Lepidico

A subsidiary of

Platypus MINERALS

Investor Roadshow Presentation – Mines & Money Americas, Toronto

September 2016

Creative Resources Leadership

Important notice

This presentation has been prepared by the management of Platypus Minerals Ltd (the 'Company') for the benefit of brokers, analysts and investors and not as specific advice to any particular party or person.

The information is based on publicly available information, internally developed data and other external sources. No independent verification of those sources has been undertaken and where any opinion is expressed in this document it is based on the assumptions and limitations mentioned herein and is an expression of present opinion only. No warranties or representations can be made as to the origin, validity, accuracy, completeness, currency or reliability of the information. The Company disclaims and excludes all liability (to the extent permitted by law), for losses, claims, damages, demands, costs and expenses of whatever nature arising in any way out of or in connection with the information, its accuracy, completeness or by reason of reliance by any person on any of it.

Where the Company expresses or implies an expectation or belief as to the success of future exploration and the economic viability of future projects, such expectation or belief is based on management's current predictions, assumptions and projections. However, such forecasts are subject to risks, uncertainties and other factors which could cause actual results to differ materially from future results expressed, projected or implied by such forecasts. Such risks include, but are not limited to, exploration success, commodity price volatility, future changes to mineral resource estimates, changes to assumptions for capital and operating costs as well as political and operational risks and governmental regulation outcomes. For more detail of risks and other factors, refer to the Company's other Australian Securities Exchange announcements and filings. The Company does not have any obligation to advise any person if it becomes aware of any inaccuracy in, or omission from, any forecast or to update such forecast.

Competent Person Statement

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.

Lepidico

- Lepidico's strategic objective is to become a sustainable lithium producer with a portfolio and pipeline of assets
- Lepidico is a well funded ASX listed lithium exploration and development company with an experienced management team
- Lepidico is exploring for a range of hard rock lithium minerals including lithium bearing micas and spodumene
- Lepidico is differentiated by having produced lithium carbonate using its patented L-Max® process technology from non-traditional hard rock lithium bearing minerals
- Lepidico provides exposure to a portfolio of lithium exploration assets through its wholly owned properties and joint ventures/IP licence agreements in Australia, Canada, Europe and South America
- Post June rights issue, Lepidico had A$3.7M in cash and no debt

A New Source of Lithium

- Lepidolite and Zinnwaldite contain up to 5% Li_2O and like spodumene, are hosted in pegmatites
- Lepidolite and Zinnwaldite often occur with tin and tantalum bearing minerals as well as spodumene
- Micas have been largely overlooked as a source of lithium as no commercially viable process was available to extract the lithium and process through to lithium chemicals – L-Max® changes this

Lepidolite (light purple)

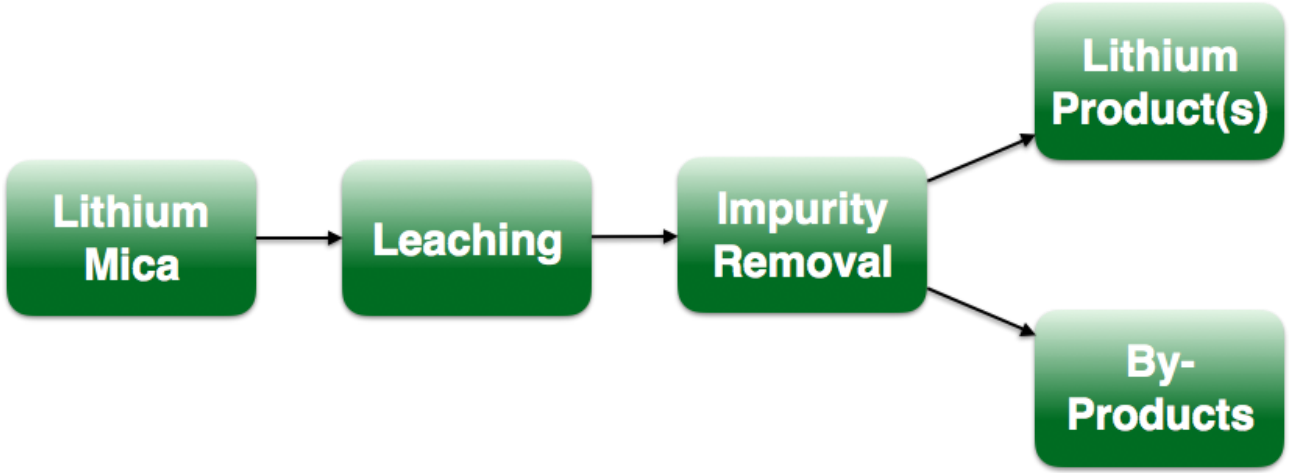
$K(Li,Al,Rb)_3(Al,Si)_4O_{10}(F,OH)_2$

Zinnwaldite (dark grey)

$KLiFeAl(AlSi_3)O_{10}(OH,F)_2$

L-Max® Technology

- Lepidico's 100% owned L-Max® technology is a proprietary 'straight-forward' hydrometallurgical process
- L-Max® can produce battery grade lithium carbonate and other valuable by-products from lithium-rich micas
- An international patent application has been filed under the PCT for L-Max®



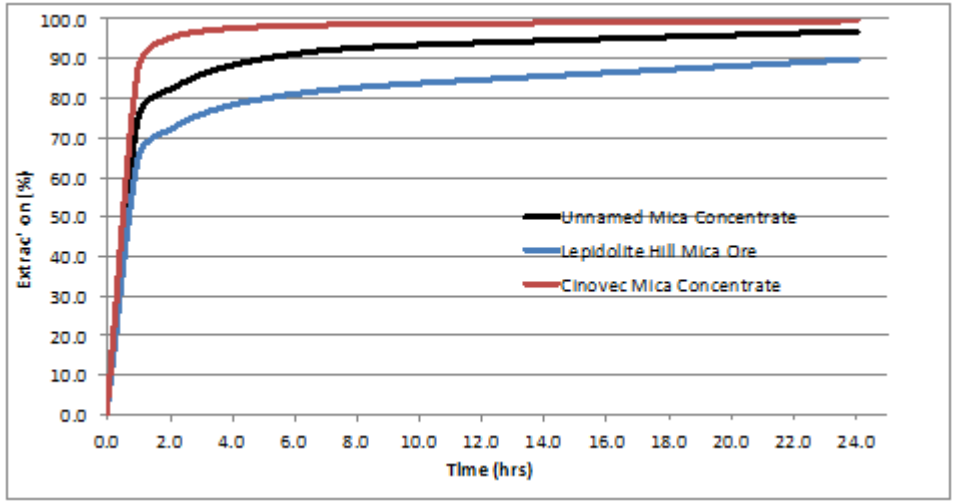
L-Max® combines a series of conventional processes supporting competitive capital intensity

At commercial scale L-Max® is expected to be competitive on the lithium cost curve

By-products further increase its competitive advantage

The L-Max® Advantage

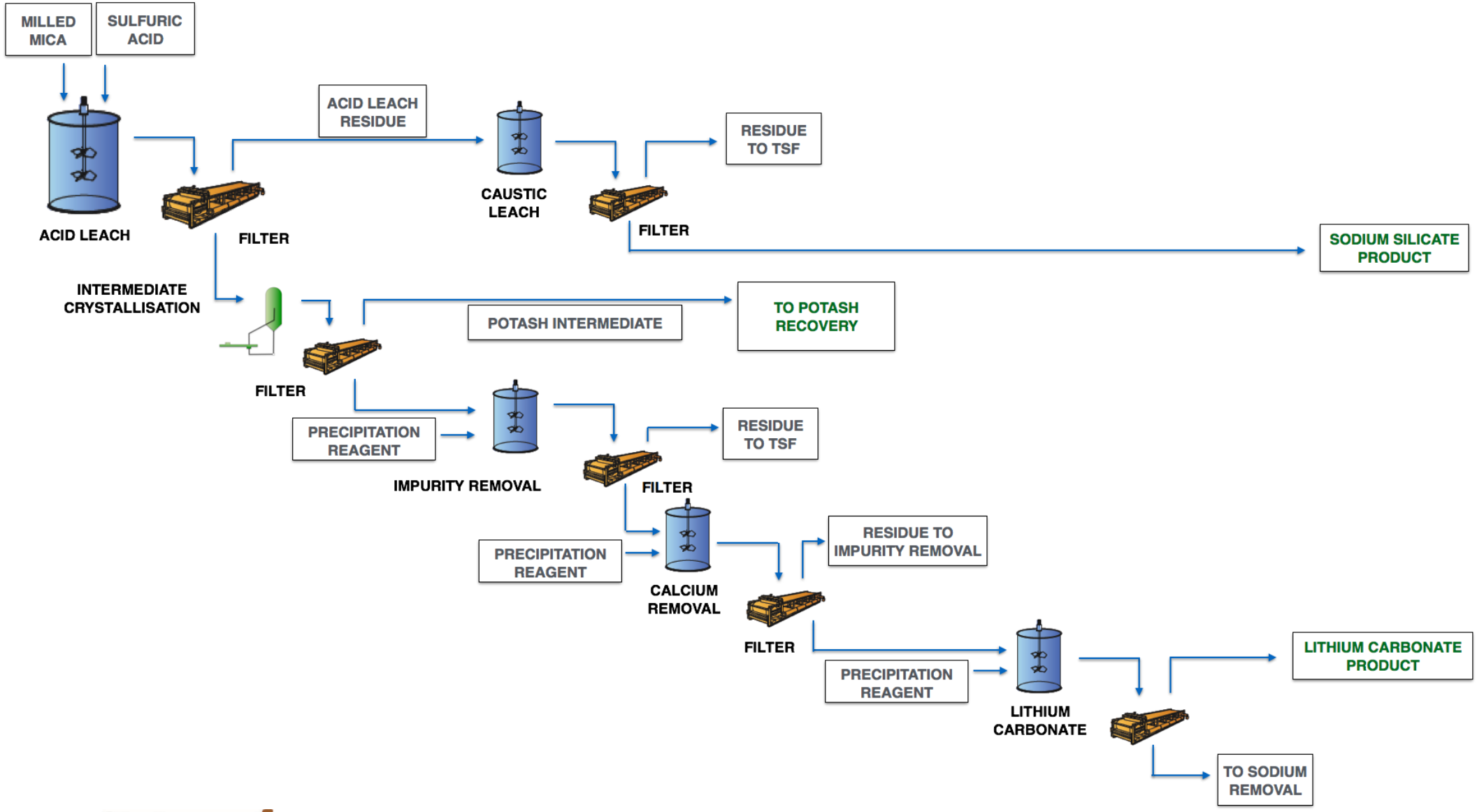
- ✓ L-Max® allows lithium to be leached from micas without roasting – conventional spodumene requires capital and energy intensive roasters to extract lithium, often with no by-products
- ✓ L-Max® reagents and operations have straightforward health, safety and environmental characteristics
- ✓ L-Max® utilises inexpensive, readily available reagents
- ✓ L-Max® utilises a series of conventional, straightforward processes – a series of agitated tanks, filters and crystallisers
- ✓ L-Max® is energy efficient and at full commercial scale may be self-sufficient for power generated from an integrated acid plant
- ✓ By-products include potassium sulphate fertiliser, sodium silicate and potentially caesium and rubidium formate
- ✓ Fast leach kinetics and moderate process cost estimates open up opportunities to treat lower grade sources of feedstock (eg tailings, waste dumps)



Lithium leach curves under L-max®

L-Max® mini plant

L-Max® Flowsheet



L-Max® Products Produced from Li-Rich Micas

- Lithium carbonate >99.5% purity produced from L-Max® mini-plant
- US$15,000-20,000/t
- Strong long-term market fundamentals

- Potassium sulphate “a potash” is a high-value fertiliser
- US$500/t
- Potassium sulphate prices have been robust, unlike Potassium Chloride which has become oversupplied

- Sodium silicate or “Water-glass”
- Value depends on proximity to market
- Widespread industrial chemical use

- Caesium & Rubidium formate
- US$25,000/t
- High density – utilised as a completion fluid for drilling in the oil & gas industry

L-Max® - Achievements and Future Milestones

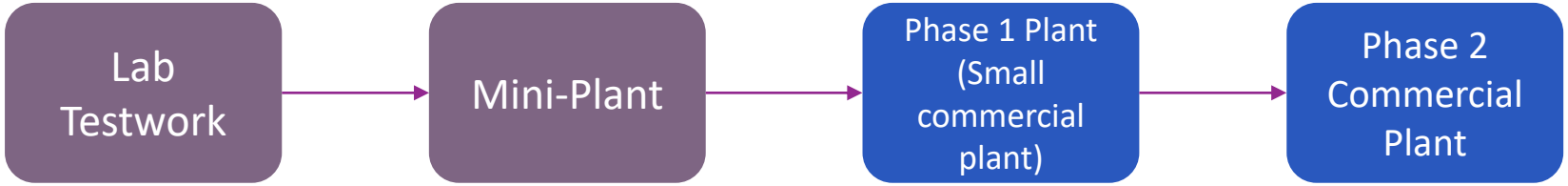
- ✓ Patent registered
- ✓ Additional patents submitted relating to processing of Lithium-Phosphate Minerals (eg. amblygonite and montebrasite) and production of Caesium-Rubidium formate from micas
- ✓ Successful operation of a continuously run mini-plant (140 Hours) treating a lepidolite concentrate to produce >99.5% purity lithium carbonate, achieving recoveries of >94% from the leach liquor
- ✓ Subsequent production of by-products from mini-plant leach liquor
- ✓ Ongoing refinement of process to improve recoveries and efficiency of flowsheet
- What's next?
  - Pre-feasibility study for "Phase 1 L-Max® Commercial Plant" – Q4 2016
  - Secure feedstock supply sources for Phase 1 Plant – Q4 2016
  - Feasibility study for Phase 1 Plant – 2H 2017
  - Permitting, implementation and construction of Phase 1 Plant – 2018'19
  - Lithium Production – 2019
  - Exploration and acquisition of Li-rich mica deposits – ongoing

Lepidico L-Max® mini-plant

Phase 1 L-Max® Commercial Plant

- Typical processing technology development goes through the following phases:

- Usually all steps in this process are uneconomic, with the exception of the commercial plant
- Due to the straight-forward nature of L-Max® and Lepidico's confidence in the process, Lepidico plans to adopt the following pathway to commercialisation of the technology



- No Pilot Plant stage required
- High value of lithium and associated by-products support the Phase 1 Plant having robust economics (to be confirmed by Pre-Feasibility Study)

Phase 1 L-Max® Commercial Plant

- Lepidico has commenced a Pre-Feasibility Study for the development of the Phase 1 L-Max® Commercial Plant
  - Strategic Metallurgy Pty Ltd appointed to conduct metallurgical testwork and develop design criteria for a 2-4tph mica concentrate (~1.5% Li) Phase 1 Plant to produce ~2,500tpa lithium carbonate
  - Assessment of feedstock supply opportunities – directly owned, joint venture and third party
  - Assessment of optimal Phase 1 Plant locations – including lepidolite concentrate, pay-metal and by-product logistics
  - By-product market assessment
- Successful development of a Phase 1 Plant will provide many benefits to Lepidico:
  - ✓ Demonstration that L-Max® is a commercial lithium extraction process
  - ✓ In conjunction with secured feedstock supply, will allow Lepidico to become a meaningful lithium producer, targeted for 2019
  - ✓ Modest capex estimated at approximately A$20M and competitive capital intensity support ability to fund development
  - ✓ Establishment of early free cash flow to support subsequent developments
  - ✓ Scalable and able to treat ore from different mines
  - ✓ Pathway to Phase 2 Commercial Plant (nominally 20,000tpa lithium carbonate) that offers economies of scale

Asset Overview – Spodumene and Lepidolite Projects

A global footprint made manageable by JV's & licences

Lemare
Earn up to 75%
Quebec
Spodumene Target

Royal
Earn up to 70%
Quebec
Lepidolite Target

Third Element Metals
50% Lepidico
50% Crusader Resources

Manga
100%
Brazil
Zinnwaldite Target

Latin Resources JV
Initially 40%
Argentina
Lepidolite Target

Cinovec
Licence Option
Agreement
Czech Republic
Zinnwaldite/Tin

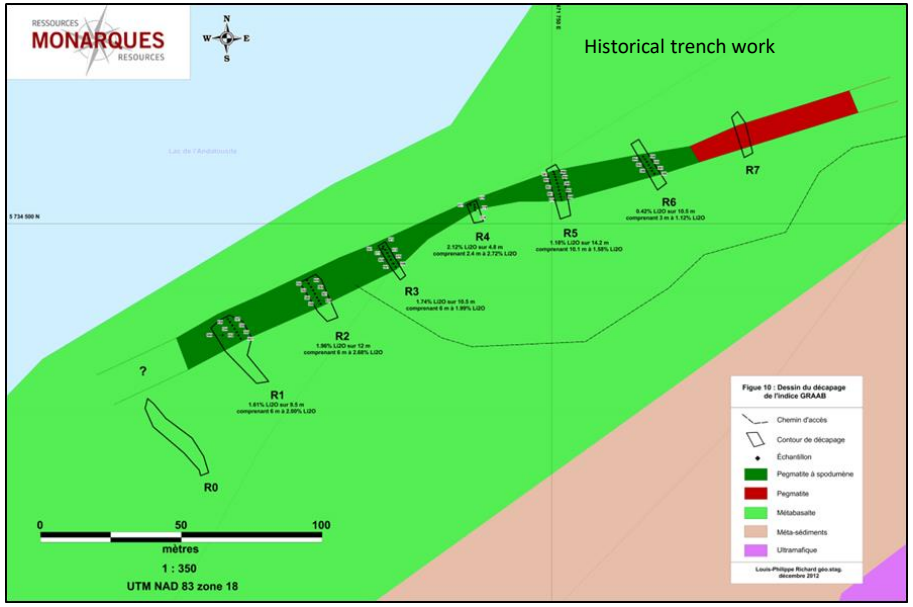
Euriowie
100%
Broken Hill
Amblygonite Target

Lepidico Platypus MINERALS

Lemare (Canada)

- Farm-in Agreement up to 75% with Critical Elements Corp. (TSX-V:CRE)
- 74 km^2 in proven lithium district
- Spodumene rich pegmatite identified with over 200m strike (open laterally)
- 6 transverse channels averaged: 10m @ 1.44% Li_2O
- Expectation for other pegmatites on property
- 4,000m drill program commenced September 2016
- Targeting JORC Mineral Resource by December 2016

Lemare spodumene pegmatite exposed in trench No 3



Channel	Grade Li_2O %	Length (metres)
LEM(Li)-12-R1	1.61%	9.5 m
including	2.00%	6.0 m
LEM(Li)-12-R2	1.96%	12.0 m
including	2.68%	6.0 m
LEM(Li)-12-R3	1.74%	10.5 m
LEM(Li)-12-R4	2.12%	4.8 m
LEM(Li)-12-R5	1.18%	14.2 m
including	1.58%	10.1 m
LEM(Li)-12-R6	0.42%	10.5 m
including	1.12%	3.0 m
AVERAGE	1.44%	10.25 m

la

Lepidico Platypus MINERALS

Cinovec Licence Option Agreement (Czech Republic)

- L-Max® has been used to extract and recover lithium, as >99.5% lithium carbonate from Cinovec zinnwaldite rich mineralisation
- Lepidico has granted European Metals Holdings (ASX:EMH) an option to acquire a licence to use L-Max® at Cinovec
  - $30k cash + 890,215 EMH shares (current value ~$500k) upon exercise
  - 2% gross product royalty on all lithium and L-Max® by-products produced
- Cinovec hosts Europe's largest lithium Mineral Resource
- L-Max has been short listed by EMH as one of the methods they will be investigating as part of their pre-feasibility study
- Lepidico and EMH are working together to investigate additional benefits of L-Max® which may include a reduction in sliming of tin and therefore a potential increase in tin recovery

Cinovec Lithium Mineral Resource						
Category		Gross				
	Cut-off Li %	Tonnes (Mt)	Li %	LCE	Sn %	Sn t
Indicated	0.4	0.9	0.45	21,588	0.11	990
	0.3	5.1	0.36	9,773	0.12	6,120
	0.2	22.4	0.27	321,935	0.09	20,160
	0.1	49.1	0.20	522,719	0.06	29,460
Inferred	0.4	10.3	0.46	252,204	0.08	8,240
	0.3	46.6	0.37	917,792	0.08	37,280
	0.2	211.7	0.27	3,042,574	0.06	127,020
	0.1	482.9	0.20	5,140,953	0.05	241,450

Cinovec Location and JORC Resource (Source: EMH)

Third Element Metals Joint Venture (Brazil)

- Third Element Metals (TEM) is a 50/50 JV with Crusader Resources (ASX:CAS)
  - Lepidico contributed L-Max® technology
  - Crusader contributed prospective Manga project and in-country experience
- Manga was previously explored for tin and indium
  - Historical works identified a zinnwaldite-rich greisen zone
  - re-assaying of rock chips returned grades of up to 1.2% Li_2O
- TEM is seeking further lithium acquisition opportunities within Brazil's identified pegmatite fields

Historical RC Drilling at Manga Prospect

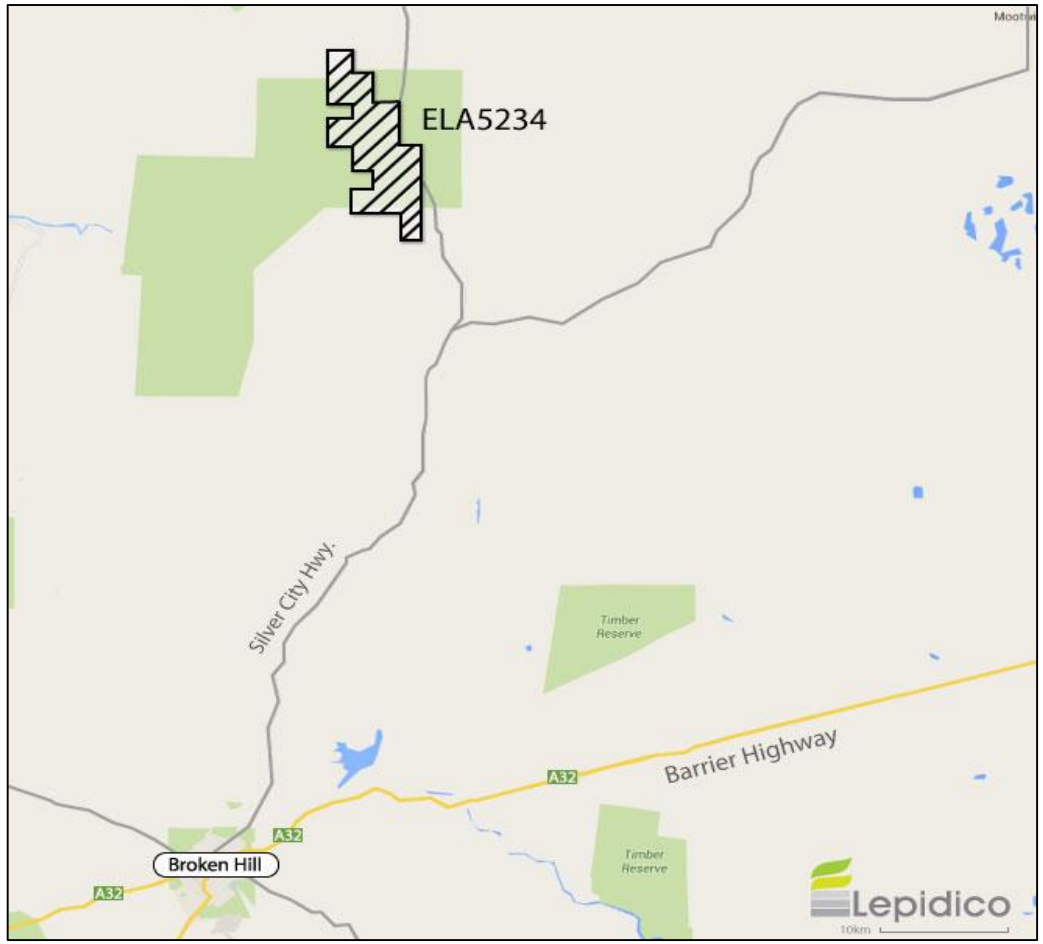
Latin Resources Joint Venture (Argentina)

- Joint Venture in Argentina and Peru
  - Initially 60% Latin Resources (ASX:LRS)
  - 40% Lepidico
- LRS will spend the first $1M on exploration for Li-rich micas in each country
  - After first $1M, Lepidico can contribute pro-rata or dilute to 35%
  - After second $1M, Lepidico can contribute pro-rata or dilute to 30% and be free-carried through to FID
- Lepidico contributes L-Max® technology
- LRS is actively seeking lithium acquisition opportunities in Argentina and Peru:
  - Another example of using L-Max® to gain exposure in a jurisdiction where Lepidico does not have established networks and in-country experience

Argentina Pegmatites – lithium potential (Source: LRS)

Lepidico Platypus MINERALS

Euriowie (Australia)

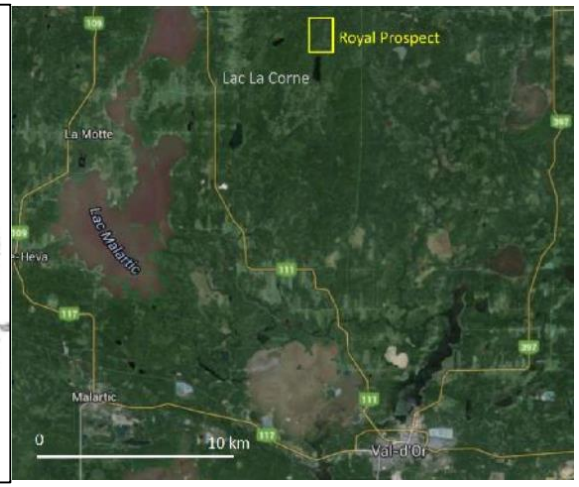


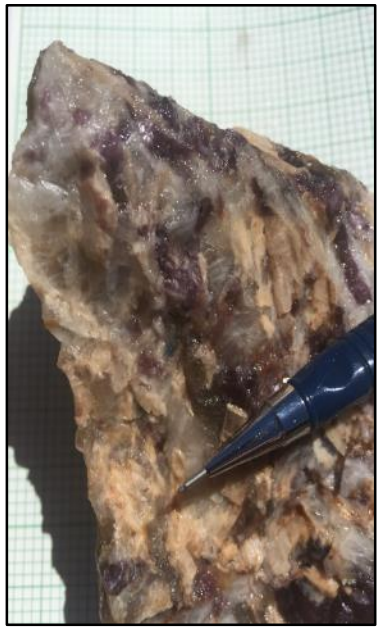
Euriowie Location

- Exploration licence grant expected imminently
- Excellent infrastructure close to Broken Hill
- Historical small scale mining for amblygonite (lithium phosphate mineral)
- Due diligence returned samples grading up to 4.5% Li_2O
- Lepidico has lodged a patent (separate to L-Max®) for the extraction of lithium from lithium phosphate minerals

Amblygonite

Royal (Canada)





Royal location, lepidolite in pegmatite outcrops

- Farm-in Agreement with private Canadian vendors
  - Earn up to 100%
- Claims cover 3km^{2}with Lepidolite outcrops
- Situated 4km from shuttered Quebec lithium mine
- 70:30 JV with St-Georges (CSX:SX)
  - Lepidico contributes L-Max® technology to JV
  - St-Georges to fund first C$450k in exploration expenditure for 30% interest
  - St-Georges can increase to 50% interest by funding a further C$600k in exploration expenditure

Investor Highlights

Unique Lithium Opportunity

- Lithium company with a difference – technology driven exploration and development now at the PFS stage
- L-Max® is our point of difference
- A far less competitive landscape exists for Li-mica exploration properties
- Global footprint being established

Exploration & Development

- New frontier of exploration – third parties who also discover Li-rich micas will be drawn to L-Max®
- Growing portfolio of assets around the world
- Can be commercialised - series of conventional processes supporting competitive capital intensity
- Potential to establish processing hubs in strategic locations around the world

Production

- Potential to introduce a third source of lithium (Li-rich micas)
- Near term production opportunities through processing of tailings / dumps – target production by 2019
- PFS study on Phase 1 commercial plant commenced

By-product Potential

- High value by-products
- Natural diversification from lithium
- By-products will assist in keeping L-Max® operations competitive on the cost curve

Proven Management Team

- Highly experienced management team with a strong track record incorporate, project and technology development
- Significant milestones accomplished in a short period of time –Lepidico is just getting started…

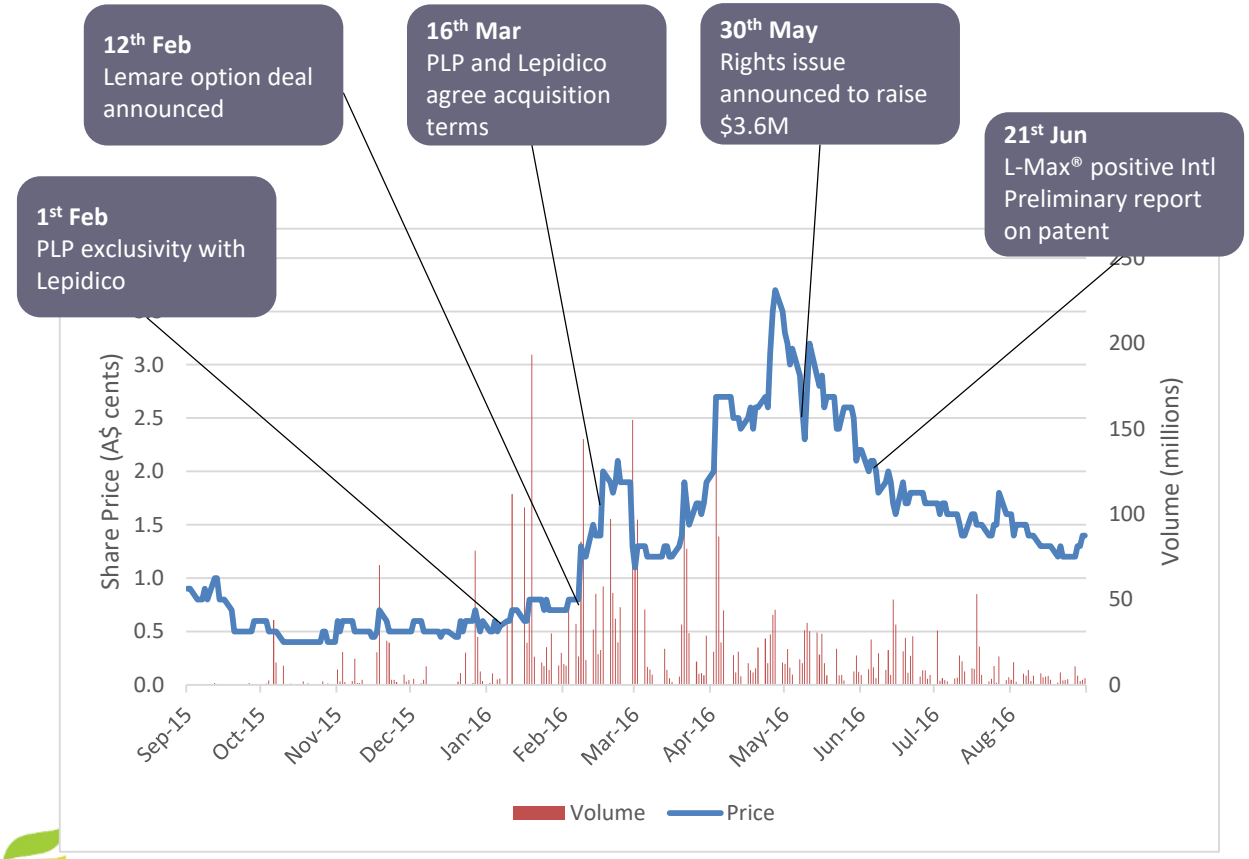
Lepidico Strategy

Lepidico aims to become a lithium producer in 2019

L-Max Opportunities	▪ Secure feedstock supply for Phase 1 Plant to achieve production in 2019 ▪ Identify "undervalued" tailings / waste dumps containing Li-rich micas ▪ Explore for mid-scale Li-rich mica deposits which will underpin a large scale commercial L-Max® plant
Lithium Opportunities	▪ Capitalise on other lithium opportunities (including spodumene) that present themselves and are of strategic merit (eg regional footprint, cashflow opportunities)
Joint Ventures and Partnerships	▪ Through L-Max®, establish joint ventures to expand Lepidico's exploration reach (Crusader Resources JV, Latin Resources JV) ▪ Issue L-Max® licences to earn future royalties (EMH Cinovec, Lithium Australia)
By-Product Opportunities	▪ Capitalise on L-Max® by-products (potassium sulphate fertiliser, sodium silicate, caesium/rubidium formate) ▪ Evaluate other commodity opportunities that may co-exist with Li-rich micas (tin, tantalum, tungsten, spodumene)

Overview

Description	Amount
Share Price	1.3c
Shares O/S	1.75B
Market Cap	$22.7M
Cash (Post Rights Issue)	$3.7M
Top 20 Shareholders	51.1%



Mr. Gary Johnson
MAusIMM, MAICD
Chairman

Gary has over 30 years experience in the mining industry as a metallurgist, manager, owner, director and managing director possessing broad technical and practical experience of the workings and strategies required by successful mining companies.

Gary is the managing director of the metallurgical consulting business, Strategic Metallurgy Pty Ltd, and a director of ASX-listed Antipa Minerals Ltd and TSX-V-listed St George Platinum and Base Metals Limited. Mr. Johnson is a member of the Australasian Institute of Mining and Metallurgy and the Australian Institute of Company Directors.

Mr. Joe Walsh
BEng, MSc
Managing Director

Joe is a resources industry executive and mining engineer with over 25 years experience working for mining companies and investment banks.

Joe was the General Manager Corporate Development with PanAust and was instrumental in the evolution of PanAust from an explorer in 2004 to a US$2+ billion, ASX 100 multi-mine copper and gold company.

Joe also has extensive equity market experience and has been involved with the technical and economic evaluation of many mining assets and companies around the world.

Mr. Tom Dukovcic
BSc (Hons), MAIG, MAICD
Director Exploration

Tom is a geologist with over 25 years experience in exploration and development. He has worked in diverse regions throughout Australia, including the Yilgarn, Kimberley, central Australia and northeast Queensland.

Internationally he has worked in southeast Asia and Brazil. During this time he has been directly involved with the management of gold discoveries in Australia and Brazil.

Tom is a Member of the Australian Institute of Geoscientists and a Member of the Australian Institute of Company Directors.

Mr. Gavin Becker
ARSM, BSc (Eng), MBA, FAusIMM, CP(Met), GAICD
GM Business Development

Gavin is a metallurgist with 40 years industry experience. During that time he has worked in senior operational, R&D, feasibility study and consulting roles on lead/zinc, gold, uranium, copper and nickel/cobalt/scandium mines and/or projects.

He holds a Bachelor of Science (Eng) degree from the University of London and completed his MBA at Bond University. Mr Becker is a Fellow of the Australasian Institute of Mining and Metallurgy and is an Associate of the Royal School of Mines (UK).

Lepidico

Creative Resources Leadership

Contact us: info@Lepidico.com