

#### **ASX Announcement**

20 September 2023

# Mapping identifies new pegmatite targets at Chubb North

#### **HIGHLIGHTS**

- Recently completed mapping coupled with pXRF mineral vectors at Chubb North indicates additional pegmatites prospective for lithium minerals.
- Ambient Noise Tomography ("ANT") Survey locates sub-surface structural anomalies which may represent buried pegmatites to the northeast of Chubb Central.
- Burley has completed ~7,000m of diamond drilling at Chubb Central since April 2023.
- Additional permits to drill new Chubb North targets received.
- Chubb North drilling to commence shortly to test the pegmatites for spodumene mineralization.
- The Chubb Lithium Project is strategically located in the world-class lithium province of Québec, Canada and only 10kms from North American Lithium's operating spodumene mine.

Burley Minerals Limited (ASX: BUR, "Burley" or "the Company") has recently completed geological mapping, field pXRF mineral geochemical vectors and geophysical surveys at its 100% owned Chubb Lithium Project, 25 km from the mining-centre of Val d'Or, Québec, Canada.

The mapping and field mineral vectors, completed by the Company and specialist geologists familiar with LCT pegmatite systems, has determined that outcropping pegmatites at Chubb North show fertility indicators consistent with LCT pegmatites. Burley has identified six targets and has gained additional approvals to allow drilling of the Chubb North pegmatite targets.

Furthermore, the ANT geophysical survey preliminary results have identified potential structural anomalies to the northeast of Chubb Central which may represent emplacement sites for LCT pegmatites; this data is undergoing further processing. These will be tested in future drilling following data confirmation.

## **Burley Minerals Managing Director and CEO, Stewart McCallion commented:**

"Burley's recently completed fieldwork at the Chubb Lithium Project in Québec, Canada has identified, through mapping and field mineral geochemistry, potentially fertile pegmatites, and with permitting now complete, we plan to drill here immediately.

"Drilling at Chubb Central has continued to infill and extend the mineralised zone down plunge. The Company has now completed approximately 7,000m of diamond drilling since April of this year combined with mapping, geochemistry and geophysics targeting.

"We are very encouraged about the new drill permitted targets which have opened a large, undrilled area at Chubb North. We are excited as the team successfully continues to progress this highly prospective project, strategically located in the Tier 1 lithium province of Québec, Canada. To date the Company has drilled only two of the 35 mineral claims at the Chubb Lithium Project, located 25 km from Val d'Or, Québec".

ASX: BUR

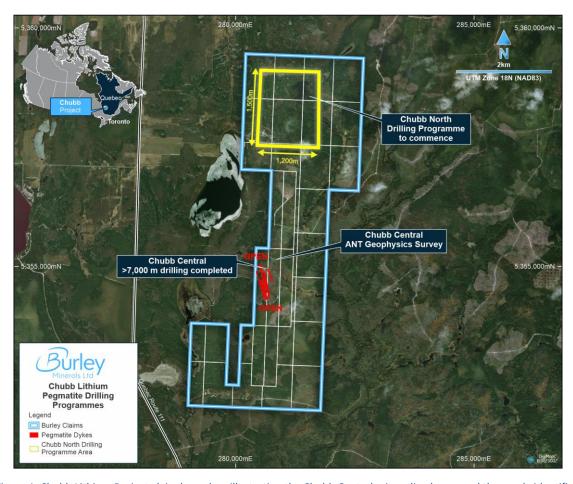


Figure 1. Chubb Lithium Project claim boundary illustrating the Chubb Central mineralised zone and the newly identified Chubb North prospect.



Figure 2. Outcropping pegmatite target at Chubb North where drilling is to commence shortly.



Figure 3. Stewart McCallion, Burley MD and CEO, on pegmatite outcrop at Chubb North during a site visit in July 2023.

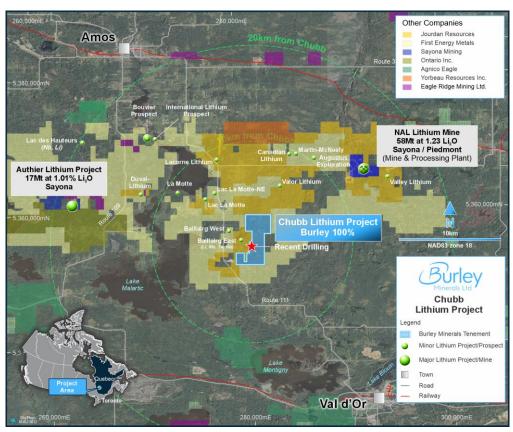


Figure 4. Location map of the Chubb Project showing proximity to the nearby mining town of Val d'Or, NAL lithium mine, other lithium deposits and prospects and railway infrastructure connected to ports.

### **About Burley Minerals Limited**

Burley Minerals Ltd (ASX: BUR) is a well-funded, ASX-listed, Perth-based minerals explorer with lithium and iron ore projects, located within the World-Class Tier-1 provinces of Québec, Canada and Western Australia. Burley acquired 100% ownership of the Chubb Lithium Project in Québec, Canada, and the Gascoyne Lithium Projects in Western Australia, in February 2023.

The Chubb Lithium Project is located 25 km north of the mining community of Val d'Or in the heart of the world-class lithium province of Québec, Canada with a total area of 1,509 hectares. The Chubb Project is centred within the Manneville Deformation Corridor, which hosts Canada's only operating lithium mine, the North America Lithium Operation (NAL). The NAL is owned by Sayona Mining Ltd (ASX: SYA) and Piedmont Lithium Inc, with Mineral Resources of 58Mt at 1.23% Li<sub>2</sub>O<sup>1</sup> reported, plus a number of other emerging projects including the Authier Lithium Project, with resources of 17Mt at 1.01 % Li<sub>2</sub>O reported<sup>2</sup>. The recommissioned NAL plant is located 10km north-east of the Chubb Lithium Project, with first production having commenced in the March 2023 Quarter<sup>3</sup>.

Prior to Burley acquiring the Chubb Lithium Project, 43 diamond drill holes for 5,460m of drilling had been completed across the Project, however these have tested only 2 of the 35 Mineral Claims acquired. Burley is well-funded to continue exploration after recently completing a C\$3.0M 'flow-through' capital raising initiative to fund exploration activities on its Canadian lithium projects.

This includes systematically identifying new spodumene opportunities in this region with a current priority being the intended acquisition of the Bouvier Lithium Project, located just 14 Km from the Chubb Lithium Project.

In Western Australia, Burley also owns a 70% interest in the Yerecoin Iron Project, located approximately 120km northeast of Perth, and which has a JORC 2012 compliant Inferred and Indicated Mineral Resource of 246.7Mt capable of producing a concentrate at >68% Fe<sup>4</sup>.

Burley also has the Cane Bore Prospect (exploration license application) in the world class Hamersley Iron Ore Province. The Cane Bore Prospect has 28kms of remnant outcropping Channel Iron Deposit (CID) mineralisation which on average is 400m wide.

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

For further information, please contact:

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<sup>&</sup>lt;sup>1</sup> Refer to Sayona Mining's ASX Release dated 14 April 2023

<sup>&</sup>lt;sup>2</sup> Refer to Sayona Mining's ASX Release dated 14 April 2023.

<sup>&</sup>lt;sup>3</sup> Refer to Sayona Mining's ASX Release dated 28 April 2023.

<sup>&</sup>lt;sup>4</sup> Refer to Burley Minerals Ltd Prospectus dated 27 May 2021 Section 10 for the Independent Technical Assessment Report.

## **Competent Person's Statement**

The information in this announcement that relates to lithium and LCT pegmatite exploration results is based on and fairly represents information and supporting documentation supplied to Mr David Crook, who is a member of The Australasian Institute of Mining and Metallurgy (AusIMM) and the Australian Institute of Geoscientists (AIG). Mr Crook is a consultant to Burley Minerals and is a non-executive Director of the Company. Mr Crook has sufficient experience relevant to the style of mineralisation under consideration and to the activity which he is undertaking 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 Crook consents to the inclusion in this announcement of the matters based on this information in the form and context in which it appears.

The Yerecoin Main and South Mineral Resource Estimate was reported in 2014 under the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". The Mineral Resource Estimate was detailed in refer to Prospectus dated 27 May 2021 Section 10 for the Independent Technical Assessment Report. Burley confirms that it is not aware of any new information or data that materially affects the information included in this announcement regarding the mineral resources and that all material assumptions and technical parameters underpinning the estimates continue to apply and have not materially changed.

#### **Caution Regarding Forward-Looking Information**

This announcement may include forward-looking statements regarding Burley Mineral Limited. Forward-looking statements are only predictions and are subject to risks, uncertainties and assumptions which are outside the control of Burley. Actual values, results or events may be materially different to those expressed or implied in this document. Given these uncertainties, recipients are cautioned not to place reliance on forward looking statements. Any forward-looking statements in this document speak only at the date of issue of this ASX Release. Subject to any continuing obligations under applicable law, Burley does not undertake any obligation to update or revise any information or any of the forward-looking statements in this announcement or any changes in events, conditions, or circumstances on which any such forward looking statement is based.



# JORC Code, 2012 Edition – Table 1 report

# **Section 1 Sampling Techniques and Data**

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
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Sampling techniques	Nature and quality of sampling (eg 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.  Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.  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 (eg '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 (eg submarine nodules) may warrant disclosure of detailed information.	<ul> <li>Rock chip samples and pXRF mineral vectors were collected from surface on outcropping rock. The laboratory analyses a subsample without further preparation.</li> <li>Sampling spacing is appropriate for this early stage of exploration based on historical sampling, local (Quebec) experience, sample size collected, and methods used.</li> </ul>
Drilling techniques	Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg 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).	No new drilling reported in this release.
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.	No new drilling reported in this release.

Criteria	JORC Code explanation	Commentary
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.	<ul> <li>General mineralogy and rock type is noted for each sample.</li> <li>No logging reported in this release.</li> <li>No drilling reported in this release.</li> </ul>
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	
	The total length and percentage of the relevant intersections logged.	
Sub-sampling	If core, whether cut or sawn and whether quarter, half or all core taken.	No sample preparation is undertaken under the Company's geochemistry protocol.
techniques and sample preparation	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	<ul> <li>As stated, the samples were not crushed or pulverised.</li> <li>Field duplicates and standards were inserted at a rate of 1:25 and 1:33 respectively.</li> </ul>
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	
	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.	
	Whether sample sizes are appropriate to the grain size of the material being sampled.	
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.	<ul> <li>The nature and quality of the assay and laboratory procedures are considered appropriate for the rock chip samples</li> <li>SGS protocol GE_ICM91A50 was used for the samples and is specific to lithium testing and associated elements in Pegmatites, as such it is considered fit for purpose. Over limit Si values were obtained using XRF72 borate fusion.</li> <li>Handheld XRF were used in the field.</li> <li>Internal SGS QAQC passed internal protocol and inserted standards were generally within 1STD. All blanks remained under detection limits confirming no contaminatio was introduced through the laboratory process.</li> </ul>
	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.	
	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.	
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.	<ul> <li>Verification of the exploration processes were undertaken by David Crook, a non-executive director of the Company and the Competent Person for this report.</li> <li>No drilling reported in this release.</li> <li>There were no other adjustments made to the data.</li> </ul>
	The use of twinned holes.	
	Documentation of primary data, data entry procedures, data verification, data storage	

Criteria	JORC Code explanation	Commentary
	(physical and electronic) protocols.	
	Discuss any adjustment to assay data.	
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.  Specification of the grid system used.  Quality and adequacy of topographic control.	<ul> <li>The rock chip sample and pXRF mineral vectors locations were positioned using handheld GPS.</li> <li>Each location has been marked in the field by flagging and paint, a follow up survey is intended using an RTK system.</li> <li>The grid system used is UTM NAD83 (zone 18)</li> </ul>
Data spacing and distribution	Data spacing for reporting of Exploration Results.  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.  Whether sample compositing has been applied.	<ul> <li>Sample and and pXRF mineral vectors spacing is appropriate for regional (Quebec) exploration results.</li> <li>No drilling reported in this release.</li> <li>No resource estimation has been made.</li> <li>No sample compositing was applied.</li> </ul>
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.  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.	<ul> <li>No drilling reported in this release.</li> <li>Sampling locations and frequency considered 'fit for purpose' and appropriate fro the local (Quebec) terrain.</li> </ul>
Sample security	The measures taken to ensure sample security.	<ul> <li>Samples were bagged and sealed on site, sample bags were grouped by batched of 15 -20 and put into shipping bags that were again sealed and transported directly to SGS lab by MNG technicians.</li> </ul>
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	<ul> <li>Sampling and assaying techniques are considered to be industry standard.</li> <li>At this stage of exploration, no external audits or reviews have been undertaken.</li> </ul>

Section 2 Reporting of Exploration Results (Criteria listed in the preceding section also apply to this section.)

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.  The security of the tenure held at the time of reporting along with any known impediments to obtaining a license to operate in the area.	Data reported within this announcement is from the Chubb property is 100% owned by Lithium Chubb Inc. a 100% owned subsidiary of Burley Minerals Ltd.  The Chubb property is made up of 35 claims in one block totaling 1,508.93ha, located in NTS 32c05, in La Corne and Vassan townships, 28km NNW of Val-d'Or.  A 2.5% Net Smelter Royalty over the Chubb Lithium Project.  There are no environmental liabilities.  First nation title claims sit with the Abitibi Winni First Nation Council.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	43 holes for 5,722m has previously been completed at the Chubb Central Prosect. No previous drilling has been completed outside of Chubb Central. All material data has been previously reported.
Geology	Deposit type, geological setting and style of mineralisation.	Pegmatites of the Chubb Project are spodumene bearing quartz-albite LCT (Lithium Cesium Tantalum) pegmatite family of rocks. The pegmatite dykes have intruded into a suite of mafic and felsic rocks.
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.  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.	Refer to Appendix 1 of the announcement dated 3 July 2023.
Data aggregation methods	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.	All assay results are reported as received from SGS laboratories except $\text{Li}_2\text{O}$ , where a stoichiometric conversion factor of 2.1527 has been applied to convert Li to $\text{Li}_2\text{O}$ No metal equivalent values have been reported.

Criteria	JORC Code explanation	Commentary
	Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.	
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	
Relationship	These relationships are particularly important in the reporting of Exploration Results.	No drilling reported in this release.
between mineralisation	If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.	Downhole lengths are reported in Appendix 1 of the announcement dated 3 July 2023.
widths and	'	Current interpretation suggests the pegmatite dykes are sub vertical.
intercept lengths	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').	
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 maps in this report.
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.	Comprehensive reporting of drilling results have been provided in Appendix 1 of the announcement dated 3 July 2023.
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.	All meaningful and material exploration data has been reported.
Further work	The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).	Work that is currently underway or remains outstanding includes:  Additional assay results from the completed diamond drilling.
	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not	Field mapping of the Chubb tenure.
	commercially sensitive.	Follow up drilling if remaining assay results are encouraging.