ADVANCING THE WORLD CLASS Kathleen Valley Lithium-Tantalum Project

Liontown

ASX: LTR | MAY 2020



Forward Looking Statements

This Presentation may include statements that could be deemed "forward-looking statements". Although the Company believes the expectations expressed in such forward-looking statements are based on reasonable assumptions, such statements are not guarantees of future performance and actual results or developments may differ materially from those expected in the forward-looking statements or not take place at all.

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Competent Person Statement

The Information in this report that relates to Mineral Resources for the Kathleén Valley Project is extracted from the ASX announcement "Kathleen Valley confirmed as a world-class lithium deposit as Mineral Resource increases to 156Mt @ 1.4% Li₂O" released on the 11th May 2020 which is available on <u>www.ltresources.com.au</u>.

The Information in this report that relates to Ore Reserves and Pre-Feasibility Study (PFS) for the Kathleen Valley Project is extracted from the ASX announcements "Kathleen Valley Pre-Feasibility Study confirms potential for robust new long-life open pit lithium mine in WA" released on 2nd December 2019 which is available on

The Information in this report that relates to Exploration Results for the Kathleen Valley Project is extracted from the ASX announcements "Liontown set for interim resource upgrade at Kathleen Valley as drilling intersects further thick, high-grade mineralised zones" released on the 5th February 2020 which is available on <u>www.ltresources.com.au</u>.

The Information in this report that relates to Exploration Results for the Moora Project is extracted from the ASX announcements "Initial phase of exploration completed at 100%-owned Moora Nickel Project, located north-east of Perth in Western Australia" released on the 16th April 2020 and "Strong gold, PGE, nickel and copper anomalism returned from initial fieldwork completed at 100%-owned Moora Project, WA" released on 13th May 2020 which are available on www.ltresources.com.au.

The Information in this report that relates to Mineral Resources for the Buldania Project is extracted from the ASX announcement "Liontown announces maiden Mineral Resource Estimate for its 100%-owned Buldania Lithium Project, WA" released on the 8th November 2019 which is available on <u>www.ltresources.com.au</u>.

The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements and that all material assumptions and technical parameters underpinning the estimates in the relevant market announcements continue to apply and have not materially changed. The company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcements.



Liontown Overview

Kathleen Valley



- World class resource
- 156Mt @ 1.4% Li₂O & 130ppm Ta₂O₅
- 80% Measured and Indicated
- Potential long life (>25 years) mine
- Significant opportunities to build on previous positive PFS:
 - o Access higher grades earlier
 - Tantalum by-product
- Updated PFS due Q3/Q4 2020

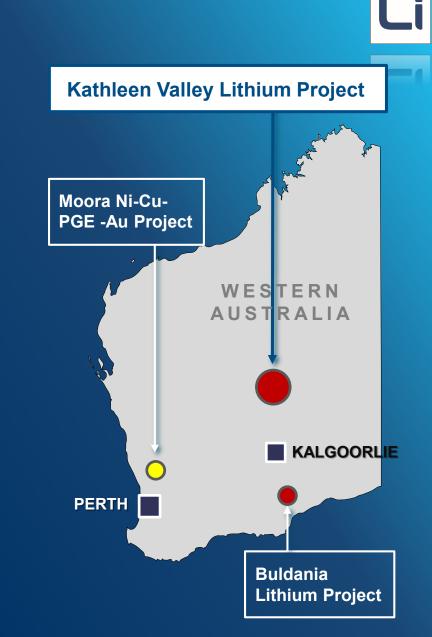
Pipeline Projects

Moora Project

- Emerging Ni-Cu-PGE-Au province
- Largely unexplored
- Buldania Project
 - o ∼15M† @ 1.0% Li₂O
 - Exploration upside

Low Risk

- All Projects 100% owned
- Stable, investor friendly jurisdiction
- Established, modern infrastructure



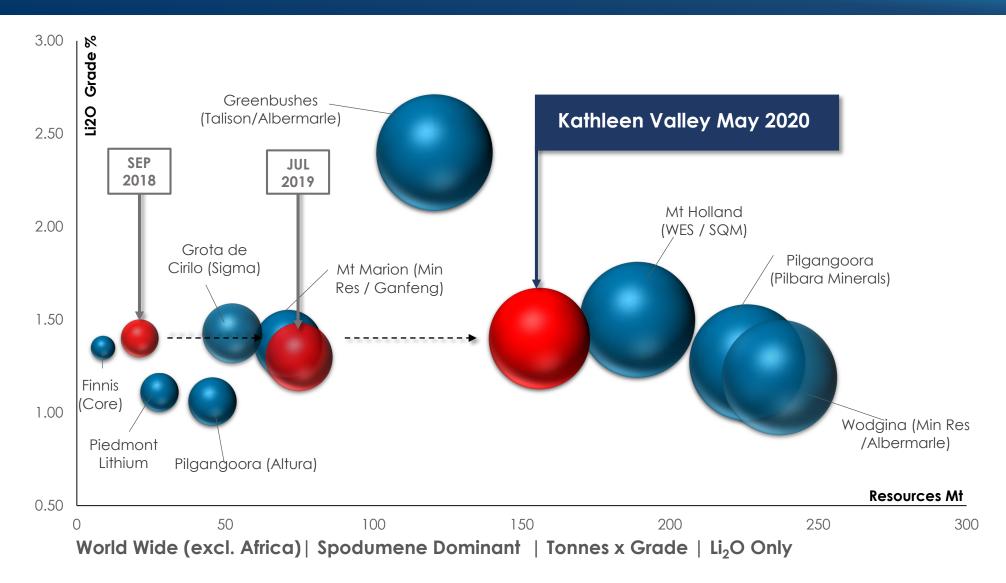
The latest Kathleen Valley resource confirms Liontown as a major player in the battery metals space

Kathleen Valley Lithium-Tantalum Project

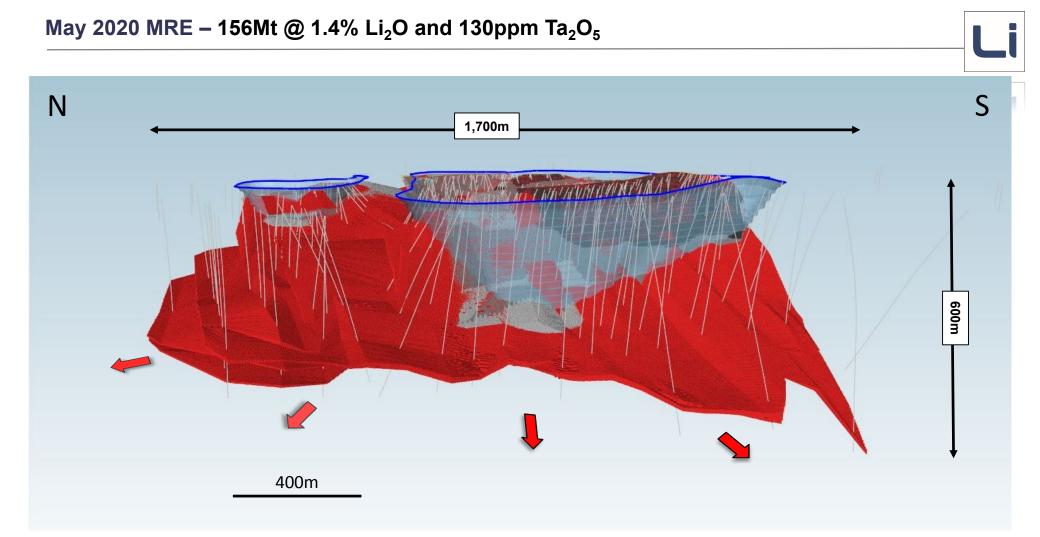
WESTERN AUSTRALIA 100%



A globally significant lithium resource



Refer to Appendix on Slide 25 for Peer Comparison Information including Resource Classifications



May 2020 MRE



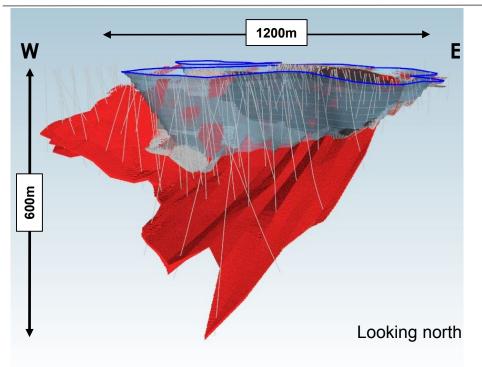
108% increase in tonnes and 119% increase in contained lithium versus the July 2019 MRE used to prepare the Dec 2019 PFS

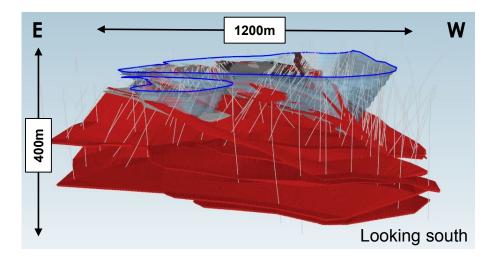




Resource remains open along strike and at depth

May 2020 MRE – 80% Measured and Indicated

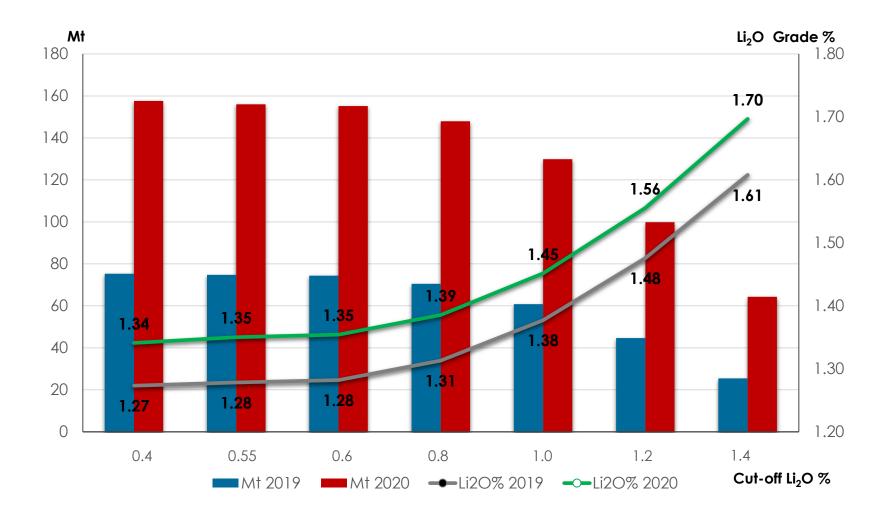




Cut-off Li ₂ 0%				Aillion onnes	Li ₂ 0%		Ta₂O₅ (ppm)	
Measur		easured	20		1.3		140	
0.55	Indicated		105		1.4		130	
	I	Inferred		32	1.3		110	
Tot		I		156	1.4		130	
Cut-off Li ₂ C	0%	Mt		Li ₂ C	0%	Тс	a₂O₅ (ppm)	
0.4		158		1.34			128	
0.55		156		1.35		128		
0.6		155		1.35			128	
0.8		148		1.39		129		
1.0		130		1.45		131		
1.2		100		1.56			132	
1.4		64		1.7	70		131	

* Tonnages and grades have been rounded to reflect the relative uncertainty of the estimate. Inconsistencies are due to rounding.

An increase in grade and tonnes



Li

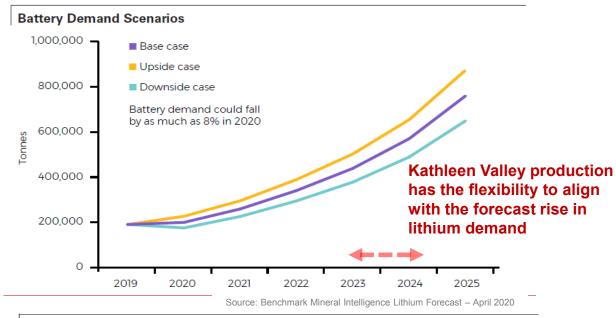
December 2019 PFS Key Metrics | Open-pit mining and lithium only

Based on Jul 2019 MRE – 74.9Mt @ 1.3% Li₂O **A\$** ہם–0 SC6.1: Mining: **Reserve:** Life of Mine **Total Free Cash** 50Mt @ 1.2% Li₂O 295Ktpa 2Mtpa Flow +\$1.9B 26 years NPV¹ \$507M IRR 25.1% Payback Period ~4 YEARS \$564/t conc. Opex² (excl. Ta credits) (US\$406/t conc.) Ave. Strip Ratio 7.7:1 A\$960/t Ave. SC6 Price³ (US\$690/t) Capex \$240M ¹ 8% (real). ² Operating costs include all mining, processing, transport, state and private royalties, freight to port, port costs and site administration and overhead costs. ³ Source: Roskill 2019 and Liontown base case related

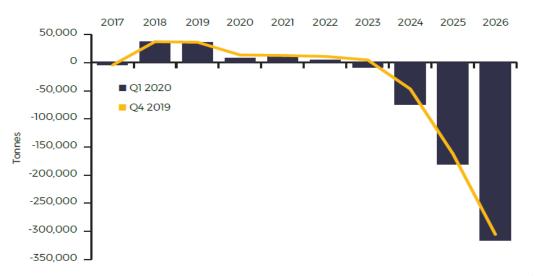
party and arms length prices 2024 - 2040.

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While EV adoption rates will be temporarily delayed by COVID-19, the longer-term fundamentals remain strong







The rise of lithium batteries continues

January 2020:

China extends subsidies on EV's

EU rules begin – heavily penalising carmakers on CO_2 emissions.

Feb 2020:

UK commits to banning sales of new petrol and diesel cars by 2035 – 5 years earlier than previous target

Plans to ban petrol cars in 12 major European capitals starting as early as 2030

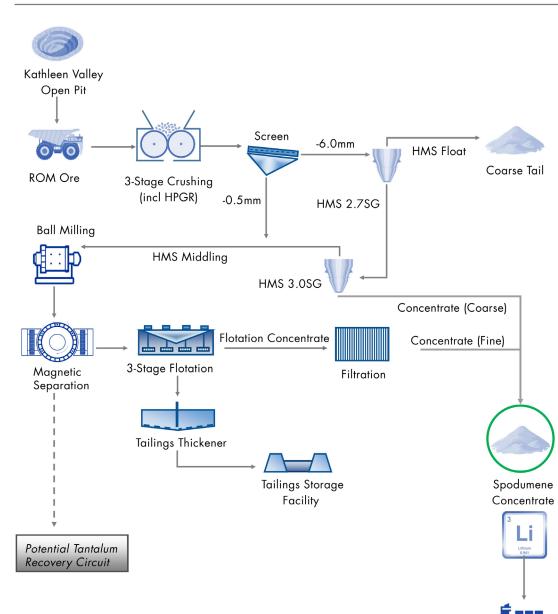
COVID-19 2020:

In Europe, Jan-Feb 2020 EV sales were 140,000 units - a~6% penetration rate compared to ~ 2% in 2019

At the peak of China's COVID-19 closures in Feb, EV penetration rose 3.2%

Tesla's share price remains strong – up 95% in 2020, reaching high of +400% over the last nine months

PFS Mining and Processing Flowsheet



2019 Initial PFS Key Outcomes

- 6.1 % Li₂O concentrate
- Predicted 76% recovery of Li₂O
- Chemical Grade Li₂O concentrate achievable

2020 Focus – Update PFS to align with latest MRE

Revised Mine planning

Offtake

- Li₂O flowsheet R&D Testwork
- Tantalum recovery R&D Testwork



New, larger MRE will underpin an updated PFS



Investigate optimal underground/ open pit interface

• Thicker (up to 70m TW) and high grade (>1.5%) at depth:

31m @ 1.8% Li₂O (TW 31m)

33.7m @ 2.0% Li₂O (TW 22m)

83m @ 1.5% Li₂O (TW 68m)

45m @ 1.7% Li₂O (TW 41m)

55m @ 1.7% Li₂O (TW 50m)

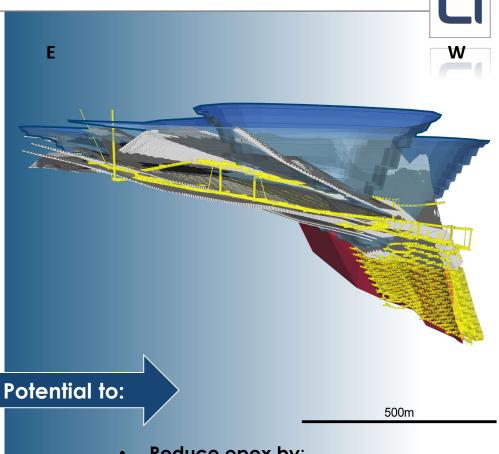
43m @ 3.1% Li₂O (TW 30m)

30.1m @ 2.8% Li₂O (TW 20m)

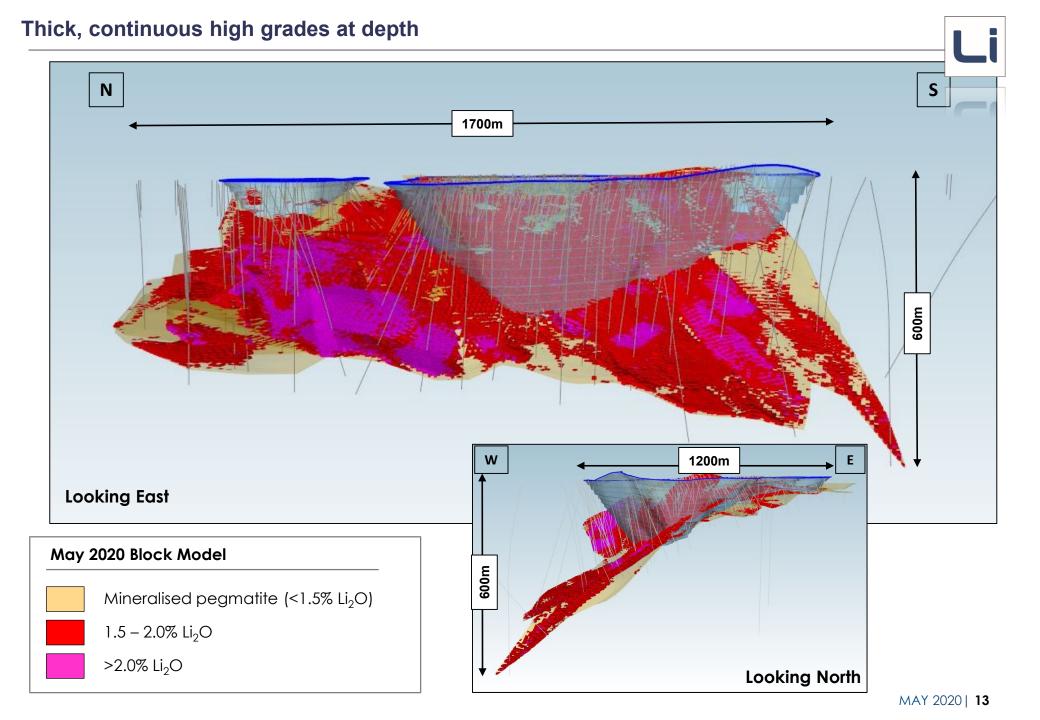
97m @ 1.9% Li₂O (TW 60m)

TW - true width

- No geotechnical issues identified
- Minimise environmental footprint



- Reduce opex by:
- Lowering mine dilution
- Bringing forward higher grades
- Increasing concentrate production
- Shorten payback







Liontown has engaged Lycopodium Minerals who, along with the assistance of highly reputable and experienced consultants, will ensure a high standard of work

Process Improvements

- Systematic and thorough approach
- Investigate simpler Whole-Ore Flotation verses industry standard DMS-Flotation process flowsheet
- Develop tantalum flow sheet
- De-risk scale-up and improve future operability

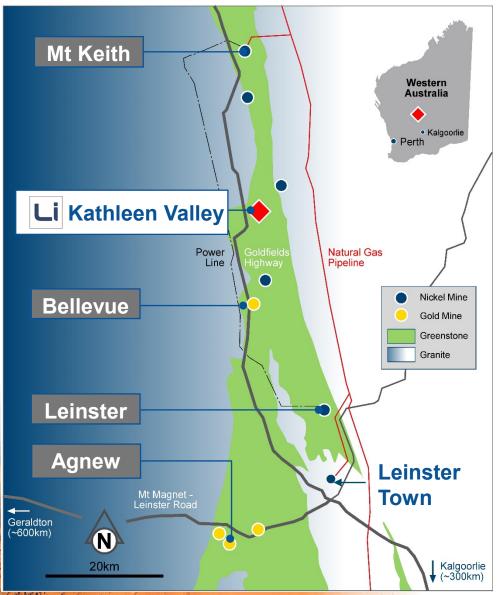


Downstream Potential

- Long life operation with potential to attract strategic partner
- Match product with processing/customer needs
- Existing infrastructure provides significant head start

Location

Well serviced and highly active mining region





Power

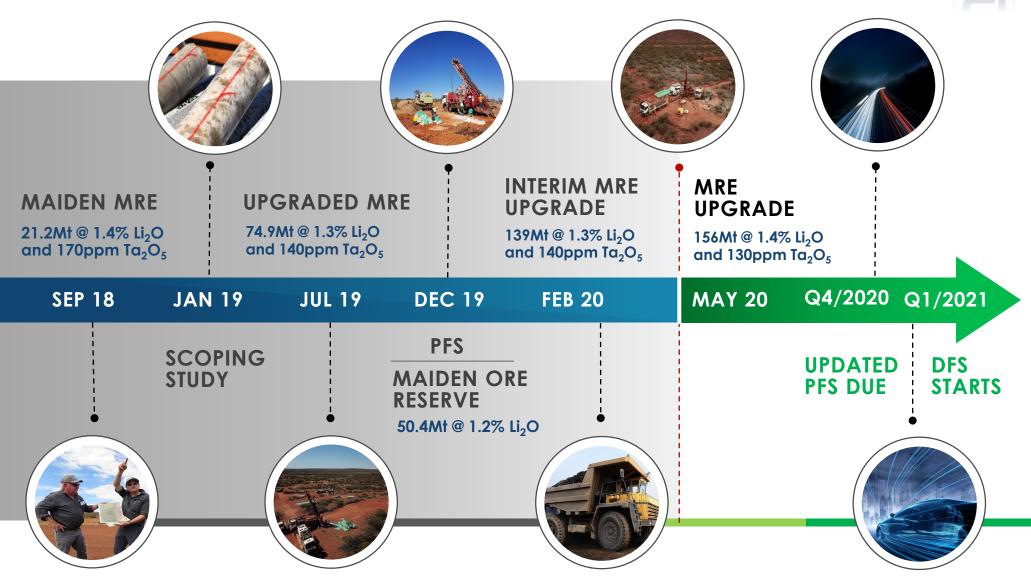


Natural Gas

Major Milestones



Consistent delivery of results with targets met or exceeded

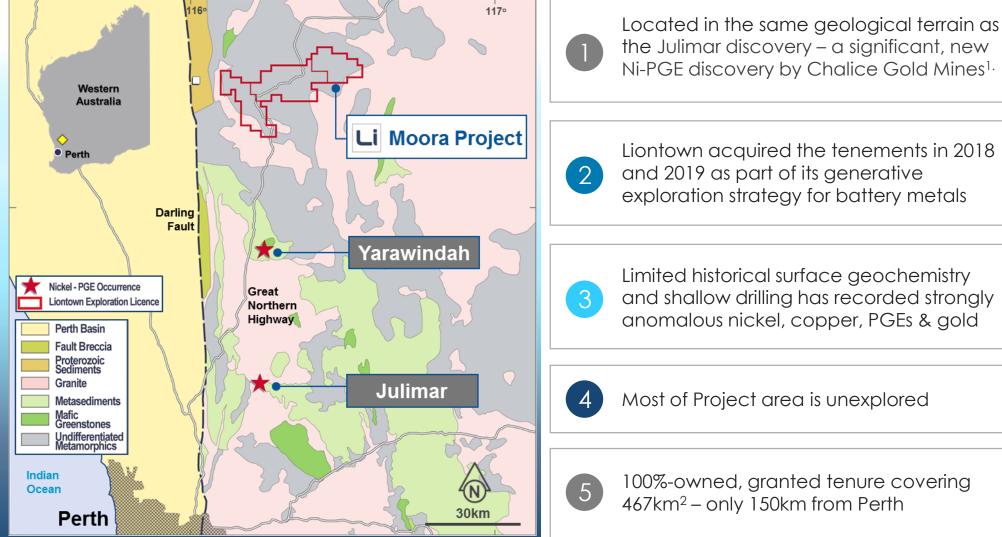


Moora Nickel-Cu-PGE-Au Project

WESTERN AUSTRALIA 100%

Project Overview

Moora is located in an emerging precious and base metal mineral province

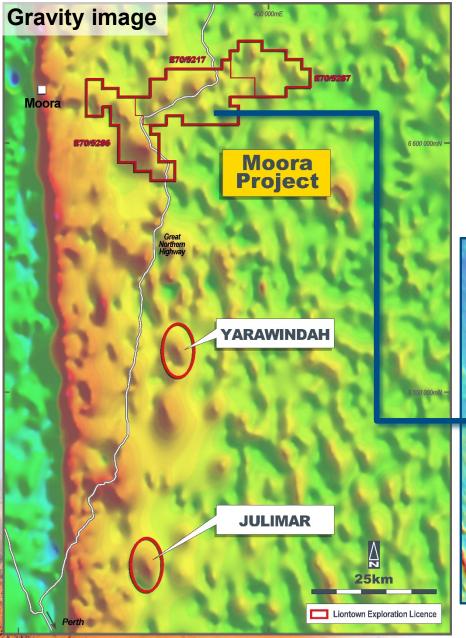




Liontown acquired the tenements in 2018 exploration strategy for battery metals

Limited historical surface geochemistry and shallow drilling has recorded strongly anomalous nickel, copper, PGEs & gold

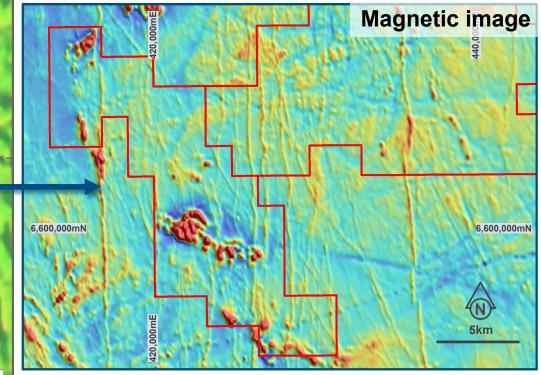
Project Background



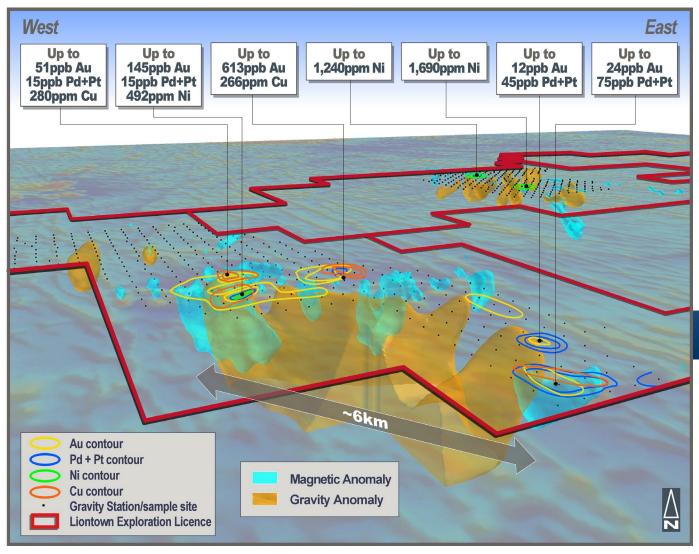
Regional geophysical data sets indicate that Moora is underlain by mafic/ultramafic intrusions similar to that which hosts the Julimar discovery

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• There has been no drill testing of the fresh bedrock at Moora.



Encouraging results validate exploration concept



- Strong, coincident, multielement anomalism defined:
 - Au (up to 613ppb Au)
 - Pd + Pt (up to 75ppb)
 - Ni (up to 492ppm)
 - Cu (up to 280ppm)
- Overlying large, coincident gravity and magnetic highs - **indicative of mafic/** ultramafic intrusions

Next Steps

•

•

- Infill geochemical anomalies
- Extend first pass sampling and gravity surveying
- EM surveys to define sulphide bodies for drill testing

Investment Case

The only uncommitted "Tier 1" lithium resource in Australia, strengthened by exciting new targets



Kathleen Valley Lithium-Tantalum Project



156Mt resource

Flexible development

timeline aligned to



Multiple opportunities to improve economics



Updated PFS Q3/Q4 2020



Moora Project

demand



Ni-Cu-PGE-Au Project in an emerging mineral province



Initial results highly encouraging with follow up ongoing

Projects are 100% owned and in a stable, established, investor friendly jurisdiction

Leadership and Key Financials



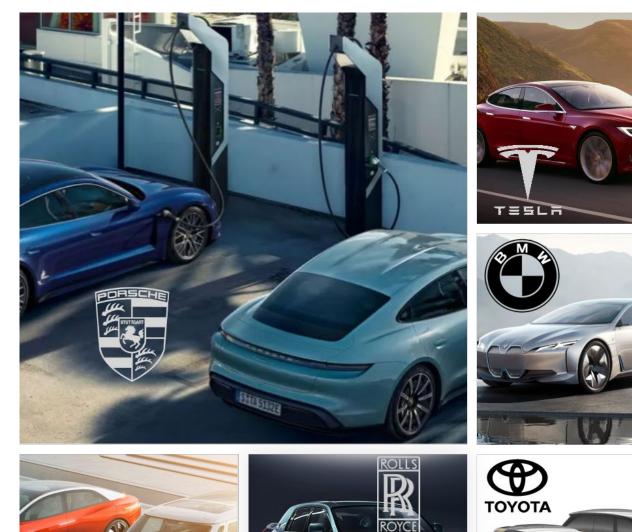
Corporate Snapshot

ASX CODE: LTR	
Shares on Issue	~1,694M
Market Capitalisation	~\$186M (AT 11cps)
Major Shareholder	Tim Goyder~17%
Top 20 Shareholders	~43%
Cash	~A\$5.8M (as at 31-Mar-20)

Liontown

THANK YOU

For more information visit www.ltresources.com.au









APPENDIX 1

Peer Comparison Information



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Company	Project	Stage	Measured Mt	Indicated Mt	Inferred Mt	Global MRE Mt	MRE Grade	Information Source
Liontown Resources	Kathleen Valley	Development	20	105	32	156	1.35	ASX Announcement, 11 May 2020: https://www.ltresources.com.au
Pilbara Minerals	Pilgangoora	Operating	22.8	112.8	90.4	226	1.27	ASX Announcement, 17 Sept 2018: http://www.pilbaraminerals.com.au/site/PDF/2235_0/Pilga ngooraReserveandResourceUpgrade
Wesfarmers / SQM	Mt Holland	Development	66	106	17	189	1.50	ASX Announcement, 19 March 2018: https://wcsecure.weblink.com.au/pdf/KDR/01963105.pdf
Talison / Albermarle	Greenbushes	Operating	0.6	117.9	2.1	120.6	2.40	Talison Lithium 1st Quarter FY 2013 Results: https://www.sedar.com/CheckCode.do
Piedmont Lithium	Piedmont	Development	0	13.9	14	27.9	1.11	ASX Announcement, 25 June 2019: https://d1io3yog0oux5.cloudfront.net/_aee37ed4f1b7c046 14dea0a7b549e5c2/piedmontlithium/db/336/2543/pdf/19 0625+-+Resource+Update_Final.pdf
Sigma Lithium	Grota de Cirilo	Development	26.3	19.4	6.6	52.4	1.43	Investor Presentation, January 2020: http://www.sigmalithiumresources.com/wp- content/uploads/2020.01.14-Sigma-Marketing- <u>Presentation.pdf</u>
Mineral Resources / Jiangxi Ganfeng	Mt Marion	Operating	0	22.7	48.7	71.3	1.37	ASX Announcement, 28th October: https://www.neometals.com.au/reports/2018-10-31-1697- <u>MINMtMario.pdf</u>
Altura Mining	Pilgangoora	Operating	7.4	34.2	4.1	45.7	1.06	ASX Announcement, 9 October 2019: <u>https://alturamining.com/wp-</u> <u>content/uploads/2019/10/1982592.pdf</u>
Core Lithium	Finnis	Development	1.1	1.9	5.9	8.9	1.35	Investor Presentation, November 2019 – https://wcsecure.weblink.com.au/pdf/CXO/02178950.pdf
Mineral Resources / Albermarle	Wodgina	Care & Maintenance	0	177	59.9	236.9	1.19	ASX Announcement, 23 October 2018 (only pegmatite resource used) - http://clients3.weblink.com.au/pdf/MIN/02037855.pdf

APPENDIX 2

Buldania Lithium Project (Liontown 100%)





Buldania is Located in a Lithium-Rich Mineral Province

Outcropping, fresh, spodumenerelated mineralisation

2 Mineralisation at Anna extends to the SE under shallow cover – strike length >1.4km and open

Similar geology to the Mt Marion and Bald Hill lithium deposits (71Mt and 26Mt respectively)



3

Good infrastructure – located on Eyre Highway ~30km east of Kalgoorlie-Esperance railway



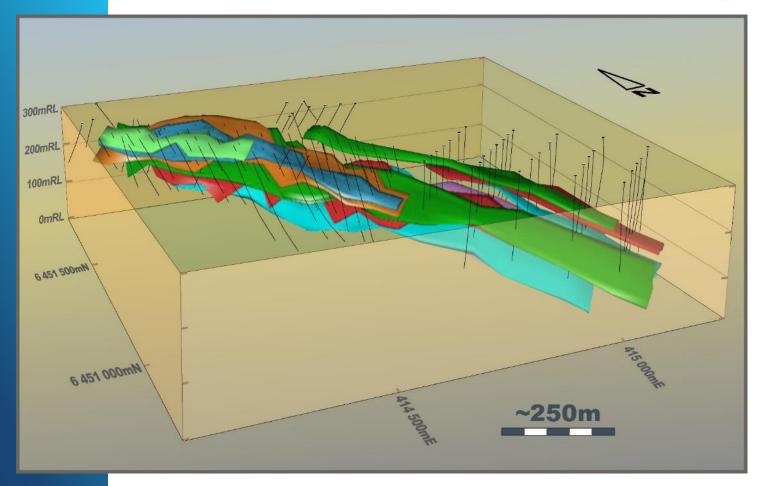
Liontown has 100% of the lithium and related metal rights





¹Mt Marion – please refer to Peer Comparison table – slide 25. ² Bald Hill source: http://www.allianceminerals.com.au/projects/ Resource

Maiden Mineral Resource Estimate 14.9Mt @ 1.0% Li₂O



The completion of the MRE complements flagship Kathleen Valley Lithium Project

Li

Liontown

Level 2, 1292 Hay St West Perth WA 6005

+61 8 9322 7431 info@ltresources.com.au www.ltresources.com.au in liontown-resources-limited

