

11 March 2025

ASX: LPM

## EXPLORATION AND LEI DEPOSIT DEVELOPMENT ADVANCEMENT UPDATE BYNOE LITHIUM PROJECT

Lithium Plus Minerals Limited (ASX: LPM) (**Lithium Plus** or the **Company**) is pleased to provide an update on exploration and development activities at its 100%-owned Bynoe Lithium Project (the **Project**). The Project hosts the high-grade Lei Deposit, which boasts a Mineral Resource Estimate (**MRE**) of **4.09 million tonnes at 1.43% Li<sub>2</sub>O**, ranking it among Australia's top lithium deposits. Strategically located near Darwin in the Northern Territory, the Project is just 71.5 kilometres by road from a major deep-water port, offering significant logistical advantages.

### Advancement Highlights

Lithium Plus continues to efficiently and cost-effectively advance the Bynoe Lithium Project towards development ahead of an anticipated recovery in the lithium market. Several critical milestones have been achieved in the economic assessment of an underground mine at the Lei Deposit and a Direct Shipping Ore (**DSO**) development pathway:

- + Ore sorting trials delivered **2.52% Li<sub>2</sub>O** head-grade (51% uplift) at 57.8% mass yield for 87% lithia recovery enabling the reduction of approximately **42%** of low grade (<0.5% Li<sub>2</sub>O) ore into a waste stream, significantly enhancing the economics of the DSO operation.
- + Metallurgical test work achieved **85.3%** recovery to a concentrate grading **6.12% Li<sub>2</sub>O** from DMS plus fines and middlings flotation (high-grade sample), with further optimisation opportunities under evaluation.
- + Preliminary mine and surface infrastructure design now complete.
- + Initial haulage route assessment completed, with detailed Traffic Impact Assessment (**TIA**) studies underway.
- + Preliminary water management studies conducted (including the installation of five water monitoring bores) with advanced-stage modelling set to commence alongside standard environment impact assessments. This forms part of a required Supplementary Environmental Report (**SER**) process.
- + Non-binding Memorandum of Understanding (**MoU**) signed with Canmax for a spodumene offtake agreement, designed to:
  - Provide exposure to lithium hydroxide/carbonate processing margins.
  - Open avenues for potentially non-dilutive development financing.
- + Mineral Lease Application (**MLA**) 33874 lodged and under assessment.
- + Full planning and permitting for production readiness remains a key priority for CY2025.
- + Parallel assessment of gold potential at Wingate and other tenements is underway.

**Commenting on Lei Deposit development progress, Executive Chairman, Dr Bin Guo, said:**

*"Our priority this year remains firmly on advancing the Lei Deposit toward future development, strongly focused on securing all necessary permits.*

*We have been busy conducting an economic evaluation of an underground mine and direct shipping ore pathway for the Lei Deposit, which is well advanced. This approach potentially offers low upfront capital requirements, minimal environmental impact - with no on-site tailings and waste rock - and a straightforward pathway to permitting and mine construction. By executing this work efficiently and cost-effectively, we are laying the groundwork for rapid implementation once the lithium market recovers.*

*With the mining lease application and environmental referral now under assessment and well progressed, we have also turned our attention to evaluating the broader prospectivity of the Bynoe region, through the lens of last year's drilling results. We firmly believe that the Lei Deposit is just the first of many lithium discoveries waiting to be uncovered across our highly prospective pegmatite fields.*

*Beyond lithium, we have also been assessing the gold potential of the Wingate Project, our work is well advanced, and we look forward to sharing our findings soon."*

## LEI LITHIUM PROJECT DEVELOPMENT

Lithium Plus Minerals is advancing the development of an underground mine located 71.5 km from Darwin Port by road on the Cox Peninsula, Northern Territory. The current planned operation is a DSO project, where ore will be crushed and screened on-site, before being transported to Darwin Port for processing into lithium hydroxide or carbonate at Canmax's facility in China.

## MINERAL RESOURCES

The MRE summary for the Lei Deposit is outlined in Table 1. Resources have been estimated as 4.09Mt at 1.43% Li<sub>2</sub>O at 0.5% cutoff including Indicated and Inferred material. No measured material has been classified at this time (refer ASX announcement of 19 December 2023).

Table 1: Mineral Resource Summary (at 0.5% Li<sub>2</sub>O cutoff)

Resource Category	Million Tonnes	Li <sub>2</sub> O (%)	Contained Li <sub>2</sub> O (Kt)
Indicated	0.42	1.22	5
Inferred	3.67	1.45	53
<b>Total</b>	<b>4.09</b>	<b>1.43</b>	<b>58</b>

Note: All Mineral Resource Estimates are inclusive of drilling undertaken throughout 2022 and 2023.

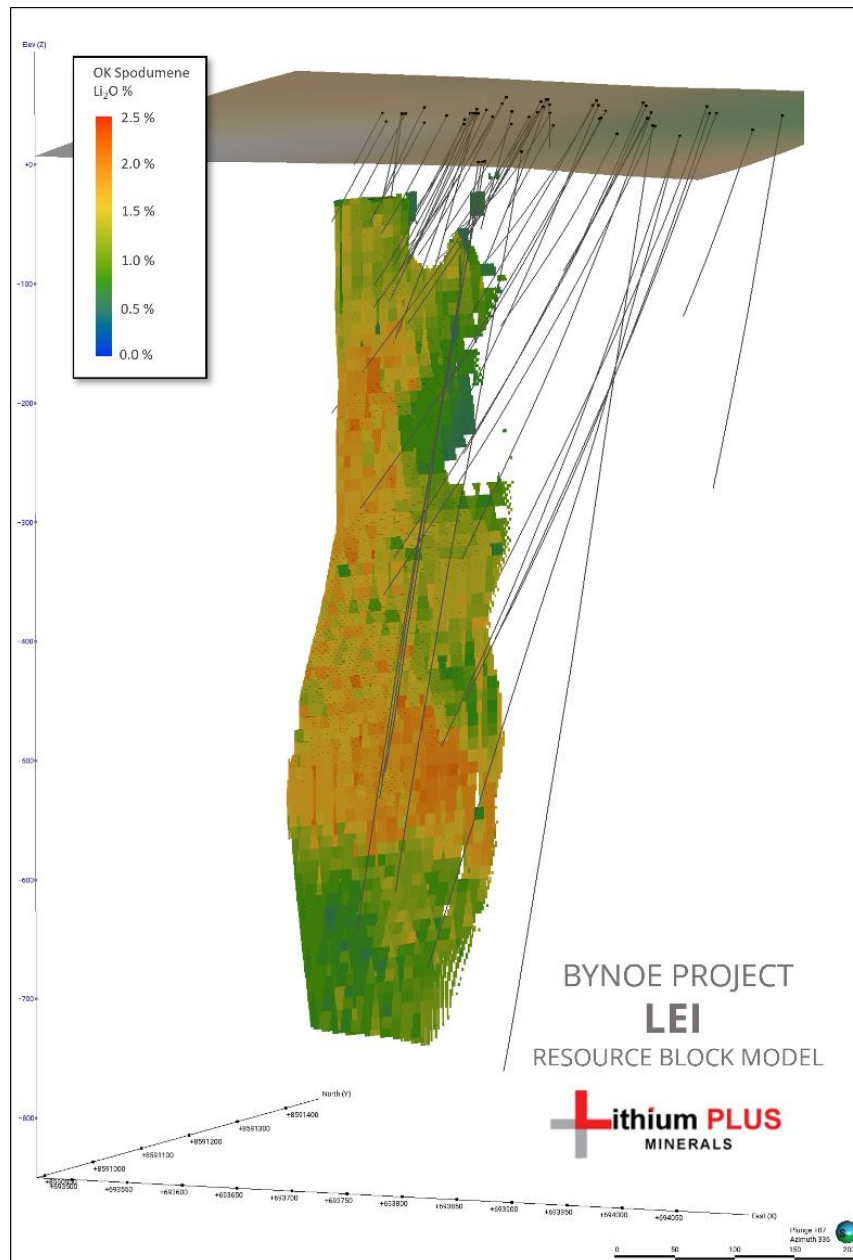


Figure 1: Lithium Grade ( $\text{Li}_2\text{O}\%$ ) distribution across the Lei Resource

## AGREEMENT WITH CANMAX

In June 2004, Lithium Plus entered into a non-binding MoU with Canmax Technologies Co., Ltd (XSHE: 300390) regarding a spodumene offtake agreement (refer to ASX announcement dated 5 June 2024).

The MoU covers 50% of all DSO and spodumene concentrate produced from the Lei Project, with an option for Canmax to purchase additional product, subject to availability. Pricing will be determined based on a percentage of operation profit from lithium hydroxide/carbonate sales, factoring in mining, transportation, and processing costs at Lei.

Initial production will focus on DSO (Stage 1), with potential for spodumene concentrate (Stage 2) in the future. Processing of Lei ore at Canmax's facility is expected to achieve high recovery rates compared to equivalent feedstock.

Additionally, Canmax has agreed to support project financing arrangements for the Lei Project. The profit-sharing structure enables Lithium Plus to economically benefit from Canmax's downstream lithium processing capabilities providing early cash flows while avoiding the substantial capital expenditure required for a downstream lithium processing facility (refer to LPM ASX announcement dated 5 June 2024).

## ORE SORTING

As part of its economic assessment, Lithium Plus engaged global ore sorting technology specialists Stark Resources GmbH to conduct initial ore sorting trials on ore from the Lei Deposit.

The trials delivered positive results, achieving a **2.52% Li<sub>2</sub>O head grade** (a 51% uplift) at a **57.8% mass yield**, with exceptionally low **<0.23% Fe<sub>2</sub>O<sub>3</sub> content**. The process effectively reduces approximately **42% of the ore** into a waste stream containing just **0.5% Li<sub>2</sub>O** whilst recovering over 87% lithia.

These results underscore the strong potential for improved economic outcomes in a planned DSO commercialisation pathway.

## METALLURGY

Lei deposit ore (primary coarse spodumene) has demonstrated high amenability to beneficiation through multiple processing routes:

- + Whole-of-ore flotation test: 79.5% recovery to a concentrate grading 6.05% Li<sub>2</sub>O.
- + DMS plus fines and middlings flotation (high-grade sample): **85.3%** recovery to a concentrate grading **6.12% Li<sub>2</sub>O**.

## MINE AND SURFACE INFRASTRUCTURE DESIGN

The proposed **Stage 1 DSO development** at Lei includes:

- + An underground mine with covered box cut and portal entry,
- + Crushing and screening facilities, and
- + A road train loading area for ore transport to Darwin Port.

The mined spodumene ore is expected to be exported to China for processing at **Canmax's conversion plant**, producing lithium hydroxide for global battery manufacturers.

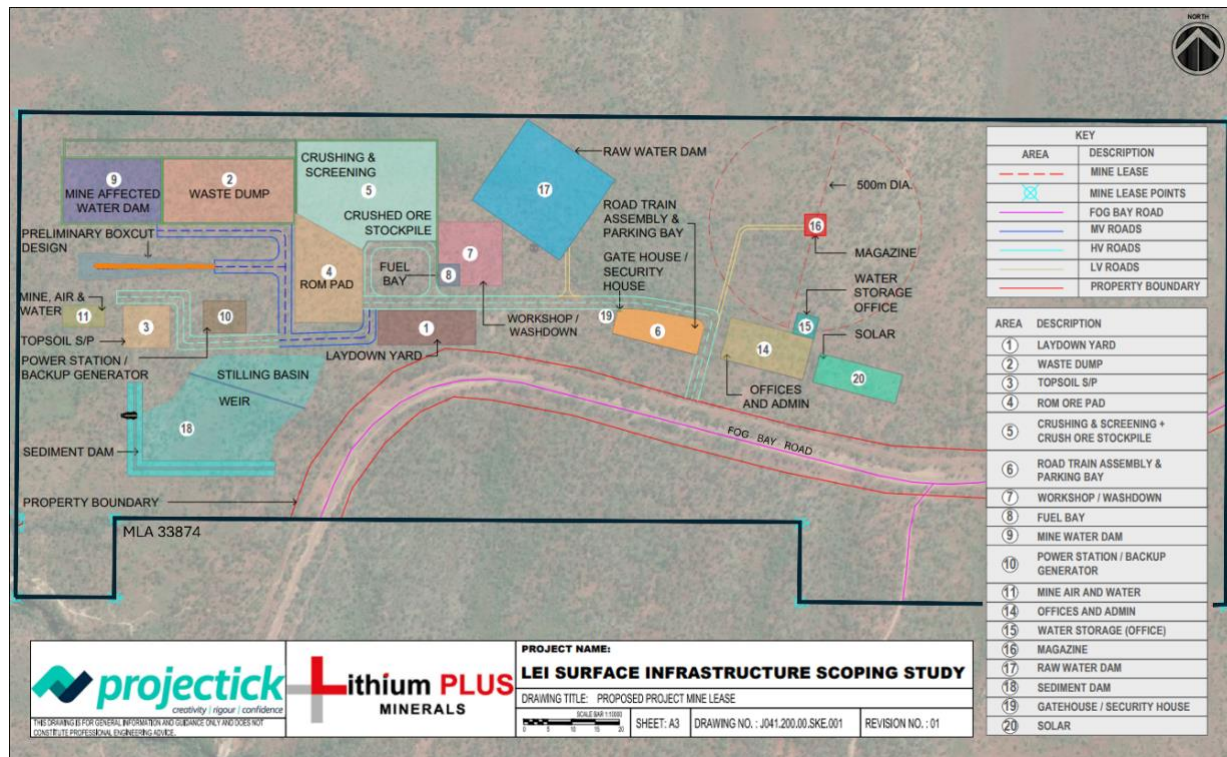


Figure 2: Image of surface infrastructure

## MINING LEASE APPLICATION

The Mining Lease application covers 295 hectares, including the existing Lei MRE. The application area extends to highly prospective zones of lithium mineralisation adjacent to the deposit, including a second pegmatite at Lei yet to be incorporated into the MRE.

## ENVIRONMENTAL REFERRAL

The Environmental Referral has been prepared by EcOz Environmental Consultants on behalf of Lithium Plus and submitted in October 2024.

A positive notice of decision and statement of reasons have been received from the Northern Territory Government's Department of Lands, Planning, and Environment, confirming the pathway for environmental approval through SER. Supplementary studies are underway to support the SER submission.

## LIANA PROSPECT

### RC DRILLING

A four (4) hole, 600m RC drilling programme was completed at the Liana Prospect late last year, immediately prior to the onset of the wet season. This first drilling campaign by Lithium Plus at the prospect aimed to test the shallow strike length of a poorly outcropping quartz-muscovite-kaolinite pegmatite body.

- + Significant pegmatite intervals up to 20m thick (including both weathered and fresh material) were intersected downhole beneath historical tin workings



- + Two of the holes require follow-up, deeper RC and/or diamond tail drilling to fully intersect the pegmatite fully. These holes were suspended due to deteriorating drill pad conditions.
- + Assay results from two sampled holes returned no significant spodumene or lithium grades above 0.2% Li<sub>2</sub>O. The remaining holes will test for deeper spodumene-bearing pegmatite when conditions allow.

Table 2: Lithium Plus Minerals 2024 Liana drill hole locations

Hole ID	Collar Co-ordinates GDA94 MGA Zone 52		Survey Data				Pegmatite interval		
	Easting	Northing	RL (m)	Azi (°)	Dip (°)	Depth (m)	From	To	Interval (m)
BYLIRC001	694054	8587751	24	295	-70	176	141	143	2.0
							148	162	14.0
BYLIRC002	694011	8587632	25	295	-60	167	Diamond pre-collar		
BYLIRC003	694040	8587673	25	295	-60	120	72.0	92.0	20.0
BYLIRC004	694046	8587671	24	116	-80	146	Diamond pre-collar		

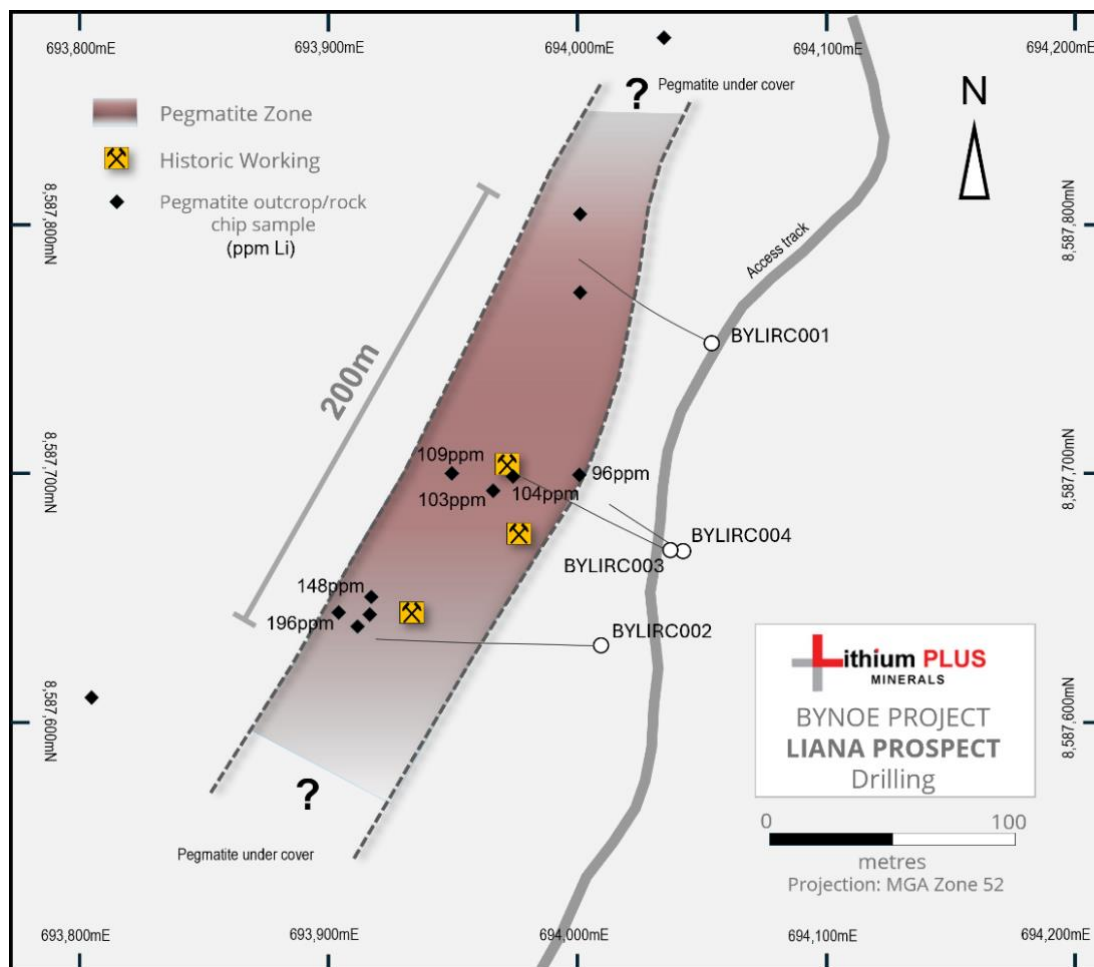


Figure 3: Liana Prospect Geology and Exploration

## TARGET GENERATION

Lithium Plus conducted systematic soil geochemistry surveys and reconnaissance mapping between the Lei and Liana deposits within EL 31091.

Several discrete anomalous zones have been identified, warranting follow-up drilling in CY2025.

Reconnaissance mapping has identified several discrete anomalous geochemical zones, with exposures of highly weathered clay-quartz (smectite-kaolinite) saprolite pegmatite in historical artisanal workings, and exploration costeans. These zones often exhibit surficial residual 'scattered' pegmatite float, comprising resistant quartz and mica, found proximal to the workings.

Further exploration of these drill-ready pegmatite targets will be prioritised and integrated into the CY2025 field season exploration planning at Liana and Lei.

## NEXT STEPS

- + Advancing production readiness for the Lei Lithium Project development.
- + Planning drilling at the Perseverance Prospect, targeting the recently interpreted fresh pegmatites at depth.
- + Shallow RAB drill testing of geochemical targets to define additional prospects.
- + Further soil geochemistry at the Kings Landing Area to prioritise targets, refine existing anomalies, and expand untested areas.

## References:

1. ASX LPM Announcement 20/12/2024, Exploration Update.
2. ASX LPM Announcement 27/11/2024, Reverse Circulation Drilling Programme to commence at Liana.
3. ASX LPM Announcement 16/10/2024, Excellent Outcomes from Metallurgical Test Work on Lei Deposit Ore.
4. ASX LPM Announcement 13/09/2024, Positive Ore Sorting Trial results on Lei Deposit Ore.
5. ASX LPM Announcement 17/06/2024, Mining Lease Application lodged for Lei Lithium Deposit.
6. ASX LPM Announcement 05/06/2024, MOU executed with Canmax for Spodumene offtake from Lei Project.
7. ASX LPM Announcement 19/12/2023, Maiden High-Grade Lithium Resource declared at Lei.
8. ASX CXO Announcement 11/04/2024, Finniss Mineral Resource Increased by 58%.

## About Lithium Plus Minerals

### Bynoe Lithium Project

Situated on the Cox Peninsula, 45 km south of Darwin, on the northern end of the Litchfield Pegmatite Belt, Lithium Plus Minerals Ltd have a large tenement holding hold eleven (11) granted tenements covering 297 km<sup>2</sup>. Geologically centred around the Bynoe Pegmatite Field, the tenements share a border with Core Lithium's Ltd (ASX: CXO) Finniss mine development. Lithium Plus Minerals are currently developing plans quickly for the Lei deposit. A maiden JORC Mineral Resource of 4.09 Mt @ 1.43% Li<sub>2</sub>O was announced on 19 December 2023 "Maiden High-Grade Lithium Resource declared at Lei"<sup>2</sup>.

In June 2024, the company applied for a Mining Lease over Lei and announced entering a non-binding MOU with Canmax for 50% offtake of spodumene DSO and concentrate. An extensive exploration program is ongoing in parallel with an early-stage economic assessment of the potential development of the Lei deposit.

The Bynoe region is now recognise as a world-class lithium district with significant lithium resources and exploration potential associated with spodumene-bearing pegmatites. Its proximity to Darwin provides a distinct economic advantage with its regional infrastructure, such as roads and port, providing ready-made access to export markets. The pegmatite quality is recognised for its simple mineralogy, coarse texture, and high grade, features which allow options for low-cost concentrate production or direct shipping. The region hosts Core Lithium Ltd's Finniss Operations, which commenced production on the Grants deposit in 2023, and is currently in care and maintenance. The BP33 deposit is currently in development.

Lithium in the Bynoe pegmatite field is hosted within LCT (lithium–caesium–tantalum) pegmatites that range from narrow veins to broad lozenge-shaped bodies up to 500 meters long and 60 meters wide which are poorly expressed at surface as highly weathered clay-quartz (smectite-kaolinite) saprolite. To date, lithium resources have been defined for 12 individual pegmatite-hosted deposits in this field. Ongoing exploration by multiple companies is expected to significantly grow the resource base in the Bynoe pegmatite field, through systematic assessment of over 100-odd historic prospects, that were recognised (and historically worked) during the main phase of Sn-Ta exploitation in the 1980s.

Table 3. Regional Bynoe Pegmatite Field: Current Lithium Minerals Resource Estimates

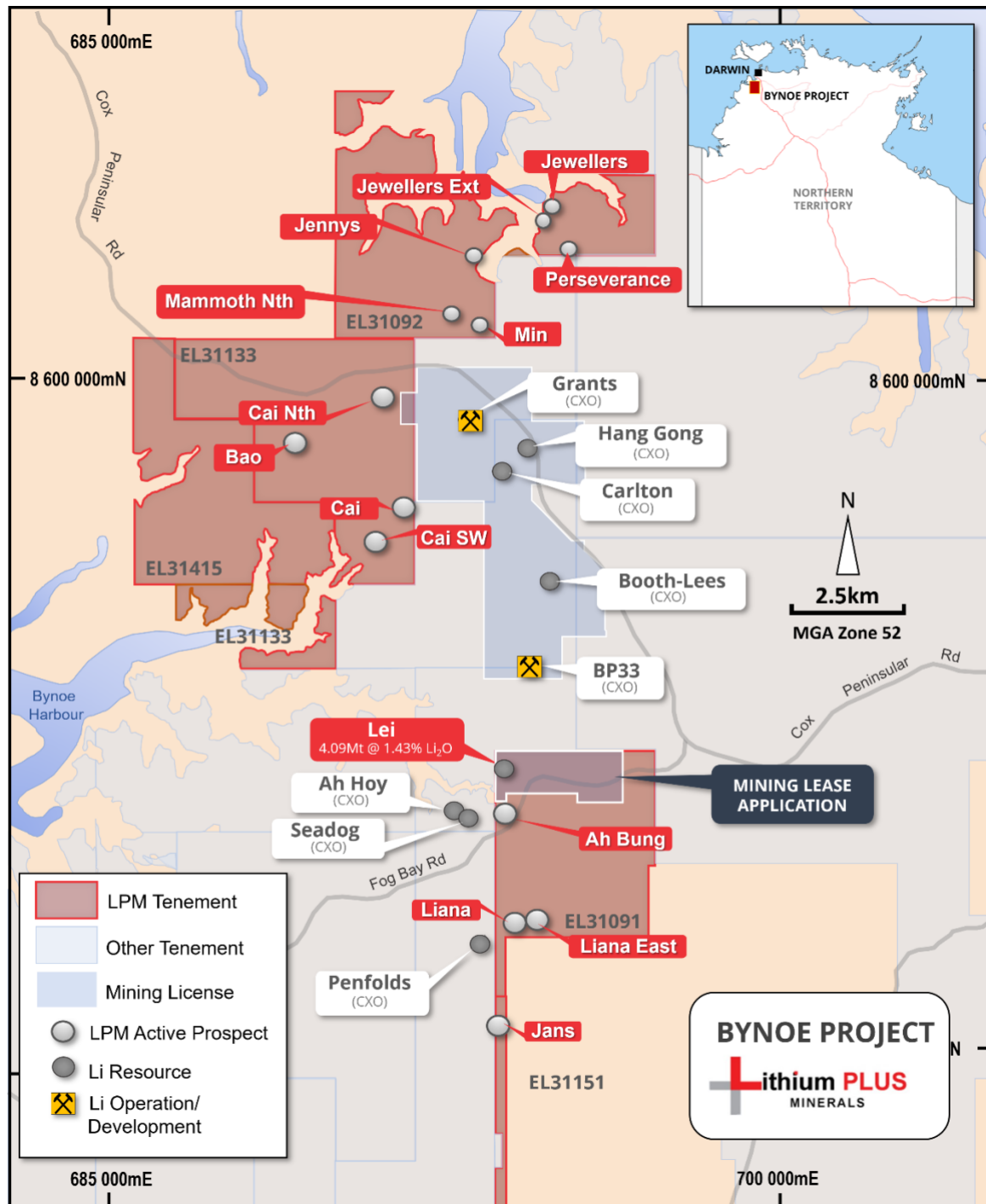
Mineral Resource Estimate	Lithium Mineral Resources – Bynoe Region (0.5% Li <sub>2</sub> O cut-off)								
	Measured		Indicated		Inferred		Total		
	Tonnes (Mt)	Li <sub>2</sub> O (%)	Tonnes (Mt)	Li <sub>2</sub> O (%)	Tonnes (Mt)	Li <sub>2</sub> O (%)	Tonnes (Mt)	Li <sub>2</sub> O (%)	Li <sub>2</sub> O Contained Metal (kt)
Grants <sup>1</sup>	1.34	1.48	0.61	1.49	0.37	1.27	2.32	1.45	33.6
BP33 <sup>1</sup>	2.85	1.44	6.51	1.55	1.14	1.59	10.5	1.53	161
Carlton <sup>1</sup>	2.14	1.33	3.43	1.32	0.78	1.14	6.34	1.30	82.6
Lees <sup>1</sup>			4.16	1.18	7.08	1.12	11.2	1.14	128
Ah Hoy <sup>1</sup>			1.71	1.20	2.93	1.38	4.64	1.31	60.8
Booths <sup>1</sup>			1.84	0.99	1.40	1.06	3.24	1.02	33.0
Penfolds <sup>1</sup>			0.65	1.25	0.71	1.24	1.36	1.24	16.9
Hang Gong <sup>1</sup>			1.51	1.18	1.95	1.14	3.46	1.16	40.1
Seadog <sup>1</sup>					1.41	1.18	1.41	1.18	16.6
<b>Lei<sup>2</sup></b>			<b>0.42</b>	<b>1.22</b>	<b>3.67</b>	<b>1.45</b>	<b>4.09</b>	<b>1.43</b>	<b>58.0</b>
Bilatos <sup>1</sup>					1.92	1.03	1.92	1.03	19.8
Sandras <sup>1</sup>			1.17	0.92	0.57	0.82	1.73	0.89	15.4

<sup>1</sup>The information is extracted from the report entitled – "Finniss Mineral Resource increased by 58%" - Core Lithium Ltd.'s ASX Announcement 11 April 2024 and is available on the Core Lithium Ltd website [www.corelithium.com.au](http://www.corelithium.com.au) or on the ASX website [www.asx.com.au](http://www.asx.com.au).

<sup>2</sup>The information is extracted from the report entitled – Maiden High-Grade Lithium Resource declared at Lei"- Lithium Plus Minerals Ltd.'s ASX Announcement of 19 December 2023 and is available on the Lithium Plus website [www.lithiumplus.com.au](http://www.lithiumplus.com.au) or on the ASX website [www.asx.com.au](http://www.asx.com.au).

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, in the case of estimates of Mineral Resources or Ore Reserves, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. The Company confirms that the form and content in which the Competent Person's findings are presented have not been materially modified from the original announcements.





Bynoe Project Location map and pegmatite prospects.

This announcement has been authorised for release by the Board of Lithium Plus.

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**Competent Person Statement**

The information in this release that relates to Exploration Results for the Bynoe Lithium Project is based on, and fairly represents, information and supporting documentation prepared by Dr Bryce Healy, Exploration Manager of Lithium Plus Minerals Ltd. Dr Healy is a Member of the Australasian Institute of Mining and Metallurgy and he has sufficient experience which is relevant to the style of mineralisation and type of deposits under consideration and to the activity which has been undertaken to qualify as a Competent Person as defined in the 2012 Edition of the “Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves”. Dr Healy consents to the inclusion in this release of the matters based on the information in the form and context in which they appear.

The Company confirms that it is not aware of any new information or data that materially affects the information cross referenced in this announcement. The Company confirms that the form and content in which the Competent Person’s findings are presented have not been materially modified from the original announcements.

11 March 2025

**ASX: LPM**

## About Lithium Plus Minerals

Lithium Plus Minerals Limited (ASX: LPM) is an Australian Lithium exploration company with 21 tenements in the Northern Territory grouped into the following projects:

### **Bynoe Lithium Project (100% LPM)**

Situated on the Cox Peninsula, 45 km south of Darwin, on the northern end of the Litchfield Pegmatite Belt, with 11 granted tenements covering 297 km<sup>2</sup>. Geologically centred around the Bynoe Pegmatite Field, the tenements share a border with Core Lithium's Finniss mine development. Significant lithium mineralisation was discovered at Lei in 2017 within the north-northeast trending spodumene bearing pegmatites. Current drill ready targets are Lei, SW Cai, Cai and Perseverance.

### **Wingate Lithium Project (100% LPM)**

Located 150 km south of Darwin, this single tenement (EL31132) covers the Wingate Mountains Pegmatite District, the southern part of the Litchfield Pegmatite Belt. It contains the known presence of pegmatites with little exploration and minor historical production of tin. Historical gold workings (Fletcher's Gully) are present.

### **Arunta Lithium Projects (100% LPM)**

#### ***Barrow Creek***

Located in the Northern Arunta pegmatite province, 300 km north of Alice Springs. Historic tin and tantalum production and the presence of spodumene in nearby Anningie Pegmatite field suggest lithium potential.

#### ***Spotted Wonder***

Located approx. 200 km north-north-east of Alice Springs with proven lithium mineralisation, with amblygonite present in the Delmore Pegmatite.

### **Moonlight Resources Ltd (44.7% LPM)**

Australian uranium and REE portfolio including MacDonnell Ranges Uranium Project and the Moonlight Project in the NT, and the Fox Hill RE Project in NSW.

