

4 October 2023

## Drilling commenced at Chubb North; Geophysics survey identifies new targets.

### HIGHLIGHTS

- Diamond drilling has commenced at the Chubb North prospect after geochemical analysis of outcrops indicated potential lithium mineralisation fertility.
- Ambient Noise Tomography (“ANT”) geophysics surveys located sub-surface structural targets which may represent buried pegmatites to the northeast and south of the Chubb Central mineralised zone.
- Burley has completed more than 7,800 m of diamond drilling at Chubb Central since April 2023, assay results presently pending.

Burley Minerals Limited (ASX: BUR, “Burley” or “the Company”) has commenced drilling at the Chubb North prospect following analysis of mapping and field pXRF mineral geochemistry completed in August. Outcropping pegmatites extend over an area of more than 200 hectares at the northern end of the Chubb Lithium Project, north of Val d’Or, Québec. Burley identified six targets and has gained additional approvals to allow drilling. This preliminary drilling program is designed to develop an understanding of the pegmatites’ structures while confirming pathfinder and spodumene mineralisation. However, it is not an exhaustive programme and additional drilling is being planned and permitted.



Figure 1. Diamond drill established directly in front of outcropping pegmatite at Chubb North.

Furthermore, results of the ANT geophysics survey adjacent to Chubb Central were presented by Fleet Space Technologies Ltd (Fleet). Fleet designed two ANT surveys as *Regional Survey 1* and *Regional Survey 2*; each survey deployed 64 geodes (geophones used to record low frequency sound wave data in the ground) over an area of approximately 50 hectares, collecting data for a period of six days. Fleet analysed the collected data and identified potential structural targets to the northeast and south of

the mineralised zone at Chubb Central which may represent emplacement sites for LCT pegmatites. A drilling programme to test these anomalies is now being planned. These areas represent an extension of the mineralised zone of more than 400 m to the south and a duplication of the mineralised zone, striking more than 1 km, to the east.

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

“Burley’s exploration team are excited about the prospect of additional spodumene mineralisation at previously undrilled Chubb North Prospect. Following analysis of the geochemistry and mapping over the sizeable pegmatite outcrop, the Burley team in Val d’Or, Québec expedited the initial drilling permits and now the diamond drilling rig is in place and making good progress. I am looking forward to seeing the results.

“After completing more than 7,800m of infill and extension drilling at Chubb Central since April of this year, we will take this opportunity to review the data and logs, together with the results of the ANT geophysics survey to determine targets aiming at further expansion of the known spodumene mineralised zone.

“We are very encouraged about the new targets which have opened a large, undrilled areas at Chubb North and at Chubb Central. Our team continues to successfully progress this highly prospective project, in the Tier 1 lithium province of Québec, Canada. As we have moved into Chubb North, this will be only the third of the 35 claims we have drilled at the Chubb Lithium Project, located in close proximity to Quebec’s major mining community, Val d’Or.”

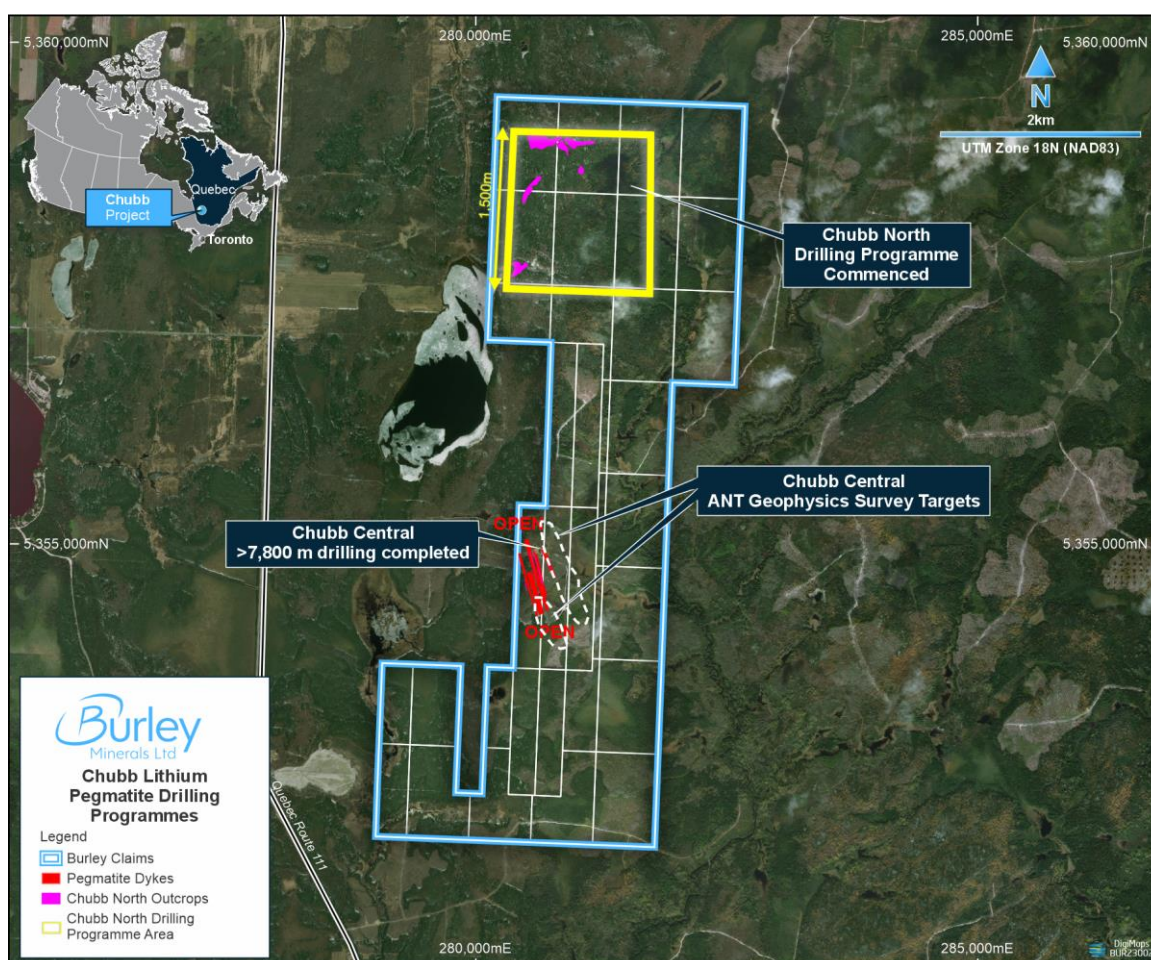


Figure 2. Chubb Lithium Project claim boundary illustrating the Chubb Central mineralised zone and the newly identified Chubb North prospect and Chubb Central ANT geophysics survey targets.



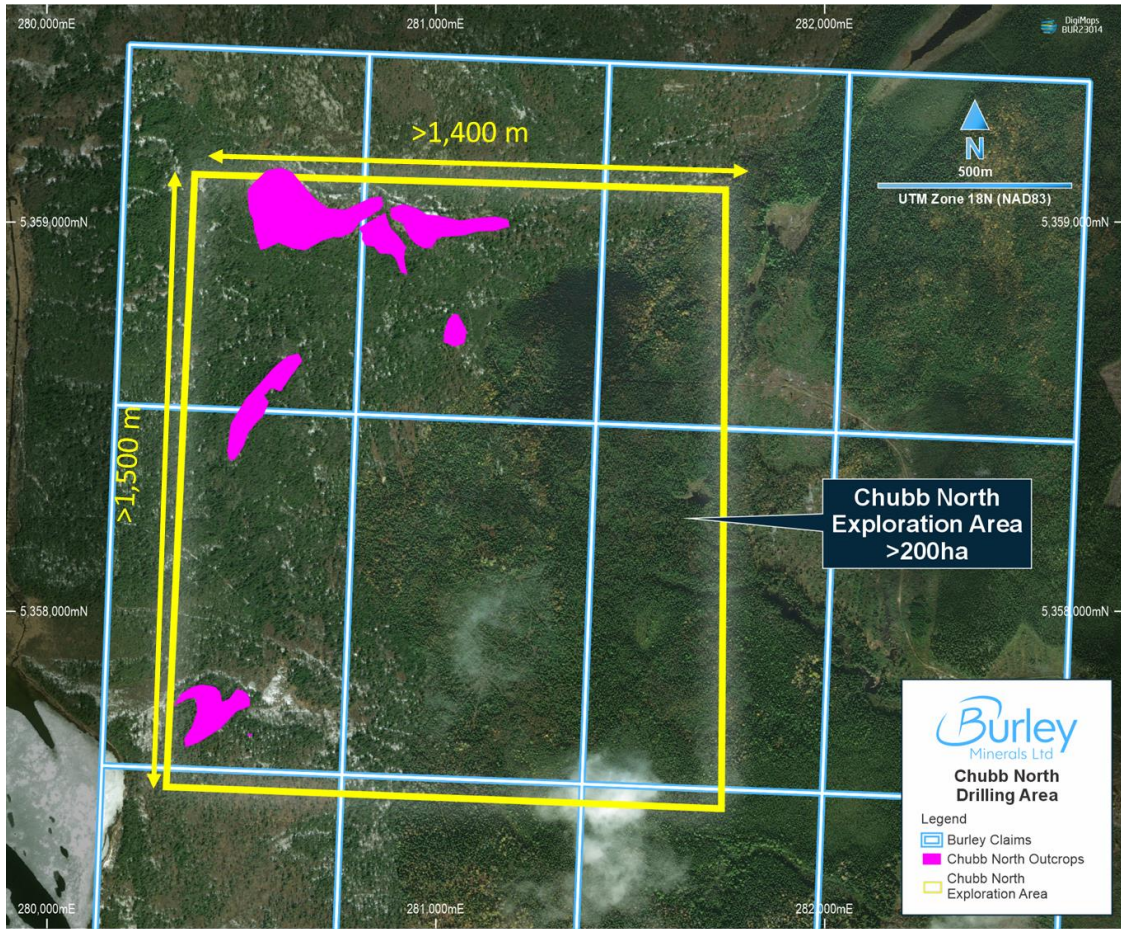


Figure 3: Detail of the Chubb North prospect showing size of outcropping pegmatite targets.



Figure 4. An overhead view of a pegmatite outcrop at Chubb North with drill rig and support vehicles for scale.



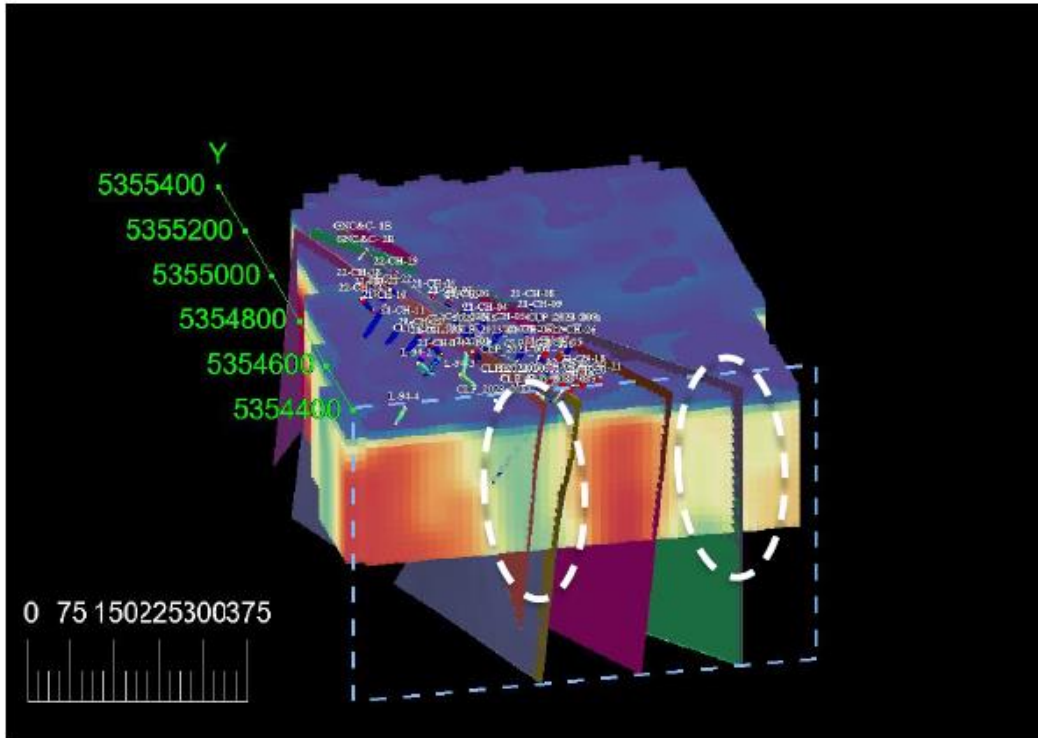


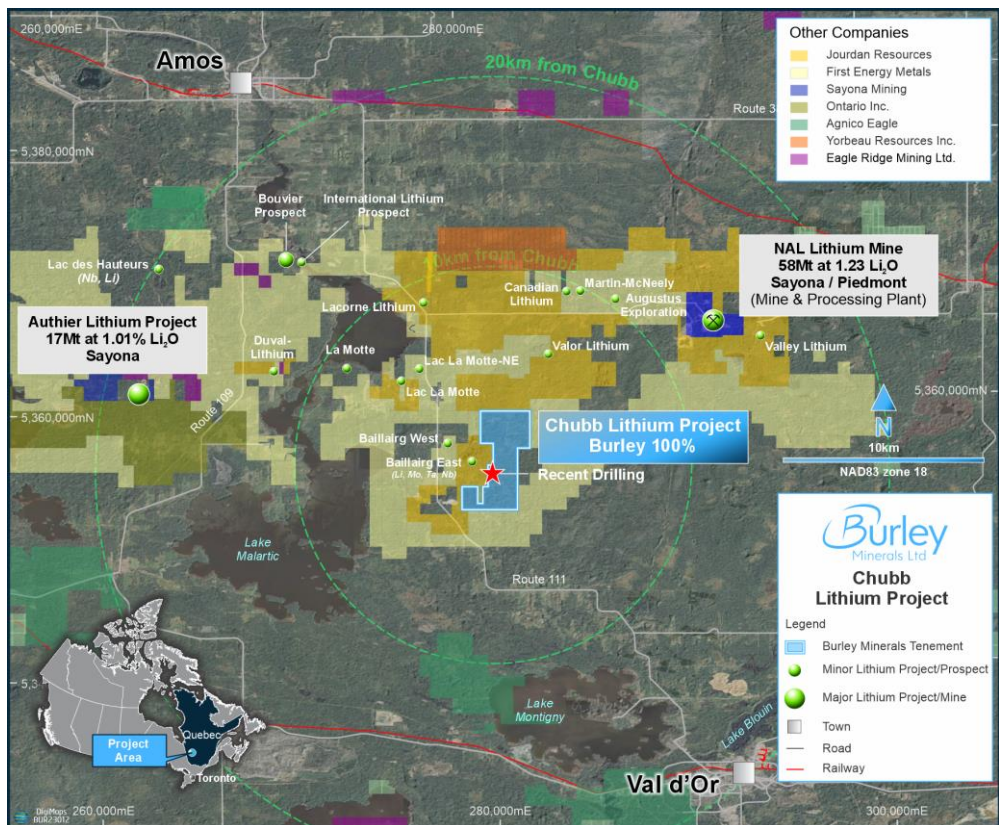
Figure 5. An oblique view of the ANT survey analysis, identifying sub-surface structural anomalies which may represent buried pegmatites adjacent to the Chubb Central mineralised zone.

### 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.

Figure 6. Location map of the Chubb Project showing proximity to the nearby NAL lithium mine and other lithium deposits and prospects.

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 completing a C\$3.0M 'flow-through' capital raising initiative in May 2023, to fund exploration activities on its Canadian lithium projects.

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:

**Bryan Dixon**

Non-Executive Chairman

Burley Minerals Limited

[bryan@burleyminerals.com.au](mailto:bryan@burleyminerals.com.au)

**Stewart McCallion**

Managing Director & CEO

Burley Minerals Limited

[stewart@burleyminerals.com.au](mailto:stewart@burleyminerals.com.au)

**Alex Cowie**

NWR Communications

+61 412 952 610

[alexc@nwrcommunications.com.au](mailto:alexc@nwrcommunications.com.au)

### 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.

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

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

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

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

### **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.)

<i>Criteria</i>	<i>JORC Code explanation</i>	<i>Commentary</i>
<b>Criteria</b>	<i>JORC Code explanation</i>	<i>Commentary</i>
<b>Sampling techniques</b>	<p><i>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.</i></p> <p><i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i></p> <p><i>Aspects of the determination of mineralisation that are Material to the Public Report.</i></p> <p><i>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.</i></p>	<ul style="list-style-type: none"> <li>• <i>No new sample results reported in this release.</i></li> </ul>
<b>Drilling techniques</b>	<p><i>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).</i></p>	<ul style="list-style-type: none"> <li>• <i>No new drilling reported in this release.</i></li> </ul>
<b>Drill sample recovery</b>	<p><i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></p> <p><i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i></p> <p><i>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.</i></p>	<ul style="list-style-type: none"> <li>• <i>No new drilling reported in this release.</i></li> </ul>

<b>Criteria</b>	<b>JORC Code explanation</b>	<b>Commentary</b>
<b>Logging</b>	<p>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.</p> <p>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</p> <p>The total length and percentage of the relevant intersections logged.</p>	<ul style="list-style-type: none"> <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>
<b>Sub-sampling techniques and sample preparation</b>	<p>If core, whether cut or sawn and whether quarter, half or all core taken.</p> <p>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</p> <p>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</p> <p>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</p> <p>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.</p> <p>Whether sample sizes are appropriate to the grain size of the material being sampled.</p>	<ul style="list-style-type: none"> <li>• No new sample results reported in this release</li> </ul>
<b>Quality of assay data and laboratory tests</b>	<p>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</p> <p>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.</p> <p>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.</p>	<ul style="list-style-type: none"> <li>• No new assay sample results reported in this release</li> </ul>
<b>Verification of sampling and assaying</b>	<p>The verification of significant intersections by either independent or alternative company personnel.</p> <p>The use of twinned holes.</p> <p>Documentation of primary data, data entry procedures, data verification, data storage</p>	<ul style="list-style-type: none"> <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>



<b>Criteria</b>	<b>JORC Code explanation</b>	<b>Commentary</b>
	<p>(physical and electronic) protocols.</p> <p>Discuss any adjustment to assay data.</p>	
<b>Location of data points</b>	<p>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.</p> <p>Specification of the grid system used.</p> <p>Quality and adequacy of topographic control.</p>	<ul style="list-style-type: none"> <li>• Geodes deployment was undertaken using handheld GPS units, with an accuracy typically of +/- 3m. Internal GPS within the geodes ultimately recorded the units' locations with greater accuracy.</li> <li>• Topographic control is provided by GPS instruments on the geodes and is considered of acceptable quality for this stage of exploration at Chubb.</li> <li>• The grid system used is UTM NAD83 (zone 18)</li> </ul>
<b>Data spacing and distribution</b>	<p>Data spacing for reporting of Exploration Results.</p> <p>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.</p> <p>Whether sample compositing has been applied.</p>	<ul style="list-style-type: none"> <li>• No drilling reported in this release.</li> <li>• No resource estimation has been made.</li> <li>• No sample compositing was applied.</li> <li>• Data was collection in two ANT surveys: Regional Survey 1 and Regional Survey 2. For both surveys, 64 geodes were evenly spaced as a matrix over an area of approximately 50 hectares (each). Regional Survey 1 was positioned directly north of Regional Survey 2.</li> </ul>
<b>Orientation of data in relation to geological structure</b>	<p>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</p> <p>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.</p>	<ul style="list-style-type: none"> <li>• No drilling reported in this release.</li> <li>• No new sample results reported in this release.</li> <li>• Orientations of the ANT surveys were designed to intersect known structural (pegmatite dyke) orientations and outcrops to calibrate low frequency data and extend into areas of overburden to the east and south of known mineralisation. Orientation is not believed to have introduced material bias which cannot be corrected by processing.</li> </ul>
<b>Sample security</b>	<p>The measures taken to ensure sample security.</p>	<ul style="list-style-type: none"> <li>• No new sample results. reported in this release.</li> </ul>
<b>Audits or reviews</b>	<p>The results of any audits or reviews of sampling techniques and data.</p>	<ul style="list-style-type: none"> <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
<b>Mineral tenement and land tenure status</b>	<p>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.</p> <p>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.</p>	<p>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.</p> <p>The Chubb property is made up of 35 map-designated cells in one block totaling 1,508.93ha, located in NTS 32c05, in La Corne and Vassan townships, 28km NNW of Val-d'Or</p> <p>There are no environmental liabilities.</p> <p>First nation title claims sit with the Abitibi Winni First Nation Council.</p>
<b>Exploration done by other parties</b>	Acknowledgment and appraisal of exploration by other parties.	43 holes for 5,722m has previously been completed at the property. All material data has been previously reported.
<b>Geology</b>	Deposit type, geological setting and style of mineralisation.	<p>Pegmatites of the Chubb Central Prospect 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.</p> <p>Outcropping pegmatites have been identified at the Chubb North prospect which show fertility indicators consistent with LCT (Lithium Cesium Tantalum) pegmatite family of rocks.</p>
<b>Drill hole Information</b>	<p>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:</p> <p>easting and northing of the drill hole collar</p> <p>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</p> <p>dip and azimuth of the hole</p> <p>down hole length and interception depth</p> <p>hole length.</p> <p>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.</p>	No new drill results reported in this release.

Criteria	JORC Code explanation	Commentary
<b>Data aggregation methods</b>	<p><i>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.</i></p> <p><i>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.</i></p> <p><i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></p>	<p><i>No new drill results reported in this release.</i></p> <p><i>No metal equivalent values have been reported.</i></p>
<b>Relationship between mineralisation widths and intercept lengths</b>	<p><i>These relationships are particularly important in the reporting of Exploration Results.</i></p> <p><i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i></p> <p><i>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').</i></p>	<p><i>No drilling reported in this release.</i></p> <p><i>Current interpretation suggests the Chubb Central pegmatite dykes are sub vertical.</i></p>
<b>Diagrams</b>	<p><i>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.</i></p>	<p><i>Refer to maps in this report.</i></p>
<b>Balanced reporting</b>	<p><i>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.</i></p>	<p><i>Comprehensive reporting of drilling results have been provided.</i></p>
<b>Other substantive exploration data</b>	<p><i>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.</i></p>	<p><i>All meaningful and material exploration data has been reported.</i></p>
<b>Further work</b>	<p><i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></p> <p><i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></p>	<p><i>Work that is currently underway or remains outstanding includes:</i></p> <p><i>Additional assay results from the completed diamond drilling.</i></p> <p><i>Field mapping of the Chubb tenure.</i></p> <p><i>Metallurgical test work programme underway.</i></p> <p><i>Ongoing drilling at Chubb Central and Chubb North.</i></p>