

09 November 2023

ASX ANNOUNCEMENT

New 1.3 km LCT Pegmatite Defined at Cadillac

Highlights

- New LCT pegmatite outcrop discovered, measuring 1.3km long and up to 150m wide, providing scale for potentially significant discovery¹
- Ongoing pegmatite analysis has defined a clear geochemical trend of highly fractionated, lithium fertile pegmatites at Cadillac
- Field crews are back to work, with the drilling approvals process underway for planned drilling across the northern winter season
- The Cadillac Lithium Project is strategically located within Sayona Mining's (ASX:SYA) Abitibi Hub in Québec, less than 100km from Canada's only operating lithium mine

Olympio Metals Limited (ASX:OLY) (Olympio or the Company) is pleased to report further exciting lithium targets from the exploration team at the Cadillac Lithium Project, as the Company works towards a drill program for the upcoming Quebec winter.

A large new LCT pegmatite trend (Dyke Z) has been mapped along 1.3km of strike, with an average mapped width of > 50m, confirming the significant scale of the target (Figure 1). A number of large-scale pegmatites in the Dyke M zone have also been identified as priority targets for drilling.

The Cadillac Project is in the rapidly emerging Cadillac-Pontiac lithium camp, less than 100km from Canada's only operating lithium mine in southwest Québec (Figure 4). First pass drilling at the Cadillac Lithium Project, completed by Vision Lithium in 2022, intersected spodumene-bearing Lithium-Caesium-Tantalum ("LCT") pegmatites with visible crystals in the drill core which correlated with high grades up to 3.14% Li₂O, confirming the presence of significant lithium².

Olympio's Managing Director, Sean Delaney, commented:

"Our exploration teams have used the XRF and LIBS analysers in the field to great effect. I visited the Cadillac Project last week and inspected a number of the targets in the field, including Dyke Z, with the Explo-Logik field team and experienced Canadian geologist Jean Lafleur.

"It was great to see first-hand the scale of the targets, especially Dyke Z, which is a very large, raised topographic feature, largely covered in moss and vegetation. These targets are all close to the known spodumene occurrences at Wells-Lacourcière which provides confidence that we are in the right area. We are currently planning our first drilling program and working on the approvals process."

¹ The classification as a Lithium-Caesium-Tantalum (LCT) pegmatite is based on field work analysis using a portable LIBS device

² ASX Announcement 1st August 2023 – Olympio Acquires Advanced Lithium Project in Quebec

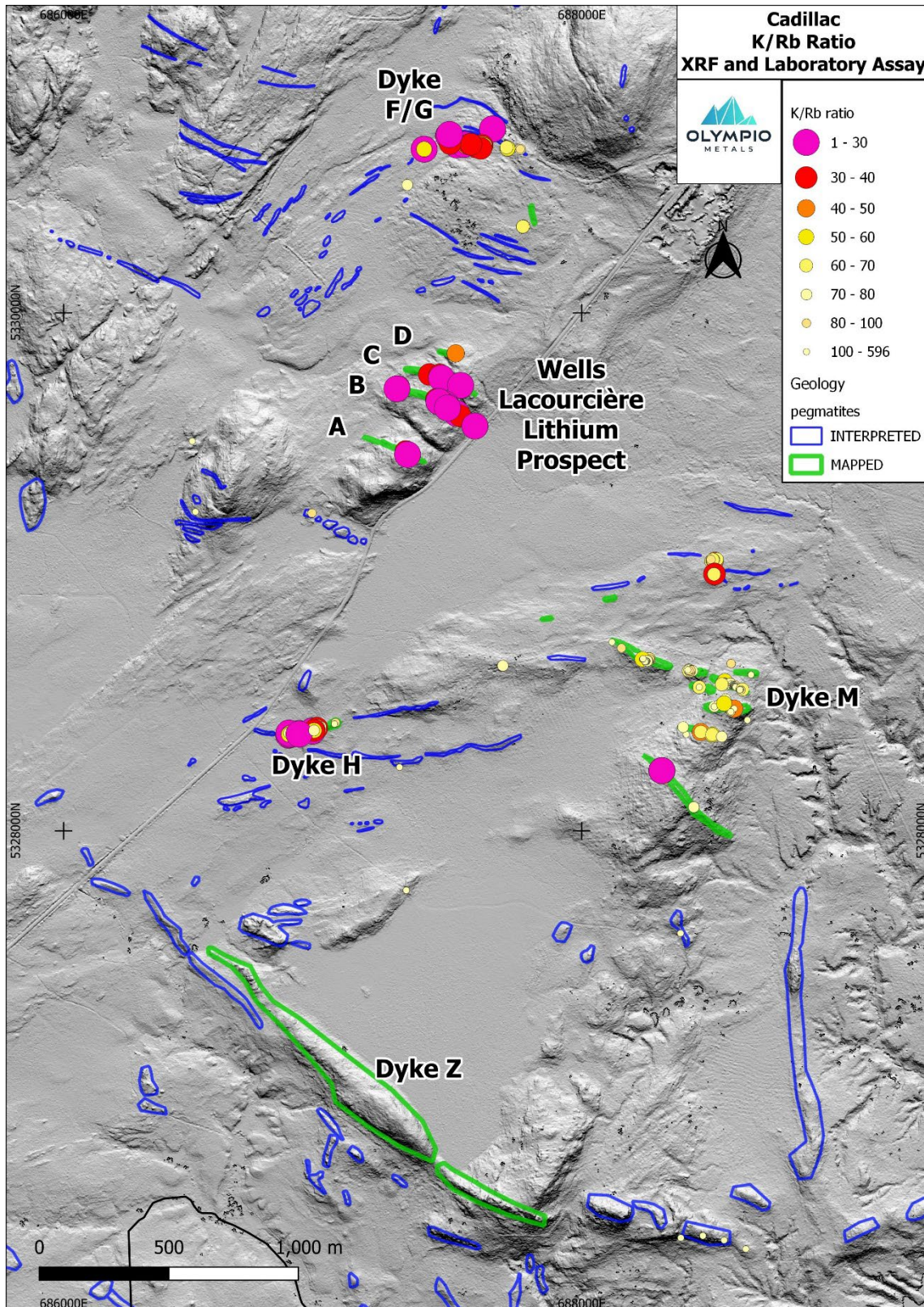


Figure 1: K/Rb ratio of rock samples across Cadillac Project, revealing prospective zones with low ratio values

Dykes M1-M6

The Dyke M zone is made up of a series of large-scale pegmatites around 1.5km to the southeast of the Wells-Lacourcière spodumene-bearing dykes. The dykes in this area are up to 400m long and up to 70m wide in parts, providing a large target area with potential for significant scale.

Thirteen rock chip samples from the Dyke M zone recently assayed by ALS laboratories Val d'Or returned a maximum value of 387 ppm Li_2O , with 5 samples $> 200\text{ppm Li}_2\text{O}$ (see Table 1 for results). Dyke M zone remains a high priority target for further clearing and drilling.

Fractionated Pegmatite Trend - Dykes F, G, H

A strong trend of the potassium to rubidium ratio less than 30 ($\text{K/Rb} < 30$) in pegmatites has been demonstrated at Dyke H (1km SSW of Wells-Lacourcière) and at Dykes F/G (1km NNE of Wells-Lacourcière) as shown in Figure 1.

The generalised N-S trend of lithium-fertile K/Rb ratios occurs peripheral to an interpreted regional structure, evident from magnetic data and topographic features evident in the detailed LiDAR derived DEM (digital elevation model). XRF measurements have established consistent $\text{K/Rb} < 30$ associated with spodumene mineralisation at Wells-Lacourcière, consistent with established theory of fractionated pegmatites and lithium fertility.³

³Selway, J.B., Breaks, F.W., and Tindle, A.G., 2005, A review of rare-element (Li-Cs-Ta) pegmatite exploration techniques for the Superior Province, Canada, and large worldwide tantalum deposits: *Exploration and Mining Geology*, v. 14, no. 1-4, p. 1-30.



Figure 2: Explo-Logik field crew on Dyke Z at Cadillac Lithium Project

Phase 3 Exploration Currently Underway

Exploration contractors Explo-logik have returned to the field to continue sampling while the weather permits. The field crews utilise portable XRF and LIBS analysers in the field to help speed up the exploration process and exploit geochemical trends in the field.

The team has also started the approvals process for Olympio's first drilling program of priority targets, scheduled to commence in the upcoming Quebec winter.

Sampling and Assay Details

In October 2023, 32 rock chip samples were collected in the Wells-Lacourcière Prospect area by exploration consultants from Explo-Logik. The samples were analysed at ALS Rouyn-Noranda for the elements Li (Li-OG63), Ba, Ce, Cr, Cs, Dy, Er, Eu, Ga, Gd, Hf, Ho, La, Lu, Nb, Nd, Pr, Rb, Sm, Sn, Sr, Ta, Tb, Th, Tm, U, V, W, Y, Yb, Zr, Be (ME-MS85) and K (ME-ICP61). Assays are presented in Table 1 below.

Table 1: Selected Rock Chip Assays October 2023 Cadillac Project (only >.005% Li shown)

Sample	E_NUTM17	N_NUTM17	Description	Dyke	Li ₂ O %	Be ppm	Nb ppm	Rb ppm	Sn ppm	Ta ppm	K %
553667	688433	5328092	Pegmatite	M	0.011	3	34.3	362	13.7	3.0	2.88
553669	688589	5328472	Pegmatite	M	0.039	6	19.7	340	6.4	3.5	3.71
553671	688460	5328382	Pegmatite	M	0.030	58	31.5	280	3.8	25.1	1.74
553673	688512	5328480	Pegmatite	M	0.026	9	26.1	211	7.0	6.2	2.17
553675	688541	5328566	Pegmatite	M	0.022	10	87.9	327	53.5	18.8	2.14
553684	688576	5328460	Pegmatite	M	0.022	15	28.4	352	8.5	10.0	4.02

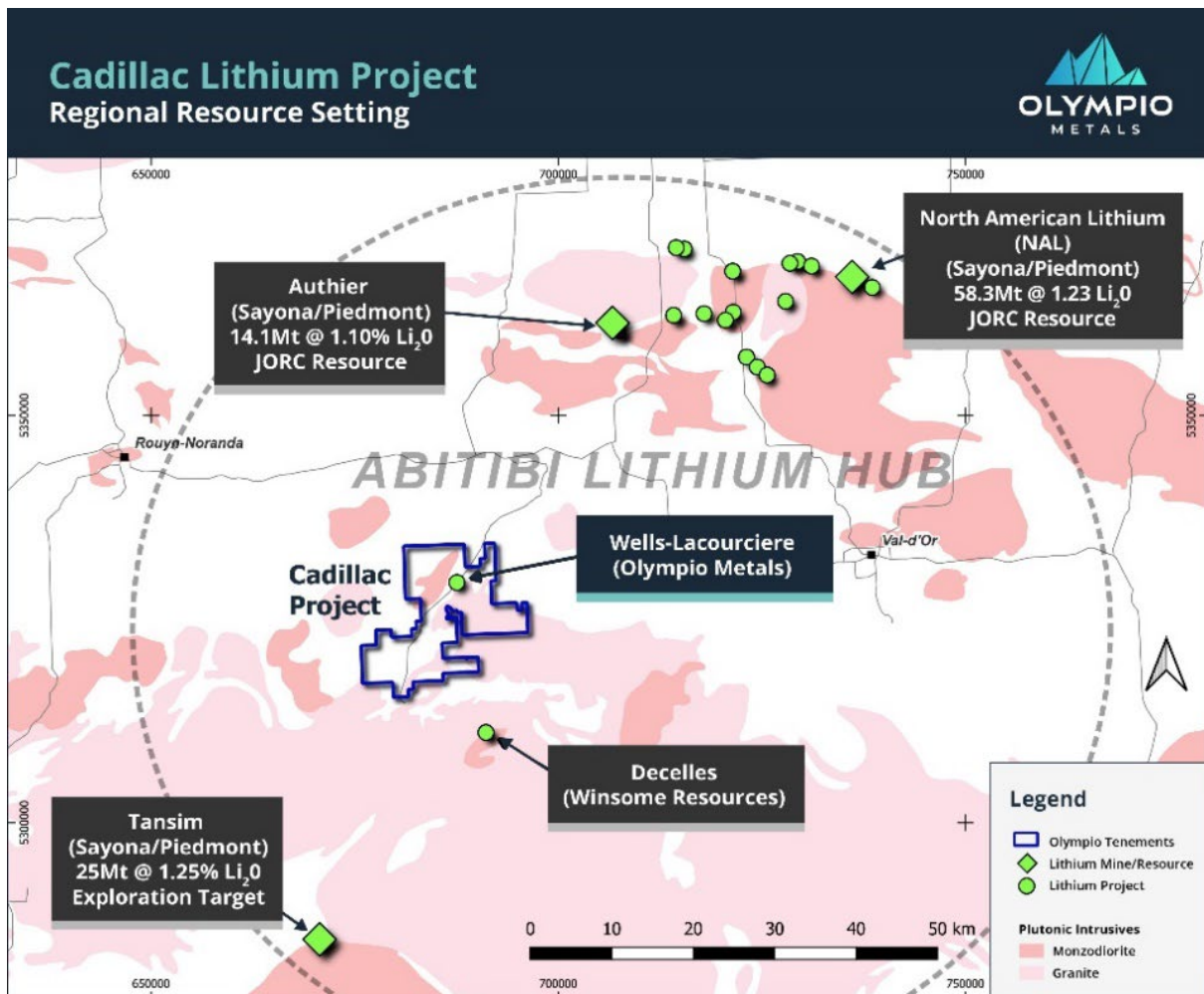


Figure 3: Location of Cadillac Project relative to intrusive bodies and lithium mineralisation

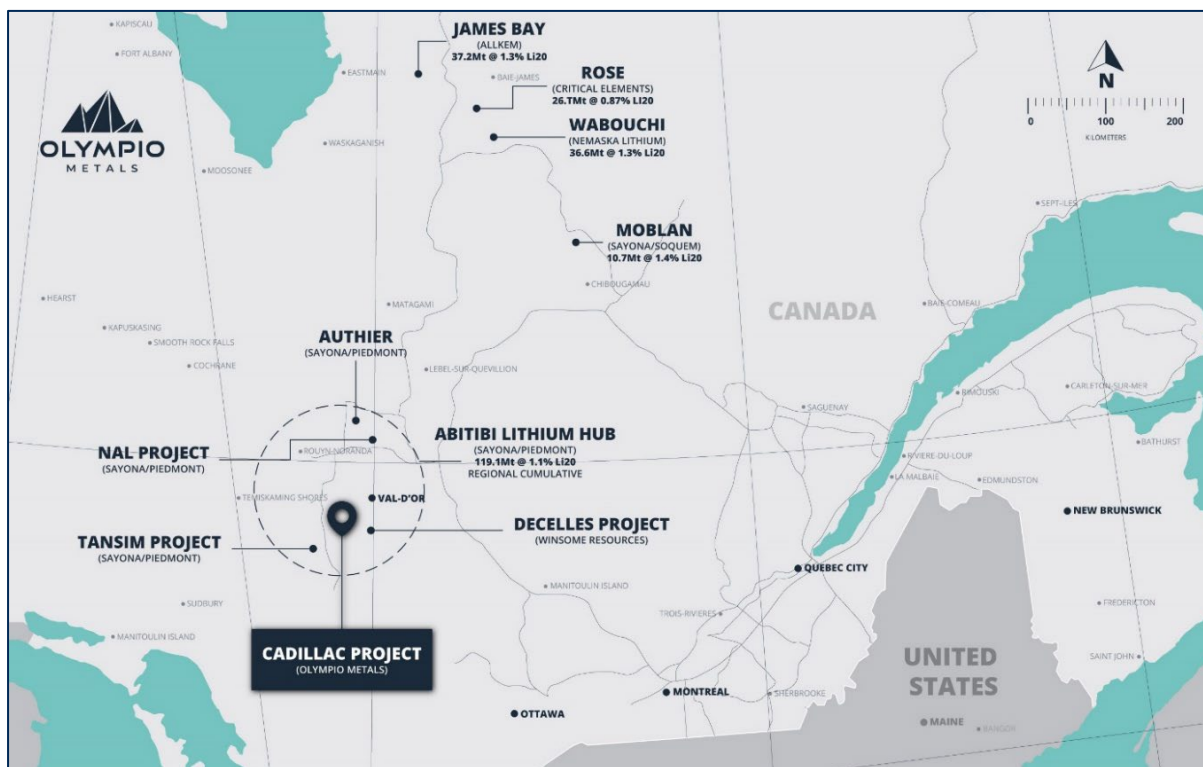


Figure 4: Cadillac Lithium Project Location

This announcement is approved by the Board of Olympio Metals Limited.

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Competent Person's Statement

The information in this announcement that relates to exploration results is based on information compiled by Mr. Neal Leggo, a Competent Person who is a Member of the Australian Institute of Geoscientists and a consultant to Olympio Metals Limited. Mr. Leggo has sufficient experience which is relevant to the style of mineralisation and type of deposit 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 Leggo consents to the inclusion in this announcement of the matters based on this information in the form and context in which it appears.

Cautionary Note

Throughout this document, Olympio refers to “spodumene” or “pegmatite”. While the Company is very encouraged by the geological observations and assessment by advisors, no quantitative assessment of mineralisation is possible at this stage. The presence of pegmatite does not equate to lithium mineralisation. Further, no forecast is made of whether further drilling will deliver ore grade intersections. The observed presence of spodumene within pegmatite does not necessarily equate to economic grades of lithium mineralisation until confirmed by chemical analysis. It is not possible to accurately estimate the concentration of lithium in mineralisation by visual estimates and this will be determined by chemical analysis.

Forward Looking Statements

This announcement may contain certain “forward looking statements” which may not have been based solely on historical facts, but rather may be based on the Company’s current expectations about future events and results. Where the Company expresses or implies an expectation or belief as to future events or results, such expectation or belief is expressed in good faith and believed to have a reasonable basis.

However, forward looking statements are subject to risks, uncertainties, assumptions, and other factors which could cause actual results to differ materially from future results expressed, projected or implied by such forward looking statements. Such risks include, but are not limited to exploration risk, Mineral Resource risk, metal price volatility, currency fluctuations, increased production costs and variances in ore grade or recovery rates from those assumed in mining plans, as well as political and operational risks in the countries and states in which we sell our product to, and government regulation and judicial outcomes.

Readers should not place undue reliance on forward looking information. The Company does not undertake any obligation to release publicly any revisions to any “forward looking statement” to reflect events or circumstances after the date of this announcement, or to reflect the occurrence of unanticipated events, except as may be required under applicable securities laws.

ISSUED CAPITAL

Ordinary Shares: 78.8M

BOARD OF DIRECTORS

Sean Delaney, Managing Director

Simon Andrew, Chairman

Aidan Platel, Non-Executive Director

COMPANY SECRETARY

Peter Gray

REGISTERED OFFICE:

L2, 25 Richardson St,
West Perth 6005

JORC Code - Table 1

Section 1 Sampling Techniques and Data

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

Criteria	Explanation	Comment
Sampling techniques	<i>Nature and quality of sampling.</i>	The rock chip sampling program described was carried out on surface pegmatite outcrops using hammers and chisels to extract samples. Samples were not representative of outcrop widths, and comprise selectively extracted mineralised rock.
	<i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i>	Samples were collected by or under the supervision of professional geologists.
	<i>Aspects of the determination of mineralisation that are Material to the Public Report.</i>	Samples ranged from 0.75 – 2kg No standards, blanks or duplicate analyses were undertaken.
Drilling techniques	<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>	N/A
Drill sample recovery	<i>Method of recording and assessing core and chip sample recoveries and results assessed.</i>	N/A
	<i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i>	
	<i>Whether a relationship exists between sample recovery and grade ...</i>	
Logging	<i>Whether core and chip samples have been logged</i>	Detailed descriptions of each sample analysed were recorded. They are not presented in this report due to space limitations.
	<i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i>	
	<i>The total length and percentage of the relevant intersections logged.</i>	
Sub-sampling techniques and sample preparation	<i>If core, whether cut or sawn and whether quarter, half or all core taken.</i>	The rock chip samples were bagged, sealed and transported to the facility of ALS Chemex in Rouyn-Noranda, where each sample was dried, crushed and pulped (Prep-31). The samples were crushed to 70 per cent less than two millimetres (CRU-31), riffle split, pulverise split to better than 85 per cent passing 75 microns (PUL-31). The sample preparation of the samples followed industry best practice, involving oven drying, pulverising, to produce a homogenous sub sample for analysis. Along with submitted samples, standards and blanks were inserted on a regular basis where the pre-numbered calico bag ended with the numbers. The sampling program and the quality control program were planned and supervised by Suzie Tremblay of Explo-Logik. ALS applied standard QAQC, involving analysis of sterile, duplicate and standardised samples, accredited by ALS Canada Ltd.
	<i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i>	
	<i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i>	
	<i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i>	
	<i>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.</i>	
	<i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i>	
Quality of assay data and	<i>The nature, quality and appropriateness of the assaying and laboratory procedures used</i>	Rock chip samples were assayed for Lithium plus 33 elements by ICP-AES (MEMS85) and by 4 Acid digestion for ore grade lithium samples (Li-OG63), plus K (ME-ICP61). The suite of elements analysed was:

laboratory tests	<i>For geophysical tools, spectrometers, handheld XRF instruments, etc,</i>	Li (Li-OG63), Ba, Ce, Cr, Cs, Dy, Er, Eu, Ga, Gd, Hf, Ho, La, Lu, Nb, Nd, Pr, Rb, Sm, Sn, Sr, Ta, Tb, Th, Tm, U, V, W, Y, Yb, Zr, Be (ME-MS85) and K (ME-ICP61). The assaying techniques used are considered total and appropriate to the style of mineralisation and geology.
	<i>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.</i>	No geophysical tools, spectrometers, or handheld XRF instrument results are reported on. However, portable LIBS and XRF analysis tools were utilised in the field to directly measure Li, K, Rb and numerous other pathfinder elements. This strategy enabled a high rate of geochemical assessment of outcrops, permitting in-field interpretation and focusing rockchip sampling on more prospective outcrops.
Verification of sampling and assaying	<i>The verification of significant intersections by independent or alternative company personnel.</i>	NA
	<i>The use of twinned holes.</i>	NA
	<i>Documentation of primary data, data entry procedures, data verification, data storage protocols.</i>	Capture of field logging was electronic into Excel spreadsheets with multiple worksheets for each sample No adjustments to the assay data are recorded.
	<i>Discuss any adjustment to assay data.</i>	
Location of data points	<i>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.</i>	Handheld GPS (+/- 10m accuracy) Grid System – NAD83/NUTM17
	<i>Specification of the grid system used.</i>	
	<i>Quality and adequacy of topographic control.</i>	N/A
Data spacing and distribution	<i>Data spacing for reporting of Exploration Results.</i>	Data spacing is appropriate for reporting of exploration results.
	<i>Whether appropriate for the Mineral Resource ... estimation procedure(s) ...</i>	No Mineral Resources have been estimated.
	<i>Whether sample compositing has been applied.</i>	No compositing was undertaken.
Orientation of data in relation to geological structure	<i>Whether the orientation of sampling achieves unbiased sampling</i>	Rock chip samples are point samples, not representative, sample orientation is therefore not relevant.
	<i>relationship between the drilling orientation and structures is considered to have introduced a sampling bias.</i>	N/A.
Sample security	<i>The measures taken to ensure sample security.</i>	Samples were transported from the Cadillac Lithium project to a secure facility in Rouyn-Noranda, Quebec where samples were prepared. The samples were bagged, sealed and transported to the facility of ALS Chemex in Rouyn-Noranda, Quebec.
Audits or reviews	<i>The results of any audits or reviews of sampling techniques and data.</i>	N/A

Section 2 Reporting of Exploration Results

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

Criteria	Explanation	Comment
Mineral tenement and land tenure status	<i>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.</i>	The Cadillac Project is a mineral property which consists of 331 claims and 3 claim applications (registered with the Quebec provincial government) covering 19,036 hectares (190 km ²). The Property is located 20km south of the historic mining town of Cadillac and approximately halfway between the major mining centres of Rouyn-Noranda and Val-d'Or, in the province of Quebec, Canada. The property consists of a contiguous package of wholly owned tenements held under title by Vision Lithium and under option for purchase by Olympio. The tenements are current and in good standing with the Quebec Provincial government. There are existing 2% net smelter royalty agreements on 214 of the mining claims with four independent parties.
	<i>The security of the tenure held at the time of reporting along with any known impediments to</i>	Olympio are not aware of any known impediments to obtaining a licence to operate in the area.

	<i>obtaining a licence to operate in the area.</i>	
Exploration done by other parties	<i>Acknowledgment and appraisal of exploration by other parties.</i>	<p>Significant exploration has recently been undertaken by Vision Lithium in 2022. Earlier exploration by previous explorers is limited and Vision reported having found no record or sign of earlier drilling on the property. Vision undertook the following work in 2022:</p> <ul style="list-style-type: none"> • Acquired permits for access trails prep, outcrop clearing, sampling and drilling. • Sampled and assayed 24 separate short channels across the main outcropping B dyke over a strike length of 300 metres. • Completed a high-resolution airborne MAG survey over more than half the property. Combining the results of the survey with an existing adjacent HiRes survey. • Acquisition of recent government LIDAR data for the entire property and completed a re-interpretation of the data at higher resolutions in order to define and refine potential pegmatite targets for future exploration. The LIDAR report identified over 400 potential pegmatite targets for ground proofing. • Brush cleaning and stripping of outcropping pegmatite dykes in the main cluster; • Completed diamond core drilling of 36 holes totalling 4,597 metres. • Completion of a “first pass” field exploration of property to ground proof pegmatite targets identified by Mag and LiDAR survey interpretations. This work was undertaken by consultants Geologica, and involved the mapping of 979 outcrops and collection of 634 samples, predominantly in the south of the project area. The samples were analysed for a wide range of elements including Li (Li-OG63), K (ME-ICP61) and Rb (ME-MS85). The Li, K, and Rb samples are presented in this release.
Geology	<i>Deposit type, geological setting and style of mineralisation.</i>	<p>The Cadillac Project is located in the Val-d’Or-Malartic mining camp in the Southern Volcanic Zone in the southeastern part of the Archean Abitibi Greenstone Belt.</p> <p>The Property hosts a cluster of spodumene mineralised east-west trending pegmatite dykes, known as the Wells-Lacourciere prospect. The dykes are spaced approximately 100 metres apart north-south over close to one kilometre and traced for at least 300 metres along strike. The dykes have been drilled and the geology and mineralisation of the prospect is well understood. The dykes at the Wells-Lacourciere prospect are classification as a Lithium-Caesium-Tantalum (LCT) pegmatite based on geochemical analysis, mineralogy and geological setting.</p> <p>There are many hundreds of unexplored pegmatites beyond Wells-Lacourciere, as defined from detailed LiDAR derived DEM and remotely sensed imagery. Limited clearing of prospective pegmatites was undertaken by previous project owner (Vision Lithium) however current exploration is focused on uncleared pegmatites in the Wells-Lacourciere region. Recent exploration by Olympio is showing promising results at a number of early-stage prospects with indications of LCT-style pegmatite mineralisation detected.</p>
Drill hole Information	<i>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:</i>	No new drilling for this announcement. The drill hole intercepts mentioned in this release have been discussed in greater detail in previous ASX release Olympio Metals 1 st August 2023 “OLYMPIO ACQUIRES ADVANCED LITHIUM PROJECT IN QUEBEC”
Data aggregation methods	<p><i>... weighting averaging techniques, maximum and/or minimum grade truncations should be stated.</i></p> <p><i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></p>	<p>Individual sample assays are presented.</p> <p>No metal equivalent values or formulas used.</p>
Relationship between mineralisation widths and intercept lengths	<p><i>These relationships are particularly important in the reporting of Exploration Results.</i></p> <p><i>If the geometry of mineralisation with respect to the drill hole angle</i></p>	Intercepts reported are point samples.
Diagrams	<i>Appropriate maps and sections (with scales) and tabulations of intercepts should be included ...</i>	Summary diagrams are included in the accompanying announcement.
Balanced reporting	<i>Where comprehensive reporting of all Exploration Results is not practicable</i>	<p>Selected significant individual assays are highlighted in the announcement, with all sample assays provided in a Table 1.</p> <p>The location of interpreted pegmatite targets is shown in a map.</p> <p>No historical drilling is known to exist.</p>

Other substantive exploration data	<i>Other exploration data, if meaningful and material, should be reported.</i>	All relevant data has been discussed within this report.
Further Work	<i>The nature and scale of planned further work.</i>	Further field mapping and rock chip sampling is currently underway. Drilling is proposed to be undertaken during the Canadian winter. Much of the tenement remains unexplored for pegmatites.