been converted to $\text{Li}_2\text{O}\%$ for the purposes of reporting. The conversion used is $\text{Li}_2\text{O}$ = Li x 2.1527. No other adjustments to assay data have been undertaken.
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.	The drilling collars are positioned using a Trimble R8 differential GPS by our internal technicians.  Drill rig alignment was attained using an electronic azimuth aligner (Reflex TN-14 or Reflex Devi-Aligner azimuth aligner). Downhole survey was collected at 3m intervals using Reflex EZ-TRAC instruments.  NAL local LIDAR survey (J-L Corriveau surveyors) of the area was used to prepare a DEM/topographic model for the Project.
	Specification of the grid system used.	The grid system used 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 data to be used for estimation of Mineral Resources.
Data spacing and distribution	Data spacing for reporting of Exploration Results.	The drill hole spacing ranges from 50–150m within the mineral resource area.  The spacing between drill hole fences is typically 150m in 2022-2023.  The drilling grid is looser in areas at the exploration stage and may include isolated drill holes.

	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.	The data spacing is sufficient to establish the degree of geological and grade continuity for the exploration results reported.  Further drilling is required to determine the extent of currently defined mineralisation.
	Whether sample compositing has been applied.	Samples are not composited.  For the purposes of illustrating exploration results, lithium values for pegmatite dykes are obtained by weighted average of individual samples.
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.	Drilling may intersect mineralisation at various angles but is typically orthogonal to the lithium pegmatite dykes. Some drill positions have utilized the same drill pad but with a variable dip to intersect the target mineralisation at depth.
	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.	Relationship between the drilling orientation and the orientation of key mineralised structures is appropriate. Drill holes exploring the extents of the NAL deposit intersect the main pegmatite dykes with the right angle.
Sample security	The measures taken to ensure sample security.	All reasonable measures and industry standard sample security and storage measures have been undertaken. The security of samples is controlled by tracking samples from drill rig to core logging, to sampling, to laboratory to database. Drill core was delivered from the drill rig to the project core yard every shift. On completion of geological and geotechnical logging, core processing was completed by Explo-Logik's personnel, and/or by their representatives, and then sent to the laboratory.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	Internal reviews of core handling, sample preparation and assays laboratories were conducted on a regular basis by Sayona personnel and/or by owner's representatives.  Sayona's internal Qualified Person conducted site visits and reviewed application of core logging and sampling protocols and procedures.  The sample preparation, security and analytical procedures are consistent with current industry standards and are appropriate for the styles of mineralisation identified. There are no identified drilling, sampling or recovery factors that materially impact the adequacy and reliability of the results of the drilling program in place at the NAL Project.

### JORC Code, 2012 Edition - Table 2

# 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.	The property is located in La Corne Township in the Abitibi-Témiscamingue region, approximately 38km southeast of Amos, 15km west of Barraute and 60km north of Val-d'Or in the Province of Québec, Canada. The site is approximately 550km north of Montreal and is serviced by road, rail and air. The property is centred near coordinates 291964mE and 5365763mN, zone 18N, as located on the NTS map sheet 32C05.  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 1.49256ha. The mining lease was granted to QLI on 29 May 2012, based on 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.  Forty mineral titles (39 claims and 1 mining lease) have no royalties applicable to any mineral substances that may eventually be extracted from the lands subject to the mining titles.  Two mineral titles are subject to 1% Net Smelter Return (NSR) to Lise Daigle (90%) and Marc Dekeyser (10%). The company has obtained approval 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.
	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 June 10, 2024.
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 discussed 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 to the east of the pit.
Geology	Deposit type, geological setting and style of mineralisation.	The project is located in the region of The Archean Preissac-La Corne 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 La Corne 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

Criteria	JORC Code explanation	Commentary
		grained. Both mafic and intermediate volcanic rocks are affected by moderate to strong pervasive silicification, minor chloritization 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 in the dyke, the feldspar and quartz content, the texture of the pegmatite and the presence or absence of zoning. Pegmatite mineralisation occurs as a swarm of dykes ranging in thickness from 1.5-60m, 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.	Refer to previous exploration releases for drillhole information of the previously reported intercepts (ASX announcements of 14 April 2023, 2 November 2023 and 13 May 2024).  New material information on the NAL project drill holes is illustrated on Figures (plan views, sections, results tables) in this announcement.  The coordinates in the Figures and Tables are in metres in UTM NAD 83 Zone 18 and elevations are above sea level.  The selection of the most significant intercepts was based on visual appraisal of high metal factors (% Li <sub>2</sub> O content x length in m) within spodumene pegmatite intercepts. Table 5 in the main body text of this report includes collar dip and azimuth of the hole, down hole length and interception depth, and hole length Depending on the azimuths and dips of the selected boreholes, the drilled lengths are apparent and are not directly true thicknesses.
	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 currently in production. The current LOM was estimated at 20 years. The current drilling campaign shows that there is a strong potential to extend the life of the mine
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.	Significant assay intercepts are reported as weighted averages over total pegmatite intercepts (Tables 1, 2, 3 and 4).
	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	Aggregation of $\text{Li}_2\text{O}$ content to obtain the weighted average of a significant intercept is constrained within single pegmatite dykes.

Criteria	JORC Code explanation	Commentary
Officia	and some typical examples of such aggregations should be shown in detail.	Continentary
	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 reported significant assay intervals represent apparent widths. Refer to previous exploration releases for the drill hole information of previously reported intercepts.
	If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.	Drilling is not always perpendicular to the dip of mineralisation and true widths are less than downhole widths. Lithium pegmatites correspond to a series of stacked dykes of variable true thicknesses.
	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 <sub>2</sub> O over m) are expressed over down hole 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 setting, as well as drill hole collar locations are included in Figure 1.
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.	All the assay results received and complete until the date is reported here.
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 drill results reported are consistent with geological observations as described. No other meaningful exploration data is reported.

Criteria	JORC Code explanation	Commentary
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).	Further work includes further drilling to outline the geometry and extents of the lithium pegmatite dyke swarm identified to date.  Exploration and step-out drilling are planned to extend the limits of the mineralized system and for potential discovery of additional pegmatite dykes.
	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 Figures in the release and previous exploration releases for drill hole information of the previously reported illustrations of drill holes, assays, and areas with potential.