



FEBRUARY 2019 ASX : LTR

For personal use only



Developing Two Quality Hard Rock
Lithium Deposits in Western Australia

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.

No offer to sell or invitation to buy

This Presentation is not, and should not be considered to, constitute any offer to sell, or solicitation of an offer to buy, any securities in Lione Resources Limited, and no part of this Presentation forms the basis of any contract or commitment whatsoever with any person. Lione Resources Limited does not accept any liability to any person in relation to the distribution or possession of this Presentation from or in any jurisdiction.

Disclaimer

Whilst care has been exercised in preparing and presenting this Presentation, to the maximum extent permitted by law, Lione Resources Limited and its representatives:

- make no representation, warranty or undertaking, express or implied, as to the adequacy, accuracy, completeness or reasonableness of this Presentation;
- accept no responsibility or liability as to the adequacy, accuracy, completeness or reasonableness of this Presentation; and
- accept no responsibility for any errors or omissions from this Presentation.

Competent Person Statement

The Information in this report that relates to the Scoping Study for the Kathleen Valley Project is extracted from the ASX announcement “Kathleen Valley Scoping Study confirms potential for robust new WA lithium mine development” released on the 29th January 2019 which is available on www.lioresources.com.au.

The Information in this report that relates to Mineral Resources for the Kathleen Valley Project is extracted from the ASX announcement “Maiden 21 million tonne Lithium-Tantalum Mineral Resource sets strong growth foundation for Lione at Kathleen Valley” released on the 4th September 2018 which is available on www.lioresources.com.au.

The Information in this report that relates to Metallurgy for the Kathleen Valley Project is extracted from the ASX announcement “Highly encouraging results from initial metallurgical test work at the Kathleen Valley Lithium-Tantalum Project, WA” released on the 12th November 2018 which is available on www.lioresources.com.au.

The Information in this report that relates to Exploration Targets is extracted from the ASX announcement “Major resource expansion drilling program commences at Kathleen Valley Lithium Project, WA” released on the 29th January 2019 which is available on www.lioresources.com.au.

The Information in this presentation that relates to the Exploration Results for the Buldania Project is extracted from the ASX announcements entitled “More strong assays confirm significant lithium discovery at Buldania Project in WA”, “Lione confirms second significant lithium discovery in WA with new thick, high-grade hits at Buldania”, “Outstanding new drilling results continue to expand lithium mineralisation at Buldania”, “Lione further expands prospective lithium footprint at Buldania in WA’s South-Eastern Goldfields” and “Latest assays confirm lithium mineralisation over >1.3km strike length at the Buldania Lithium Project in WA” released on the 26th March 2018, 19th September 2018, 1st November 2018, 13th November 2018 and 20th November 2018 respectively which are available on www.lioresources.com.au.

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.

Next Generation Lithium Producer

1 Kathleen Valley Lithium Project

Maiden Mineral Resource:

21.2Mt @ 1.4% Li_2O and 170ppm Ta_2O_5

- 75% Measured and Indicated
- Located on granted mining leases
- Close to established infrastructure

- Scoping study confirms potential for a commercially robust mining operation
- Resource expansion drilling in progress aimed at significantly extending mine life
- Comprehensive test work ongoing to optimise grade and recoveries
- Feasibility studies scheduled for completion by Q1 2020

Projects strategically located in the lithium-rich Eastern Goldfields region of Western Australia

2

Buldania Lithium Project

Liontown's second lithium discovery:

up to 58m @ 1.2% Li_2O in drilling

- Mineralisation confirmed over a length of >1.3km and remains open
- Further resource definition drilling to commence Q1 2019
- Maiden resource estimate Q2/Q3 2019

PERTH

KALGOORLIE

Both projects are either wholly-owned or Liontown has 100% of the relevant mineral rights



For personal use only

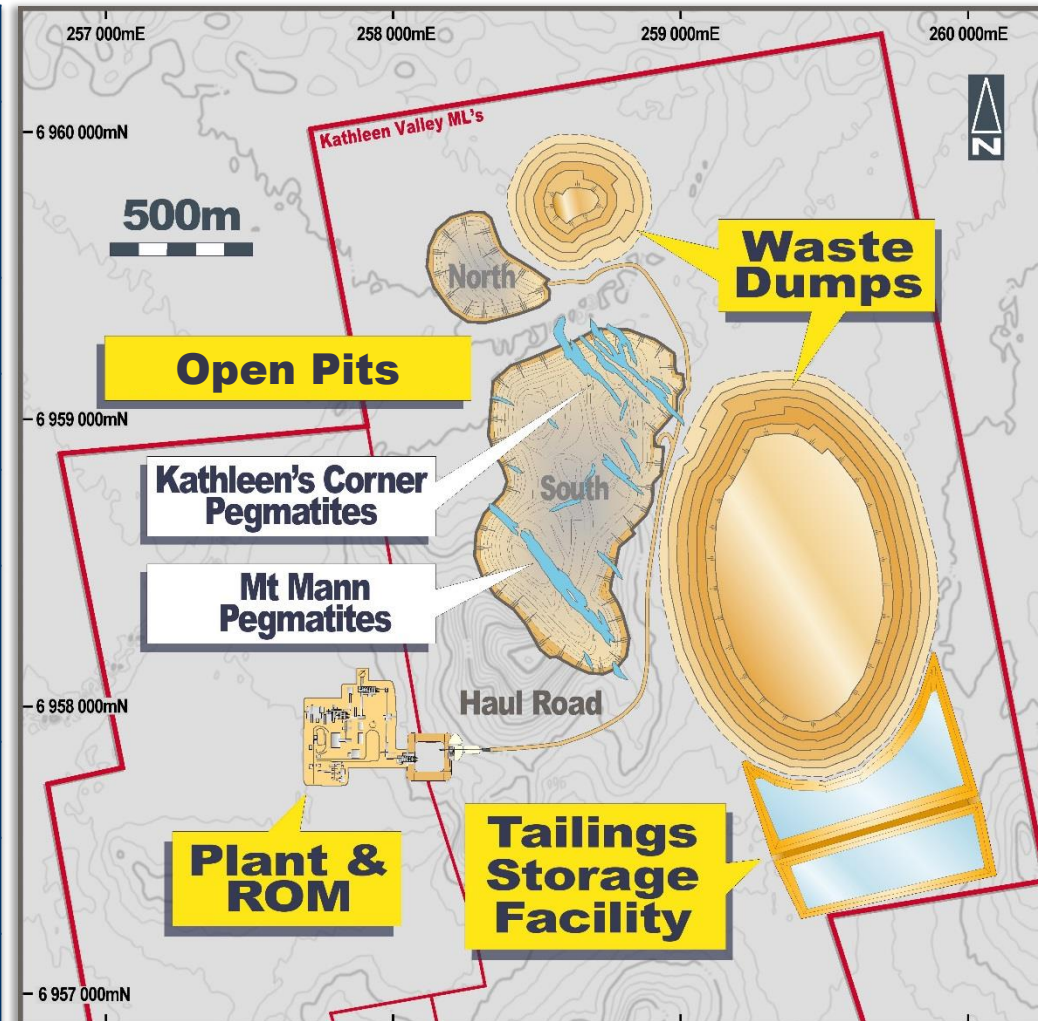


KATHLEEN VALLEY LITHIUM PROJECT

WESTERN AUSTRALIA

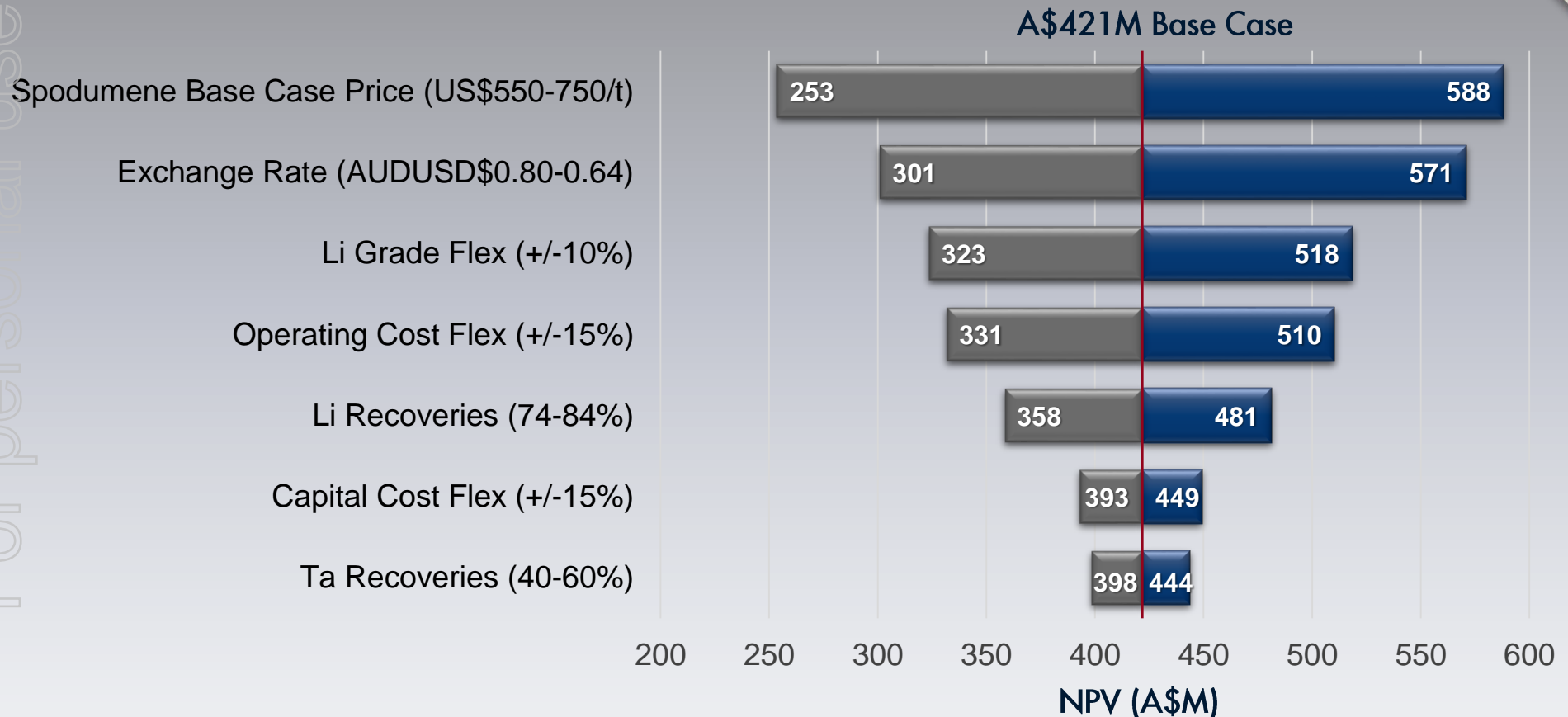
Scoping Study Supports Potential To Develop A Standalone Lithium Mining and Processing Operation

Base Case	2Mtpa (Li & Ta)
NPV _(8%, real, post tax)	A\$421M (Range of A\$316 to A\$526M)
IRR	38%
Payback	<3 years
Mine Life	9 years
Average LOM Opex	~A\$428/t conc. (net of Ta credits)
Annual Production	~360kt concentrate
LOM Spodumene Price	A\$900 (US\$650/t) FOB
Capex	~A\$232M



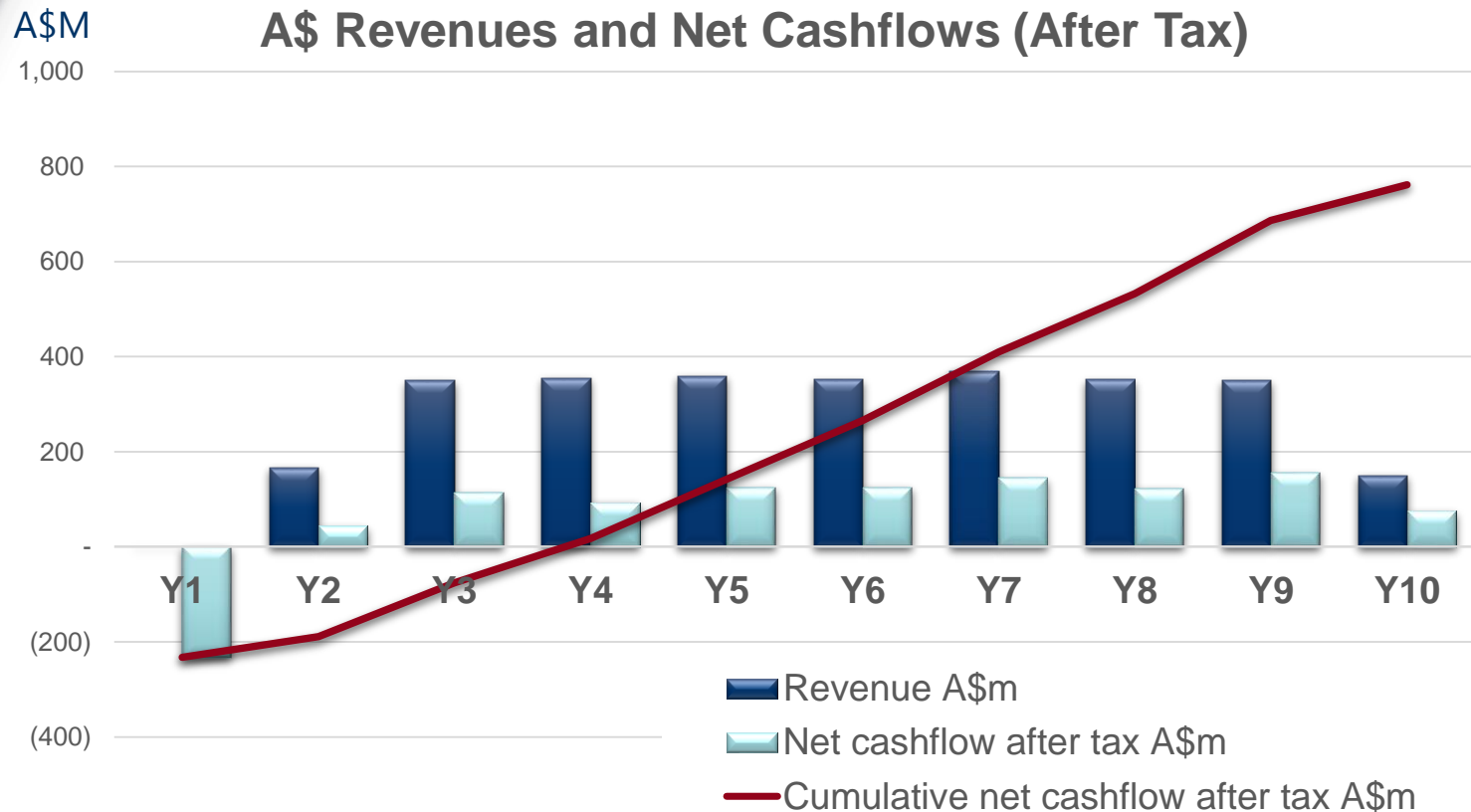
Financial Sensitivity – Robust Project

Kathleen Valley Project - NPV Sensitivity Analysis (A\$M)



Cash Flow Profile →

<3 Year Payback Period



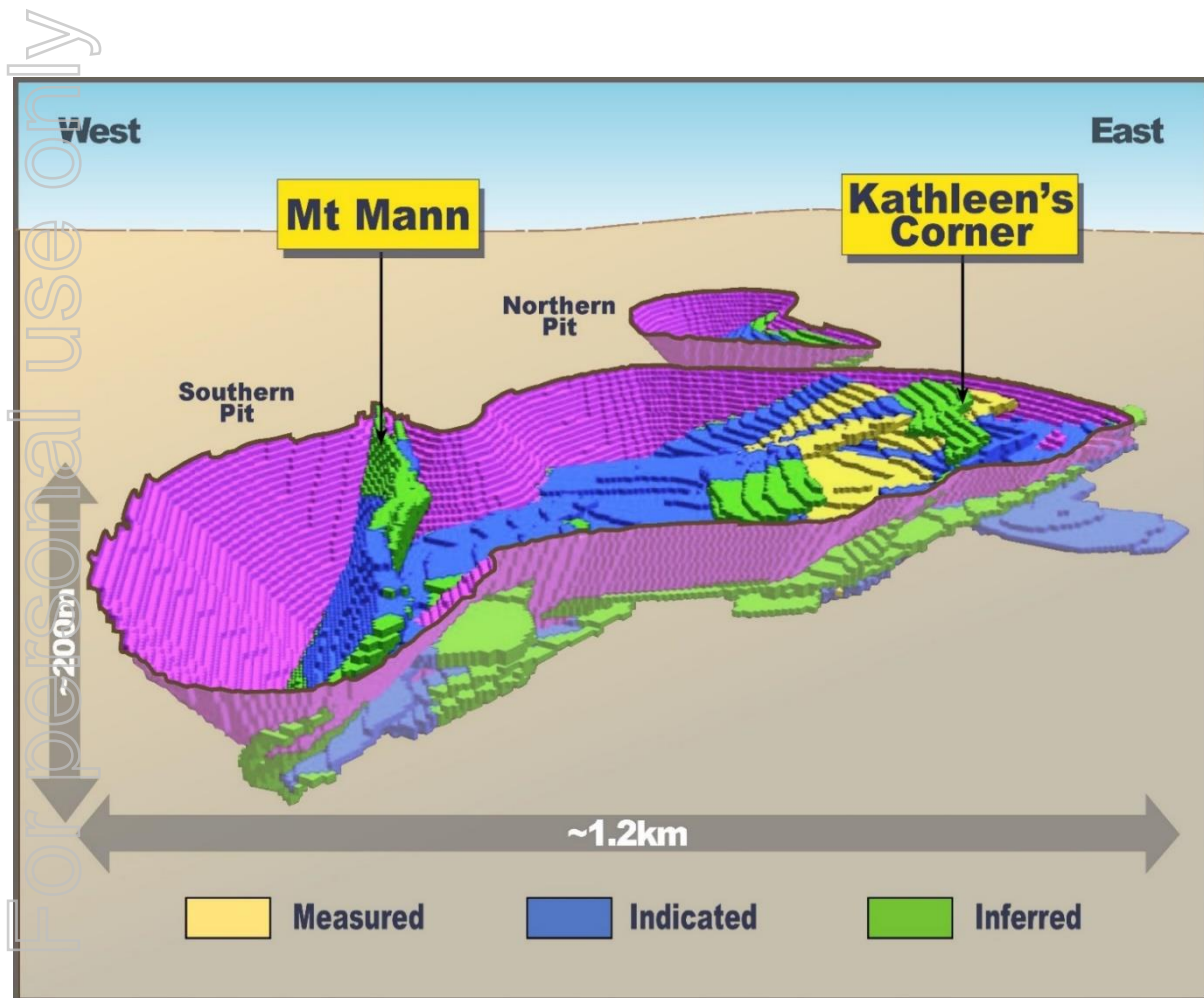
Scoping study suggests Life of Mine free cash flow of ~A\$762M

Cash Flow Per Year

Scoping study suggests average free cash flow of >A\$100M per year



Resources and Mining



Global resource 21.2Mt @
1.4% Li_2O and 170ppm Ta_2O_5



75% Measured and Indicated



Scoping study Production Target
of 15.7Mt @ 1.26% Li_2O and
154ppm Ta_2O_5



Open pits largely constrained
by limit of data



Conventional open pit mining
and processing



Favourable location close to
established infrastructure



Access to world-class expertise
and work force

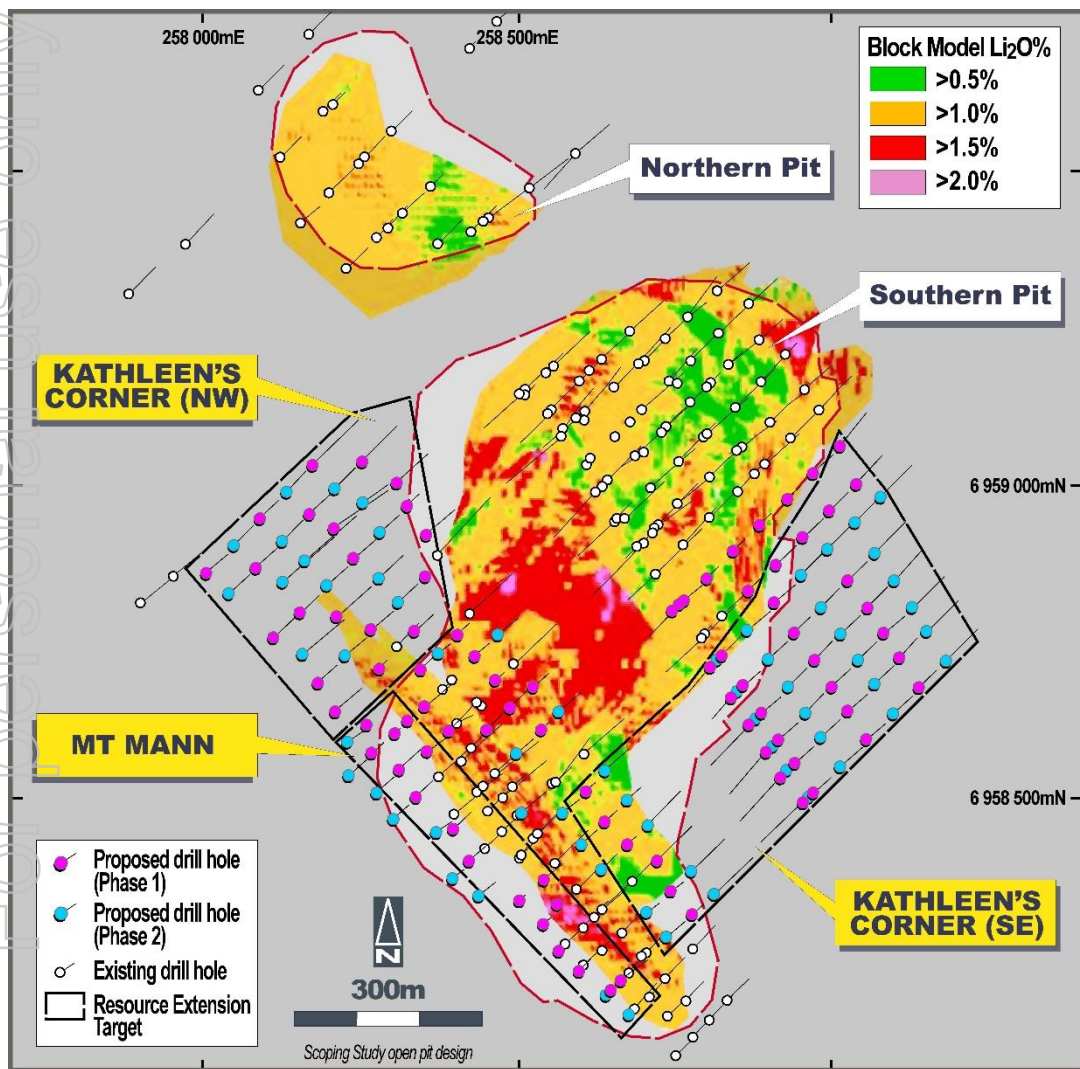
For personal use only

Additional test work in progress on a further 4 tonnes of sample

[illegible]



Next Steps – Unlocking Further Value



Resource Growth

- ~16,000m RC drilling program in progress
- Testing immediate extensions of block model
- Targeting additional 8.5 – 16Mt @ 1.2 – 1.5% Li_2O^*
- Potential to significantly increase mine life



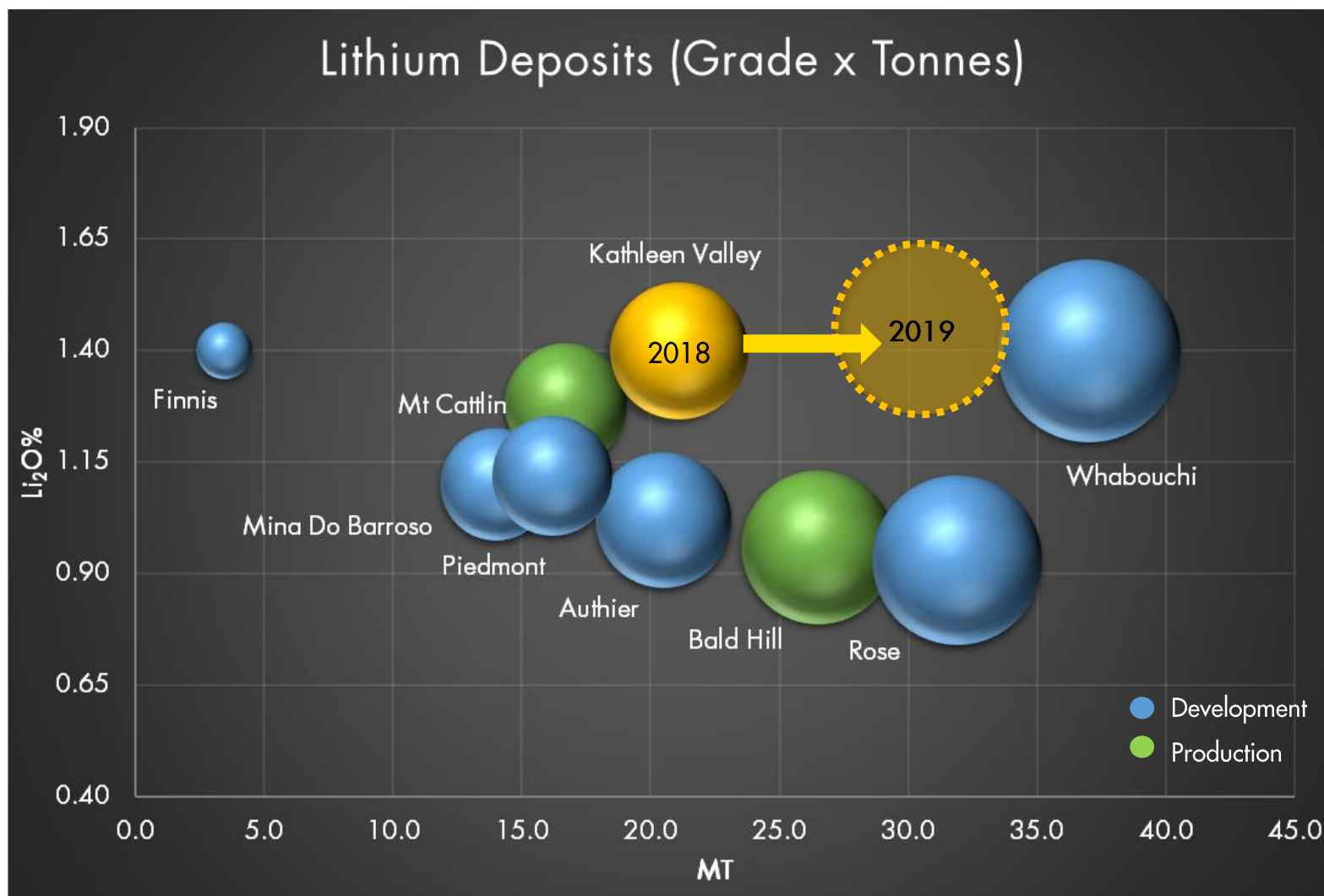
Metallurgy

- Optimise unit processes to produce 6% Li_2O concentrate
- Confirm tantalum recovery
- Provide samples for potential offtake partners

*The potential grade and tonnage of the exploration target referred to above is conceptual in nature and there has been insufficient exploration to estimate a Mineral Resource. It is uncertain if further exploration will result in the estimation of a Mineral Resource. See Appendix for full explanation of assumptions used to estimate ranges.

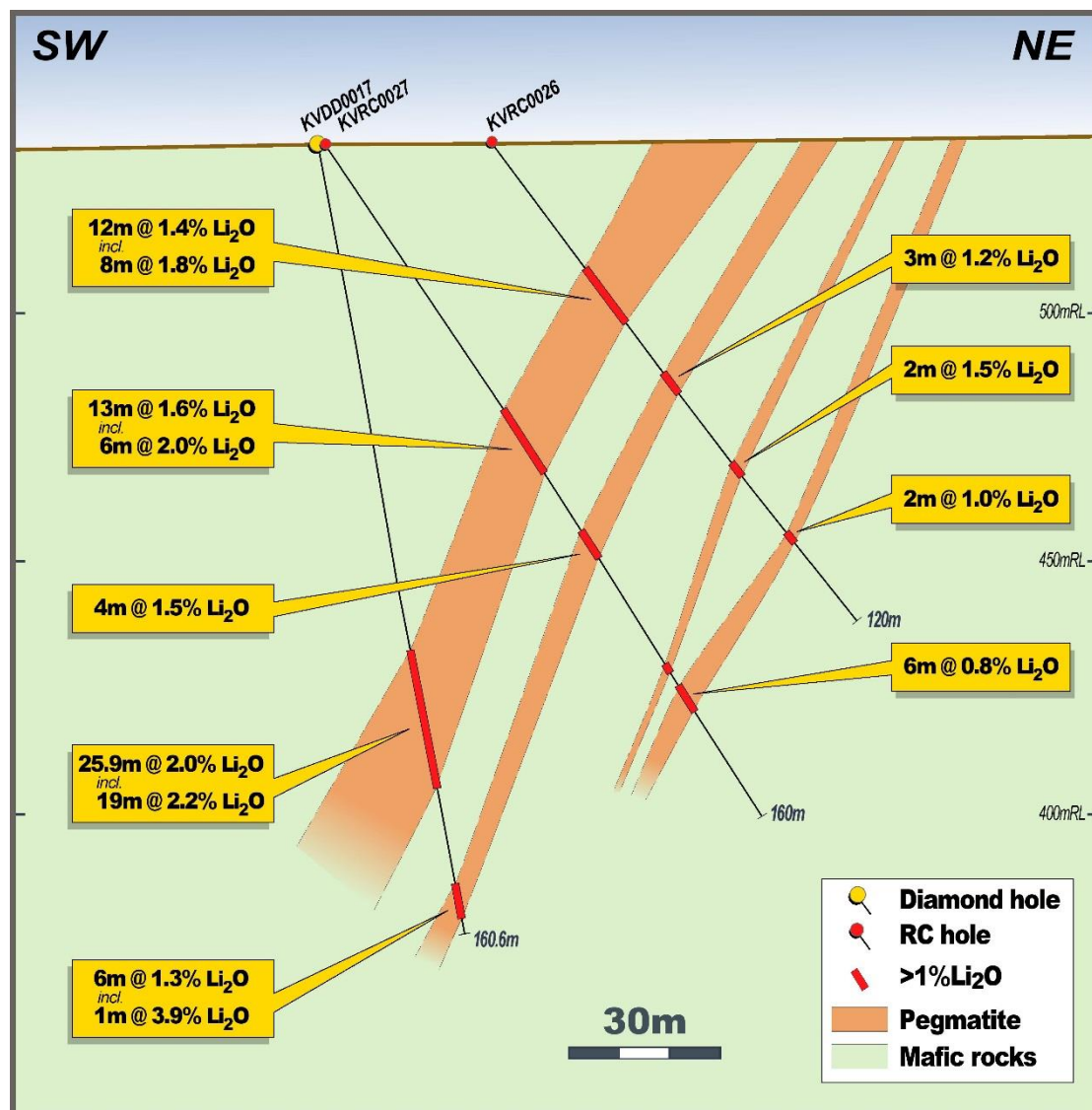
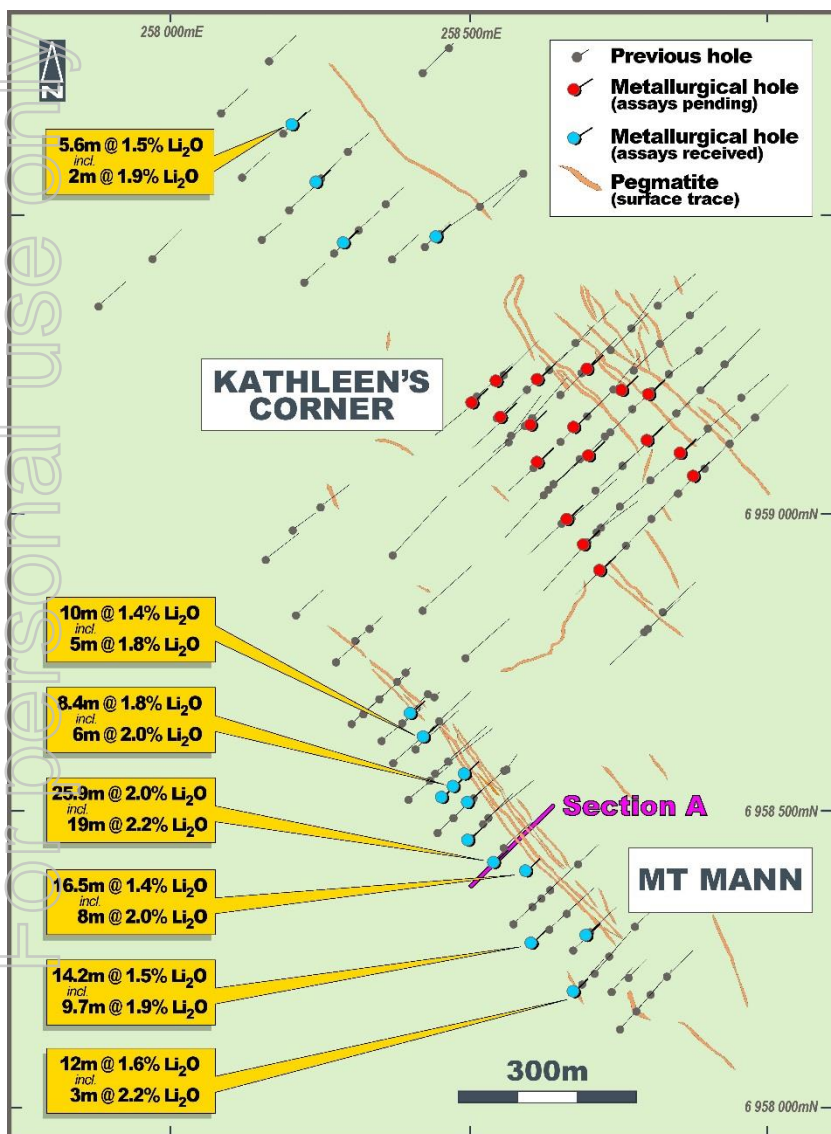
High Grade Compared With Most Peers - Plus Potential to Grow

For personal use only



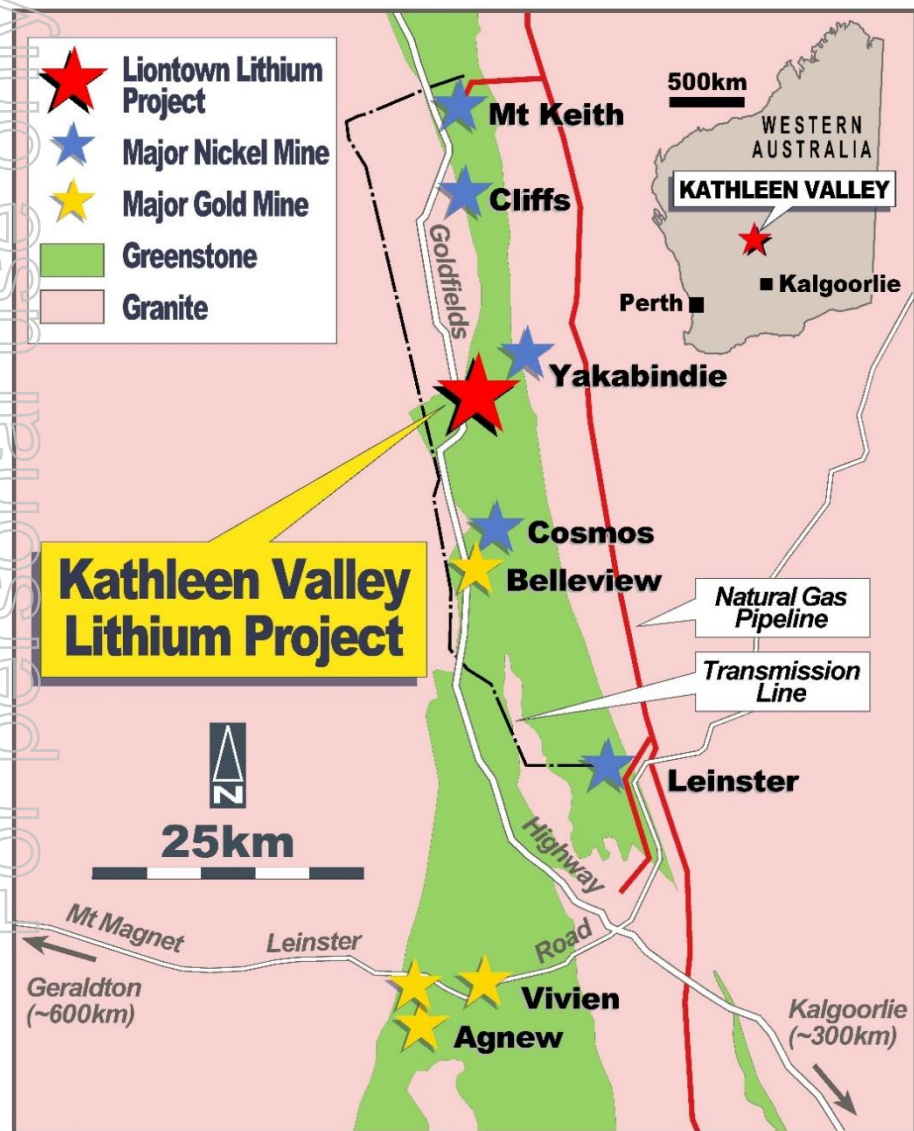
* Resources as at 24 January 2019 (Sourced from company websites)

Recent Metallurgical Drilling Confirms Continuity of Geological Model



Grades appear to be increasing with depth

Investment Case



Robust, high grade resource



First world location and expertise



Active, well serviced mining region



Conventional mining and processing



Resource upside – 16,000m RC drilling program in progress



Strong focus on optimising recoveries – further test work in progress



Very experienced, well-credentialed management team

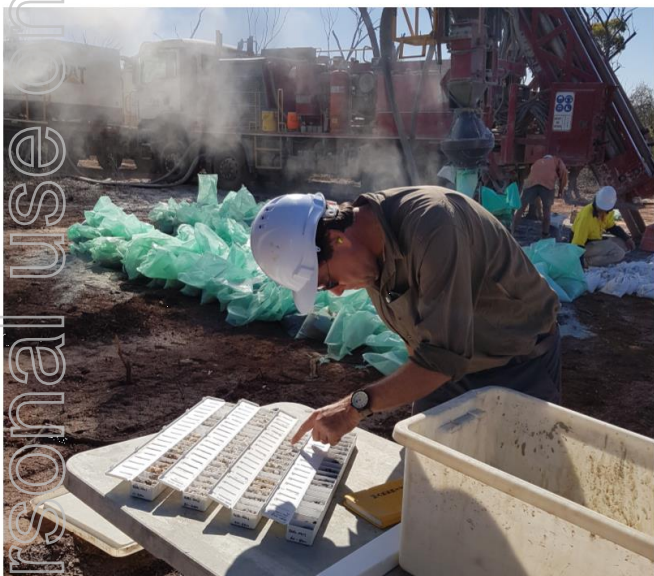


Further feasibility studies ongoing



Highly positive financial outcomes from Scoping Study

For personal use only

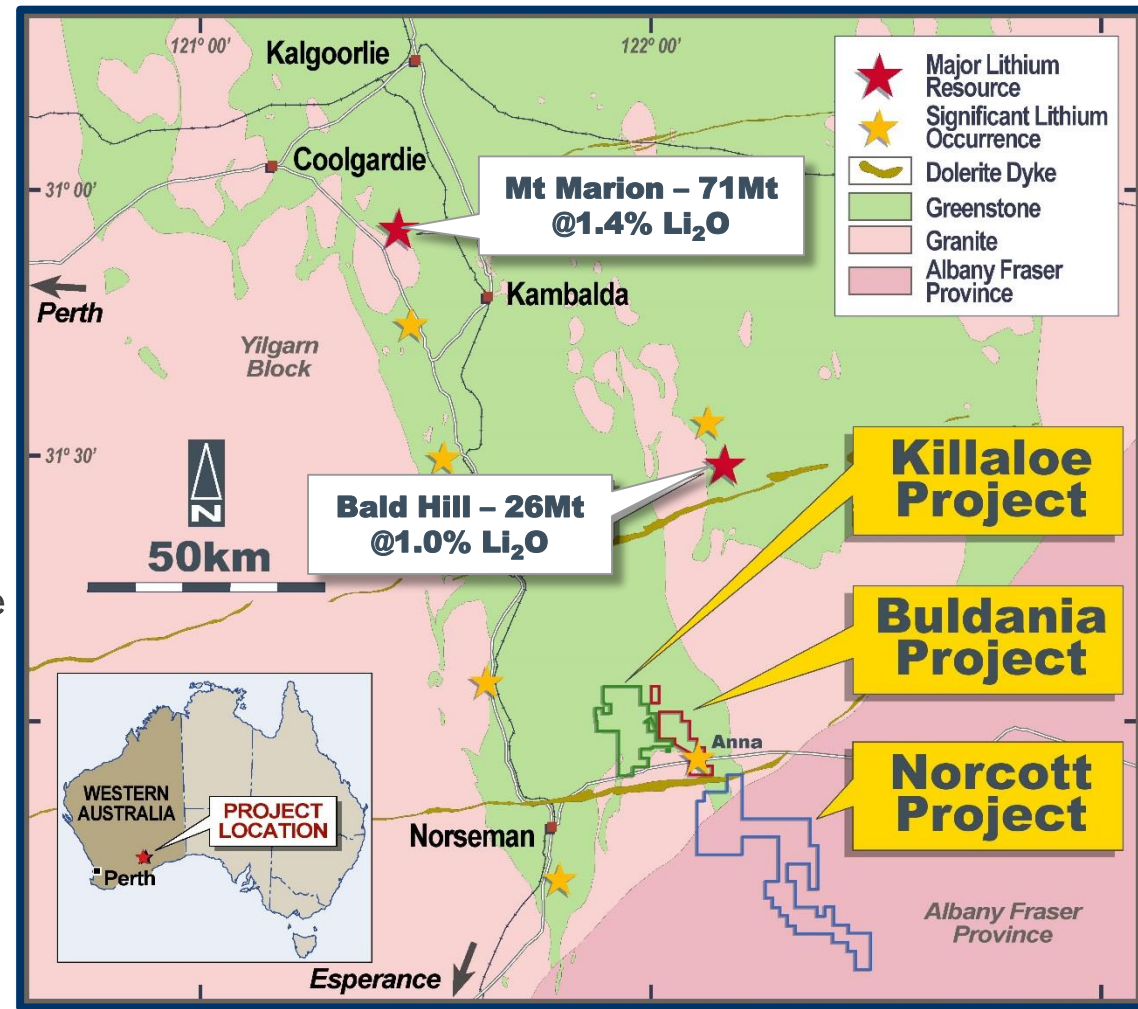


BULDANIA LITHIUM PROJECT

WESTERN AUSTRALIA

Buldania Is Strategically Located in a Lithium-rich Mineral Province

- Outcropping, fresh, spodumene-related mineralisation
- Mineralisation at Anna extended to the SE under shallow cover – strike length >1.3km and open
- Similar geology to the Mt Marion and Bald Hill lithium deposits (71Mt and 26Mt respectively)
- Good infrastructure – located on Eyre Highway ~30km east of Kalgoorlie-Esperance railway
- Liontown has 100% of the lithium and related metal rights*
- Part of larger, 650km² strategic land holding



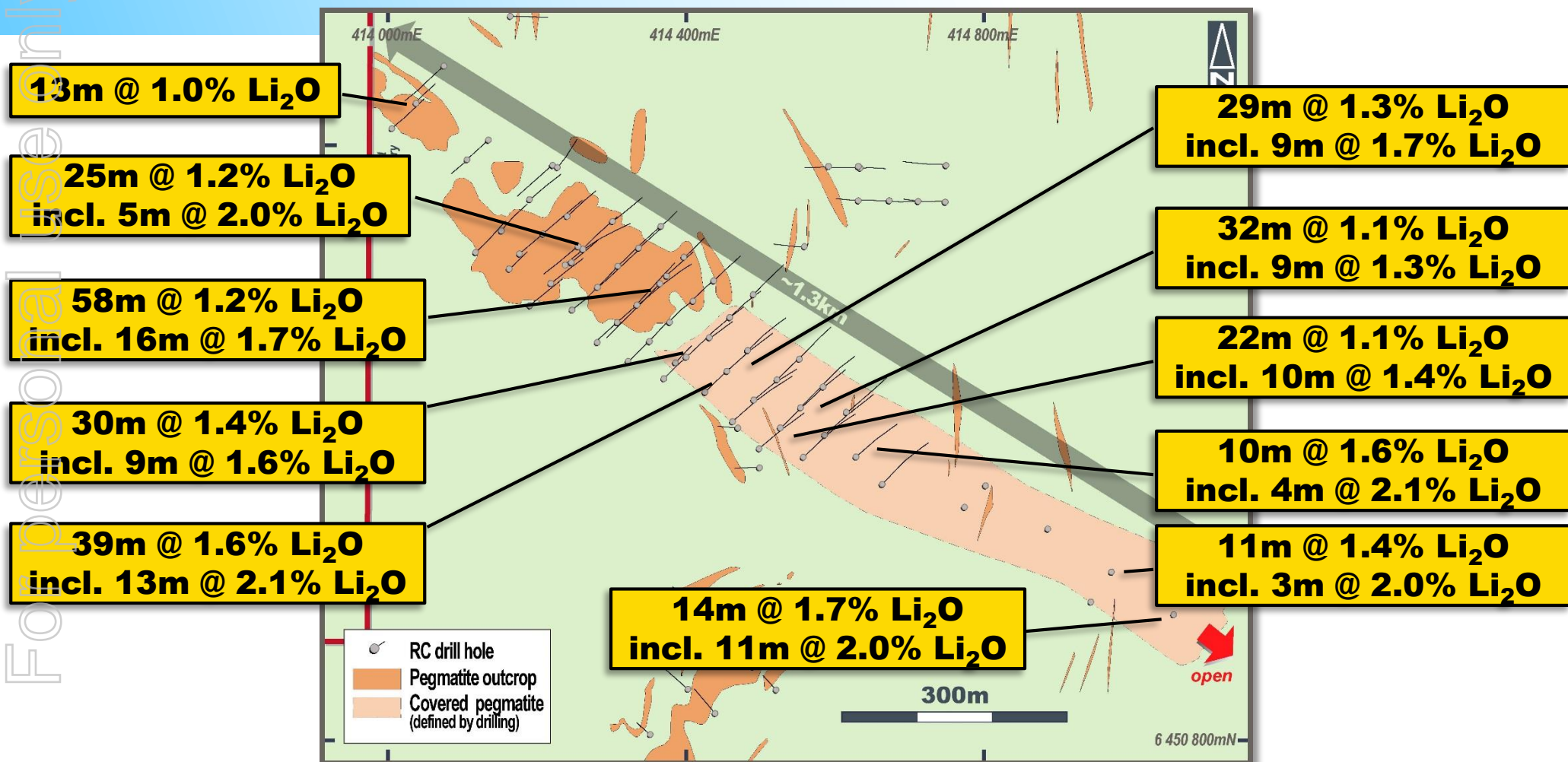
Significant lithium discovery

Total land position ~650km²

Large Lithium (Spodumene) Mineralised Pegmatite Defined at the Anna Prospect

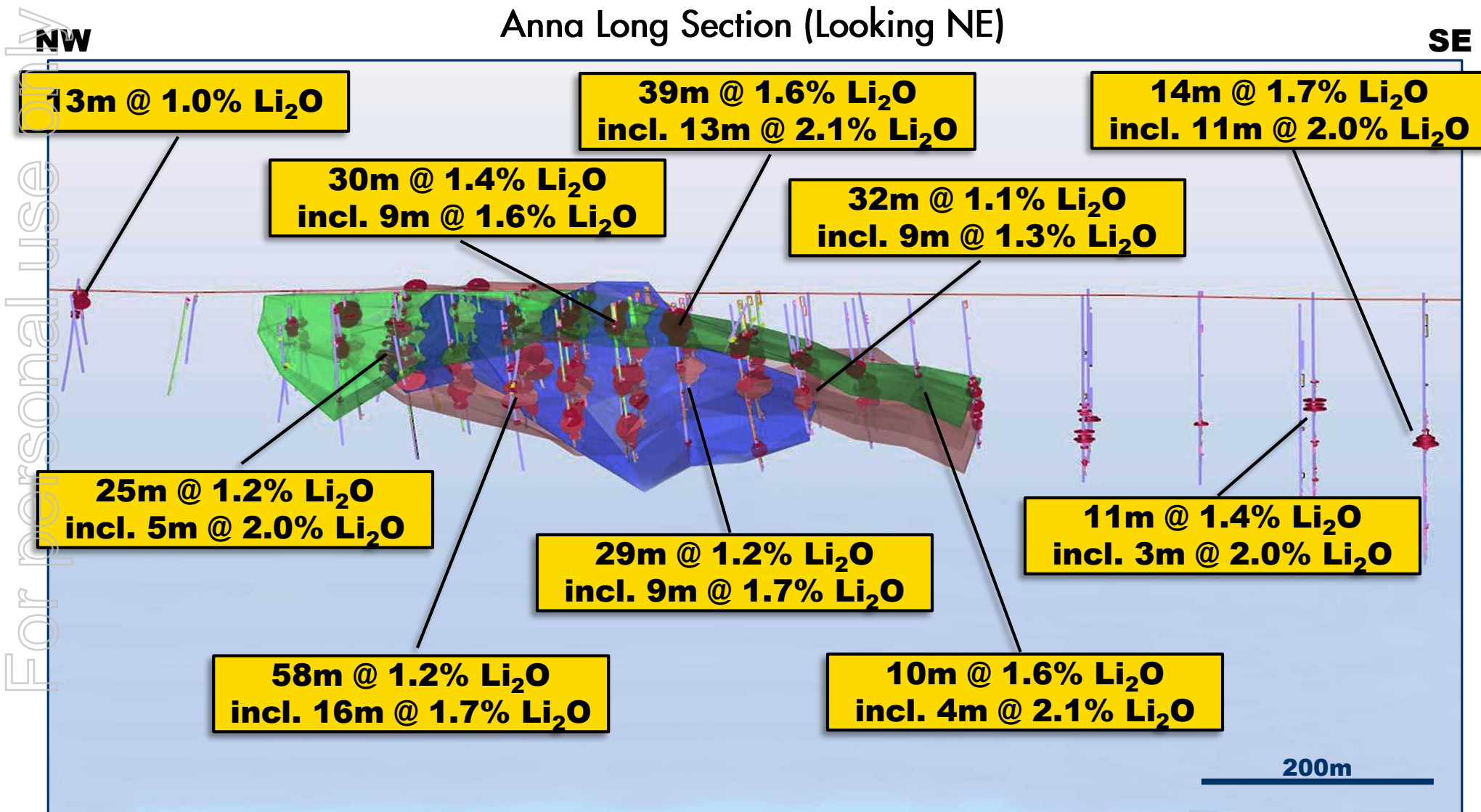


Mineralisation fresh from surface and open along strike and at depth



Further definition drilling planned as precursor to maiden Mineral Resource estimate

Drilling Extends Mineralisation At Anna To South East – System Remains Open



Buldania is Part of a Large (~650km²) Land Position Highly Prospective For Lithium

Li

KILLALOE PROJECT

163km² area located immediately north west of the Buldania Project – covers strike extension of Anna trend

~20km strike length of prospective stratigraphy

Multiple spodumene-bearing pegmatites up to 800m long and 20m wide mapped

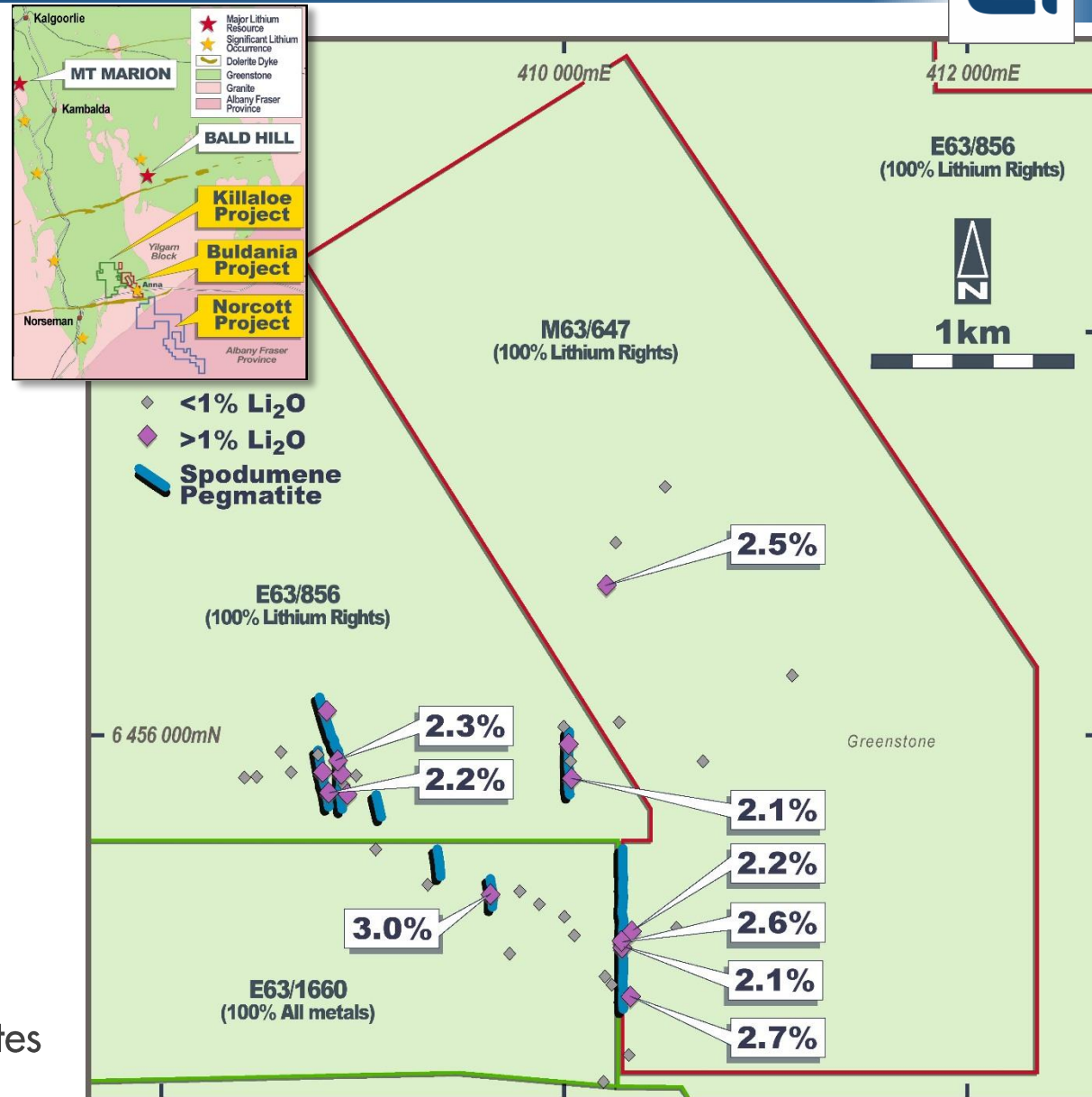
Assay values up to 3.0% Li₂O

NORCOTT PROJECT

377km² area located 4km to the south and along strike of the Buldania Project

Up to 1.8% Li₂O recorded from reconnaissance rock chip sampling

Multiple undrilled spodumene pegmatites



Going Forward

Kathleen Valley Lithium Project

- 01 Resource Expansion (Q1 2019)
- 02 Comprehensive Metallurgy (Q1/Q2 2019)
- 03 Feasibility Studies (Q1 2019 - Q1 2020)
 - ✓ Metallurgy
 - ✓ Hydrology
 - ✓ Optimisation/Engineering Studies
 - ✓ Process Plant and Infrastructure
 - ✓ Environmental

Buldania Lithium Project

- 01 Resource Expansion and Infill (Q1/Q2 2019)
- 02 Regional Exploration (Q2 2019)
- 03 Maiden Mineral Resource Estimate (Q2/Q3 2019)

Projects are either Wholly Owned or Lontown has 100% of the Relevant Mineral Rights

A Proven, Experienced Board



DAVID RICHARDS

Managing Director

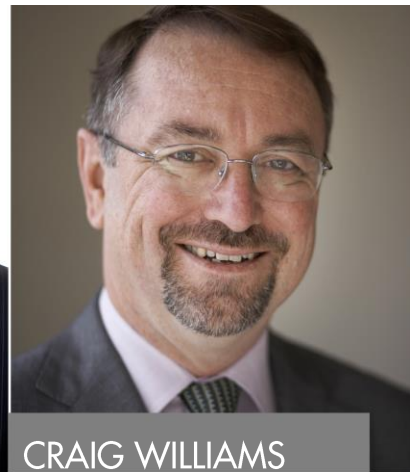
- +35 years experience
- Discovered Vera Nancy Gold Deposits



TIM GOYDER

Chairman

- +40 years experience
- Executive Chairman Chalice Gold Mines



CRAIG WILLIAMS

Non-Executive Director

- +40 years experience
- Founder and CEO of Equinox Minerals



ANTHONY CIPRIANO

Non-Executive Director

- +30 years experience
- Former Senior Partner at Deloitte



STEVE CHADWICK

Non-Executive Director

- +40 years experience
- Director of Lycopodium Minerals

Corporate Snapshot

ASX CODE	LTR
SHARES ON ISSUE	~1,134M
MARKET CAPITALISATION	\$28M (AT ~2.5CPS)
MAJOR SHAREHOLDER	TIM GOYDER ~20%
TOP 20 SHAREHOLDERS	50.8%



EMAIL
info@lresources.com.au



WEBSITE:
www.lresources.com.au



OFFICE
Level 2, 1292 Hay St
West Perth WA 6005



PHONE NUMBER
08 9322 7431

CONNECT



<https://au.linkedin.com/company/liontown-resources-limited>



<https://twitter.com/LiontownRes>



APPENDIX

Kathleen Valley Project Additional Information



Scoping Study – Key Parameters And Assumptions



Parameter	
General and Economic	
Discount rate (real, post tax)	8%
Spodumene concentrate price	US\$650 per tonne FOB
Tantalum concentrate price (contained Ta ₂ O ₅)	US\$71 per pound FOB
Exchange rate – AUD/USD	0.72
Mining and Production	
Average Life-of-Mine strip ratio	8.24:1
Processing rate	2Mtpa
Life-of-Mine Production Target	15.7Mt ore
Average Li ₂ O grade (diluted)	1.26%
Average Ta ₂ O ₅ grade (diluted)	154ppm
Li ₂ O recoveries	79%
Ta ₂ O ₅ recoveries	50%
Spodumene concentrate grade	5.6%
Tantalite concentrate grade	30%
Moisture content of concentrate	13%

Parameter	
Cost Assumptions	
LOM average open pit mining costs (\$/t ore mined)	A\$37.72
LOM average processing cost (\$/t ore milled)	A\$19.32
Logistics and transport (\$/t concentrate)	A\$75.65
General and admin (\$/t ore milled)	A\$6.01
Western Australia State royalty	5%
Other royalties	3% gross sales and \$0.5/t ore mined
Corporate tax rate	30%
Estimated opening tax losses available	A\$25M



Scoping Study – LoM Financials And Capital Expenditure



Life of Mine Financials

	A\$M
Revenues	2,802
Operating costs	(1,236)
Capital expenditure	
pre-production	(232)
sustaining	(25)
Royalties	(232)
Corporate tax	(315)
Life of Mine Project Free Cash flow	762

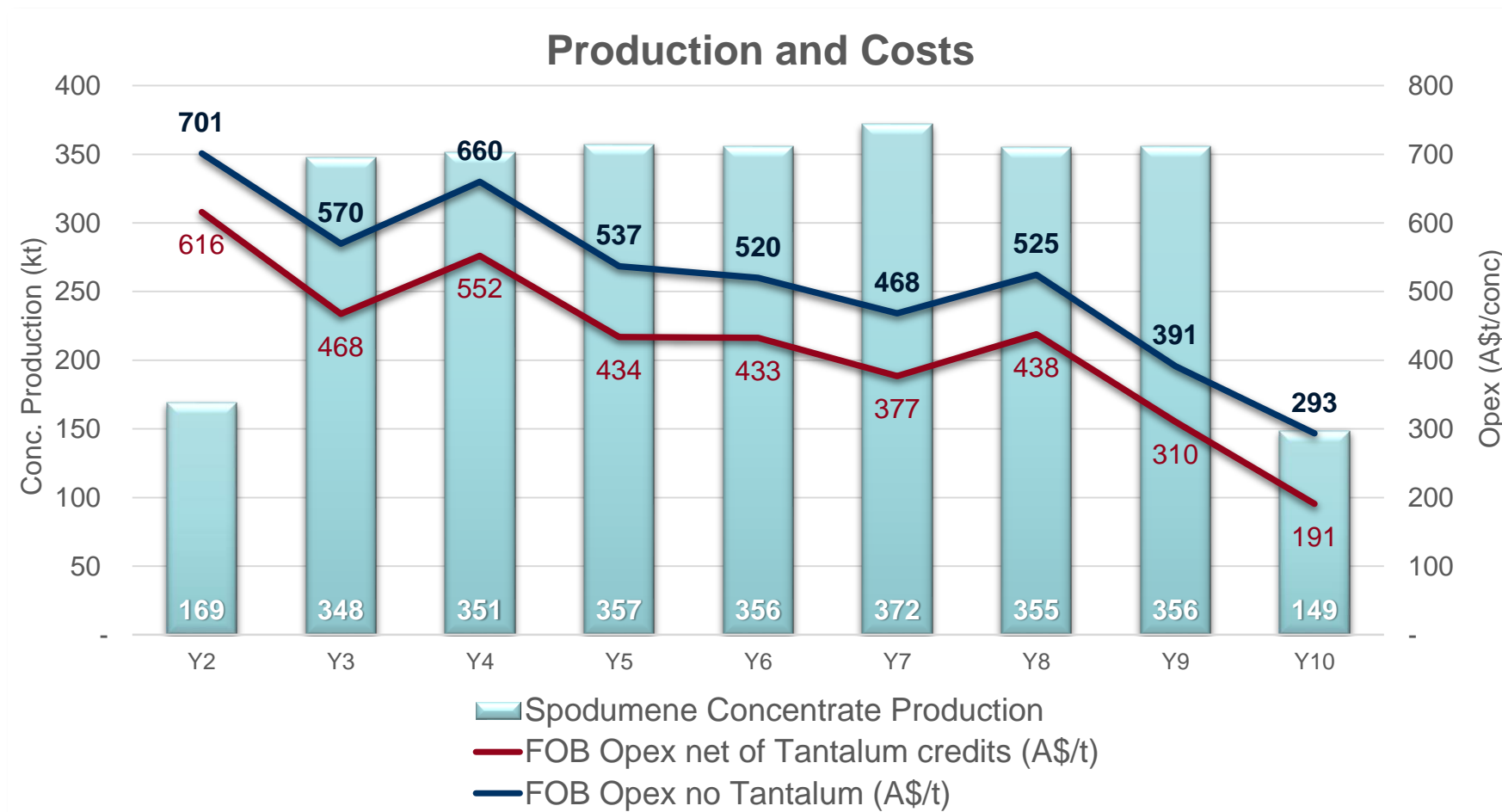
Capital Costs Summary

Main Area	Capital (A\$M)
Treatment Plant	82.8
Reagents & Plant Services	9.5
Infrastructure – general	39.9
Mining	6.1
Contractor and Construction Indirects	18.6
Subtotal	156.9
Management Costs	20.6
Owners Costs	14.4
Subtotal	35.0
Contingency	40.3
Project Total	232.2

Scoping Study – Production And Costs



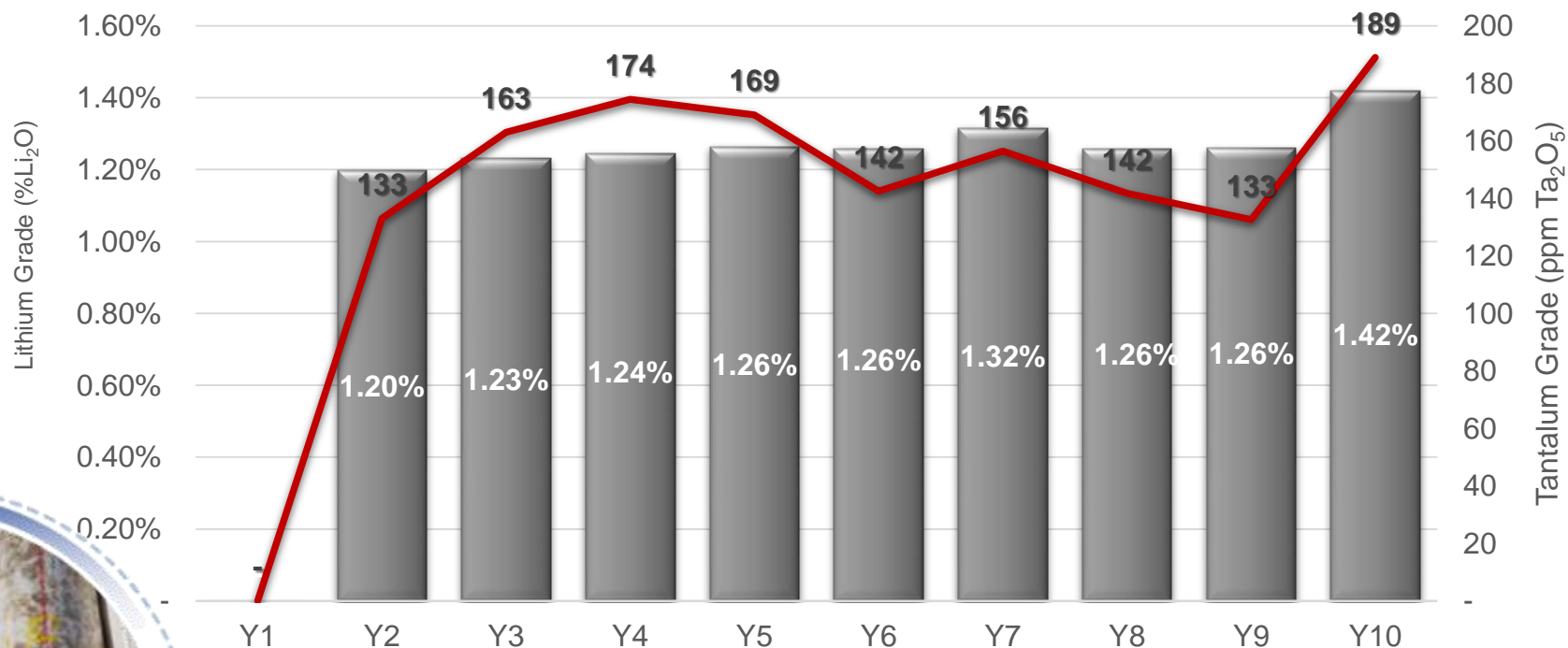
For personal use only



Scoping Study – Grade Profiles



LOM Lithium and Tantalum Grade Profile



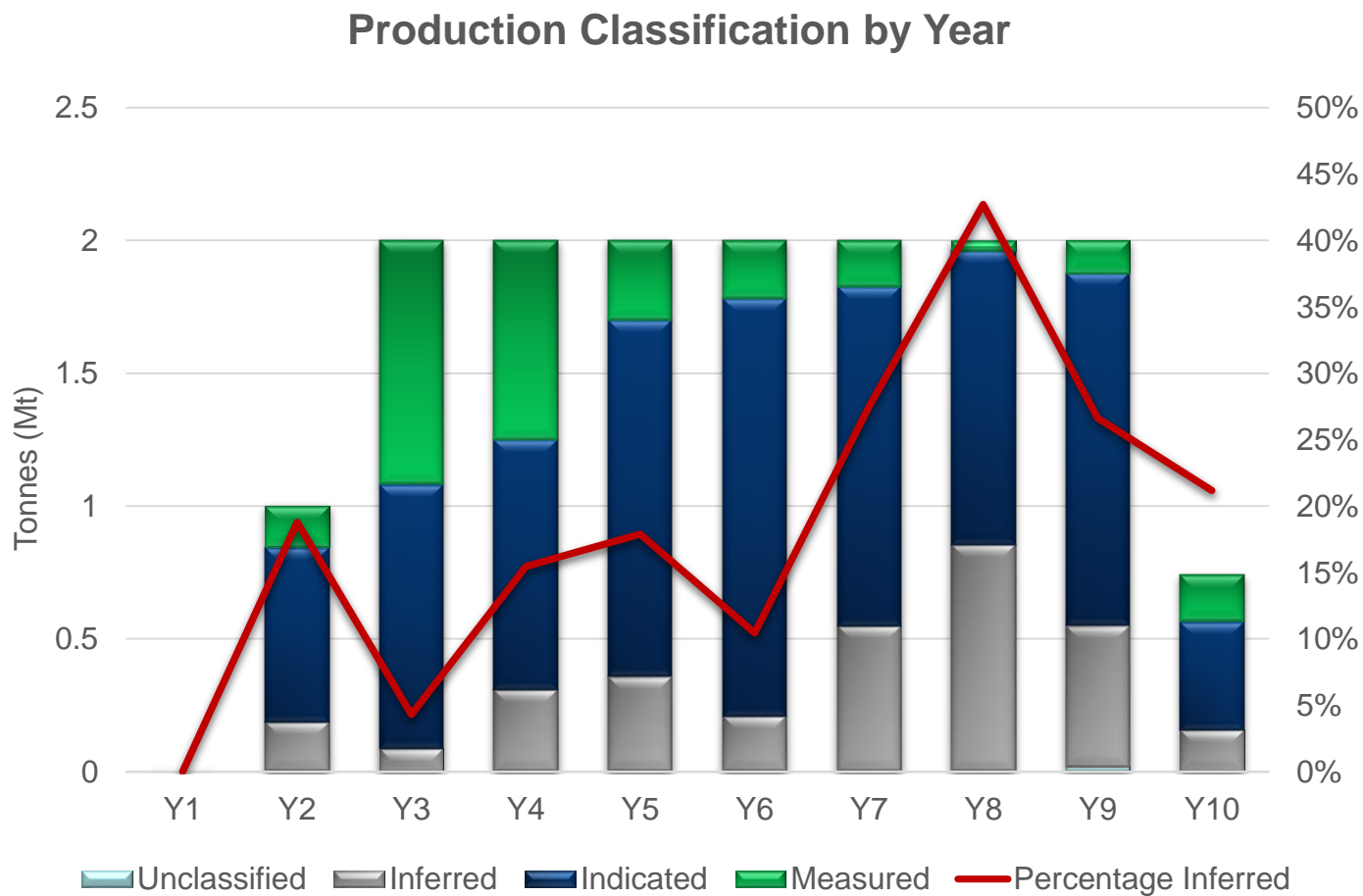
For personal use only



Scoping Study – Production Classification



For personal use only



Exploration Target Parameters and Assumptions



Parameter	Mt Mann	Kathleen's Corner (NW)	Kathleen's Corner (SE)	Rationale
Combined strike length of pegmatites	700 – 800m	300	200	Based on previous drilling and extrapolation of block model used in preparation of maiden Mineral Resource Estimate (released 4 th September 2018)
Average cumulative true width	12 – 20m	12 -18m	10 - 15m	
Down Dip extent	100 – 125m	250 – 350m	500 - 600m	
Specific gravity	2.75	2.75	2.75	Measured from diamond core drilling
Total tonnage	2.3 – 5.5Mt	2.5 – 5.2Mt	4.1 – 5.0Mt	Strike x width x dip x S.G
Average grade	1.2 – 1.5%	1.2 – 1.5%	1.2 – 1.5%	Based on maiden Mineral Resource Estimate

For personal use only



The grade and tonnage ranges referred to above are conceptual in nature and there has been insufficient exploration to estimate a Mineral Resource. It is uncertain if further exploration will result in the estimation of a Mineral Resource.



 @LiontownRes  liontown-resources-limited  www.ltresources.com.au

