SAYONA
ACN 091 951 978

ASX Announcement

20 February 2024

MOBLAN LITHIUM PROJECT DEFINITIVE FEASIBILITY STUDY: POSITIVE RESULTS DELIVER C$2.2B NPV

- Annual production rate of 300ktpa spodumene concentrate over 21-year Life of Mine ("LOM") via open pit mining at rate of 1.8Mtpa, based on Ore Reserves estimate of 34.5Mt at grade of 1.36% Li_2O
- Process plant feed rate at 4,800 tonnes per day (tpd); average LOM recovery of 74.7%; spodumene concentrate grade at 6% Li_2O
- Post-tax $NPV_{(8\%)}$ of C$2.2 billion; net cash flow of C$6.0 billion from LOM net revenues of C$14.4 billion; post-tax IRR of 34.4% and payback of 2.3 years
- Cost competitive operating unit cost of C$555/t and all-in sustaining costs of C$748/t
- Low-risk operation to form centrepiece of Sayona's emerging northern lithium hub in Québec's Eeyou Istchee James Bay territory

North American lithium producer Sayona Mining Limited ("Sayona") (ASX:SYA; OTCQB:SYAXF) announced today a Definitive Feasibility Study (DFS) that demonstrates the value of its Moblan Lithium Project, forming the centrepiece of the Company's Eeyou Istchee James Bay Hub in northern Québec, Canada. Moblan is owned 60% by Sayona and 40% by Investissement Québec.

The Project has an estimated post-tax $NPV_{(8\%)}$ of C$2.2 billion. The operation is expected to generate estimated total net revenue of C$14.4 billion over its 21.1 LOM, with an EBITDA of C$11.2 billion.

These positive financial returns have been driven by an estimated head grade of 1.36% Li_2O, a LOM recovery rate of 74.7% and LOM average annual concentrate production of 300,000tpa at a grade of 6% Li_2O.

Moblan is a greenfield project situated in the Eeyou Istchee James Bay territory in north-western Québec, Canada. It is located within just 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.

The Project's key production parameters include a relatively low strip ratio of 2.3:1 (ore versus waste), expected product grade of 6% Li_2O, and an estimated operating unit cost comparable with some of the most cost competitive international hard-rock lithium mines currently in production, supporting an extremely robust future for Moblan. Upon receipt of the necessary regulatory approvals, delivery of an appropriate financing package based on securing potential offtake and project partners, the Project is expected to require approximately two years to complete construction.

Sayona's Interim CEO, James Brown commented: "*We are delighted by the results of this DFS, which demonstrate that the Moblan Lithium Project is an incredibly strategic and valuable asset for Sayona, representing one of the single largest hard rock lithium resources in North America.*

"Forming the centrepiece of our northern lithium hub, Moblan has an extremely bright future supplying Québec-produced lithium derivatives into the expanding North American battery and EV sector.

"Moblan has an amenable ore body that will deliver product from an integrated process of both dense medium separation (DMS) and floatation circuits supported by ore sorting technology. The offset of delivering such high recoveries is an increase in capital intensity relative to simpler DMS plants. The high expected product recovery will benefit project economics and extend the life of mine.

"The challenging market conditions of recent months highlight the importance of developing Tier 1 lithium projects that are strategically located near existing transport corridors and end markets and that have the potential to deliver high grade lithium concentrate at industry-low and competitive operating costs. Moblan is an exceptional project that meets these criteria and we look forward to applying Sayona's extensive operational expertise to minimise costs and develop the Project as efficiently as possible.

"We are confident that the current lithium market will recover over the medium term and enable Moblan to benefit from the long-term industry fundamentals to become a profitable long-lasting operation for the benefit of all stakeholders.

"Sayona will now look to review the timelines given the current market conditions, and continue to advance the necessary regulatory approvals, seek community support and secure the necessary financing and project partners capable of advancing this Project through to successful production, with the ultimate ambition to integrate Moblan into a regional supply chain for battery materials in Québec."

DFS HIGHLIGHTS

The DFS demonstrates a financially and technically viable operation based on estimated JORC Probable Ore Reserves of 34.5Mt at 1.36% Li_2O to deliver average annual production of 1.8Mtpa. The financial analysis demonstrates an estimated pre-tax $NPV_{(8\%)}$ of C$3.9 billion and a pre-tax IRR of 47.4%, based on a 21.1 year LOM. The estimated post-tax $NPV_{(8\%)}$ is C$2.2 billion and a post-tax IRR of 34.4%, with a post-tax payback period of 2.3 years based on LOM net cash flows of C$6.0 billion. There are no Proven Ore Reserves.

Analysis of the financial model on the key economic assumptions indicates that the Project is robust in terms of operating costs and capex. The Project is most sensitive to changes in commodity prices, exchange rates, product grades and recoveries.

The Project demonstrates robust operational and financial metrics, with the key Project assumptions and outputs shown in the tables below:

Table 1 – Key Project Parameters

Production Parameters	Value	Units
Pre-production period	39	months
Production period	20.0	years
Life of mine	21.1	years
Probable ore reserves [3]	34.5Mt @ 1.36%	Li_2O
Total waste	75.4	Mt
Total overburden	4.1	Mt
Total project tonnage	114.1	Mt
Average LOM strip ratio	2.3	Waste: Ore
Daily production	4,800	tpd milled
Monthly production	146,000	tpm milled
Annual production	1,752,000	tpa milled
Average feed head grade	1.36%	Li_2O
Product concentrate grade Li_2O	6.0%	Li_2O
Average LOM recovery [4]	74.7%	%
LOM 6% Li_2O produced [5]	5,848,179	t at 6% Li_2O
Average annual production	300,000	tpa 6% Li_2O
Concentrate moisture [6]	7.0%	%
Royalties [7]	1.5% to 2.0%	%

Project Economics	Value	CAD	Value	USD
Exchange rate [8]	0.750	CAD/USD	1.333	USD/CAD
AISC [9, 15]	748.04	$/t concentrate	561.03	US$/t concentrate
Operating unit cost [9]	94.04	$/t milled	70.53	US$/t milled
Operating unit cost [9]	555.39	$/t concentrate	416.55	US$/t concentrate

Mining costs [9]	7.88	$/t mined	5.91	US$/t mined
Process costs [9]	22.70	$/t milled	17.03	US$/t milled
G&A costs [9]	65.84	$/t concentrate	49.38	US$/t concentrate
Transport costs [10]	147.87	$/t concentrate	110.90	US$/t concentrate
Total OPEX cost estimate	3,248	$M	2,436	US$M
Total CAPEX cost estimate	962	$M	722	US$M
Total SUSEX cost estimate	96	$M	72	US$M
Other cost – Env. & mine closure cost	68	$M	51	US$M
Total project cost	4,375	$M	3,281	US$M
Average market price LOM 6% Li_2O [11]	2,653	$/t concentrate	1,990	US$/t concentrate
Total net revenue	14,423	$M	10,817	US$M
Undiscounted pre-tax cash flow	10,048	$M	7,536	US$M
Estimated mining and income taxes	4,093	$M	3,070	US$M
Net cash flow	5,955	$M	4,466	US$M
Discount rate [12]	8%	%	8%	%
Pre-tax NPV	3,918	$M	2,939	US$M
Pre-tax IRR	47.4%	%	47.4%	%
Post-tax NPV	2,187	$M	1,640	US$M
Post-tax IRR	34.4%	%	34.4%	%
Post-tax Payback period	2.3	Years	2.3	Years

Notes:

1. All costs and sales are presented in constant 2023 CAD, with no inflation or escalation factors considered. $M = millions of dollars.
2. All related payments and disbursements incurred before the first quarter of calendar 2024 are considered sunk costs.
3. The financial analysis was performed on Probable Ore Reserves as outlined in this report. There are no Proven Ore Reserves.
4. The average metallurgical recovery over the LOM is 74.7%. However, the recovery rate depends on the mine production plan, spodumene grade and iron grade fed to the concentrator by period.
5. Tonnes of concentrate are presented as dry metric tonnes.
6. The transportation cost is applied to a 6% Li_2O concentrate (including 7% moisture) from the Project to the port in Québec City.
7. Royalties ranging from 1.5% to 2.0% are payable to Lithium Royalty Corp. Calculated by PWC depending on production quantities.
8. An exchange rate of 0.75 CAD/USD was fixed over the LOM for the Project.
9. Unit operating costs are calculated for the production period only. Excluding tonnes during preproduction. Total tonnes mined: 110.14 Mt; Total tonnes milled: 34.54 Mt; Total tonnes concentrate: 5.85 Mt.
10. From a transport study conducted during the DFS for wet concentrate.
11. The average 6% Li_2O concentrate price is US$1,990/t over the LOM. This price is based on a market analysis from Benchmark Mineral Intelligence for Q3 2023 and varies over the LOM from US$1,850/t to US$3,000/t.
12. A discount rate of 8% was used for the base case scenario.
13. Production targets are based on the Ore Reserves Estimate which considers the open pit-constrained portion of the Measured and Indicated Mineral Resources. Inferred Mineral Resources are considered waste. In addition to 34.5 Mt of mineralised material, 75.4 Mt of waste and 4.1 Mt of overburden must be mined, resulting in an overall LOM stripping ratio of 2.3.
14. The Moblan Ore Reserves estimate is supported by the DFS studies on modifying factors, resulting in positive pre-tax and post-tax financial data.
15. AISC doesn't include concentrate transportation costs which are part of the total net revenue calculations.
16. The numbers have been rounded. Any discrepancy in the totals may be due to rounding effects.

OVERVIEW

The Moblan Lithium Project ("Moblan" or "the Project") is a greenfield project located 130 km to the north of the township of Chibougamau with access via the Route du Nord. The Moblan Project comprises 20 claims covering 433 ha or 4.3 km^2 and is held by Sayona Nord (60%) and Investissement Québec (40%).

The Project is host to lithium mineralised pegmatite. Individual dykes have been documented and modelled comprising the Main Zone, South Zone, Inter Zone and Moleon domain.

The DFS assessed several strategic development options and determined an economic open pit mine operation, production schedule and site layout as the preferred option. The DFS has been completed with an overall accuracy of ±15% to 20%.

The DFS has been completed by an independent Canadian consulting firm, InnovExplo Inc., in collaboration with AtkinsRéalis (formerly SNC-Lavalin), Primero Group Americas, SLR Consulting, G Mining Services Inc. and Richelieu Hydrogéologie Inc.

Mining is via open pit using a conventional fleet of excavators and trucks. The final design comprises two pits with the Moleon pit encompassing the Moleon domain, and the Main pit encompassing the Main, Inter and South domains.

A detailed dilution model has been developed using linear dilution of 0.50 m and a minimum mining width of 4.00 m. Mining dilution is 5.8% with a mining recovery of 87.6%. The average Fe grade for the LOM is 1.03%.

The Moblan processing facility is designed to produce a 6.0% Li_2O spodumene concentrate from an ore grade of 1.36% Li_2O (diluted), with an average iron oxide (Fe_2O_3) content of 1.47%. The spodumene concentrate will be produced via processing through DMS and floatation circuits.

The mine plan involves the excavation of 34.5 million tonnes ("Mt") of ore grading at an average of 1.36% Li_2O. The mill is designed to process 1.8 Mt of ore per annum to produce an annual average of 300,000 tonnes of spodumene concentrate at 6% Li_2O. Over LOM, the planned open pit will excavate 75.4 Mt of waste rock and 4.1 Mt of overburden. The total calculated stripping ratio is 2.3 tonnes of waste and overburden per tonne of ore.

A metallurgical cut-off grade (COG) of 0.60% Li_2O has been used. It should be noted that the iron content can have an impact on metallurgical recoveries and the quality of the spodumene concentrate. Ore shapes containing more than 2.80% Fe have been excluded from the Ore Reserves Estimate.

PROPERTY STATUS

The Moblan Lithium Project properties (the "Properties") are situated in the Eeyou Istchee James Bay territory in north-western Québec, Canada. (Figure 1).

SITE ACCESS AND EXISTING INFRASTRUCTURE

The Project is located 130 km from Chibougamau via a year-round accessible road, named 'Route du Nord'. Access to site is easily obtained via a 300-metre access off the main road.

Chibougamau is the largest community in the James Bay area. Chibougamau and Chapais (located approximately 45 km drive west of Chibougamau) are former copper and gold mining centres with a combined municipal population of about 10,000 residents, providing all related municipal infrastructure and services.

Aside from provincial roads connecting Chibougamau to all major cities, the railway hub located in Chibougamau offers links with major ports of Eastern Canada, including Montreal and Québec City ports. Chibougamau is also serviced regularly by commercial airlines from Montreal and Québec City.

Access to clean and reliable hydroelectricity is provided via Hydro-Québec. A connection to the existing 161kV electrical line will be made 42 km from the Moblan site.

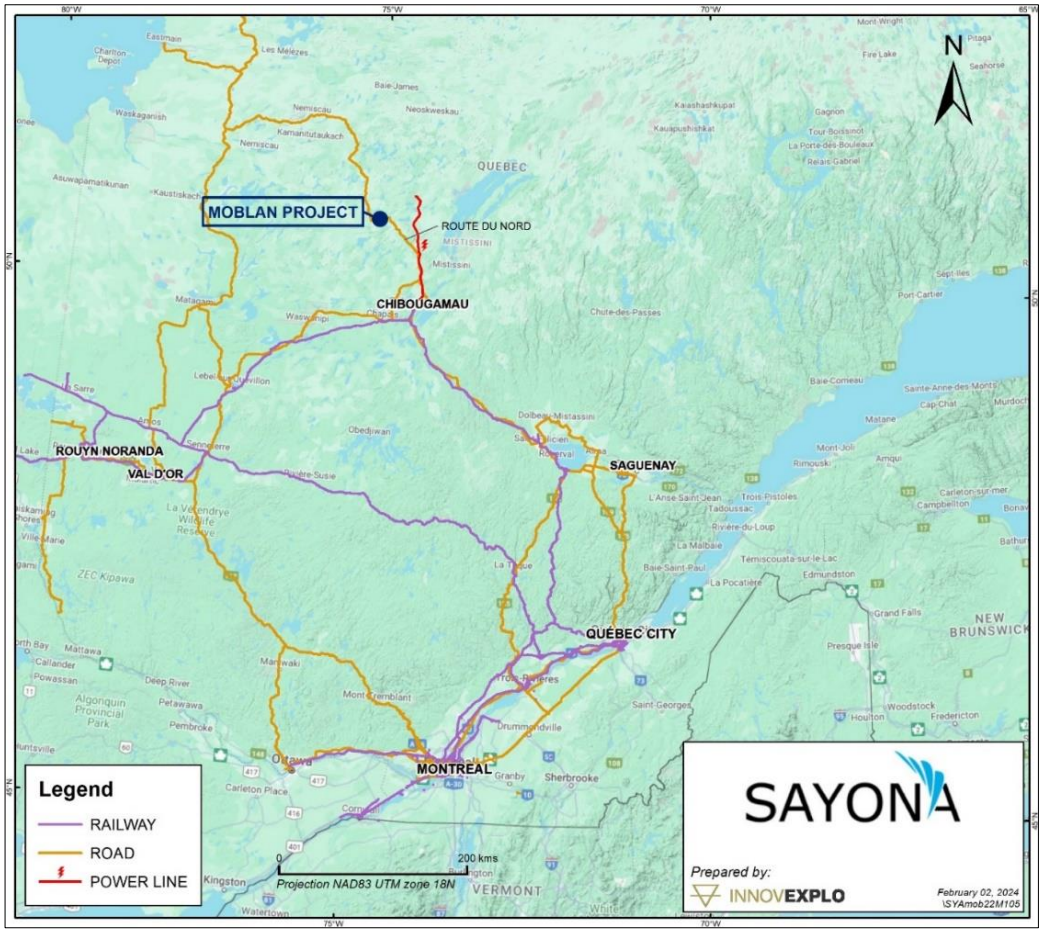


Figure 1 – Moblan property location and site access

MINING TITLES

Moblan comprises 20 claims covering 433 ha or 4.3 km^2 held by Sayona (60%) and Investissement Québec (40%) (Table 2 and Figure 2). The interest in the 20 claims was transferred from SOQUEM to Investissement Québec pursuant to the "Moblan joint venture agreement deed of assignment" dated 31 December 2023. InnovExplo verified the status of all mining titles using GESTIM, the Government of Québec's online claim management system (gestim.mines.gouv.qc.ca). All claims were in good standing as of December 2023. At the time of verification by InnovExplo, the transfer of the 20 claims from SOQUEM to Investissement Québec had not yet been registered in GESTIM.

Table 2 – Summary of the Moblan Project mining titles

Property	Number of Mining Titles	Total Area (ha)	Ownership	Royalties
Moblan	20	433.37	60% Sayona / 40% Investissement Québec	GOR royalty to Lithium Royalty Corp (LRC): 2.5% for the first 1 Mt/y. 1.5% for any t/y of ore in excess of the first 1 Mt. Offtake agreement with LRC: • 10% of Sayona's ownership participation in the annual production for the LOM. • Price at a 5% discount to the prevailing market terms.

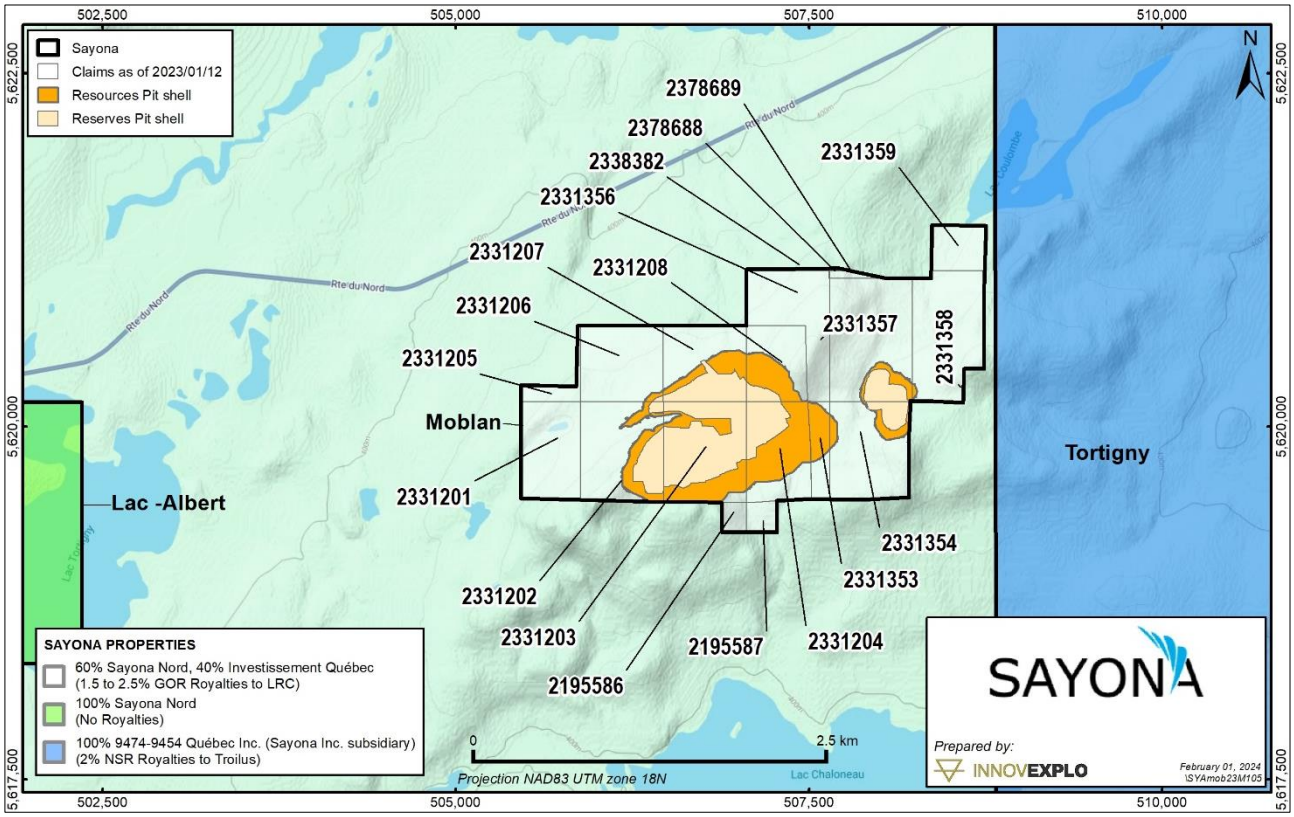


Figure 2 – Moblan Claim Map

GEOLOGY AND MINERALISATION

The Property is located in the Frotet-Evans greenstone belt ('FEGB'), which forms part of the Archean Superior Province. The geology of the Moblan Property is dominated by a large north-east trending gabbro, bordered to the north-west by mafic volcanics and lesser sedimentary rocks. The Archean bedrock is locally covered by glacial tills which typically do not exceed 3 to 4 metres in thickness.

The gabbro is the main host rock for lithium bearing pegmatite mineralisation. The pegmatites are of the albite – spodumene class of LCT (lithium-cesium-tantalum) pegmatites. Four pegmatite clusters are recognised, forming a series of stacked pegmatite dykes of variable thicknesses. These are displayed in Figure 3 below.

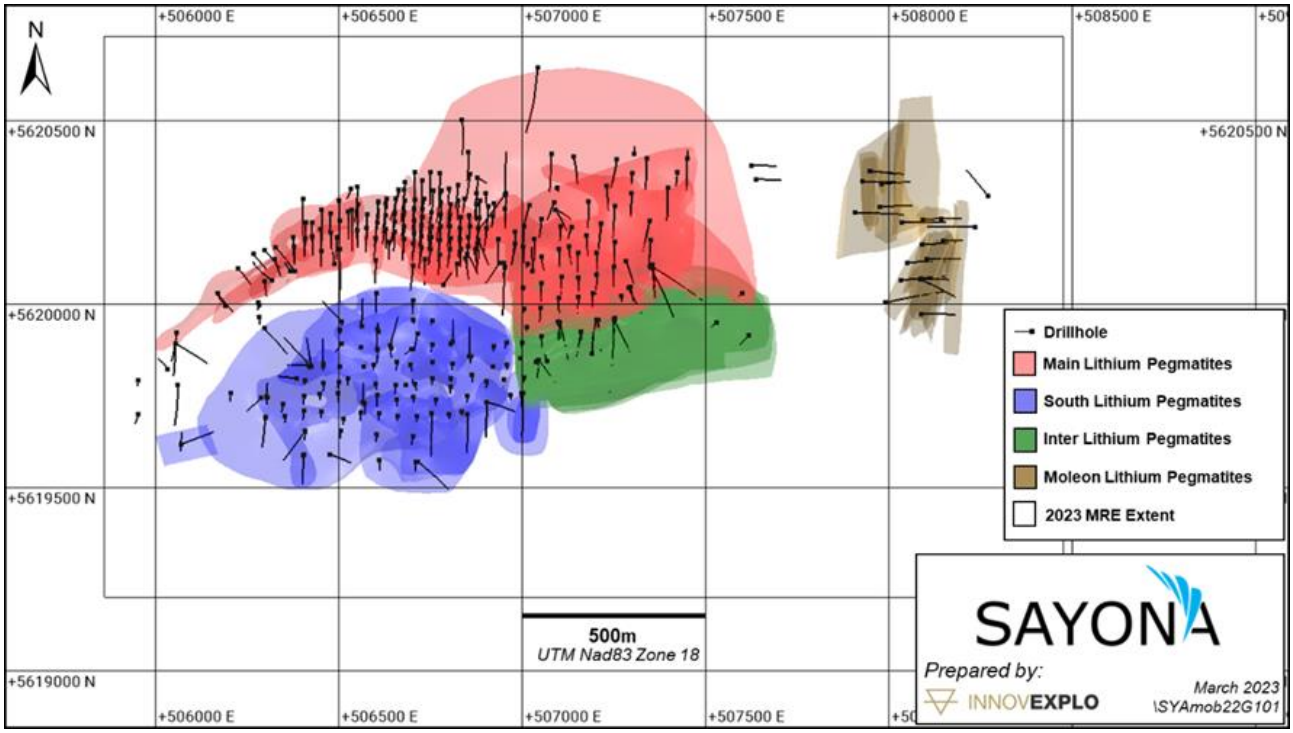


Figure 3 – Moblan Lithium Pegmatite and Diamond Drilling (2023 MRE)

MINERAL RESOURCE ESTIMATE

The Moblan 2023 Mineral Resource Estimate (MRE) covers an area of 2,500 m strike length and 900 m width, extending to a depth of 350 m below surface. The mineralisation model consists of 21 lithium pegmatite dykes modelled as the Main dykes, 20 as the South dykes, 17 as the Inter domain and 17 as the Moleon dykes. The MRE is based on diamond drill holes drilled between 2002 and 2022 and trenches sampled between 2004 and 2009. The database includes assay data from 366 surface drill holes and 10 surface trenches with a close-out date of 18 January 2023.

Table 3 – Moblan Lithium Project – 2023 Mineral Resource Estimate

Resource Classification	Measured		Indicated		Measured + Indicated		Inferred		Measured + Indicated + Inferred	
Domain	Tonnes kt	Li_2O %	Tonnes kt	Li_2O %	Tonnes kt	Li_2O %	Tonnes kt	Li_2O %	Tonnes kt	Li_2O %
Main	6,313	1.46	11,541	1.19	17,854	1.28	3,406	1.00	21,260	1.24
South	-	-	23,498	1.17	23,498	1.17	8,939	1.12	32,438	1.16
Inter	-	-	5,601	0.89	5,601	0.89	7,209	0.81	12,810	0.85
Moleon	-	-	2,932	1.52	2,932	1.52	1,430	1.42	4,362	1.49
Total	**6,313**	**1.46**	**43,573**	**1.16**	**49,886**	**1.20**	**20,984**	**1.02**	**70,870**	**1.15**

MRE Notes:

1. The independent Competent Persons, as defined by JORC, respectively, are Alain Carrier, M.Sc., P.Geo., and Simon Boudreau, P.Eng., both of InnovExplo Inc., and Ryan Cunningham, P.Eng., of Primero Group Americas Inc. The effective date of the 2023 MRE is 21 March 2023, and it was released on 17 April 2023.
2. These mineral resources are not ore reserves and do not have demonstrated economic viability.
3. The MRE follows the JORC Code (2012 Edition).
4. Seventy-five lithium pegmatite dykes were modelled in Leapfrog™ 2022.1.1 using implicit modelling techniques for the Main, South, Inter and Moleon domains. Dyke wireframes, used as geological resource solids, were modelled with a minimum thickness of 0.30 m.
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 in Leapfrog™ 2022.1.1 using hard boundaries on composited assays. The OK method was used to interpolate a sub-blocked model (parent block size = 5 m x 5 m x 5 m).
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 three (3) drill holes in areas where the minimum distance from a drill hole is less than 50 m.
8. Pegmatite densities were estimated using a regression function (SG = 0.0623644*Li_2O% +2.61928) developed using specific gravity ("SG") measurements (grams per cubic centimetre) and lithium values (Li_2O%). Other host rocks were given fixed SG values of 3.04 g/cm^3 for gabbro, 3.00 g/cm^3 for volcanics, 2.70 g/cm^3 for metasediments, and 2.70 g/cm^3 for rhyolite.
9. The requirement of reasonable prospects for eventual economic extraction is satisfied by using reasonable cut-off grades for an open pit extraction scenario and constraining pit shells (Whittle optimization). The estimate is reported at a cut-off grade of 0.25% Li_2O. The estimate was calculated using a price of US$1,273/t of 6% Li_2O concentrate, a USD/CAD exchange rate of 1.32, a recovery of 75%, a mining cost of $5.50/t mined, a transport cost of $157.90/t dry concentrate, a G&A cost of $12.35/t, a tailings management cost of $0.80/t processed, and a processing cost of $35.00/t. 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. Rounding followed the recommendations of NI 43-101.
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 not mentioned in this Technical Report that could have a significant impact on the 2023 MRE.

ORE RESERVES ESTIMATE

The Ore Reserves have been classified according to the category of the underlying mineral resources and the status of the modifying factors. Probable Ore Reserves are based upon Indicated and Measured mineral resources. The confidence level in the modifying factors (mid-term planning, planned dilution and %Fe grade) is not considered sufficient to classify any of the Measured mineral resources as Proven Ore Reserves.

Table 4 – Moblan Lithium Project – Ore Reserves Estimate

Category	Tonnage (t)	Grade (%Li_2O)
Probable	34,537,284	1.36
Total	**34,537,284**	**1.36**

Notes

1. The Ore Reserves for the Project have been estimated by Simon Boudreau, P.Eng. (OIQ #132338) of InnovExplo Inc., an independent and Competent Person, as defined by JORC 2012. The effective date of the 2024 Ore Reserves Estimate is 24 January 2024.
2. The Ore Reserves are estimated assuming open pit mining methods and reported on a 100% project basis.
3. Ore Reserves are measured as dry tonnes at the crusher above a diluted cut-off grade of 0.60% Li_2O.
4. Ore Reserves result from a positive pre-tax financial analysis based on a 6.0% Li_2O spodumene concentrate, a selling price ranging from US$1,850/t to US$3,000/t with an average of US$1,990/t over LOM, and a CAD/USD exchange rate of 0.75.
5. The selected pit shell is based on a revenue factor of 0.59 applied to a base case selling price of US$1,050/t of concentrate.
6. The reference point of the Ore Reserves Estimate is the Moblan crusher feed.
7. In-situ mineral resources are converted to Ore Reserves based on pit optimisation, pit design, mine scheduling and the application of modifying factors, all of which support a positive LOM cash flow model. Inferred Resources have not been converted to Ore Reserves.
8. The waste and overburden to ore ratio (strip ratio) is 2.3.
9. Ore blocks containing more than 2.80% Fe have been excluded from the Ore Reserves Estimate. The average Fe grade for the LOM is 1.03%.
10. There are no Proven Ore Reserves.
11. The CP is not aware of any known environmental, permitting, legal, title-related, taxation, socio-political, marketing, or other relevant issues that could materially affect the mineral reserves estimate other than those disclosed in this JORC compliant DFS.
12. Totals may not add up due to rounding of significant figures.

MINE DESIGN

The Project will be mined by open pit methods using a conventional excavator and truck fleet. The final design comprises two open pits. The Moleon Pit encompasses the Moleon domain, and the Main Pit encompasses the Main, Inter and South domains.

Pit designs are derived from optimisation pit shells obtained with Dassault System' GEOVIA Whittle software using the Lerchs-Grossman algorithm. A revenue factor of 0.59 pit shell was retained for the final design from an optimisation using 49 revenue factors. Phase 1 of the Main and South pits, which later merge into a single pit (the Main Pit), is based on a revenue factor of 0.41.

Pit shell optimisation parameters were obtained from the following parameters:

- 6% spodumene concentrate price of US$1,050
- 2% royalty on sales
- 0.76 CAD/USD exchange rate

- Processing cost of $35.00/t
- Rehandling cost of $0.90/t
- Tailings management cost of $0.80/t
- G&A costs of $12.35/t
- Concentrate transportation cost of $157.90/t of concentrate
- Process recovery of 75%
- Overburden removal cost of $3.94/t
- Waste mining cost of $5.25/t
- Ore mining cost of $5.50/t
- Mine recovery of 90%
- Dilution of 10%
- Overall overburden slope angle of 20°
- Overall rock slope angle of 55°

The calculated economic marginal cut-off grade is lower than the operational cut-off grade of 0.6% Li_2O which was estimated based on metallurgical process parameters and limitations and which was retained for the purpose of the optimisation.

The Main, Inter and South geological zones merge into a single final Mine design named Main Pit. The Moleon Zone will require a separate pit design and access.

The optimal depth of the Main Pit from the highest topographic point mined is 200 m. The optimal depth of the Moleon Pit is 130 m. Final designs are based on the optimised pit shells. Pit design is based on geotechnical, geomechanical, and hydrogeological studies combined with considerations and mine fleet equipment. Selected parameters are presented in Table 5.

Table 5 – Mine design parameters

Parameters	Main Pit	Moleon Pit
Wall Angles	80° to 85°	80° to 90°
Catch bench Width	6.0 m to 9.4 m	6.5m to 11.7 m
Wall Height	20.0 m	20.0 m
Inter-Ramp Angle (IRA)	61° to 65°	57° to 70°
Ramp width (Double Lane)	28.0 m	28.0 m
Ramp width (Single Lane)	17.0 m	17.0 m

Figure 4 presents the Main Pit and Figure 5 presents the Moleon pit.

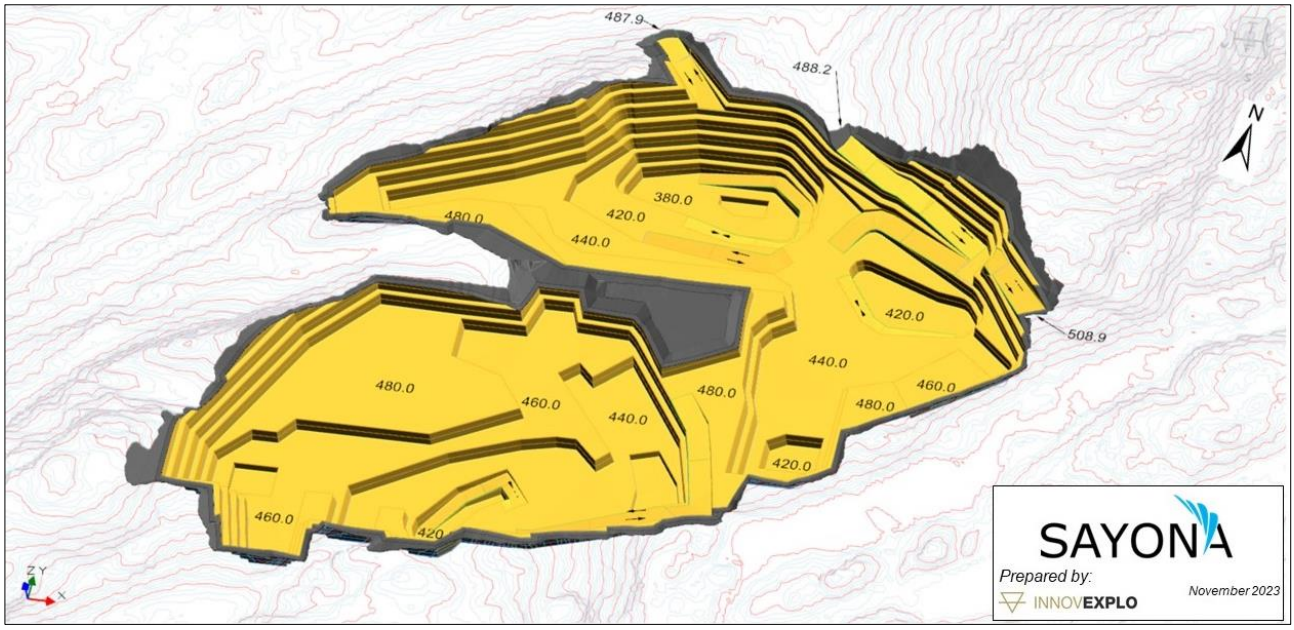


Figure 4 – Final Main pit

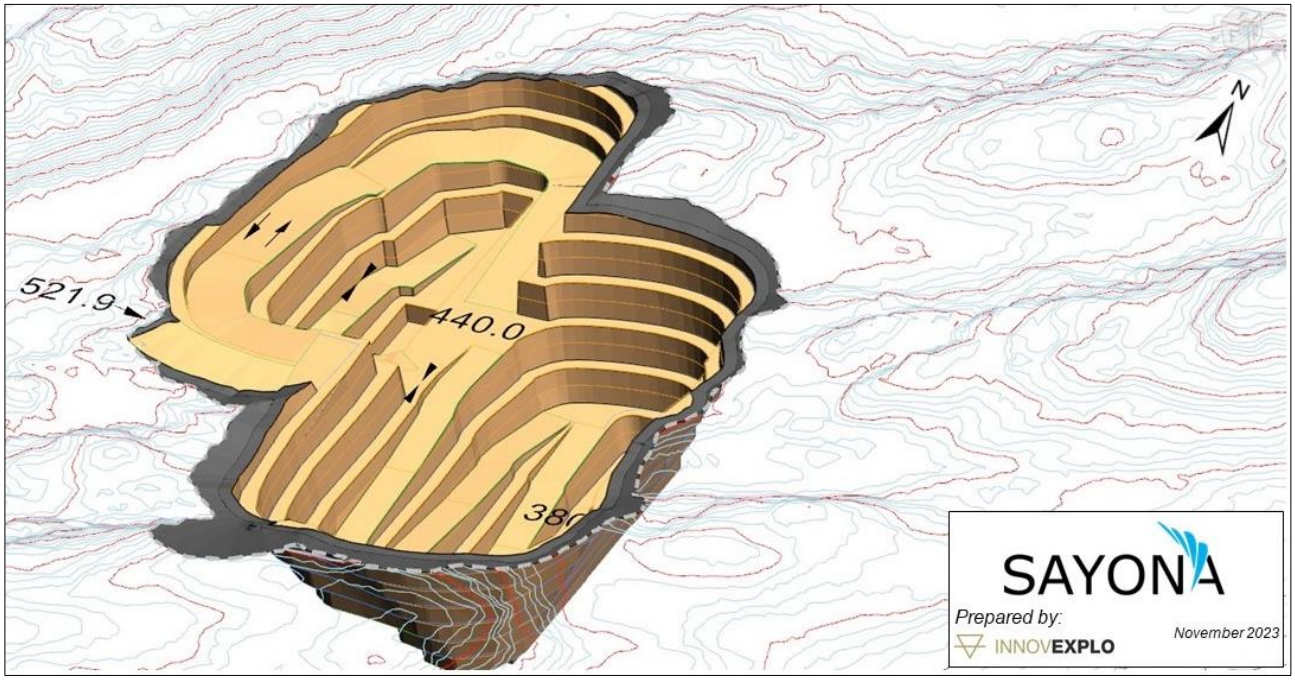


Figure 5 – Final Moleon pit

ORE DEFINITION

Ore shapes were defined using Deswik Stope Optimiser ("DSO"). As part of the metallurgical process considerations, DSO ore shapes with more than 2.8% Fe were excluded from the reserves to maintain an Fe grade of 1.03% over the LOM. Final Ore Shapes are displayed below as Figure 6 and Figure 7.

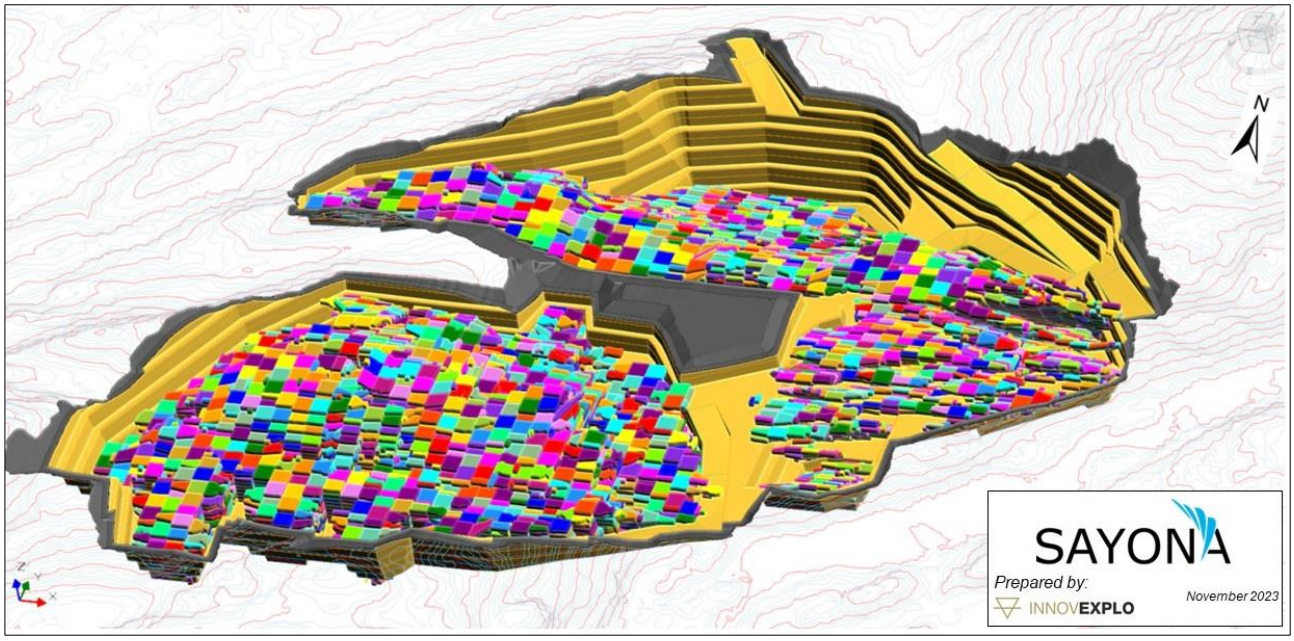


Figure 6 – Main Pit optimised ore shapes

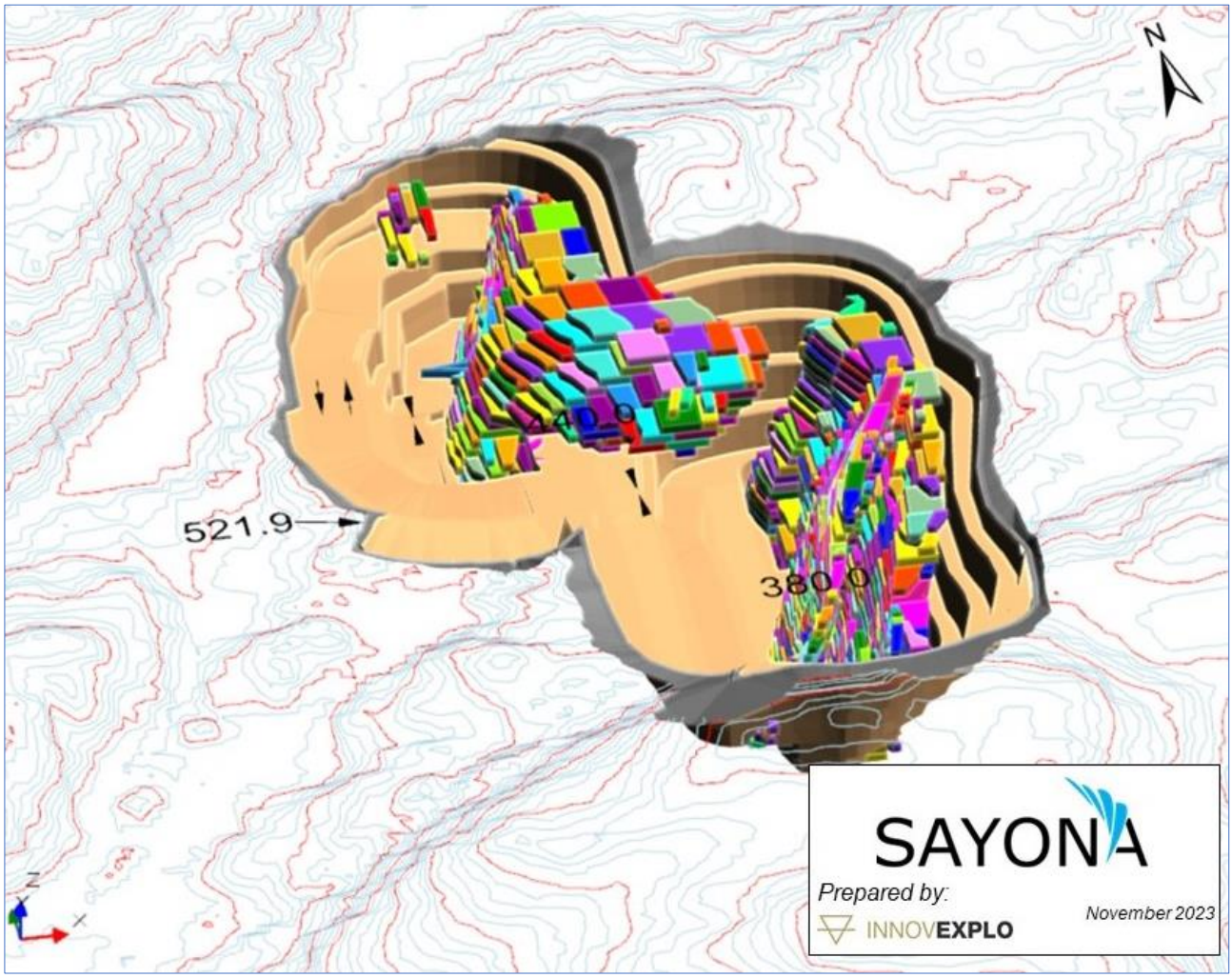


Figure 7 – Moleon pit optimised ore shapes

MINING FLEET

The owner operated production fleet consists of three 7 m^3 backhoes, six 92 t mine trucks, and three 100 mm to 152 mm drills with remote capabilities.

LIFE OF MINE PLAN

The LOM plan was evaluated to optimise process feed with the ore shapes discussed above. An optimised mining schedule was prepared with Dassault System Minesched Software.

A total of 114.1 Mt will be mined from the pits over a 21.1-year LOM, including 4.1 Mt of overburden, 75.4 Mt of waste rock and 34.5 Mt of ore at a grade of 1.36% Li_2O. The total calculated stripping ratio ('SR') is 2.3. The total tonnage distribution by phase is presented in Table 6.

Table 6 – Mining quantities by pit and phase

	Ore	Grade	Waste	Overburden	Stripping Ratio
Pit / Phase	Mt	% Li_2O	Mt	Mt	
Main Phase 1	4.075	1.58	5.717	0.672	1.57
South Phase 1	3.904	1.46	7.079	0.681	1.99
Main final	20.731	1.26	51.870	2.413	2.62
Moleon	5.827	1.50	10.776	0.333	1.91
Total:	**34.537**	**1.36**	**75.442**	**4.099**	**2.30**

Note: Numbers may not sum due to rounding.

The LOM is composed of 13 months of preproduction, within the 39 months construction period, starting in March 2026 followed by a 19-year production period starting in April 2027. LOM ends in 2047. Mining tonnages and the mining sequence are presented in Figure 8, and the material sequence and stripping ratio are presented in Figure 9.

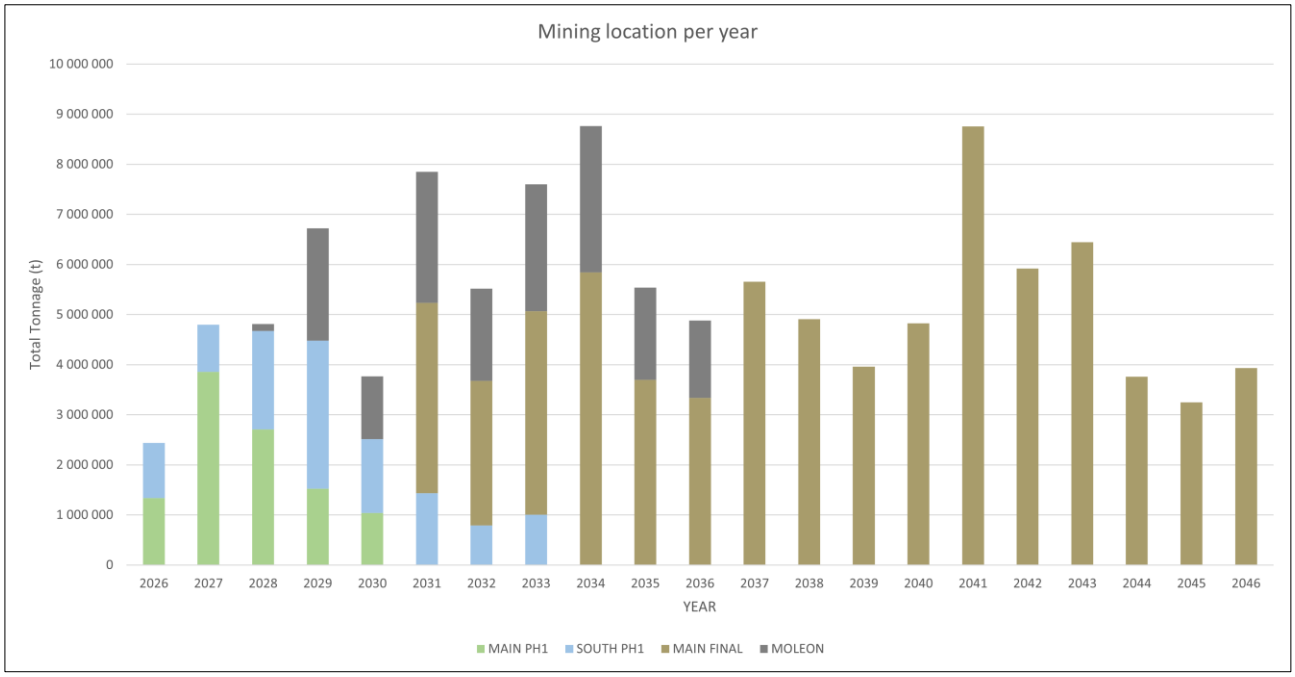


Figure 8 – Mining location per year

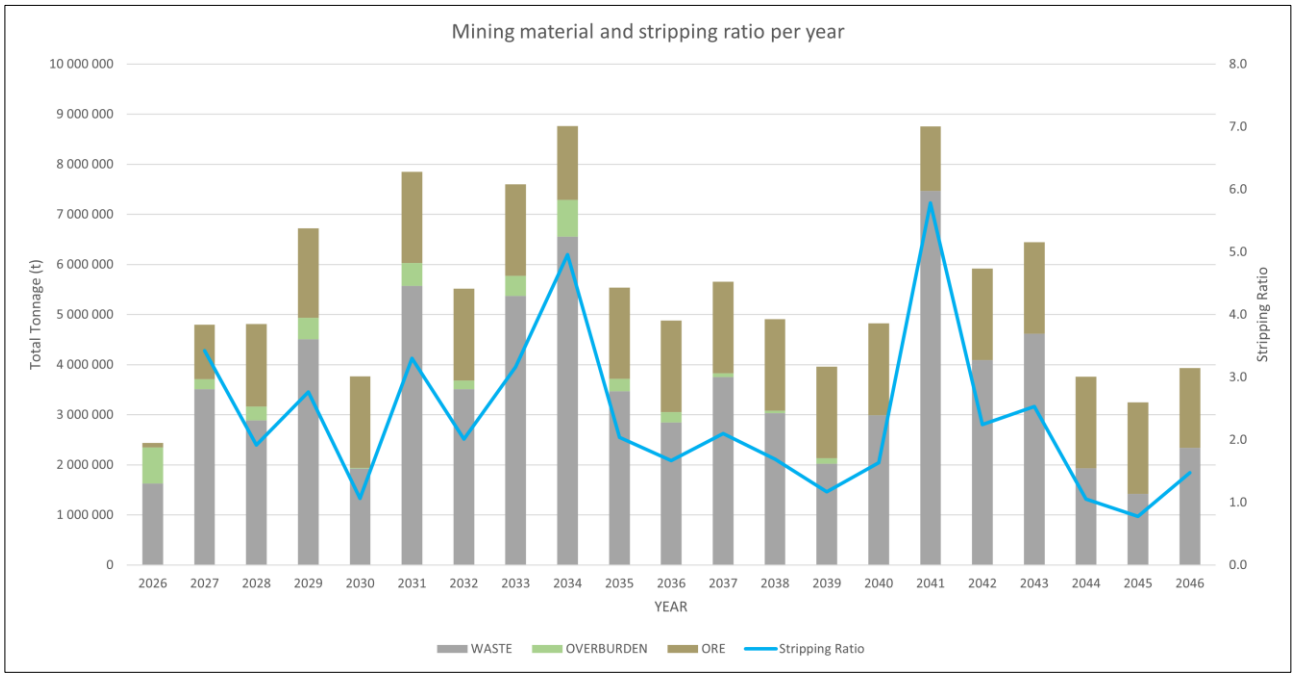


Figure 9 – Mining material and stripping ratio per year

MOBLAN CONCENTRATOR FEED AND PRODUCTION PROFILE

The Moblan concentrator ore feed will be blended from the ROM and low-grade stockpile to control Li_2O grade and Fe contamination. Head feed is optimised to obtain an average grade of 1.45% Li_2O over the first 10 years of the LOM. Figure 10 presents yearly head feed tonnage and grade over the LOM. LOM is optimised to maximise concentrate production in the first 10 years of the Project. Figure 11 presents yearly concentrate production and metallurgical recovery over the LOM.

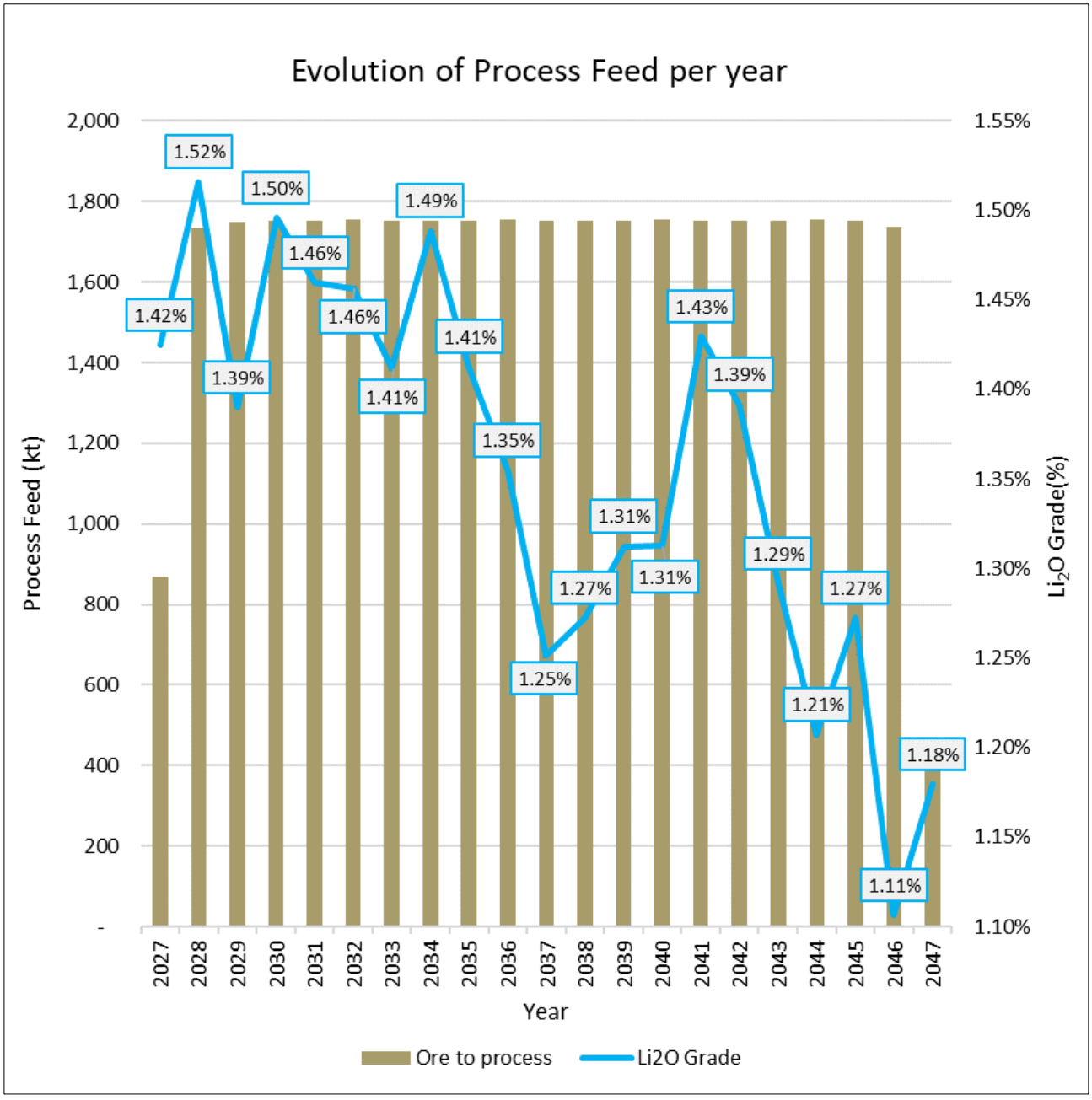


Figure 10 – Process head feed per year for LOM

The Moblan processing facility has been designed to process a nominal 1.8 Mtpa with a 74.7% Li_2O recovery, with a DMS and floatation plant availability of 85%. The circuit will produce a nominal

144 ktpa of DMS concentrate and 142 ktpa of floatation concentrate, with a target product grade of 6.0% Li_2O.

Over the 20 years of production, targets equate to a nominal 300 ktpa of concentrate.

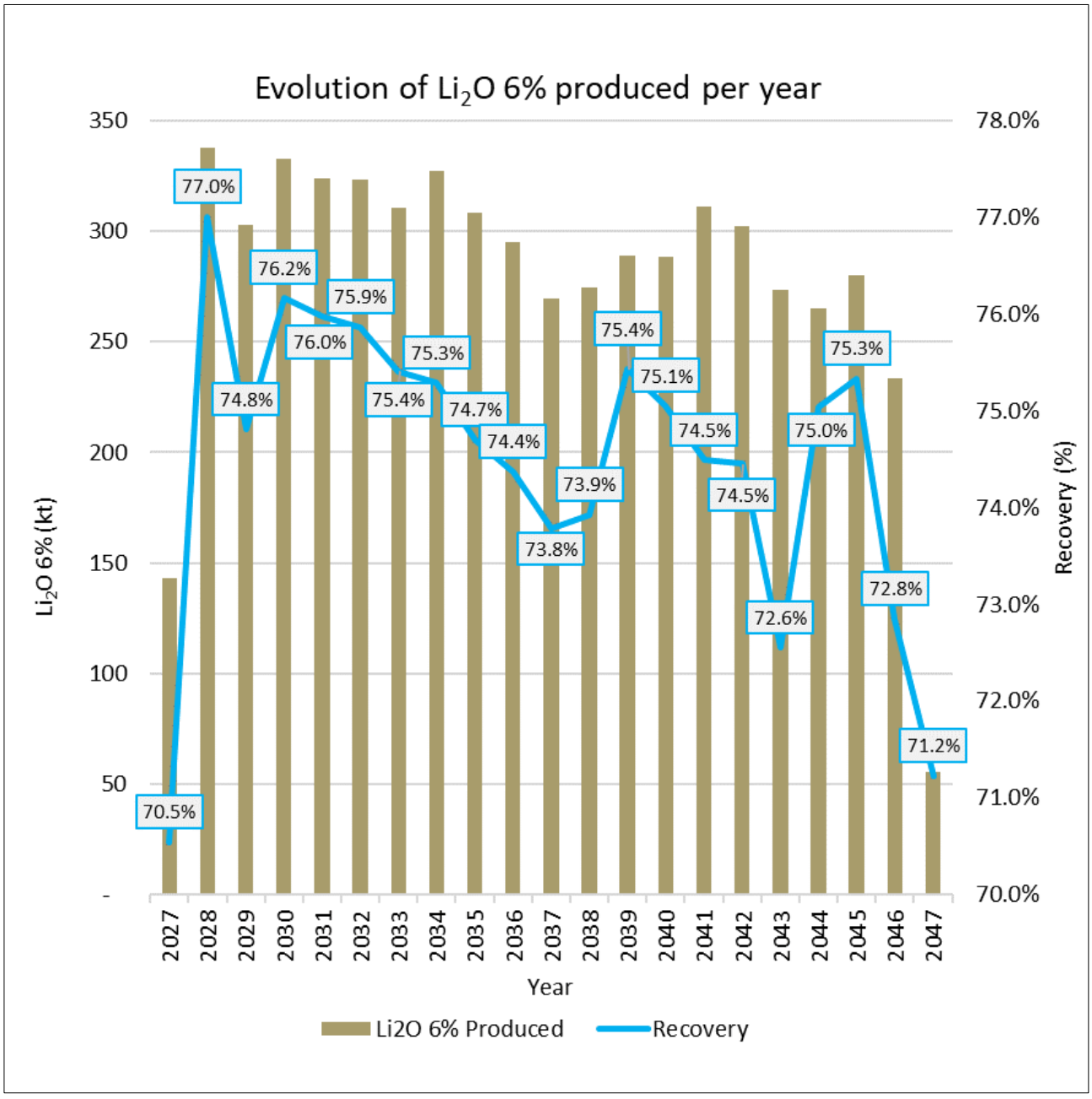


Figure 11 – Production and recovery rate over LOM

METALLURGY

Metallurgical recovery assumptions are based on historical metallurgical tests and test work completed during 2022-2023, under the supervision of independent QPs and Sayona representatives.

The deposit was drilled extensively, from which over 300 pegmatites samples totalling over 4 tonnes were used to generate 14 composites ranging in grade from 0.70% to 1.73% Li_2O and 0.74% to 1.41% Fe_2O_3, which straddles the mine grade material for Li_2O and Fe_2O_3. The iron content can have an impact on metallurgical recovery and the quality of the spodumene concentrate.

The average Fe grade for the LOM is 1.03% Fe. Test programs provided the data required to establish optimal crush size, comminution parameters, DMS separation, magnetic separation and impact of dilution/feed grade among other parameters.

Near-surface bulk samples totalling over 50 tonnes were used to perform sorting test work and to confirm design parameters and process flowsheet. A portion was sent to SGS Lakefield, CA, to run a pilot DMS and floatation program, where it was processed based on the proposed flowsheet to produce >5t of 6.0% Li_2O concentrate, a sufficient quantity to undertake testing of the major-size equipment in the flowsheet, as required, and to provide concentrate samples to third-party prospective buyers. Another portion was used to test the ore sorting technology.

A global recovery was calculated using the bulk test work and pilot data and then compared to the bench-scale test program results and trended across the feed grades straddling the proposed mine Li_2O grade. The recoveries over the LOM range from 72.3-77.9% with varying Li_2O and Fe_2O_3 grades (refer to Table 7). The concentrate grades across the range of feed grades vary from 5.6-6.2% Li_2O. As a result of this work an average metallurgical recovery of 74.7% Li_2O is used in the design criteria to produce a 6% Li_2O concentrate. This performance is predicated on the use of a combined DMS and floatation flowsheet to achieve the reported recovery.

Table 7 – Life of mine recoveries and potential variability with feed grade

Mine Grade ID	Li_2O Grade (%)	Fe_2O_3 Grade (%)	Mass (%)	Li_2O Grade (%)	Fe_2O_3 Grade (%)	Li_2O Distrib.*	Fe_2O_3 Distrib.*
	Feed Grade		Global Recovery (%)				
Design (LOM)	1.36	1.47	16.5	6.1	0.8	74.7	8.8
High Li_2O	1.66	1.12	20.8	6.2	0.8	77.9	15.2
Low Li_2O	1.10	1.49	14.5	5.6	0.9	73.0	8.8
High Fe_2O_3	1.30	1.87	15.4	6.0	0.8	72.3	7.0
Low Fe_2O_3	1.54	1.07	19.9	6.0	0.8	77.7	14.0
* Distribution: Li_2O Rec % = -7.2686 x (Fe_2O_3 Head Grade / Li_2O Head Grade) + 82.802							

MINERAL PROCESSING

A spodumene concentrate will be produced via processing through DMS and floatation circuits. The plant is designed to produce a 6.0% Li_2O spodumene concentrate from an ore grade of 1.36% Li_2O (diluted), with an average iron oxide (Fe_2O_3) content of 1.47%. The design of the spodumene concentrator process plant is based on a commercially proven DMS and floatation circuit technology (refer to Figure 12) and includes the following:

- A three-stage conventional crushing and screening circuit
- Ore sorting circuit on primary crushed material (to control the iron content in the ROM)
- DMS screening and mica removal via fluidised classification
- Two-stage DMS circuit for coarse fraction with magnetic separation of concentrate
- Two-stage DMS circuit for fines fraction with magnetic separation of concentrate
- Grinding and floatation circuit for the middlings and ultra fines fraction
- Magnetic separation on the floatation feed
- Thickening and filtration of floatation tailings and hyperfine fractions
- Tailings from the DMS and floatation plant trucked for co-disposal with the waste rock

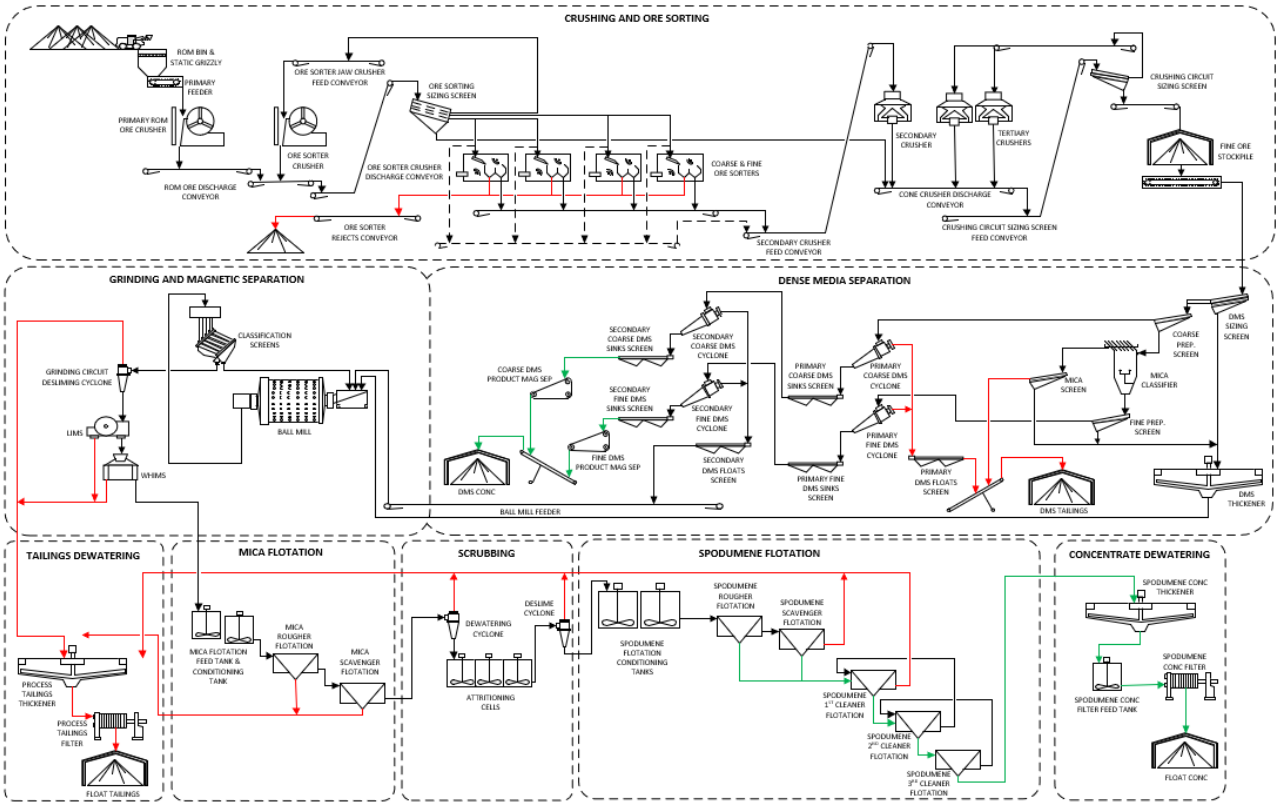


Figure 12 – Process flowsheet

A ROM blend will be fed to the primary crusher. The primary crusher product will be sized and fed to the ore sorter circuit. The sorter product will be fed to the secondary and tertiary crushing stages.

The crushing circuit will produce a nominal 6.35mm product screened into coarse (-6.3+4.0mm) and fine (-4.0+1.0mm) streams to be fed to the respective DMS circuits. The fines will be fed through a fluidised classifier to remove mica, before being fed to the fines DMS circuit.

Before feeding the primary DMS cyclones, each ore stream (coarse and fine) will be mixed with ferrosilicon slurry and pumped to the respective coarse and fine primary DMS cyclones. The ferrosilicon slurry density will be carefully controlled to enable the gravity separation of spodumene from minerals with a lower SG. Spodumene has a higher SG than most other gangue minerals. Consequently, the spodumene will report to the DMS cyclone underflow (sinks), with the gangue material reporting to the DMS cyclone overflow (floats) and then reporting to the DMS tailings stockpile. The sinks are fed to the respective secondary DMS circuits.

The secondary DMS circuit cyclones for both the coarse and fine DMS circuits will be fed with the ferrosilicon medium (SG 2.95). This will separate the material (floats) that contains some lithium as unliberated spodumene, which will report as middling to the grinding circuit for size reduction prior to floatation. The sinks from the secondary coarse DMS cyclones and from the secondary fines DMS cyclones will be sent to the DMS product stockpile after respective magnetic separators, which remove iron minerals to meet the product iron content criteria. This will be the final DMS spodumene concentrate product at 6% Li_2O.

The screened fines (-1.0mm) and DMS middlings will be ground in a ball mill and then fed through desliming cyclones, magnetic separators, mica floatation, and dewatering cyclones, which remove the slimes, the fine iron minerals and mica components. The deslimed slurry is then attrited further to dislodge or break down any residual mica flakes present.

The slurry is then pumped through a final deslime step before being fed to the spodumene floatation circuit. The floatation feed is treated with a high-intensity conditioning step where floatation reagents (generally oleic acids and tallow alkyl amine acetate) are added as required. The floated spodumene concentrate is thickened and filtered, and the tailings (a combination of all slimes, mica and floatation tails) are thickened and filtered for disposal to the tailings stockpile.

TAILINGS STORAGE FACILITIES

During the operation of the Moblan mine, a combined waste rock and filtered tailings co-disposal pile will be implemented. The dimensions have been designed according to the Project's LOM, with sufficient capacity to contain 75.4Mt (32.8Mm^3) of waste rock and 28.7Mt (16.7Mm^3) of filtered tailings.

The proposed footprint covers approximately 200 ha, including ponds and ditches around the stockpile. The design is in accordance with the Government of Québec's Directive 019 (MDDEP, 2012), other industry guidelines (Canadian Dam Association, Global Industry Standard on Tailings Management), and best industry practice.

Static and leaching tests have characterised the mill tailings as non-acid generating and non-leachable. The waste rock acid generation potential is uncertain, and a series of kinetic (humidity cells and column tests) tests are in progress.

Overburden and topsoil, which will be excavated during site development, will be stored and reused during progressive rehabilitation. The tailings will be encapsulated by waste rock for stability purposes and then covered by a geomembrane followed by overburden and topsoil. This will reduce the amount of contact run-off water to be managed during the operations.

The need for the geomembrane cover will be reconsidered based on the kinetics tests results. The tailings and waste rock storage design and water treatment processing are displayed in Figure 13.

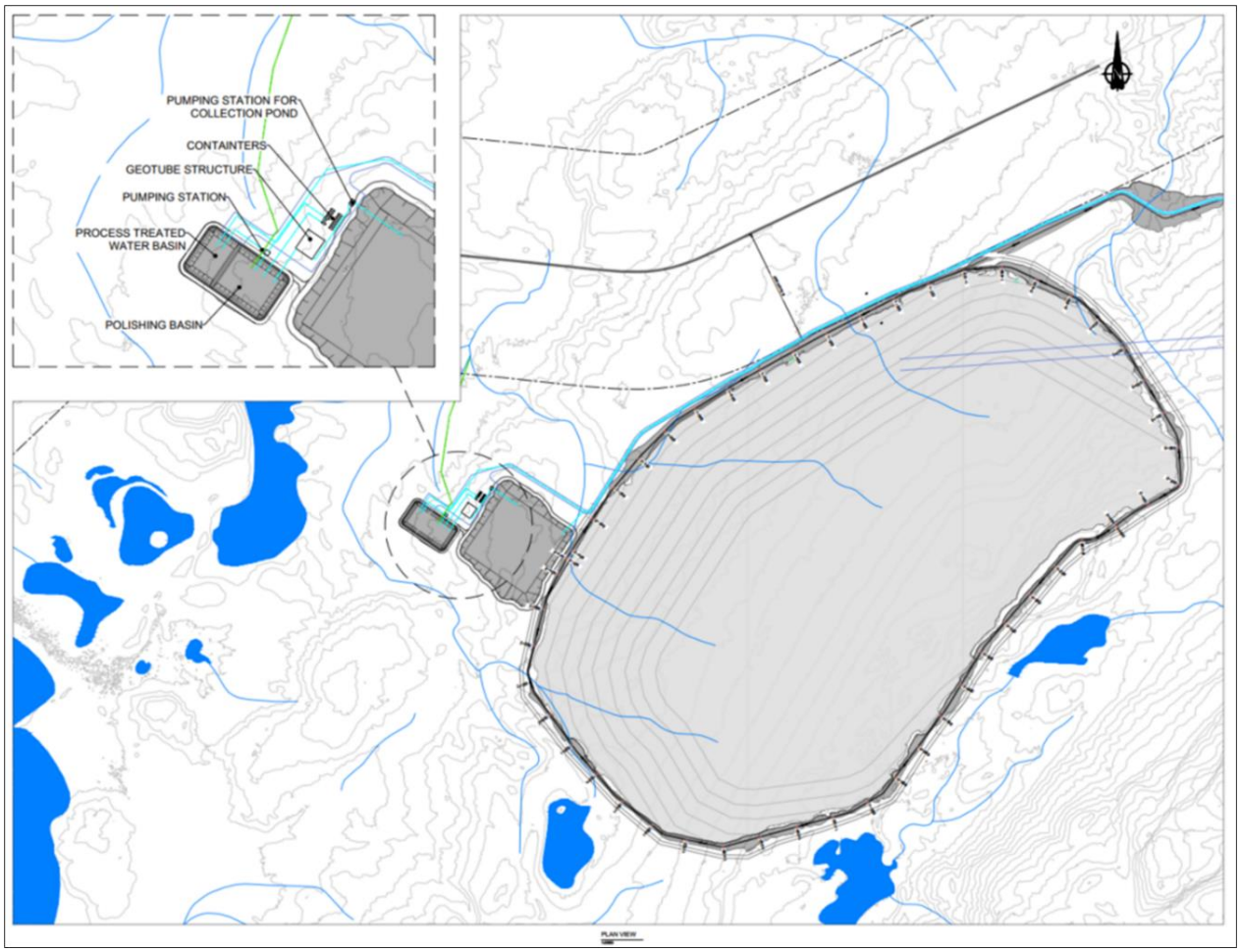


Figure 13 – Plan view – Tailings storage facilities – Co-disposal pile (tailings and waste rock)

INFRASTRUCTURE

The project is still at a greenfield stage and therefore has no operating infrastructure built to date other than access roads. Table 8 provides a list of buildings that need to be built on-site.

Table 8 – List of Moblan infrastructure components

Mining	
	Mine explosive storage
	Assay laboratory
	Mine fuel depot and fuel distribution
	Electrical substation
Concentrator	
	Crush ore storage
	Dense media separation (DMS)
	Grinding
	Magnetic separation

	Mica floatation
	Spodumene floatation
	Concentrate dewatering
	Concentrate storage
	Tailings dewatering
	Reagents storage
	Mechanical shop, operation room, mill lab and supervisor offices
	Crushing
	Ore sorting
Multi-service building	
	Offices, engineering, administration etc.
	Infirmary
	Mine Dry
	Mine offices and dispatch
Mine maintenance shop	
	Mechanical and welding shop
	Warehouse
	Supervisor offices
	Wash bay
	Supervisory and administration offices
	Fire department- Fire truck and ambulance
Auxiliary buildings	
	Warehouse domes
	Gatehouses and truck scale
	Fresh and fire water pump house
Emergency electrical power and emergency generators	
Accommodation complex	
	Permanent camp with dormitory, kitchen and gymnasium
	Temporary camp for construction

Figure 14 presents the general layout for the Moblan project site.

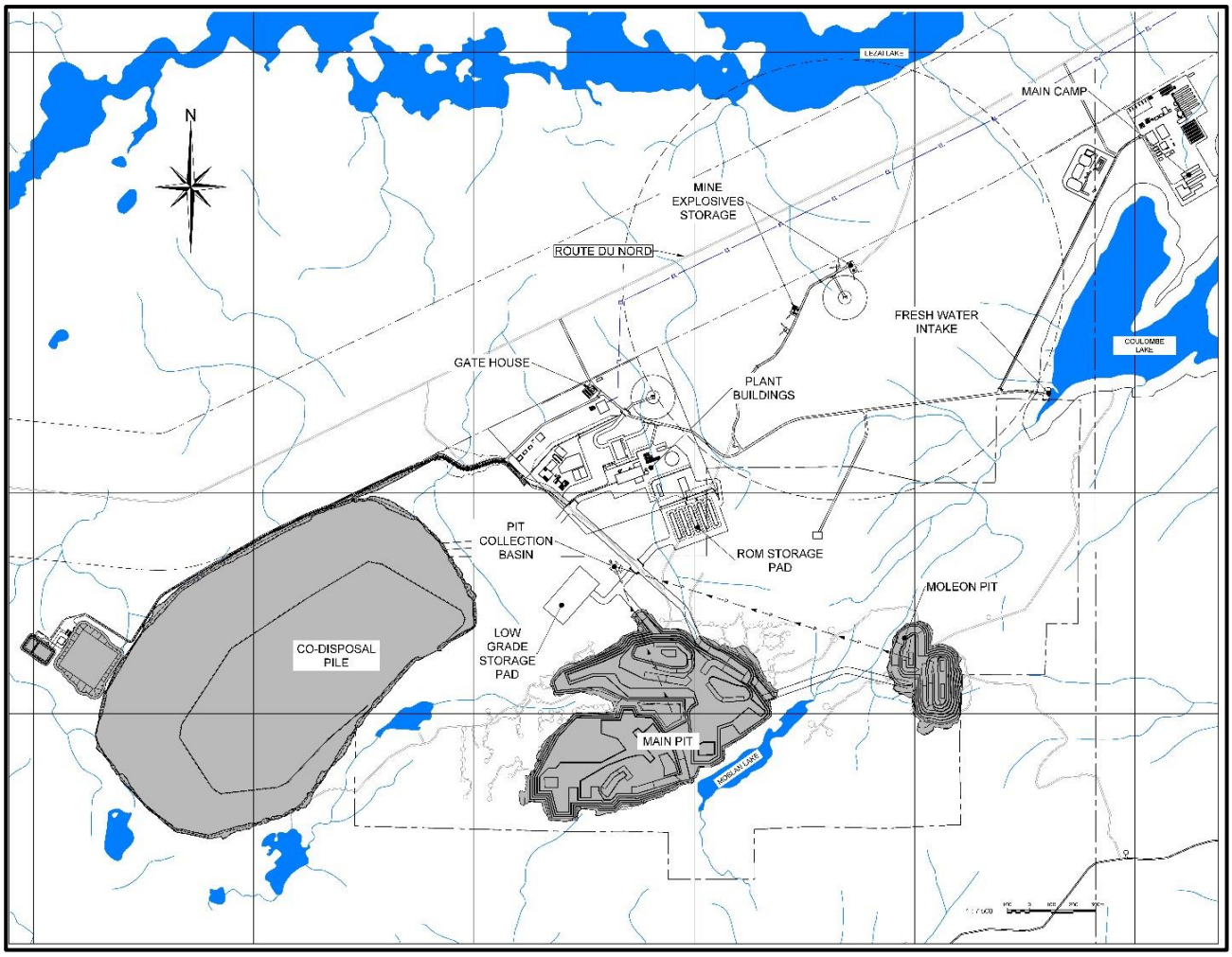


Figure 14 – Plan view – Infrastructure site

POWER SUPPLY AND DISTRIBUTION

The Project will be powered via hydroelectric power. The preferred power option is to build a new power transmission line over a length of 42 km which will be connected into the existing Hydro-Québec 161kV power line number 1625. The tap connection will be located between structures 563 and 564.

An on-site 161kV / 25kV substation will then supply the 26.1MW power demand of the Project required for mining and processing operations. A third party will construct and maintain the supply line.

Emergency power will be provided by two 600V 1MW and one 600V 500kW diesel-powered generators.

WATER MANAGEMENT

Site contact water will be conveyed and stored in the main collection basin located north of the tailings storage facility. Contact water will be pumped to the water treatment plant (WTP) before being released in the polishing basin. From the polishing basin, water will be pumped to the ore processing plant or released to the environment.

The WTP is designed to manage run-off from the site for a design storm flood event consisting of a 30 days, 1:100 year snowmelt coupled with a 24 hours, 1:2000 year rainfall event. The Project will process contact water from the processing operations, and run-off to ensure compliance with the applicable discharge limits under Directive 019 (MDDEP, 2012) and the Federal Metal and Diamond Mining Effluent Regulations (SOR/2002-222).

Water from Lake Coulombe will be pumped for the fire protection systems and distribution at the ore processing and the permanent camp. Lake Coulombe will also supply the initial raw water demand at the start of the concentrator's operations.

Potable water will be generated from supplied fresh water, which is being sourced from three artesian wells located near the concentrator site, the accommodation camp and the explosives storage area. A supplementary source from the freshwater distribution system will be available. The local artesian wells supply an estimated maximum of 90 m^3/day based on 300L/person/day. Two water treatment plants will be installed to ensure that water quality complies with regulations.

ENVIRONMENT AND SOCIAL

The Environmental and Social Impact Assessment ('ESIA') is underway. The following are key findings of the environmental studies to date:

- The Project is expected to impact 580 ha of forest land and 76.6 ha of wetlands and water bodies, from which 4.5 ha are fish habitats. Impacted forest land will be restored upon closure, except for the pit and mine waste storage facility, which will undergo ad-hoc closure measures. The impacts on wetlands and water bodies will require authorisation from the federal government and a compensation program.
- The Project may impact the displacement of Boreal Woodland Cariboo (*Rangifer tarandus caribou*), which are present north and south of the Project area. Cariboo's displacement routes are already impacted by the presence of the Route du Nord (gravel highway). The actual impacts and corresponding mitigation measures are under evaluation and will be defined in the ESIA.
- Preliminary estimates of greenhouse gas (GHG) emissions during operations amount to 25,000 t-CO_2-eq/y direct (scope 1) emissions from on-site fuel consumption, ore transport by road to Chibougamau and by railway to the Port of Québec, and personnel transportation by road and aircraft. No significant scope 2 (indirect emissions from electricity consumption) have been identified due to the use of hydropower generated electricity for all site power consumption.
- Due to its location, the Project falls within the scope of the *James Bay and Northern Québec Agreement and Complementary Agreements* (JBNQA), signed by the Canadian and Québec governments with the Cree and Inuit peoples. According to this agreement, the Cree Nation Government is directly involved in the approval process for the ESIA. The project falls into Category III lands, which are public lands in the domain of the State. The closest Cree communities around the Project are Mistissini and Oujé-Bougoumou, with other more distant communities such as Waswanipi and Nemaska. A consultation process is already in place, and the general perception of the Project from the side of Cree communities and other non-Cree stakeholders is positive, with no indications of actual or potential severe conflict envisaged.
- Sayona is committed to prioritising local recruitment and procurement.

The ESIA must be submitted to Québec authorities, and the Cree Nation Government is also involved in the approval process. The project is exempted from the federal environmental impact assessment procedure due to its size, although federal authorisations are required for the expected impacts on wetlands and watercourses.

Applications for the use of land for the processing plant and the mine waste storage facility have already been submitted and are under evaluation by the authorities. The filing of the closure plan is planned for 2024. Financial assurance will be required upon approval of the closure plan. Other permit applications will be submitted upon approval of the ESIA, including those for the mining lease, lease to mine surface mineral substances, construction on State lands, modification of public roads in forest, and storage of petroleum equipment and explosives.

The closure plan for the site includes an impermeable cover with geomembrane for the mine waste storage facility (based on the preliminarily presumed acid generating nature of the waste rock), flooding of the pits and demolition, decontamination, and reforestation of the rest of the impacted land.

PROJECT SCHEDULE AND IMPLEMENTATION

A detailed project and construction implementation schedule has been developed using estimated labour hours required during the construction phase. The schedule outlines a 39-month duration from DFS completion until introduction of first ore. Introduction of first ore into the main process plant is planned in April 2027. The schedule has zero float.

A total of 1.5 million labour hours plus indirect labour is expected to be spent on the Project during the construction phase. Figure 15 presents the histogram of the workforce required based on the construction schedule.

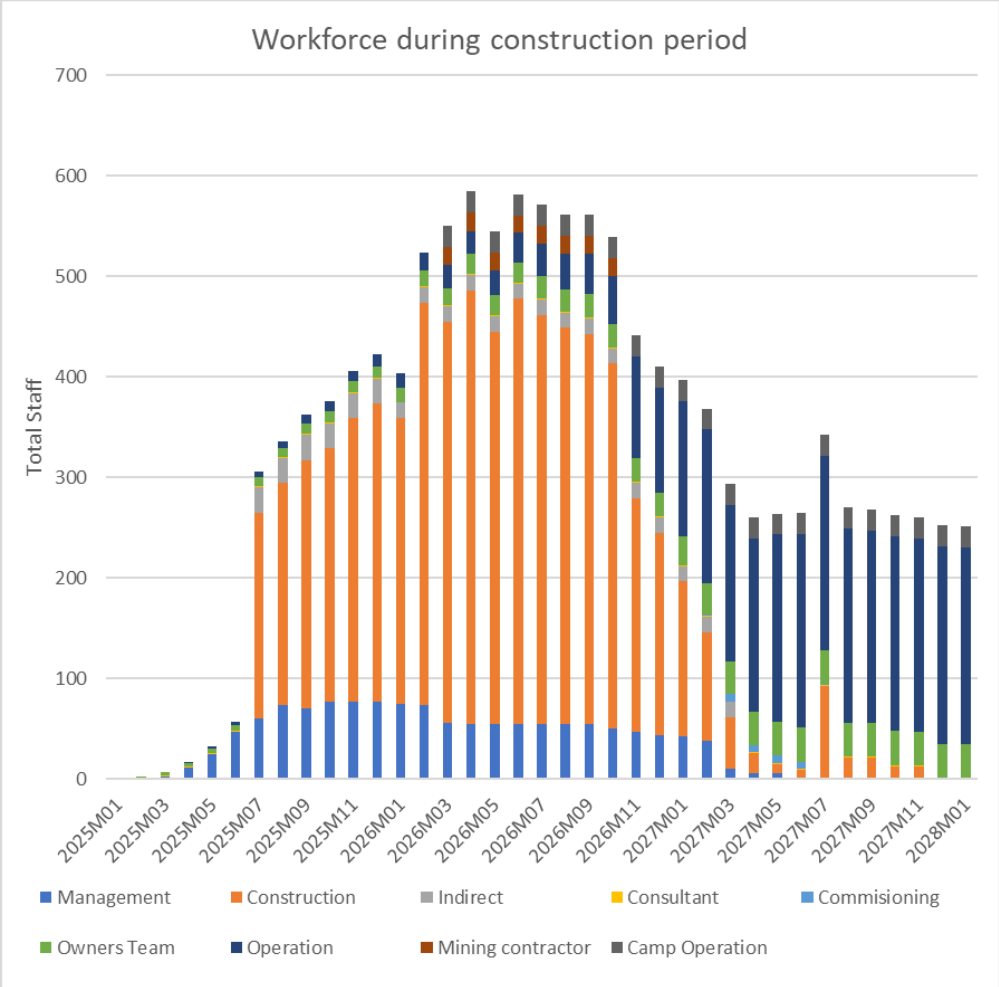


Figure 15 – Construction workforce loading

CAPITAL (CAPEX) AND SUSTAINING (SUSEX) EXPENDITURES

Table 9 presents a summary of the total life-of-mine capital and sustainable costs (CAPEX/SUSEX), including contingencies, in millions of Canadian dollars ($M). The total CAPEX is $962.5M and the total SUSEX is $96.1M for a total LOM CAPEX/SUSEX of $1,058.6M.

Table 9 – Summary of total LOM CAPEX/SUSEX by area

Area	CAPEX	SUSEX	Contingencies	CAPEX/ SUSEX	Expense ratio
Currency: CAD	$M	$M	$M	$M	%
General site-wide	69.5	1.3	8.2	**79.0**	7.8%
Mine site	15.7	19.5	4.6	**39.8**	3.9%
Concentrator	287.5	27.8	46.6	**361.9**	35.7%
Multi-service building	13.6	-	2.3	**15.9**	1.6%
Mine - Maintenance shop	24.0	1.0	4.0	**29.0**	2.9%
Accommodation complex	41.6	2.1	1.9	**45.6**	4.5%
Auxiliary building	20.7	-	3.3	**23.9**	2.4%
Genset	1.5	-	0.2	**1.7**	0.2%
Tailings and water management	37.7	26.8	12.1	**76.6**	7.5%
Owner's cost	118.0	-	0.6	**118.5**	11.7%
Indirect costs	192.9	4.5	25.7	**223.1**	22.0%
TOTAL CAPEX/SUSEX:	**822.6**	**82.9**	**109.4**	**1,015.0**	**100%**
Design contingency	96.3	13.1	109.4	**Included**	11.7%
Global contingency	43.5	-	43.5	**43.5**	5.3%
Total:	**962.5**	**96.1**	**153.0**	**1,058.6**	

Note: *Indirect cost during SUSEX is the result of a carry over from CAPEX.

Combined owner's costs and indirect costs represent 33.7% of total CAPEX.

Table 10 summarises the owner's cost by expense type (capitalised operating costs) excluding contingency. The total cost is estimated at $118.0M, of which 73.9% ($87.1M) is related to supervision, manpower, and contractors. Also, it should be noted that 85% ($100.73M) of owner's costs are planned for 2026 and 2027 when most of Moblan's employees are functioning.

Table 10 – Summary of owner's cost by expense type (capitalised operating costs)

Type of expense	Owner's cost	Expense ratio	2024	2025	2026	2027
Currency: CAD	$M	%	$M	$M	$M	$M
Supervision and Manpower	**51.15**	43.4%	5.15	7.38	23.72	14.90
Mobile equipment	**9.30**	7.9%	-	0.00	6.79	2.50
Consumables	**19.13**	16.2%	0.87	1.41	10.82	6.02
Fixed equipment	**0.13**	0.1%	-	0.01	0.01	0.11
Contractors	**35.98**	30.5%	0.35	2.06	31.50	2.06
Others	**2.28**	1.9%	-	-	2.28	-
TOTAL:	**117.97**	**100%**	**6.37**	**10.87**	**75.13**	**25.60**

*Note:
- Values exclude contingencies.
- Three months of preproduction in 2027, from January to the end of March. Start of production April 2027.

Table 11 summarises the total indirect cost during construction by expense type, including contingencies, for a total of $223.1M.

Table 11 – Summary of indirect cost by expense type

Type of expense	CAPEX	SUSEX	Contingency	Total indirects	Expense ratio
Currency: CAD	$M	$M	$M	$M	%
Mine Third Party Consultants	43.96	0.02	3.38	**47.35**	21.2%
Concentrator Freight, Handling & Duties	12.97	0.81	2.07	**15.85**	7.1%
Transportation	32.56	0.18	3.67	**36.41**	16.3%
Accommodation	9.66	0.21	1.58	**11.45**	5.1%
Temporary Facilities, Utilities and Roads	23.10	0.64	3.71	**27.45**	12.3%
Site Services & Maintenance	20.69	-	3.41	**24.10**	10.8%
Construction Site Vehicles	12.43	0.06	1.89	**14.38**	6.4%
Environment Management during Construction	30.48	0.30	4.62	**35.40**	15.9%
HSE & Training	0.91	-	0.14	**1.04**	0.5%
Construction Camp	6.19	2.27	1.26	**9.72**	4.4%
Total - Indirect cost by type of expense:	**192.95**	**4.48**	**25.71**	**223.14**	**100%**

Figure 16 presents the repartition of CAPEX and SUSEX costs by area over the LOM. Only the categories of mining, concentrator, tailings, and water management will require other major sustaining expenditures during operation.

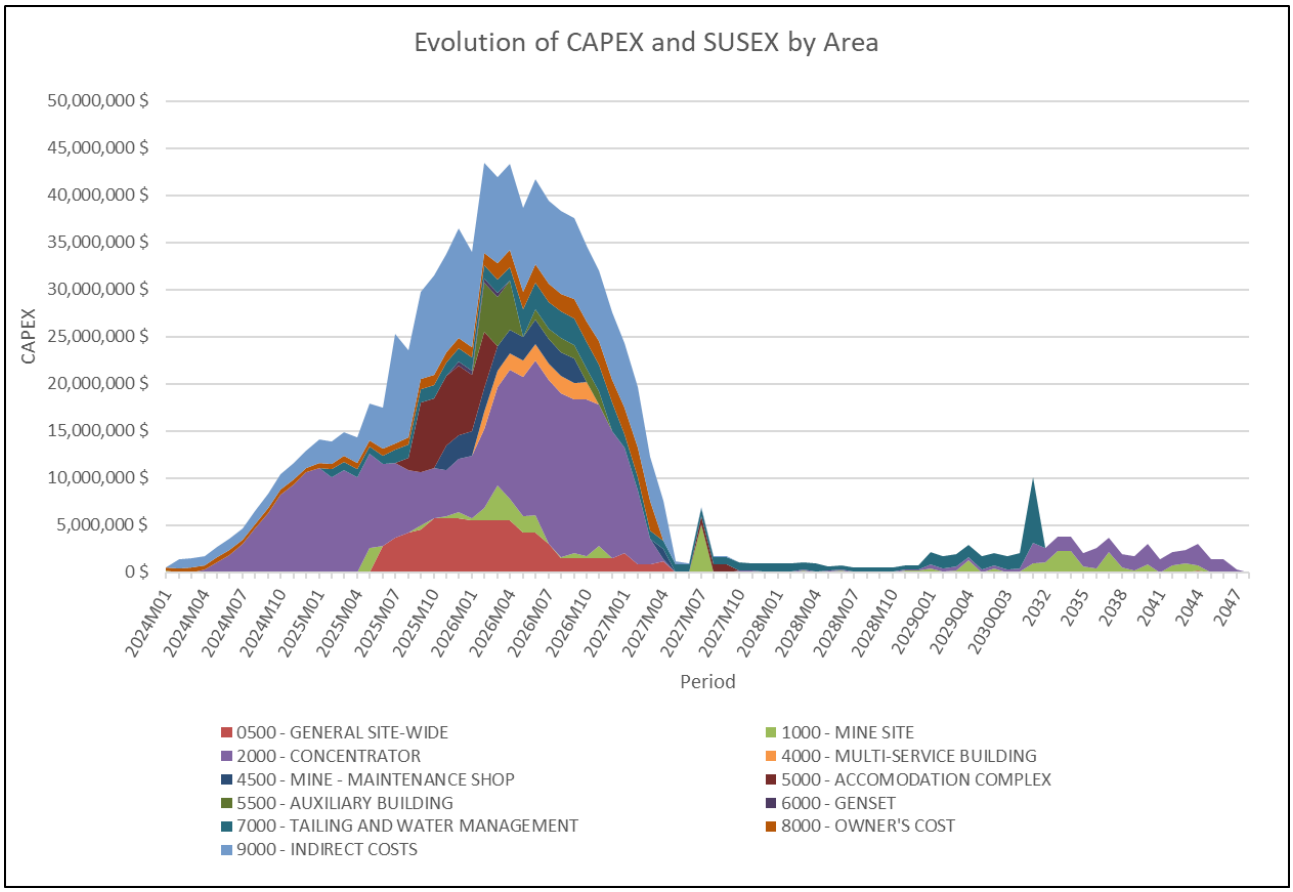


Figure 16 – CAPEX over the construction period and SUSEX over LOM

PROJECT GLOBAL CONTINGENCY

The total contingency for the entire project amounts to $153.0M. Different types of contingencies were applied to the Project's cost evaluation.

A design contingency was applied to each CAPEX line-item detail according to the level of engineering progress. The overall design contingency for the Project is 11.7% of total CAPEX ($96.3M) and 15.8% of total SUSEX ($13.1M), for a total amount of $109.4M.

A global contingency of 5.3% of the total CAPEX was applied to mitigate the risk during the construction phase, for a total of $43.5M. A quantitative risk analysis was performed, which is detailed in the risk analysis report. Using a semi-qualitative risk evaluation matrix, each risk was assigned a scale for cost and/or schedule impact during the risk development interviews.

A multidisciplinary committee reviewed and refined these proposed risk assessments by estimating the level of probable impact (minimum, most likely or maximum). Monte Carlo simulations were performed iteratively to refine risk mitigations of key drivers until the DFS residual risk profile was as low as reasonably practicable.

Consequently, a total contingency of 17.0% was applied to the Project's CAPEX ($139.8M) and a total contingency of 15.8% was applied to the SUSEX ($13.1M). These contingencies align with AACE International's recommendations because the cost estimation is based on:

- A class 3 estimate, including ±15% to 20% accuracy in engineering
- A bottom-up estimation methodology

- A feasibility-level estimate

The next engineering process will focus on the front-end engineering design ('FEED').

Table 12 – Contingency applied to CAPEX and SUSEX

Contingency type	CAPEX	SUSEX	TOTAL	Contingency CAPEX	Contingency SUSEX
Currency: CAD	$M	$M	$M	%	%
CAPEX/SUSEX excl. contingency	822.6	82.9	**905.6**		
Contingencies - Design	96.3	13.1	**109.4**	11.7%	15.8%
Contingencies - Global	43.5	-	**43.5**	5.3%	0.0%
Contingencies - Total	**139.8**	**13.1**	**153.0**	**17.0%**	**15.8%**
CAPEX/SUSEX incl. contingency :	**962.5**	**96.1**	**1,058.6**		

Note: The values have been rounded. Any discrepancy in the totals is due to rounding effects.

OPERATING COSTS

Mine operating expenditures ('OPEX') were estimated based on:

- Suppliers' quotes and/or recent internal database
- Mine production plan and quantities
- Manpower evaluation over the LOM
- Equipment evaluation over the LOM, including leasing, acquisition, rebuilds, operation and maintenance
- Estimated quantities of energy consumption (fuel and electricity)
- Estimated quantities of other consumables

Table 13 summarises the estimated OPEX for the LOM and unit costs. Unit costs were calculated for the tonnes extracted and processed during the production period only. Overall operating unit costs are $29.49/t mined, $94.04/t milled, and $555.39/t of concentrate. It should be noted that 50.8% ($1,651M) of the OPEX is related to the mine site and concentrator. Unit costs include energy consumption and exclude the cost of transporting the concentrate off-site.

Table 13 – Summary of estimated operating expenditures for the LOM

OPEX area	OPEX	Budget ratio	Unit cost		
Currency: CAD	$M	%	$/t mined	$/t milled	$/t conc.
General and administration	**385.1**	11.9%	3.50	11.15	65.84
General site-wide	**327.0**	10.1%	2.97	9.47	55.92
Mine site	**867.3**	26.7%	7.88	25.11	148.31
Concentrator	**784.0**	24.1%	7.12	22.70	134.06
Environment	**35.4**	1.1%	0.32	1.03	6.06
Multi-service building	**195.5**	6.0%	1.78	5.66	33.43
Mine - Maintenance shop	**251.6**	7.7%	2.28	7.29	43.02
Accommodation complex	**175.7**	5.4%	1.59	5.09	30.04

OPEX area	OPEX	Budget ratio	Unit cost		
Currency: CAD	$M	%	$/t mined	$/t milled	$/t conc.
Auxiliary building	4.9	0.2%	0.04	0.14	0.84
Genset	3.2	0.1%	0.03	0.09	0.55
Tailings and water management	218.2	6.7%	1.98	6.32	37.31
TOTAL	3,248.0	100%	29.49	94.04	555.39

Note: Unit operating costs are calculated for the production phase only.
- Total tonnes mined: 110,137,269 tonnes
- Total tonnes milled: 34,537,284 tonnes
- Total tonnes concentrate: 5,848,179 tonnes

Table 14 summarises the OPEX by expense type. Note that $2,656.7M (81.8%) of the $3,248.0M is related to supervision and labour (44.7%) and consumables (37.1%). The consumable category includes the energy cost (electricity and fuel). The mobile equipment category includes the leasing of all the major mobile equipment (acquisition and rebuilt), and the operating fees and maintenance of the overall equipment fleet at the exclusion of the maintenance labour.

Table 14 – Summary of OPEX by expense type over the LOM

Expense type	OPEX	Budget ratio	Unit cost		
Currency: CAD	$M	%	$/t mined	$/t milled	$/t conc.
Supervision and labour	1,451.7	44.7%	13.18	42.03	248.23
Mobile equipment	283.6	8.7%	2.57	8.21	48.49
Consumables	1,204.9	37.1%	10.94	34.89	206.04
Fixed equipment	143.3	4.4%	1.30	4.15	24.50
Contractors	164.5	5.1%	1.49	4.76	28.13
TOTAL	3,248.0	100%	29.49	94.04	555.39

Note: Unit operating costs are calculated for the production phase only.
- Total tonnes mined: 110,137,269 tonnes
- Total tonnes milled: 34,537,284 tonnes
- Total tonnes concentrate: 5,848,179 tonnes

ENERGY COST

Table 15 presents the projected long-term diesel price and long-term electricity costs used in the study.

Table 15 – Summary of project energy cost by type

Energy type	Value	Unit Currency: CAD
Diesel	1.54	$/l
Power Grid	0.055	$/kWh

The financial analysis considered that a third party owns the power line feeding the site. The cost related to the utilisation of this facility is added to the OPEX energy consumption and represents a fixed cost of $6.2M/y. It includes the estimated construction cost of the line, the maintenance cost over the LOM, and a margin for the third-party company that will operate the facility with a total cost over LOM of $123.3M.

Table 16 – Electrical cost over LOM by area

Area	OPEX	Budget ratio	Unit cost		
Currency: CAD	$M	%	$/t mined	$/t milled	$/t conc
Site wide cost	70.8	24.6%	0.64	2.05	12.11
Concentrator cost	93.4	32.5%	0.85	2.70	15.96
Line rental cost	123.3	42.9%	1.12	3.57	21.08
Total:	287.5	100%	2.61	8.32	49.16

Note: Unit operating costs are calculated for the production phase only.

- Total tonnes mined: 110,137,269 tonnes
- Total tonnes milled: 34,537,284 tonnes
- Total tonnes concentrate: 5,848,179 tonnes

PERSONNEL

Sayona's objective and vision is to promote local employment. Two work roster schedules will be used: 4 days on, 3 days off for all local personnel or working remotely and 14 days on, 14 days off for operations personnel. Sayona's workforce will peak at 528 workers of which a maximum of 258 will be on-site at any given time, as can be seen in Figure 17.

Salary structures have been fully developed and based on Sayona's existing Québec operation, providing a robust benchmark. Allocations have been established for the permanent 300-person camp accordingly, which will provide sufficient accommodations and will permit optimised occupancy during peak shutdown maintenance periods requiring supplemental contractors.

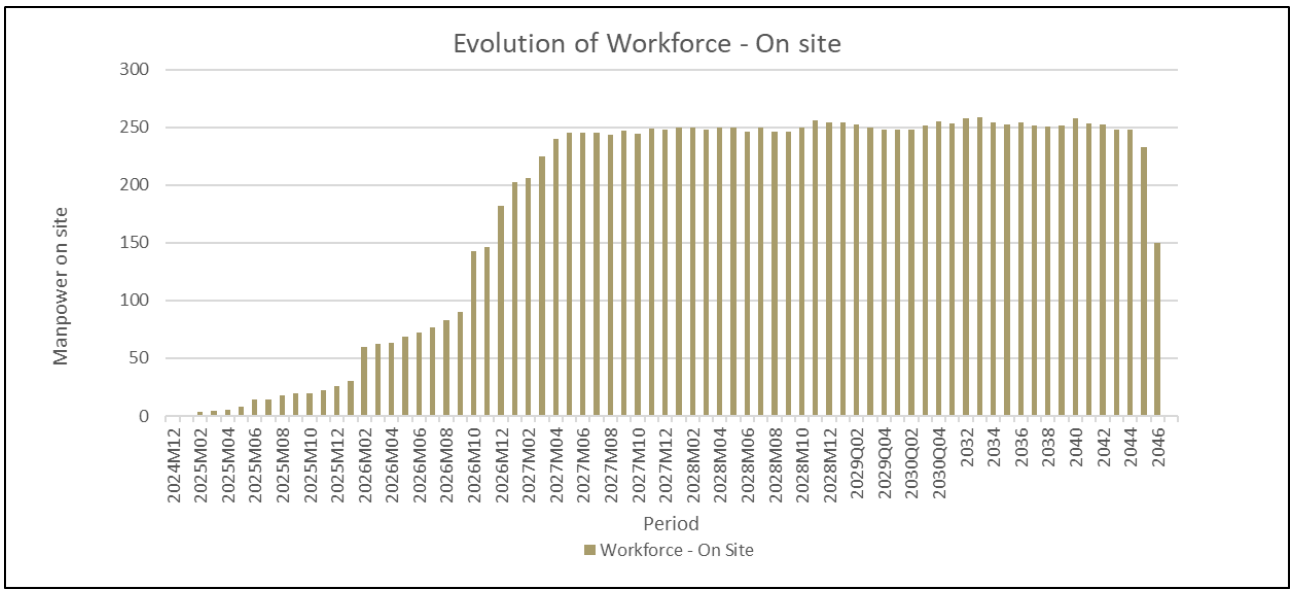


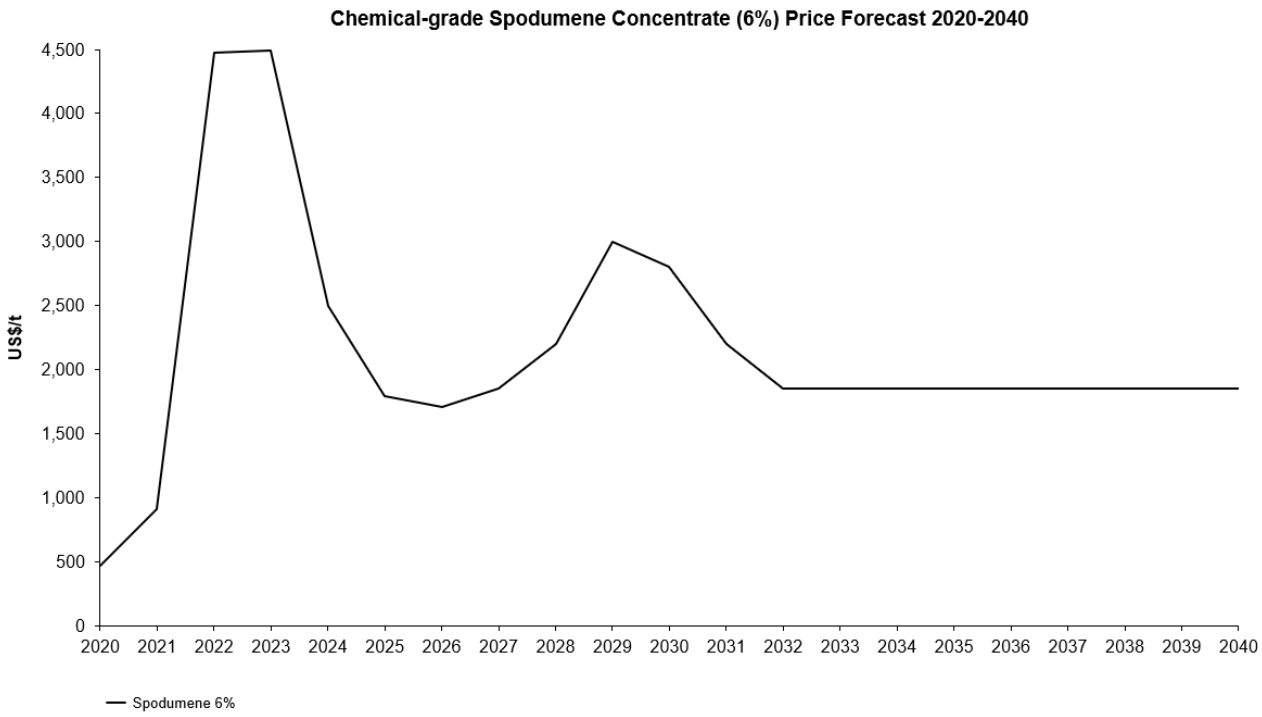
Figure 17 – Maximum on-site Sayona workforce over LOM

MARKET AND LITHIUM PRICE

Sayona has relied on the Q3 2023 price forecast from consultancy Benchmark Mineral Intelligence ('BMI') to assess the expected market balance for battery-grade lithium and pricing assumptions for the spodumene concentrate.

According to BMI, from 2023 to 2028, a slight surplus in the supply of battery-grade lithium chemicals is expected as new production is brought online more rapidly than demand. However, from 2029 to 2040, a growing deficit is projected, and it is expected to reach 1,516 kt of LCE in 2040 as demand for electric vehicles grows faster than supply.

According to BMI, the price of spodumene concentrate (6%) increased significantly from 2020 to 2023, reaching a peak of US$4,488/t. However, by 2026, the market price of spodumene is expected to decrease to US$1,710/t. A short-term price rise is forecasted in the following years, up to US$3,000/t in 2029, followed by another decrease and a gradual stabilisation at a long-term price of US$1,850/t from 2032 onwards.



Sources: Lithium-Price-Forecast-Q3-2023-Benchmark-Mineral-Intelligence, PwC Analysis

Figure 18 – Chemical-grade spodumene concentrate (6%) real price forecast 2020-2040

The average 6% Li_2O concentrate price is US$1,990/t over the LOM and the prices range from US$1,850/t to US$3,000/t over LOM. Table 17 presents the price used for the DFS to calculate revenue, using a 0.75 CAD/USD exchange rate. Recent negative spodumene price movements have been noted, however the commencement of production timeline for Moblan aligns with medium-term product pricing.

Table 17 – Li_2O concentrate price escalation scenario over LOM

Year	Li_2O Conc. Price USD/t	Li_2O Conc. Price CAD/t
Default	1,850	2,467
2027	1,850	2,467
2028	2,200	2,933
2029	3,000	4,000
2030	2,800	3,733
2031	2,200	2,933
2032 to 2046	1,850	2,467
Average	**1,990**	**2,653**

The Moblan Lithium Project does not host another economical mineral or co-product.

FINANCIAL ANALYSIS

The main highlights of the Project's financial analysis are presented in Table 18.

Table 18 – Main financial assumptions and results summary for the Moblan Project

Parameters	Value	Units
Production		
Pre-production period	39	months
Production period	20.0	years
Life of mine	21.1	years
Probable ore reserves [3]	34.5Mt @ 1.36%	Li_2O
Total waste	75.4	Mt
Total overburden	4.1	Mt
Total project tonnage	114.1	Mt
Average LOM strip ratio	2.3	t:t
Daily production	4,800	tpd milled
Monthly production	146,000	tpm milled
Annual production	1,752,000	tpa milled
Average feed head grade	1.36%	Li_2O
Product grade concentrate Li_2O	6.0%	Li_2O
Average LOM recovery [4]	74.7%	%
LOM 6% Li_2O produced [5]	5,848,179	t at 6% Li_2O
Average annual production	300,000	tpa 6% Li_2O
Concentrate moisture [6]	7.0%	%
Royalties [7]	1.5% to 2.0%	%

Project Economics	Value	CAD	Value	USD
Exchange rate [8]	0.750	CAD/USD	1.333	USD/CAD
AISC [9, 15]	748.04	$/t concentrate	561.03	US$/t concentrate
Operating unit cost [9]	94.04	$/t milled	70.53	US$/t milled
Operating unit cost [9]	555.39	$/t concentrate	416.55	US$/t concentrate
Mining costs [9]	7.88	$/t mined	5.91	US$/t mined
Process costs [9]	22.70	$/t milled	17.03	US$/t milled
G&A costs [9]	65.84	$/t concentrate	49.38	US$/t concentrate
Transport costs [10]	147.87	$/t concentrate	110.90	US$/t concentrate
Total OPEX cost estimate	3,248	$M	2,436	US$M
Total CAPEX cost estimate	962	$M	722	US$M
Total SUSEX cost estimate	96	$M	72	US$M
Other cost – Env. & mine closure cost	68	$M	51	US$M
Total project cost	4,375	$M	3,281	US$M
Average market price LOM 6% Li_2O [11]	2,653	$/t concentrate	1,990	US$/t concentrate
Total net revenue	14,423	$M	10,817	US$M
Undiscounted pre-tax cash flow	10,048	$M	7,536	US$M
Estimated mining and income taxes	4,093	$M	3,070	US$M
Net cash flow	5,955	$M	4,466	US$M
Discount rate [12]	8%	%	8%	%
Pre-tax NPV	3,918	$M	2,939	US$M
Pre-tax IRR	47.4%	%	47.4%	%
Post-tax NPV	2,187	$M	1,640	US$M
Post-tax IRR	34.4%	%	34.4%	%
Post-tax payback period	2.3	Years	2.3	Years

Notes:

1. All costs and sales are presented in constant 2023 CAD, with no inflation or escalation factors considered. $M = millions of dollars.
2. All related payments and disbursements incurred before the first quarter of calendar 2024 are considered sunk costs.
3. The financial analysis was performed on Probable Ore Reserves as outlined in this report. There are no Proven Ore Reserves.
4. The average metallurgical recovery over the LOM is 74.7%. However, the recovery rate depends on the mine production plan, spodumene grade and iron grade fed to the concentrator by period.
5. Tonnes of concentrate are presented as dry metric tonnes.
6. The transportation cost is applied to a 6% Li_2O concentrate (including 7% moisture) from the Project to the port in Québec City.
7. Royalties ranging from 1.5% to 2.0% are payable to Lithium Royalty Corp. Calculated by PWC depending on production quantities.
8. An exchange rate of 0.75 CAD/USD was fixed over the LOM for the Project.
9. Unit operating costs are calculated for the production period only. Excluding tonnes during preproduction. Total tonnes mined: 110.14 Mt; Total tonnes milled: 34.54 Mt; Total tonnes concentrate: 5.85 Mt.
10. From a transport study conducted during the DFS for wet concentrate.
11. The average 6% Li_2O concentrate price is US$1,990/t over the LOM. This price is based on a market analysis from Benchmark Mineral Intelligence for Q3 2023 and varies over the LOM from US$1,850/t to US$3,000/t.
12. A discount rate of 8% was used for the base case scenario.
13. Production targets are based on the Ore Reserves Estimate which considers the open pit-constrained portion of the Measured and Indicated Mineral Resources. Inferred Mineral Resources are considered waste. In addition to 34.5 Mt of mineralised material, 75.4 Mt of waste and 4.1 Mt of overburden must be mined, resulting in an overall LOM stripping ratio of 2.3.

14. The Moblan Ore Reserves estimate is supported by the DFS studies on modifying factors, resulting in positive pre-tax and post-tax financial data.
15. AISC doesn't include concentrate transportation cost which are part of the total net revenue calculations.
16. The numbers have been rounded. Any discrepancy in the totals is due to rounding effects.

There are other costs that have been considered in the Project's financial analysis, including the following.

TRANSPORT COST

An analysis has been undertaken during the DFS to define the transportation options for the transportation charges of 300,000 tpa of 6% Li_2O concentrate from Moblan to the Port of Québec. The transportation option retained from Moblan to the port is:

- By truck to Chibougamau, and
- By train to Québec City.

The transportation cost of $147.87/t is applied to a Li_2O 6% wet concentrate, including 7% moisture. The 7% moisture content is calculated in the transport overall cost. Total concentrate transportation cost is $925.3M over LOM.

CLOSURE COST

Under Québec regulations, all mining projects must provide a financial guarantee for 50% of the closure and site rehabilitation cost as soon as authorisation is given by the government, and then 25% on each subsequent anniversary date (year 1: 25% and year 2: 25%). The closure cost for the Moblan project is estimated at $46.9M.

The salvage value of the Project is nil.

OTHER ENVIRONMENTAL COSTS

Other environmental costs related to the Project include:

- Compensation for loss of wetlands and water bodies
- Compensation for loss of fish habitats
- Compensation for loss of forest land
- Compensation for impacts on caribou

The calculated total for these other environmental costs is $21.2M over the LOM.

The compensation for GHG emissions was considered under the taxation calculations (carbon tax) for a total of $30.1M over LOM.

COMPENSATION FOR CREE LAND USE

Sayona is currently discussing with the Cree community regarding compensation for the use of Cree lands. As the discussions have not yet concluded, this cost was not considered in the Project's financial analysis.

COSTS NOT INCLUDED

Some of the other costs that might eventually by added to the Project, but were not considered in the financial analysis are:

- Exploration costs
- Corporate costs

SENSITIVITY ANALYSIS

A sensitivity analysis was conducted on the factors presented in Table 19.

Table 19 – Sensitivity analysis factors

Factors				*Base Case*			
Recovery rate	-15%	-10%	-5%	0%	5%	10%	15%
Concentrate 6% Li_2O price	-15% -30%	-10% -20%	-5% -10%	0%	5% 10%	10% 20%	15% 30%
CAPEX/SUSEX costs	-15%	-10%	-5%	0%	5%	10%	15%
OPEX costs	-15%	-10%	-5%	0%	5%	10%	15%
Exchange rate	-15%	-10%	-5%	0%	5%	10%	15%

Post-Tax $NPV_{8\%}$ sensitivities range from -15% to +15% for all factors. The impact of the NPV (in CAD $M) outputs was tested at discount rates of 0%, 5%, 8%, 10% and 12%. The results of the sensitivity analysis are summarised in Table 20 and Figure 19.

Table 20 – Sensitivity analysis results for Post-Tax $NPV_{8\%}$

Variation	-15%	-10%	-5%	0%	5%	10%	15%
Recovery [1]	1,709	1,876	2,030	2,187	2,339	2,489	2,643
Li_2O Grade [1]	1,709	1,876	2,030	2,187	2,339	2,489	2,643
Spodumene Price	1,686	1,861	2,027	2,187	2,347	2,506	2,665
Exchange Rate	2,750	2,542	2,355	2,187	2,035	1,892	1,756
OPEX	2,268	2,241	2,214	2,187	2,160	2,133	2,105
CAPEX	2,225	2,213	2,200	2,187	2,174	2,162	2,149
SUSEX	2,189	2,189	2,188	2,187	2,186	2,185	2,185
Variation	**-30%**	**-20%**	**-10%**	**0%**	**10%**	**20%**	**30%**
Spodumene Price ± 30%	1,131	1,503	1,861	2,187	2,506	2,825	3,142

Note:

1. There is no difference between variation on recovery or Li_2O grade. Both affects the Project identically.
2. All post-tax NPVs are presented in $M (CAD)

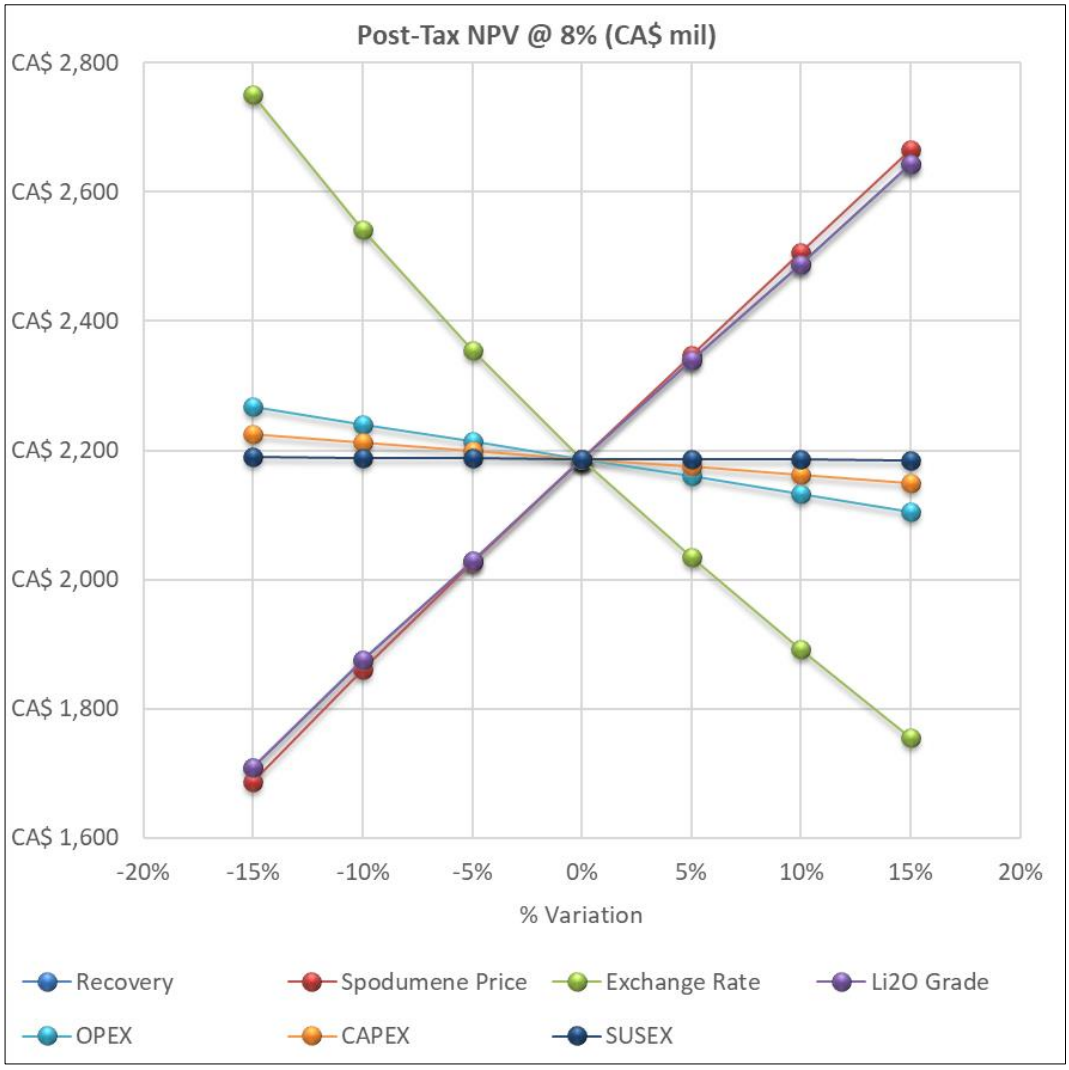


Figure 19 – Sensitivity analysis on NPV(8%)

The project is more sensitive to revenue assumptions than cost assumptions. The spodumene price has a major impact on the Project. Therefore, an additional analysis for spodumene price was completed with a variance of from -30% to +30%. Results are presented in Table 21.

Table 21 – Average annual spodumene price sensitivities, Post-Tax NPV CAD $M

%Variation	-30%	-20%	-15%	-10%	-5%	0%	5%	10%	15%	20%	30%
LOM Average Price ($/t 6% Li_2O)	$1,870	$2,137	$2,271	$2,405	$2,538	$2,653	$2,805	$2,939	$3,073	$3,206	$3,473
Discount rate 0%	3,457	4,337	4,771	5,188	5,580	5,955	6,327	6,700	7,072	7,444	8,186
Discount rate 5%	1,713	2,212	2,458	2,693	2,915	3,129	3,343	3,556	3,768	3,980	4,405
Discount rate 8%	1,131	1,503	1,686	1,861	2,027	2,187	2,347	2,506	2,665	2,825	3,142
Discount rate 10%	853	1,164	1,316	1,462	1,601	1,735	1,869	2,003	2,136	2,270	2,536
Discount rate 12%	635	898	1,027	1,150	1,268	1,382	1,495	1,609	1,722	1,835	2,061
IRR	23.7%	27.7%	29.6%	31.3%	32.8%	34.4%	35.9%	37.3%	38.7%	40.1%	42.8%

All post-tax NPVs are presented in $M (CAD)

As the recovery rate varies considerably from one project study to another, the sensitivity to recovery was also tested, with the resultant range from 64% to 86% recovery. The results are presented in Table 22.

Table 22 – Post-tax NPV sensitivity analysis results for recovery

%Variation	-15%	-10%	-5%	0%	5%	10%	15%
Average Recovery (%)	63.5%	67.2%	71.0%	74.7%	78.4%	82.2%	85.9%
Discount rate 0%	4,845	5,229	5,597	5,955	6,307	6,664	7,014
Discount rate 5%	2,492	2,714	2,922	3,129	3,332	3,533	3,738
Discount rate 8%	1,709	1,876	2,030	2,187	2,339	2,489	2,643
Discount rate 10%	1,334	1,474	1,602	1,735	1,863	1,987	2,118
Discount rate 12%	1,040	1,160	1,268	1,382	1,490	1,594	1,707
IRR	29.6%	31.3%	32.7%	34.4%	35.8%	37.0%	38.6%

All post-tax NPVs are presented in $M (CAD)

The key outcome is the sensitivity to the spodumene price. If the spodumene price decreases, other factors might have a greater impact on the economics of the Project.

RISKS AND OPPORTUNITIES

PROJECT RISK ASSESSMENT

A risk assessment was undertaken to identify potential risks that could impact the delivery and operability of the Project as well as structure mitigation measures to help reduce potential impacts.

A standard Risk Assessment process was followed, ranking the severity of consequence and likelihood of the occurrence for each area of the Project as much for its construction as the operation. The risk assessment was carried out in a workshop session with a broad spectrum of expertise from within Sayona as well as specialised consultants intimately involved with the Project.

Further, a quantitative risk analysis was performed on the CAPEX estimate. Each risk identified which impacts cost and or schedule. It was evaluated and assigned a minimal, likely, and maximum data points which was run through a Monte-Carlo simulation running through several iterations. Based on this quantitative risk, a 5.3% global contingency was applied above and beyond the traditional project CAPEX contingency.

The risk matrix developed is fulsome and as the Project evolves risk will change. Principal risks on the Project relate to obtaining permits, social licence in the Project footprint, climate, geotechnical information related to placing of infrastructure and pit design criteria, power line connection and geological certainty around the resource. As the mitigations identified will be applied in subsequent phases, the likelihood of such risks will diminish or be removed.

PROJECT OPPORTUNITIES

The same process was performed for Project opportunities. Similarly, actions to promote and evolve the opportunities are integrated in the recommendations of the Project, which will be implemented or explored in subsequent work.

There are several opportunities, including the potential for by-products (Ta, Rb, Cs), the potential for further resource conversion with infill drilling and extension of mineralised zones, cost reduction opportunities, design improvements and the potential for in-pit waste disposal.

LAND UTILISATION

The proposed Project site is located on public lands in the domain of the State (Government of Québec). Therefore, the final location of the Project infrastructure is conditional on obtaining appropriate surface rights from the province's Ministry of Natural Resources and Forests ('MRNF'), including a mining lease pursuant to the *Mining Act* (Québec), and surface (industrial) leases pursuant to the *Act respecting the lands in the domain of the State* (Québec).

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 emerging Tansim Lithium Project, supported by a strategic partnership with American lithium developer Piedmont Lithium Inc. (Nasdaq:PLL; ASX:PLL). 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 (ASX:1MC).

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.

REFERENCES TO PREVIOUS ASX RELEASES

- Quarterly Activities Report – 31 January 2024
- Annual Report to shareholders – 31 October 2023
- Moblan drilling shows expansion potential – 23 October 2023
- Drill results significantly expand Moblan lithium footprint – 11 July 2023

- Moblan boosted by significant increase in lithium resource – 17 April 2023
- Northern lithium hub expands in major acquisition – 17 November 2022
- Moblan PFS targets Québec lithium expansion – 5 October 2022
- New lithium discoveries strengthen Moblan potential – 27 June 2022
- New lithium pegmatite discovery at Moblan project – 26 April 2022
- Sayona expands northern Québec lithium hub – 121 new claims – 25 January 2022
- Resource expansion eyed as Moblan acquisition closes – 18 October 2021

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 PERSON STATEMENT

Below is the statement testifying that Simon Boudreau qualifies as a Competent Person ('CP') as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves ('JORC Code'), prepared by the Joint Ore Reserves Committee of the Australasian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and Minerals Council of Australia ('JORC').

The CP is a signatory of the DFS report with an effective date of 24 January 2024.

SIMON BOUDREAU, P.ENG.

The information in this report that relates to Ore Reserves for the Moblan project is based on information compiled by Mr Simon Boudreau P.Eng. who is a member of the Ordre des Ingénieurs du Québec. Mr Boudreau is a full time employee of InnovExplo Inc, and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which it is undertaking to qualify as a Competent Person as defined in the JORC Code (2012 Edition) of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves."

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

The Competent Person relies on other professionals for studies related to the Modifying Factors. The Competent Person and these professionals are signatory to the DFS report with an effective date of 24 January 2024.

MOBLAN DFS TEAM

The DFS has been prepared by consultants and organisations with significant experience and expertise in their respective fields of study in the province of Québec. All aspects of lithium resource definition, mining, processing, and infrastructure requirements were considered.

Table 23 – Moblan DFS Team

Study Area	Leads contributors
Moblan mineral resource estimation	InnovExplo: Alain Carrier
Moblan ore reserves estimation	InnovExplo: Simon Boudreau
Geology analysis	InnovExplo: Alain Carrier
Mining and key operating cost parameters Design, CAPEX, SUSEX and OPEX	InnovExplo: Simon Boudreau
Mobile equipment fleet Fleet selection, CAPEX, SUSEX and OPEX	All engineering firms by sector InnovExplo: Simon Boudreau and Sébastien Tanguay
Manpower Estimation, integration and salaries by InnovExplo CAPEX, SUSEX and OPEX	All engineering firms by sector InnovExplo: Simon Boudreau and Sébastien Tanguay
Geomechanical and lithostructural models Design pit slopes in rock	InnovExplo: Sébastien Tanguay
Geotechnical Design pit slopes in overburden	SLR Consulting: Fraser Lord
Metallurgy Design and analysis	Primero: Andrew Siemon and Lina Du
Process plant CAPEX, SUSEX and OPEX	Primero: Jacques Parent, Alexandre Roy and Peter Grigsby
Assay laboratories CAPEX and OPEX	G Mining
Tailings Design, CAPEX, SUSEX and OPEX	AtkinsRéalis: Nicolas Lemieux
Water management and treatment Design, CAPEX, SUSEX and OPEX	AtkinsRéalis: Anh-Long Nguyen
Environmental and social aspects study	AtkinsRéalis: Fernando Medina
Hydrogeology study	Richelieu: Yves Leblanc
Temporary and permanent surface infrastructures Design and CAPEX	AtkinsRéalis: Martin Lord
Earthworks, civil works, roads, and mine haul roads	AtkinsRéalis: Richard Marcoux
Power line Design and CAPEX	AtkinsRéalis: Angel Humberto Pinto Unda
Electrical installation, distribution, and consumption CAPEX, SUSEX and OPEX	Primero: Benjamin Shin AtkinsRéalis: Nicolas Dupont
Communication systems CAPEX and SUSEX	AtkinsRéalis: Mathieu Robitaille
Indirect construction cost CAPEX	All engineering firms by sector InnovExplo: Daniel Bégin, Marc Beauvais and Sébastien Tanguay.
Capitalised OPEX	InnovExplo: Geneviève Auger, Simon Boudreau and

Study Area	Leads contributors
	Sébastien Tanguay
Capitalised revenue	InnovExplo: Geneviève Auger, Simon Boudreau and Sébastien Tanguay
Mine and surface services Owner's cost and OPEX	AtkinsRéalis: Jérôme Fournier and Jessy Barbeau
General and administration Owner's cost and OPEX	InnovExplo: Marc Beauvais and Sébastien Tanguay
Closure cost	AtkinsRéalis: Fernando Medina
Concentrate transportation options Study and OPEX estimation	AtkinsRéalis: Michel Fournier G Mining: Jean-Louis Folio
Market analysis and pricing	InnovExplo: Geneviève Auger PWC: Philippe Pourreaux
Financial modelling and analysis	InnovExplo: Geneviève Auger and Sébastien Tanguay PWC: Philippe Pourreaux
Project construction schedule	InnovExplo: Daniel Bégin With contributions from AtkinsRéalis and Primero
Linguistic review and translation JORC, NI 43-101, ASX announcement, Canadian press release	Vee Geoservices Inc.: Venetia Bodycomb
Overall project management and study integrator	InnovExplo: Geneviève Auger
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REPORT FILING

Sayona has filed on 20 February 2024 a NI 43-101 technical report summarising the Moblan Lithium Project on SEDAR+ (www.sedarplus.com) and the Company's website (www.sayona.ca/en/).

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.

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 0.25 m and 1.6 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 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	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).

	disclosure of detailed information.	
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 EZ multi- and single-shot recording instruments for 444 drill holes; Flexit multi-shot for 99 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 2023 Moblan Mineral Resource Estimate ('2023 MRE') is supported by 366 surface drill holes for 53,088.47 m drilled between 2002 and 2022 and by surface channel samples (samples collected from 10 surface trenches) with database close-out date of 18 January, 2023 (ASX announcement 17 April, 2023). The Project is still subject to a drilling programme (with assays pending), and several results have been published since the 2023 MRE. In July 2023, 153 drill holes (30,928 m) and 12 geotechnical drill holes (2,636 m) for 33,564 m were released (ASX announcement 11 July, 2023). In October 2023, 41 additional drill holes (9,180 m) were released in a new ASX Announcement. The completed and released drill holes for the Project currently amount to 572 drill holes (95,577.47 m). 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. 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).
	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. 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)). 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. 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)). 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 2022–2023, all samples were analysed at ALS by ME-MS589L Sodium Peroxide Fusion and ICP-MS finish using a 0.2 g aliquot 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. Assaying was completed by ALS Laboratories. 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.
	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. 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. The assaying techniques and quality control protocols used are considered appropriate for the data to be reported in its current form and for the estimation of mineral resources.
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.	Sampling intervals defined by the geologist were assigned sample identification numbers prior to core cutting. The results have been reviewed by multiple geologists. The company conducts internal data verification protocols, which have been followed. Significant intersections were verified by company personnel and CPs. There are no currently known drilling, sampling, recovery, or other factors that could materially affect the accuracy or reliability of the data.
	The use of twinned holes.	No twinned holes have been drilled.

	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	All sampling and assay information were stored in a secure GeoticLog database with restricted access. Assay results from the laboratory with corresponding sample identification are loaded directly into the GeoticLog database.
	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. 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. 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. 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. 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, yielding Measured, Indicated and Inferred Mineral Resources within the Main dykes and Indicated and Inferred Mineral Resources within the South, Inter and Moleon dykes. Significant assay intercepts remain open. Further drilling is required to determine the extent of currently defined mineralisation. New drilling results obtained since the 2023 MRE database close-out date could potentially locally upgrade some resources and add new resources.
	Whether sample compositing has been applied.	One-metre (1m) compositing is applied to samples used for the mineral resource estimation. Samples from drill holes completed after the 2023 MRE were not composited. 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, Inter and Moleon. Each corresponds to a series of stacked dykes of variable thickness. The Main group comprises 21 dykes oriented E-W and dipping gently to the north (N280°/-20°). The South group comprises 20 dykes oriented E-W and nearly sub-horizontal or dipping gently to the south (N080°/-10°). The Inter group comprises 17 dykes oriented ENE and dipping moderately to the north (N260°/-20°). The Moleon group comprises 17 dykes oriented N-S and dipping steeply to the west (N180°/-70°). 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. 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.
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. 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. Independent (Technominex) and internal (Sayona) CPs also conducted site visits and reviewed the 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 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.

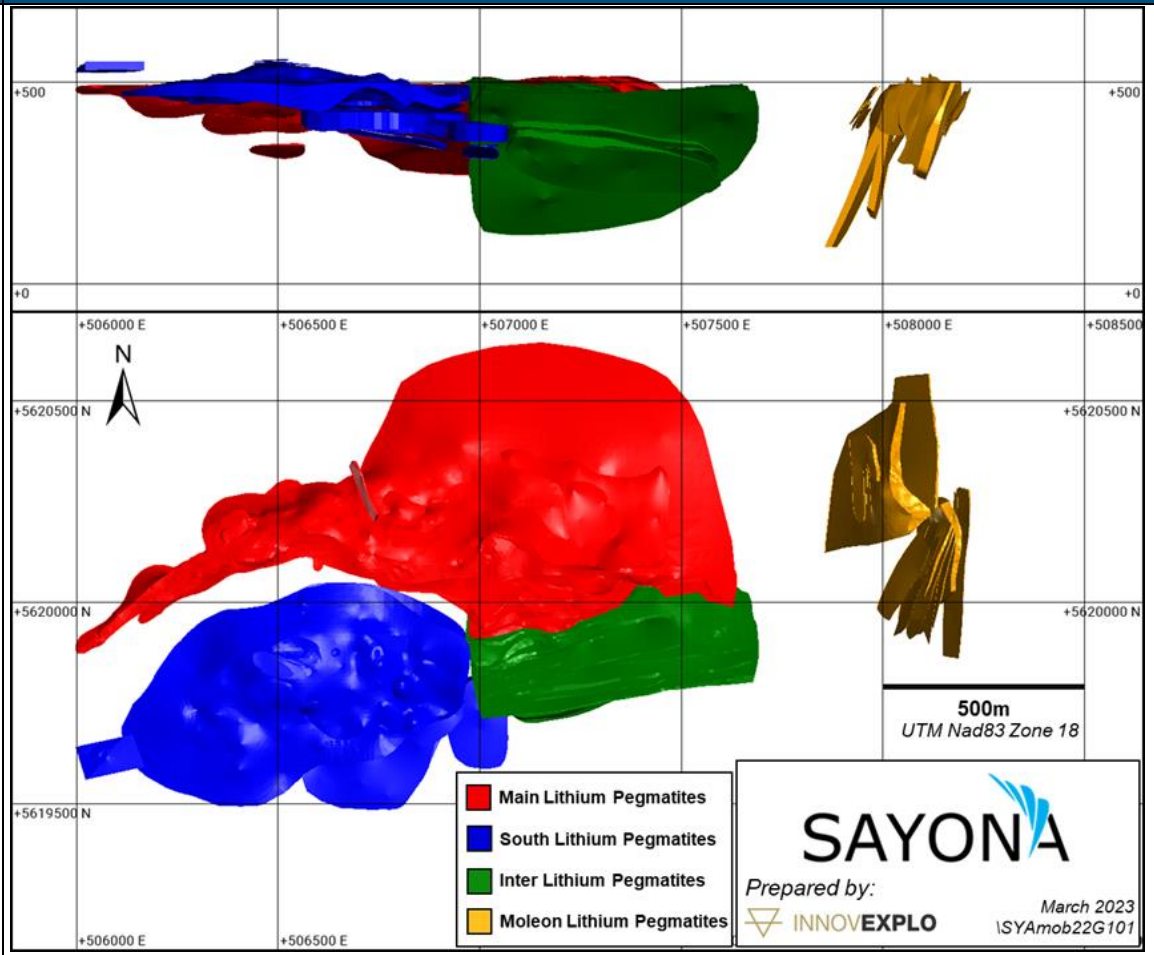
JORC Code, 2012 Edition – Table 2

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.	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 2023 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 December, 2023. On 31 December, 2023, SOQUEM transferred all Moblan Property claims to Investissement Québec. Investissement Québec is now a 40% partner in the Moblan Property (according to the document entitled "Moblan joint venture agreement deed of assignment" dated 31 December, 2023. As of 13 February, 2024, the Moblan Property claims have not been transferred to from SOQUEM to Investissement Québec in GESTIM. 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). 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. 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

Criteria	JORC Code explanation	Commentary
		porphyry systems (e.g., Troilus Gold). 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, Inter and Moleon. Each corresponds to a series of stacked lithium-bearing dykes of variable thicknesses. The Main group comprises 21 lithium pegmatite dykes oriented E-W and dipping gently to the north (N280°/-20°). This swarm extends laterally E-W for approximately 1500 m and 500 m N-S. In this group, three (3) dykes have an average intercept length greater than 10 m. The South group comprises 20 dykes oriented E-W and almost sub-horizontal or dipping gently to the south (N080°/-10°). This swarm extends laterally E-W for approximately 750 m and 500 m N-S. In this group, five (5) dykes have an average intercept length greater than 10 m. The Inter group comprises 17 dykes oriented ENE and dipping moderately to the north (N260°/-20°). This swarm extends laterally E-W for approximately 750 m and 300 m N-S. In this group, only one (1) dyke has an average intercept length greater than 10m. The Moleon group comprises 17 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, two (2) dykes have an average intercept length greater than 10 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: • 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 the drill hole information of the previously reported intercepts (ASX announcements of 26 April, 2022; 27 June, 2022; 17 April, 2023 and 11 July, 2023). Material information on the Project's drill holes is illustrated on the figures (plan views, sections, results tables) in ASX Announcements of April, July and October 2023. The coordinates in the figures and the tables are in metres (UTM NAD83 Zone 18), and the elevation is in metres above sea level. 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 April, July and October 2023, the table includes collar dip and azimuth of the hole, down hole length, interception depth, and hole length. Depending on the azimuths and plunges of the selected boreholes, the drilled lengths are apparent and do not reflect true thicknesses. The CPs were provided with all necessary detailed drill hole information to complete the 2023 MRE and 2023 DFS.
	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 572 drill holes (95,577.47 m). All the details are therefore not presented in table form. Drilling resumed on the Project after the publication of the 2023 MRE and while engineering studies on the Project were still being carried out. The new 2023 drilling results are not included in the 2023 MRE. The CPs do not believe that their omission will materially affect the 2023 MRE. The new drilling results will have an influence

Criteria	JORC Code explanation	Commentary
		mainly on the periphery of the current resources, potentially contributing to the conversion of resources (upgrading) and adding new resources (ASX Announcements of July and October 2023).
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. Li_2O grades do not show great variations (coefficient of variation of 0.85). Based on statistical analysis, no capping is required, and no capping was applied to the Project's Li_2O grades. Refer to previous exploration releases for the drill hole information of previously reported intercepts.
	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 previous resources and exploration releases (ASX Announcement of April, July and October 2023) for illustrations of previously reported holes and assays and for the block model results of the 2023 MRE.

Criteria	JORC Code explanation	Commentary
		 Above; Moblan Lithium Pegmatites Dyke Swarms (Main, South, Inter and Moleon)

Criteria	JORC Code explanation	Commentary
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 2023 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. Metallurgical testing, geomechanical, geotechnical and environmental studies, and condemnation drilling were completed for engineering purposes. No other meaningful exploration data are reported.
Further work	The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).	Further work includes additional drilling to outline the geometry and extent of the lithium pegmatite dyke swarms identified to date. Exploration and step-out drilling is planned to extend the limits of the mineralised system and potentially discover 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 the figures in previous exploration releases (ASX Announcements of April, July and October 2023) for illustrations of previously reported holes and assays.

JORC Code, 2012 Edition – Table 3

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. 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. 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. 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 Alain Carrier, M.Sc., P.Geo., member of the OGQ (a Recognised Overseas Professional Organisation), and Co-President Founder of InnovExplo Inc., completed an independent site visit for the 2023 MRE. The CP reviewed core intervals from previous and 2022 drilling programme, conducted a site tour of the Moblan Property, visited an active drill rig, reviewed drilling, logging and sampling procedures, completed a field validation of drill collar locations, and conducted independent re-sampling. The CP is satisfied with the quality of the measures undertaken. Other site visits have been conducted by Technominex, SOQUEM and Sayona (and/or their 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.

Criteria	JORC Code explanation	Commentary
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. Geology was modelled under the supervision of an independent CP in Leapfrog ™ (v.2022.1.1) using implicit modelling techniques. A total of 75 spodumene pegmatite dykes were modelled for the Main, South, Inter and Moleon lithium-bearing domains. These volumes were modelled from logged geology. 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 drilling results and lithological descriptions.
	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 were used to create 3D volumes for each of the individual pegmatite dykes (75 pegmatite dykes in the 2023 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 Inter dyke swarms is 700 m long N-S, ~300 m wide E-W, dips ~60-70° to the west, and has a vertical extent of ~300 m. The Moleon mineral resource area is 1700 m long WSW-ENE, is 50–400 m wide, dips ~0–25° to the NNW, and has a vertical extent of ~350 m. 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. 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.2022.1.1) 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.

Criteria	JORC Code explanation	Commentary
	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.
	The assumptions made regarding recovery of by-products.	There are no by-products.
	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.	No grade capping was applied to the 1m assay composites. The Li_2O grades do not show great variations (coefficient of variation of 0.85). 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 10-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.

Criteria	JORC Code explanation	Commentary
Cut-off parameters	The basis of the adopted cut-off grade(s) or quality parameters applied.	Economic assumptions: • Selling price: $US1,273 /t conc. 6% Li_2O • Royalties: 2.00% • Exchange rate: 1.32 Process: • Processing cost: $35.00 /t processed • Rehandling cost: $0.90 /t processed • Transport cost: $157.90 /t concentrate • Tailings management cost: $0.80 /t processed • % Li_2O in concentrate: 6.0% • Li_2O metallurgical recovery: 75.0% Administration: • G&A: $12.35 /t processed • Camp and remote area: included in G&A Mining: • Mining cost – Mineralised material: $5.50 /t mined • Mining cost – Waste material: $5.25 /t mined • Mining cost – Overburden: $3.94 /t mined • Mining recovery: 100% • Loss of reserves: 0% • Pit wall angles – rock: 50° • Pit wall angles – overburden: 30° • Cut-off grade: 0.25% Li_2O
Mining factors or assumptions	Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis	An open pit scenario was retained for the 2023 MRE. All remaining tonnage outside of the optimised pit shell (Whittle) was excluded from the mineral resource statement. No underground mining scenario was retained. The resource-level pit shell optimisation was completed at 0.25% Li_2O (US$1273 /t conc. 6% Li_2O) on a 5 x 5 x 5 m SMU using pit wall angles of 50° in rock and 30° in overburden. Estimated mining costs are presented for the cut-off parameters above.

Criteria	JORC Code explanation	Commentary
	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. 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. 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. 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. Estimated processing costs are presented based on the proposed mine plan as detailed above. 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.	Assumptions were made regarding possible waste and process residue disposal options, as discussed in Section 4. The assumption is that there will be no significant impediments to conventional waste management of rock and tailings.

Criteria	JORC Code explanation	Commentary
Bulk density	Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.	Density assignments in the block model are appropriate and supported by measurements.
	The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc.), moisture and differences between rock and alteration zones within the deposit.	Bulk density measurements were carried out in accordance with standard procedure using a water immersion method. Intervals for bulk density determination were selected according to lithology. 267 measurements were taken using a standard water immersion method on core samples averaging 0.75 m long, throughout the Moblan lithium deposit (no samples were taken in the vicinity of the Moleon domain); 169 were taken in lithium pegmatites, 95 in gabbro and 3 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 = 0.0623644*Li_2O% +2.61928 (R2=0.8632), 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, 3.00 g/cm^3 for volcanics, 2.70 g/cm^3 for metasediments, and 2.70 g/cm^3 for rhyolite.
Classification	The basis for the classification of the Mineral Resources into varying confidence categories.	The 2023 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, including the assessment of minimum distances to inform composites. Within the modelled lithium pegmatites only, the Measured mineral resource estimate is classified with a nominal drill spacing less than 30 m x 30 m and interpolated by passes 1 and 2 (within the full variogram ranges); the Indicated mineral resource estimate is classified with a nominal drill spacing less than 60 m x 60 m and interpolated by passes 1 and 2 (within the full variogram ranges); the Inferred mineral resource estimate is classified within a nominal drill spacing less than 100 m x 100 m and interpolated by passes 1 and 2 (within the full variogram ranges) and the contiguous footprint of reasonable prospects of eventual economic extraction.
	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.
Audits or reviews	The results of any audits or reviews of Mineral Resource estimates.	The key assumptions for the 2023 MRE were reviewed, discussed and decided with peers internally at InnovExplo and with Primero and Sayona representatives. 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.

Criteria	JORC Code explanation	Commentary
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 2023 MRE is high. The uncertainty of the geological domains (the Main, South, Inter and Moleon lithium pegmatite dyke swarms) is considered low. The new drilling information obtained since the completion of the 2023 MRE confirms the nature, extent and orders of magnitude of the Li_2O content of the pegmatites. The new drilling will potentially contribute to resource conversion and the addition of new resources along the periphery of the block model.
	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, Inter and Moleon pegmatite domains are marked and could be explained by structural discontinuities (e.g., a NNE fault between the South and Inter groups; and a NNE fault between Main/Inter and Moleon groups), which needs to be more accurately addressed. 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.

JORC Code, 2012 Edition – Table 4

SECTION 4: ESTIMATION AND REPORTING OF ORE RESERVES

Criteria	JORC Code explanation	Commentary
Mineral Resources estimate for conversion to Ore Reserves	Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.	The Ore Reserves Estimate is based on the Mineral Resource Estimate reported on 21 March, 2023 and discussed in Section 3.
	Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.	Ore Reserves are included in the Mineral Resources.
Site visits	Comment on any site visits undertaken by the Competent Person and the outcome of those visits.	A site visit was completed by the following contributors and the CP on 1 August, 2023: The main objectives of the visits were to: • Understand the land topography, access points and natural features of the Project site. • Understand the existing hydrographic network on the site (watercourses, lakes, etc.). • Observe rock outcrops and drill core samples. • Identify existing borrow pits and the location of future sites. • Identify potential sites for future structures and discuss them. • Identify all access roads to the site. • Use the collected data to guide detailed project planning and site preparation. • Promote open communication between AtkinsRéalis engineers and stakeholders. Observations: • The site visit confirmed that the site is readily accessible and appears to be well maintained, with maintenance crews competently resurfacing the road base over sections of the dirt road during the visit. The road is of a quality that can handle large vehicles. A significant number of maintenance trucks loaded with bedding material were seen tramming during the visit. • The co-disposal pile area has a significant natural water flow and/or hold-up. Earthworks may be more substantial, as non-contact water diversion work is required. Also, if the low points do not naturally drain, then additional work may be required. There was evidence of bedrock being reasonably close to the surface, with multiple outcrops seen during the visit. • Upslope co-disposal pile non-contact water deviation may need to be significant to protect the upstream wall. • The crests in the main plant area indicate the presence of competent material as outcrops in the area. • The drainage for the plant site needs to consider whether sedimentary ponds will be needed to protect the

		drainage systems from sediment buildup due to the distance to gravity flow to the contact water collection basin. • There is evidence of outcrops of 'sandy' material, which, when screened, yields a competent road base and fill material.
	If no site visits have been undertaken indicate why this is the case.	Site visits have been completed by all engineering firms working on the DFS.
Study status	The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.	The Project was evaluated at an DFS level from September 2022 to December 2023. The Ore Reserves Estimate herein is based on the work completed for this DFS. An achievable and economically viable mine plan has been determined based on the resource reported under JORC Code and NI 43-101 in April 2023, with the following effective dates: • The close-out date for the 2023 MRE database is 18 January, 2023. • The effective date of the 2023 MRE and Technical Report is 21 March, 2023. • The signature date of the Technical Report is 14 April, 2023. No previous ore reserves has ever been reported for the Project. This study presents a maiden ore reserves estimate.
	The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.	The DFS has covered the following modifying factors with the right level of accuracy to meet DFS requirements: **Mining method and mine plan, including:** • Geomechanical campaign and analysis • Slope geotechnical study and analysis • Hydrological campaign and analysis • Review of the economic cut-off • Evaluation of the metallurgical cut-off • Calculation of mining dilution • Calculation of mining recovery • Pit limit optimisation • Mine stope optimisation process • Mobile equipment and mining fleet **Ore processing (concentrate) and metallurgy, including:** • Metallurgical tests • Concentrator design • Process selection and design, including equipment sizing • Processing recovery rate based on the mine plan • Major equipment pricing and delivery confirmation to support estimate and construction schedule • Full interface coordination with mining and infrastructure facilities **Required infrastructure for operations, including:** • Site preparation and major earthworks • Mine maintenance shop • Mine and site roads • Explosives storage and facilities • Ore storage facilities

		• Electrical and power distribution facilities • Mine fuelling and charging station facilities • Offices • Other operation and auxiliary buildings. Environmental infrastructures, including: • Mine waste storage facilities • Water collection and management • Water treatment facilities • Permit requirements Economic analysis and sensitivity, including: • Li_2O price review • Mining cost evaluation • Metallurgy cost evaluation • Manpower requirements • G&A cost evaluation • Environmental cost evaluation • LOM CAPEX and OPEX evaluations • Concentrate transportation cost • Royalties • Revenue calculation Market study, including: • Market price analysis • Market demand analysis • Exchange rate used in the study Legal issues, including: • Claim verifications • Verification of the national, provincial, and regional regulations Social, including: • HR plan • Land use compensation Governmental.
Cut-off parameters	The basis of the cut-off grade(s) or quality parameters applied.	The marginal cut-off grade of 0.35% is calculated based on the following parameters: • 6% spodumene concentrate price of US$1050 • 2% royalty on sales • 0.76 CAD/USD exchange rate • Processing cost of $35.00 /t • Rehandling cost of $0.90 /t

<table>
<tr><td></td><td></td><td>

Tailings management cost of $0.80 /t
G&A costs of $12.35 /t
Concentrate transportation cost of $157.90 /t of dry concentrate
Process recovery of 75%

Since the marginal cut-off of 0.35% Li_2O is lower than the minimum, long-term optimised metallurgical process head feed grade of 0.60% Li_2O, The Ore Reserves Estimate cut-off grade is fixed at 0.60% Li_2O.
</td></tr>
<tr><td rowspan="4">Mining factors or assumptions</td><td>The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserves (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).</td><td>Ore Reserves are estimated from a detailed final design and a LOM plan. The LOM plan includes preliminary phases to optimise the processing feed grade and mining stripping ratio over time. Ore Reserves are evaluated over a complete LOM cash flow, including site preparation, infrastructure and mine closure capital costs and all operating costs.</td></tr>
<tr><td>The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.</td><td>The selected method is open pit using excavators and mining trucks. The final design includes two pits: Moleon and Main. The mine production fleet is fully owner-operated after an 8-month period of contracted pre-stripping. Mine roads and accesses are prepared with quality overburden mined from the pits.</td></tr>
<tr><td>The assumptions made regarding geotechnical parameters (e.g. pit slopes, stope sizes, etc.), grade control and pre-production drilling.</td><td>The geotechnical design parameters were recommended by InnovExplo. Six (6) major structures surround the open pits. The main joint sets are sub-horizontal, which is favourable for bench stability. The three (3) main geomechanical units are Basalt, Gabbro and Pegmatite, which showed to be of good quality according to RMR89, Q index and GSI. The overall slope angles vary from 25° to 63° for the Main Pit and from 42° to 67° for the Moleon Pit. The analyses generally demonstrated safety factors ensuring long-term stability. However, for the Main pit, a risk persists at the center of the pit where stability is governed by the faults, including the MB fault. Regarding the Moleon pit, some analyses indicated the need to lower the water level to meet project stability criteria. These areas will require enhanced geomechanical monitoring. Empirical analyses have corroborated these observations.
<table>
<tr><th></th><th>Main Pit</th><th>Moleon Pit</th></tr>
<tr><td>Bench Angle</td><td>80° to 85°</td><td>80° to 90°</td></tr>
<tr><td>Bench Width</td><td>6.0 m to 9.4 m</td><td>6.5m to 11.7 m</td></tr>
<tr><td>Bench Height</td><td>20.0 m</td><td>20.0 m</td></tr>
<tr><td>Inter-Ramp Angle</td><td>61° to 65°</td><td>57° to 70°</td></tr>
</table>
</td></tr>
<tr><td>The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).</td><td>Pit designs are derived from optimisation pit shells obtained from Whittle software Lerchs-Grossman Method, using the 2023 MRE geological model. A revenue factor of 0.59 pit was retained for the final design from an optimisation using 49 revenue factors. Phase 1 of the Main and South pits, which later merge into a single pit (the Main Pit), is</td></tr>
</table>

		based on a revenue factor of 0.41. Pit shell optimisation parameters were obtained from the cut-off parameters discussed in Section 4.4. The other parameters are as follows: • Overburden removal cost of $3.94 /t • Waste mining cost of $5.25 /t • Ore mining cost of $5.50 /t • Mine recovery of 90% • Dilution of 10% • Overall overburden slope angle of 20° • Overall rock slope angle of 55°
	The mining dilution factors used.	The calculated dilution after ore shape optimisation and exclusion is 5.8%.
	The mining recovery factors used.	The calculated mining recovery is 87.6%.
	Any minimum mining widths used.	The optimised ore shapes are based on: • 0.6% Li_2O cut-off grade • excavation on 5.00 m benches • 0.50 m linear dilution on both footwall and hanging wall • minimal mining width of 4.00 m Ore shapes containing more than 2.8% Fe are excluded from the Ore Reserves.
	The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.	Inferred resource material is considered as waste or dilution for the purpose of the DFS.
	The infrastructure requirements of the selected mining methods.	Pit designs are adjusted to accommodate a 30.1-m-wide access ramp, and inter-ramp slopes are designed to respect the geotechnical specifications discussed above.
Metallurgical factors or assumptions	The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.	The proposed flowsheet, which is becoming more common as new orebodies are developed, maximises spodumene production. DMS and floatation have been used in far more complex ore bodies to recover spodumene. The associated challenges are generally high dilution values; however, based on the ore body interpretation, it would appear as though the ore zones are quite broad, thereby minimising that risk. Also, the use of 'newer' technologies, such as ore sorting in the lithium space would also help reduce the risk. There is evidence of some lithium-bearing minerals (i.e. petalite, holmquistite) in the host rock bounding the ore zones, which are not amenable to the flowsheet proposed, so there is some risk that recoveries could be impacted. Test work to date has not shown any detrimental impact.
	Whether the metallurgical process is well-tested technology or novel in nature.	Operations using some or all of the proposed technologies exist in Australia (Greenbushes, Mt Cattlin, Mt Marion, and Bald Hill), Brazil (Mibra), Canada (Bernic Lake), China (Sichuan Aba, Maerkang, Jiajika), the United States (Kings Mountain), and Zimbabwe (Bikita).

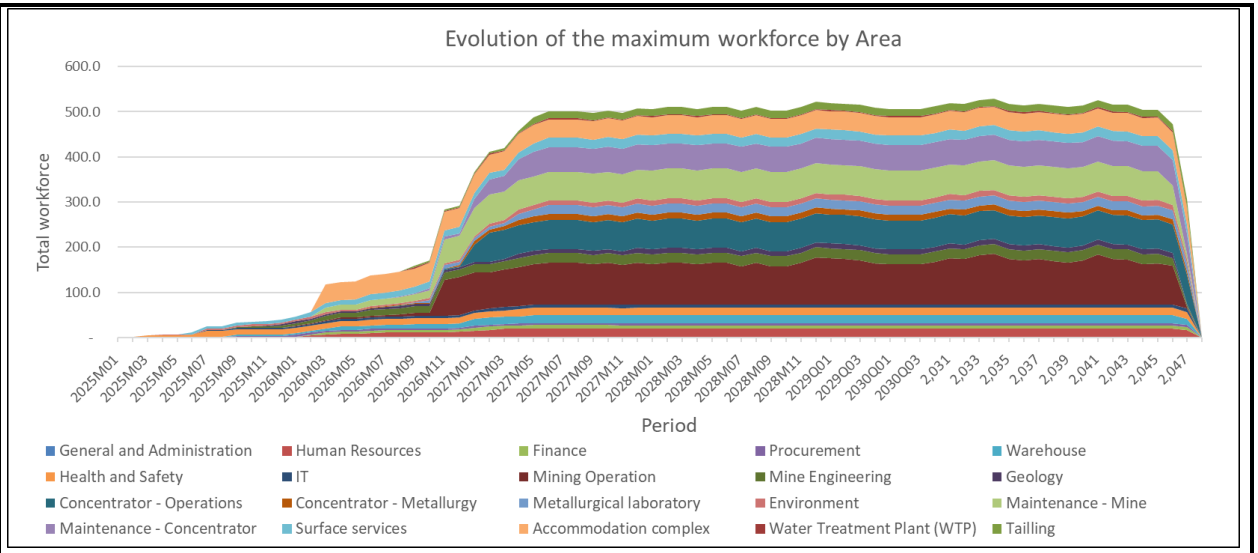
		Sayona operates a spodumene concentrator facility in the same region as Moblan, which is floatation only. This supports the assumption that the technology will work for spodumene production. The use of DMS has been prevalent worldwide for hard rock orebodies, and the technology is well understood. Ore sorting is finding a footing with installations going in at the Pilgangoora Project Australia.
	The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.	The deposit has been drilled extensively, generating over 14 composites ranging in grade from 0.70–1.73% Li_2O and 0.74–1.41% Fe_2O_3. The majority of the test work was on near-mine grade material for Li_2O but below mine grade for Fe_2O_3. Significant bench test work was undertaken to confirm that composites can be upgraded using density, with all samples undergoing heavy liquid separation ('HLS') test programmes. A selection of composites with feed grades ranging from 0.92% to 1.74% Li_2O have been tested at a larger scale, with bulk DMS test programmes (>100 kg samples) being undertaken based on the HLS results. The DMS middlings and ultra-fines generated during these test programmes were then tested for floatation performance with conventional floatation regimes and magnetic separation to upgrade the concentrates produced. The recoveries applied were based on the average trend across the composites tested in the bulk/larger scale test programmes as the recoveries are considered to more closely align to the commercial application, compared to HLS testing and bench-scale floatation.
	Any assumptions or allowances made for deleterious elements.	No additional allowances were applied. As the test programme gave a good spread of data, it has been considered by taking the approach of averaging, and using bulk test data has yielded a good understanding of the components that may impact final concentrate quality based on the analysis undertaken to date. The work to date has not identified any elements that would impact the operation. Iron grade is a concern, but with ore sorting and multiple magnetic separation steps, the impact is considered manageable. Based on the mine plan, the impact only comes in as the main ore zone mine sequences pass through a section of high iron grade during the first 6 months of Yr 2. As part of the metallurgical process considerations, DSO ore shapes with more than 2.8% Fe were excluded from the reserves to maintain an Fe grade of 1.03% over the LOM.
	The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole.	Bulk composites of >100 kg were generated and are considered to represent acceptable distribution. As noted previously, there is a higher portion of testing on material that is higher than the proposed mine grade, but additional work to support the Project financials is being undertaken, with the generation of four (4) composites lower than mine grade. Ore sorting test work was undertaken on a near-surface sample; further work on high Fe >1.5% is recommended.
	For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?	The Ore Reserves Estimate has been calculated based on analytical techniques.
Environmental	The status of studies of potential environmental impacts of the mining and	An Environmental and Social Impact Assessment study ('ESIA') is currently progressing. Due to the Project's location within the Cree Nation territory, the approval process includes the active involvement of the Cree Nation Government

	processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.	and the Cree community of Mistissini. Based on the preliminary (static tests) geochemical characterisation, the tailings are classified as non-acid generating, whereas the acid generation potential of mine waste rock is uncertain. A set of kinetic tests are in progress and the results will be available in 2024. A comparative analysis has been carried out to decide between the co-disposal of tailings and waste rock vs. conventional separate storage of each type of mine waste. The analysis concluded that co-disposal is advantageous, mainly because of its smaller footprint and stability purpose. It has also proved beneficial for preventing acid generation. The location of the co-disposal pile was chosen after a comparative analysis of six (6) pre-selected options. The analysis considered community, environmental, economic, and technical factors. A permit application for the location of the co-disposal pile has been submitted to Québec's Ministry of Natural Resources and Forestry. Other permits, like construction and operation, water intake, water treatment, restoration plan, public land use, forest land intervention, and work in fish habitats, are planned for 2024–2025. A conceptual closure plan considers an impermeable cover (geomembrane) on the co-disposal mine waste facility, flooding of the pits, and removal and cleanup of all facilities. A formal restoration plan will be submitted to Québec authorities in 2024.
Infrastructure	The existence of appropriate infrastructure	The Project is located at 300 m of the Route du Nord, a regional highway and is accessible year-round. Exploration facilities are currently set up on the Project location. Nearest railway station is in Chibougamau at 130 km by road from Moblan. The railway is linked with major ports of Eastern Canada, including Montreal and Québec City ports. Chibougamau is also serviced regularly by commercial airlines from Montreal and Québec City. 161 kV electrical line no. 1625 from Hydro-Québec power distribution system is available for tap connection at 42 km from site. An exploration site has been set up on the Project site. The Project is still at the greenfield stage; therefore, no operating infrastructures have been built to date at the site, The following is a list of buildings that will need to be built on-site: • Explosive magazine • Assay Laboratory • Mine Fuel Depot and fuel distribution • Electrical Substation Concentrator • Crush ore storage • Dense media separation (DMS) • Grinding • Magnetic separation • Mica floatation • Spodumene floatation • Concentrate dewatering • Concentrate storage • Tailings dewatering

		• Reagents storage • Mechanical shop, operations room, mill laboratory • Crushing • Ore sorting • Concentrator maintenance shop • Laboratories • Control rooms • Mine offices and dispatch Permanent Camp: • Kitchen • Cafeteria • Reception • Camp 300 rooms • Gymnasium Multi-service building: • Offices, engineering, administration, etc. • Infirmary • Dry Mine maintenance shop: • Fire department-casern and ambulance • Mechanical and welding shop • Wash bay • Warehouse • Supervisor and administration offices Auxiliary buildings: • Warehouse domes, • Gatehouses • Fresh water and fire water pump house Emergency electrical power and emergency generators
	availability of land for plant development	The proposed project site is located on public lands in the domain of the State (Government of Québec). Therefore, the final location of the Project infrastructure is conditional on obtaining appropriate surface rights from the province's Ministry of Natural Resources and Forests (MRNF), including a mining lease pursuant to the *Mining Act* (Québec), and surface (industrial) leases pursuant to the *Act respecting the lands in the domain of the State* (Québec). Approval from the MRNF is also required for the proposed site of the concentrator and tailings storage facility and was issued on 20 December 2023. Sayona is now required to submit to the MRNF a survey plan of the site to be used as a storage area for mine tailings, as well as an application for a mining lease and surface leases. These leases are expected to be issued following the issuance of the global certificate of authorisation for the Project.

power	**Electrical main line** The Project will be supplied with electricity from an existing Hydro-Québec power line. From this point, a switching station will be installed, and a new 161KV line will be built using wooden poles over approximately 42 km. A complete distribution substation will be installed on-site, with two 20 MVA transformers. It should be noted that the financial analysis considered that a third party owns the power line feeding the site. The cost related to the utilisation of this facility is added to the OPEX energy consumption and represents a fixed cost of $6.165 M/y. It includes the estimated construction cost of the line, the maintenance cost over the LOM, and a profit for the third-party company that will operate the facility with a total cost over LOM of $123.3 M. **Site power supply and distribution** The total power demand of the Project is approximately 26.1 MW. A 25kV substation will be built near the main road (Route du Nord), and an overhead power line will distribute the power to the different buildings on the Project site. The main services requiring electrical power will be fed at 25 kV to 4160v for the main concentrator equipment. All building services will be fed at 600V or 120/208V, depending on the type of load and operation requirements. Emergency power will be provided by two (2) 600V 1MW and one (1) 600V 500kW diesel-powered generators. **Fuel depot:** • Diesel fuel (285,000 L) • Gasoline fuel tank (9000 L)
water	Water management infrastructure required for the site includes: • Treatment for drinking water • Domestic sewage treatment plant • Groundwater wells • Pump house for fresh water and fire protection • Contact water treatment • Contact water pump stations • Contact water sludge management building **Domestic water:** • Sourced from local artesian wells, estimated maximum demand of 90 m^3/d based on 300L/hab/d. • In-situ domestic sewage treatment using a compact plant, including primary settling, biological aerobic treatment (biofilm), UV disinfection, and coagulation/clarification. **Non-contact and contact water:** • Management based on separating non-contact from contact (contaminated) water. • Non-contact run-off diverted to local streams. • Contact water treated to meet discharge limits. **Contact water on site:** • Contaminated run-off and snowmelt from the co-disposal pile, ore stockpile, industrial site, and service road

	ditches. • Pit infiltration water. • Process effluent from the ore processing plant. Contact water management: • All contact water is directed to a collection basin, then pumped to water treatment containers. • Physico-chemical treatment for trace metals and suspended solids using geosynthetic filtration bags to capture and dewater the precipitated metals and solids. • Treated water from the geosynthetic filtration bags is directed to the polishing basin. Treated water stored in the polishing basin will be pumped back to the ore processing plant and excess is gravity-discharged into Lake Unnamed-09, meeting discharge criteria. • Initial treatment capacity is 500 m^3/h, with the potential to expand to 1000 m^3/h. • In later stages, a portion of the treated water will undergo further treatment by reverse osmosis system to produce a treated process water low in total dissolved solids and chlorides. Permeate is stored in a treated process water basin and recycled to the plant. The concentrate is returned to the water collection basin.
transportation (particularly for bulk commodities),	Proximity to the North Road (*Route du Nord*). An hour and a half of road travel from Chibougamau.
labour	Labour will come from several Québec regions, both from local communities and urban centres: • Town of Chibougamau. • Town of Mistissini. • Mining region of Abitibi. • Saguenay–Lac-St-Jean region. • Other areas, such as metropolitan centres (Montreal or Québec City). The figure below presents the LOM manpower requirements. The maximum number of Sayona employees will be 528 and the on-site maximum will be 258.

	
accommodation	Permanent camp with a capacity of 300. A two-storey accommodation complex will consist of a prefabricated building envelope over wood and steel foundation structures. The buildings are: • Kitchen • Cafeteria • Reception • Bunkhouse • Gymnasium Accommodation will be built to the following requirements: • 300 individual bedrooms • 600 lockable storage units • 1 laundry room per floor • 2 washrooms (women and men) • training room • refrigeration room • cloakroom • manager's office • store for food • dining area • 4 dormitory modules ("H" shape)

<table>
<tr><td></td><td></td><td>All buildings will be ventilated and heated with electric equipment.
Fire protection in all sectors will comply with current code standards.
All buildings will be connected to sanitary sewer and drinking water services.
• A network of sanitary and gravity sewer collectors and manholes will be deployed and connected at its lowest point to a wastewater treatment system. The treatment outlet will be discharged into a stream close to the camp, and the treatment will meet regulated discharge targets.
• Drinking water will be supplied from an underground well developed near the site. An intake pipe will then be connected to a treatment system before connecting to the building.</td></tr>
<tr><td></td><td>Ease with which the infrastructure can be provided or accessed.</td><td>All Project infrastructures will need to be built before production start-up.</td></tr>
<tr><td>Costs</td><td>The derivation of, or assumptions made, regarding projected capital costs in the study.</td><td>Project CAPEX was estimated based on a combination of:
• Costs evaluated from supplier's quotes and historical data.
• Estimated quantities, either factorised or detailed by preliminary engineering.
• Estimate accuracy is evaluated at ±15% to 20%.
The table below summarises the total LOM capital and sustainable costs (CAPEX SUSEX), including design contingencies.
<table>
<tr><th>Description

Currency: CAD</th><th>CAPEX

$M</th><th>SUSEX

$M</th><th>Contingency

$M</th><th>TOTAL CAPEX/ SUSEX

$M</th><th>Expense ratio

%</th></tr>
<tr><td>General site-wide</td><td>69.5</td><td>1.3</td><td>8.2</td><td>79.0</td><td>7.8%</td></tr>
<tr><td>Mine site</td><td>15.7</td><td>19.5</td><td>4.6</td><td>39.8</td><td>3.9%</td></tr>
<tr><td>Concentrator</td><td>287.5</td><td>27.8</td><td>46.6</td><td>361.9</td><td>35.7%</td></tr>
<tr><td>Multi-service building</td><td>13.6</td><td>-</td><td>2.3</td><td>15.9</td><td>1.6%</td></tr>
<tr><td>Mine – maintenance shop</td><td>24.0</td><td>1.0</td><td>4.0</td><td>29.0</td><td>2.9%</td></tr>
<tr><td>Accommodation complex</td><td>41.6</td><td>2.1</td><td>1.9</td><td>45.6</td><td>4.5%</td></tr>
<tr><td>Auxiliary building</td><td>20.7</td><td>-</td><td>3.3</td><td>23.9</td><td>2.4%</td></tr>
<tr><td>Genset</td><td>1.5</td><td>-</td><td>0.2</td><td>1.7</td><td>0.2%</td></tr>
<tr><td>Tailings and water management</td><td>37.7</td><td>26.8</td><td>12.1</td><td>76.6</td><td>7.5%</td></tr>
<tr><td>Owner's cost</td><td>118.0</td><td>-</td><td>0.6</td><td>118.5</td><td>11.7%</td></tr>
</table></td></tr>
</table>

Indirect costs	192.9	4.5	25.7	223.1	22.0%
TOTAL CAPEX/SUSEX :	**822.6**	**82.9**	**109.4**	**1,015.0**	**100%**
Design contingency	96.3	13.1	109.4	Included	11.7%
Global contingency	43.5	-	43.5	**43.5**	5.3%
Total :	**962.5**	**96.1**	**153.0**	**1,058.6**	

The methodology used to estimate operating costs.

Project OPEX was estimated based on a combination of:

- Costs evaluated from supplier's quotes and/or recent internal database.
- Mine production plan.
- Equipment evaluation over the LOM, including leasing acquisition and rebuilt, and operation and maintenance.
- Estimated operating quantities from the LOM mine production plan.
- Estimated operating hours from the LOM plan schedule.
- Estimated quantities of energy consumption (fuel and electricity).
- Estimated quantities of other consumables.
- Total manpower plan developed over the LOM plan, with salaries based on another Sayona operation or operating mine in Québec.

Estimate accuracy is evaluated at ±15% to 20%.

The table below summarises the total LOM OPEX costs.

TOTAL LOM OPEX by Area	TOTAL OPEX	Budget ratio	Unit cost		
Currency: CAD	$M	%	$/t mined	$/t milled	$/t conc.
General and administration	385.1	11.9%	3.50	11.15	65.84
General site-wide	327.0	10.1%	2.97	9.47	55.92
Mine site	867.3	26.7%	7.88	25.11	148.31
Concentrator	784.0	24.1%	7.12	22.70	134.06
Environment	35.4	1.1%	0.32	1.03	6.06
Multi-service building	195.5	6.0%	1.78	5.66	33.43
Mine - maintenance shop	251.6	7.7%	2.28	7.29	43.02
Accommodation complex	175.7	5.4%	1.59	5.09	30.04
Auxiliary building	4.9	0.2%	0.04	0.14	0.84

Genset	3.2	0.1%	0.03	0.09	0.55
Tailing and water management	218.2	6.7%	1.98	6.32	37.31
Total:	**3,248.0**	**100%**	**29.49**	**94.04**	**555.39**

Note: Unit operating costs are calculated for the production phase only.

- Total tonnes mined: 110,137,269 tonnes.
- Total tonnes milled: 34,537,284 tonnes.
- Total tonnes concentrate: 5,848,179 tonnes.

Allowances made for the content of deleterious elements.

The total contingency for the entire Project amounts to $196.9 M. Different types of contingencies were applied to the Project's cost evaluation:

- **Design contingency:** A design contingency was applied to each CAPEX line-item detail according to the level of engineering progress. The overall design contingency for the Project is 11.7% of total CAPEX ($96.3 M) and 15.8% of total SUSEX ($13.1 M), for a total amount of $109.4 M.
- **Global contingency:** A global contingency of 5.3% of the total CAPEX was applied to mitigate the risk during the construction phase, for a total of $43.5 M. A quantitative risk analysis was performed during the Feasibility Study, which is detailed in the risk analysis report. Using a semi-qualitative risk evaluation matrix, each risk was assigned a scale for cost and/or schedule impact during the risk development interviews. A multidisciplinary committee reviewed and refined these proposed risk assessments by estimating the level of probable impact (minimum, most likely or maximum). Monte Carlo simulations were performed iteratively to refine risk mitigations of key drivers until the Feasibility Study residual risk profile is as low as reasonably practicable.

Consequently, a total contingency of 17% was applied to the Project's CAPEX ($139.8 M) and a total contingency of 15.8% was applied to the SUSEX ($13.1 M) for a total of $153.0 M. These contingencies align with AACE International's recommendations because the cost estimation is based on:

- A class 3 estimate, including ±15% to 20% accuracy in engineering.
- A bottom-up estimation methodology.
- A feasibility-level estimate.

The next engineering step is the front-end engineering design ('FEED').

The source of exchange rates used in the study.

Exchange rates	Value
USD/CAD	1.33333
EUR/CAD	1.53846
AUS/CAD	0.94340
RAND/CAD	0.08251
GBP/CAD	1.69348

Exchange rates	Value
CAD/USD	0.75000
CAD/EUR	0.65000
CAD/AUS	1.06000
CAD/RAND	12.12000
CAD/GBP	0.59050

DKK/CAD	5.00000		CAD/DKK	0.20000
ISK/CAD	106.38298		CAD/ISK	0.00940
ZAR/CAD	12.12121		CAD/ZAR	0.08250

Derivation of transportation charges.

An analysis during the DFS defined the options to transport loads of 300,000 tpa of Li_2O concentrate from the Moblan site to the port of Québec City (Port de Québec). The retained option is by truck to Chibougamau and then by train to Québec City. Moblan 6% Li_2O concentrate is shipped with 7% content moisture, which is calculated in the overall transport cost. The transport unit cost is shown below:

Concentrate transportation	Value	Unit
Concentrate transportation cost.	147.87	$/t concentrate
Concentrate moisture	7%	

The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.

No refining cost or mint cost is included in the DFS.

The allowances made for royalties payable, both Government and private.

Property	Number of mining titles	Total area (ha)	Ownership	Royalties
Moblan	20	433.37	60% Sayona Inc. / 40% Investissement Québec	GOR royalty to Lithium Royalty Corp: • 2.5% for the first 1 Mtpa • 1.5% for any tpa of ore in excess of the first 1 Mt Offtake agreement with LRC: • 10% of Sayona's ownership participation in the annual production for the LOM • Price at a 5% discount to the prevailing market terms
Lac Albert	121	6,592.01	100% Sayona Inc.	No royalties
Gariteau	37	2,009.4	100% 9474-9454 Québec Inc. (Sayona Inc. subsidiary)	2% NSR to Troilus Gold Corporation
Albert-Sud	24	1,240.82		
Lezai-Troilus	216	11,673.06		
Tortigny	76	3,850.17		
Regnault	386	20,669.63		
Larabel	193	10,482.11		

Frotet	441	24,031.60			
De-Maurès	451	24,466.61			
TOTAL	**1,965**	**105,448.78**			

Royalties were calculated by PWC firm in the financial model for a total of C$241.0 million over the LOM.

Other costs: There are other costs that have been considered in the financial analysis of the Project.

- Closure cost financial guarantee: Under Québec regulations, all mining projects must provide a 50% guarantee for the closure and site rehabilitation cost as soon as authorisation is given by the government, and then 25% on each subsequent anniversary date (year 1: 25% and year 2: 25%). Closure cost for Project overall site is estimated to $46.9 M.
- Other environmental costs related to the Project, totalising $21.2 M, include:
  - Compensation for loss of wetlands and water bodies
  - Compensation for loss of fish habitats
  - Compensation for loss of forest land
  - Compensation for impacts on caribou
- The compensation for GHG emissions was considered under the taxation calculations (Carbon tax) for a total of CA$30.1 million over LOM.
- Compensation for the use of Cree lands: Sayona is currently discussing with the Cree community regarding compensation for Cree land use. As the discussions have not yet concluded, this cost was not considered in the Project's financial analysis.
- Salvage value of the Project is null.
- Exploration cost: Not considered in the Project's financial analysis.
- Corporate fees: Not considered in the Project's financial analysis.

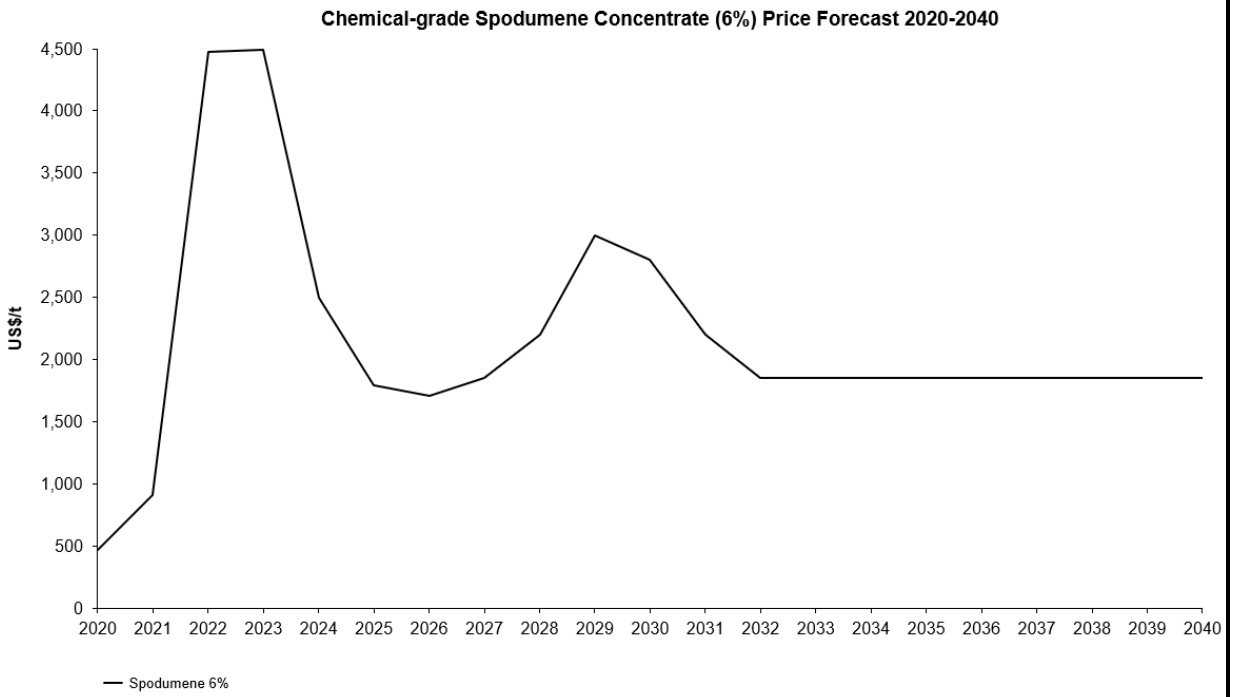
Revenue factors

The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.

The following revenue factors were used in the DFS:

Revenue Factor	Value	Unit
Product grade concentrate Li_2O	6.0%	%
Average metallurgical recovery [3]	74.7%	%
Exchange rate (USD/CAD)	1.33333	USD/CAD
Exchange rate (CAD/USD) [1]	0.75	CAD/USD
Royalties [4]	1.5% to 2% GOR - See table above. Calculation by PWC	%
Transportation charges [2]	147.87	$/t concentrate
Concentrate moisture	7%	%

		1. An exchange rate of 0.75 CAD/USD was fixed over the LOM for the Project. 2. From a transport study conducted for the DFS. The transportation cost is applied to a 6% Li_2O concentrate, including 7% moisture, from Moblan to the Port of Québec City. 3. The average metallurgical recovery over the LOM is 74.7%. However, a calculation of the recovery rate was made depending on the mine production plan and spodumene grade that was fed to the concentrator by period. 4. Royalties from 1.5 to 2% are payable to Lithium Royalty Corp. ('LRC').
	The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.	Based on the analysis from Pricewaterhouse Coopers LLP ('PWC') entitled 'Lithium Market Study, October 31, 2023': *'The prices for spodumene concentrate and battery-grade lithium are expected to remain high relative to historic prices, driven mainly by the demand for lithium for electric vehicle (EV) batteries.* *According to Benchmark Minerals Intelligence (BMI), the price of spodumene concentrate (6%) increased significantly from 2020 to 2023, reaching a peak of USD4,488/t. However, by 2026, the market price of spodumene is expected to decrease to USD1,710/t. A short-term rise in price is forecasted in the following years, up to USD3,000/t in 2029, followed by another decrease and a gradual stabilisation at a long-term price of USD1,850/t from 2032 onwards.'* The BMI figure below showing the Li_2O price forecast curve was taken from the PWC market study report:



Sources: Lithium-Price-Forecast-Q3-2023-Benchmark-Mineral-Intelligence, PwC Analysis

Therefore, the average Li_2O 6% concentrate price is 1,990 USD/t of Li_2O 6% over the LOM. The prices vary over LOM from 1,850 USD/t to 3,000 USD/t. The Project does not host any other economic mineral by-product. The concentrate price has been fixed according to the table below using a 0.75 CAD/USD exchange rate.

Year	Li_2O Concentrate Price	Li_2O Concentrate Price
	USD/t	CAD/t
Default	1,850	2,467
2027	1,850	2,467
2028	2,200	2,933

		2029: 3,000 / 4,000 2030: 2,800 / 3,733 2031: 2,200 / 2,933 2032 to 2046: 1,850 / 2,467 **Average: 1,990 / 2,653**
Market assessment	The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.	According to BMI, the market balance for battery grade lithium chemicals was expected to be in a deficit in 2021 and 2022. From 2023 to 2028, a slight surplus is expected as new production is brought online more rapidly than demand. However, from 2029 to 2040, a growing deficit is projected and is expected to reach 1,516 thousand tons of LCE in 2040 as demand for electric vehicles grows faster than supplier production.
	A customer and competitor analysis along with the identification of likely market windows for the product.	According to BMI, demand for lithium is projected to grow at a compound annual growth rate (CAGR) of 15% from 2020 to 2040. Several new mines and transformation facilities will be required to meet the market demand.
	Price and volume forecasts and the basis for these forecasts.	The prices for spodumene concentrate and battery-grade lithium are expected to remain high relative to historical prices, driven mainly by the demand for lithium for EV batteries.
	For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.	According to BMI, the price of spodumene concentrate (6%) has increased significantly from 2020 to 2023, reaching a peak of USD4,488/t. However, by 2026, the market price of spodumene is expected to decrease to USD1,710/t. A short-term rise in price is forecasted in the following years, up to USD3,000/t in 2029, followed by another decrease and a gradual stabilisation at a long-term price of USD1,850/t from 2032 onwards.
Economic	The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.	The key results and assumptions for the financial analysis are presented in the next table.

Parameters	Value	Units
Production		
Preproduction period	39	months
Production period	20.0	years
Life of mine	21.1	years
Probable Ore reserves [3]	34.5Mt @1.36%	Li_2O
Total waste	75.4	Mt
Total overburden	4.1	Mt
Total project tonnage	114.1	Mt

Average LOM strip ratio	2.3	t:t
Daily production	4,800	tpd milled
Monthly production	146,000	tpm milled
Annual production	1,752,000	tpa milled
Average feed head grade	1.36%	Li_2O
Product grade concentrate Li_2O	6.0%	Li_2O
Average LOM recovery [4]	74.7%	%
LOM 6% Li_2O produced [5]	5,848,179	t 6% Li_2O
Average annual production	300,000	tpa 6% Li_2O
Concentrate moisture [6]	7.0%	%
Royalties [7]	1.5% to 2.0%	%

Project Economics	Value	CAD	Value	USD
Exchange rate [8]	0.750	CAD/USD	1.333	USD/CAD
AISC [9, 15]	748.04	$/t concentrate	561.03	US$/t concentrate
Operating unit cost [9]	94.0	$/t milled	70.5	US$/t milled
Operating unit cost [9]	555.4	$/t concentrate	416.5	US$/t concentrate
Mining costs [9]	7.88	$/t mined	5.91	US$/t mined
Process costs [9]	22.70	$/t milled	17.03	US$/t milled
G&A costs [9]	65.84	$/t concentrate	49.38	US$/t concentrate
Transport costs [10]	147.87	$/t concentrate	110.90	US$/t concentrate
Total OPEX cost estimate	3,248	$M	2,436	US$M
Total CAPEX cost estimate	962	$M	722	US$M
Total SUSEX cost estimate	96	$M	72	US$M
Other cost – Envir. & mine closure cost	68	$M	51	US$M
Total project cost	4,375	$M	3,281	US$M

Average market price LOM 6% Li_2O [11]	2,653	$/t concentrate	1,990	US$/t concentrate
Total net revenue	14,423	$M	10,817	US$M
Undiscounted pre-tax cash flow	10,048	$M	7,536	US$M
Estimated mining and income taxes	4,093	$M	3,070	US$M
Net cash flow	5,955	$M	4,466	US$M
Discount rate [12]	8%	%	8%	%
Pre-tax NPV	3,918	$M	2,939	US$M
Pre-tax IRR	47.4%	%	47.4%	%
Post-tax NPV	2,187	$M	1,640	US$M
Post-tax IRR	34.4%	%	34.4%	%
Post-tax Payback period	2.3	Years	2.3	Years

1. All costs and sales are presented in constant 2023 CAD, with no inflation or escalation factors considered. $M = millions of dollars.
2. All related payments and disbursements incurred before Q1 2024 are considered sunk costs.
3. The financial analysis was performed on Probable Ore Reserves as outlined in this report. There are no Proven Ore Reserves.
4. The average metallurgical recovery over the LOM is 74.7%. However, the recovery rate depends on the mine production plan, spodumene grade and iron grade fed to the concentrator by period.
5. Tonnes of concentrate are presented as dry tonnes.
6. The transportation cost is applied to a 6% Li_2O concentrate (including 7% moisture) from Moblan to the port in Québec City.
7. Royalties ranging from 1.5% to 2.0% are payable to Lithium Royalty Corp. Calculated by PWC depending on production quantities.
8. An exchange rate of 0.75 CAD/USD was fixed over the LOM for the Project.
9. Unit operating costs are calculated for the production period only. Excluding tonnes during preproduction. Total tonnes mined: 110.137 Mt; Total tonnes milled: 34.54 Mt; Total tonnes concentrate: 5.85 Mt.
10. From a transport study conducted during the DFS for wet concentrate.
11. The average 6% Li_2O concentrate price is US$1,990 /t over the LOM. This price is based on a market analysis from Benchmark Mineral Intelligence for Q3 2023 and varies over the LOM from US$1,850 /t to US$3,000 /t.
12. A discount rate of 8% was used for the base case scenario.
13. Production targets are based on the Ore Reserves Estimate, which considers the open pit-constrained portion of the Measured and Indicated Mineral Resources. Inferred Mineral Resources are considered waste. In addition to 34.5 Mt of mineralised material, 75.4 Mt of waste and 4.1 Mt of overburden must be mined, resulting in an overall

<table>
<tr>
<td></td>
<td></td>
<td>LOM stripping ratio of 2.3.
14. The Moblan Ore Reserves estimate is supported by the DFS studies on modifying factors, resulting in a positive pre-tax and post-tax output.
15. AISC doesn't include concentrate transportation cost which are part of the total net revenue calculations.
16. The numbers have been rounded. Any discrepancy in the totals is due to rounding effects.

All OPEX and CAPEX costs and revenue streams were included in the financial model. The overall cost base assumptions and analysis methodology are considered appropriate, robust and at DFS-level accuracy. It is therefore demonstrated that processing the Ore Reserves can yield a positive $NPV_{8\%}$.</td>
</tr>
<tr>
<td></td>
<td>NPV ranges and sensitivity to variations in the significant assumptions and inputs.</td>
<td>Sensitivity was conducted on:
• Revenue assumptions: sale price, recovery, exchange rate.
• Cost assumptions: OPEX costs, CAPEX/SUSEX costs.
• Discount rates are: 0%, 5%, 8%, 10% and 12%.
The sensitivity to all those factors is summarised in the tables and figure below showing the analysis curves.
<table>
<tr><th>Factors</th><th></th><th></th><th></th><th>Base Case</th><th></th><th></th><th></th></tr>
<tr><td>Recovery rate</td><td>-15%</td><td>-10%</td><td>-5%</td><td>0%</td><td>5%</td><td>10%</td><td>15%</td></tr>
<tr><td>Concentrate 6% Li_2O price</td><td>-15%
-30%</td><td>-10%
-20%</td><td>-5%
-10%</td><td>0%</td><td>5%
10%</td><td>10%
20%</td><td>15%
30%</td></tr>
<tr><td>CAPEX/SUSEX costs</td><td>-15%</td><td>-10%</td><td>-5%</td><td>0%</td><td>5%</td><td>10%</td><td>15%</td></tr>
<tr><td>OPEX costs</td><td>-15%</td><td>-10%</td><td>-5%</td><td>0%</td><td>5%</td><td>10%</td><td>15%</td></tr>
<tr><td>Exchange rate</td><td>-15%</td><td>-10%</td><td>-5%</td><td>0%</td><td>5%</td><td>10%</td><td>15%</td></tr>
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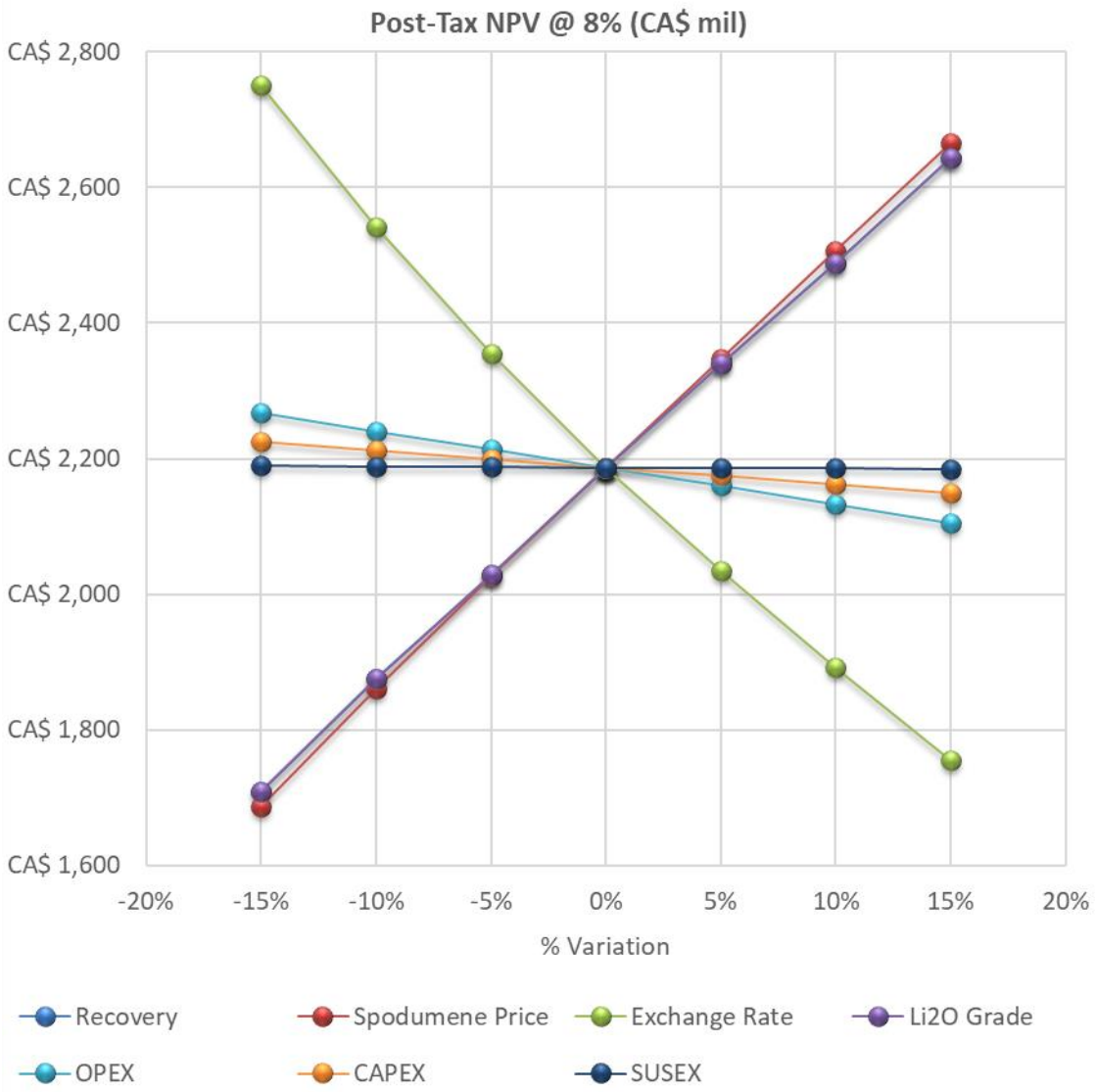
Post-Tax NPV @ 8% (CA$ mil)
CA$ 2,800
CA$ 2,600
CA$ 2,400
CA$ 2,200
CA$ 2,000
CA$ 1,800
CA$ 1,600
-20%
-15%
-10%
-5%
0%
5%
10%
15%
20%
% Variation
Recovery
Spodumene Price
Exchange Rate
Li2O Grade
OPEX
CAPEX
SUSEX

The Project is most sensitive to revenue assumptions than cost assumptions. The spodumene price has a major impact on the Project. The results for this most sensitive factor are presented in the table below.

Variation	-30%	-20%	-15%	-10%	-5%	0%	5%	10%	15%	20%	30%
LOM Average Price ($/t 6% Li_2O)	$1,869	$2,136	$2,269	$2,403	$2,536	$2,653	$2,803	$2,936	$3,070	$3,203	$3,470
Discount rate 0%	3,544	4,441	4,879	5,314	5,733	6,120	6,493	6,865	7,238	7,610	8,351
Discount rate 5%	1,701	2,208	2,454	2,698	2,934	3,153	3,364	3,575	3,786	3,997	4,417
Discount rate 8%	1,095	1,472	1,655	1,836	2,011	2,174	2,331	2,489	2,646	2,803	3,116
Discount rate 10%	808	1,122	1,275	1,426	1,572	1,708	1,839	1,970	2,102	2,233	2,494
Discount rate 12%	585	851	980	1,107	1,230	1,344	1,456	1,567	1,678	1,789	2,010
IRR	22%	26%	28%	29%	31%	32%	34%	35%	37%	38%	40%

Note: All NPV shown in CAD $M.

Next table presents the sensitivity analysis total results for Post-Tax NPV @ 8%.

Variation	-15%	-10%	-5%	0%	5%	10%	15%
Recovery[1]	1,709	1,876	2,030	2,187	2,339	2,489	2,643
Blended Li_2O Grade[1]	1,709	1,876	2,030	2,187	2,339	2,489	2,643
Spodumene Price	1,686	1,861	2,027	2,187	2,347	2,506	2,665
Exchange Rate	2,750	2,542	2,355	2,187	2,035	1,892	1,756
OPEX	2,268	2,241	2,214	2,187	2,160	2,133	2,105
Project CAPEX	2,225	2,213	2,200	2,187	2,174	2,162	2,149
Sustaining CAPEX	2,189	2,189	2,188	2,187	2,186	2,185	2,185
%Variation	-30%	-20%	-10%	0%	10%	20%	30%
Spodumene Price +/- 30%	1,131	1,503	1,861	2,187	2,506	2,825	3,142

Note:

1. There is no difference between variation on recovery or Li_2O Grade. Both affects the Project identically.
2. All NPVs presented in CAD $M.

		With such a high concentrate market price, cost factor has little influence on the economic of the Project. The major factor that could influence the Project rentability at this stage, are the revenue factor (market price and recovery). Should the price drop drastically, then the costs would become more of an issue and should be followed more closely. Therefore, if the price remains what is forecast, even if during the operations, OPEX or SUSEX cost are higher, this should not affect the rentability of the operation at a high level.
Social	The status of agreements with key stakeholders and matters leading to social licence to operate.	Given its location, the Project falls under the scope of the *James Bay and Northern Québec Agreement and Complementary Agreements*, signed between the governments of Québec and Canada and the Cree and Inuit nations. According to this agreement, the Cree Nation has an active involvement in the approval of the ESIA. Consultations are underway with the Cree Nation Government, local Cree communities, local authorities, and non-Cree land users around the Project site. Sayona is engaged in supporting local development by prioritising local recruitment and procurement. No indications of serious existing or potential conflicts have been observed. The general climate of the relationship between the Project and the community is pacific, and communities have positive expectations from the Project.
Other	To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:	An exhaustive risk analysis has been undertaken during the DFS. Those listed below are the top risks detailed in the risk analysis report: • More stringent discharge criteria for regulated and non-regulated elements (chloride, ammonia, etc.) than considered in the DFS. • Insufficient flood control consideration in the design. • Significant cost increase from market overheats. • Uncertainty of geotechnical foundations. • Uncertainty of final effluent discharge point location. • Uncertainty of borrow pits aggregates quality. • Uncertainties of on-site accommodation. • Underestimation of various systems and applications integration. • Uncertainties related to a 'fast track' DFS. • Uncertainty of project human resources • Uncertainty of business communities (Indigenous and non-Indigenous) experience and capacity, which has not been verified or investigated in DFS. • Delays related to obtaining specific ministerial permits and authorisations (MELCCFP, Ministry of environment, fight against climate changes, wildlife and parks). • Unavailability of electrical power source required for pre-operational activities.
	Any identified material naturally occurring risks.	Identified naturally occurring material risks are: • Higher dilution than estimated. • Not achieving the stated throughput. • Not achieving the stated recovery. • Not achieving the planned start-up date. • Not finding the necessary qualified personnel for the operation.

		• Having to pay higher salaries than estimated.
	The status of material legal agreements and marketing arrangements.	Sayona will sell and LRC will buy a quantity of Lithium Concentrate produced from the Moblan property equal to 10% of Sayona's entitlement. • Pricing of the Lithium Concentrate will be determined using Fastmarkets Lithium Concentrate pricing using the following formula to adjust for grade and to provide a 5% discount to LRC. • Purchase price = (Lithium Concentrate Grade/0.06) x (Fastmarkets Lithium Concentrate Price x 0.95) Sayona will pay a Gross Revenue Royalty on all Ore that is processed and sold as concentrate from the Moblan Property. The Royalty payable will equal: • two and a half percent (2.5%) of Gross Revenue for annual ore throughout less than one (1) million tonnes per annum • will equal one and a half percent (1.5%) of Gross Revenue for annual ore throughout LOM from one (1) million tonnes per annum and more. The Royalty will run with the title to the Moblan Project, and any Transfer of the Project or any interest therein shall be subject to the Royalty.
	The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.	An ESIA is currently in progress. Due to its location within the Cree Nation territory, the approval process includes the active involvement of the Cree Nation Government and the Cree community of Mistissini. An application for a permit for the location of the co-disposal mine waste facility and the mill has been submitted to Québec's Ministry of Natural Resources and Forestry. Other permits, like construction and operation, water intake, water treatment, restoration plan, public land use, forest land intervention, and work in fish habitats are planned for 2024-2025. A conceptual closure plan considers an impermeable (geomembrane) cover on the co-disposal mine waste facility, flooding of the pits, and removal and cleanup of all facilities. A formal restoration plan will be submitted to Québec authorities in 2024. An application for a mining lease for the exploitation of the resource will be submitted to the Ministry of Natural Resources and Forestry after government approval has been obtained (ESIA). No agreement is currently signed for the construction and operation of the electric line providing main feed to the Moblan site. No agreement is currently signed for the construction and operation of the transfer of concentrate facilities from truck to train at Chibougamau.
Classification	The basis for the classification of the Ore Reserves into varying confidence categories.	Ore Reserves are classified in accordance with the JORC Code and with NI 43-101 Standard Mineral Reserve classification.
	Whether the result appropriately reflects the Competent Person's view of the deposit.	No Ore Reserves are classified as Proven Ore Reserves. Probable Ore Reserves are derived from Measured Resources and Indicated Resources and include dilution.

	The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).	Probable Ore Reserves derived from measured resources represent 15.0% of the total Ore Reserves. The Probable Ore Reserves classification appropriately reflects the view of the independent CP.
Audits or reviews	The results of any audits or reviews of Ore Reserves estimates.	No external audits or reviews have been undertaken on the Ore Reserves Estimate. Ore Reserves have been developed from Measured and Indicated mineral resources reported under JORC Code and NI 43-101 in March 2023. Independent CP for the Ore Reserves Estimate is: • Simon Boudreau, P.Eng., of InnovExplo Inc. The different key assumptions were reviewed, discussed, and decided with peers internally, with Primero, with AtkinsRéalis, and with Sayona representatives. The estimate has been prepared using accepted industry practices and completed in accordance with the JORC Code guidelines. It is suitable for preparing a public report documenting the Ore Reserves Estimate.
Discussion of relative accuracy/confidence	Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserves 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 reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.	The CP is of the opinion that the Ore Reserves Estimate for the Project appropriately considers modifying factors and has been estimated using industry best practices.
	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 accuracy of the Ore Reserves Estimate is mostly determined by the order of accuracy associated with the Mineral Resources model, metallurgical input, and long-term cost and revenue factors.
	Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserves	Factors that can affect the Ore Reserves Estimate are: • Dilution and recovery factors calculations. • Ore tonnage and grade modelling. • Unidentified geotechnical structures.

	viability, or for which there are remaining areas of uncertainty at the current study stage.	• Unidentified groundwater structures. • Commodity price and exchange rate assumptions. • Long-term OPEX costs, including power, G&A, escalation, and inflation. • Metallurgical recovery. The CP is not aware of any environmental, permitting, legal, title, taxation, socio-economic, marketing, or political factors that could materially influence the Ore Reserves other than modifying factors already described in this section of the report.
	It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	The Moblan Lithium Project is a greenfield project. No previous production data are available.