

PDAC Presentation

March 2017

Creative Resources Leadership



Overview

- Lepidico (ASX: LPD) is an ASX-listed lithium exploration and development company with a management team experienced in project and business development
- Lepidico's strategic objective is to become a sustainable lithium producer with a portfolio of quality assets and pipeline of projects
- Lepidico is differentiated by having successfully produced lithium carbonate and a suite of by-products from non-traditional hard rock lithium bearing minerals using its registered L-Max® process technology
- PFS completed for Phase 1 L-Max® Plant February 2017 and DFS works have commenced
- Lepidico provides exposure to a portfolio of lithium exploration assets through its wholly owned properties, JV's and IP licence agreements in Australia, Canada, Europe and South America
- At 31 December 2016 Lepidico had A\$2.1M in cash and no debt











The L-Max® Advantage

- ✓ L-Max® leaches lithium from certain micas and phosphates without roasting conventional processing of spodumene requires capital and energy intensive roasters to extract lithium, often with no by-products
- ✓ L-Max® reagents and operation have straightforward health, safety and
 environmental characteristics
- ✓ L-Max[®] utilises common use, inexpensive reagents & is energy efficient
- ✓ L-Max[®] is novel but utilises conventional equipment and straightforward processes a series of agitated tanks, crystallisers and filters
- ✓ By-products include potassium sulphate fertiliser (SOP), sodium silicate, gypsum and potentially caesium and rubidium formates
- ✓ Fast leach kinetics, high recoveries and moderate process cost estimates make for compelling economics







Lepidolite

Zinnwaldite

Amblygonite

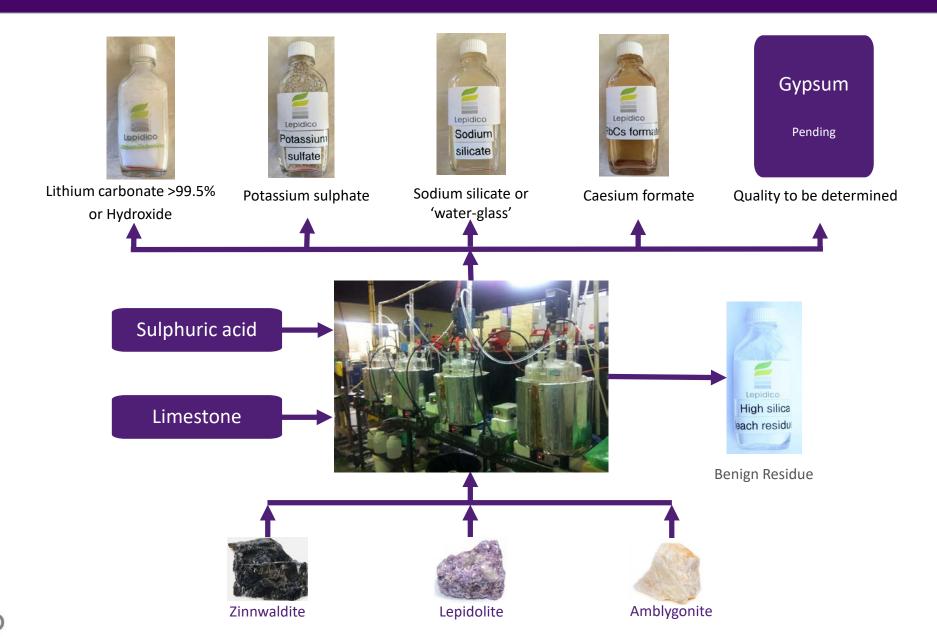
 $K(Li,Al,Rb)_3(Al,Si)_4O_{10}(F,OH)_2$ $KLiFeAl(AlSi_3)O_{10}(OH,F)_2$ $(Li,Na)AlPO_4(F,OH)$

100
80
60
40
—Cesium
20
—Potassium
0 2 4 6 8 10 12 14 16 18 20 22 24
Time (hrs)

Element leach curves under L-Max® - PFS sample

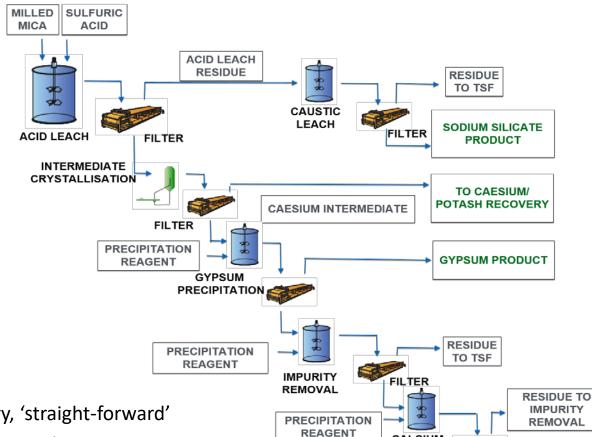


The L-Max® Process – Demonstrable Success





L-Max® - 100% Owned by Lepidico



CALCIUM

REMOVAL

FILTER

PRECIPITATION

REAGENT

Extraction of Lithium and valuable by-products from mica

- Atmospheric pressure leaching in sulfuric acid
- 95-115 degrees Celsius
- Fine grind, short residence time, high extraction rates
- Leach residue filters and dewaters very well

LITHIUM

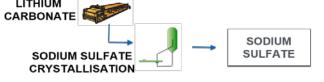
CARBONATE

PRODUCT

>8g/L Li in solution – ideal for downstream processing

- L-Max® is a proprietary, 'straight-forward' yet novel hydrometallurgical process
- An international patent application has been filed under the PCT for L-Max®





Lepidico Strategy & Asset Overview

Strategy: to leverage its registered L-Max® technology to process high-quality lithium mica Resources via high-return, strategically located development projects that produce lithium chemicals and a suite of valuable products.

Lemare Earn up to 75% Quebec Spodumene Target Cinovec Drilling 000 L-Max® Licence Option Agreement Royal Czech Republic Earn up to 70% Zinnwaldite/Tin Quebec Resource Lepidolite Target Exploration Separation Rapids Reung Kiet Lithium Lepidolite offtake Project MoU (Expired) under LOI with Avalon 75% Viking Mines Advanced Materials Thailand Drilling Lepidolite Target Exploration Portugal Multiple Lepidolite & Amblygonite Targets under negotiation Drill Ready Euriowie 100% Broken Hill Amblygonite Target L-Max® License Option Latin Resources JV Pioneer Dome JV Exploration Agreement: Brazil & Agreement Pending LPD 75% Earn-in Portugal Argentina & Peru Lepidolite Target PFS Strategic Drill Ready Lepidolite Targets L-Max® locations



Mineral Resource Development

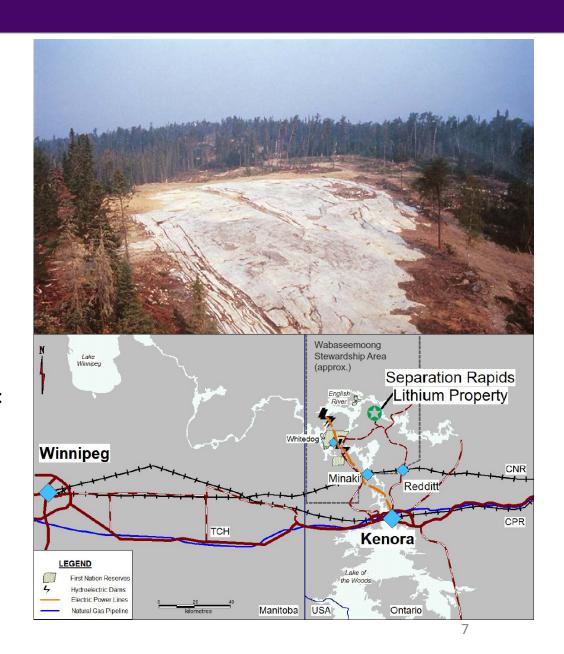
Separation Rapids*

.epidico

- The Separation Rapids deposit is **one of the largest "complex-type"**lithium pegmatite deposits in the world
- NI43-101 PEA completed on the Petalite Mineral Resource
- Excellent recoveries and high-specification, 99.88% battery grade lithium
 carbonate produced in L-Max® testwork programme
- Outcropping Lepidolite zone largely undrilled Resource drilling scheduled to commence March 2017 for completion in June Qtr
- Letter of Intent with Avalon Advanced Materials Inc. (TSX: AVL and OTCQX: AVLNF) for an integrated Lepidolite mining and lithium carbonate
 production partnership in Canada

Reference: ASX Announcement, Lithium Alliance with Avalon Advanced Materials Inc, 6 February 2017

*Note: Separation Rapids is one of several mica concentrates that have been identified as potential feed to Lepidico's Phase 1 Commercial L-Max® Plant (DFS – commenced). Exploration activities continue at each, including Pioneer Dome in WA (farm-in with ASX:PIO)



Positive Phase 1 L-Max® Plant PFS*

- PFS highlights economic potential to construct a strategically located Phase 1 L-Max® process facility in Kenora, Canada due to:
 - Close proximity to abundant, low-cost sources of bulk consumables
 - Location adjacent to markets for bulk by-products (particularly SOP and sodium silicate)
 - Established infrastructure (particularly road, rail and port infrastructure)
 - Close proximity to a skilled labour force with competitive labour rates
- Lepidico has committed to commence a DFS at a cost of c. US\$5 million (A\$6.5 million), as soon as funding is secured
 - Currently formulating plans to undertake a pro-rata non-renounceable Rights Issue, to raise between A\$3M A\$8M

Product Recoveries

Element	L-Max [®] Feed Grade	Recovery to Product
Lithium	2.10%	94%
Potassium	6.77%	85%
Silicon	23.10%	85%
Caesium	0.05%	81%
Tantalum	0.03%	70%

Expected Construction Costs

Item	US\$M
Feasibility Study and 2017 Owners Costs	5.0
L-Max® plant direct costs	16.2
L-Max [®] plant services	4.6
Infrastructure	2.6
Indirect costs	6.7
Contingency at 20%	6.0
Total	41.1

^{*}Refer to ASX Announcement, Positive Phase 1 L-Max® Plant Pre-Feasibility Study"" dated 27 February 2017 for further details

Phase 1 L-Max® Plant Project Progressing to DFS

- Key metrics for the DFS scope* will be:
 - Plant throughput rate 3.6tph of lithium-mica concentrate (annualised rate of 29,000tpa 91.4% operating time)
 - Battery grade lithium carbonate equivalent (LCE) production of c. 3,000tpa
 - Average C1 Costs nil to negative after by-products
 - Average C3 Costs of US\$1,000-2,000/t after by-product credits including amortisation of development capital
 - Capex of US\$40-45M (incl. 20% contingency and US\$5M for DFS costs)
 - Valuable suite of by-products including sulphate of potash (SOP), caesium, tantalum concentrate and sodium silicate

Project Planning Key Metrics

Key Parameter	Key Metric
Lithium Carbonate (>99.5%) Production	3,000 tpa
SOP (>95% K ₂ SO ₄) Production	3,000-4,000 tpa
Sodium Silicate (40wt% solution at SiO ₂ :Na ₂ O ratio of 2.0) Production	40,000-50,000 tpa
Caesium (as metal contained in formate) Production	10-100 tpa
Tantalite Con (30% Ta₂O₅) Production	20-25 tpa
LiCarbonate C1 cost after by-products credits	<=US\$0/t
LiCarbonate C3 cost after by-product credits	US\$1,000-2,000/t

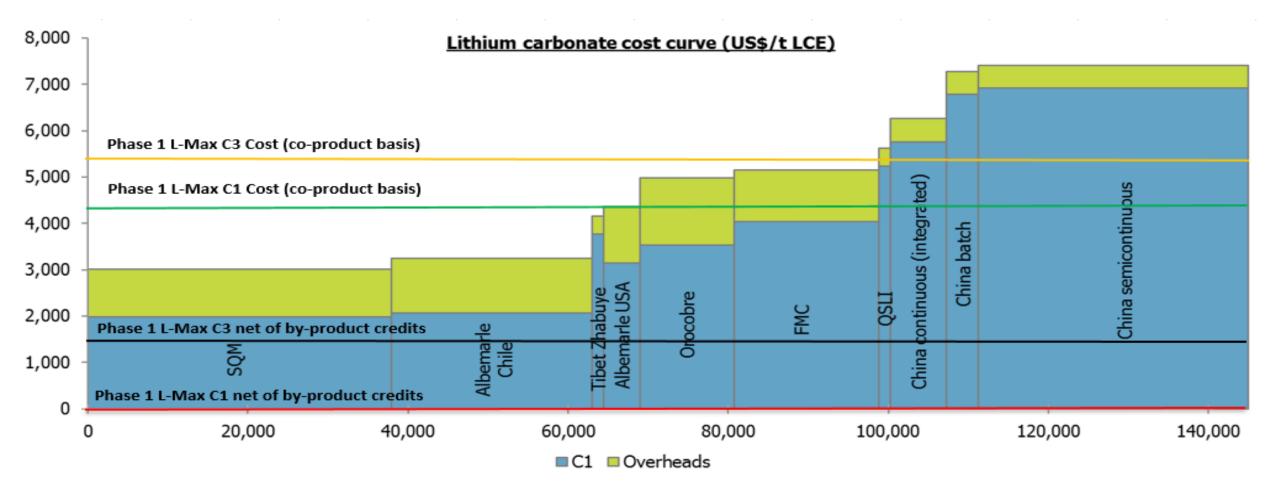
Expected Operating Costs

Item	US\$/t of Concentrate Processed (current prices)
Concentrate purchase	350
Concentrate transport	4
Inbound consumables logistics	144
Consumables FOB	286
Processing costs other	186
Sales, marketing, and outbound logistics	55
General and administration	104
Total Unit Cost	1,130

^{*}The assumptions set out above and elsewhere in this announcement contain reference to broad indicative plant operating parameters (Parameters) for the purpose of the DFS which have been developed through scoping level work and subsequent PFS work. For the avoidance of doubt, investors are advised that the Parameters expected to be adopted for the DFS do not constitute a production forecast or target in relation to mineral resources associated with any project owned by the Company. The Company wishes to expressly clarify that any references in this announcement or the PFS to annual production rates relate to scoping and planning parameters and are not a production target. The Company cautions investors against using any statements made in either this announcement or the PFS which may indicate or amount to the reporting of a production target or forecast financial information, as a basis for making any investment decisions about shares in the Company. The primary purpose of disclosing the DFS Parameters is to inform on the scope of work for the study and provide an estimate of the intended scale of a potential future Phase 1 Plant.

Peer Analysis

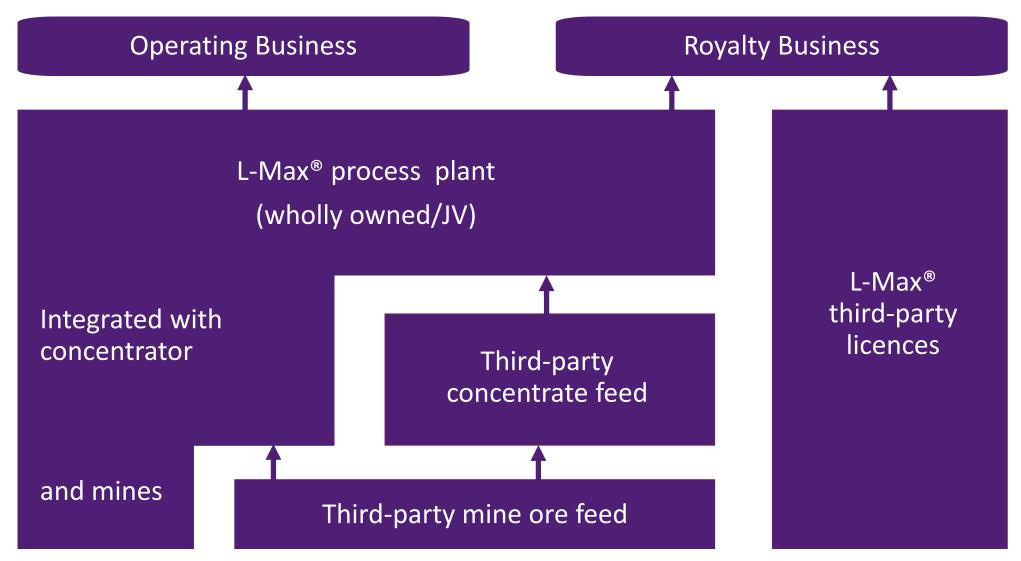
Phase 1 L-Max® Plant is Favourably Placed on the Global Cost Curve*







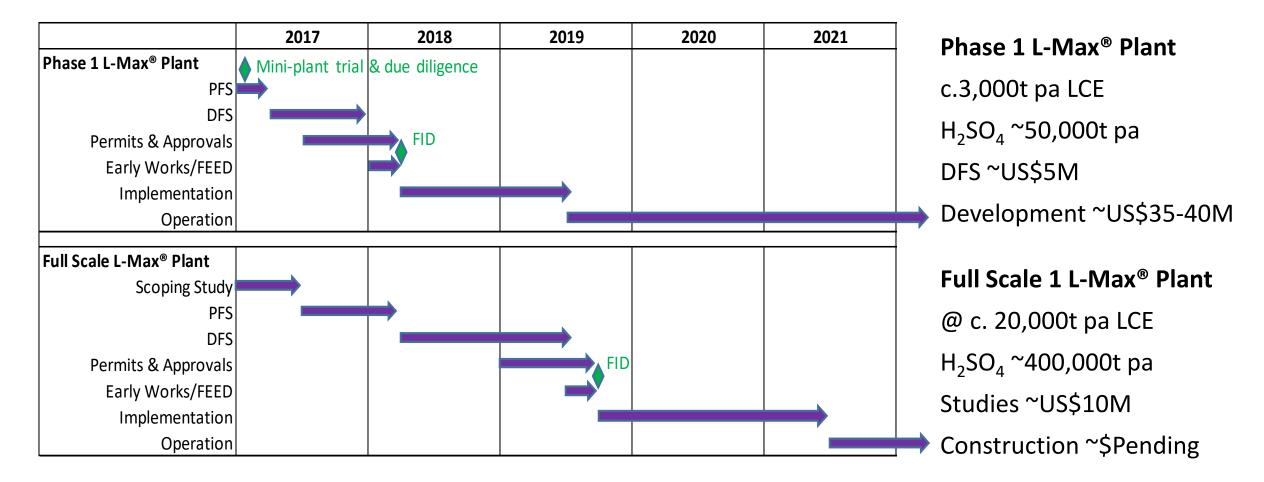
Business Model





Opportunities

Mining and processing sustainably for 21st century products





Directors and Senior Management Team



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.



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



Mr. Mark Rodda

BA, LLB

Non-Executive Director

Mark is a lawyer with 20 years experience in the resources sector including the management of local and international mergers and acquisitions, divestments, exploration and project joint ventures, strategic alliances, corporate and project financing transactions and corporate restructuring initiatives.



Ms. Shontel Norgate

B.Bus

Chief Financial Officer

Shontel is a finance executive with over 20 years commercial experience in the resources industry including debt and equity finance, financial reporting, project management, corporate governance, commercial negotiations and business analysis



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



Overview

Capital Structure (ASX:LPD)

Description	Amount
Share Price (Close 24 February 2017)	1.5c
Shares O/S (Current)	1.75B
Market Cap (Close 24 February 2017)	\$26.3M
Cash (31 December 2016)	\$2.1M
Top 20 Shareholders (31 January 2017)	51.5%

■ Volume

Directors and Senior Management

Name	Title
Gary Johnson	Non-Executive Chairman
Joe Walsh	Managing Director
Tom Dukovcic	Executive Director Exploration
Mark Rodda	Non-Executive Director
Shontel Norgate	Chief Financial Officer
Gavin Becker	GM Business Development

-Lithium Carbonate Price

(RMB/mt)

Share Price

Lithium Carbonate Price 4.0 180,000 3.5 170,000 3.0 160,000 2.5 2.0 150,000 1.5 140,000 1.0 130,000 0.5 24-Mar-16 24-Aug-16 24-Sep-16 24-Oct-16 24-Apr-16 24-May-16 24-Jun-16 24-Jul-16 24-Nov-16 24-Dec-16 24-Jan-17

-Share Price

(A\$ Cents)

Highlights

Competitive Advantage

- A far less competitive landscape exists for Li-mica and Li-phosphate exploration properties
- L-Max® is expected to have relatively competitive capital intensity
- By-product potential means L-Max® should have a competitive operating cost structure

Feed Sources

- Lepidico is building a portfolio of quality lithium assets around the world
- Inbound enquiries reveal explorers that discover Li-rich micas are drawn to L-Max®
- Tailings and waste dumps rich in Li-mica offer near term production opportunities

L-Max®

- Employs conventional processes using industry standard equipment, operated at ambient pressure and moderate temperature
- Employs common use, inexpensive reagents with straightforward health, safety and environmental characteristics
- Has a novel flowsheet that is the subject of an international patent application

Pathway to Production

- PFS confirmed viability of constructing a strategically located Phase 1 L-Max® Plant at Kenora, Canada, processing lithium-mica concentrates purchased from third parties
- DFS work has commenced
- First production projected for 2019

Proven Team

- Management team experienced in new process, project and business development
- A strong industry track record that includes company transforming project and technology development
- Significant milestones accomplished in a short period of time Lepidico is just getting started......



Important Notice

This presentation has been prepared by the management of Lepidico 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.







Creative Resources Leadership

Contact us: info@lepidico.com