

International Lithium: PEA for the Raleigh Lake Lithium Project Outlines Highly Favourable After-Tax NPV of CAD\$342.9 million and After-Tax IRR of 44.3% P.A.

04.12.2023 | [Newsfile](#)

Vancouver, December 4, 2023 - [International Lithium Corp.](#) (TSXV: ILC) (OTCQB: ILHMF) (FSE: IAH) (the "Company" or "ILC") is pleased to announce a positive Preliminary Economic Assessment ("PEA") for a proposed lithium mining operation to produce spodumene concentrate at Raleigh Lake, 25 kilometres west of Ignace, Ontario. The PEA relies on recent metallurgical test work (Phase 1) which indicates that a spodumene concentrate containing 6% Li₂O ("SC6") can be produced using a simple crushing circuit and heavy liquid separation techniques. In the Phase 1 tests lithium recoveries were above 81% while iron oxide content remained within acceptable limits. As originally foreshadowed, the very near proximity of Raleigh Lake to existing service infrastructure along the Trans-Canada Highway corridor affords significant logistical and economic advantages to the project.

This PEA only considers spodumene concentrate, i.e. lithium, as a revenue source. The Company continues to investigate the potential value associated with the extraction of rubidium from the microcline zone within the spodumene deposit.

PEA Highlights

Economics (discounted at 8% p.a., CAD\$)

- Pre-tax Cashflow = CAD\$709.4 million, NPV = CAD\$385.1 million, IRR = 46.5% p.a.
- After-tax Cashflow = CAD\$634.0 million, NPV = CAD\$342.9 million, IRR = 44.3% p.a.
- Price assumptions: CAD\$3,139/tonne for 6% Li₂O concentrate (USD\$2,325/tonne)

CAPEX/OPEX

- Total pre-production capital costs: CAD\$111.9 million
- Total sustaining capital: CAD\$17.5 million
- Total life of mine ("LoM") operating costs: CAD\$381 million (including concentrate transport)
- Average operating costs: CAD\$94.38/tonne milled, CAD\$993/tonne SC6

Mining Method

- Traditional open pit drilling and blasting followed by load and haul
- The plant feed production rate is proposed to be 540,000 tonnes per year ("tpy")
- This LoM mine plan is proposed to mine 57 million tonnes ("Mt") of material over the mine life, which will be comprised of 4Mt of mill feed and 53Mt of waste with an average strip ratio of 13.2:1
- Life of mine is forecast at nine years; project duration is 11 years

Process Plant

- The base case process plant is designed to crush 1,500 tonnes per day ("tpd") and process 1,500 tpd in a dense media separation ("DMS") plant to produce a nominal 56,000 tpy of 6% Li₂O at 81% recovery
- Process engineering and design were developed to a scoping level based on the results of the SGS laboratory testing. The SGS lab tests obtained 22.9 weight percentages of 6% Lithium Concentrate and estimated 81% lithium recovery
- A design factor of 10% is applied on nominal requirements to ensure that the process equipment has enough capacity to take care of the expected feed variation
- Total production for LoM is 414,904 tonnes of 6% Li₂O spodumene concentrate ("SC6")

Raleigh Lake is 100% owned by ILC and there are no overriding royalties. The Company's vision for Raleigh Lake is a low-risk, low-impact, small-scale mining operation that can begin to provide critical minerals necessary to fulfil Canada's Critical Mineral Strategy in a shorter time frame than would be required for a much larger scale, longer duration and more remotely located project. Revenues from the mine production would continue to feed back into exploration work to expand ILC's drive to become a significant Critical Minerals supplier in North America.

Executive Comment

John Wisbey, Chairman and CEO of ILC commented:

"It is very pleasing for ILC to have delivered its first PEA at Raleigh Lake, Ontario with highly respectable numbers of CAD\$385.1 million pre-tax NPV and 46.5% IRR (post-tax CAD\$342.9 million and 44.3% IRR) despite the significant fall in the lithium price this year. This reflects, to a considerable extent, our good access to infrastructure at Raleigh Lake, which has a very beneficial effect on our projected costs. It should be noted that this PEA only relates to the 600 hectare Zone 1 out of our 48,500 hectares of claims at Raleigh Lake. It is also important to note that at this stage these numbers only relate to the lithium at Raleigh Lake and not to the separately declared rubidium resource. Given the high market price of rubidium, this leaves appreciable upside.

This year's fall in the lithium price has of course depressed these numbers versus what they would have been only a few months ago. For example, a major Canadian lithium company produced a feasibility report in August 2023, using a price assumption of USD\$ 4,699 (CAD\$6,109) per tonne for 6% spodumene concentrate. Had we applied this same number to the spreadsheet that ERM have used for ILC's PEA, our own NPV would have been CAD\$1,137 million pre-tax and CAD\$906 million post-tax. These numbers are more than 2.6 times the NPV numbers that we are now reporting. Of course, what this means is that, as for every mining company, there is a high level of operational gearing in our business. It is also very important that, when comparing different companies in the sector, investors and analysts compare like price assumptions with like.

The omission of rubidium from this initial PEA reflects the fact that we and our consultants need to do more work on the real size of the rubidium market. Our measured and indicated contained tonnes of rubidium at Raleigh Lake are 822 tonnes and the inferred 521 tonnes. The market price for >99% rubidium carbonate as at end November 2023 was USD\$ 1,159.38 per kg, meaning USD\$ 1.16 million per tonne. However, if world annual demand for rubidium is and remains much smaller than our resource there, our ability in future to sell at the rate we can produce would be affected, as could the market price."

PEA Summary

Environmental Resource Management ("ERM") was retained by [International Lithium Corp.](#) ("ILC" or the "Company") to prepare a Preliminary Economic Assessment ("PEA") in accordance with National Instrument 43-101 (NI 43-101) for the Raleigh Lake Project (the "Project") located near Ignace, Ontario, Canada.

The Raleigh Lake Project is roughly 25 kilometres west of Ignace and 235 kilometres west of Thunder Bay in the northwestern part of Ontario within the Kenora Mining District. It is adjacent to the Trans-Canada Highway (Hwy 17) with CN Rail, TC Energy natural gas pipeline and Hydro One 235kV power lines transcending the Property. It is owned 100% by International Lithium Canada Ltd., a 100% owned subsidiary of ILC. There are no royalties or other encumbrances on the Property.

ILC identified the opportunity at Raleigh Lake in 2016 but did not begin actively pursuing work on the project until 2021 when an initial test drilling campaign was conducted along with regional lithogeochemical sampling. In 2022 the Company completed sufficient drilling to define a maiden Mineral Resource Estimate ("MRE") with resources reported in the measured, indicated, and inferred categories (see below and Company press releases dated March 1 and April 13, 2023). Upon analyzing the MRE the Company embarked upon some initial metallurgical and economic studies that culminated in the results presented here. It is the Company's opinion that the results to date provide a good basis to pursue a mining operation at Raleigh Lake and such an operation can be considered low impact due to the existence of well-developed and utilized infrastructure and the path to environmental permitting and eventual production would be shorter

than if the project were to be more remotely located. The entire operation could be significantly more sustainable than remote operations and have direct economic benefits for the nearby and surrounding communities.

The proposed open pit mining operation would extract 57Mt of material over the mine life, which will be comprised of 4Mt of mill feed and 53Mt of waste with an average strip ratio of 13.2:1. The proposed PEA level mine plan is based around work at a proposed plant feed production rate of 540,000 tpy producing a total of 414,904 tonnes of SC6 concentrate over the mine life. The average mill feed grade is 0.70% Li₂O (Table 1).

Table 1: Summary of Base Case Cash Flow Modelling and Project Financial Analysis.

Parameter	Value	Unit
Project Schedule		
Overall project life	11	years
Mine life	9	years
Mining, Processing and Economic Parameters		
Total mill feed	4.4	Mt
Average mill feed grade	0.70	% Li ₂ O
Open pit mining rate	1,500	tpd
Process recovery	81.0	%
Total concentrate produced - 6% TG Li ₂ O	414,904	T
Commodity price - 6% TG Li ₂ O	\$2,325	USD/t
Exchange Rate	1.35	CAD/USD

A summary of the base case capital and operating costs calculated and used in the economic analysis exercise is shown in Table 2 below. Total costs are based on unit cost rates per tonne mill feed multiplied by the total tonnes of mill feed (4.37Mt).

Table 2: Summary of Base Case Capital and Operating Costs.

Parameter	Value	Unit
Unit Operating Costs -Production Phase		
Mining	CAD\$3.55	/t mined
Mining	CAD\$40.98	/t mill feed
Milling	CAD\$28.53	/t mill feed
G & A	CAD\$17.74	/t mill feed
Concentrate transportation	CAD\$7.13	/t mill feed
Total	CAD\$94.38	/t mill feed
Project Operating and Sustaining Capital Costs		
Total operating costs	CAD\$381.0	million
Total sustaining capital costs	CAD\$17.5	million
All operating and capital costs	CAD\$398.6	million

A summary of the base case revenues used in the economic analysis exercise is shown in Table 3 and a summary of the pre- and post-tax economic analysis results is shown in Table 4.

Table 3: Summary of Base Case Revenues.

Parameter	Value
Project Revenue, Profit and Pre/Post Tax Cash Flows	
Concentrate sales revenue	CAD\$1,302.3 million
Concentrate transportation costs	CAD\$31.1 million
Net operating revenue	CAD\$1,271.2 million
Operating and sustaining capital costs	CAD\$398.6 million
EBITDA	CAD\$872.6 million
Payable taxes	CAD\$75.5 million
Net profit after taxes (NPAT)	CAD\$797.1 million

Total pre-production capital costs CAD\$163.1 million

Table 4: Summary of Pre- and Post-tax Economic Analysis Results.

Parameter	Value	Unit
Economic Analysis Results		
Discount Rate	8.0	% p.a.
Pre-Tax Cashflow	\$709.5	CAD\$ million
Pre-Tax NPV	\$385.1	CAD\$ million
Pre-Tax IRR	46.5	% p.a.
Post-Tax Cashflow	\$634.0	CAD\$ million
Post-Tax NPV	\$342.9	CAD\$ million
Post-Tax IRR	44.3	% p.a.

Resource Estimate

The MRE for the Raleigh Lake project that the current PEA study was based on was produced by Nordmin Engineering Ltd. ("Nordmin"), based in Thunder Bay, Ontario, who prepared an independent lithium (spodumene-hosted) and rubidium (microcline-hosted) MRE for the Project and Technical Report, "NI 43-101 TECHNICAL REPORT AND MINERAL RESOURCE ESTIMATE FOR THE RALEIGH LAKE LITHIUM PROJECT, IGNACE, ONTARIO" (the "MRE Report") consistent with the standards and guidelines set out by the Canadian Institute of Mining, Metallurgy and Petroleum ("CIM") and in accordance with National Instrument 43-101 - Standards of Disclosure for Mineral Projects.

In preparation of the MRE and MRE Report, Nordmin applied processes that were appropriate for lithium pegmatite-style deposits. The Report is available on SEDAR. The effective date for the Report was April 13, 2023.

Detailed summaries of the MRE Report can be found in Company news releases dated March 1 and April 13, 2023. A tabulated listing of the MRE for both lithium in spodumene and rubidium in microcline is given in Table 5 and Table 6 respectively.

Table 5: Lithium Open Pit and Underground MRE.

Area	Resource Category	Mass (kt)	Grade		Contained
			Li (ppm)	Li ₂ O (%)	Li (t)
Open Pit	Measured	80	3,887	0.84%	313
	Indicated	2,021	2,919	0.63%	5,897
650ppm	Measured + Indicated	2,101	2,956	0.64%	6,210
Li Cut-off	Inferred	3,247	2,595	0.56%	8,427
Underground	Measured	3	2,560	0.55%	8
	Indicated	189	3,203	0.69%	606
2,000ppm	Measured + Indicated	192	3,192	0.69%	614
Li Cut-off	Inferred	655	3,162	0.68%	2,073
Total	Measured + Indicated	2,293	2,976	0.64%	6,824
	Inferred	3,902	2,691	0.58%	10,499

Refer to notes on Mineral Resources below.

Table 6: Rubidium Open Pit and Underground MRE.

Area	Resource Category	Mass (kt)	Grade		Contained
			Rb (ppm)	Rb ₂ O (%)	Rb (t)
Open Pit	Measured	5	5,412	0.59%	29
	Indicated	90	6,073	0.66%	547
4,000ppm	Measured + Indicated	95	6,036	0.66%	576
Rb Cut-off	Inferred	18	3,005	0.33%	53

Underground Measured	5	6,547	0.72%	35
Indicated	33	6,474	0.71%	211
4,000ppm Measured + Indicated	38	6,484	0.71%	246
Rb Cut-off Inferred	106	4,427	0.48%	468
Total Measured + Indicated	133	6,163	0.67%	822
Inferred	123	4,224	0.46%	521

Refer to notes on Mineral Resources below.

Notes on Mineral Resources

1. The MRE was prepared by Christian Ballard, P.Geo., of Nordmin, who is the Qualified Person ("QP") as defined by NI 43-101 and is independent of ILC.
2. Mineral Resources, which are not Mineral Reserves, do not have demonstrated economic viability. The above Inferred Mineral Resources are subject to potential upgrade to Indicated and Measured Mineral Resources with continued drilling. There is no guarantee that any part of the Mineral Resources discussed herein will be converted to another category or to a Mineral Reserve in the future. The estimate of Mineral Resources may be materially affected by environmental, permitting, legal, marketing, or other relevant issues.
3. The Mineral Resources in this report were estimated using the Canadian Institute of Mining, Metallurgy and Petroleum standards on Mineral Resources and reserves, definitions, and guidelines prepared by the CIM standing committee on reserve definitions and adopted by the CIM council (CIM 2014 and 2019).
4. The MRE is developed with data from diamond drill holes totaling 13,821 m.
5. The pit constrained mineral resources were defined using a parented block model, within an optimized pit shell with average pit slope angles of 45° in rock and 30° in overburden, a 9.8 strip ratio (waste material: mineralized material) and a revenue factor of 1.0. The pit optimization shells were created using Deswik.AdvOPM software.
6. The lithium resource pit optimization parameters include: 5.5% Li₂O spodumene concentrate; US\$1,800 Li₂O spodumene concentrate price; exchange rate of CAD\$1.30/USD\$1; concentrate transportation and offsite charges of CAD\$175/t, mining cost of CAD\$6/t, processing plus general and administration cost of CAD\$41/t; and a process recovery of 75%. Only lithium value was used to generate the resource optimized pit shell.
7. Underground constrained mineral resources were defined within 5 x 5 x 5 m minable shape optimization wireframes. The mineable shape optimization constraining wireframes were created using Deswik.SO software.
8. The lithium resource underground minable shape optimization parameters include: 5.5% Li₂O spodumene concentrate; US\$1,800 Li₂O spodumene concentrate price; exchange rate of CAD 1.30/USD 1; concentrate transportation and offsite charges of CAD\$175/t, mining cost of CAD\$80/t, processing plus general and administration cost of CAD\$50/t; and a process recovery of 75%.
9. The rubidium resource was constrained above market value due to the current limited world market. A 4,000 ppm rubidium cut-off grade was selected. The rubidium resource was excluded from (i.e. neither taken into account nor used as a credit for) the underground and open pit lithium resource.
10. A default density of 2.668 g/cm³ was used for the mineralized zones.
11. All figures are rounded to reflect the relative accuracy of the estimates; totals may not add correctly.
12. The effective date of the MRE was February 16, 2023. The effective date for the MRE Report was April 13, 2023, and is available on SEDAR.

Preliminary Economic Assessment

The Project:

- Is 100% owned by ILC and is not subject to any off-take agreements, partnerships, or royalties.
- Consists of 48,500 hectares (485 square kilometres) of adjoining mineral claims.
- Is located approximately 25 kilometres west of the Township of Ignace, Ontario.
- Distinguishes itself from other lithium projects in Canada by being very well situated near to major public infrastructure, including:
 - The Trans-Canada Highway, with direct access to Thunder Bay on Lake Superior, is less than six kilometers north of the Project;
 - The Canadian Pacific Railway, natural gas pipelines, and Hydro One power transmission lines (115 and 230 kV) are just a few kilometres from the Project.

Figure 1: Major public infrastructure relative to the Raleigh Lake project.

To view an enhanced version of this graphic, please visit:

https://images.newsfilecorp.com/files/3232/189765_6cc313dab4895b6e_003full.jpg

Mining Methods

The mining method selected for this project will use traditional open pit drilling and blasting followed by load and haul. The primary mining production will be executed using hydraulic excavators, front shovels, and/or wheel loaders as appropriate to the terrain and depending on the major production equipment available for the project. The material will be hauled from the bench to the crusher, ROM stockpiles or waste dump depending on the material type. Furthermore, ancillary equipment, such as bulldozers, graders, and a range of vehicles, is employed to perform functions related to maintenance, support, services, and utilities.

The proposed PEA level mine plan is based around work at a proposed plant feed production rate of 540,000 tpy.

This LoM mine plan is proposed to mine 57Mt of material over the mine life, which will be comprised of 4Mt of mill feed and 53Mt of waste with an average strip ratio of 13.2:1 (Table 7).

The open pit created for the Raleigh Lake deposit covers about 800 metres in length and 450 metres in width at the surface (Figure 2). The pit's lowest point extends to a depth of 330 metres above sea level, while the entrance to the pit is positioned at 475 metres above sea level. The pit incorporates two entrance ramps, with the first granting access to the southern section of the pit and the second facilitating entry to the northern part.

The approach selected for the storage of tailings generated at the concentrator and the waste rock from the mine will be co-disposal. This co-disposal method involves containing filtered tailings within designated waste rock cells. This approach offers the benefit of enhancing overall stockpile stability and the efficiency of water drainage. The primary goal is to guarantee long-term physical and geochemical stability.

Figure 2: General arrangement of the mine site layout for Raleigh Lake showing the final open pit (right) and co-disposal facility (left).

To view an enhanced version of this graphic, please visit:

https://images.newsfilecorp.com/files/3232/189765_6cc313dab4895b6e_004full.jpg

Table 7: Proposed mine production schedule for Raleigh Lake.

Project Year	-1	1	2	3	4	5	6	7	8	9
Mill Feed (tonnes)	54,037	324,183	539,881	540,107	539,899	539,895	540,305	539,713	540,312	208,7
Measured (tonnes)	0	0	5,566	0	6,338	27,854	0	8,927	23,584	2,725
Indicated (tonnes)	20,659	112,928	365,731	298,367	265,030	250,939	41,048	152,832	278,257	115,9
Inferred (tonnes)	33,378	211,254	168,584	241,741	268,531	261,103	499,257	377,954	238,471	90,00
Grade Li ₂ O (%)	0.67	0.67	0.71	0.94	0.83	0.79	0.49	0.54	0.68	0.65
Measured (Li ₂ O%)	0.00	0.00	0.30	0.00	0.63	1.19	0.00	1.13	0.78	0.66
Indicated (Li ₂ O%)	0.47	0.51	0.70	0.93	0.67	0.75	0.47	0.63	0.67	0.58
Inferred (Li ₂ O%)	0.79	0.75	0.75	0.94	0.99	0.79	0.49	0.48	0.68	0.75
Waste (tonnes)	7,572,425	8,641,731	8,930,422	9,147,177	8,855,024	4,651,476	2,979,449	1,530,607	864,285	509,6
Concentrate (tonnes)	0	34,194	51,828	68,321	60,532	57,726	35,668	38,988	49,323	18,32

Mineral Processing

The Raleigh Lake Orebody contains two metallurgical domains, the lithium spodumene domain and the rubidium microcline domain. These two separate domains represent zones in the Raleigh Lake orebody that require customized process flowsheets to be developed for each zone. For the lithium domain, the objective

is the recovery of spodumene to 6% Li₂O concentrate grade, while the rubidium bearing microcline domain objective is to develop a flowsheet for extraction of the rubidium from the microcline.

The current focus was to perform mineralogy and mineral processing testing to develop the flowsheet for the lithium zone (Li-Head) and do a literature review to begin to investigate the flowsheet development of the rubidium zone (Rb Head). Samples of the lithium and rubidium domains were sent to SGS Canada in August of 2023, to perform phase one mineralogy tests with follow-up mineral processing testing and literature review. The Li Head and Rb Head were collected from the Raleigh Lake Deposit and were received by the SGS Lakefield Canada Advanced Mineralogy Facility for mineralogy. Mineralogy was conducted to determine liberation, mineral assemblages which would help to support and guide the metallurgical test work.

The lithium Li head sample assayed 1.59% Li₂O and 0.56% Fe₂O₃, while the rubidium head sample graded 6,580 g/t Rb (equivalent to 0.72% Rb₂O) with 0.12% Li₂O and 0.24% Fe₂O₃.

The main objective of the phase one scoping level mineral processing test investigation was to provide a preliminary indication of the lithium beneficiation of the Li head by heavy liquid separation (HLS).

The metallurgical target was the preparation of spodumene concentrate grading >6.0% Li₂O while maximizing lithium recovery.

The pegmatite Li Head sample was initially stage-crushed to 100% passing 12.7 mm, homogenized, and split into 10 kg test charges. One of the 10 kg charges was sub-sampled 500 g for head assays and the remaining was screened at 16 mesh to remove the -1 mm fraction for mineralogy.

From the 10kg charges, the minus 12.7 mm +1 mm fraction was further screened at 1/4" (6.3 mm) to generate two fractions of -12.7 mm +6.3 mm and -6.3 mm +1 mm. The two coarse fractions, -12.7 mm +6.3 mm and -6.3 mm +1 mm, were submitted for Heavy Liquid Separation (HLS) testing.

The HLS testing results at SG 2.85, 6.0% Li₂O concentrate grade of 14.9 weight % with global lithium recovery of 53.0% was obtained in the fraction of -12.7 mm/+6.3 mm.

The HLS Testing results interpolated to SG 2.83, a 6.0% Li₂O concentrate grade of 8.0 wt% with a global lithium recovery of 28.5 % was obtained in the -6.3 mm/+1 mm fraction.

Combining the 6% Li₂O concentrates from the two fractions of -12.7 mm/+6.3 mm and 6.3 mm/+1 mm (highlighted in cyan in Table 8) generated a combined global lithium recovery of 81.5%.

Above a tailings SG-cut point of 2.70, the HLS middling from each sample contained between 1.27 - 1.69% Li₂O with 2.3 - 8.2% of the global lithium distribution. Therefore, the HLS middling can potentially be stage crushed then mixed with the minus 1 mm fines fraction to produce a flotation feed (or gravity feed) grading 1.19 % Li₂O and 0.59% Fe₂O₃.

The combined HLS middling and fines fraction contained 16.2% of the lithium distribution graded 1.19% Li₂O. This is potential feed for a roll crusher and screening, for flotation feed, or a ultrafines DMS gravity circuit to increase the lithium recovery.

The grade of iron in the spodumene concentrate was ~1% Fe₂O₃, which is acceptable, however, this would likely be reduced by treating the concentrate by magnetic separation.

Table 8: Summary of HLS Global Mass Balance (Interpolated @ 6.0% Li₂O).

To view an enhanced version of this graphic, please visit:
https://images.newsfilecorp.com/files/3232/189765_table8.jpg

Recovery Methods

The lithium zone flowsheet development test work showed a viable flowsheet to crush to minus 12.7 mm and screen at 1 mm, followed by screening again at 6.3 mm to make two streams (-12.7 mm plus 6.3 mm and -6.3 mm plus 1mm) for HLS (plant DMS). The minus 1 mm fines and HLS middlings (DMS plant middlings) would be stored for future processing and recovery of additional lithium, and other minerals of interest. HLS floats (DMS floats) may also be considered for road construction projects. The flowsheets developed for Project are shown in Figure 3.

The base case process plant is designed to crush 1,500tpd and process 1,500tpd in a DMS plant to produce a nominal 56,000 tpy of 6% Li₂O at 81% recovery.

Engineering and design were developed to a scoping level based on the results of the SGS laboratory testing. The SGS lab tests obtained 22.9 weight percentages of 6% Lithium Concentrate and estimated 81% lithium recovery.

A design factor of 10 % is applied on nominal requirements to ensure that the process equipment has enough capacity to take care of the expected feed variation.

Environmental

The preliminary analysis of the Project indicates it will be subject to multiple Class Environmental Assessments under the Ontario provincial Environmental Assessment Act. The Project is not anticipated to trigger a federal impact assessment under the Impact Assessment Act. Several other permits, approvals or authorizations will be required to continue Project development beyond early exploration, including advanced exploration through closure.

At the time of filing, environmental and socio-economic studies have not been initiated for the Project though will be necessary to support and inform environmental assessment(s) and permitting applications. These studies are required to characterize the existing environmental setting of the Project and to inform design and/or process considerations.

Figure 3: Crushing area flowsheet (A) and DMS area flowsheet (B) for the Raleigh Lake project.

To view an enhanced version of this graphic, please visit:
https://images.newsfilecorp.com/files/3232/189765_intlithium.jpg

Once Project approvals are secured, ILC will be required to comply with any terms and conditions associated with Project-specific authorizations issued by provincial or federal authorities, as well as relevant environmental law and regulation.

First Nation's and Metis communities are situated near the Raleigh Lake property and consider the area part of their traditional territory. ILC has identified Indigenous groups that may have an interest in the Project and has initiated engagement. The lands and community of the Wabigoon Lake Ojibway Nation (WLON) are the closest to the Project, WLON has been the foremost community for communication and involvement by Company representatives.

Capital Costs

The Raleigh Lake Preliminary Economic Analysis Study (PEA) involves the development of an open pit mine, the construction of on-site processing facilities and all infrastructure required to support those activities.

The capital cost estimate for the Raleigh Lake has been prepared to an accuracy of + 30% / - 20% based on a 10% to 40% engineering completion ratio to conform with the requirements for an American Association of Cost Engineers (AACE) Class 3 Estimate.

All capital cost estimates are based on Q4 2023 Canadian Dollars (CAD\$) and an assumed US to Canadian Dollar ratio of \$1 USD = \$1.35 CAD.

Total pre-production capital costs will be CAD \$111.9 million as shown in Table 9, which include capitalized operating costs incurred before the open pit mine moves into the production phase.

Table 9: Pre-production Capital Costs.

Cost Centre Description	Cost (CAD\$ million)
Direct CAPEX Costs	
1000 Open Pit Mining	18.2
3000 Mineral Processing	38.5
4000 Power, Electrical and Instrumentation	3.8
5000 Site Infrastructure and Support Services	11.5
6000 Water Management Systems	2.0
7000 Tailings and Mine Waste Management Facilities	1.8
Total Direct CAPEX Costs	75.8
Owner and Indirect CAPEX Cost Summary	
8000 Reclamation and Closure	10.0
9000 Indirect and Owner Costs	18.6
Total Indirect CAPEX Costs	28.6
9600 Contingency	7.6
Total Pre-Production CAPEX Costs	111.9

Total sustaining capital costs over the mine production phase will be CAD\$17.5 million (Table 10).

Table 10: Total Sustaining Capital Costs (SUSEX).

Cost Centre Description	Cost (CAD\$ million)
Direct SUSEX Costs	
1000 Open Pit Mining	9.1
6000 Water Management Systems	0.2
7000 Tailings and Mine Waste Management Facilities	3.8
Total Direct SUSEX Costs	13.0
Owner and Indirect SUSEX Cost Summary	
9000 Indirect and Owner Costs	3.2
Total Indirect Costs	3.2
9600 Contingency	1.3
Total SUSEX	17.5

Operating Costs

The operating cost estimate (Table 11) is based on the total amount of labour, materials and consumables that will be required to fully execute the mining and processing plans as described above.

The total operating costs incurred over the life of the project are based on sufficient mill feed material being available to begin processing plant operations in Year 1 of the overall project schedule, which will include the processing of 54,037 tonnes of mill feed stockpiled in Year -1 of the pre-production schedule.

Total operating costs for the operation will primarily be those for mining and processing.

The total LoM operating cost is estimated to be CAD \$412.1 million.

The total LoM operating cost of mining is estimated to be CAD \$179 million.

The total LoM operating cost of processing is estimated to be CAD \$124.6 million.

The total LoM operating cost of G&A is estimated to be CAD \$77.5 million.

The total LoM operating cost of concentrate transport is estimated to be CAD \$31 million.

Road Transportation Costs

Road transportation costs incurred over the production life of the project assume that the final technical grade concentrate would be transported by truck to a conversion plant located in Winnipeg or Thunder Bay.

A total cost of CAD\$75 per tonne of concentrate was assumed based on a conservative truck haulage cost of CAD\$60 per tonne and total loading/unloading costs of CAD\$15 per tonne of concentrate produced, or CAD\$7.13 per tonne of mill feed for a total LoM cost of CAD\$31.1 million.

Table 11: Unit Operating and Overall Project Costs.

Parameter	Value	Unit
Unit Operating Costs - Production Phase		
Mining	CAD\$3.55	/t mined
Mining including Waste (Strip Ratio = 13.2:1)	CAD\$40.98	/t mill feed
Milling	CAD\$28.53	/t mill feed
G & A	CAD\$17.74	/t mill feed
Concentrate transportation	CAD\$7.13	/t mill feed
Total	CAD\$94.38	/t mill feed
Overall Project Costs		
Total Mining Cost*	CAD\$179 million	
Total Milling Costs	CAD\$124.6 million	
Total G&A Costs	CAD\$77.5 million	
Total Concentrate Transport Costs	CAD\$31 million	
Total Operating Costs	CAD\$412.1 million	

* Does not include capitalized waste mining pre-production

Project Economics

The economic analysis of the Raleigh Lake project is based on cost models prepared for each major component of the overall project, which includes an open pit mine, crushing and processing plants, supporting surface infrastructure and a waste rock / tailings co-disposal facility.

The assumed technical grade 6% spodumene concentrate product and cost calculations are all expressed in Canadian dollars unless otherwise noted, with an exchange rate of 1.35 CAD/USD being used for currency conversions.

The calculated internal rate of return (IRR) of the project does not include potential external financing costs and assumes that all required funding will be equity based. The net present value (NPV) calculations assumed a discounting rate of 8% p.a.

The discounted cash flow model includes revenues, costs, taxes, and other known factors directly related to

the project but excludes indirect factors such as financing costs, sunk costs, and corporate obligations.

The results of the economic analysis yielded a post-tax NPV of CAD\$342.9 million, an IRR of 44.3% p.a. and a payback period of 4 years after construction begins or 2 years after the start of the production phase of the project.

About International [Lithium Corp.](#)

[International Lithium Corp.](#) believes that the world faces a significant turning point in the energy market's dependence on oil and gas and in the governmental and public view of climate change. In addition, we have seen the clear and increasingly urgent wish by the USA and Canada to safeguard their supplies of critical battery metals and to become more self-sufficient. Our Canadian projects are strategic in that respect.

Our key mission in the next decade is to make money for our shareholders from lithium and rare metals while at the same time helping to create a greener, cleaner planet and less polluted cities. This includes optimizing the value of our existing projects in Canada and Ireland as well as finding, exploring and developing projects that have the potential to become world class lithium and rare metal deposits. We have announced separately that we regard Zimbabwe as an important strategic target market for ILC, and we hope to be able to make announcements over the next few weeks and months.

A key goal has been to become a well-funded company to turn our aspirations into reality, and following the disposal of the Mariana project in Argentina in 2021 and the Mavis Lake project in Canada in January 2022, the Board of the Company considers that ILC is now well placed in that respect with a strong net cash position.

The Company's interests in various projects now consists of the following, and in addition the Company continues to seek other opportunities:

Name	Location	Area (Hectares)	Current Ownership Percentage	Future Ownership percentage if op
Raleigh Lake	Ontario	48,500	100%	100%
Wolf Ridge	Ontario	5,700	0%	100%
Avalonia	Ireland	29,200	45%	21%
Mavis Lake	Ontario	2,600	0%	0%
Forgan Lake & Lucky Lake	Ontario	< 500	0%	(carries an extra earn-in payment c 1.5% Net Smelter Royalty

The Company's primary strategic focus at this point is on the Raleigh Lake Project's lithium and rubidium project in Canada and on identifying additional properties in Canada and Zimbabwe.

The Raleigh Lake Project consists of 48,500 hectares (485 square kilometres) of mineral claims in Ontario and is ILC's most significant project in Canada. Drilling has so far been on less than 1,000 hectares of our claims. The exploration results there so far, which are on only about 8% of ILC's current claims, have shown significant quantities of rubidium and caesium in the pegmatite as well as lithium. Raleigh Lake is 100% owned by ILC, is not subject to any encumbrances, and is royalty free.

With the increasing demand for high tech rechargeable batteries used in electric vehicles and electrical storage as well as portable electronics, lithium has been designated "the new oil", and is a key part of a green energy sustainable economy. By positioning itself with projects with significant resource potential and with solid strategic partners, ILC aims to be one of the lithium and rare metals resource developers of choice for investors and to continue to build value for its shareholders in the '20s, the decade of battery metals.

Patrick McLaughlin, P. Geo., and Garth Liukko P.Eng., are Qualified Persons as defined by NI 43-101 and have verified the disclosed technical information and have reviewed and approved the contents of this news release.

On behalf of the Company,

John Wisbey
Chairman and CEO

www.internationallithium.ca

For further information concerning this news release please contact +1 604-449-6520.

Neither TSX Venture Exchange nor its Regulation Services Provider (as that term is defined in the policies of the TSX Venture Exchange) accepts responsibility for the adequacy or accuracy of this release.

Cautionary Statement Regarding Forward-Looking Information

Except for statements of historical fact, this news release or other releases contain certain "forward-looking information" within the meaning of applicable securities law. Forward-looking information or forward-looking statements in this or other news releases may include: the effect of results of anticipated production rates, the timing and/or anticipated results of drilling on the Raleigh Lake or Wolf Ridge or Avalonia projects, the expectation of resource estimates, preliminary economic assessments, feasibility studies, lithium or rubidium or caesium recoveries, modeling of capital and operating costs, results of studies utilizing various technologies at the company's projects, budgeted expenditures and planned exploration work on the Company's projects, increased value of shareholder investments, and assumptions about ethical behaviour by our joint venture partners or third party operators of projects. Such forward-looking information is based on assumptions and subject to a variety of risks and uncertainties, including but not limited to those discussed in the sections entitled "Risks" and "Forward-Looking Statements" in the interim and annual Management's Discussion and Analysis which are available at www.sedar.com. While management believes that the assumptions made are reasonable, there can be no assurance that forward-looking statements will prove to be accurate. Should one or more of the risks, uncertainties or other factors materialize, or should underlying assumptions prove incorrect, actual results may vary materially from those described in forward-looking information. Forward-looking information herein, and all subsequent written and oral forward-looking information are based on expectations, estimates and opinions of management on the dates they are made that, while considered reasonable by the Company as of the time of such statements, are subject to significant business, economic, legislative, and competitive uncertainties and contingencies. These estimates and assumptions may prove to be incorrect and are expressly qualified in their entirety by this cautionary statement. Except as required by law, the Company assumes no obligation to update forward-looking information should circumstances or management's estimates or opinions change.

Dieser Artikel stammt von GoldSeiten.de

Die URL für diesen Artikel lautet:

<https://www.goldseiten.de/artikel/602129--International-Lithium--PEA-for-the-Raleigh-Lake-Lithium-Project-Outlines-Highly-Favourable-After-Tax-NPV-of-CAD>

Für den Inhalt des Beitrages ist allein der Autor verantwortlich bzw. die aufgeführte Quelle. Bild- oder Filmrechte liegen beim Autor/Quelle bzw. bei der vom ihm benannten Quelle. Bei Übersetzungen können Fehler nicht ausgeschlossen werden. Der vertretene Standpunkt eines Autors spiegelt generell nicht die Meinung des Webseiten-Betreibers wieder. Mittels der Veröffentlichung will dieser lediglich ein pluralistisches Meinungsbild darstellen. Direkte oder indirekte Aussagen in einem Beitrag stellen keinerlei Aufforderung zum Kauf-/Verkauf von Wertpapieren dar. Wir wehren uns gegen jede Form von Hass, Diskriminierung und Verletzung der Menschenwürde. Beachten Sie bitte auch unsere [AGB/Disclaimer!](#)

Die Reproduktion, Modifikation oder Verwendung der Inhalte ganz oder teilweise ohne schriftliche Genehmigung ist untersagt!
Alle Angaben ohne Gewähr! Copyright © by GoldSeiten.de 1999-2025. Es gelten unsere [AGB](#) und [Datenschutzrichtlinien](#).