Burley Minerals Ltd

ASX Announcement

12 December 2023

Burley intersects high value pollucite mineralisation at Chubb Lithium Project in Québec

HIGHLIGHTS

- High value pollucite mineralisation intersected in holes CLP-038 and CLP-063 through the spodumene bearing Main Dyke at Chubb Central
- Assay results from hole CLP-038 reported
 - o 2.9m at 6.8% Cs₂O high grade pollucite and
 - 5.3m at 2.3% Li₂O including 2.3m at 3.9% Li₂O high grade lithium, intersected immediately adjacent to the pollucite zone.
- Hole CLP-063 was advanced to intersect the Main Dyke approximate 60m south of the CLP-038 intersection; visual interpretation supported by LIBS scanning suggests 3m of approximately 3 to 8% pollucite mineralisation and 10m of 5 to 20% spodumene mineralisation.

Burley Minerals Limited (ASX: BUR, "Burley" or "the Company") is excited to have received additional assay results from its spodumene-mineralised zone extension drilling at Chubb Central in the heart of the world-class lithium province of Québec, Canada.

Assay data confirmed **high value pollucite** intersections within the southern extent of the spodumene bearing Main Dyke. Early interpretation of results suggests a strike extent of more than 60m of strong caesium pollucite mineralisation, directly south of known spodumene mineralisation. The pollucite mineralisation alternates with spodumene mineralisation within the pegmatite intersections.

Pollucite is the premium caesium-bearing mineral, classified as critical by the USA and Canada, and is rarely available in economic deposits. Only three pollucite mines have ever operated and none are mining pollucite currently. The chief use of caesium to-date is as a specialty oil well fluid, caesium formate, however a range of other high-value chemicals are used in specialty research projects. Naturally occurring caesium is not radioactive.

The pegmatite intersections of Holes CLP-038 and CLP-063 were scanned at the Elemission laboratory in Montreal, Canada. Elemission uses calibrated and precise laser-induced breakdown spectroscopy (LIBS) scanning technology to determine minerology and estimate chemical composition of rock core. The results of the LIBS scanning confirmed pollucite mineralisation intersections from holes CLP-038 and CLP-063.

Burley Minerals Non-Executive Director, David Crook commented:

"The discovery of pollucite at the Main Dyke of Chubb Central, adjacent to spodumene mineralisation, greatly enhances the importance of the Chubb Project to Burley Minerals.

"To date, deposits of pollucite have not been large, but quality pollucite is a critical mineral of high value, and only three pollucite mines have operated world-wide. One of those mines was the Sinclair Caesium Mine near Norseman, Western Australia, which was profitably mined by Pioneer Resources Limited when I was Managing Director. Burley will benefit from having two of the key Sinclair team involved in the Chubb Project.

ASX: BUR

"Pollucite has only been found in significant amounts in large, highly differentiated Lithium Caesium Tantalum pegmatite systems which bodes well for the prospectivity of the Chubb Project for further discoveries of LCT-related minerals.

Burley Minerals Managing Director and CEO, Stewart McCallion commented:

"Burley Minerals are thrilled to discover this premium pollucite zone in the Main Dyke at Chubb Central, where we have already defined significant and continuous spodumene mineralisation. The pollucite materially adds value to the Chubb Central Mineralised Zone. Significant discoveries of pollucite in LCT pegmatites are very rare and only three pollucite mines have operated in recent times.

"Burley's exploration team has now completed more than 12,000 m of drilling at Chubb since April of this year and continue to extend and expand the Mineralised Zone at Chubb Central. Burley is aiming to publish its maiden lithium resource over Chubb Central within six months. This unexpected and fortunate discovery of pollucite supports the on-going drilling that continues to increase value for our shareholders."



Photo 1: Core from Hole CLP-038 exhibiting pollucite (red outline) and spodumene mineralisation (green outline) between 313m and 318m. Assay results from hole 38 reported 2.9m at 6.8% Cs₂O and 5.3m at 2.3% Li₂O.

Table 1: Assay Results from Hole 38 between 313 m and 319 m

			Length		Rock		
Hole-ID	From	То	(m)	Samp-ID	Code	Li₂O%	Cs₂O%
CLP-038	313	313.83	0.83	98789	PEG	2.84	0.08
CLP-038	313.83	314.2	0.37	98790	PEG	0.54	5.04
CLP-038	314.2	315.2	1.00	98792	PEG	0.07	7.11
CLP-038	315.2	316	0.80	98793	PEG	0.70	7.71
CLP-038	316	316.59	0.59	98795	PEG	1.61	6.32
CLP-038	316.59	317.5	0.91	98796	PEG	5.67	0.28
CLP-038	317.5	317.95	0.45	98797	PEG	4.51	0.11
CLP-038	317.95	318.3	0.35	98798	PEG	2.46	0.71
CLP-038	318.3	319.3	1.00	98799	PEG	0.04	1.93
		Total	6.30		Avg	1.94	5.65

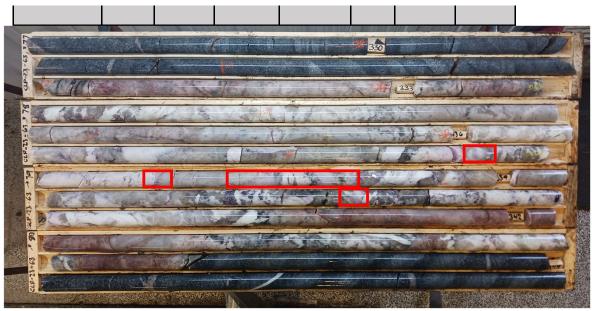


Photo 2: Core from Hole 63 exhibiting pollucite mineralisation 3m between 337 m and 340 m of approximately 3-8% pollucite (visual estimate, red outline), and 10m from 334 m - 344m visual estimate of spodumene is between 5% and 20%.

Elemission (https://www.elemission.ca/about) is a Montreal-based geochemical services group providing laser-induced breakdown spectroscopy (LIBS) technology to mining and exploration companies, amongst other industries. LIBS provides real-time multi-element analysis of rock core that can be used to provide accurate estimation of mineralogy. Pegmatite intersections of Holes CLP-038 and CLP-063, approximately 60m apart along strike of the Main Dyke, were submitted to Elemission for scanning, after assay results from Hole CLP-038 were received. Using Hole-038 core and its assay results and pollucite standard samples to calibrate the LIBS equipment, Elemission were able to positively identify pollucite in Hole-CLP-063, supporting the logging completed by Burley's Exploration Team at Chubb. Hole CLP-063 was sampled and samples were shipped to the SGS laboratory for assay; assay results results are expected in the New Year.

While sporadic and intermittent mineralisation of pollucite in LCT pegmatites is not unusual¹, continuous mineralisation of pollucite over a measurable length is very rare. This occurrence pollucite presents an opportunity to add significant value to the know spodumene-bearing Chubb Central Mineralised Zone. A schematic long section of the Chubb Central Main Dyke is presented in Figure , clearly illustrating the continuous distribution of spodumene mineralisation and now the zone of pollucite mineralisation.

¹ See Mark Ivan Jacobson and Donald Doell Jr., *The Valor Lithium and Cesium Pegmatite, Lacorne Township, Abitibi RCM, Quebec, Canada* (2019), pp.4-6.

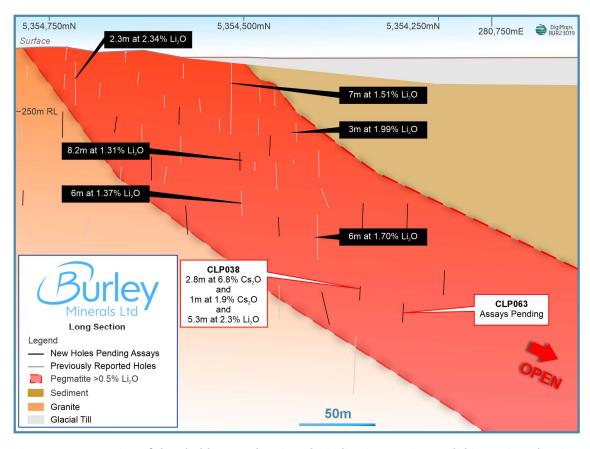


Figure 1: Long section of the Chubb Central Main Dyke indicating continuous lithium mineralisation and zone of pollucite mineralisation which may be 60m long.

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

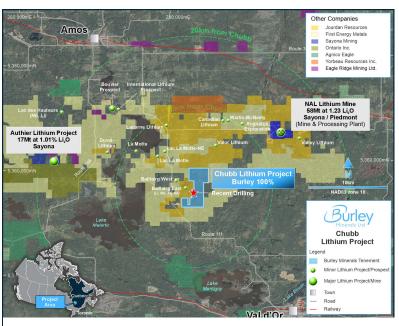


Figure 2. Location map of the Chubb Project showing proximity to the NAL lithium mine and other lithium deposits and prospects.

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 $1.23\%\,Li_2O^2$ reported, plus a number of other emerging projects including the Authier Lithium Project, with resources of 17Mt at $1.01\%\,Li_2O$ reported³. The recommissioned NAL plant is located 10km north-east of the Chubb Lithium Project, with first production having commenced in the March 2023 Quarter⁴.

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% Fe⁵.

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 DixonStewart McCallionAlex CowieNon-Executive ChairmanManaging Director & CEONWR CommunicationsBurley Minerals LimitedBurley Minerals Limited+61 412 952 610bryan@burleyminerals.com.austewart@burleyminerals.com.aualexc@nwrcommunications.com.au

² Refer to Sayona Mining's ASX Release dated 14 April 2023

³ Refer to Sayona Mining's ASX Release dated 14 April 2023.

⁴ Refer to Sayona Mining's ASX Release dated 28 April 2023.

⁵ 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
Criteria	JORC Code explanation	Commentary
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.	NQ core samples from holes drilled from surface
а	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	 QAQC comprising suitable standards (Certified Reference Material "CRM") and sourced blank material were inserted at nominal rates inside the sample sequence. The standards reported within acceptable limits. Samples are considered 'fit for purpose', being to detect anomalous metal element.
	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.	Half core samples dictated by geology vary in length and weight up to a maximum sample length of 1.2m.
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).	 Standard surface diamond drilling to recover NQ size core. Core was orientated and surveyed downhole at 50m intervals.
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.	 Diamond core recovery was measured for each run and calculated as a percentage of the drilled interval. Core recovery was generally high with fresh rock from near surface Because the sample recoveries are assumed to be high, any possible relationship between sample recovery and grade has not been investigated.

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. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. The total length and percentage of the relevant intersections logged.	 All core was geologically logged for lithology and mineralisation which has been recorded in the geology table of the drillhole database. Geological logging is of qualitive and descriptive in nature. The entire length of each hole has been geologically logged and photographed.
Sub-sampling techniques and sample preparation	If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. 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.	 Core was cut in half by diamond saw with one half retained as reference and one half sent for assay. All core processing was carried out by Service provider, MNG and stored in their facility. All samples were submitted to SGS and prepared according to the PREP-89 protocol which involves, core to be crushed to 75% passing 2mm, riffle split off 250g, then pulverized and split to better than 85% passing 75 microns. QA/QC programme has CRMs and blanks inserted into the analytical sequence at the rate of 5 per hundred. Samples sent to Elemission Laboratories were half core and not destroyed during test work.
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. 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.	 All samples were submitted for a 56-element suite to SGS laboratory having both ISO9001:2008 and ISO/IEC 17025 accreditation. SGS protocol GE_ICM91A50 was used for core 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. Samples were submitted to Elemission Laboratories for Scanning Laser Breakdown Induced Spectroscopy (LIBS). The process is considered fit for purpose for mineral species identification and core modal composition. No geophysical tools, handheld XRF or spectrometers were used. Internal SGS QAQC passed internal protocol and inserted standards were generally within 1STD. All blanks remained under detection limits confirming no contamination was introduced through the laboratory process.
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.	 Verification of the exploration processes and significant drill intersections table was undertaken by David Crook, a non-executive director of the Company and the Competent Person for this report.

Criteria	JORC Code explanation	Commentary
	The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data.	 No holes were twinned at this stage of drilling. There were no other adjustments made to the data, other than to convert Li to Li₂O using a factor of 2.1527 and to convert Cs to Cs₂O using a factor of 1.0602.
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.	 The hole collars were positioned using handheld GPS The rock chip sample and pXRF mineral vectors locations were positioned using handheld GPS. Each location has been marked in the field by a wood pole and a follow up survey is intended using an RTK system. The grid system used is UTM NAD83 (zone 18)
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.	 Drill holes are spaced approximately 50m in section and plan. Sample and pXRF mineral vectors spacing is appropriate for regional (Quebec) exploration results. No resource estimation has been made. No sample compositing was applied.
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.	 Drill lines are orientated approximately at right angles to the current interpreted strike of the targeted mineralization. No bias is considered to have been introduced by the existing sampling orientation
Sample security	The measures taken to ensure sample security.	 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.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	 Sampling and assaying techniques are considered to be industry standard. At this stage of exploration, no external audits or reviews have been undertaken.

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.	The drill hole 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 1,509ha, 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. 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 Prospect. 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 of spodumene bearing quartz-albite LCT (Lithium Caesium Tantalum) pegmatite family of rocks. The pegmatite dykes have intruded into a suite of mafic and felsic rocks. Outcropping pegmatites have been identified at the Chubb North prospect which show fertility indicators consistent with LCT (Lithium Cesium Tantalum) pegmatite family of 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 this announcement. Refer also to Appendix 1 of the announcement dated 3 July 2023.

Criteria	JORC Code explanation	Commentary
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 Li_2O , where a stoichiometric conversion factor of 2.1527 has been applied to convert Li to Li_2O No metal equivalent values have been reported.
	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.	No metal equivalent values have been reported.
Relationship	These relationships are particularly important in the reporting of Exploration Results.	Downhole lengths are reported in Appendix 1.
between mineralisation widths and	If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.	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.
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). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	Work that is currently underway or remains outstanding includes: Additional assay results from the completed diamond drilling. Field mapping of the Chubb tenure. Follow up drilling if remaining assay results are encouraging.