# Moblan Mineral Resource increases 81% to 93Mt

- Major resource expansion for Sayona's Moblan Lithium Project, totalling 93.1 million tonnes (Mt) at 1.21% $Li_2O$ (cut-off of 0.55% $Li_2O$), up from 51.4Mt @1.31% $Li_2O$ (at 0.55% $Li_2O$).
- Measured and Indicated categories are up 59% to 65.1 million tonnes @ 1.25% $Li_2O$ and account for 70% of the total resource, as such this provides a high level of certainty for conversion of Mineral Resources to Ore Reserves.
- 70,000 m of drilling is planned for 2024 to further test the extent of mineralisation and increase the Measured and Indicated resources.

**North American lithium producer Sayona Mining Limited ("Sayona") (ASX:SYA; OTCQB:SYAXF)** announced today the results from updated Mineral Resource Estimates (MRE) at its Moblan Lithium Project (Sayona 60%; Investissement Quebec 40%), demonstrating the potential of this highly strategic asset.

Sayona has significantly expanded its Canadian lithium resource base with this updated JORC Mineral Resource estimate for the Moblan Lithium Project. Results from the updated MRE reinforce the project's status as the centrepiece of Sayona's Eeyou-Istchee James Bay hub in northern Quebec.

Sayona now has a total estimated **JORC Measured, Indicated and Inferred Mineral Resource** of **93.1 million tonnes @ 1.21% $Li_2O$** at a cut-off grade of 0.55% $Li_2O$ (Table 1). For comparison to the previous MRE (17 April 2023), the tonnage at a cut-off grade of 0.25% $Li_2O$ is 107.7Mt @ 1.10% $Li_2O$, an increase of 52% from 70.9 Mt @ 1.15% $Li_2O$.

Approximately 70% of the total tonnage is in the higher confidence Measured and Indicated categories. The mineral resources are constrained by the claim limits and within a resource level conceptual pit shell.

The substantial increase in mineral resources at Moblan reflects the addition and integration of all the drilling results from the 2023 program (addition of 368 drillholes for 75,022 m) and from a major revision of the geological model (Figure 1).

Sayona has commenced further testing the extent of mineralisation through 70,000 m of additional drilling to be completed by the end of 2024. This drilling will continue to 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, *"The significant expansion of our Moblan Lithium Project's resource base is a testament to Sayona's commitment to unlocking the full potential of our assets in the Eeyou-Istchee James Bay region. Increasing the total resource to 93.1 million tonnes at 1.21% $Li_2O$ represents a substantial enhancement of our strategic position in the North American lithium industry.*

*"The 59% increase in Measured and Indicated categories, now totalling 65.1 million tonnes at 1.25% $Li_2O$, provides a strong foundation for the future conversion of these Mineral Resources into Ore Reserves.*

*"Looking ahead, the planned 70,000 metres of drilling in 2024 will further test the extent of mineralisation. As we continue to invest in exploration and development, we remain focused on strategically growing our resource base to deliver value to our stakeholders and positioning Sayona as a leading North American lithium producer."*

## Moblan JORC Mineral Resource Estimates 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 comply with the JORC Code disclosure. The breakdown of MRE results by zone (pegmatite domain) and by category is shown in Table 1.

The updated mineral resource block model covers an area of 2,350m strike length and 1,250m width, extending to a depth of 350m below surface. The mineralisation model consists of seven lithium pegmatite dykes modelled as the Main dykes, 13 as the South dykes, 13 as the New South domain and 10 as the Moleon dykes, for a total of 43 lithium pegmatite dykes in the project's geological model (Figure 2). Moblan 2024 MRE includes all available data on the Project including extensive additional drilling coverage from the 2023 exploration program. The MRE database includes 49,910 assay data from 771 surface drill holes (130,633m), drilled between 2002 and the end of 2023, and 10 surface trenches sampled between 2004 and 2009 (Figure 3).

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Table 1 – Moblan JORC Mineral Resource Estimates Statement (0.55 % $Li_2O$ cut-off grade, US$1,850/t SC6)

| Classification | Measured | | Indicated | | Mea. + Ind. | | Inferred | | Mea. + Ind. + Inf. | |
|---|---|---|---|---|---|---|---|---|---|---|
| Lithium pegmatites | Tonnes (kt) | $Li_2O$ % | Tonnes (kt) | $Li_2O$ % | Tonnes (kt) | $Li_2O$ % | Tonnes (kt) | $Li_2O$ % | Tonnes (kt) | $Li_2O$ % |
| Main | 5,901 | 1.53 | 9,042 | 1.20 | 14,943 | 1.33 | 5,165 | 1.10 | 20,108 | 1.27 |
| South | 67 | 1.10 | 30,614 | 1.18 | 30,681 | 1.18 | 10,323 | 1.08 | 41,004 | 1.15 |
| New South | | | 15,167 | 1.24 | 15,167 | 1.24 | 6,834 | 1.11 | 22,002 | 1.20 |
| Moleon | | | 4,302 | 1.44 | 4,302 | 1.44 | 5,665 | 1.33 | 9,967 | 1.38 |
| **Total** | **5,968** | **1.53** | **59,125** | **1.22** | **65,093** | **1.25** | **27,987** | **1.14** | **93,081** | **1.21** |

JORC Mineral Resource Statement notes:

1. *Independent and Competent Persons, as defined by JORC 2012, that prepared or supervised the MRE are Marina Iund, P.Geo., Alain Carrier, M.Sc., P.Geo., Simon Boudreau, P. Eng., all of InnovExplo inc.; and Andrew Siemon, P.Eng. of Primero Group Americas. The effective date of the 2024 MRE is 27 August 2024;*
2. *The mineral resources are not mineral reserves as they do not have demonstrated economic viability;*
3. *The MRE was prepared in accordance with the JORC Code (2012);*
4. *A total of 43 dykes of lithium pegmatites were modelled in Leapfrog ™ 2023.2 using implicit modelling techniques for the Main, South, New South and Moleon domains. Dyke wireframes, used as geological resource solids, were modelled with a minimum thickness of 0.3m;*
5. *No assays were capped. Composites 1.0 m long were generated 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 Ordinary Kriging method was used to interpolate a sub-blocked model (parent block size = 5m x 5m x 5m);*
7. *The Measured category was assigned to blocks estimated with a minimum of three (3) drill holes in areas where the minimum distance from a drill hole is less than 15 m. The Indicated category was assigned to blocks estimated with a minimum of three (3) drill holes in areas where the minimum distance from a drill hole is less than 30 m. The Inferred category was assigned to blocks estimated with a minimum of one (1) drill hole in areas where the minimum distance from a drill hole is less than 50 m;*
8. *Density was estimated, in the pegmatites using a regression function developed using measurements of SG and $Li_2O$%. The regression function used is SG = 0.0606*$Li_2O$% +2.63 which use $Li_2O$% block values and is used for the conversion of the volume of each block interpolated into a tonnage. Values in other host rocks were given fixed SG values of 3.04 g/cm$^3$ for the Gabbro 2.93 g/cm$^3$ for the Volcanics, 2.70 g/cm$^3$ for the Metasediments, 2.72 g/cm$^3$ for the Granodiorite;*
9. *The 'reasonable prospects for eventual economic extraction' is met by having used reasonable cut-off grades for an open pit extraction scenario and constraining pit shell using a price of US$1,850 per tonne of 6% $Li_2O$ concentrate (Whittle optimisation). Due to processing assumptions from the 2024 DFS, the selected COG for the MRE is 0.55% $Li_2O$. The selected COG of 0.55% $Li_2O$ should be viewed as a metallurgical cut-off grade for an open pit scenario. Other assumptions include: selling price of US$1,850 per tonne of 6% $Li_2O$ concentrate, a USD:CAD exchange rate of 1.33, a recovery of 75%, a mining cost of C$4.25/t mined, a G&A cost of C$11.15/t processed, a remote camp cost of C$5.66/t processed, a processing cost of C$22.70/t processed, a rehandling cost of C$0.88/t processed, a concentrate transportation cost of C$147.87/t concentrate and a tailing management cost of C$6.32/t processed. The cut-off grade takes into account a royalty of 2%. The cut-off grades should be re-evaluated in light of future prevailing market conditions (metal prices, exchange rate, mining cost, etc.);*
10. *The number of tonnes has been rounded to the nearest thousand. Any discrepancy in the totals is due to rounding effects;*
11. *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 the 2024 MRE.*

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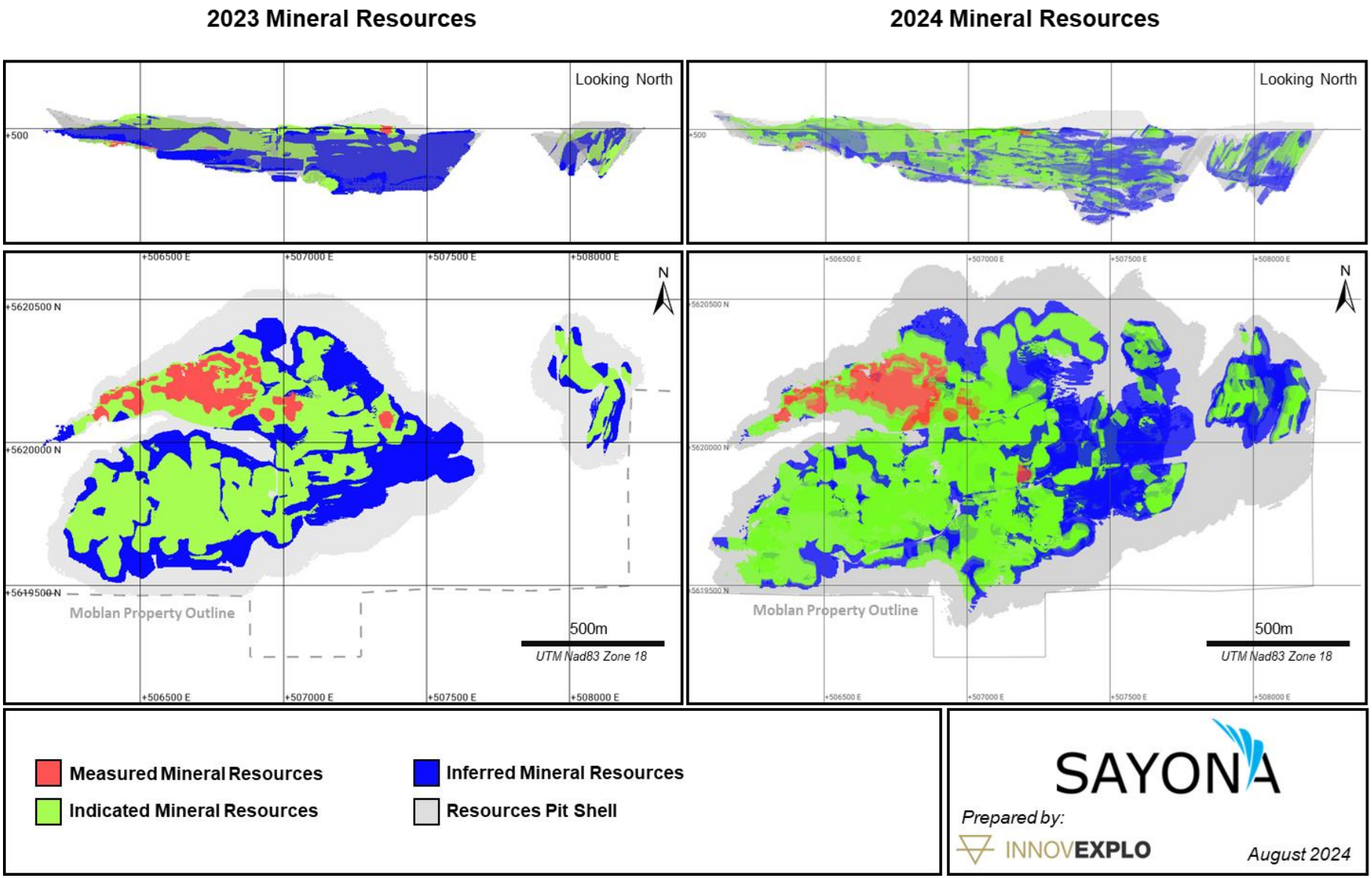



Figure 1- Comparison between the 2023 and 2024 MREs in plan and longitudinal views illustrating the success of 2023 Moblan drilling to convert Inferred into Indicated Resources and for the addition of new mineral resources on the periphery

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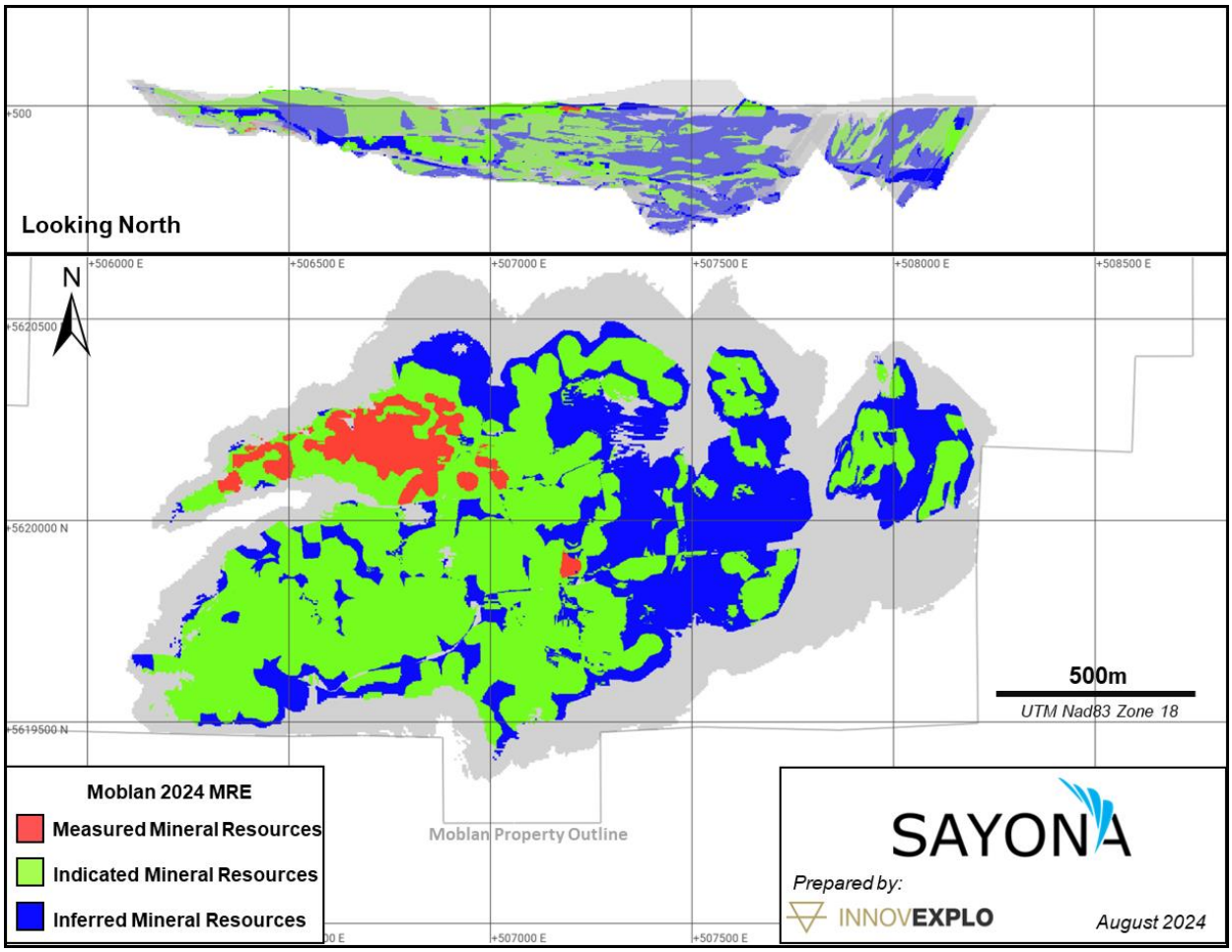



Figure 2- Longitudinal and plan views illustrating Measured, Indicated and Inferred Mineral Resources from 2024 MRE

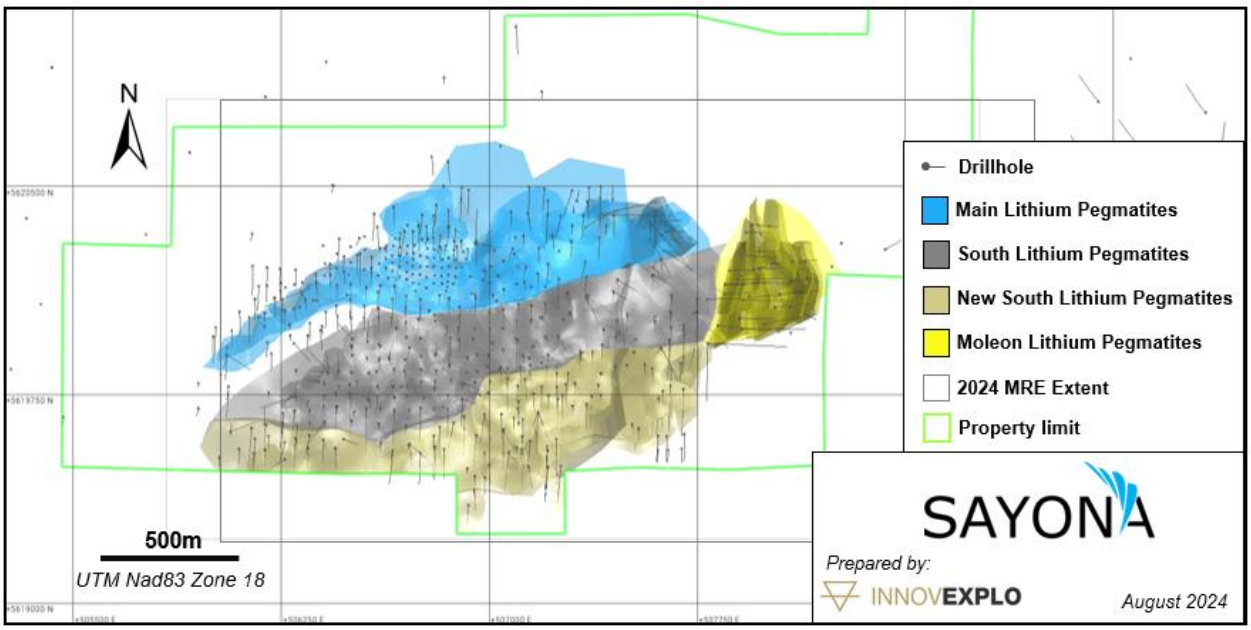



Figure 3- Drillhole database and pegmatites domains supporting the 2024 MRE

## Tonnage-Grade Distribution and Sensitivity Analysis

Table 3 and Figure 4 illustrate the tonnage and grade distribution at different cut-off grades contained within the MRE pit shell (pit shell US$1850/t of 6% $Li_2O$ concentrate and COG of 0.55% $Li_2O$).

Table 3 -Cumulative tonnage and grade distribution by cut-off grades within base case pit shell

| Classification | Measured | | Indicated | | Mea. + Ind. | | Inferred | | Mea.+ Ind.+ Inf. | |
|---|---|---|---|---|---|---|---|---|---|---|
| Cut-off Grade $Li_2O$ % | Tonnes (kt) | $Li_2O$ % | Tonnes (kt) | $Li_2O$ % | Tonnes (kt) | $Li_2O$ % | Tonnes (kt) | $Li_2O$ % | Tonnes (kt) | $Li_2O$ % |
| 0.25 | 6,565 | 1.42 | 67,143 | 1.12 | 73,708 | 1.15 | 33,981 | 1.01 | 107,689 | 1.10 |
| 0.4 | 6,252 | 1.47 | 63,535 | 1.17 | 69,786 | 1.19 | 31,125 | 1.08 | 100,912 | 1.16 |
| 0.5 | 6,061 | 1.51 | 60,701 | 1.20 | 66,762 | 1.23 | 29,078 | 1.12 | 95,840 | 1.20 |
| **0.55** | **5,968** | **1.53** | **59,125** | **1.22** | **65,093** | **1.25** | **27,988** | **1.14** | **93,081** | **1.21** |
| 0.65 | 5,750 | 1.56 | 55,549 | 1.26 | 61,299 | 1.28 | 25,612 | 1.19 | 86,911 | 1.26 |
| 0.7 | 5,652 | 1.57 | 53,596 | 1.28 | 59,248 | 1.31 | 24,392 | 1.22 | 83,640 | 1.28 |

**Note:** This Table should not be interpreted as a mineral resource statement. The data is presented to illustrate the distribution of tonnage and grade above different cut-off grades within the MRE pit shell. The selected cut-off is 0.55 % $Li_2O$.

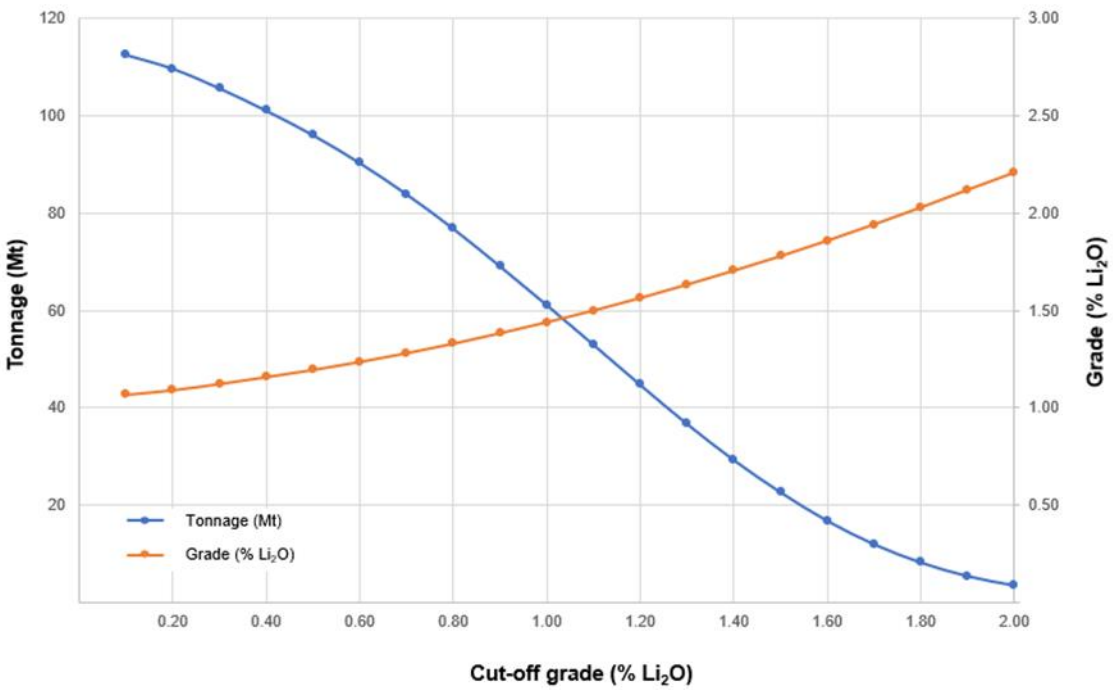



Figure 4- Grade / Tonnage Curve within base case pit shell

**Note:** This Figure should not be interpreted as a mineral resource statement. The data is presented to illustrate the distribution of tonnage and grade above different cut-off grades within the MRE pit shell. The selected cut-off is 0.55 % $Li_2O$.

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## Listing Rule 5.8.1
## Summary of Resource Estimation Parameters for Moblan 2024 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).

## Moblan Project

The Moblan project is located about 130km north-west of the town of Chibougamau and approximately 85km from the Cree (First Nations) community of Mistissini. The project is located within 300 metres of the Route du Nord, a regional highway which is accessible year-round, providing access to railway lines that link with major ports in Eastern Canada.

## Geology and Geological Interpretation

The geology of the Moblan property is dominated by a large northeast-southwest trending gabbro (Figure 5). Apart from the spodumene pegmatite dyke swarms, other important rock units are mafic volcanic rocks, intermediate volcanic rocks, felsic volcanic rocks and metasedimentary rocks. The gabbro is bordered to the northwest by mafic lava flows and to the southeast by a volcano-sedimentary sequence of tholeiitic and transitional lavas, volcaniclastic and sedimentary rocks. The gabbro is the main host rock for the lithium pegmatites (Main, South, New South and Inter pegmatites) except for the Moleon pegmatites hosted in adjacent mafic volcanic rocks.

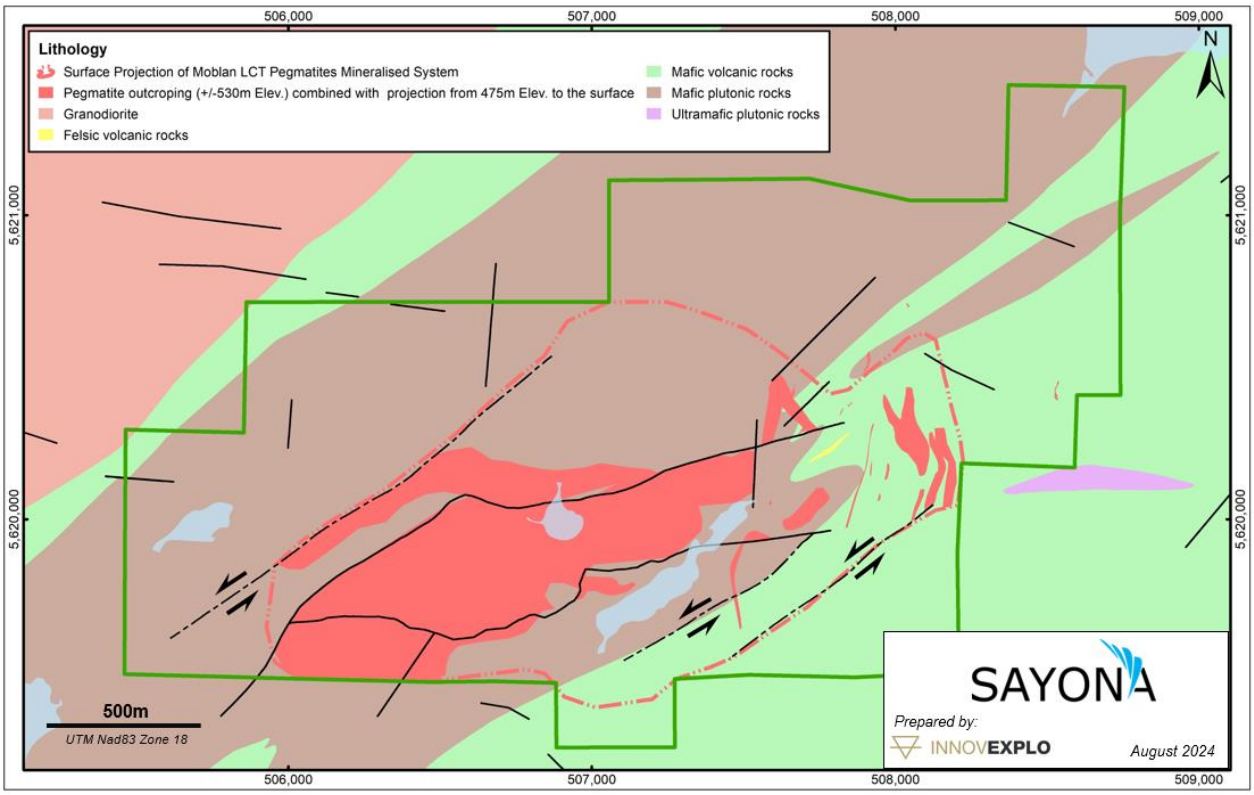



Figure 5 - Geology Map of Moblan

Results from the 2024 MRE clearly demonstrate that Moblan is a major single extensive lithium-caesium-tantalum (LCT) mineralised system. The primary metal is lithium and is mainly associate with spodumene, a lithium bearing pyroxene. Moblan pegmatites also contains domains with enrichment in caesium, rubidium and tantalum, all of which could be potential opportunities for by-product extraction at Moblan.

New drilling results and geological modelling illustrate the spatial connection between the Main, South, New South, Inter and Moleon pegmatite dykes within a single extensive lithium-caesium-tantalum (LCT) mineralised system (Figure 7). The links that can now be established between the various sectors of Moblan have a global positive impact on the geological continuity of the updated MRE. The footprint of the Moblan mineralised system now extends over ~2.3km E-W, ~1.2km N-S and to depth of ~450m from surface and bounded by a NE-trending shear zone in the west (shown as a dashed line in Figure 5).

Structural analysis (i.e. different sets of dykes: E-W sub-horizontal pegmatites (Main, South and New South) and N-S sub-vertical pegmatites (mostly in the Inter and Moleon areas) and geochemical signatures (i.e. evolution of K/Rb, K/Cs

element ratios, fractionation geochemical indicator of the pegmatites) points towards emplacement and formation of Moblan LCT pegmatites system during a continuum of deformation and magmatic evolution. Pegmatites dykes being crystallized from single- and multi-stage events with different generations of dykes where geometry of the pegmatite dykes reflects the evolution from ductile-brittle to brittle deformation.

Geochemistry of the eastern pegmatites of Moleon is different from the Main, South and New South pegmatites. In addition to structural orientations, whole-rock geochemical signatures indicate that the N-S pegmatites are more evolved (and thus enriched in tantalum) than the sub-horizontal E-W ones. These different groups of dykes likely reflect a pulsating emplacement of different generations of LCT pegmatites (the sub-horizontal E-W ones first, followed by the sub-vertical N-S ones). The emplacement of both generations (Moblan and Moleon) is structurally controlled by a NE-trending deformation corridor during the transcurrent tectonics (D3 regional deformation event).

The project hosts several lithium pegmatite dykes which mostly lie within the gabbro unit, close to the surface. Locally, the spodumene zone outcrops as escarpments. A total of 43 different dykes have been documented and modelled for the 2024 MRE. During the 3D geological interpretation and for the purpose of the 2024 MRE, the lithium pegmatite dykes were grouped into four dyke swarms (groups or domains): Main, South, New South and Moleon. Each corresponds to a series of stacked dykes of variable thicknesses (Figure 6).

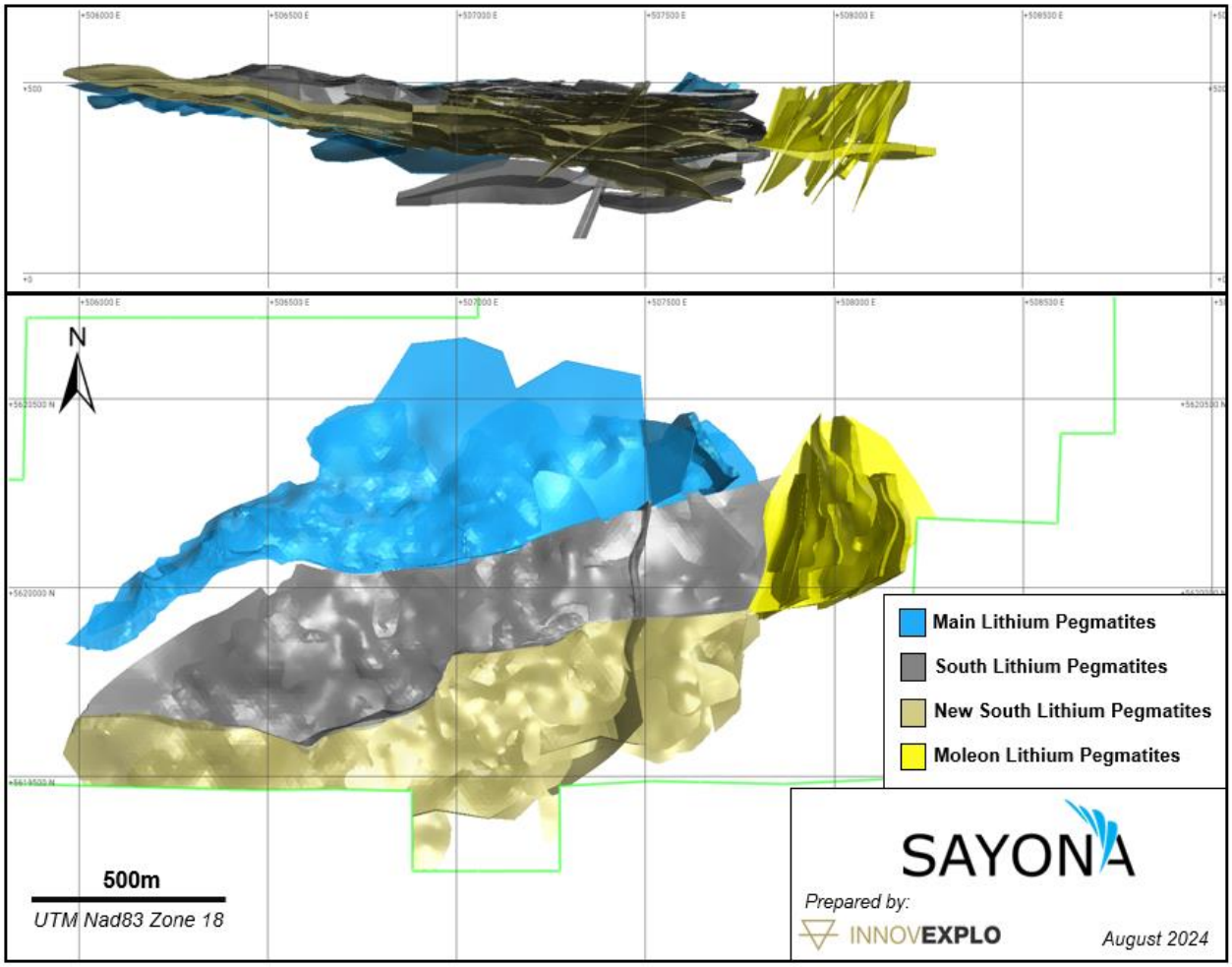



Figure 6 - Moblan Spodumene pegmatite domains - 2024 MRE

The boundaries between the Main, South, New South and Moleon domains were determined by their attitudes (direction and dip) and geological continuity (number and thickness of the dykes) from section to section. The boundaries between the domains are marked and could be explained by structural discontinuities (e.g. local faults).

The Main group comprises five lithium pegmatite dykes oriented E-W and dipping gently to the north (N260°/-20°) and two dykes oriented approximately N-S and dipping steeply to the west (N180°/-70°). This swarm extends laterally E-W for approximately 1500 m and 500 m N-S. In this group, the thickest dyke has an average intercept length of 25 m.

The South group comprises 12 dykes oriented E-W and almost sub-horizontal or dipping gently to the south (N260°/-10°) and one dyke oriented approximately N-S and dipping steeply to the west (N180°/-70°). This swarm extends laterally E-W for approximately 1800 m and 300 m N-S. In this group, the thickest dyke has an average intercept length of 45 m.

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The New South group comprises 12 dykes oriented E-W and dipping moderately to the north (N260°/-5°) and one dyke oriented approximately N-S and dipping steeply to the west (N180°/-70°). This dykes swarm extends laterally E-W for approximately 1800 m and 300 m N-S. In this group, the thickest dyke has an average intercept length of 29 m.

The Moleon group comprises 1 dyke oriented E-W and nearly sub-horizontal or dipping gently to the south (N260°/-5°) and 9 dykes oriented N-S and dipping steeply to the west (N180°/-70°). This dykes swarm extends laterally N-S for approximately 750 m and 250 m E-W. In this group, the thickest dyke has an average intercept of 26 m.

## Sampling and Sub-sampling Techniques

The Project's sampling is from core drilling. A geologist marked 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 sample contacts respect lithological contacts and changes in the appearance of mineralisation or alteration (type and/or strength). 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 stockpiled or stored in outdoor core racks for future reference before being sent to the issuer's site in La Corne, Quebec, for safekeeping. Individual sample bags and the sample list were placed in rice bags. According to the geologist's instructions, QA/QC samples are prepared and bagged ahead of time by core shack personnel and batched at the core shack.

## Drilling Techniques

All the drilling carried out on the Project is core drilling. The Moblan deposit has been drilled using diamond drilling over many campaigns by several companies. Diamond drill core is predominantly NQ size (47.6 mm core diameter) from surface to the final depth. Some HQ size drilling is also used for specific testing such as for recovery of metallurgical samples. Core recovery has been excellent through the different programs.

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

The 2024 MRE comprises Measured, Indicated, and Inferred Mineral Resources. The categories were prepared using a script in Edge. The resulting classifications were subsequently refined using a series of outline rings (clipping boundaries) to locally upgrade or downgrade blocks. The CPs consider this a necessary step to homogenise the mineral resource volumes in each category and avoid including isolated blocks.

The classification takes into account the following criteria:

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

Within the modelled lithium pegmatites only, the Measured category was assigned to blocks estimated with a minimum of three (3) drillholes in areas where the minimum distance from a drill hole is less than 15 m. The Indicated category was assigned to blocks estimated with a minimum of three (3) drillholes in areas where the minimum distance from a drillhole is less than 30 m. The Inferred category was assigned to blocks estimated with a minimum of one (1) drillholes in areas where the minimum distance from a drillhole is less than 50 m. The drilling grid and the distribution of the drillholes make it technically possible to obtain the three categories of resources on the Project (Figure 1 and Figure 6).

## Sample Analysis Method

All samples were analysed at independent accredited laboratories (SGS laboratories in Toronto, Ontario (Canada), and ALS and AGAT laboratories in Val-d'Or, Québec (Canada)).

2007–2010 samples were analysed by SGS in Toronto by Sodium Peroxide Fusion and ICP-MS finish using a split of up to 250 g of pulverised material. For the 2022 Winter campaign, samples were analysed at AGAT by ME- Sodium Peroxide Fusion followed by ICP-OES with ICP-MS finish using a split of up to 250 g of pulverised material. For the 2022 Summer-Fall and the 2023 campaigns, samples were analysed at ALS by ME-MS589L Sodium Peroxide Fusion and ICP-MS finish using a split of up to 250 g of pulverised material.

Previous operators and Sayona have regularly inserted third-party reference control samples and blank samples in the sample stream to monitor assay and laboratory performance.

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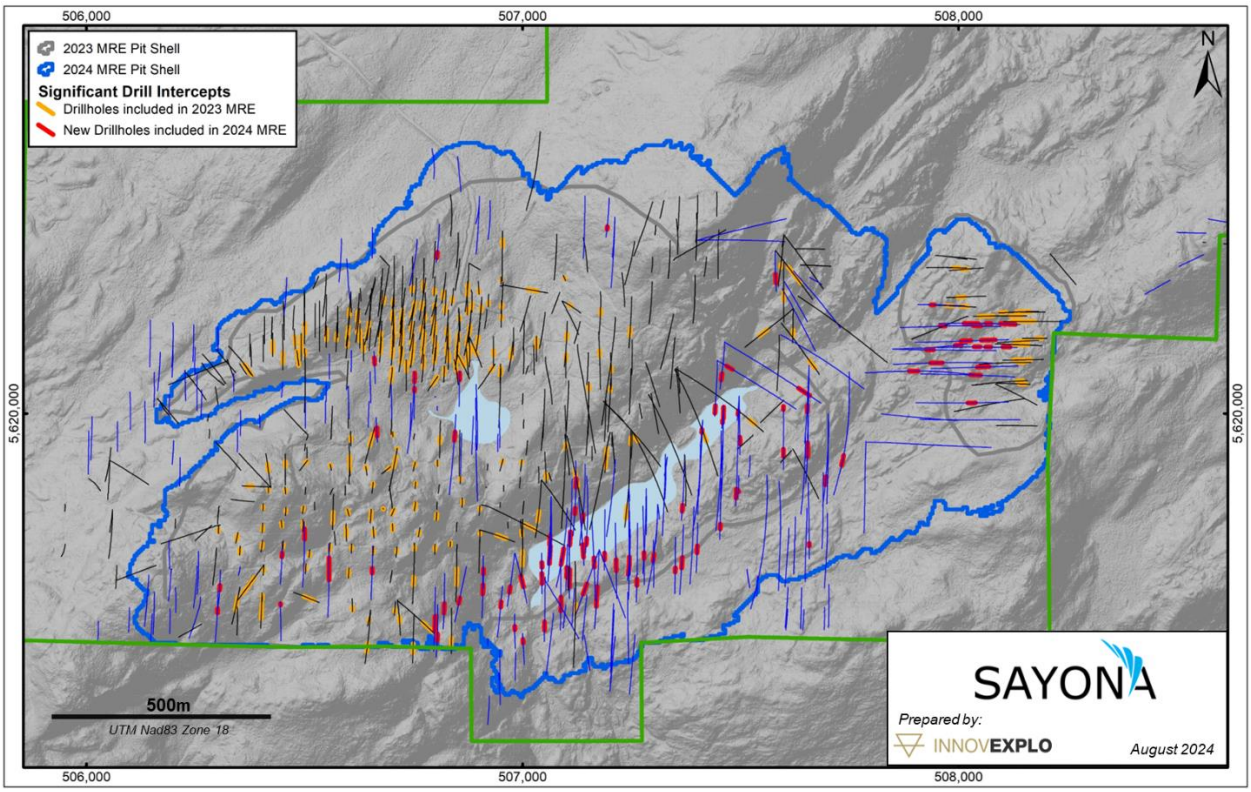



Figure 7- Significant Intercepts and Drillholes Distribution (old and new) included in the 2024 MRE

*Notes (1): Drillholes results above a Metal Factor greater than 25.*

*Notes (2): Methodology for calculating drilling intercept. Drillhole intercepts query 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% $Li_2O$ 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% $Li_2O$ 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 ($Li_2O$ grade (%) x core length (m)).*

## Estimation Methodology

Ordinary Kriging (OK) was selected as the method for grade interpolation because the Moblan lithium deposit is considered homogeneous based on geology, geostatistics and variography. No grade capping was applied to the 1m assay composites. The geological interpretation (lithium pegmatites) provided hard boundaries for the estimation domains.

Experimental variograms were modelled in Snowden Supervisor™ v8.14 using composites on a domain-by-domain basis (4 experimental variograms were modelled). Estimation was completed in Leapfrog™ (v.2023.2) using a three-pass approach. For thicker pegmatites (drill hole intersects longer, on average, than 10 m), a minimum of 13, 13 and 4 composites and a maximum of 24, 24 and 24 composites were required for passes 1 to 3, respectively, using 0.5x, 1x and 2x the variogram ranges as search ellipses, respectively. For the remaining pegmatites, passes 1 to 3, 5, 5 and 2 minimum composites were required, 8, 8 and 8 maximum composites using 0.5 times. 1.0 times and 2.0 times the variogram ranges as search ellipses, respectively.

## 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. The COG used for the 2024 MRE is an economic cut-off grade for an open pit scenario. The COG must be evaluated regularly in light of prevailing market conditions and other factors, such as metal price, exchange rate, mining method, related costs, etc. Moblan 2024 MRE satisfy the requirement of 'reasonable prospects of eventual economic extraction' ("RPEEE").

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The Mineral Resource Estimate has been reported within a conceptual pit shell optimised at US$1850/t of 6% $Li_2O$ concentrate and reported at a selected COG of 0.55% $Li_2O$, which is based on geological, technical and metallurgical assumptions. Sayona has relied upon the Q2 2024 price forecast from consultancy Benchmark Mineral Intelligence (BMI) to assess pricing assumption for the spodumene price.

The Resource pit shell is obtained based on the following parameters:

Economic assumptions:

- Selling price: $US1,850 /t 6% $Li_2O$ concentrate
- Royalties: 2.00%
- Exchange rate: 1.33

Process:

- Processing cost: C$22.70 /t processed
- Rehandling cost: C$0.88 /t processed
- Transport cost: C$147.87 /t concentrate
- Tailings management cost: C$6.32 /t processed
- % $Li_2O$ in concentrate: 6.0%
- $Li_2O$ metallurgical recovery: 75%

Administration:

- G&A: C$11.15 /t processed
- Remote Camp: C$5.66 /t processed

Mining:

- Mining cost – Mineralised material: C$4.25 /t mined
- Mining cost – Waste material: C$4.25 /t mined
- Mining cost – Overburden: C$3.00 /t mined
- Mining recovery: 100%
- Loss of reserves: 0%

Selected cut-off grade:

Due to processing assumptions from the 2024 DFS, the selected COG for the MRE is 0.55% $Li_2O$. The selected COG of 0.55% $Li_2O$ should be viewed as a metallurgical cut-off grade for an open pit scenario.

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

An open pit scenario was retained for the 2024 MRE. An optimised pit shell (using Whittle) was constrained within Moblan claims limits. All remaining tonnage outside of the optimised pit shell was excluded from the mineral resource statement. No underground mining scenario was retained.

The resource-level pit shell optimisation was completed at US$1850/t conc. 6% $Li_2O$ and 75% metal recovery on a 5 x 5 x 5 m SMU using a pit wall angle of 56° in rock and 18° in overburden.

## Mineral Tenement and Land Tenure Status

Moblan is situated in the northwestern part of the Province of Québec, Canada. The Moblan Property, host to the lithium mineral resources outlined in the 2024 MRE consists of 20 claims (roughly 433 ha or 4.3 $km^2$) held by Sayona Nord (60%) and Investissement Québec (40%). Sayona's share of the Moblan Property is subject to a 1.5 to 2.5% Gross Overriding Revenue ('GOR') royalty payable to Lithium Royalty Corporation. All claims are in good standing as of July, 2024. There are no impediments that have been identified for operating in the Project areas.

The Moblan Property is part of the ten (10) properties that constitute the Moblan James Bay Property Group (the "Properties") (Figure 8): Moblan, Lac Albert, Gariteau, Albert-Sud, Lezai-Troilus, Tortigny, Regnault, Larabel, Frotet and De-Maurès. The Properties are located in the Eeyou Istchee James Bay territory in the northwestern part of the province of Quebec. The centroid of the Properties is approximately 90 km to the north-northwest of the town of Chibougamau and 42 km west of Lake Mistassini, Quebec. The Properties cover an area of 1,054.49 $km^2$, extending 85 km east-west and 55 km north-south. The Properties fall within the area covered by NTS map sheets 32J09, 32J/10, 32J11, 32J14, 32J15 and 32J16. The approximate coordinates of the geographic centre of the Properties are 74°54' W and 50°44' N (UTM coordinates: 507,059mE and 5,618,693mN, NAD 83, Zone 18).

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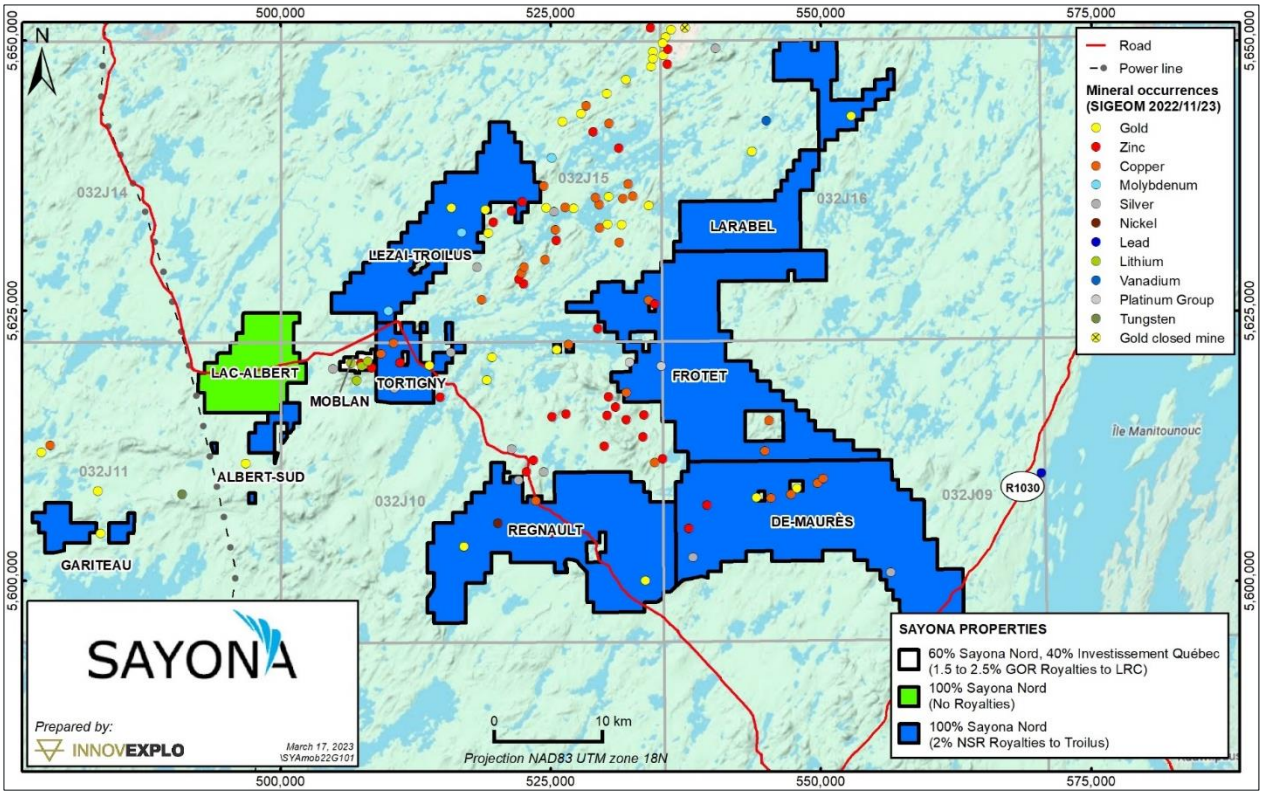



Figure 8- Moblan Reginal Property and surroundings Sayona's claims of the Moblan James Bay Group of Properties

Release authorised by Lucas Dow, Sayona Mining Limited's Managing Director and CEO

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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 www.sayonamining.com.au

## About Investissement Québec

Investissement Québec's mission is to play an active role in Québec's economic development by stimulating business innovation, entrepreneurship and business acquisitions, as well as growth in investment and exports. Operating in all of the province's administrative regions, the Corporation supports the creation and growth of businesses of all sizes with investments and customised financial solutions. It also assists businesses by providing consulting services and other support measures, including technological assistance available from Investissement Québec Innovation. In addition, through Investissement Québec International, the Corporation prospects for talent and foreign investment, and assists Québec businesses with export activities.

## 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 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". Mr Corriveau, Carrier, 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.

The information in this announcement relating to the Estimation and Reporting of Mineral Resources is based on information, and fairly represents, information and supporting documentation prepared by Mrs Marina Lund, PGeo, Mr Alain Carrier, P.Geo, Mr Simon Boudreau, PEng (all from InnovExplo) and Mr Andrew Siemon, PEng (from Primero) consultants to the Company, who are all members of the Quebec Order of Geologists or Quebec Order of Engineers, all 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". Mrs Lund, Mr Carrier, Mr Boudreau and Mr Siemon consents to the inclusion in the announcement of the matters based on his information in the form and context in which it appears.

## 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.

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.

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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. | Sampling at the Moblan Lithium Project (the 'Project') is adequate, of good quality and comes from core drilling. Core samples are obtained from diamond drilling (NQ and HQ diameter core). |
| | 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 pegmatite and its constituent mineralogy to determine the intervals for sampling. Lithium-bearing spodumene is easily identified. Sampling has been determined on geological characteristics and ranges from between 0.15 m and 3 m in length. The core was cut using a diamond saw core-cutter, and half-cores were 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 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). |

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| 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.). | Drilling from surface was carried out by diamond drilling methods, using a standard tube to recover NQ and HQ size core (no other drilling methods were used). The core was not orientated. Downhole drill azimuth and dip have been determined by TN-14 azimuth aligner and downhole Reflex Gyro Sprint-IQ and EZ multi- and single-shot recording instruments for 631 drill holes; Flexit multi-shot for 98 drill holes; and Tropari and acid test for the remaining historical drill holes. |
| Drill sample recovery | Method of recording and assessing core and chip sample recoveries and results assessed. | Drilling was directly into the hard (fresh) rock, starting at the surface, and core recovery approximates 100%. the core has been marked up, and the core recovery and RQD |
| | Measures taken to maximise sample recovery and ensure representative nature of the samples. | To ensure the representative nature of the samples drilling has been by diamond drill core methods, measurements have been recorded. Core recoveries were typically high and 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 photography of marked-up core. The logging was appropriate and of sufficient quality and level of detail to support the mineral resource estimation and mining 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 core recovery and RQD measurements. |
| | The total length and percentage of the relevant intersections logged. | The 2024 MRE database includes 49,910 assay data from 771 surface drill holes (130,633m), drilled between 2002 and the end of 2023, and 10 surface trenches sampled between 2004 and 2009 with database close-out date of 02 April, 2024 (ASX announcement 17 April, 2023).<br>The sample database has been established in UTM coordinates (NAD 83 Zone 18). |
| 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 a diamond saw, with half-core samples packaged and grouped into bulk bags for dispatch to the laboratory.<br>Half-core sampling is considered an appropriate method to ensure a sufficient quantity of sample is collected for it to be representative of the drill 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). |

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| | 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.<br>Since 2011, sample preparation has been conducted in independent accredited laboratories (SGS laboratories in Toronto, Ontario (Canada) and ALS and AGAT laboratories in Val-d'Or, Québec (Canada)).<br>AGAT: each core sample is dried and weighed, and the entire sample is crushed to 75% passing 2 mm. A split of up to 250 g is taken using a riffle splitter and pulverised to better than 85% passing 75 µm.<br>ALS: each core sample is dried and weighed, and the entire sample is crushed to 70% passing 2 mm. A split of up to 250 g is taken using a riffle splitter and pulverised to better than 85% passing 75 µm. |
| | 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. | All samples were analysed at independent accredited laboratories (SGS laboratories in Toronto, Ontario (Canada), and ALS and AGAT laboratories in Val-d'Or, Québec (Canada)).<br>All the 2007–2010 samples were analysed by SGS in Toronto by Sodium Peroxide Fusion and ICP-MS finish using a 0.2 g aliquot of pulverised material. For the 2022 Winter campaign, samples were analysed at AGAT by ME- Sodium Peroxide Fusion followed by ICP-OES with ICP-MS finish using a split of up to 250 g of pulverised material. For the 2022 Summer-Fall and the 2023 campaigns, samples were analysed at ALS by ME-MS589L Sodium Peroxide Fusion and ICP-MS finish using a split of up to 250 g of pulverised material.<br>Previous operators and Sayona have regularly inserted third-party reference control samples and blank samples in the sample stream to monitor assay and laboratory performance.<br>It is believed that the sampling, assaying and laboratory procedures are representative of the drilled material and appropriate for the Project. |
| | 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. |

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| | 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. | QA/QC was ensured by the insertion of Certified Reference Material ('CRM'), half-core duplicate sampling, and the insertion of blanks into the sample sequence. Protocols include the systematic insertion of CRM standards at approximately 1 for every 25 samples and alternating blank samples of quartz and core duplicate samples at a rate of 1 for every 25 samples in previous operator programmes (SOQUEM). Since June 2022, Sayona's protocols have switched to 1 control sample for every 20 samples.<br>The CRMs used for monitoring lithium values are OREAS 750, OREAS 752 and OREAS 753. Occasionally, a CRM for Zn (OREAS 630B) has been used to validate other metals. These standards have been selected to reflect the target mineralisation type. Assays of quality control samples were compared with reference samples in the database and verified as acceptable prior to using the data from the analysed batches.<br>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.<br>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.<br>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.<br>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 $Li_2O$% for reporting purposes. The conversion used is $Li_2O$ = Li x 2.1527. No other adjustments to the assay data have been made. |
| **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 handheld GPS and then professionally surveyed after completion. The professional survey firms of Paul Roy, Arpenteur-Géomètre, and Caouette, Thériault & Renaud, both based in Chibougamau, provided a land surveyor with a GPS base station to survey the completed drill collar locations.<br>Drill rigs were aligned using an electronic azimuth aligner (TN-14 azimuth aligner). Downhole survey data were collected at 3-m intervals using Reflex EZ and Flexit instruments. Some historical drill holes were subjected to Tropari and acid tests to monitor down-hole deviations.<br>The government's LIDAR survey of the area was used to prepare a DEM/topographic model for the Project. There are no mine workings on the site. |
| | Specification of the grid systeusMed. | The grid systeusMed 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 drill hole spacing ranges from 15–100m within the mineral resource area.<br>The spacing between drill hole fences ranges up to 100m in the eastern drill area but is typically on drill sections spaced 40m apart in 2022–2023.<br>The drilling grid is looser in areas at the exploration stage and may include isolated drill holes. |

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| | 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, yielding Measured, Indicated and Inferred Mineral Resources within the Main dykes and Indicated and Inferred Mineral Resources within the South, New South and Moleon dykes.<br>Significant assay intercepts remain open.<br>Further drilling is required to determine the extent of currently defined mineralisation. |
| | Whether sample compositing has been applied. | One-metre (1m) compositing is applied to samples used for the mineral resource estimation.<br>For the purposes of illustrating exploration results, lithium values for pegmatite dykes are reported as the 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 pegmatites dykes. Some drill positions have utilised 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. | The relationship between the drilling orientation and the orientation of key mineralised structures is appropriate. Drill holes exploring the extent of the Project intersected four (4) lithium-bearing pegmatite dyke swarms: Main, South, New South and Moleon. Each corresponds to a series of stacked dykes of variable thickness separated by faults. The Main group comprises 5 dykes oriented E-W and dipping gently to the north (N260°/-20°) and two dykes oriented approximately N-S and dipping steeply to the west (N180°/-70°). The South group comprises 12 dykes oriented E-W and nearly sub-horizontal or dipping gently to the south (N260°/-10°) and one dyke oriented approximately N-S and dipping steeply to the west (N180°/-70°). The New South group comprises 12 dykes oriented E-W and nearly sub-horizontal or dipping gently to the south (N260°/-5°) and one dyke oriented approximately N-S and dipping steeply to the west (N180°/-70°). The Moleon group comprises 1 dyke oriented E-W and nearly sub-horizontal or dipping gently to the south (N260°/-5°) and 9 dykes oriented N-S and dipping steeply to the west (N180°/-70°).<br>Spodumene pegmatite dykes in the area are typically tabular bodies, and the reported results appear consistent with that style of mineralisation. Drill hole orientation does not appear to have introduced a sampling bias. |
| Sample security | The measures taken to ensure sample security. | All reasonable measures and industry-standard sample and storage protocols have been applied.<br>Sample security is controlled by tracking samples from the drill rig through core logging, sampling, laboratory preparation and analysis, and database entry. Drill core was delivered from the drill rig to the core yard every shift. On completion of geological and geotechnical logging, SOQUEM or Sayona personnel and/or their representatives finished processing the core and sent the samples to the laboratory. |

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| Audits or reviews | The results of any audits or reviews of sampling techniques and data. | Internal reviews of core handling, sample preparation and laboratory procedures were conducted on a regular basis by both SOQUEM or Sayona personnel and/or by their representatives.<br>The CP for the resource estimate, Mr. Alain Carrier, P.Geo completed an independent logging and sampling review, and conducted re-sampling of selected core intervals. The results of the CP's independent re-sampling programme are satisfactory.<br>Independent (InnovExplo) and internal (Sayona) CPs also conducted site visits and reviewed the application of core logging and sampling protocols and procedures.<br>The sample preparation, security and analytical procedures are consistent with current industry standards and are appropriate and acceptable for the styles of mineralisation identified and will be appropriate for use in mineral resource estimation. There are no identified drilling, sampling or recovery factors that materially impact the adequacy and reliability of the results of the drilling programme on the Project. |

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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. | Moblan is situated in the northwestern part of the Province of Québec, Canada.<br>The Moblan Property, host to the lithium mineral resources outlined in the 2024 MRE consists of 20 claims (roughly 433 ha or 4.3 $km^2$) held by Sayona Nord (60%) and Investissement Québec (40%). The Moblan Property is subject to a 1.5 to 2.5% Gross Overriding Revenue ('GOR') royalty payable to Lithium Royalty Corporation. |
| | 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.<br>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. | The current Properties cover and overlap many historical mining and exploration properties. The boundaries and names of those properties have evolved following changes in ownership, option agreements, or land packages as claims were abandoned or added. Exploration work has been varied (e.g., prospecting, mapping, geophysics, geochemistry, drilling, etc.) and has focused on a variety of commodities (e.g., precious metals, base metals, and, more recently, critical and strategic minerals).<br>Interest in lithium in the area began in the 1960s inside the current limits of the Moblan Property. Surface prospecting and trenching performed by Muscocho Explorations Ltd in 1963 resulted in the discovery of numerous lithium-bearing dykes. A few of the dykes had been sampled earlier and revealed high grades of lithium oxide. Twenty-eight (28) lithium-bearing pegmatite dykes have been discovered in six (6) separate areas on the Moblan Property between 1992 and 2004, during work conducted by Abitibi Lithium Corporation.<br>The current Project has been the subject of significant exploration and drilling efforts, including geophysics, geochemistry, historical studies, metallurgical testing and engineering studies. |
| Geology | Deposit type, geological setting and style of mineralisation. | The Properties host several mineral occurrences and showings. These (and other adjacent) occurrences highlight the strong potential of the area for (i) Li pegmatite deposits; (ii) Cu-Zn VMS deposits; (iii) Au orogenic quartz-carbonate veins and disseminated sulphide deposits; (iv) Ni-Cu-PGE magmatic sulphide deposits; and (v) Au-Cu porphyry systems (e.g., Troilus Gold).<br>The economic potential of the Moblan Property is for lithium mineralisation (spodumene pegmatites). Lithium-bearing pegmatites were grouped into four (4) dyke swarms: Main, South, New South and Moleon. Each corresponds to a series of stacked lithium-bearing dykes of variable thicknesses separated by faults.<br>The Main group comprises 5 lithium pegmatite dykes oriented E-W and dipping gently to the north (N260°/-20°) and two dykes oriented approximately N-S and dipping steeply to the west (N180°/-70°). This swarm extends |

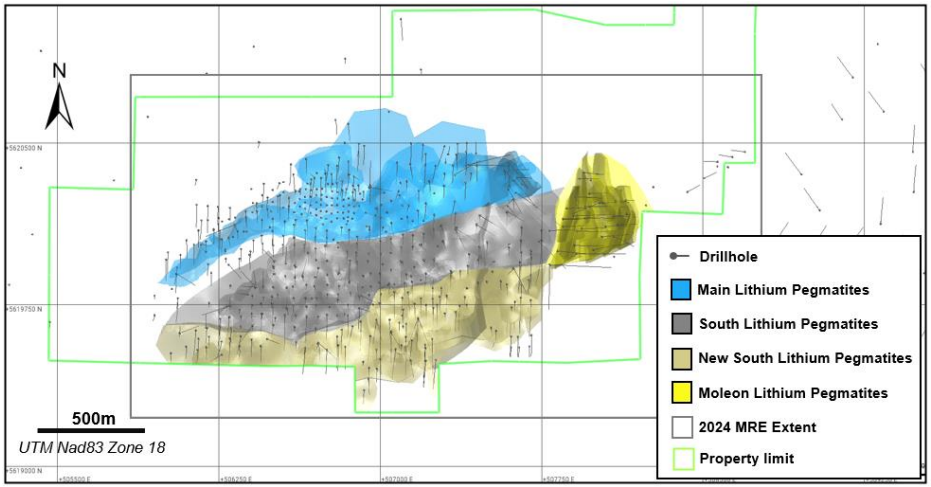
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| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | | laterally E-W for approximately 1500 m and 500 m N-S. In this group, the thickest dyke has an average intercept length of 25 m.<br>The South group comprises 12 dykes oriented E-W and almost sub-horizontal or dipping gently to the south (N260°/-10°) and one dyke oriented approximately N-S and dipping steeply to the west (N180°/-70°). This swarm extends laterally E-W for approximately 1800 m and 300 m N-S. In this group, the thickest dyke has an average intercept length of 45 m.<br>The New South group comprises 12 dykes oriented E-W and dipping moderately to the north (N260°/-5°) and one dyke oriented approximately N-S and dipping steeply to the west (N180°/-70°). This swarm extends laterally E-W for approximately 1800 m and 300 m N-S. In this group, the thickest dyke has an average intercept length of 29 m.<br>The Moleon group comprises 1 dyke oriented E-W and nearly sub-horizontal or dipping gently to the south (N260°/-5°) and 9 dykes oriented N-S and dipping steeply to the west (N180°/-70°). This swarm extends laterally N-S for approximately 750 m and 250 m E-W. In this group, the thickest dyke has an average intercept length of 26 m. |
| 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:<br>• easting and northing of the drill hole collar<br>• elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole<br>• collar dip and azimuth of the hole<br>• down hole length and interception depth<br>• hole length. | Refer to previous exploration releases for the drill hole information of the previously reported intercepts (ASX announcements of 26 April 2022; 27 June 2022; 17 April 2023; 11 July 2023; 23 October 2023 and 27 May 2024).<br>Material information on the Project's drill holes is illustrated on the figures (plan views, sections, results tables) in ASX Announcements of 2023 and 2024.<br>The coordinates in the figures and the tables are in metres (UTM NAD83 Zone 18), and the elevation is in metres above sea level.<br>The selection of the most significant drill hole intercepts was based on high metal factors (%$Li_2O$ content x length in metres) for intervals in spodumene pegmatite dykes. In ASX Announcements of 2023 and 2024, the table includes collar dip and azimuth of the hole, down hole length, interception depth, and hole length.<br>Depending on the azimuths and plunges of the selected boreholes, the drilled lengths are apparent and do not reflect true thicknesses.<br>The CPs were provided with all necessary detailed drill hole information to complete the 2024 MRE. |
| | 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 an advanced stage of exploration, with a reported mineral resource, ongoing engineering studies, and a substantial database of 771 surface drill holes (130,633m). All the details are therefore not presented in table form. |
| 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 the weighted average over total pegmatite core length.<br>$Li_2O$ grades do not show great variations (coefficient of variation of 0.87). Based on statistical analysis, no capping is required, and no capping was applied to the Project's $Li_2O$ grades.<br>Refer to previous exploration releases for the drill hole information of previously reported intercepts. |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | 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. | Aggregation of $Li_2O$ grades to obtain the weighted average of a significant intercept is constrained within single pegmatite dykes. |
| | 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 (%$Li_2O$ 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. | Refer to the figures in this ASX announcement and previous resources and exploration releases (ASX Announcements of 2023 and 2024) for illustrations of previously reported holes and assays and for the block model results of the 2024 MRE. |

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| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | | <br>Above; Moblan Lithium Pegmatites Dyke Swarms (Main, South, New South and Moleon) |
| 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 assay results were used to estimate and report the 2024 MRE and for the engineering studies. |
| 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 reported drill results are consistent with geological observations and the mineral resource estimate as described.<br>Geochemical, structural and geophysical studies (drone MAG , LIDAR) have been performed.<br>Metallurgical testing, geomechanical, geotechnical and environmental studies, and condemnation drilling were completed for engineering purposes. |
| 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 additional drilling to outline the geometry and extent of the lithium pegmatite dyke swarms identified to date.<br>Exploration and step-out drilling is planned to extend the limits of the mineralised system and potentially discover additional pegmatite dykes. |

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| Criteria | JORC Code explanation | Commentary |
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| | 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. | Data are stored in a Geotic™ Database (MS Access database). Assays and geological data are electronically loaded into Geotic. Geotic's built-in validation tools were used.<br>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.<br>The CPs checked the downhole surveys visually and statistically for outliers. Assay data was checked for negative, extreme and missing values. Overlapping intervals were flagged when imported into Leapfrog. Assay values below the detection limit were set to half the lower detection limit for estimation purposes.<br>Suspicious geological intervals that did not fit with surrounding drill hole intersections were verified by the CPs using core photos and then investigated and corrected where possible. |
| | Data validation procedures used. | The CPs completed a 5% audit on collar coordinates, downhole survey values and assay values by comparing the database information against the assay certificates (received directly from the independent and certified laboratories), surveyor certificates or source files from the DGPS, and source files from downhole deviation survey tools. Any data found to be in error were investigated and corrected where possible. |
| Site visits | Comment on any site visits undertaken by the Competent Person and the outcome of those visits. | CP Carl Corriveau P.Geo., VP Exploration of Sayona, and CP Ehouman N'Dah, P.Geo., Exploration Manager of Sayona oversees all drilling and sampling activities. They regularly attend site and understand details associated with the site setting and location.<br>CP Alain Carrier, M.Sc., P.Geo., completed independent site visits on March 30-31, 2022; April 4 and 6, 2022.<br>CP Simon Boudreau, P.Eng. (InnovExplo) and CP Andrew Siemon visited the Project site on August 1, 2023. Visits have included reviewed core intervals from previous program, and site tour of the Moblan Property. The CPs are satisfied with the quality of the measures undertaken.<br>Other site visits have been conducted by InnovExplo, SOQUEM and other Sayona representatives to ensure that protocols and procedures are followed during drilling activities. |
| | If no site visits have been undertaken indicate why this is the case. | Site visits were completed. |

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| Geological interpretation | Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit. | The level of confidence in Moblan's geological model is high.<br>Geology was modelled under the supervision of an independent CP in Leapfrog ™ (v.2023.2) using implicit modelling techniques. A total of 43 spodumene pegmatite dykes were modelled for the Main, South, New South and Moleon lithium-bearing domains.<br>These volumes were modelled from logged geology and geochemical data. This information is based on the drilling and surface trenching database supplied by Sayona. Geology is the controlling factor in guiding mineral resource estimation. |
| | 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 surface and 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 and geochemical ratio were used to create 3D volumes for each of the individual pegmatite dykes (43 pegmatite dykes in the 2024 MRE). |
| | The factors affecting continuity both of grade and geology. | Locally small fault offsets can be expected. 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 mineral resource area encompassing the Main, South and New South dyke swarms is 1,800 m long WSW-ENE, is 600–1,200 m wide, dips ~0–25° to the NNW, and has a vertical extent of ~350 m.<br>The Moleon mineral resource area is ~450 m long N-S, ~450 m wide E-W, dips ~60-70° to the west, and has a vertical extent of ~350 m.<br>Mineralisation remains open at depth and laterally for all domains. |
| 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. | Ordinary Kriging (OK) was selected as the method for grade interpolation because the Moblan lithium deposit is considered homogeneous based on geology, geostatistics and variography. No grade capping was applied to the 1m assay composites.<br>Experimental variograms were modelled in Snowden Supervisor™ v8.14 using composites on a domain-by-domain basis (4 experimental variograms were modelled).<br>Estimation was completed in Leapfrog™ (v.2023.2) using a three-pass approach. For thicker pegmatites (drill hole intersects longer, on average, than 10 m), a minimum of 13, 13 and 4 composites and a maximum of 24, 24 and 24 composites were required for passes 1 to 3, respectively, using 0.5x, 1x and 2x the variogram ranges as search ellipses, respectively. For the remaining pegmatites, passes 1 to 3, 5, 5 and 2 minimum composites were required, 8, 8 and 8 maximum composites using 0.5 times. 1.0 times and 2.0 times the variogram ranges as search ellipses, respectively. |
| | The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data. | The current estimate was compared to previous historical estimates, both visually and volumetrically. No reconciliation data is available as the Project has not reached the extraction stage. |

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| | The assumptions made regarding recovery of by-products. | The potential to recover Ta, Rb and Cs as by-products still need to be study. |
| | Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation). | For metallurgical studies, the $Fe_2O_3$ contents of pegmatites and adjacent host rocks were estimated. |
| | In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed. | The block model is octree-type. The parent block dimensions are 5 m x 5 m x 5 m, and the sub-blocks can go down to 1.25 m x 1.25 m x 1.25 m. The parameters of the block model are consistent with the drilling grid and the dimensions of the pegmatite dykes. |
| | Any assumptions behind modelling of selective mining units. | The SMU used for the optimisation was the parent block size (5 m x 5 m x 5 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. |
| | Discussion of basis for using or not using grade cutting or capping. | The $Li_2O$ grades do not show great variations (coefficient of variation of 0.87). Based on the statistical analysis, no capping is required, and no capping was applied to the Project's $Li_2O$ grades. |
| | 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. Swath plots on 5-m-wide slices through the block model (comparing OK, ID2 and NN estimations) and the composite data set were generated for the X, Y and Z directions. |
| 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. |

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| Cut-off parameters | The basis of the adopted cut-off grade(s) or quality parameters applied. | The 'reasonable prospects for eventual economic extraction' is met by having used reasonable cut-off grades for an open pit extraction scenario and constraining pit shell using a price of US$1,850 per tonnes of 6% $Li_2O$ concentrate (Whittle optimisation). Due to processing assumptions from the 2024 DFS, the selected COG for the MRE is 0.55% $Li_2O$. The selected COG of 0.55% $Li_2O$ should be viewed as a metallurgical cut-off grade for an open pit scenario. Other assumptions include:<br>Economic assumptions:<br>• Selling price: $US1,850 /t conc. 6% $Li_2O$<br>• Royalties: 2.00%<br>• Exchange rate: 1.33<br>Process:<br>• Processing cost: C$22.70 /t processed<br>• Rehandling cost: C$0.88 /t processed<br>• Transport cost: C$147.87 /t concentrate<br>• Tailings management cost: C$6.32 /t processed<br>• % $Li_2O$ in concentrate: 6.0%<br>• $Li_2O$ metallurgical recovery: 75.0%<br>Administration:<br>• G&A: C$11.15 /t processed<br>• Remote Camp: C$5.66 /t processed<br>Mining:<br>• Mining cost – Mineralised material: C$4.25 /t mined<br>• Mining cost – Waste material: C$4.25 /t mined<br>• Mining cost – Overburden: c$3.00 /t mined<br>• Mining recovery: 100%<br>• Loss of reserves: 0%<br><br>The cut-off grades should be re-evaluated in light of future prevailing market conditions (metal prices, exchange rate, mining cost, etc.). |
| 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 | An open pit scenario was retained for the MRE. All remaining tonnage outside of the optimised pit shell (Whittle) was excluded from the mineral resource statement. No underground mining scenario was retained.<br>The resource-level pit shell optimisation was completed at US$1,850 /t conc. 6% $Li_2O$ and 75% metal recovery rate on a 5 x 5 x 5 m SMU using pit wall angles of 58° in rock and 18° in overburden.<br>Estimated mining costs are presented for the cut-off parameters above. |

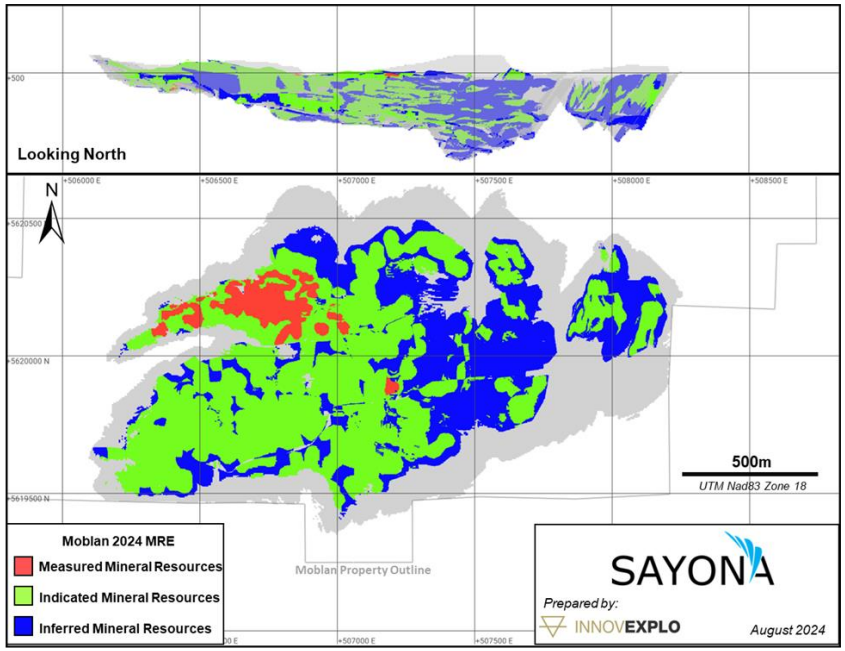
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| | rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made. | |
| Metallurgical factors or assumptions | The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made. | Metallurgical recovery assumptions are based on historical metallurgical tests and ongoing metallurgical testing conducted under the supervision of independent CPs and Sayona representatives.<br>The deposit has been drilled extensively. The more than 14 composites generated range in grade from 0.70 to 1.73% $Li_2O$ and 0.74 to 1.41% $Fe_2O_3$. The majority of the testing was on near-mine grade material for $Li_2O$ but below-mine grade for $Fe_2O_3$.<br>Near-surface material was used for bulk sampling and testing the ore sorting technology. Some interpretation has been required to compare with below-surface composites. The risk is that metallurgical performance differs from that tested.<br>The main metallurgical assumptions are that production generates a 6% $Li_2O$ concentrate with an average metallurgical recovery of 74.7% $Li_2O$. The circuit requires a combined DMS and floatation configuration to achieve the reported recovery.<br>Estimated processing costs are presented based on the proposed mine plan as detailed above.<br>Pilot-scale test work has been undertaken for DMS and floatation processes, though it used a material that is above mine grade, with floatation results showing that there is potential for lower recoveries if floatation conditions vary from design. |
| 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 assumption is that there will be no significant impediments to conventional waste management of rock and tailings. |

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| 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 carried out in accordance with standard procedure using a water immersion method. Intervals for bulk density determination were selected according to lithology. 782 measurements were taken using a standard water immersion method on core samples averaging 0.4 m long, throughout the Moblan lithium deposit; 512 were taken in lithium pegmatites, 153 in gabbro and 84 in mafic volcanics. |
| | Discuss assumptions for bulk density estimates used in the evaluation process of the different materials. | Pegmatite densities were estimated using a regression function developed using bulk density measurements and $Li_2O$%. The regression function is SG = 0.0606*$Li_2O$% +2.63 (R2=0.737), which uses $Li_2O$% block values and is used for the conversion of the volume of each block interpolated into a tonnage. Based on the mean of the measurements or theoretical values, other host rocks were given fixed densities values of 3.04 g/cm$^3$ for gabbro, 2.93 g/cm$^3$ for volcanics, 2.70 g/cm$^3$ for metasediments, and 2.72 g/cm$^3$ for granodiorite. |
| Classification | The basis for the classification of the Mineral Resources into varying confidence categories. | The 2024 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). | Resource classification is based on drill hole spacing and geological and grade continuity. Within the modelled lithium pegmatites only, the Measured category was assigned to blocks estimated with a minimum of three (3) drill holes in areas where the minimum distance from a drill hole is less than 15 m. The Indicated category was assigned to blocks estimated with a minimum of three (3) drill holes in areas where the minimum distance from a drill hole is less than 30 m. The Inferred category was assigned to blocks estimated with a minimum of one (1) drill holes in areas where the minimum distance from a drill hole is less than 50 m. |

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| | 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.<br><br> |
| Audits or reviews | The results of any audits or reviews of Mineral Resource estimates. | The key assumptions for the 2024 MRE were reviewed, discussed and decided with peers internally at InnovExplo and with Primero and Sayona representatives.<br>The estimate has been prepared using accepted industry practices and completed in accordance with the JORC Code guidelines, and it is suitable for preparing a public report documenting the mineral resource estimates. |

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| 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 level of confidence in the 2024 MRE is high.<br>The uncertainty of the geological domains (the Main, South, Inter and New South lithium pegmatite dyke swarms) is considered low. |
| | 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 boundaries between the Main, South, New South and Moleon pegmatite domains are marked and could be explained by structural discontinuities (e.g., ENE faults between the Main, South and New South groups; and a NNE fault between South/New South and Moleon groups), which needs to be more accurately addressed.<br>Inferred Mineral Resources reflect widely spaced drilling and infill drilling is recommended to potentially upgrade this category to a higher confidence level. |
| | These statements of relative accuracy and confidence of the estimate should be compared with production data, where available. | There is no production data for Moblan. |