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Rhyolite Ridge

Development and growth opportunities

RIU Explorers Conference

14-16 February 2023

Providing Material for a Sustainable & Thriving Planet

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In respect of Mineral Resources and Ore Reserves referred to in this presentation and previously reported by the Company in accordance with JORC Code 2012, the Company confirms that it is not aware of any new information or data that materially affects the information included in the public report titled "Rhyolite Ridge Ore Reserve Increased 280% to 60 million tonnes" dated 30 April 2020 and released on ASX. Further information regarding the Mineral Resource estimate can be found in that report. All material assumptions and technical parameters underpinning the estimates in the report continue to apply and have not materially changed.

In respect of production targets referred to in this presentation, the Company confirms that it is not aware of any new information or data that materially affects the information included in the public report titled "ioneer Delivers Definitive Feasibility that Confirms Rhyolite Ridge as a World-Class Lithium and Boron Project" dated 30 April 2020. Further information regarding the production estimates can be found in that report. All material assumptions and technical parameters underpinning the estimates in the report continue to apply and have not materially changed.

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Lithium Carbonate Equivalent

The formula used for the Lithium Carbonate Equivalent (LCE) values quoted in this presentation is: LCE = (lithium carbonate tonnes produced + lithium hydroxide tonnes produced * 0.880

Note

All $'s in this presentation are US$'s except where otherwise noted.

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1 CORPORATE SNAPSHOT

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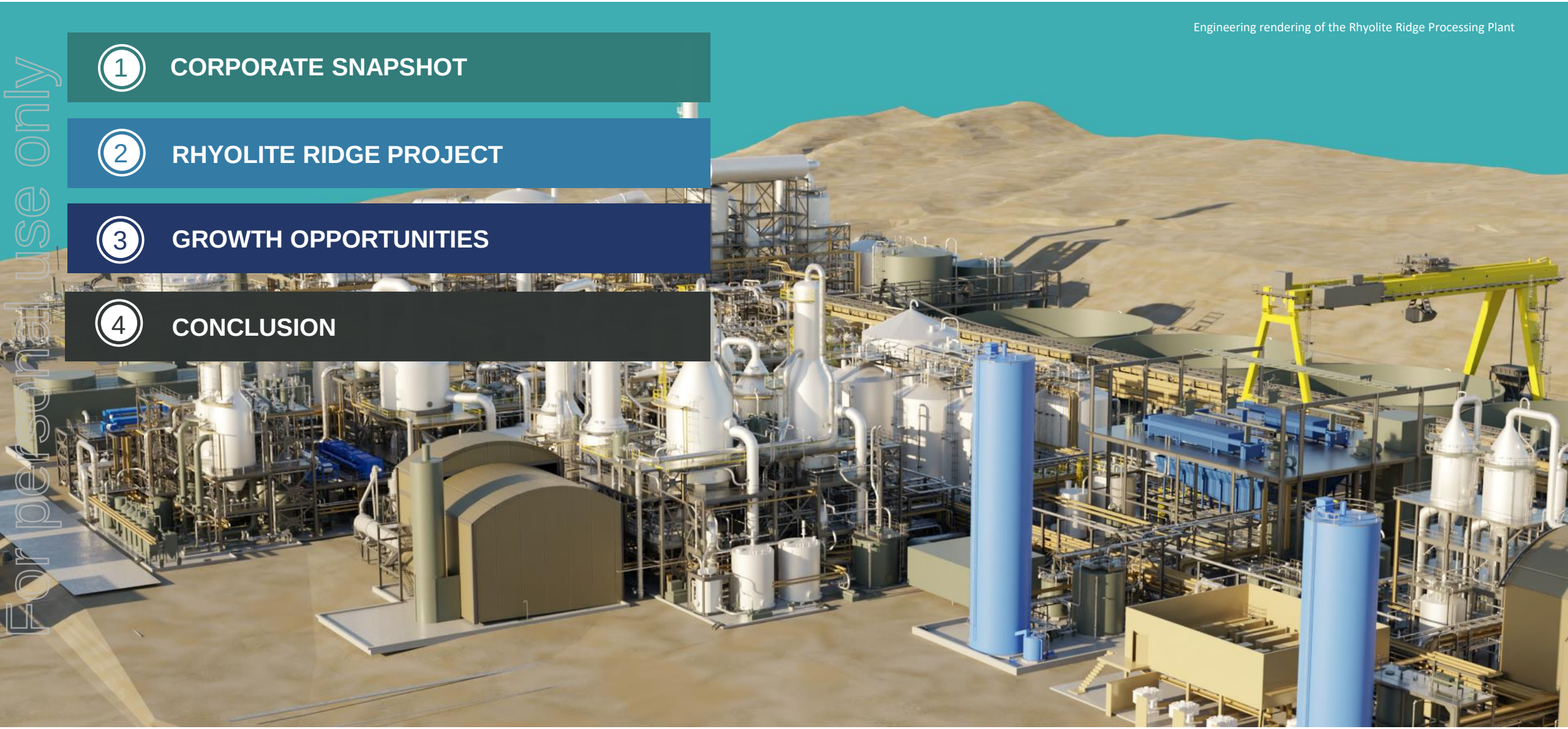

Engineering rendering of the Rhyolite Ridge Processing Plant

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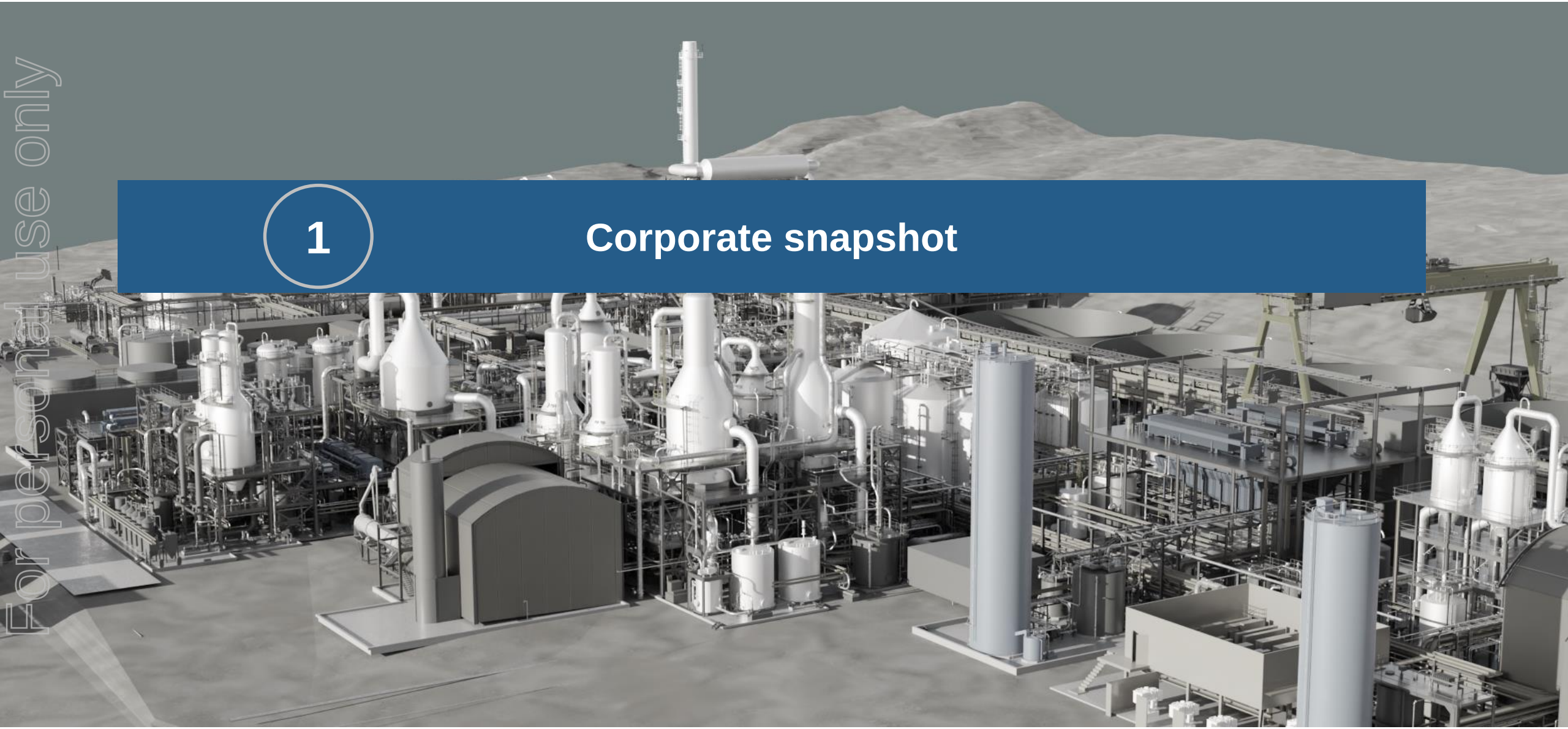

1 Corporate snapshot

Corporate Snapshot

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Capital Structure (As at February 2023)

SHARES OUTSTANDING	2.10B
CASH BALANCE (US) – 1 Jan 2023	A$100.3m (US$69.4M)
SHARE PRICE ASX / (NASDAQ - 1 ADR = 40 ASX shares)	A$0.440 / US$12.35
MARKET CAPITALISATION (US)	A$924m (US$647m)

Key Executives

JAMES D. CALAWAY
Executive Chairman
US

BERNARD ROWE
Managing Director
AU

IAN BUCKNELL
CFO & Company Secretary
AU

Research

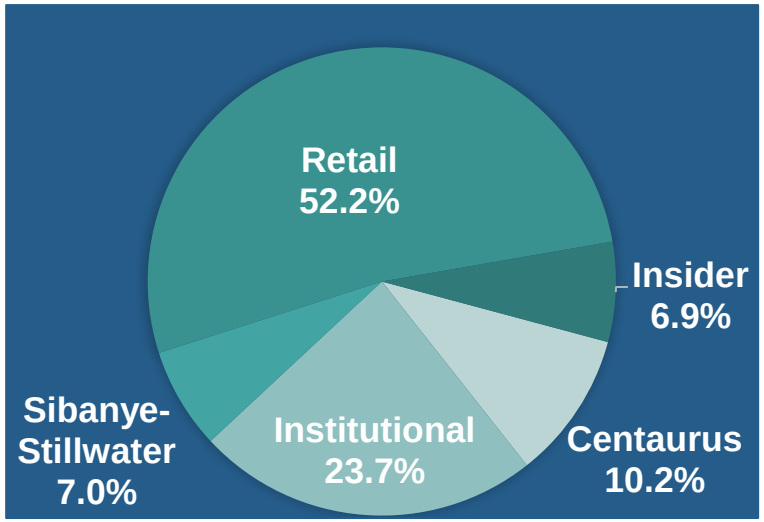
STIFEL | GMP

ORD MINNETT

BRIDGE STREET CAPITAL PARTNERS

Loop Capital Markets

Shareholders (December 2022)



Source: Source: Company Data, FactSet, Nasdaq, Ipreo and CapIQ

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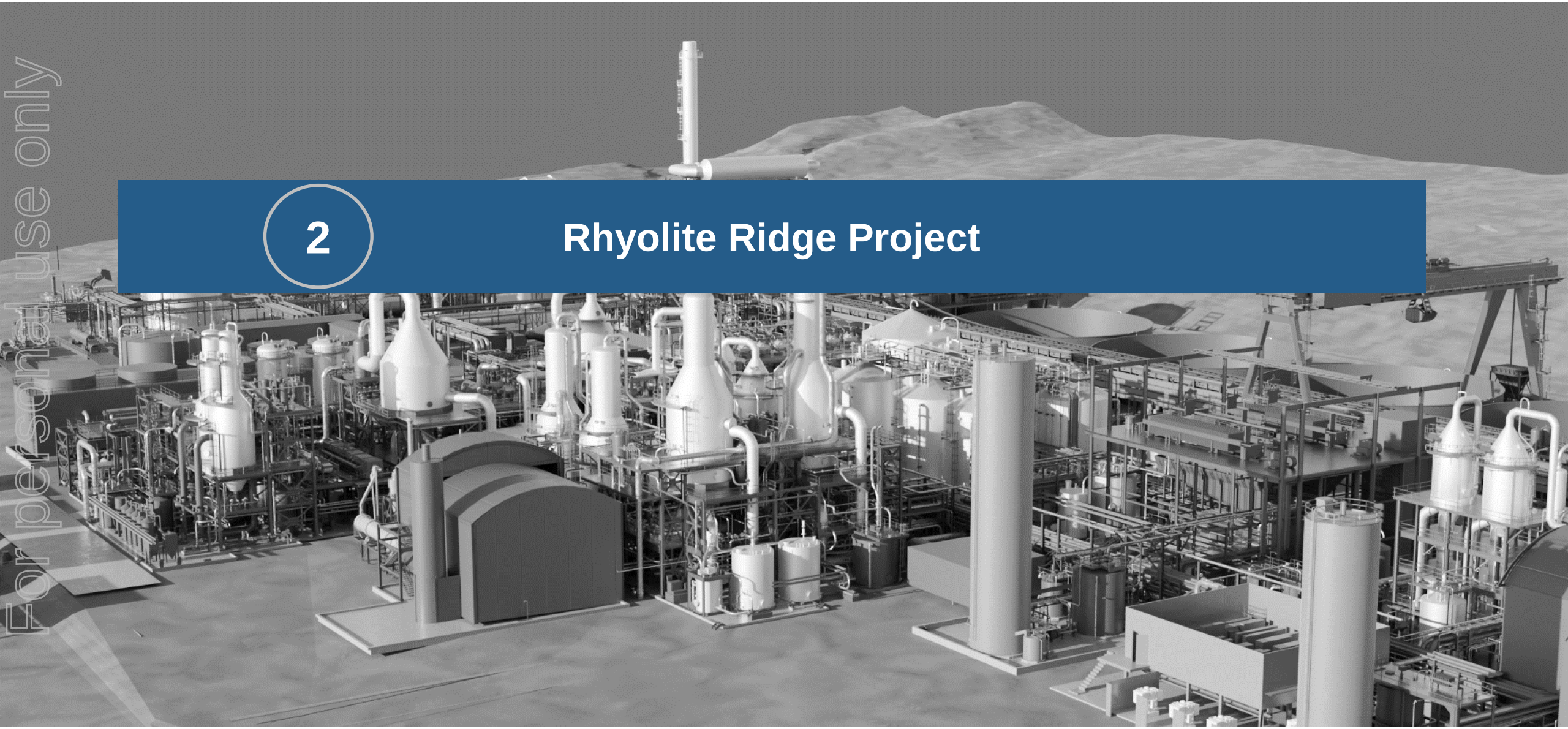

2 Rhyolite Ridge Project

Rhyolite Ridge - Location

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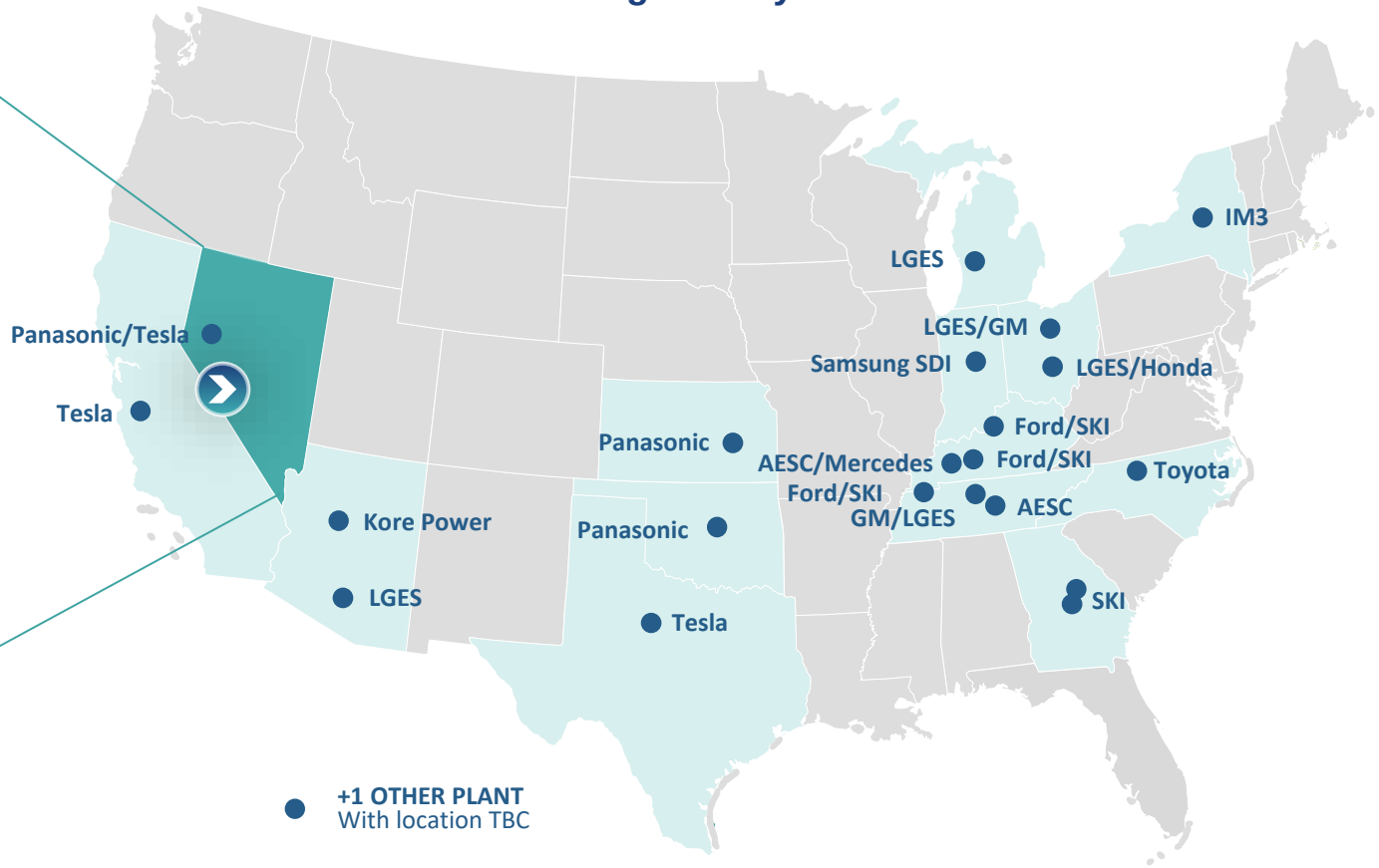
U.S. Gigafactory Locations



Current & planned Gigafactories by 2031

Ideally positioned to become a cornerstone lithium supplier to U.S. EV supply chain

Source: Benchmark Mineral Intelligence Report – Gigafactory Assessment, October 2022

Supportive Political Narrative

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"Biden signs Inflation Reduction Act into law" (CNN Politics 16/08/2022)
https://www.cnn.com/2022/08/16/politics

"The Future of Vehicles is Electric": President Biden Touts EVs in remarks on Infrastructure (Forbes breaking News 22/10/2022)
https://www.youtube.co/watch?v=Rdz2K1HHUc

"… another example of what has come from the Bipartisan Infrastructure Law and the Inflation Reduction Act is that the Loan Programs Office inside the Department of Energy gave a $700 million commitment to a company that will be doing sustainable extraction of lithium…" (Jennifer Granholm, U.S. Secretary of Energy 13/1/2023)
https://twitter.com/SecGranholm/status/1614724219702546433

Growing political will in the U.S. to support the domestic battery materials supply chain

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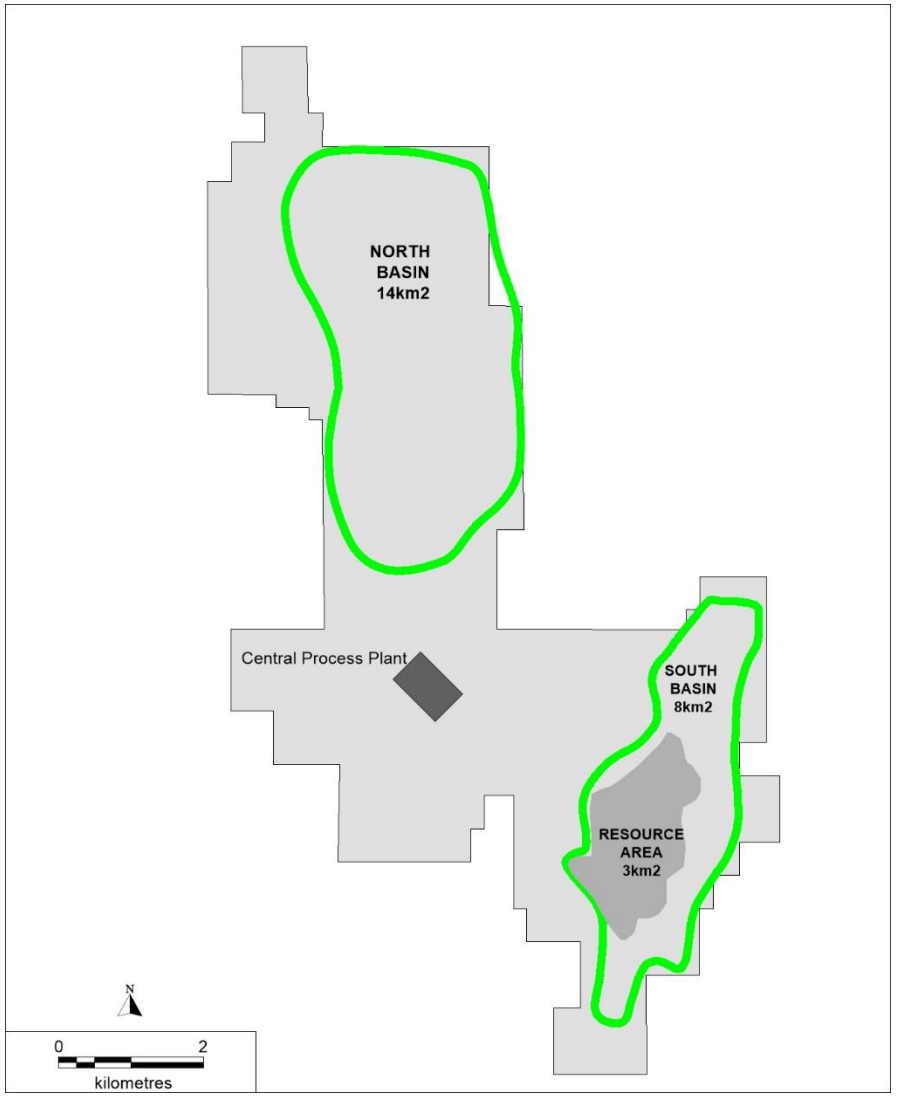
Rhyolite Ridge Lithium-Boron Project

- Located in Silver Peak Range - Part of western Nevada's Basin and Range province
- Tertiary volcanic rocks of Silver Peak Caldera
- Precambrian and Cambrian basement
- Current JORC Mineral Resource[1] of **146.5Mt** containing **1.2Mt of lithium carbonate** and **11.9Mt of boric acid** – all within 3km^2 of South Basin
- **Total combined prospective area of over 22km^2**
- Initial mine plan of **22ktpa LCE for 26 years (572kt)** representing only 41% of current Resource



1. *See Company announcement titled "Ioneer delivers DFS that confirms Rhyolite Ridge as a world-class lithium-boron Project" dated 30 April 2020*

A unique world class deposit with multi-generational scale potential

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Rhyolite Ridge Lithium-Boron Project

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Fact Sheet[1]

Location	Nevada, USA
Project Stage	Bankable Feasibility Study (April, 2020)
Products	Lithium Carbonate, Boric Acid
Reserves[2]	60Mt
Production	Li 22,000 tpa B 174,400 tpa
All in sustaining cash cost	US$2,510/t of LCE
EBITDA	US$288M (LOM)
After-tax NPV_8	US$1.265B
After-tax IRR	20.8%
Price assumptions	Li Carb – US$11,740/t Boric Acid – US$710/t

1. *See Company announcement titled "Ioneer delivers DFS that confirms Rhyolite Ridge as a world-class lithium-boron Project" dated 30 April 2020*
2. *See Company announcement titled "Rhyolite Ridge Ore Reserve Increased 280% to 60 million tonnes" dated 30 April 2020.*

Rhyolite Ridge Lithium-Boron Project

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Timing:
- Rhyolite Ridge will be the first new lithium producer in the USA in over 50 years
- Construction to begin in 2024, and production in 2026 in time for ramp up in domestic demand

Initial Production:
- Phase 1 production of 22kt of lithium carbonate and 174kt of boric acid for over 26+ years
- Options for further expansions

Low cost:
- Very low cost Li producer due to substantial offset from boric acid revenue
- Approx 70% of costs covered by revenue from boric acid sales

Financing in place:
- Conditional debt and equity in place for up to ~US$1.2 billion
- Binding lithium & boron offtake agreements

Significant upside potential:
- Resource increase and options for expansion

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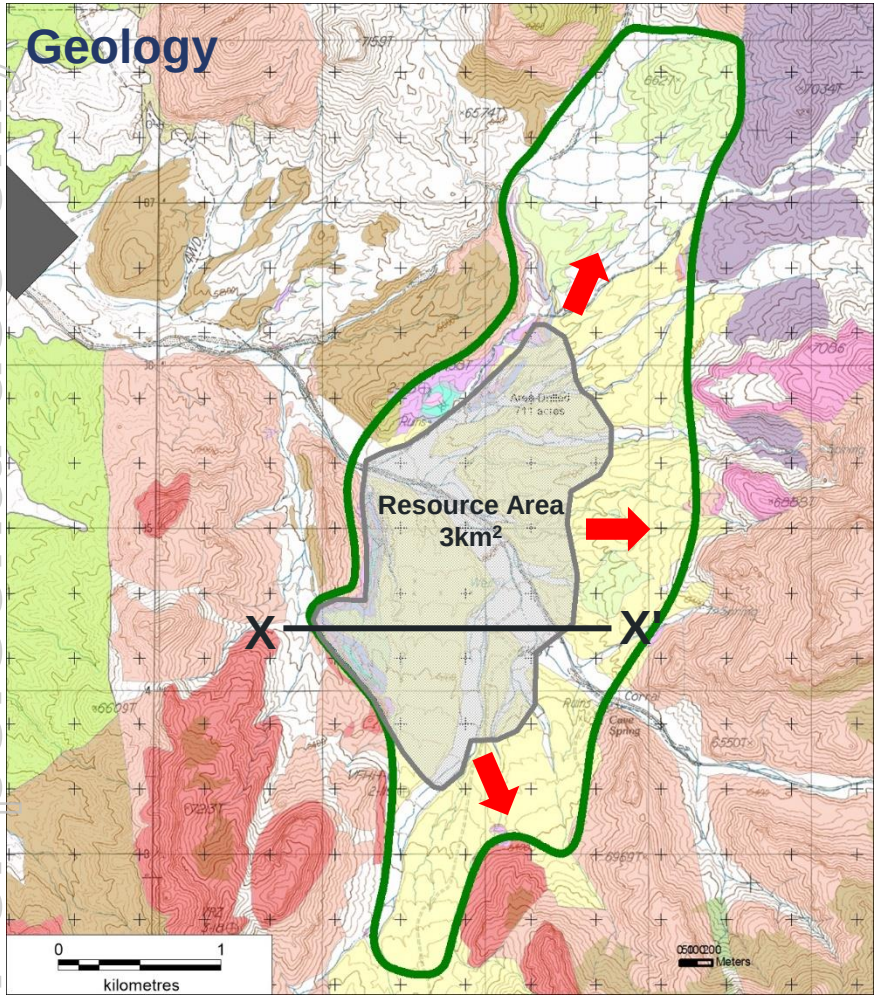
3 Growth opportunities

South Basin – Significant growth opportunity



Prospective area - 8 sq km

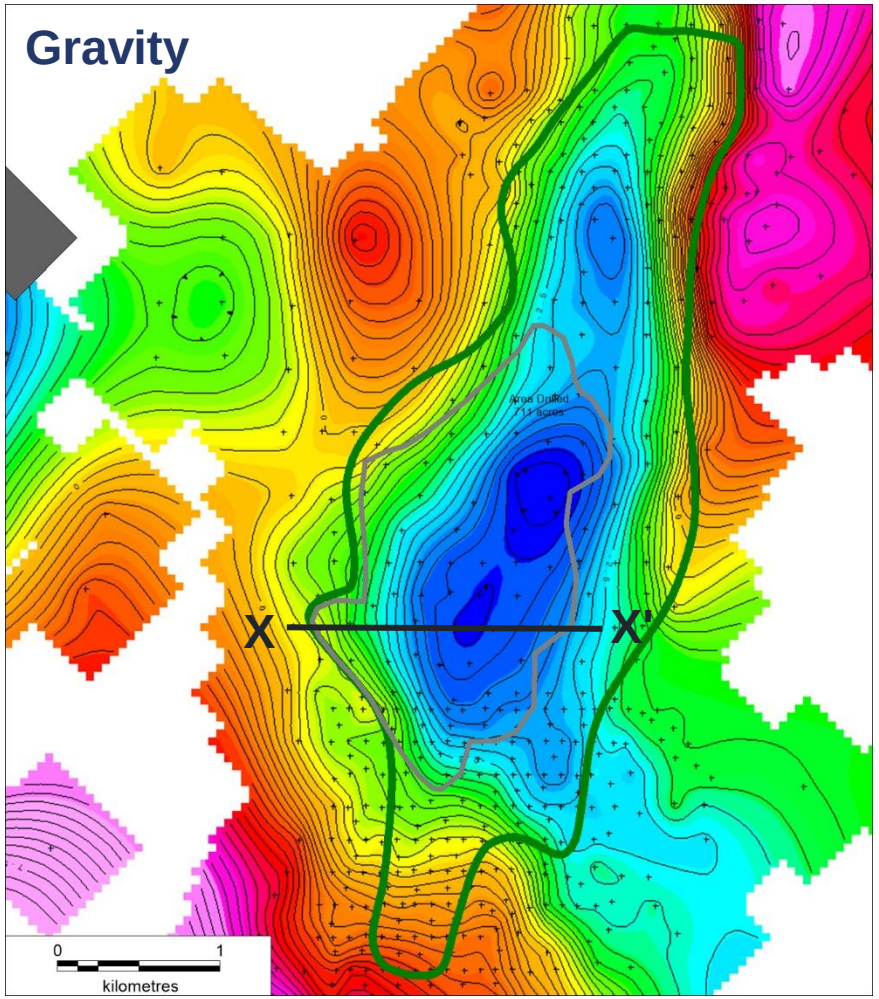
Over 2x larger than footprint of current **146.5Mt Mineral Resource**

Mineralisation is open to north, south and east

Gravity defines the basin

Mineral Resource update due March quarter 2023

Extension drilling to follow permitting Record of Decision (ROD) expected Jan 2024



Current 26-year mine plan based on 41% of Resource, significant growth potential

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Current Resource is exclusively high boron layers (B5 and L6)

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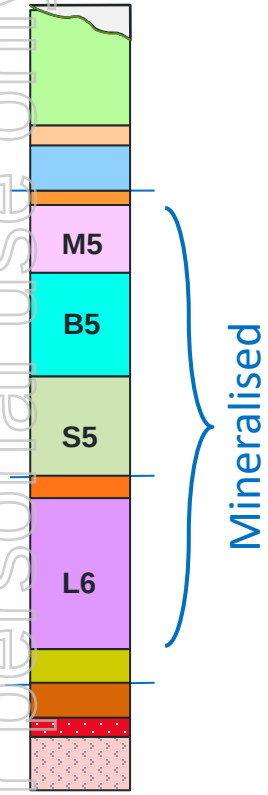
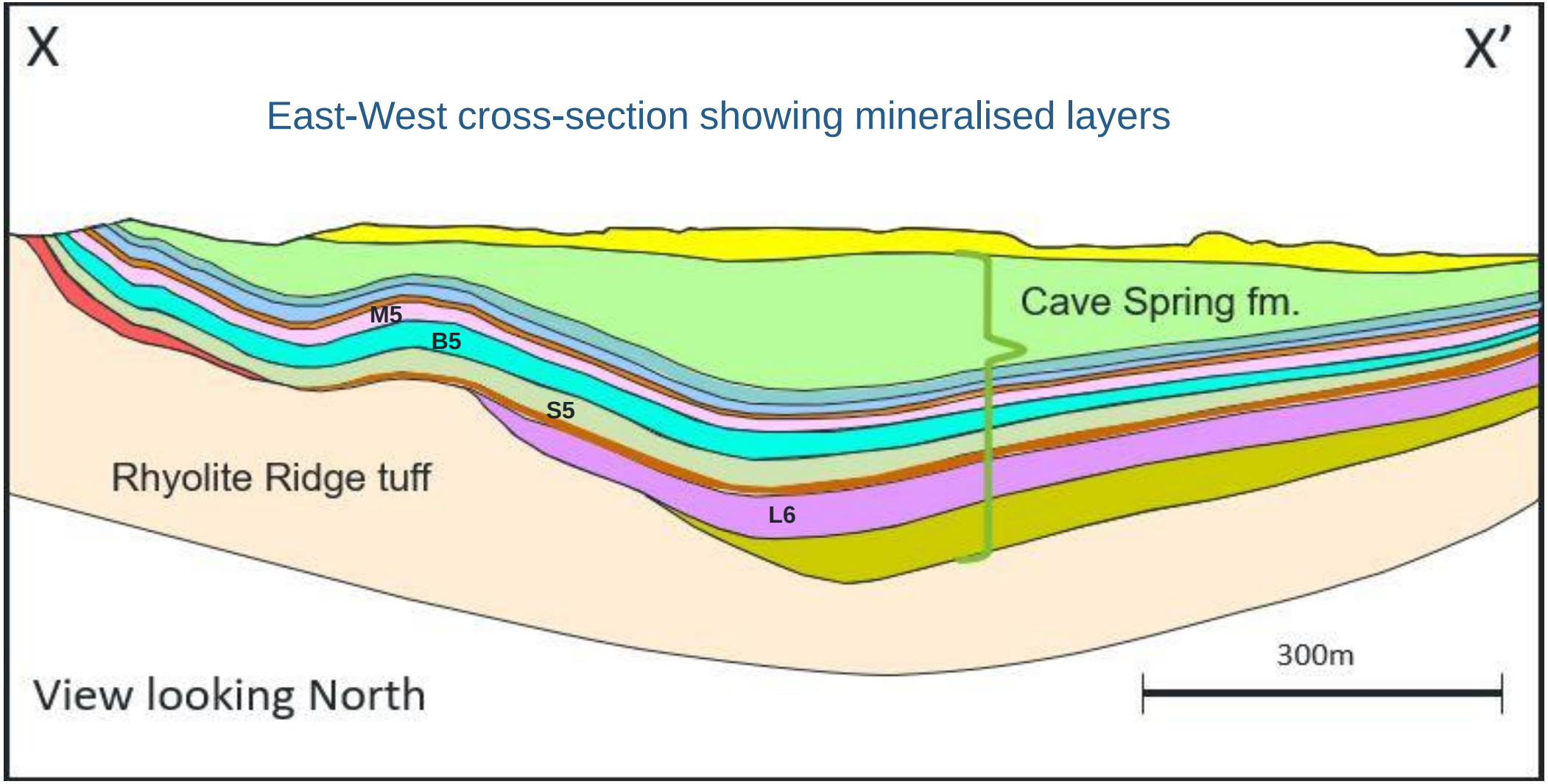
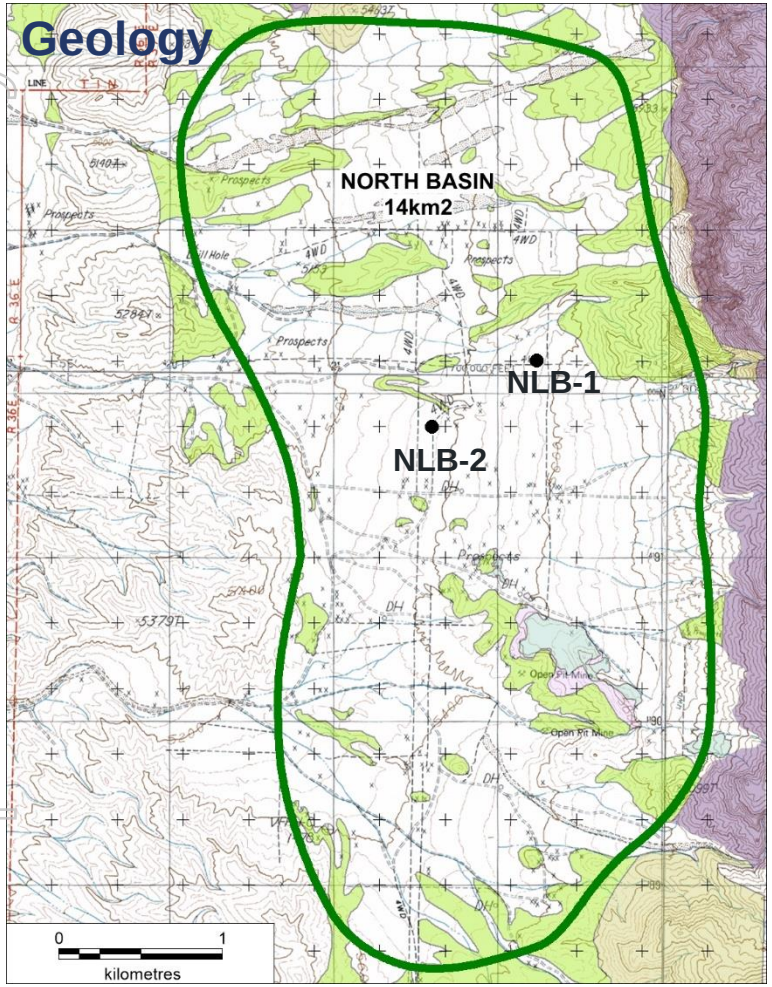




All four mineralised layers provide upside and optionality

North Basin – Another big growth opportunity



Prospective area of 14 sq km

Over 4x larger than footprint of South Basin Resource

US Borax (Rio) - >50 holes 1980-90s

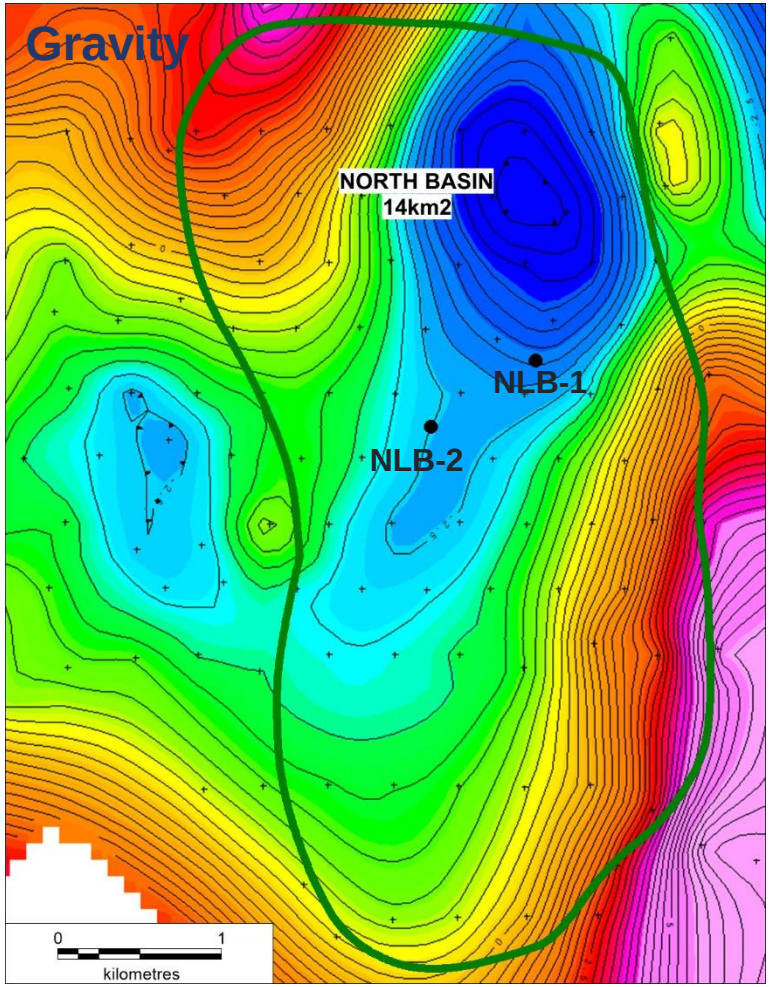
2 holes drilled by INR in 2016[1]

NLB-1 - 191m @ 1158ppm Li & 0.2% B from 23m

NLB-2 - 111m @ 1212ppm Li & 0.2% B from 3m

Gravity defines basin framework

Leach tests in progress



1. *See Company announcement titled "Quarterly Activities Report, March Quarter, 2017" dated 28 April 2017*

Lithium and boron mineralisation similar to South Basin, thick and shallow

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North Basin v's South Basin

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	South	South Update	North
Total prospective area	8 km^2		14 km^2
Drilling	112 holes (24,385m)		2 holes – INR (394m)
Typical Lithium range	1,500 - 2,400ppm		1,100 – 1,500ppm
Typical Boron range	High: 0.5 – 2% Low: 0.1 – 0.2%		High: 0.1 – 0.5% Low: 0.01 – 0.05%
Acid Leachable	Yes		Yes
JORC Ore Reserve[1]	60Mt	??	???
JORC Mineral Resource[1]	146.5Mt	??	???
Net Present Value[1]	US$1.265 billion (April 2020, 8% real)	??	???

1. *See Company announcement titled "Ioneer delivers DFS that confirms Rhyolite Ridge as a world-class lithium-boron Project" dated 30 April 2020*

South Basin

Current DFS a 'starter pit' for mine

Multiple mineralised zones not in current Reserve and Resource estimate

Resource update due March quarter

Extension potential - Open in three directions

North Basin

Drilling to define Resource

Medium grade lithium, lower grade Boron

Mineralisation open in all directions

From surface, low strip ratio

No Tiehm's buckwheat

Both basins offer significant potential for Resource growth and mine life expansion

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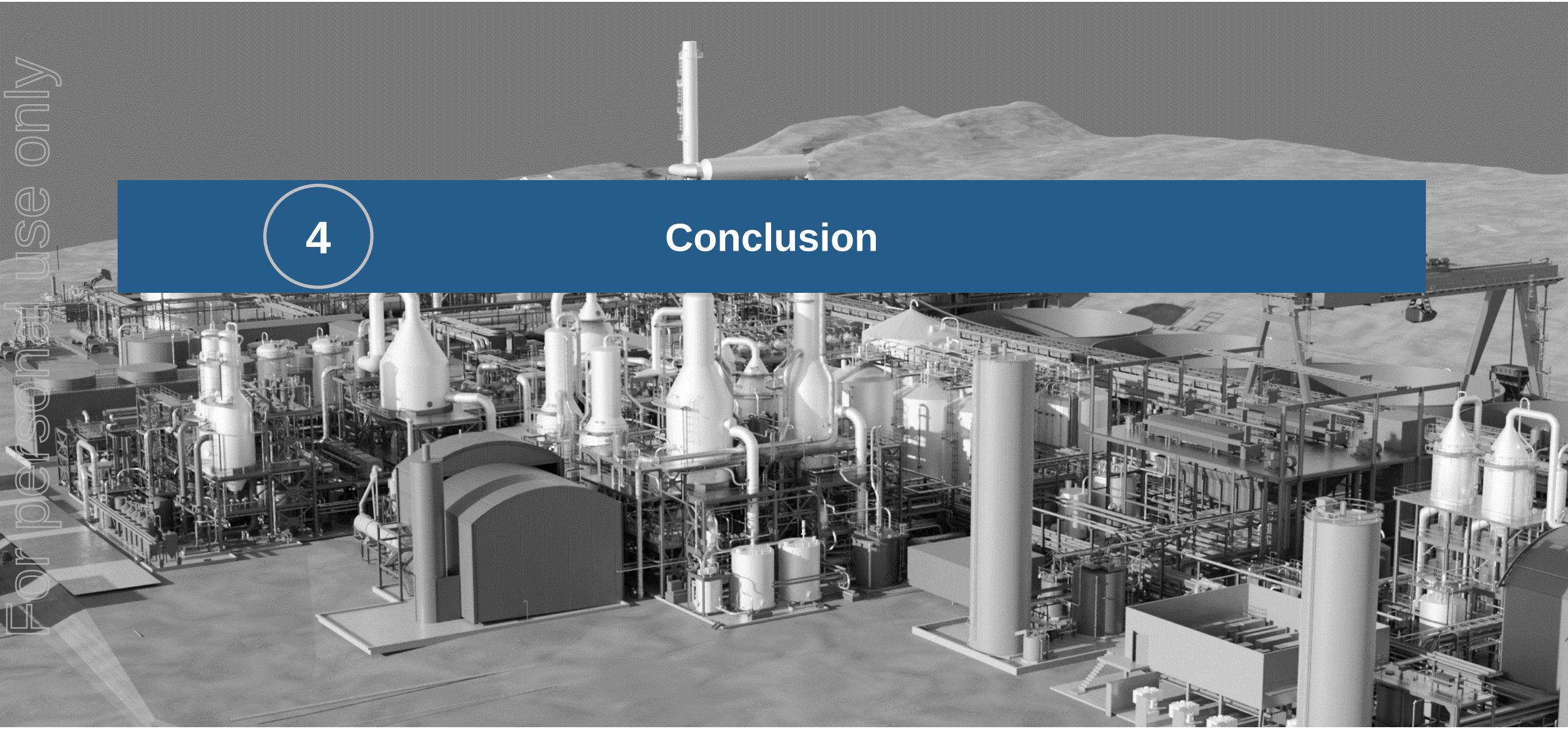

4 Conclusion

Why Ioneer

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THE RIGHT COMMODITIES
Lithium carbonate and boric acid

THE RIGHT LOCATION
Positioned to serve the U.S. EV battery supply chain

AN EXPERIENCED TEAM
With a proven track record

A UNIQUE WORLD CLASS DEPOSIT
With multi-generational scale potential

THIRD PARTY VALIDATION
US DOE, Sibanye Stillwater, Ford Motor, PPES, EcoPro

NEAR TERM NEWSFLOW
Permitting progress, Resource update, Exploration

Plug in to the Future

Contact Information

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Appendix

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Resources & Reserves

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	Metric Tonnes (Mt)	Li Grade (ppm)	B Grade (ppm)	Equivalent Grade Li_2Co_3 (%)	Equivalent Grade H_3BO_3 (%)	Equivalent contained Tonnes Li_2Co_3 (kt)	Equivalent contained Tonnes H_3BO_3 (kt)
Mineral Resources							
Measured Resource	39.0	1,700	14,550	0.9	8.3	360	3,240
Indicated Resource	88.0	1,550	14,150	0.8	8.1	730	7,110
Measured & Indicated Resource	**127.0**	**1,600**	**14,270**	**0.8**	**8.2**	**1,090**	**10,350**
Inferred Resource	19.5	1,600	13,800	0.9	7.9	170	1,530
Total Mineral Resource	**146.5**	**1,600**	**14,200**	**0.9**	**8.1**	**1,250**	**11,890**
Ore Reserves							
Proved Reserves	29.0	1,900	16,250	1.0	9.3	290	2,700
Probable Reserve	31.5	1,700	14,650	0.9	8.4	280	2,620
Total Proved and Probable Ore Reserve	**60.0**	**1,800**	**15,400**	**1.0**	**8.8**	**580**	**5,310**

- Approximately half of the Ore Reserve is classified as Proved
- Ore Reserve provides 94% of tonnes in current 26-year mine plan
- Total Mineral Resource of 146.5 mt containing a total of 1.2 mt of lithium carbonate and 11.9 mt of boric acid

Source: For further information on Resources and Reserves see ASX release titled Rhyolite Ridge Ore Reserve Increased 280% to 60 million tonnes dated 30 April 2020. Note, totals may differ due to rounding. Mineral Resources include Ore Reserves.

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History of Ioneer's Ownership of Rhyolite & Development Schedule

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Timing of permitting key driver to development time line

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2016	2017	2018	2019	2020	2021	2022	2023	2024
▪ Acquired initial interest in Project ▪ Maiden Resource	▪ Start drilling campaign ▪ Procure water rights ▪ Double Mineral Resource ▪ Discovery of heap leach Li-B extraction ▪ Completion of mining study	▪ First production of Boric Acid ▪ Release of PFS ▪ Complete exploration drilling ▪ Maiden Reserve	▪ Start Pilot Plant ▪ LiCO produced at Pilot Plant ▪ BA – Binding offtake	▪ Reserves & Resources upgrade ▪ Complete DFS ▪ Complete BA Sales & Distribution ▪ Final Plan of Operation deemed complete by BLM	▪ Production of battery grade LiOH ▪ Air Permit issued ▪ First Li offtake signed with EcoPro Innovation ▪ Water Control Permit issued ▪ JV with Sibanye-Stillwater ▪ DOE Loan submission accepted as complete	▪ US Listing on Nasdaq ▪ Li offtakes signed with Ford Motor and PPES (Toyota/ Panasonic JV)	▪ Receipt of conditional loan commitment from US Department of Energy ▪ NOI Published	▪ Anticipated Record of Decision (ROD) ▪ Construction ready ▪ FID

Note: All future dates and times are indicative and subject to change.