



Corporate Update

February 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



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.

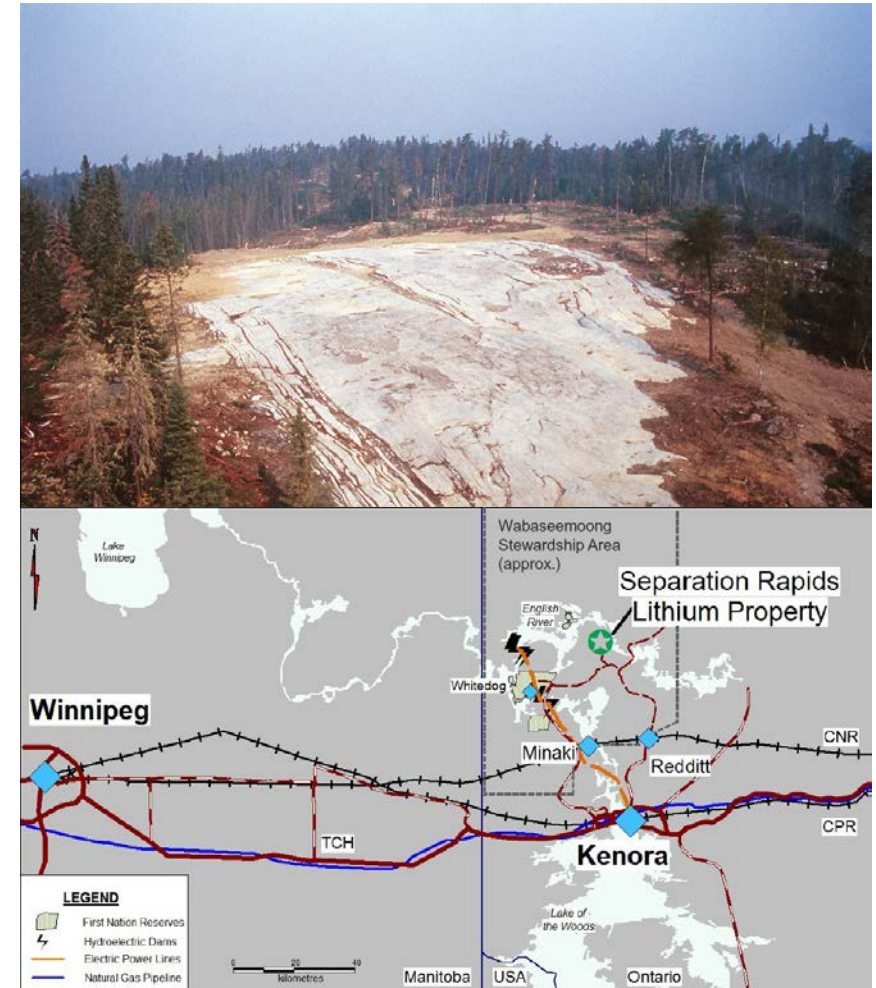


Mineral Resource Development

Separation Rapids*

- 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

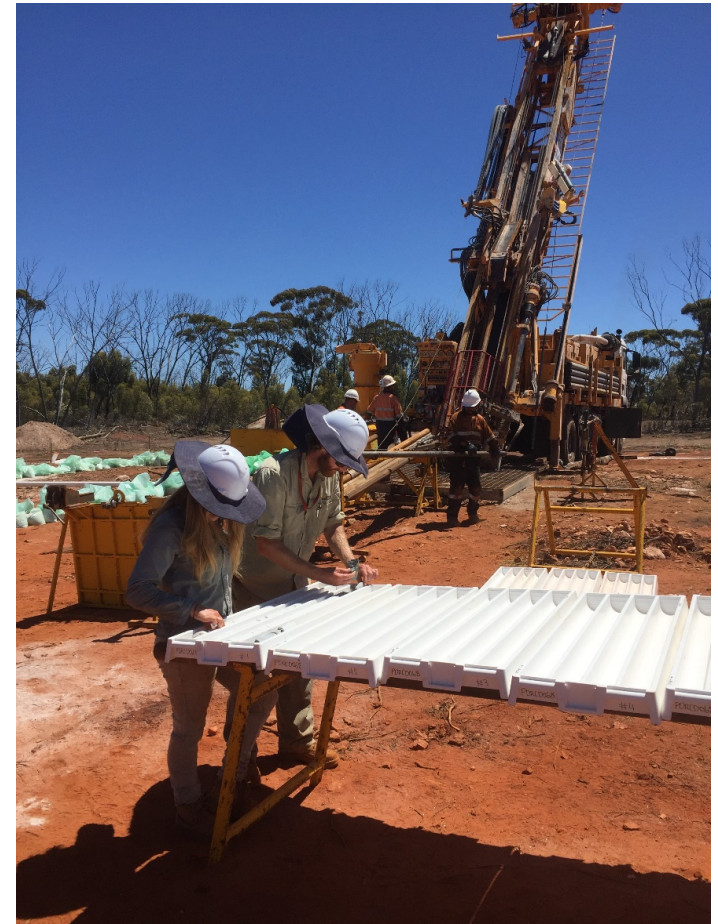


Mineral Resource Development

Pioneer Dome*

- Pegmatite 9: lithium-caesium-tantalum (LCT) pegmatite, **outcropping in two parallel structures over a 200m strike**
- Rock chip samples returned **grades up to 3.94% Li₂O**
- **PEG009 is a drill ready target** – drilling can commence once site access permits are granted
- Flotation and L-Max® leach test results **encouraging** – final lithium carbonate results pending
- Lepidico farm-in to PEG009 via **delineation of a lithium-mica Resource of 500,000t @ 1.2% Li₂O or more to earn a 75% interest**
- PEG009 occurs within **a cluster of 13 LCT-type pegmatites** defined by Pioneer Resources **along a 20km trend**

*Reference: ASX Announcement, Lepidico to Farm-in to Pioneer Dome PEG009 Lepidolites, 23 February 2017 and Pioneer Resources (ASX:PIO) announcement dated 19 May 2016

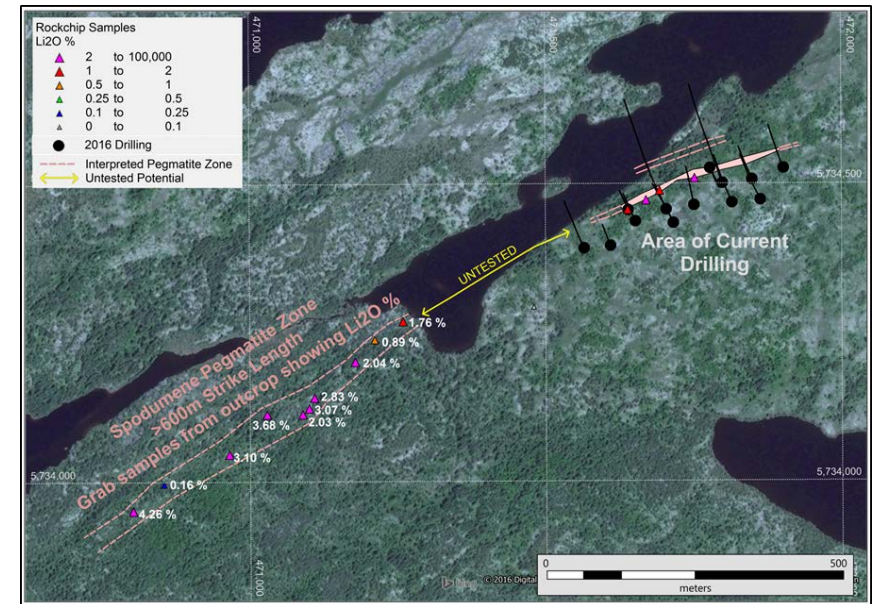
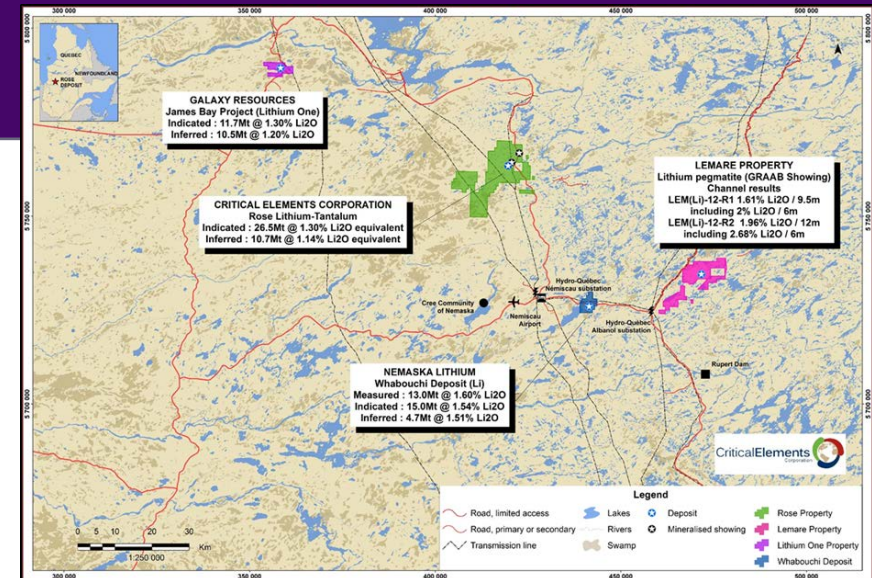


Mineral Resource Development

Lemare*

- Lemare Central Zone – spodumene **pegmatite strike of 300m and open to the NE**
- Drill results have returned: **21m @ 2.65% Li₂O;**
41 m @ 1.71% Li₂O; and
23 m @ 1.61% Li₂O
- New spodumene pegmatite identified at Lemare SW, **600m strike, up to 4.26% Li₂O in rock chip samples**, average grade of 2.19% Li₂O
- Lemare **claims cover 74 km² in the James Bay region**, 60km from Nemaska, 30 km east of Nemaska Lithium's Whabouchi deposit
- **Earn-in for up to a 75% interest** in Lemare from Critical Elements Corp.
Next drill phase C\$350k, March 2017.

*Reference: ASX Announcement, Drilling to recommence at Lemare Lithium Project, 16 February 2017 and the Company's announcement) dated 24 November 2016



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

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



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

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

*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.

Project Planning Key Metrics

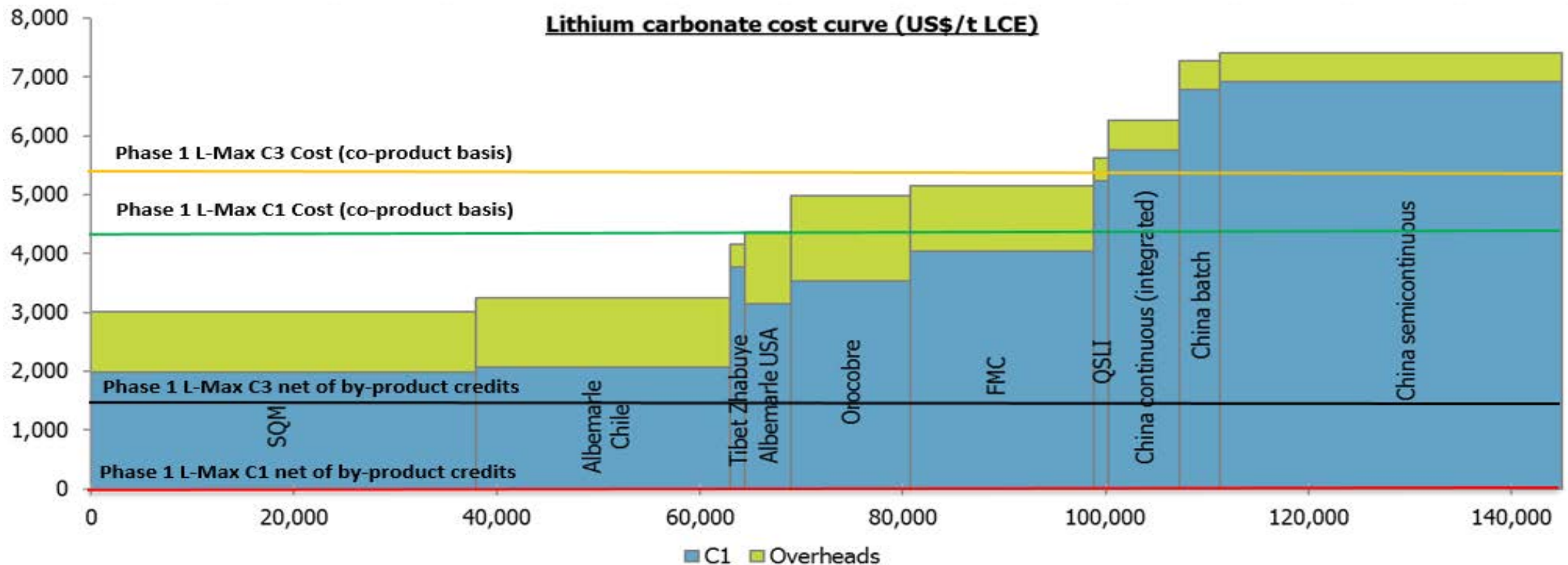
Key Parameter	Key Metric
Lithium Carbonate (>99.5%) Production	3,000 tpa
SOP (>95% K ₂ SO ₄) Production	3,000-4,000 tpa
Sodium Silicate (40wt% solution at SiO ₂ :Na ₂ O ratio of 2.0) Production	40,000-50,000 tpa
Caesium (as metal contained in formate) Production	10-100 tpa
Tantalite Con (30% Ta ₂ O ₅) 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

Peer Analysis

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



*Lithium Carbonate Cost Curve 2016 co-product basis (Source: Roskill)

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



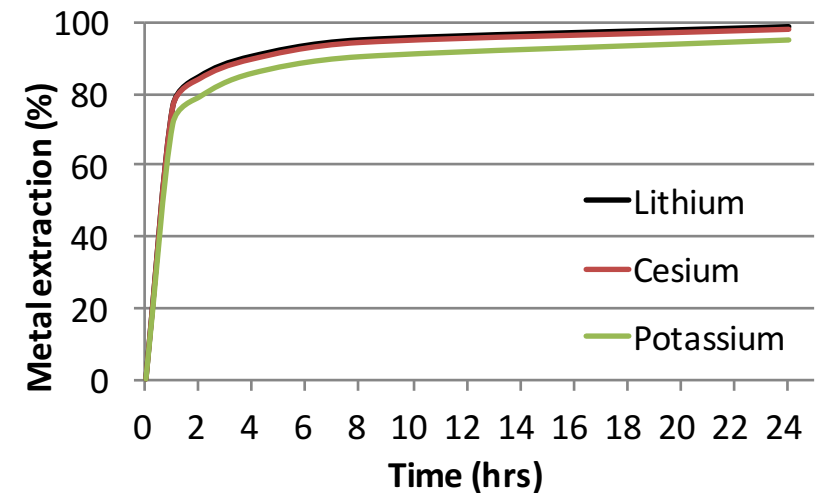
Lepidolite



Zinnwaldite

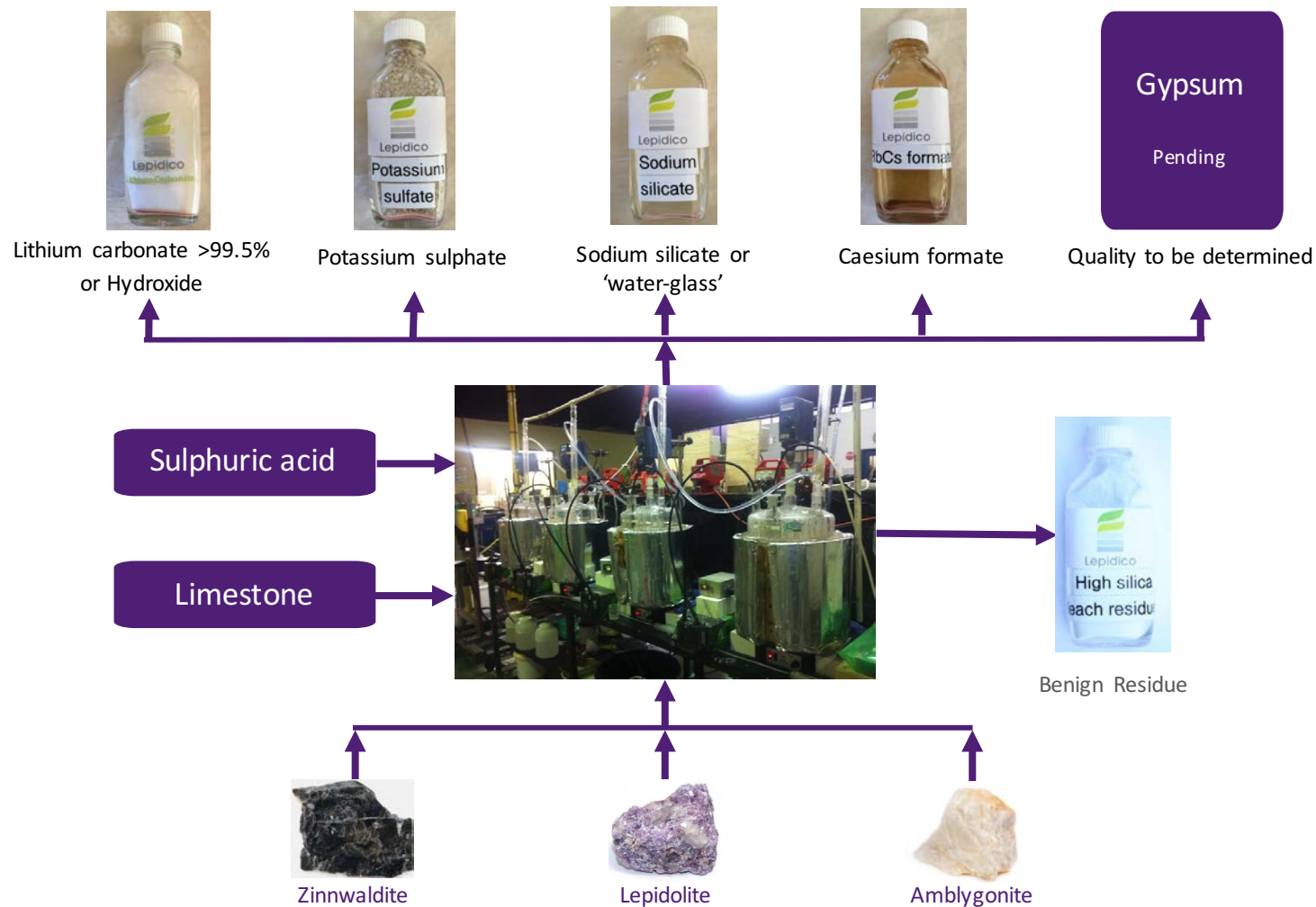


Ambygonite



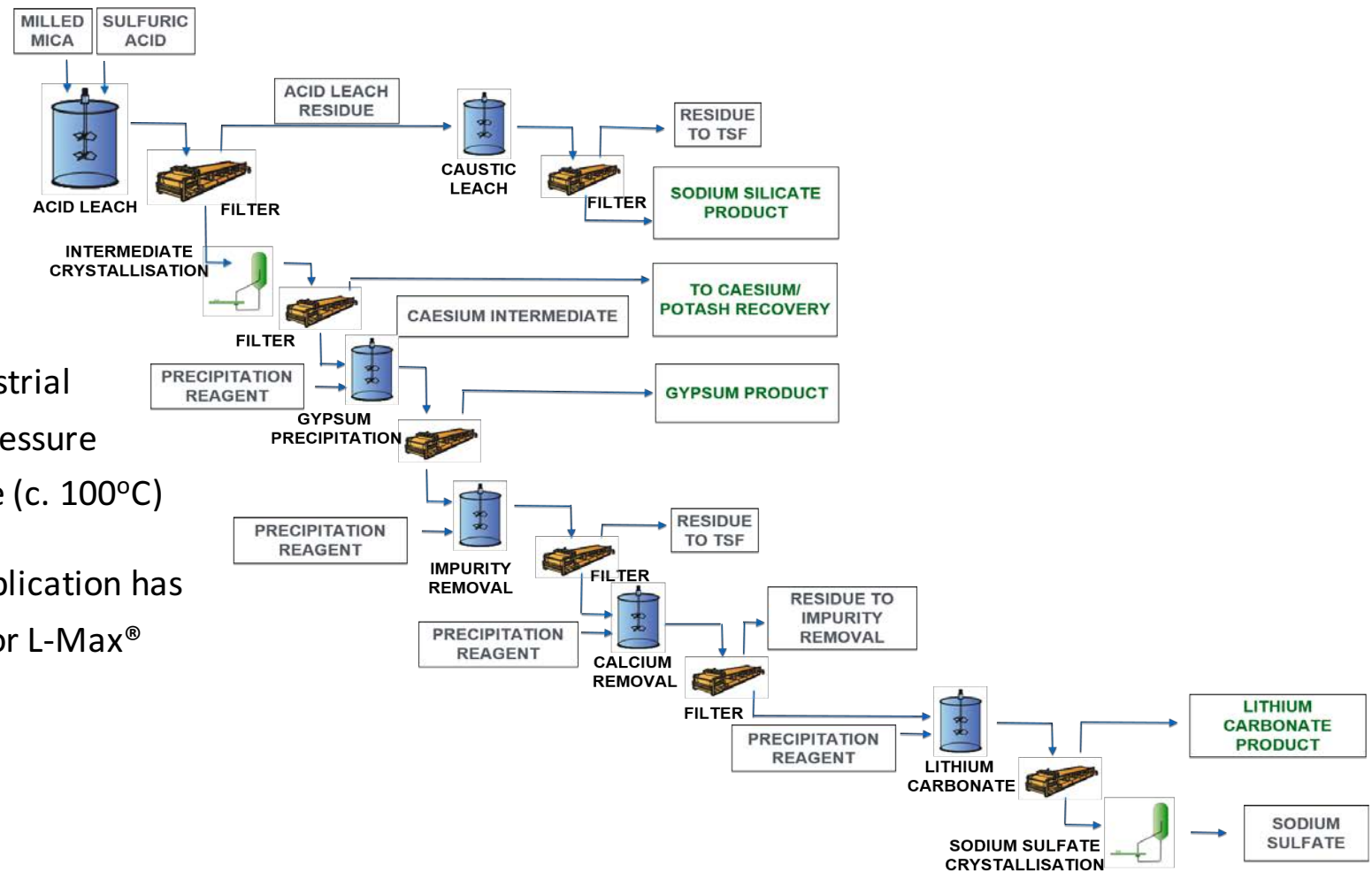
Element leach curves under L-Max[®] - PFS sample

The L-Max[®] Process – Demonstrable Success

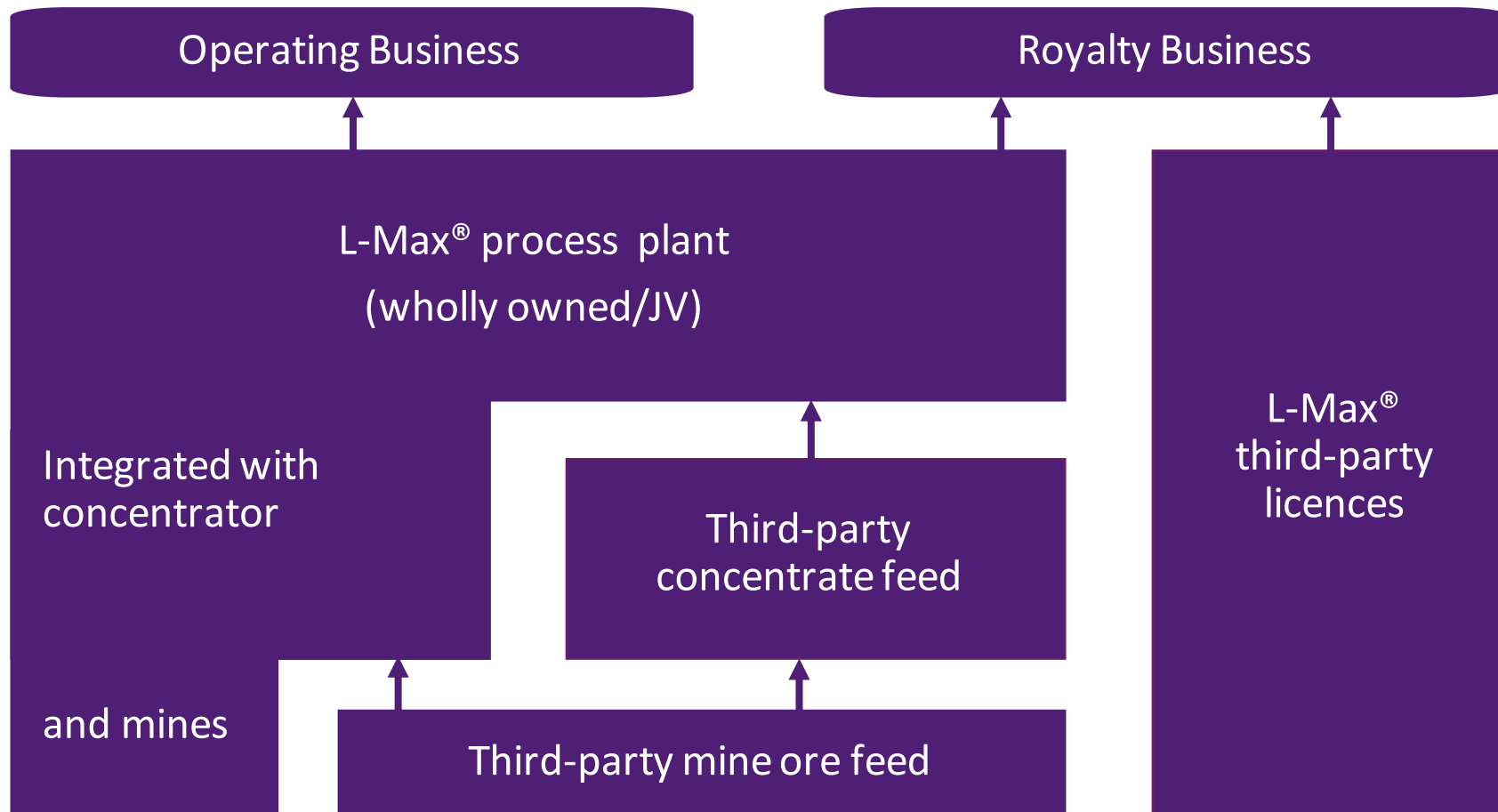


L-Max[®] - 100% Owned by Lepidico

- L-Max[®] is a proprietary, 'straight-forward' yet novel hydrometallurgical process
- L-Max[®] uses common industrial reagents at atmospheric pressure and moderate temperature (c. 100°C)
- An international patent application has been filed under the PCT for L-Max[®]

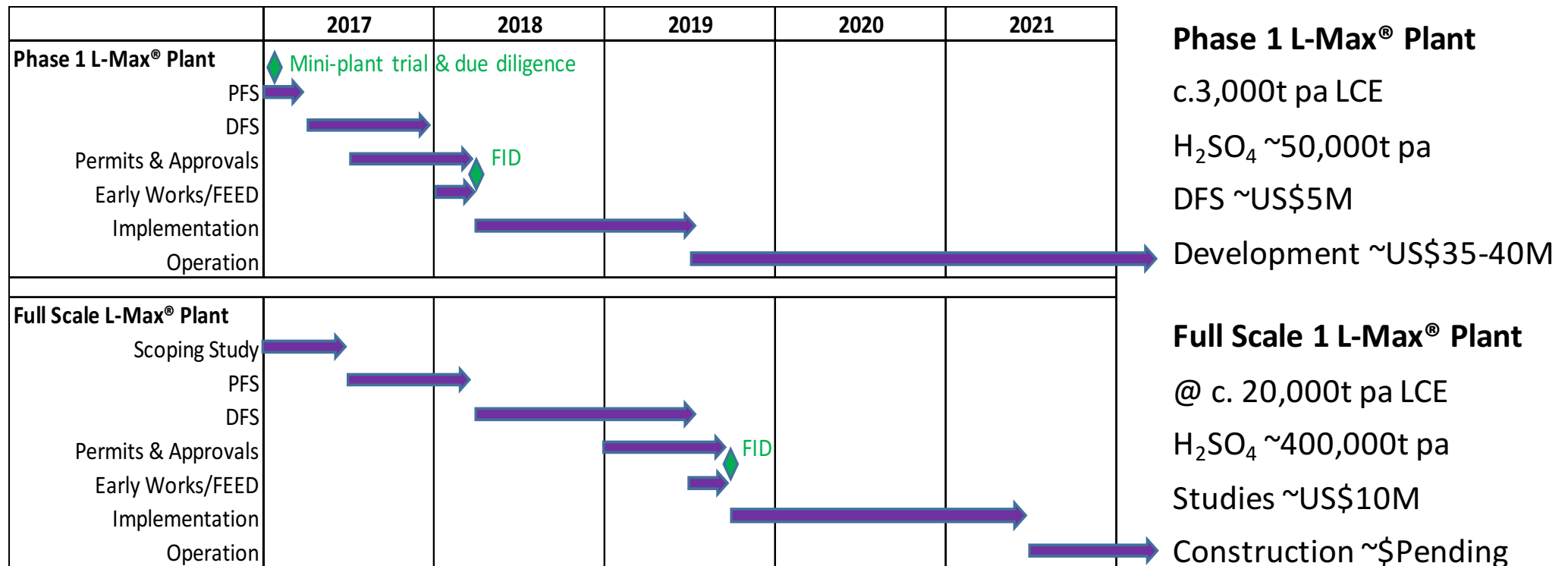


Business Model



Opportunities

Mining and processing sustainably for 21st century products



Overview

Capital Structure (ASX:LPD)

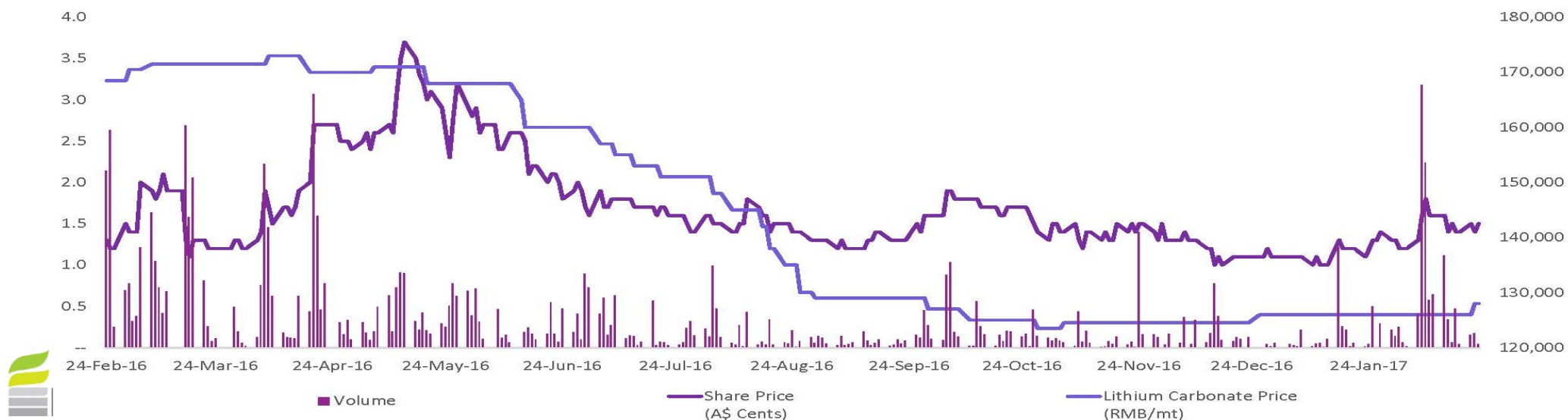
Description	Amount
Share Price (Close 24 February 2017)	1.5c
Shares O/S (Current)	1.75B
Market Cap (Close 24 February 2017)	\$26.3M
Cash (31 December 2016)	\$2.1M
Top 20 Shareholders (31 January 2017)	51.5%

Directors and Senior Management

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

Share Price

Lithium Carbonate Price



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.

Investor 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.....

Lithium Carbonate/Hydroxide

Supply & Market Balance

“Li is not rare, just an underdeveloped market”¹: deposits close to infrastructure, and of sufficient scale and quality for saleable battery grade product are less common

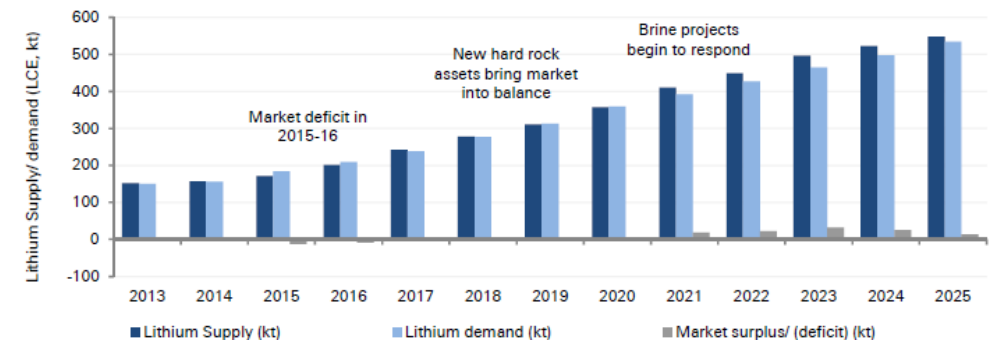
Committed new supply: hard rock mine developments will see new sources of lithium supply from 2016 to 2018 bringing market back to balance

Longer term supply growth less certain: most commentators expect brine producers to incrementally increase output to balance demand – to date this has not been the case and environmental/regulatory issues abound

L-Max® will provide a new source of low cost lithium, from micas

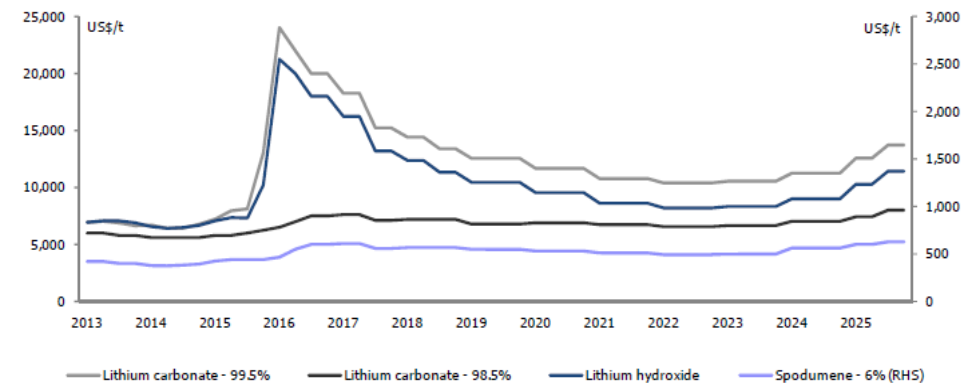


DB lithium supply-demand balance



Source: Deutsche Bank, United States Geological Society, company data

DB price forecasts (May 2016)



Source: Deutsche Bank, Asian Metal, company data

Lithium Carbonate/Hydroxide

Usage & Demand

Steady growth in traditional uses: fluxes, toughened glass, medical, and cement and adhesive additives

Unique properties for Li-ion batteries (LIB): Li-ions move from the anode (-ve carbon) to the cathode (+ve Li based) during discharge and back when charging. LIB use an intercalated lithium compound in the cathode

Strong growth in LIB usage: LiCoO^1 – high energy density but safety risks if damaged; $\text{LiFePO}^2/\text{LMO}^3/\text{NMC}^4$ – longer life and safer; $\text{NCA}^5/\text{LTO}^6$ – more selective use; and LiS^7 – pioneering higher performance to weight ratio

¹LiCoO – Lithium Cobalt Oxide; ²LiFePO – Lithium Iron Phosphate; ³LMO – Lithium Manganese Oxide;

⁴NMC – (Lithium) Nickel Manganese Cobalt; ⁵NCA – (Lithium) Nickel Cobalt Aluminum Oxide; ⁶LTO – Lithium Titanium Oxide; ⁷LiS – Lithium Sulfur; electrolyte – Li salt in organic solvent

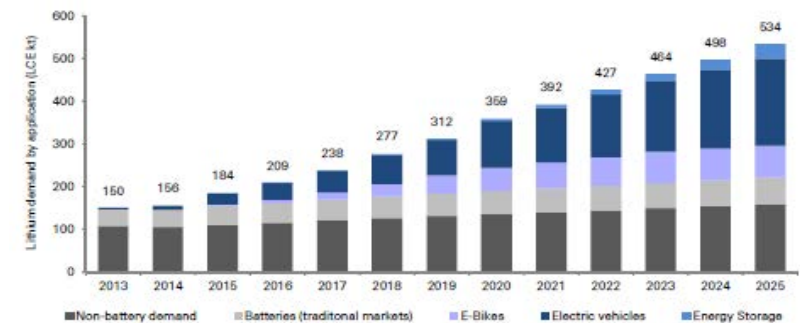


Battery costs are falling



Source: Deutsche Bank; Cairn ERA

DB Global lithium demand forecast



Source: Deutsche Bank; Inside EV

L-Max[®]: utilises common use, inexpensive reagents

L-Max[®] reagents have straightforward health, safety and environmental characteristics

Lepidolite		Acid consumption (kg/t of mica)			
Metal	Grade (%)	98% H ₂ SO ₄	32% HCl	70% HNO ₃	70% HF
Lithium	2.34	169	385	303	96.3
Rubidium	2.17	12.7	29.0	22.9	7.25
Cesium	0.83	3.12	7.12	5.62	1.78
Potassium	7.65	98.1	224	177	56.0
Aluminum	8.32	462	1054	832	264
Iron	0.36	6.43	14.7	11.6	3.67
Manganese	0.92	16.7	38.2	30.1	9.56
Silicon	27.1	0.00	0.00	0.00	1659
TOTAL (kg/t acid)		768	1,752	1,382	2,098
ACID COST (\$/tonne)		\$100	\$150	\$250	\$800
ACID COST (\$/tonne mica)		\$77	\$263	\$346	\$1,678

Sodium Silicate



8 million tonnes per annum global market

Wide commercial and industrial applications, used in:

cement/plaster (reduces porosity), detergents, wastewater treatment (coagulant), passive fire protection, textile and lumber processing, refractories, and automobiles/metal repair

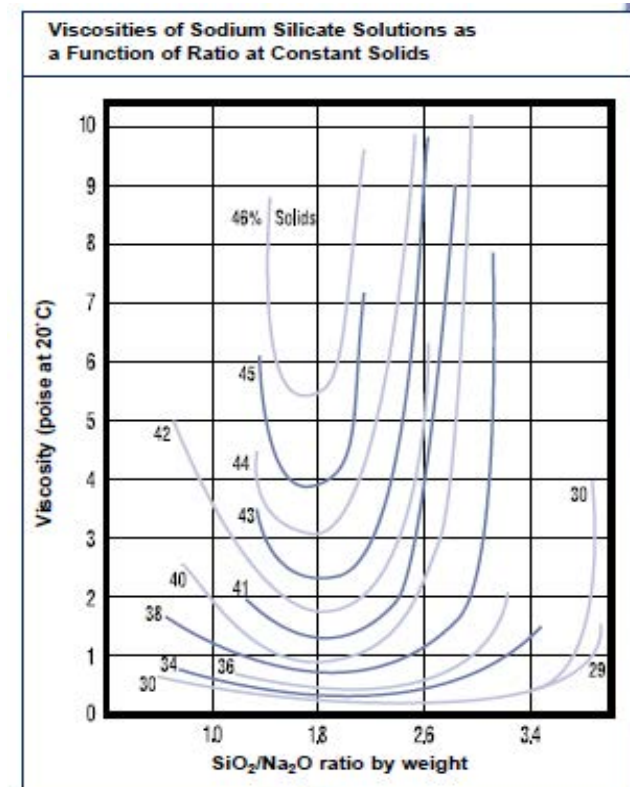
Existing supply: from combining various ratios of sand and soda ash at 1,100-1,200°C; $\text{Na}_2\text{CO}_3 + \text{SiO}_2 \rightarrow \text{Na}_2\text{SiO}_3 + \text{CO}_2$

Quality: properties vary depending on the $\text{SiO}_2/\text{Na}_2\text{O}$ ratio; higher value products with a ratio of <2.0

L-Max® will provide a new source of low-cost sodium silicate:

PFS test work has produced sodium silicate with a ratio of 1.6

Solution Price: US\$650-700/t ex-works¹; US\$250/t delivered²



Source: PQ Corporation website

Caesium & Rubidium



Niche global market

Main industrial applications: caesium (Cs) formate is used as a completion fluid in oil wells (c. 80% recycled) as well as in electricity generation, electronics, and chemistry

Existing Cs supply: mined pollucite supply is limited

Quality: high density Cs formate brine with a specific gravity of c. 2.3 required for oil drilling

L-Max® will provide a new source of low-cost Cs & Rb: PFS test work has produced Cs/Rb formate with an SG of 2.0

Price: no market prices are available for these alkali metals. Contract prices¹ are stated as US\$12,000-15,000/t Cs metal contained in formate

Potassium Sulphate (SOP)



High value, chloride free fertiliser

Main industrial applications: chloride free fertilisers are used extensively in fruit and vegetable growing and to reduce chloride accumulation in soils used for agriculture

Existing SOP supply: a c. 2 million tonne per annum market globally

Quality: 41% K and 17% S, with no chloride content

L-Max® can provide a new source of low-cost SOP: Scoping Study test work produced SOP – no value assumed in PFS

Price: ex-works prices¹ ranged between US\$500-US\$550/t in 2016

¹Source producer and market participant

Gypsum



Close proximity to market required

Main industrial applications: fertiliser – softens hard ground increasing yield and reducing wear on machinery, and as the main constituent in many forms of plaster, wallboard and chalk

Existing $\text{CaSO}_4 \cdot 2\text{H}_2\text{O}$ supply: 246 million tonnes globally in 2014 from numerous small scale de-centralised open pit operations and recycling

Quality: low impurities required for agricultural use, building material use more flexible

L-Max® can provide a new source of low-cost gypsum: Scoping Study test work produced gypsum within residue – no value assumed in PFS

Price: highly variable depending on impurities and proximity to market

Independent View of L-Max®

Roskill Weekly Round-up – 23 January 2017

Lithium: Lepidico produces battery grade lithium carbonate using the L-Max® technology

Roskill view: “Lepidico produced a battery grade lithium carbonate product grading 99.75% Li_2CO_3 from a 30kg sample of lepidolite and lithium mica bearing tailings. The tailings were gathered from an existing mining operation and form one of three samples gathered at separate deposits to be processed as part of a prefeasibility study on the L-Max® plant. As a result of the successful results, Lepidico expects to begin a definitive feasibility study on continuous L-Max® mini-plant trials in February 2017.

The production of the battery grade lithium carbonate product from lepidolite and lithium mica bearing tailings material represents an attractive potential source of lithium chemicals if processing costs are comparable with existing primary lithium production. The recovery of lithium carbonate reported at 91% is also comparable with spodumene processing at Chinese conversion plants. If test-work on the other samples proves successful, the possibility of a centralised plant processing tailings material from multiple sources improves project viability. Completion of the pre-feasibility study in Q1-2017 and definitive feasibility study scheduled for Q4-2017 is awaited to determine how Lepidico see the L-Max® plant would fitting into the lithium market, though first results appear positive”.

A subsequent ASX announcement (25 January) revealed test results on second PFS sample with a further improved product grade (99.88%) and overall recovery (93%)

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 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.



Creative Resources Leadership

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