



## ASX/Media Announcement

Perth: 3 August 2016

### Further High-Grade Lithium at Lemare

- Up to 3.34% Li<sub>2</sub>O from Lemare spodumene pegmatite
- Latest grades average 1.73% Li<sub>2</sub>O
- Project contains an undrilled spodumene pegmatite at least 200 m long and grading up to 12 m @ 1.96% Li<sub>2</sub>O, as defined by surface channel sampling
- Drilling permit expected imminently
- Field camp permit in place and awaiting drill rig
- Potential to define a resource within 6 months

Platypus Minerals Ltd (ASX:PLP) ("Platypus" or the "Company") advises that preparations for field work at Lemare are progressing, with the granting of a permit to establish a field camp.

A drilling permit is expected imminently, with the arrival of a diamond drilling rig due by mid-August.

The Lemare lithium project is located in the James Bay region of Quebec, Canada (Figure 1). The project is secured by an option agreement ("Lemare Option") entered into by the company's wholly owned subsidiary Lepidico Ltd ("Lepidico") and the owner of Lemare, Critical Elements Corporation (TSX-V:CRE), on 11 February 2016. Full details were reported to the market on 12 February 2016.

During site investigations for a suitable field camp, an additional six grab samples were collected from an outcropping portion of the Lemare spodumene pegmatite (Figures 2 and 3). Results confirm robust lithium grades at Lemare, with **up to 3.34% Li<sub>2</sub>O** recorded. The average across the six samples is 1.73% Li<sub>2</sub>O (Table 1).



**Figure 1.** Location of Lemare lithium project in Quebec, Canada.

As previously reported, in summary, the Lemare project covers approximately 70 km<sup>2</sup> of tenure in a proven lithium district that hosts several advanced lithium deposits in the vicinity. Lemare is located only 25 km east-northeast of the Whabouchi deposit, held by Nemaska Lithium, within a similar geological setting, namely, on the margin of a belt of metamorphosed greenstones fringing a zone of granulite and migmatite rocks (Figure 4).

The project contains an undrilled spodumene pegmatite, discovered in 2012, at least 200 m long and grading up to 12 m @ 1.96% Li<sub>2</sub>O, including 6 m @ 2.68% Li<sub>2</sub>O, as defined by surface channel sampling.

**Table 1.** Lemare spodumene pegmatite grab sampling<sup>1</sup> July 2016

Sample ID	Northing (m)	Easting (m)	Li <sub>2</sub> O (%)
I669460	471639	5734456	0.24
I669461	471639	5734456	1.02
I669462	471670	5734472	0.82
I669463	471670	5734472	<b>3.34</b>
I669464	471693	5734488	1.80
I669465	471752	5734509	<b>3.19</b>
		<b>Average</b>	<b>1.73</b>

<sup>1</sup> Grab samples collected from outcropping pegmatite.



**Figure 2.** Outcropping Lemare pegmatite.

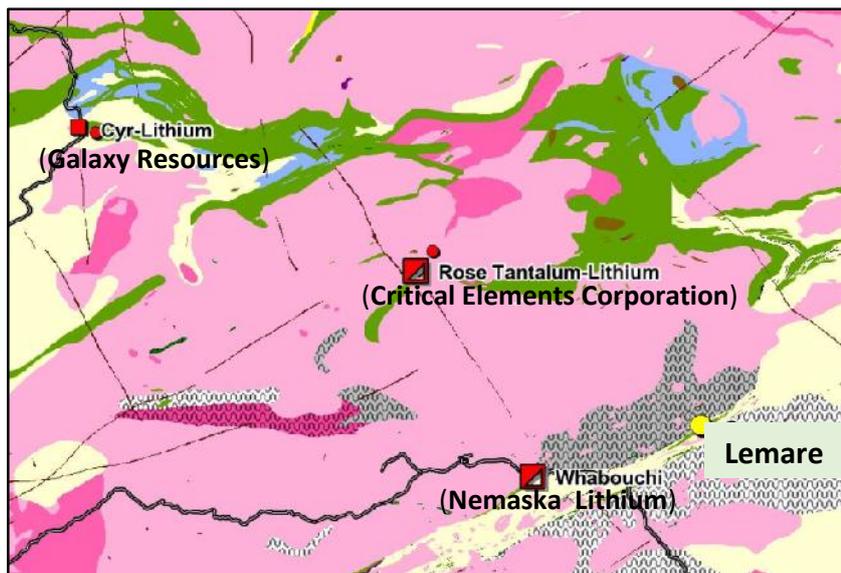
Platypus will implement a work program comprising mapping and prospecting in conjunction with two phases, of approximately 2,000 metres each, of diamond drilling, with the aim of defining an initial Inferred Resource at Lemare by 31 December 2016. As mentioned above, a drilling rig is expected on site in mid August 2016 to commence the first phase of drilling.



**Figure 3.** Close up of Lemare pegmatite showing large spodumene crystals.

Platypus, through Lepidico, is earning up to 75% of the Lemare project. Under agreed terms, the Company has issued to Critical Elements C\$500,000 worth of Platypus shares, being 18,514,939 shares issued at the 5-day VWAP post 30 May 2016 of 2.8355 cents (refer Appendix 3B lodged 28 July 2016). To complete the initial earn of a 50% interest in the project, the Company is to make a cash payment to Critical Elements of C\$35,000 by 9 September 2016, and fund exploration expenditure of C\$800,000 by 31 December 2016, and a further C\$1.2 million by 31 December 2017.

The Company can then proceed to earn an additional 25% interest in Lemare by paying to Critical Elements C\$2,500,000 and delivering a definitive feasibility study and environmental study by 30 June 2020.



**Figure 4.** Summary geology of a portion of the James Bay region, Quebec, Canada, showing similarity of geological setting of Whabouchi and Lemare on the northern edge of a belt of metamorphosed greenstones (green and yellow) wrapping around a zone of high-grade granulite and migmatite (dark grey). (After Quebec Ministry of Energy and Natural Resources, 2016). Lemare sits 25 km from Whabouchi.

Platypus Managing Director, Tom Dukovic, commented, *“We’re becoming active on several exploration fronts. The imminent drilling of the Lemare spodumene pegmatite coincides with our recent agreement on terms to explore the Royal prospect, also in Quebec, which hosts spectacular lepidolite mineralisation.*

*“We are particularly excited at the potential to define a resource at Lemare before year’s end. These developments in Canada, together with the advances in our joint ventures with Crusader Resources in Brazil and Latin Resources in Argentina, continue to build Platypus as a globally significant and diversified lithium business – an approach that management is confident will lead to strong growth of both the Company and in shareholder value.”*

For further Information, please contact:

Tom Dukovic

Managing Director

08 9363 7800 (+61 8 9363 7800)

### **About Platypus Minerals Ltd**

Platypus Minerals Ltd is an ASX-listed Perth based company focused on the lithium sector. It’s current exploration assets include options over the Lemare project and the Royal project, both in Quebec, Canada; ownership of the Euriowie project near Broken Hill in New South Wales; a joint venture agreement with ASX-listed Crusader Resources (ASX:CAS) to jointly exploit lithium opportunities in Brazil; and an agreement with ASX-listed Latin Resources (ASX:LRS) to jointly exploit lithium opportunities in Peru and Argentina. Through wholly-owned subsidiary Lepidico Ltd, Platypus also owns the L-Max® technology, a metallurgical process that extracts lithium from non-conventional sources, specifically Li-rich mica minerals such as lepidolite and zinnwaldite, and thus has the potential to disrupt the lithium market by providing additional lithium to the market from an alternative source. Platypus’s largest shareholders are Strategic Metallurgy Pty Ltd and Potash West Ltd (ASX:PWN).

*The information in this report that relates to Exploration Results is based on information compiled by Mr Tom Dukovic, who is an employee of the Company and a member of the Australian Institute of Geoscientists and who has sufficient experience relevant to the styles of mineralisation and the types of deposit under consideration, and to the activity that has been undertaken, to qualify as a Competent Person as defined in the 2012 edition of the “Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves.” Mr Dukovic consents to the inclusion in this report of information compiled by him in the form and context in which it appears.*

**APPENDIX 1. JORC Code (2012) Table 1 Report: Reconnaissance Rock Chip Sampling, Lemare lithium project, Quebec, Canada, July 2016.**

**Section 1: Sampling Techniques and Data**

Criteria	JORC Code explanation	Commentary
Sampling techniques	<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>	6 surface rockchip grab samples were collected from an outcropping portion of the Lemare pegmatite during a reconnaissance trip to determine location for a field camp for an upcoming diamond drilling program.
	<i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i>	Sample locations were determined with a hand held GPS and coordinates and geological description were noted for each sample.
	<i>Aspects of the determination of mineralisation that are Material to the Public Report.</i>	The sampling program was reconnaissance in nature, and grab samples were collected randomly by a field technician.
	<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>	
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>	Not applicable, no drilling was conducted.
Drill sample recovery	<i>Method of recording and assessing core and chip sample recoveries and results assessed.</i>	Not applicable, no drilling was conducted.
	<i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i>	Not applicable, no drilling was conducted.
	<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>	Not applicable, no drilling was conducted.
Logging	<i>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.</i>	Not applicable, no drilling was conducted.
	<i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i>	Not applicable, no drilling was conducted.
	<i>The total length and percentage of the relevant intersections logged.</i>	Not applicable, no drilling was conducted.
Sub-sampling techniques and sample preparation	<i>If core, whether cut or sawn and whether quarter, half or all core taken.</i>	Not applicable, no drilling was conducted.
	<i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i>	Not applicable, no drilling was conducted.
	<i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i>	Samples were submitted to ALS Minerals laboratories in Val d'Or, Quebec, Canada where the entire sample was crushed, >70% -6mm fraction, then pulverised to 85% passing 75 microns or better.
	<i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i>	No quality control procedures were considered necessary for this reconnaissance style sample program.

	<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>	Not considered necessary for reconnaissance style sample program.
	<i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i>	Does not apply to this sampling method.
Quality of assay data and laboratory tests	<i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i>	Samples were sent to ALS Minerals in Val d'Or and analysed for Li by method Li-OG63 with ICP-AES finish.
	<i>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.</i>	Not applicable, no instruments used.
	<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>	Not considered necessary for reconnaissance style sample program.
Verification of sampling and assaying	<i>The verification of significant intersections by either independent or alternative company personnel.</i>	Not applicable, no drilling was conducted.
	<i>The use of twinned holes.</i>	Not applicable, no drilling was conducted.
	<i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i>	Sample locations and descriptions were recorded on paper in the field then entered into digital format using Micromine software then uploaded to the company SQL database.
	<i>Discuss any adjustment to assay data.</i>	There has been no adjustment to assay data.
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>	Sample coordinates were determined using a hand held GPS.
	<i>Specification of the grid system used.</i>	Canadian NTS Sheet 32O14 Nad83 Zone18
	<i>Quality and adequacy of topographic control.</i>	RL not determined.
Data spacing and distribution	<i>Data spacing for reporting of Exploration Results.</i>	Grab samples taken randomly from an outcropping portion of the Lemare pegmatite.
	<i>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.</i>	Not applicable, no drilling was conducted.
	<i>Whether sample compositing has been applied.</i>	Not applicable, no drilling was conducted.
Orientation of data in relation to geological structure	<i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i>	Not considered necessary for reconnaissance style sample program.
	<i>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.</i>	Not applicable, no drilling was conducted.
Sample security	<ul style="list-style-type: none"> <li><i>The measures taken to ensure sample security.</i></li> </ul>	The samples were personally transported and delivered to the laboratory in Val d'Or by technical staff of the company's exploration consultant Consul-Teck Exploration.
Audits or reviews	<ul style="list-style-type: none"> <li><i>The results of any audits or reviews of sampling techniques and data.</i></li> </ul>	No audits or reviews were conducted for this sampling program.

## Section 2: Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> <li>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.</li> </ul>	Exploration Concession CDC-2003033, located approximately 65 km NE of the village of Nemaska on in the James Bay regional municipality of Quebec, Canada. Tenement ownership is held by Critical Elements Corporation. Platypus Minerals Ltd, through its subsidiary Lepidico Ltd, has an option to earn up to 75% in this concession as well as others totalling approximately 78 square kilometres.
	<ul style="list-style-type: none"> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul>	Tenure is secure with no known impediments.
Exploration done by other parties	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	Exploration was conducted by Consul-Teck Exploration staff contracted to Platypus Minerals Ltd.
Geology	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	Spodumene–dominant LCT pegmatite within Archean volcano-sedimentary belt of the Lac des Montagnes Formation.
Drill hole Information	<ul style="list-style-type: none"> <li>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: <ul style="list-style-type: none"> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>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.</li> </ul>	Not applicable, no drilling was conducted.
	<ul style="list-style-type: none"> <li>easting and northing of the drill hole collar</li> </ul>	Not applicable, no drilling was conducted.
	<ul style="list-style-type: none"> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> </ul>	Not applicable, no drilling was conducted.
	<ul style="list-style-type: none"> <li>dip and azimuth of the hole</li> </ul>	Not applicable, no drilling was conducted.
	<ul style="list-style-type: none"> <li>down hole length and interception depth</li> </ul>	Not applicable, no drilling was conducted.
	<ul style="list-style-type: none"> <li>hole length.</li> </ul>	Not applicable, no drilling was conducted.
	<ul style="list-style-type: none"> <li>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.</li> </ul>	Not applicable, no drilling was conducted.
Data aggregation methods	<ul style="list-style-type: none"> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</li> </ul>	Not applicable, no data aggregation was conducted.
	<ul style="list-style-type: none"> <li>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> </ul>	Not applicable, no data aggregation was conducted.
	<ul style="list-style-type: none"> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	Not applicable, no metal equivalent values are stated.
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> <li>These relationships are particularly important in the reporting of Exploration Results.</li> </ul>	Not applicable, no drilling was conducted.
	<ul style="list-style-type: none"> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> </ul>	Not applicable, no drilling was conducted.
	<ul style="list-style-type: none"> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</li> </ul>	Not applicable, no drilling was conducted.

Diagrams	<ul style="list-style-type: none"> <li>• <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></li> </ul>	Not applicable, no drilling was conducted.
Balanced reporting	<ul style="list-style-type: none"> <li>• <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></li> </ul>	.
Other substantive exploration data	<ul style="list-style-type: none"> <li>• <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></li> </ul>	Not applicable. Reconnaissance grab samples only.
Further work	<ul style="list-style-type: none"> <li>• <i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></li> </ul>	Work at Lemare to date consists of 6 channels cut and sampled across the pegmatite body in 2012 and recent reconnaissance grab sampling. This work has shown the presence of a Li-mineralised spodumene-dominant pegmatite at least 200 m in length averaging 10.25 m in width and 1.44% Li <sub>2</sub> O. Diamond drilling of the pegmatite is planned to commence in August 2016 to test continuity and extent of mineralisation at depth and along strike.
	<ul style="list-style-type: none"> <li>• <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></li> </ul>	This data will be compiled on completion of the first phase of drilling.