T: +61 8 9363 7800 | e: office@platypusminerals.com.au | www.platypusminerals.com.au

# ASX/Media Announcement

US TED ASX

Perth: 31 July 2016

# QUARTERLY ACTIVITIES REPORT

for the period ending 30 June 2016

Perth-based explorer Platypus Minerals Ltd ("Platypus" or "Company") presents its Q4 activities report for the quarter ended 30 June 2016.

# **HIGHLIGHTS**

## Corporate

- General Meeting held with shareholders approving terms to acquire Lepidico Ltd
- Platypus completes acquisition of 100% of lithium company Lepidico Ltd
- Gary Johnson appointed to the Board as non-executive Chairman
- Non-renounceable rights issue raises \$3.67M, with shareholders taking 74% of the offer
- Exercise of options raises a further \$281,000

#### Corporate (post quarter end)

Rights issue funds received post quarter end; current cash in bank: \$3.77M

## Operations

- Lepidico and Crusader formalise lithium joint venture
- European Metals Holdings signs option to use L-Max® at Cinovec
- Lemare Option exercised
- Term Sheet signed with Latin Resources agreeing lithium joint ventures in Argentina and Peru
- L-Max® achieves significant patent milestone

#### Operations (post quarter end)

- Drilling at Pearl Bar returns porphyry copper intercept of 92 m @ 0.31% Cu and 109 ppm Mo
- Option secured over Royal project hosting lepidolite-rich pegmatites

## **CORPORATE**

On 30 May 2016 the Company held a General Meeting at which shareholders approved the terms for the acquisition of 100% of lithium company Lepidico Ltd by the issue of 750,000,000 Platypus shares, at a deemed issue price of 0.6 cents each, to the Lepidico shareholders in exchange for all of their Lepidico shares.

The transaction was finalised on 8 June 2016. As per agreed terms, these shares are subject to voluntary escrow, with 691,729,647 shares escrowed for six months until 3 December 2016, and the balance 58,270,353 shares escrowed for three months until 3 September 2016.

Further, as agreed, on completion of the acquisition on 9 June 2016, Lepidico chairman, Mr Gary Johnson, was appointed to the Board of Platypus as Non-executive Chairman, while outgoing Chairman Laurie Ziatas resigned from the Board.

Consequent on successful completion of the acquisition of Lepidico, the Company undertook a 3 for 5 non-renounceable rights issue at 1.0 c, raising \$3,672,904 before costs. The Offer Document relating to the rights issue was dispatched on 8 June 2016 to shareholders registered on the Record Date, being 3 June 2016.

The rights issue opened on 8 June 2016 and closed on 21 June 2016. The Offer was fully underwritten by Kslcorp Pty Ltd.

Under the Offer, eligible shareholders lodged valid applications for 272,260,621 New Shares, being 74.13% of the Offer and raising \$2,722,606. Applications were received from 1,115 shareholders, confirming the strong level of support for the Company's move into the lithium sector.

The Offer did not include a provision for application for shares additional to entitlements.

The Shortfall of the Offer of 95,029,856 New Shares, representing a further approximately \$950,298, was placed by the Underwriter. The Shortfall shares were issued on 29 June 2016.

The Directors of Platypus gratefully acknowledge the support of shareholders and the Underwriter in making the Offer such a success.

The acquisition of Lepidico provides Platypus with exposure to the full spectrum of the lithium sector, including prospective ground in Canada, Brazil and Australia and ownership of the L-Max® technology, thus giving the Company a valuable point of difference.

During the quarter, the Company raised an additional \$281,415 through the exercise of 27,666,668 options at 1.0 cents each, and 135,707 options at 3.5 cents each.

Funds from the rights issue were received subsequent to quarter end and are therefore not shown in the respective Appendix 5B. The Company's current cash position stands at \$3.77 million.

## **OPERATIONS**

#### **LITHIUM**

Lemare Project, Quebec, Canada

On 6 May 2016, following completion of its due diligence over the Lemare lithium project in Quebec, Canada, Platypus directed Lepidico to proceed with exercise of the Lemare Option.

On 11 February 2016 Lepidico entered into a binding option agreement to acquire up to 75% of the Lemare lithium project from TSX-V-listed Critical Elements Corporation (TSXV:CRE)("Critical Elements"). The agreement was formalised on 30 June 2016 as the Lemare Option Agreement.

As per the terms of the Lemare Option Agreement, and consequent on shareholder approval in general meeting on 30 May 2016, Platypus issued 18,514,939 Ordinary Shares to Critical Elements Corporation, being C\$500,000-worth of Platypus shares at a C\$:A\$ exchange rate of 0.9524 and at the 5 day VWAP post 31 May 2016 of 2.8355 cents per Ordinary Share.

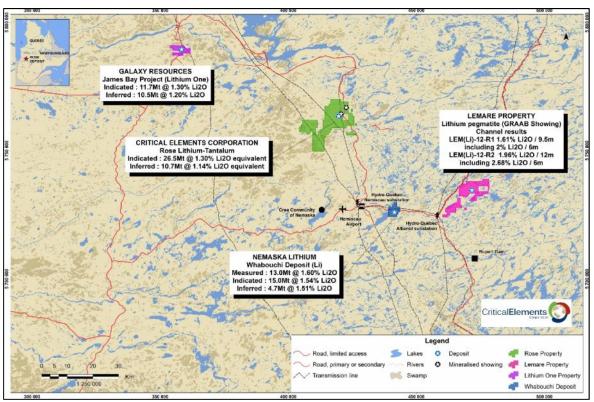
To earn its initial 50% interest in the Lemare project, Lepidico must make a cash payment to Critical Elements of C\$35,000 by 9 September2016 and sole fund exploration of C\$800,000 by 31 December 2016 and a further C\$1.2 million by 31 December 2017.

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.

Lemare comprises approximately 74 km<sup>2</sup> of tenements in the James Bay region of Quebec, Canada. This region hosts several advanced lithium projects, including the Whabouchi deposit (Nemaska Lithium), the Cyr deposit (Galaxy Resources) and Critical Elements' own Rose deposit.

The project contains a spodumene pegmatite discovered in 2012 and subsequently confirmed by channel sampling to extend over at least a 200 m strike, with an average width of 10.25 m and an average grade of 1.44%  $\rm Li_2O$ . The Lemare pegmatite was fortuitously discovered during the course of exploration for nickel and gold. As such, there is ample scope for the discovery of additional pegmatites through targeted lithium exploration as pegmatites rarely occur in isolation, but instead typically occur in 'swarms.'

Platypus is currently working in conjunction with Critical Elements to prepare for a field campaign at Lemare comprising a mapping/prospecting program in conjunction with diamond drilling of approximately 4,000 m with an aim to define an Inferred Resource at Lemare by 31 December 2016.



**Figure 1.** Advanced lithium deposits and location of the Lemare project claims (deep pink) in the James Bay area, Quebec, Canada (after Critical Elements Corporation, 2016).

#### Lepidico JV with Crusader Resources, Brazil

On 3 February 2016, the Company advised that Lepidico had increased its exposure to the lithium sector by signing a memorandum of understanding with ASX-listed Crusader Resources Limited ("ASX:CAS; "Crusader") under which the two companies would seek to exploit lithium opportunities in Brazil through a 50:50 joint venture.

On 19 April 2016, the Company advised that Lepidico and Crusader had executed a Shareholders Agreement to establish a 50:50 joint venture company, Third Element Metals Pty Ltd ("Third Element Metals" or JV Company").

#### Third Element Metals will:

- explore for lithium and other minerals on Crusader's Manga lithium project and any other tenements acquired by the JV Company in Brazil and other agreed jurisdictions ("Territory").
   Crusader will transfer Manga to the JV Company.
- mine and process minerals extracted from tenements within the Territory using the L-Max<sup>®</sup> technology, to which Third Element Metals will hold exclusive rights in the Territory; and
- sub-license the L-Max<sup>®</sup> technology to third parties for use in the Territory.

Manga was initially explored by Crusader in 2007 for tin and indium mineralisation. This work noted the presence of zinnwaldite and other Li-rich micas. Crusader also notes that academic literature on Manga highlights the similarity of the geological setting at Manga to that of the Cinovec Li-Sn-W project in the Czech Republic, which is now held by ASX-listed European Metals Holdings (ASX:EMH).

## Euriowie, Broken Hill, NSW

Euriowie is located north of Broken Hill in NSW and comprises a single exploration licence application, ELA5234 encompassing the historical Euriowie tin field.

Within this field are three historical lithium workings in amblygonite-rich pegmatites, which Platypus staff sampled last quarter, returning up to 4.45%  $\text{Li}_2\text{O}$ . Amblygonite is a lithium-phosphate mineral with a high lithium content of up to 10%  $\text{Li}_2\text{O}$ , suggesting almost half of this sample was amblygonite.

Grant of this licence has taken much longer than anticipated. However, recent progress suggests that grant should occur within the next few weeks.

#### Lithium JV with Latin Resources in Argentina and Peru

On 9 May 2016, Platypus announced that Lepidico had entered into an agreement ("Agreement") with Latin Resources Limited (ASX:LRS) ("Latin Resources") to form two lithium joint venture companies ("JV Companies"), one focussed on Argentina and the other on Peru.

Lepidico will grant the JV Companies an exclusive right to market and acquire L-Max<sup>®</sup> licences ("L-Max<sup>®</sup> Rights") in each respective country for a period of 12 months.

The Agreement is conditional upon drafting of detailed joint venture agreements for each of the JV Companies. Upon execution of these agreements, Latin Resources will issue Lepidico 10,000,000 shares with a subsequent tranche of another 10,000,000 shares issued 12 months later. Each tranche of shares will be subject to a 12 month escrow period. The JV Companies will also pay Lepidico a gross

product royalty of 1% on any revenue received from the sale of lithium and other by-products produced using L-Max<sup>®</sup>.

### **Key Terms Relating to Lepidico's interest in the JV Companies**

Expenditure	Lepidico Interest				
Level					
\$1,000,000	<ul> <li>Lepidico's initial interest will be 40%.</li> </ul>				
	<ul> <li>Lepidico is free carried for the first \$1,000,000 of expenditure.</li> </ul>				
\$1,000,001 to	• Lepidico can elect to contribute its pro rata interest for the next \$1,000,000				
\$2,000,000	of expenditure.				
	If Lepidico elects not to contribute, it will be diluted to 35%.				
\$2,000,001 or	Lepidico can elect to contribute its pro rata interest for all expenditure over				
more	\$2,000,000.				
	If Lepidico elects not to contribute, its interest will be diluted to, and				
	remain at, 30%.				

## Key Terms Relating to L-Max® Rights:

Phase	Terms
Year 1	The JV Companies hold the exclusive right to market and acquire L-Max® licences.
	• The JV Companies must acquire, or have rights to acquire, a hard rock lithium project in their respective country.
	• Latin Resources must secure \$1,000,000 in funding for each of the JV Companies.
Years 2 - 6	• The JV Companies must spend at least \$1,000,000 and complete a bankable/definitive feasibility study for a project.
Year 7 onwards	L-Max® rights for the JV Companies remain valid as long as lithium is being produced using the L-Max® technology.

On 1 June 2016, the Company announced that Latin Resources had lodged applications for 70,000 ha (700 sq km) of ground in a lithium pegmatite field near Catamarca in northern Argentina. Subsequently, Latin Resources lodged applications covering over 20 historical spodumene mines in the area, thus moving quickly to build a substantial project base in that country.

#### Royal Lithium Project, Quebec, Canada

Subsequent to quarter end, on 26 July 2016, Platypus announced that it has entered into a Binding Memorandum of Understanding ("Binding MOU") to acquire the Royal lithium prospect located 30 km north of Val d'Or in Quebec, Canada.

Platypus is acquiring Royal in conjunction with Canadian listed St-Georges Platinum and Base Metals Ltd (CSE:SX)("St Georges") on a 70:30 relative basis.

The Royal prospect comprises 5 contiguous claims, approximately 286 hectares in area and represents a virgin find within a known lithium district, albeit situated only 4 km from the Quebec Lithium Mine.

A preliminary site visit by an independent geologist commissioned by Platypus and St Georges confirmed the presence of a significant amount of lepidolite within the pegmatite outcrops (Figures 2 and 3). Lepidolite exploration is a key focus for Platypus, given its ownership of the L-Max®

technology, which was specifically designed to extract lithium from lepidolite and other Li-mica minerals.





Figure 2. Lepidolite in pegmatite at Royal.

Figure 3. Lepidolite-rich pegmatite from Royal.

Platypus and St Georges can acquire 100% of the Royal claims based on the following terms:

Cash Payment	C\$10,000 after the finalisation of due diligence		
	C\$50,000 on the first anniversary of the final acquisition agreement		
Shares Payment	3,000,000 shares in Platypus after the finalisation of due diligence		
	3,000,000 shares in St Georges in staged payments		
Work Commitment	Expenditure of C\$450,000 over 3 years to earn a 100% interest in the Claims		
Royalty	Net smelter royalty of 1%, half of which can be bought back for C\$1,000,000		
Milestone Payments	C\$500,000 payable on a JORC/NI43-101 compliant resource >5Mt @ 1.0%		
	Li <sub>2</sub> O (payable in cash or shares)		
	C\$1,000,000 payable on a JORC/NI43-101 compliant resource >10Mt @		
	1.0% Li <sub>2</sub> O (payable in cash or shares)		
	The Milestone payments are not cumulative (eg expansion of the resource		
	from 6Mt to 11Mt will result in an additional payment of C\$500,000)		

## L-Max® Process

# Cinovec

On 2 May 2016, Platypus announced that Lepidico had entered into a licensing agreement ("Agreement") for its proprietary L-Max® technology with European Metals Holdings Limited (ASX:EMH)("European Metals").

Under the terms of the Agreement, Lepidico granted European Metals an option to acquire a licence to use the L-Max® technology for the Cinovec project in the Czech Republic for consideration of \$20,000 in cash. The option will be valid for 12 months, and can be renewed for a further 12 months by payment of an additional option fee of \$25,000.

Upon exercise of the option, Lepidico will issue a licence and European Metals will:

- Pay Lepidico \$30,000 cash and issue to Lepidico 890,215 European Metals fully paid ordinary shares
- Undertake an L-Max® mini-plant test run on Cinovec ore
- Pay Lepidico a gross product royalty of 2% on all sales relating to lithium chemicals and other by-products produced using the L-Max® technology.

In 2015, European Metals completed a Scoping Study utilising the L-Max process to successfully precipitate battery grade lithium carbonate from Cinovec ore. European Metals reported the key results of the Scoping Study and associated test work to be:

- 98% of lithium recovered via flotation to concentrate
- 99.5% of lithium extracted from concentrate via leaching
- Short leach time; 97.6% of the lithium recovered in only 4 hours
- 99.56% pure lithium carbonate precipitated from a sample of Cinovec ore
- By-product potassium sulphate also successfully precipitated
- Estimated operating cost approximately US\$1,500 per tonne of lithium carbonate produced (after potassium sulphate credit). On a project basis, and after tin and tungsten credits, European Metals anticipates operating cost estimates for lithium carbonate production to reduce further.

Cinovec is a historical tin mine with a significant undeveloped lithium-tin resource comprising an Inferred Mineral Resource of 514.8 Mt @ 0.43% Li₂O and 79.7 Mt @ 0.23% Sn. Cinovec is located in an active mining region in central Europe close to key infrastructure.

#### Patent

On 21 June 2016, Platypus announced that the L-Max® technology had achieved an important milestone in its progress toward granted patent protection. The process underwent a rigorous examination by the Australian Patent Office acting as an International Searching and Examining Authority. As a result of this examination, it has been acknowledged in the International Preliminary Report on Patentability that the L-Max® Process as described and claimed in the international application is Novel, Inventive, Industry Applicable and Patentable.

The conclusions of the International Preliminary Report on Patentability, while not ultimately binding, represent a guide for Patent Offices before which national and/or regional phase patent applications may proceed in due course.

This development validates Platypus's confidence in the L-Max® Process to economically recover lithium from non-conventional lithium sources, opening a wealth of possibilities in an emerging growth market and endorses the Company's overarching strategy to becoming a low cost lithium producer. This, combined with Platypus's strategy of exploration and corporate alliances, holds the key to potentially unlocking the inherent value in these unconventional sources of lithium.

## EAST PILBARA POLYMETALLIC PROJECT, WA (E45/3326) ("Gobbos")

This project contains several targets within a single exploration licence located 50 km NE of Nullagine in the polymetallic East Pilbara region of Western Australia. The targets include the Gobbos Cu-Mo prospect, the Bridget Cu-Au prospect, the Pearl Bar Cu-Ag prospect and the Cyclops Ni-Cu prospect.

Platypus undertook initial drilling at both the Pearl Bar and Bridget prospects, with work commencing on 16 June 2016, and results reported subsequent to quarter end on 18 July 2016.

The short program comprised three holes for a total of 422 m of reverse circulation ("RC") drilling. Two holes were drilled at Bridget and one at Pearl Bar, as detailed in Table 1.

Table 1. Gobbos project: RC drilling at the Pearl Bar and Bridget prospects, July 2016

PROSPECT	HOLE_ID	EASTING	NORTHING	RL	DEPTH (m)	DIP	AZIMUTH
Bridget	BGC001	223487	7617509	394	109	-60	315
Bridget	BGC002	223518	7617478	392	199	-70	315
Pearl Bar	PBC001	219720	7614704	383	114	-60	330

## Pearl Bar (Cu-Mo-Ag)

A single RC hole, PBC001, drilled to 114 m depth, targeted the down dip extension of an outcropping quartz vein containing abundant malachite and azurite, sitting within an altered granodiorite and coincident with a large Cu-Mo-Ag geochemical anomaly defined by rockchip and soil sampling.

A best interval of 6 m @ 1.5% Cu was returned from within a broader zone of 92 m @ 0.31% Cu, 109 ppm Mo and 4.65 g/t Ag.

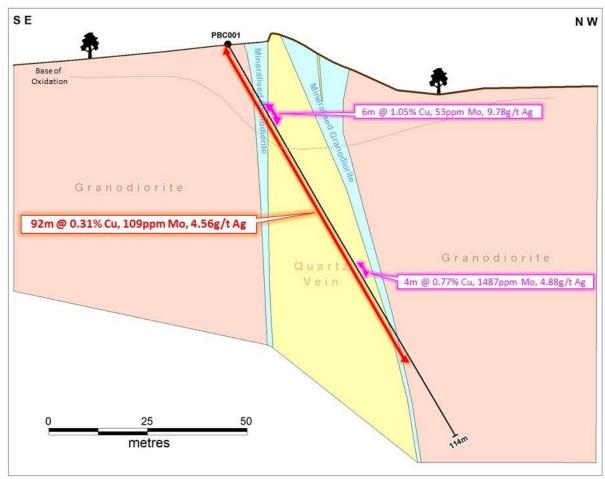
Results are summarised in Table 2, and presented graphically in Figures 3, 4 and A1.1 (Appendix 1).

Drill hole PBC001 intersected approximately 60 m of quartz vein within strongly sericite-altered granodiorite. Mineralisation consists of trace chalcopyrite, minor bornite and occasional molybdenite along fractures within the quartz vein and within the granodiorite peripheral to the contact with the quartz vein. The assay values for Cu, Mo, and Ag are highly anomalous and combined with the geology are indicative of a porphyry mineralized system.

Table 2. Pearl Bar RC Drilling, June 2016, significant intersections\*

HOLE ID	FROM	то	INTERVAL (m)	Cu (%)	Ag (g/t)	Mo (ppm)
PBC001	0	92	92	0.31	4.56	109
including	20	26	6	1.05	9.78	53
and	68	72	4	0.77	4.88	1487

<sup>\*</sup>Main intersection calculated at >1000ppm Cu, max 2m internal dilution. Internal zones >5000ppm Cu, max 1m internal dilution.



**Figure 4.** Pearl Bar prospect drilling cross-section and summary geology. Cu-Mo-Ag mineralisation is associated with a quartz vein in sericite altered granodiorite with best grades occurring on the contact of the quartz vein and the granodiorite within the oxide zone. Mineralisation occurs primarily along fractures within the quartz vein and consists of malachite and azurite in the oxide zone and chalcopyrite, minor bornite and occasional molybdenite in the fresh (sulphide) zone.

## Bridget (Cu-Au)

The Bridget prospect is located approximately 3 km NE of Gobbos and was identified in the early 1970s. The key feature of the prospect is a 210 m long gossanous zone, 2 m - 3 m in thickness, flanked by a 90 m wide zone of intensely altered and mineralised basalt. No historical records of sampling of the basalt have been located and there is no evidence that this zone has been drilled.

Sampling of the gossan by Platypus returned grades of up to 19.25% Cu, with significant gold (0.38 g/t) and silver (10.8 g/t), while five rock chip samples from the altered basalt returned an average of 0.37% Cu.

The two drill holes at Bridget (BGC001 and BGC002) targeted a zone of intense quartz stockwork veining containing malachite and trace sulphides coincident with a Cu-Mo-Au geochemical anomaly in rockchips and soils (Figure 5 and A1.2 (Appendix 1)). Both holes intersected intensely altered basalts with abundant quartz stockwork veining and micro veinlets containing trace pyrite and chalcopyrite, pyrite and chalcopyrite micro veinlets, and trace disseminated pyrite and chalcopyrite.

A best result of **20 m @ 0.20% Cu and 0.25 g/t Au** in hole BGC001, from surface, likely represents supergene enrichment.

Assay values for Cu, Mo, and Au, although not economic are highly anomalous and combined with the alteration and veining are indicative of a porphyry mineralized system.

Further work is warranted at this impressive, extensively mineralised project area, which also includes the Cyclops Ni-Cu prospect at which Platypus has not yet undertaken fieldwork.

In light of the Company's move into the lithium sector, Platypus is considering its options with regard to how to optimise future development of the Gobbos project.

For further information, contact:
Tom Dukovcic
Managing Director
08 9363 7800

The information in this report that relates to Exploration Results is based on information compiled by Mr Tom Dukovcic, 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 Dukovcic consents to the inclusion in this report of information compiled by him in the form and context in which it appears.

## **TENEMENT INFORMATION (Listing Rule 5.3.3)**

The below table of interests in tenements held by the Company and its controlled entities is provided in accordance with ASX Listing Rule 5.3.3.

#### **AUSTRALIAN OPERATIONS**

Held by the Company

Project/ Tenement ID	Location	Interest at end of Quarter	Acquired during Quarter	Disposed during Quarter
Nil	-	Nil	-	-

Farm-in Agreements

Project/ Tenement ID	Location	Interest at end of Quarter	Acquired during Quarter	Disposed during Quarter
Gobbos (E45/3326) Farm-in agreement with holder Gondwana Resources Ltd	East Pilbara, WA	Nil; earning 75%	Nil; earning 75%	-