



DEVELOPING AN AUSTRALIAN LITHIUM BUSINESS

ASX: LTR | 24 September 2019



Important Information

Liontown

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 Kathleen Valley Project is extracted from the ASX announcement "Kathleen Valley Lithium Resource jumps 353% to 74.9Mt @ 1.3% Li₂O" released on the 9th July 2019 which is available on www.ltresources.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" and "Kathleen Valley Lithium Resource jumps 353% to 74.9Mt @ 1.3% Li₂O" released on the 12th November 2018 and 9th July 2019 respectively which are available on www.ltresources.com.au.

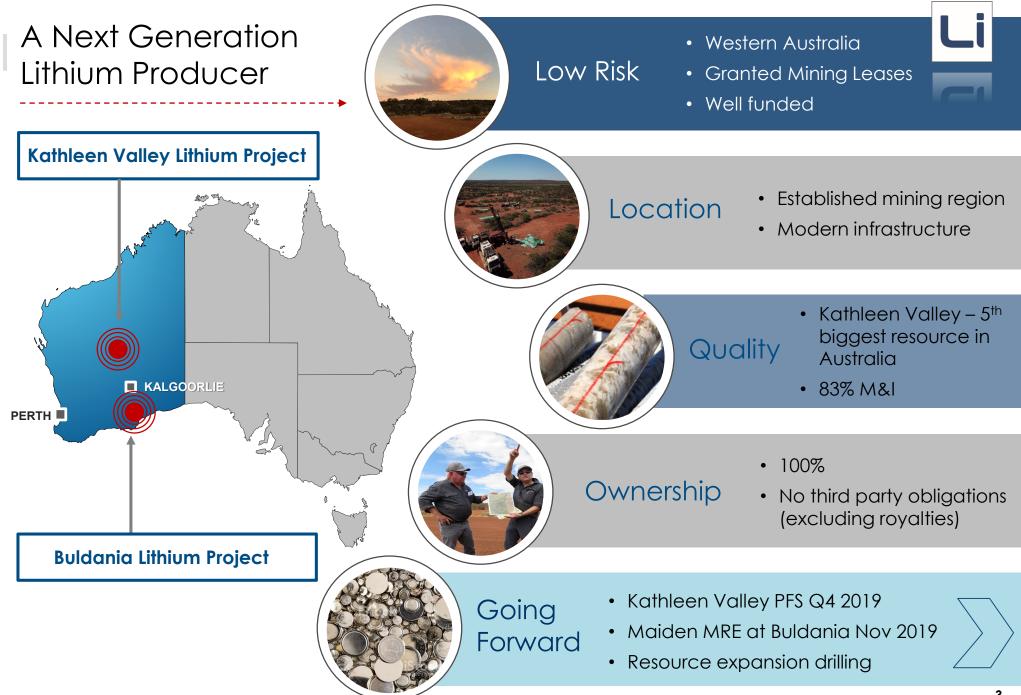
The Information in this report that relates to the Scoping Study for the Kathleen Valley Project is extracted from the ASX announcement "Kathleen Valley Scoping Study confirms potential for robust new WA lithium mine development" released on the 29th January 2019 which is available on <u>www.ltresources.com.au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

The Information in this report that relates to Exploration Results for the Kathleen Valley Project is extracted from the ASX announcements "Latest drilling extends thick, high-grade zone at Kathleen Valley further north as strong assay results continue", "Spectacular intercept of 90m @ 1.3% Li₂O at Kathleen Valley" and "Work commences on Kathleen Valley Resource update as drilling continues to deliver wide, high grade lithium results" and "Further spectacular drill intercepts returned from Kathleen Valley" released on the 9th May 2019, 20th May 2019, 3rd June 2019 and 24th June 2019 respectively which are available on www.ltresources.com.au.

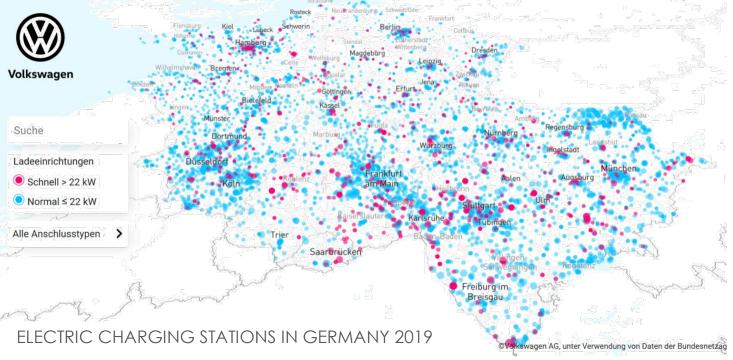
The Information in this report that relates to Exploration Targets is is based on and fairly represents information and supporting documentation prepared by Mr David Richards, who is a Competent Person and a member of the Australasian Institute of Geoscientists (AIG). Mr Richards is a full-time employee of the company. Mr Richards has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activities being 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 Richards consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

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", "Liontown 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", "Liontown further expands prospective lithium footprint at Buldania in WA's South-Eastern Goldfields", "Latest assays confirm lithium mineralisation over >1.3km strike length at the Buldania Lithium Project in WA", "Liontown expands lithium footprint at Buldania in WA's South-Eastern Goldfields", "Initial assays extend mineralised trend at Buldania", "Further thick lithium intercepts from drilling at Buldania" and "Liontown on track for maiden Resource at Buldania following receipt of further high-grade lithium assays" released on the 26th March 2018, 19th September 2018, 1st November 2018, 20th July 2019 and 17th September 2019 respectively which are available on www.ltresources.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.



The Undisputable Rise of Electric Vehicles



"Lithium: The Irreplaceable Element of the Electric Era" VOLKSWAGEN GROUP, March 19

"Auto companies are spending \$225 billion to develop more than 200 new plug-in vehicles through 2023" WALL STREET JOURNAL, August 19

"There is no sign of slowing down...by 2040, we expect 57% of all passenger vehicle sales, and over 30% of the global passenger vehicle fleet, will be electric." ELECTRIC VEHICLE OUTLOOK,

BLOOMBERG NEF, June 19

2010: Just a few thousand EV's sold
2018: +2 million sold
2025: 10 million sales forecast

2030: 28 million sales forecast

2040: 56 million sales forecast

(Bloomberg NEF, June 19)



Volkswagen commit to build 22 million EV's across 70 new models by 2028 (March 19)



BMW plans to have 25 EV models in 2023 (June 19)



Toyota target to sell 5.5million EV's a year by 2025 (June 19)

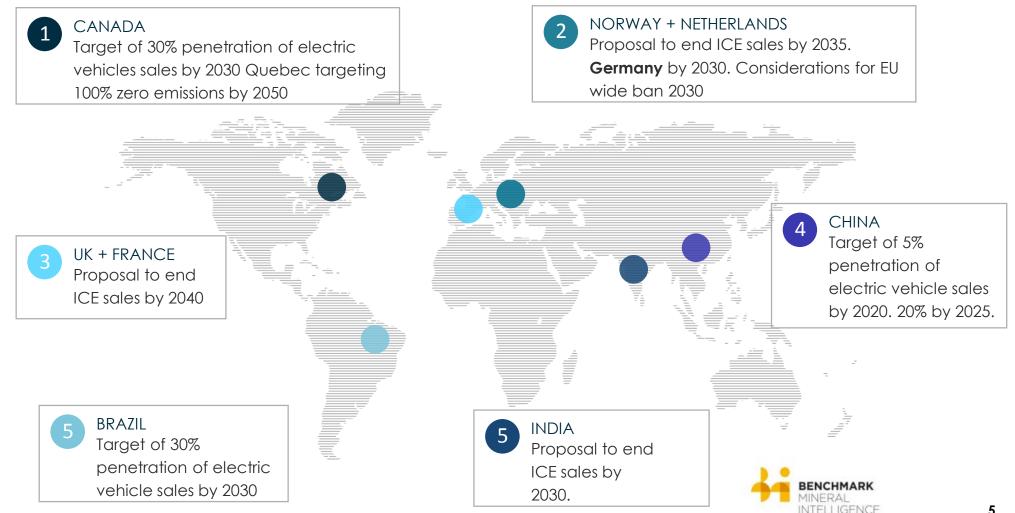


Volvo says EV's will make up to 50% of its sales by 2025 (April 18)

BENCHMARK MINERAL FORECASTS: "Global Geopolitics: The race for clean air..."



Global policy statement by governments supporting EV adoption (Benchmark Mineral Intelligence – lithium forecast May 2019)



KATHLEEN VALLEY LITHIUM PROJECT

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Project Overview



JULY 2019 RESOURCE 74.9Mt @ 1.3% Li₂O and 140ppm Ta₂O₅ 83% Measured and Indicated 353% increase on maiden 2018 MRE **Liontown Lithium** 500km Project Mt Keith WESTERM **Major Nickel Mine** AUSTRALIA **KATHLEEN VALLEY** Cliffs **Major Gold Mine** Goldfiel Greenstone Kalgoorlie Granite Perth Yakabindie Cosmos Natural Gas Pipeline **Kathleen Valley** Bellevue **Lithium Project** Transmission Line Leinster 25km Leinster Vivien Kalgoorlie (~300km) Agnew



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PFS scheduled for completion Q4 2019



Conventional mining and processing

Test work confirms ~6% DMS spodumene concentrate – feasibility-level test work ongoing

Scoping Study (January 2019) on maiden 5 MRE confirms potential for standalone mining operation

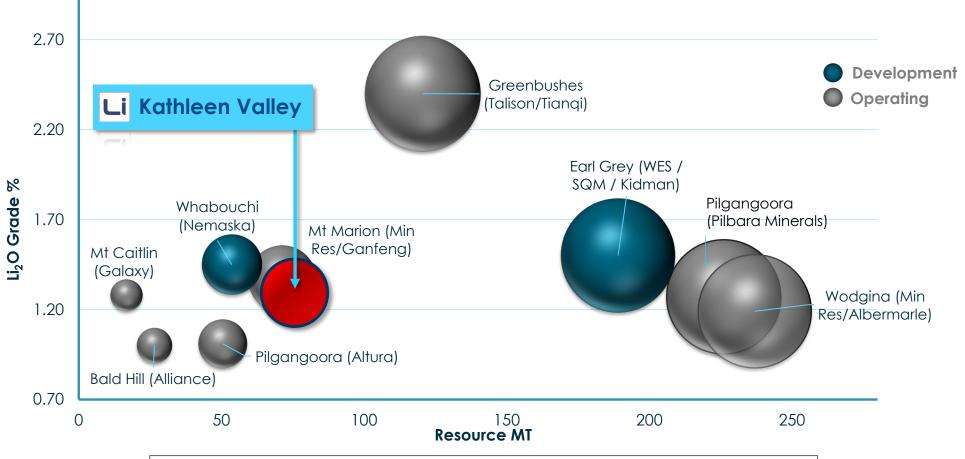
Exploration Target of 25 - 50Mt @ 1.2-1.5% Li₂O* in addition to current MRE

*The potential grade and tonnage of the Exploration Target referred to above is conceptual in nature and there has been insufficient exploration to estimate an Mineral Resource. It is uncertain if further exploration will result in the estimation of a Mineral Resource. See Appendix (slide 36) for full explanation of assumptions used to estimate ranges.

A Globally Significant Lithium Deposit

Hard Rock Lithium Operations and Advanced Projects

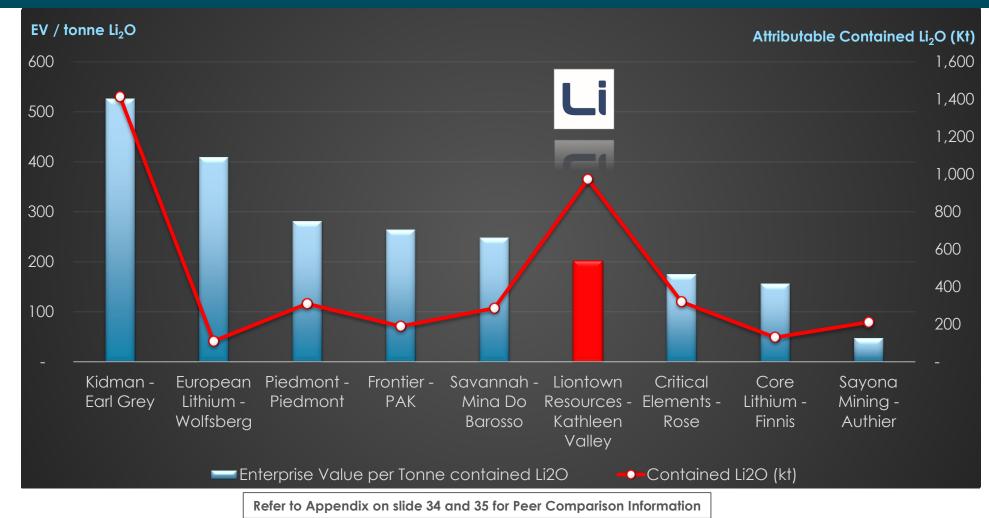
Western World | Spodumene Dominant | Tonnes x Grade | Li₂O Only

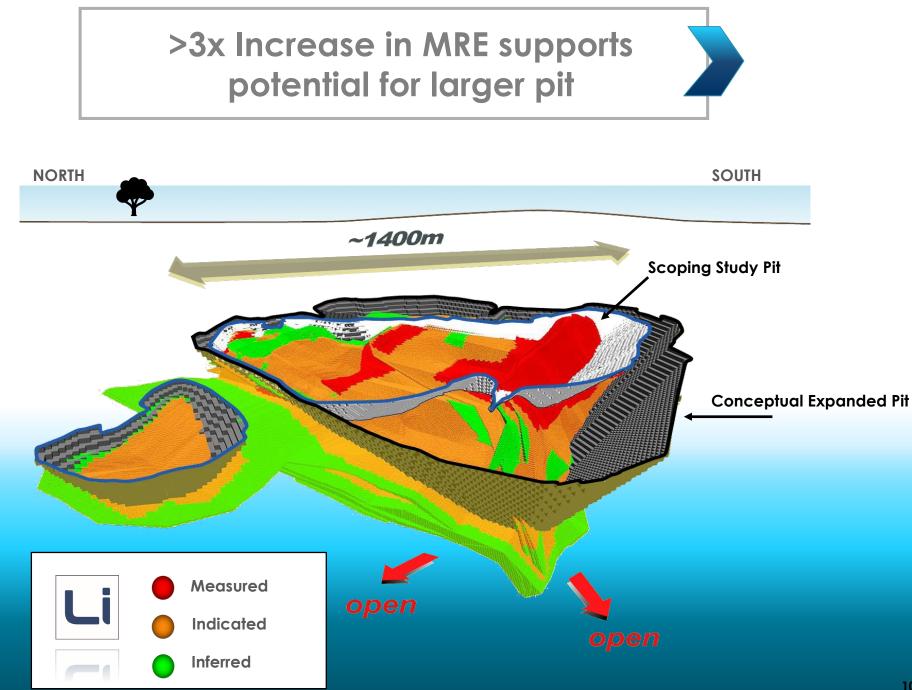


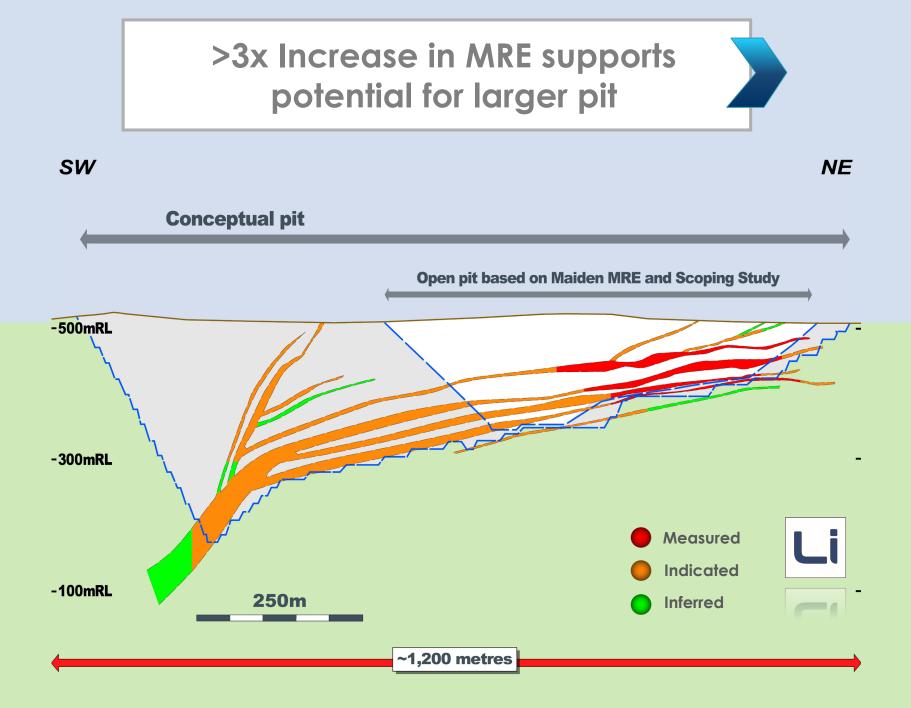
Refer to Appendix on Slide 33 for Peer Comparison Information including Resource Classifications

Hard Rock Lithium Developers

Western World | Spodumene Dominant

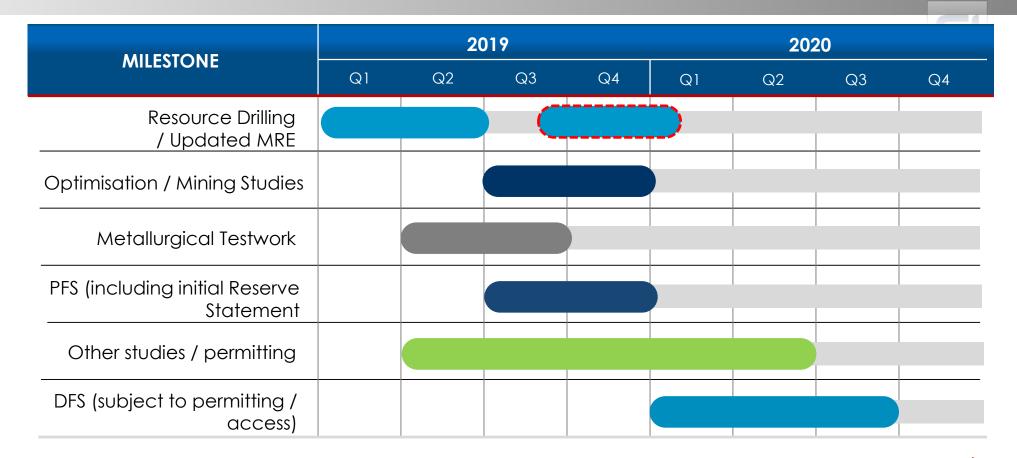
















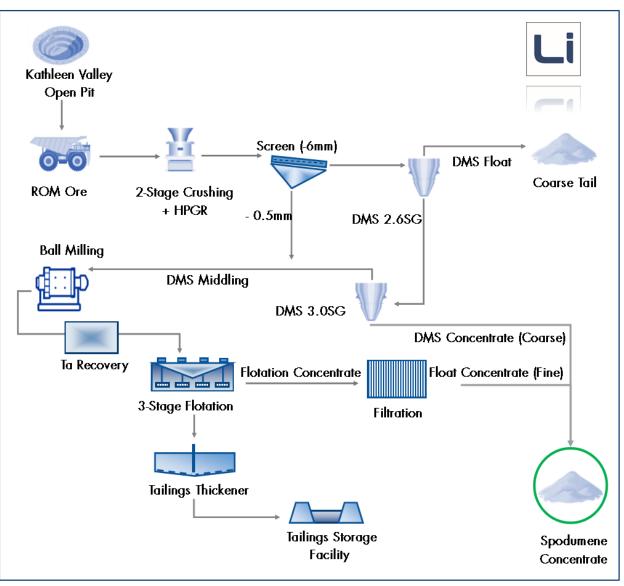


Water	✓ 3 x Bores	 Good Quality Potential supply on MLs Dewatering not an issue Favourable topography
Environment	 ~26,000 sulphur ✓ assays & flora / fauna surveys 	 Minimal acid forming rocks Other tailings likely to be benign No rare or endangered species identified
Geotechnical	✓ Drill Core	 No pit wall stability issues identified





Metallurgy and Flowsheet



Current PFS Test Work Results

6.2% Li₂O from DMS concentrate

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- **41%** Li₂O recovered to DMS concentrate
- 15% mass rejection from 2-stage DMS

Flotation test work in progress

Scoping Study (2018) Test Work Results

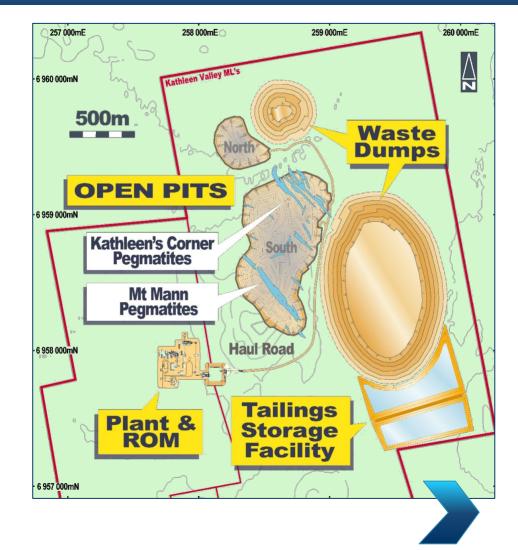
- 5.9% Li₂O from DMS concentrate
- 36% mass rejection with two stage DMS
- 5.5% Li₂O from flotation concentrate
- Predicted **79%** Li₂O recovery
- Low iron (<0.5% Fe₂O₅)
- Preliminary Ta_2O_5 conc.

High priority on getting metallurgy and processing right

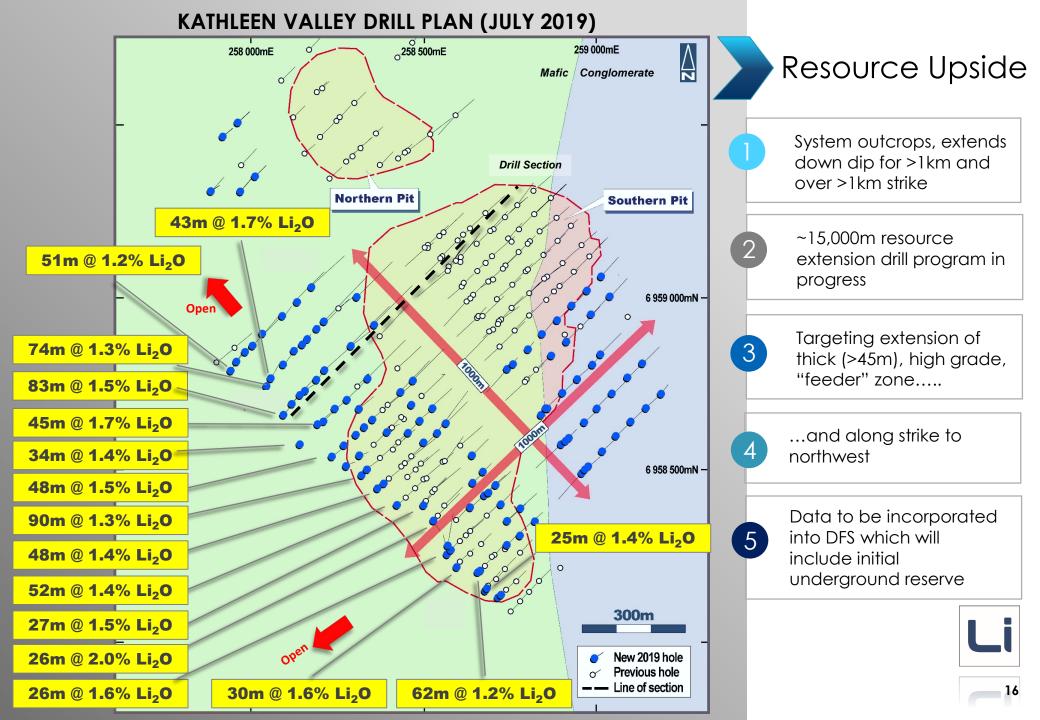
Li Scoping Study on maiden MRE supports potential to develop a standalone Lithium Mining and Processing Operation

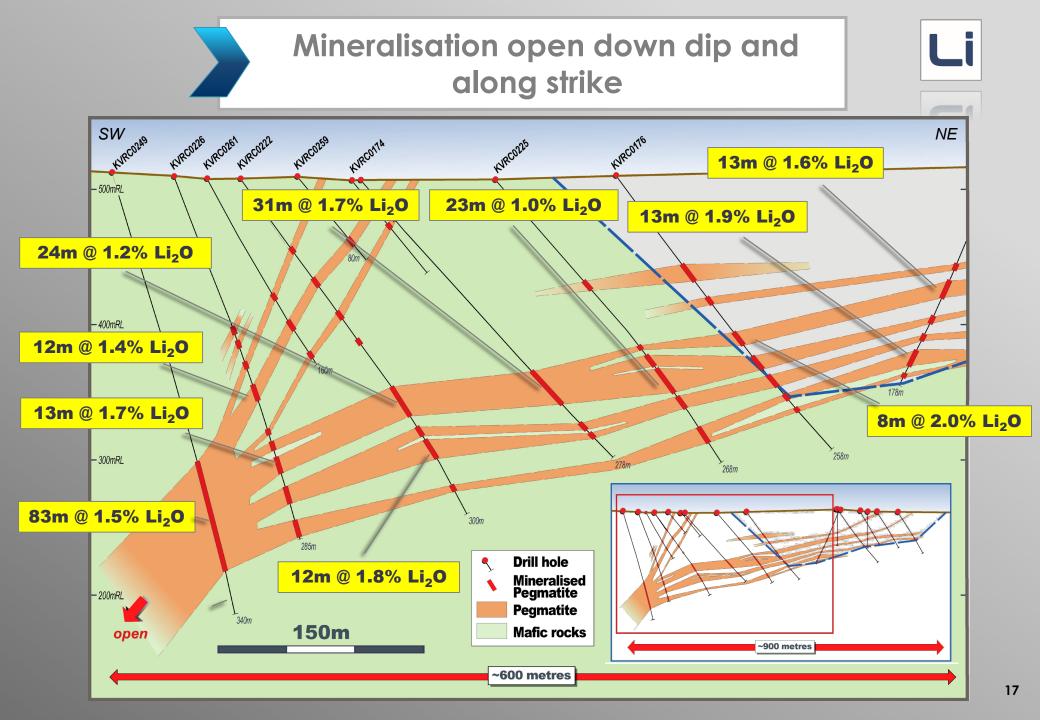
January 2019 Study – Headline Metrics

NPV _(8%, real, post tax)	A\$421M (Range of A\$316 to A\$526M)
IRR	38%
Payback	<3 years
Free Cash Flow	A\$762M
Average Cash Flow	~A\$100M per annum
Plant Capacity	2Mtpa (Li & Ta)
Annual Production	~360kt SC6
LOM SC6 PRICE	A\$900 (US\$650/t) FOB
LOM Opex	~A\$428/t SC6
Capex	~A\$232M

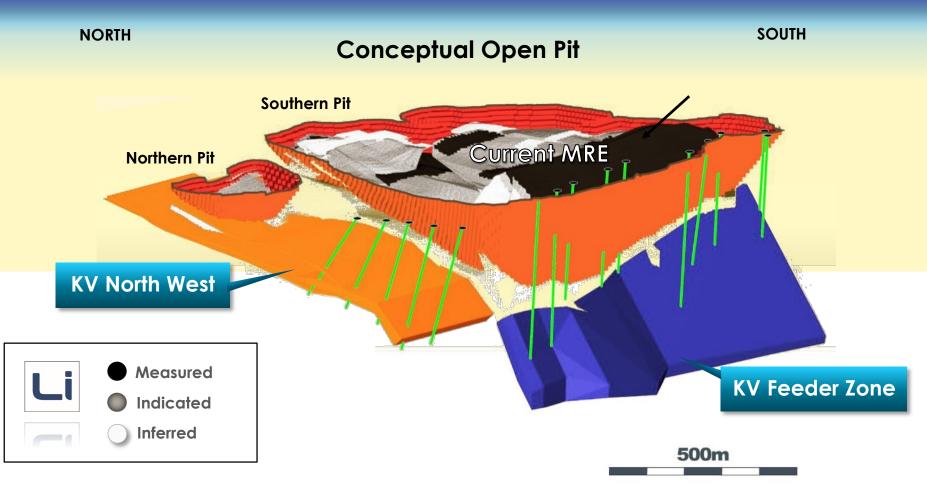


Scoping study prepared by Lycopodium Minerals Pty Ltd





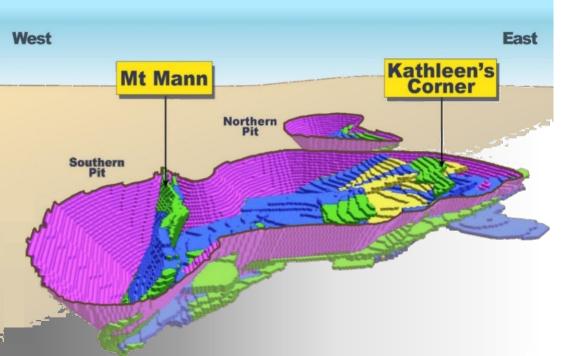
Exploration target 25 – 50Mt @ 1.2 – 1.5% Li₂O* (15,000m drilling program in progress)



*The potential grade and tonnage of the Exploration Target referred to above is conceptual in nature and there has been insufficient exploration to estimate an Mineral Resource. It is uncertain if further exploration will result in the estimation of a Mineral Resource. See Appendix (slide 36) for full explanation of assumptions used to estimate ranges.

Kathleen Valley Investment Case

The only non-committed spodumene resource in Australia



Li Experienced, well-credentialed management team

- ~75Mt @ 1.3% Li₂O and 140ppm Ta₂O₅
- Conventional mining and processing
- Positive Scoping Study PFS pending
- Probable long life mine
- First world location and expertise
- Active, well serviced mining region
- Strong medium to long term outlook for lithium
- Drilling in progress testing for additional Exploration Target of 25-50Mt @ 1.2 – 1.5% Li₂O*

BULDANIA LITHIUM PROJECT



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Project Overview



Significant lithium discovery



0 Outcropping, fresh, spodumenerelated mineralisation



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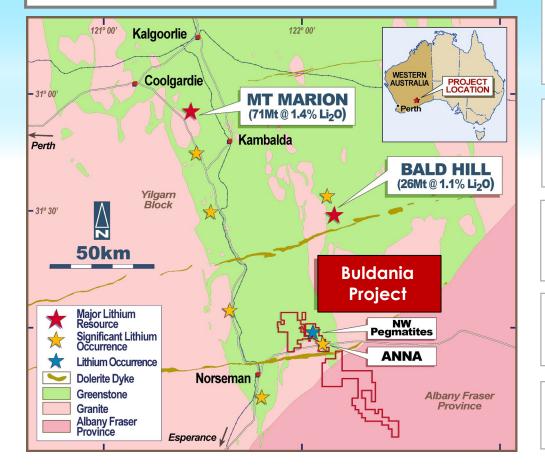
Similar geology to the Mt Marion and Bald Hill lithium deposits (71Mt and 26Mt respectively)

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



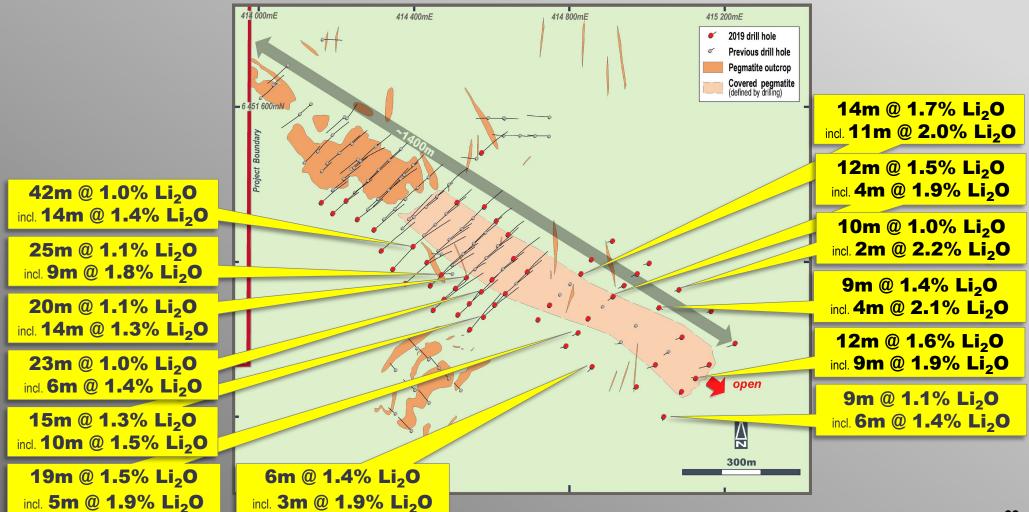
Part of larger, 600km² strategic land holding

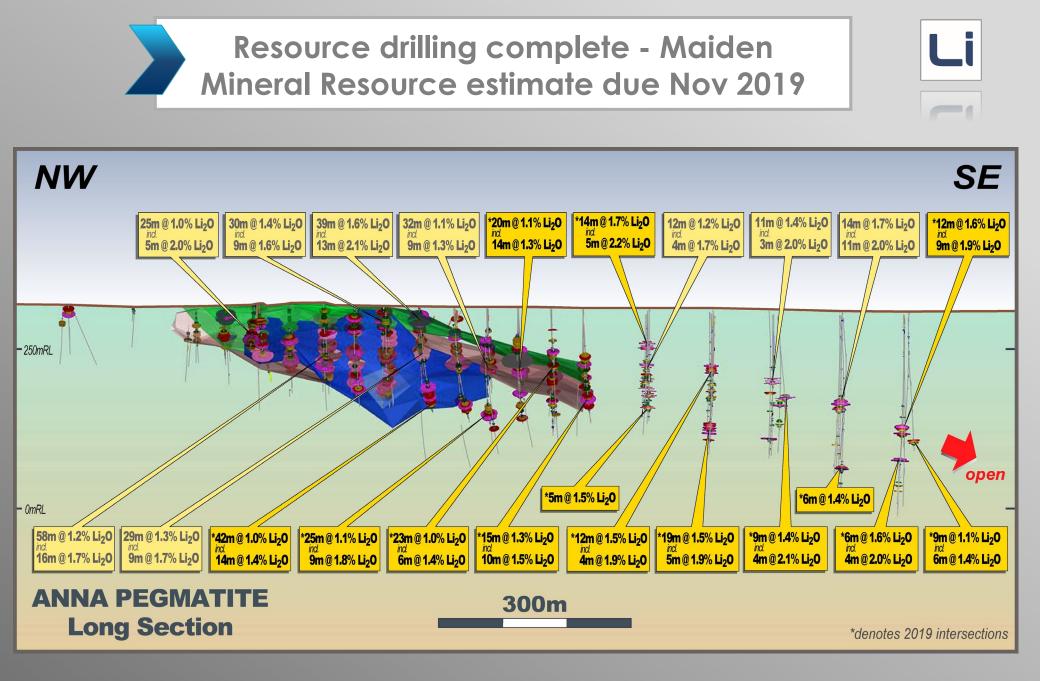




Large Lithium (Spodumene) Mineralised Pegmatite Defined at the Anna Prospect

Mineralisation fresh from surface and open along strike and at depth





Kathleen Valley Lithium Project

Catalysts for Continued Re-Rating



PFS scheduled for completion Q4 2019



Metallurgical studies focused on optimising grade and recoveries

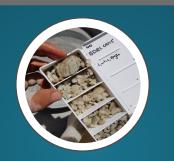


Resource expansion

Buldania Lithium Project



Maiden Mineral Resource Nov 2019



Regional exploration and discovery drilling

Leadership and Key Financials





David Richards



Tim Goyder



Craig Williams



Anthony Cipriano

Steven Chadwick

Managing Director	Chairman	Non-Executive Director	Non-Executive Director	Non-Executive Director
 +35 years Discovered multi- million ounce Vera Nancy Gold Deposits 	 +40 years Executive Chairman Chalice Gold Mines Major Shareholder 	 +40 years Founder and CEO of Equinox Minerals 	 +30 years Former Senior Partner at Deloittes 	 +40 years Director of Lycopodium Minerals

Corporate Snapshot

ASX CODE	LTR
Shares on Issue	~1,678M
Market Capitalisation	~\$168M (AT 10.0CPS)
Major Shareholder	Tim Goyder~17%
Top 20 Shareholders	~42%
Cash (as at 23-Sept-19)	~A\$14.3M (+ ~A\$1.4M)*

*An additional ~A\$1.4M will be added to the cash balance from the issue of Placement Shares to the Directors at a price of \$0.12 per Share (as previously announced).

APPENDIX

Kathleen Valley Project Additional Information

Kathleen Valley Mineral Resource Estimate – July 2019

Cut-off grade (Li ₂ O)	Resource Category	Million Tonnes	Li ₂ O (%)	Ta₂O₅ (ppm)
	Measured	17.6	1.3	160
0.5	Indicated	42.2	1.3	140
0.5	Inferred	10.1	1.1	150
	Sub-Total	69.9	1.3	150
	Indicated	2.5	1.4	120
0.7	Inferred	2.5	1.3	110
	Sub-Total	5.0	1.4	110
Total	74.9	1.3	140	

	Open	pit potential above 2	00mRL	Underground potential below 200mRL			
Cut-Off Li ₂ O	$Mt \qquad Li_2O (\%) \qquad Ta_2O_5 \qquad I$		Mt	Li ₂ O (%)	Ta ₂ O ₅		
0.3	70.2	1.3	150	5.1	1.4	110	
0.4	70.1	1.3	150	5.1	1.4	110	
0.5	69.9	1.3	150	5.1	1.4	110	
0.6	69.3	1.3	150	5.1	1.4	110	
0.7	68.1	1.3	150	5.0	1.4	110	
0.8	65.6	1.3	150	4.9	1.4	110	
0.9	61.8	1.3	150	4.7	1.4	110	
1.0	56.4	1.4	150	4.4	1.4	110	

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_2O_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



Li

Li

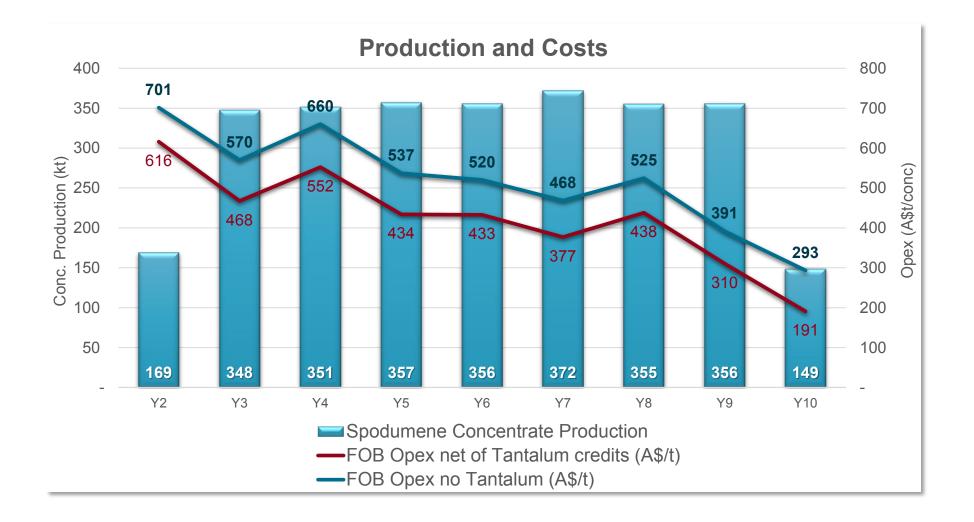
Life of Mine Financials

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

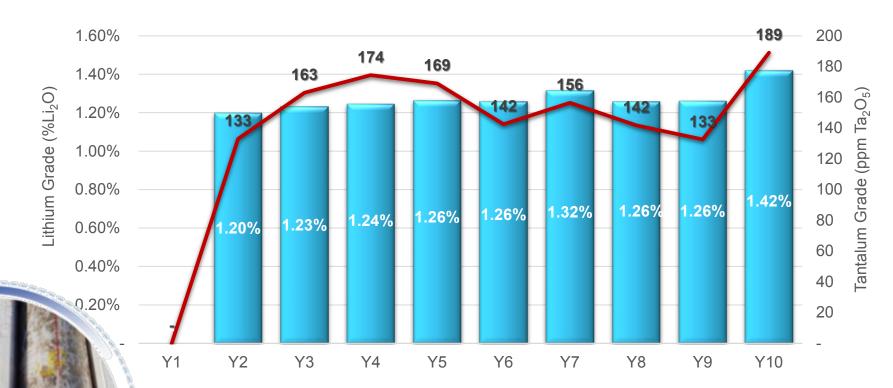
Capital Costs Summary

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



Scoping Study – Grade Profiles

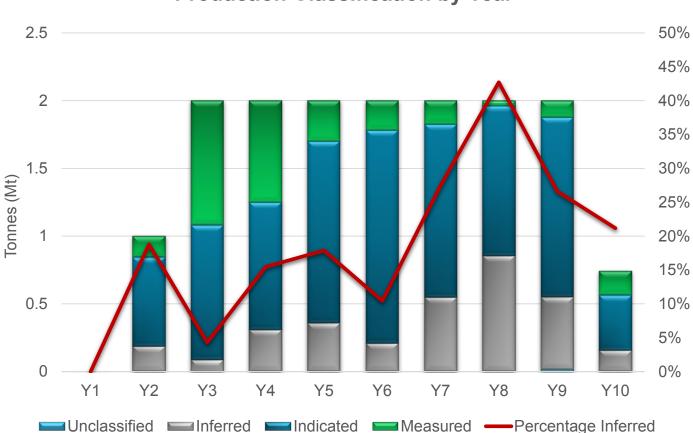


LOM Lithium and Tantalum Grade Profile

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Scoping Study – Production Classification





Production Classification by Year

Peer Comparison Information – Mineral Resource Estimates

Company	Project	Stage	Measured Mt	Indicated Mt	Inferred Mt	Global MRE Mł	MRE Grade	Information Source
Pilbara Minerals	Pilgangoora	Operating	22.8	112.8	90.4	226	1.3	ASX Announcement, 17 Sept 2018 - http://www.pilbaraminerals.com.au/site/ PDF/2235_0/PilgangooraReserveandReso urceUpgrade
Wesfarmers / SQM / Kidman	Earl Grey	Development	66	106	17	189	1.5	ASX Announcement, 19 March 2018 - https://wcsecure.weblink.com.au/pdf/K DR/01963105.pdf
Talison / Tianqi	Greenbushes	Operating	0.6	117.9	2.1	120.6	2.4	NI 43-101 Technical Report 2012 - http://www.goldendragoncapital.com/ greenbushes-lithium-mine/
Mineral Resources and Albemarle	Wodgina	Operating	0	177	59.9	236.9	1.2	ASX Announcement, 23 October 2018 http://clients3.weblink.com.au/pdf/MIN/ 02037855.pdf
Galaxy Resources	Mt Caittlin	Operating	2.2	9.9	4.6	16.7	1.28	ASX Announcement 23rd Jan 2019: https://www.asx.com.au/asxpdf/2019012 3/pdf/4420zn6jk8tl0q.pdf
Mineral Resources Ltd and Jiangxi Ganfeng	Mt Marion	Operating	0	22.70	48.7	71.3	1.37	ASX Announcement, 28th October: https://www.neometals.com.au/reports/ 2018-10-31-1697-MINMtMario.pdf
Altura Mining	Pilgangoora	Operating	8.7	38	3.8	50.5	1.01	Investor Presentation, 21 March 2019: https://alturamining.com/wp- content/uploads/2019/03/1912571.pdf
Alliance Mineral Assets Ltd	Bald Hill	Operating	0	14.4	12.1	26.5	1.0	Investor Presentation, March 2019: http://www.allianceminerals.com.au/wp -content/uploads/2019/03/02088109.pdf
Nemaska Exploration	Whabouchi	Development	17.0	20.6	16.1	53.7	1.45	Website, 18th June 2019: https://www.nemaskalithium.com/en/wh abouchi/lithium-resources-reserves/

Peer Comparison Information – Developers Chart

Peer lithium company deposit (Developers)	Stage	Mt (Attributable)	Li₂O%	Enterprise Value per Tonne contained Li ₂ O	Markeł Cap (\$Am) 17/7/19	Est. Cash (\$Am)	EV (\$Am) 17/7/19	Contained Li ₂ O (kt) (Attributable)
Kidman - Earl Grey	PFS	94.5	1.50	524	769	25	744	1,417
European Lithium - Wolfsberg	PFS	11.0	1.0	410	48	3	45	110
Piedmont - Piedmont	Scoping Study	27.9	1.11	281	118	31	87	310
Frontier - PAK	PFS	10.4	1.82	264	52	2	50	189
Savannah - Mina Do Barosso	Scoping Study	27.0	1.06	248	85	14	71	286
Liontown Resources - Kathleen Valley	Scoping Study	74.9	1.30	202	200	3	197	974
Critical Elements - Rose	FS	34.7	0.92	175	60	4	56	320
Core Lithium - Finniss	DFS	9.6	1.35	156	32.3	12	20.3	130
Sayona Mining - Authier	DFS	20.9	1.01	47	12	2	10	211



Peer Comparison Information – Developers Chart

Company	Project	Stage	Measured Mt	Indicated Mt	Inferred Mt	Global Resource Mt	Resource - Grade	Information Source
			(Attributable)			Oldac		
European Lithium	Wolfsberg	Developer	2.9	3.4	4.7	11	1	Corporate Presentation, March 2019 - <u>https://europeanlithium.com/wp-</u> <u>content/uploads/2019/03/190322-</u> <u>European-Lithium-</u> <u>Presentation_WidescreenFINAL_Compre</u> <u>ssed.pdf</u>
Kidman	Earl Grey	Developer	33	53	8.5	94.5	1.5	ASX Announcement, 19 March 2018 - https://wcsecure.weblink.com.au/pdf/K DR/01963105.pdf
Savannah	Min Do Barosso et al	Developer	6.6	8.4	12	27	1.06	AIM Announcement, 31 May 2019 - https://www.savannahresources.com/c ms/wp- content/uploads/2019/05/Portugal- Update-1.pdf
Piedmont Lithium	Core	Developer	0	13.9	14	27.9	1.11	ASX Announcement, 25 June 2019 - https://d1io3yog0oux5.cloudfront.net/_a ee37ed4f1b7c04614dea0a7b549e5c2/pi edmontlithium/db/336/2543/pdf/190625 +-+Resource+Update_Final.pdf
Frontier	PAK	Developer	1.2	7.3	1.9	10.4	1.82	www.frontierlithium.com
Critical Elements	Rose	Developer	0	31.9	2.8	34.7	0.92	NI 43 101 TECHNICAL REPORT NOVEMBER 29, 2017 - <u>https://www.cecorp.ca/wp- content/uploads/rose-43-</u> <u>101_revised_november_2017.pdf</u>
Core Lithium	Finniss	Developer	1.09	1.91	6.6	9.63	1.35	Investor Presentation, 21 May 2019 "Beyond 10 Million Tonnes" - <u>https://wcsecure.weblink.com.au/pdf/C</u> <u>XO/02107382.pdf</u>
Sayona	Authier	Developer	6.58	10.6	3.76	20.94	1.0	ASX Announcement, 24th Sept 2019, http://sayonamining.com.au/wp/wp- content/uploads/2018/09/ASX24Sep18 Authier-Project-Expanded-JORC-Ore- <u>ReservesResource.pdf</u>

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	Parameter	KV Feeder Zone	KV North West	Rationale
	Combined strike length of pegmatites	1100m	400	Based on previous drilling and extrapolation of block
	Average cumulative true width	>18m	>20m	model used in preparation of Mineral Resource
	Down Dip extent	230 - 500m	600 - 1,100m	Estimate (released 4 th September 2018)
	Specific gravity	2.75	2.75	Measured from diamond core drilling
	Total tonnage	12.5 - 27Mt	13 - 24Mt	Strike x width x dip x S.G
F	Average grade	1.2 – 1.5%	1.2 – 1.5%	Based on latest Mineral Resource Estimate

AT

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.



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