# FIRST PHASE DRILLING SUCCESSFULLY COMPLETED AT ABBOTTS NORTH PROJECT 11 March 2024



# HIGHLIGHTS

- First phase of drilling completed, with 11 RC holes totaling 1,623m at Abbotts North
- Drilling confirms orientation and down depth continuity of the stacked pegmatite system
- Program identifies multiple pegmatite layers
- Samples submitted to lab for multi element analyses with results expected in April
- Pegmatite mapping and sampling underway to define further drill targets

Premier1 Lithium Limited (ASX:PLC) ("Premier1" or the "Company") is pleased to announce the successful completion of its first phase drilling program at Abbotts North located 35km north of Meekatharra, Western Australia. The program has been completed on time and under budget.

A total of 11 RC holes for 1,623m were drilled to test the main outcropping pegmatites at the Buttamiah Prospect.

The pegmatite swarms had previously been mapped over a strike length of up to 350m with the single sub-cropping pegmatites averaging between 2 to 3m width at surface.

The drilling was able to confirm the orientation and down depth continuity of the stacked system dipping between 30-50 degree to the north.

9 of 11 drill holes intercepted pegmatites of on average 1 to 3m and locally up to 4m thickness hosted within an amphibolite unit. Occasionally, lepidolite has been identified and further analyses are planned to determine the presence of spodumene in the system.

All samples have been submitted for multi element analyses with results expected in the next approximately 6 weeks.

Additional studies of the outcropping pegmatites in the larger Buttamiah Prospect area including fractionation vectoring using K/Rb ratios by ERM consultants on site suggest the core of the system to be located to the east of the current drilling.

Further mapping and sampling of the known pegmatites in this area as well as over the remaining tenement package will be completed to refine existing and define further drill targets. This includes preparations for further heritage clearance surveys. Premier1 is fully funded for any subsequent phase two drilling program.

#### Richard Taylor, CEO of Premier1, commented:

"In our first drilling program, we were able to confirm the continuity of the mapped pegmatites at depth and enhance our understanding of the LCT system.

Although still in the early stages, Abbotts North is gradually revealing its geological story. Further analysis of the RC samples will play a significant role in informing our next drilling targets and in evaluating the area's lithium potential.

We look forward to updating our shareholders as we continue to explore this exciting region."



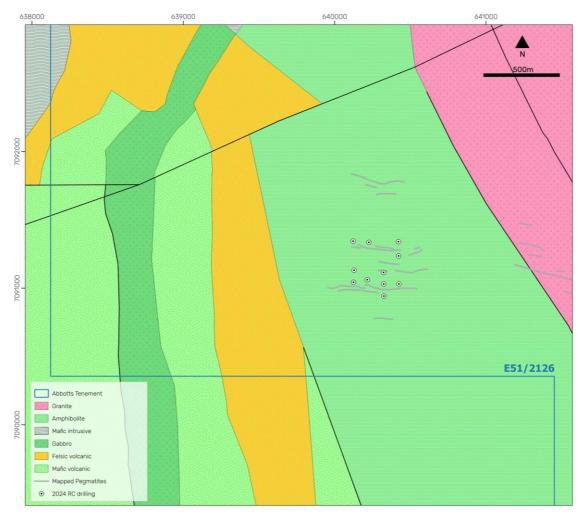


Figure 1: Geological map of the Buttamiah Prospect with collar locations of completed RC drilling.



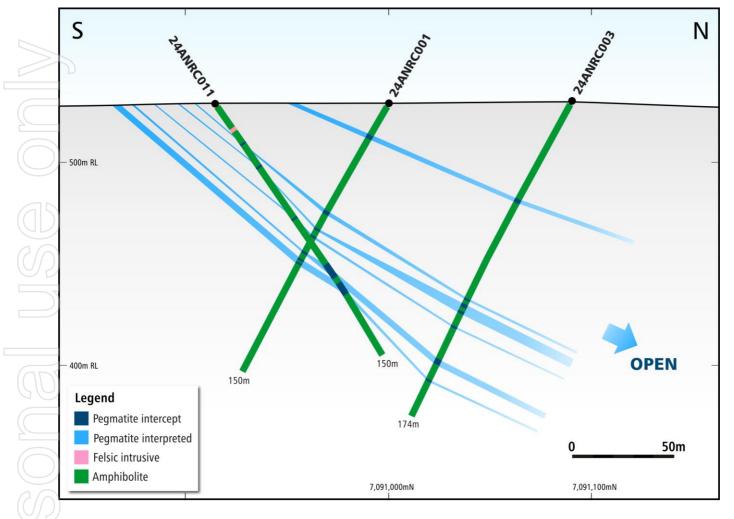


Figure 2: Cross-section 640300mE of intercepted pegmatites.



Table 1: Table detailing drill hole locations and pegmatite intercepts.

Hole ID	Easting	Northing	Grid	Depth (m)	Dip (°)	Azi (°)	Logged Pegmatites
24ANRC001	640303.7	7091004.8	50	150	-60	180	18-20m (2m) 62-63m (1m) 71-72m (1m) 75-76m (1m) 84-85m (1m) 88-89m (1m) 90-91m (1m)
24ANRC002	640195.2	7091037.8	50	150	-55	180	43-47m (4m) 71-73m (2m)
24ANRC003	640303.4	7091090.4	50	174	-60	180	55-57m (2m) 110-111m (1m) 113-115m (2m) 117-118m (1m) 125-126m (1m) 143-146m (3m) 154-155m (1m)
24ANRC004	640208.8	7091311.5	50	150	-60	180	26-29m (3m)
24ANRC005	640105.1	7091321.1	50	150	-60	180	No pegmatite intercepted
24ANRC006	640104.1	7091020.2	50	156	-60	180	12-13m (1m) 26-28m (2m) 119-121m (2m) 147-148m (1m)
24ANRC007	640109.0	7091108.4	50	162	-60	180	61-64m (3m) 73-75m (2m) 154-156m (2m)
24ANRC008	640403.9	7091314.1	50	150	-60	210	40-43m (3m) 44-46m (2m) 80-81m (1m) 137-138m (1m)
24ANRC009	640404.0	7091210.0	50	126	-55	335	45-46m (1m) 73-74m (1m) 80-82m (2m) 98-99m (1m)
24ANRC010	640404.0	7091004.7	50	105	-60	180	No pegmatite intercepted; hole stopped due to ground water
24ANRC011	640304.0	7090917.0	50	150	-60	10	24-25m (1m) 38-39m (1m) 69-70m (1m) 97-105m (8m) 108-115m (7m)



This release was approved by the Premier1 Lithium Board.

#### **ENQUIRIES**

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#### **ABOUT PREMIER1 LITHIUM**

Premier1 Lithium (**ASX:PLC**), is focused on tapping into the potential of Western Australia's renowned lithium reserves. Our strategic exploration approach in this world-class mining jurisdiction is driven by a commitment to uncover valuable resources efficiently and effectively. Our projects are situated in the heart of Western Australia's renowned greenstone belts, home to the world's largest lithium-bearing LCT pegmatite deposits. Abbotts North is a premier exploration project with outcropping lithium bearing pegmatites. Beyond Abbotts North, we have a pipeline of promising projects.

#### COMPETENT PERSON'S STATEMENT

The information in this announcement that relates to Exploration Results and Mineral Resources is based on information compiled by Robert Rowe, a Competent Person who is a Member of The Australasian Institute of Mining and Metallurgy (AusIMM) and is a Registered Professional Geoscientist in the field of Mineral Exploration with the Australian Institute of Geoscientists. Mr Rowe is a full-time employee and the Chief Operating Officer of SensOre. Mr Rowe has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Rowe consents to the inclusion in this announcement of the matters based on his information in the form and context in which it appears.



# JORC CODE<sup>1</sup> 2012 EDITION - TABLE 1

### **SECTION 1: SAMPLING TECHNIQUES AND DATA**

(Criteria in this section apply to all succeeding sections)

The following Table 1 relates to drilling activities conducted over Premier1 Lithium Ltd (PLC Abbotts North tenement E51/2126 held by Matrix Exploration Pty Ltd (Matrix) in 2024.

Criteria
Sampling techniques
ing techniques



Criteria	JORC Code Explanation	Commentary
	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).	on-board compressor with an Air Research 2400cfm x 900psi booster.  • All reverse circulation drilling employed the use of a face sampling hammer and a nominal 140mm diameter drill bit.
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. 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.	<ul> <li>All RC 1m samples are logged for drilling recovery by a visual estimate and this information is recorded and stored in the drilling database. Sample loss or gain is reviewed on an ongoing basis in the field and addressed in consultation with the drillers to ensure the best representative sample is collected.</li> <li>RC samples are visually logged for moistur content, sample recovery and contamination. The RC drill system utilises a face sampling hammer which is industry best practice, and the contractor aims to maximise recovery at all times. RC holes are drilled dry whenever practicable to maximise sample recovery.</li> <li>No study of sample recovery versus grade has been conducted as these are early-</li> </ul>
		stage drilling programs to outline mineralisation. The drilling contractor uses standard industry drilling techniques to ensure minimal loss of any size fraction.
Logging	<ul> <li>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.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> </ul>	<ul> <li>All RC samples are geologically logged to record weathering, regolith, rock type, alteration, mineralisation, shearing/foliation and any other features that are present.</li> <li>Where required, the logging records the abundance of specific minerals or the amount of alteration (including weathering) using defined ranges.</li> </ul>
	The total length and percentage of the relevant intersections logged.	<ul> <li>The entire length (100%) of each RC hole is logged in 1m intervals. Where no sample is returned due to voids or loss of sample it is recorded in the log and the sampling sheet</li> </ul>
Sub-sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all subsampling stages to maximise representivity of samples.</li> <li>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.</li> </ul>	<ul> <li>All RC samples are put through a static cone splitter and the sample is collected in unique pre numbered calico sample bag. The moisture content of each sample is recorded in the database. The drilling method is designed to maximise sample recovery and representative splitting of samples. The drilling method utilises high pressure air and boosters where required to keep water out of the hole, when possible, to maintain a dry sample.</li> <li>The sample preparation technique for all samples follows industry best practice, by an accredited laboratory. The techniques and practices are appropriate for the type and style of mineralisation. The RC sample are sorted, oven dried and the entire sample pulverised in a one stage process to 85% passing 75µm. The bulk pulverised sample</li> </ul>



Criteria	JORC Code Explanation	Commentary
	Whether sample sizes are appropriate to the grain size of the material being sampled.	extracted by spatula to a numbered paper bag that is used for the analysis.  RC samples submitted to the laboratory are sorted and reconciled against the submission documents. Standards are inserted into the sample stream at a frequency of one standard in every 25 samples. The laboratory uses its own internal standards of two duplicates, two replicates, two standards and one blank per 50 assays. The laboratory also uses barren flushes on the pulveriser.  Field duplicate samples were collected during this drilling campaign.  The sample sizes are standard industry practice sample size collected under standard industry conditions and by standard methods and are appropriate for the type, style and thickness of mineralisation which might be encountered
Quality of assay data and laboratory tests	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>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.</li> <li>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</li> </ul>	<ul> <li>Samples were submitted to Intertek, Maddington, WA for the analytical techniques detailed below:</li> <li>AI, Ca, Co, Cu, K, Mn, Na, Ni, P, S, Sc, V, Zn: The sample(s) have been digested and refluxed with a mixture of Acids including Hydrofluoric, Nitric, Hydrochloric and Perchloric Acids. The analytes have been determined by Inductively Coupled Plasma (ICP) Optical Emission Spectrometry (ICP102).</li> <li>Ag, As, Ba, Be, Bi, Cd, Ce, Cs, Dy, Er, Eu, Ga, Gd, Hf, Ho, In, La, Li, Lu, Mo, Nb, Nd, Pb, Pr, Rb, Re, Sb, Se, Sm, Sn, Sr, Ta, Tb, Te, Th, TI, Tm, U, W, Y, Yb, Zr: the sample(s) have been digested and refluxed with a mixture of Acids including Hydrofluoric, Nitric, Hydrochloric and Perchloric Acids. The analytes have been determined by Inductively Coupled Plasma (ICP) Mass Spectrometry (ICP302).</li> <li>B, Cr, Fe, Mg, Si, Ti: samples have been fused with Sodium Peroxide and subsequently the melt has been dissolved in dilute Hydrochloric acid for analysis The analytes have been determined by Inductively Coupled Plasma (ICP) Optical Emission Spectrometry (ICP104).</li> <li>Downhole geophysical tools were not used in these programs to date.</li> <li>The laboratory is accredited and uses its own certified reference material as part of their own QA/QC. The laboratory has two duplicates, two replicates, one standard and one blank per 50 assays. PLC submitted standard samples every 25th sample but did not submit additional blanks and duplicates for programs to date.</li> </ul>



	Criteria	JORC Code Explanation	Commentary
	)		<ul> <li>Standard OREAS 750, 30a and 20b was added into the analysis at a frequency of 1:25</li> </ul>
	Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul> <li>The holes were logged by independent geological contractors and PLC staff and the sampling, logging, drilling conditions and RC chips were reviewed. A PLC geologist verifies the field sampling and logging regime and the correlation of mineralised zones with assay results and lithology.</li> <li>No twinned drill holes were drilled in campaigns to date.</li> <li>Primary data was sent from the field to SensOre_X Principal Geoscientist – Data &amp; Information Management who import the data into the industry accepted DataShed database software.</li> <li>No adjustments or calibrations were made to any data used in this report.</li> </ul>
(10)	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.	<ul> <li>All drill holes have their collar location recorded using a handheld GPS unit.</li> <li>Down hole surveys for the RC drilling were conducted where dip and azimuths reported are as per set up on surface.</li> </ul>
		<ul> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul> <li>Downhole surveys were undertaken in the RC drilling at the end of the hole.</li> <li>All drill hole collars are MGA94, Zone 50 grid system.</li> </ul>
			<ul> <li>The topographic data used (drill collar RL) was obtained from handheld GPS and is adequate for the reporting of initial exploration results. All samples have their location recorded using a handheld Garmin GPX64sx GPS unit to an indicative accuracy of &lt;5m</li> </ul>
	Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> <li>Whether sample compositing has been applied.</li> </ul>	This report is for the reporting of exploration results derived from early-stage drilling programs. The drill spacing, spatial distribution and quality of assay results are sufficient to support quotation of exploration results and detect any indication of mineralisation. The data is not intended to be used to define mineral resources.  The samples were not composited
	Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>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.</li> </ul>	9 of 11 drill holes were drilled -60° with the remaining 2 holes drilled at -55 Azimuths for 8 holes were at 180 with holes at 10,220 and 335. The program was designed to test the weathered and primary (unweathered) portions of interpreted geological sequence interpreted to dip moderately to north and strike east. No drilling orientation and sampling bias has been recognised at this time.
	Sample security	The measures taken to ensure sample security.	<ul> <li>RC samples were packed in bulk bags, secured with cable ties and transported</li> </ul>



Criteria	JORC Code Explanation	Commentary	
5		from the field by PLC personnel in Meekatharra where they were transported by staff directly to the laboratory in Perth.	ı
		<ul> <li>The laboratory then checks the physically received samples against a PLC generate sample submission list and reports back a discrepancies.</li> </ul>	ed
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	<ul> <li>No external or third-party audits or reviews have been completed.</li> </ul>	S



## **SECTION 2: REPORTING OF EXPLORATION RESULTS**

(Criteria listed in the preceding section also apply to this section)

Criteria			Со	mmentary
Mineral tenement and land tenure status  Exploration done by other parties	• A	Type, reference name/number, location and ownership including agreements or material issues with third parties such as oint ventures, partnerships, overriding oyalties, native title interests, historical sites, wilderness or national park and environmental settings.  The security of the tenure held at the time of reporting along with any known mpediments to obtaining a licence to operate in the area  Acknowledgment and appraisal of exploration by other parties.	•	The results reported in this announcement are on granted exploration licence E51/2126 held by Matrix Exploration Pty Ltd (Matrix).  Premier 1 Lithium Pty Ltd have signed a Letter Agreement with Matrix for an option to acquire 100% of the tenement.  The tenement has recently been granted and is in good standing. There are no known impediments to obtaining a license to operate, other than those set out by statutory requirements, which have not yet been applied for.  No historical lithium exploration has been undertaken within the licence area. Past exploration has focused on gold and base metal exploration.
			•	No previous drilling has been completed within the tenure.  Soil and limited stream sediment sampling has been undertaken by Silver Swan Group (A93462), Doray Minerals Ltd (A99138), Cervantes Gold Pty Ltd (A117232), Cervantes Corporation Limited (A120365) and Zeus Mining Pty Ltd (A122182, A123651, A131770 & A131774),
Geology		Deposit type, geological setting and style of mineralisation.	٠	The prospect area is located 35km north of Meekatharra in the Murchison region of Western Australia. Geologically the prospect is situated within a largely basaltic sequence of the Abbots Greenstone belt. The Abbotts Greenstone belt consists of an intercalated succession of mafic, ultramafic, felsic volcanics and sediments. The sequence has been intruded by felsic porphyries, felsic pegmatites, and granite. The margins of the belt are structurally complex, and the belt is bounded by granites and monzogranites to the east and west and the north. The metamorphic grade appears to be mid to upper greenschist with some higher grade adjacent to the granite contacts.  Locally pegmatite swarms can be found outcropping mainly within the metabasalt and some of the structurally complex zones consisting of intercalated granite,
Drill hole information	t r f	A summary of all information material to he understanding of the exploration esults including a tabulation of the ollowing information for all Material drill noles:	•	greenstones, and pegmatites.  The drill holes reported in Company announcements have the following parameters applied. All drill holes completed, including holes with no significant gold intersections, are reported in Company announcements.



Criteria	Commentary
	<ul> <li>Elevation of RL (Reduced Level – elevation above sea level in metres) of the drill collar</li> <li>Dip and azimuth of the hole</li> <li>Down hole length and interception depth</li> <li>Hole length</li> <li>Down hole length and magnetic degrees vary by approximately 1° in this project area.</li> <li>Down hole as measured along the drill trace. Interception depth is the distance of an intersection as measured along the drill trace.</li> <li>Hole length is the distance from the surface of an intersection as measured along the drill trace.</li> <li>Hole length is the distance from the surface to the end of the hole as measured along the drill trace.</li> <li>No results have been excluded from this report.</li> </ul>
Data aggregation methods	<ul> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>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.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated</li> <li>No high-grade cuts have been applied to assay results. RC assay results are distance weighted using 1m for each assay Intersections are reported as anomalous if the interval is at least 4m wide at a grade greater than the Mean plus twice the Standard Deviation for a selection of elements.</li> <li>No metal equivalent reporting is used or applied.</li> </ul>
Relationship between mineralisation widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</li> <li>The true orientation (dip and strike) of any mineralisation is not known, however as all data is point data no widths are reported.</li> <li>The intersection width is measured down the hole trace; it may not represent the true width.</li> <li>All drill results within Company announcements are downhole intervals only.</li> </ul>
Diagrams	<ul> <li>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.</li> <li>A drill hole location plan and cross section are attached to or contained within Company announcements</li> </ul>



Criteria		Commentary
Balanced reporting	<ul> <li>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.</li> </ul>	All drill holes completed are included in the results tables in each Company announcement per drilling programs.
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.	Reference to other relevant exploration data is contained in Company announcements.
Further work	<ul> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul> <li>Future exploration is dependent on review of the current drilling results.</li> <li>Future drilling is warranted. An AC and/or RC program will be designed.</li> </ul>