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Investor Presentation

March-April 2023

Providing Material in the U.S. for a Sustainable Planet

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Competent Persons Statement

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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Why Ioneer

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One of two near term projects to address the need for locally sourced U.S. lithium

Positioned to become a cornerstone lithium supplier to the domestic U.S. EV battery supply chain

Ford	Toyota / Panasonic	EcoPro

Corporate Snapshot

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Capital Structure
(As at March 2023)

SHARES OUTSTANDING	2.10B
PERFORMANCE RIGHTS AND OPTIONS OUTSTANDING	36.3M
CASH BALANCE – 1 Jan 2023	US$69.4M
SHARE PRICE ASX – 27 Mar 2023	A$0.27
ADR PRICE NASDAQ (1 ADR = 40 ASX shares)	US$7.31
MARKET CAPITALISATION	A$567m (US$383m)

ASX Share Price

Shareholders (February 2023)

Insider Ownership
5.6%

Top 50 Ownership
~62.0%

Substantial Holders
Centaurus 12.1%
Sibanye-Stillwater 7.0%

Institutional holders
22.7%
(Excl. Centaurus & SSW)

Research Coverage

STIFEL | GMP | B | cg/ Canaccord Genuity
ORD MINNETT | BRIDGE STREET CAPITAL PARTNERS | Loop Capital Markets

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

Proven, Experienced Team

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Board of Directors

JAMES D. CALAWAY
Executive Chairman
FORMER:
Non-exec chairman of Orocobre Ltd
USA

ALAN DAVIES
Non-executive Director
FORMER:
Chief Executive, Energy & Minerals of Rio Tinto
AUS

BERNARD ROWE
Managing Director
IONEER:
Managing Director, CEO, Founder
AUS

ROSE McKINNEY-JAMES
Non-executive Director
FORMER:
President and CEO of Corporation for Solar Tech & Renewable Resources
USA

MARGARET WALKER
Non-executive Director
FORMER:
VP Engineering and Technology Centers, Dow Chemical
USA

STEPHEN GARDINER
Non-executive Director
FORMER:
CFO Oil Search
AUS

Management Team

JAMES D. CALAWAY
Executive Chairman
USA

BERNARD ROWE
Managing Director
AUS

IAN BUCKNELL
CFO & Company Secretary
AUS

MATT WEAVER
Snr VP Engineering & Operations
USA

KEN COON
VP Human Resources
USA

YOSHIO NAGAI
VP Commercial Sales & Marketing
JPKR

CHAD YEFTICH
VP Corporate Development & External Affairs
USA

Global Lithium Shortage Requires New Projects

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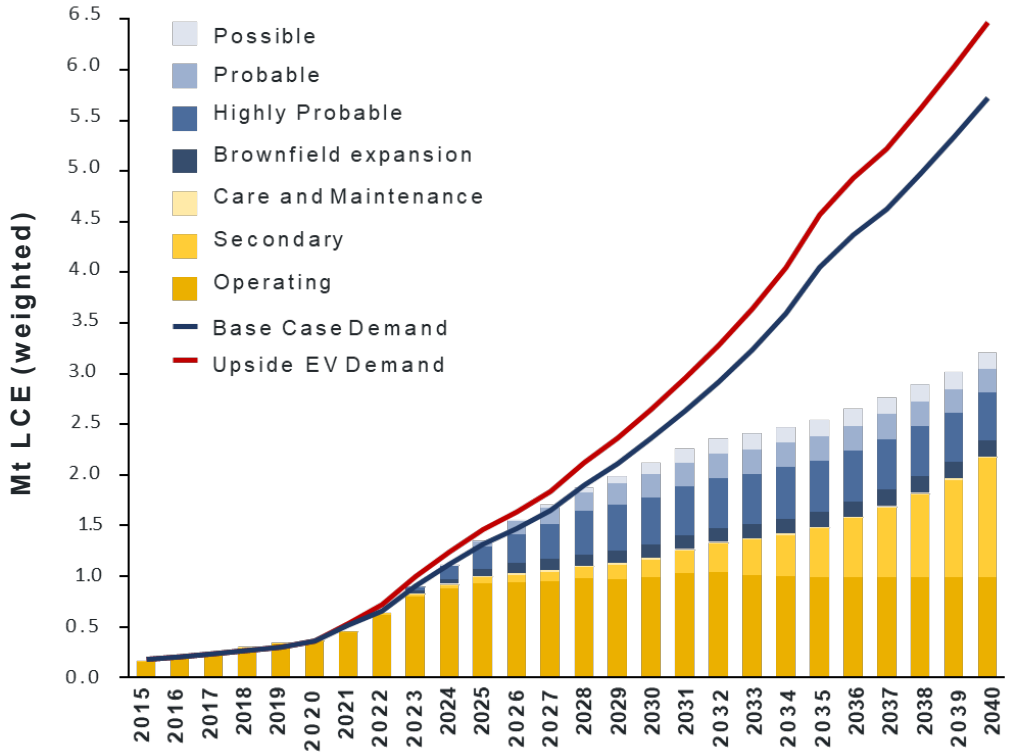
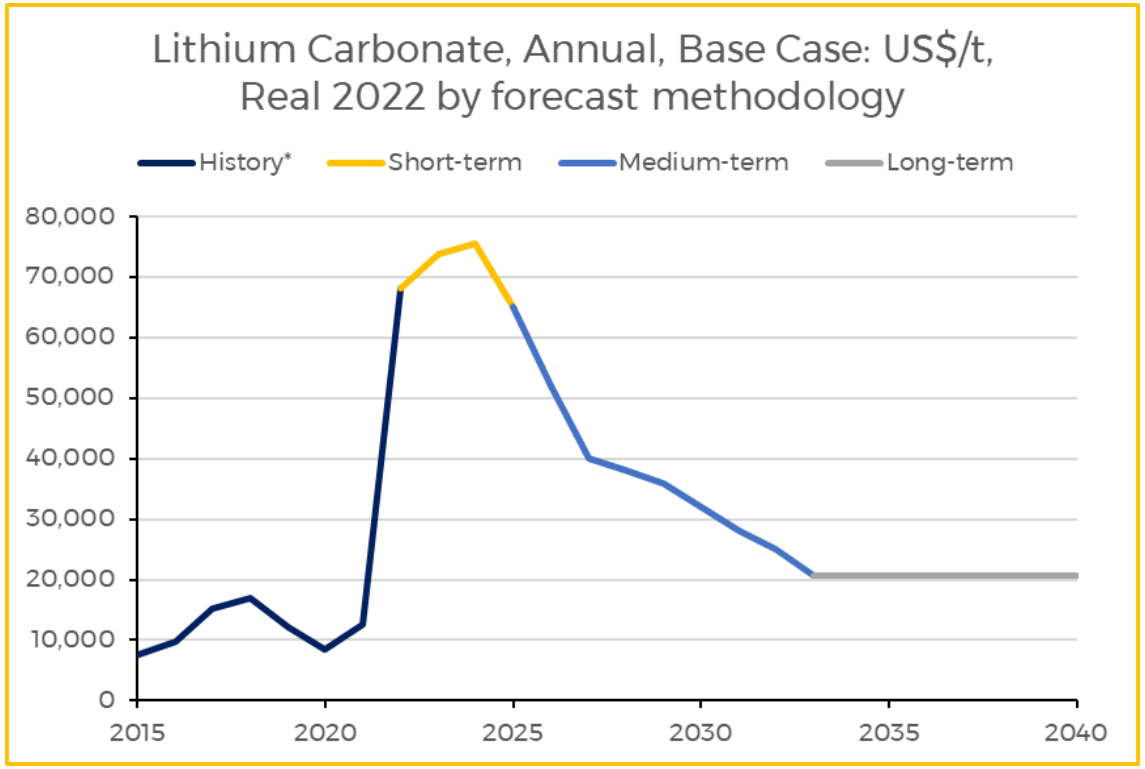
Lithium Market Balance



Source: Benchmark Mineral Intelligence – Lithium Forecast Q4 2022

Lithium Carbonate Price Forecast



Source: Benchmark Mineral Intelligence – Lithium Forecast Q4 2022

New Projects take time to develop – Supply shortages expected to continue

The Four Stages of Lithium-ion Battery Production

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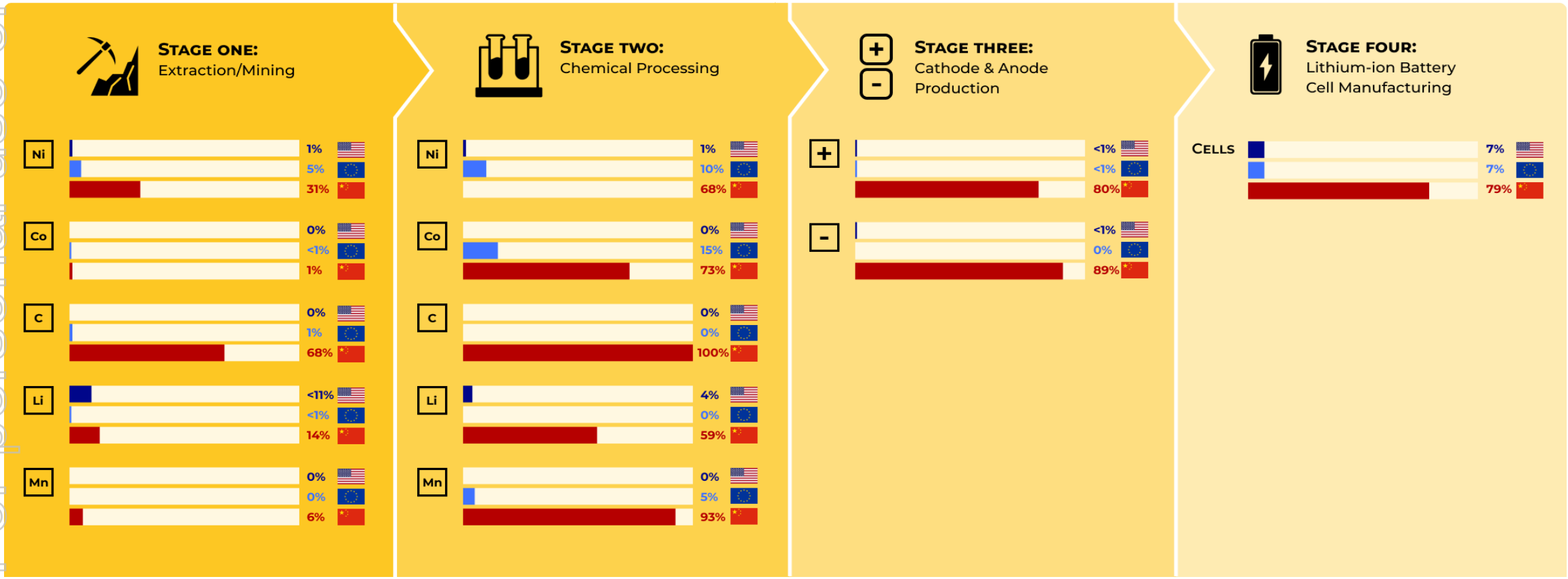
Rhyolite Ridge



Spodumene Producers

Source: Benchmark Mineral Intelligence

Forecast U.S. Lithium Market

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Gigafactory capacity (demand)

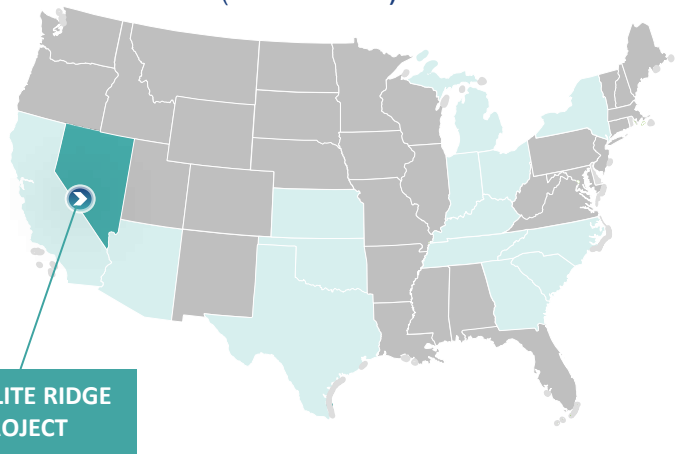
Forecast	GWh	No. Gigafactories	Demand Est. LCE ktpa
2022 Actual	107	8	
2025 F/C	462	27	396
2030 F/C	1099	33	942

Forecast domestic supply

Forecast	Supply Est. LCE ktpa
2021 Actual	5
2025 F/C	122*

** Includes Rhyolite Ridge Production*

States with current & planned Gigafactories by 2030
(Shaded in blue)



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

- **IRA advantage** – source for U.S domestic lithium supply
- **Strategic location** – Nevada, a tier one mining jurisdiction
- **Close to customer markets** – World's 2nd largest car market
- **Expansion potential**

Rhyolite Ridge is ideally positioned to serve the U.S. EV market

Source: Benchmark Mineral Intelligence Report – Gigafactory Assessment, February 2023

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Global Borates Market

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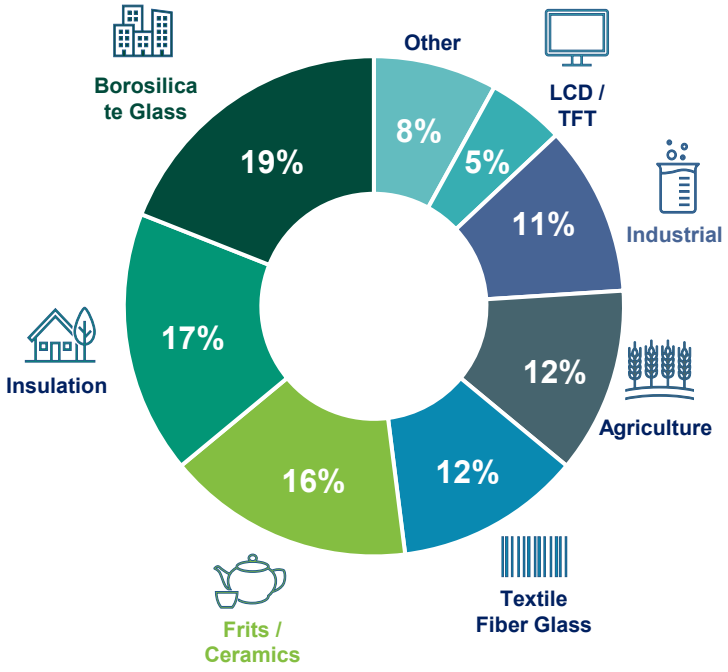
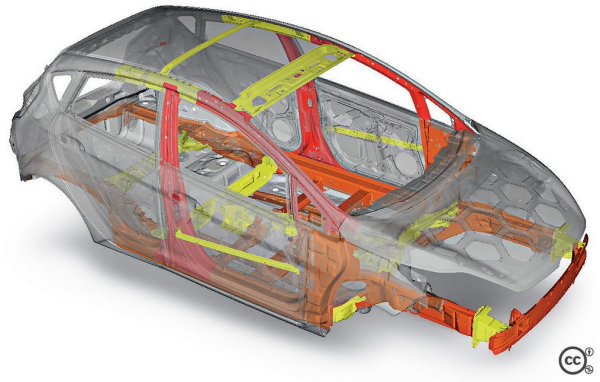
Demand by End Use



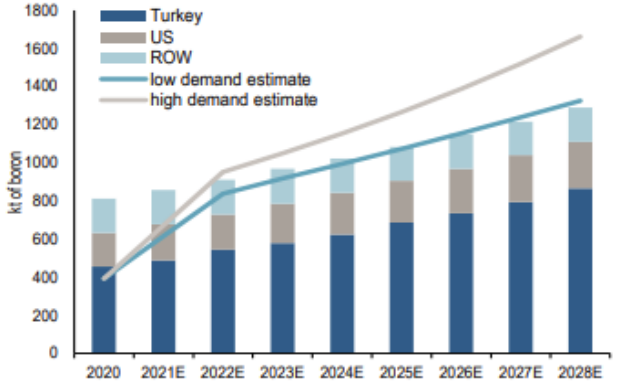
The Boric Acid Market

- **Demand:**
  - Increasing demand from agriculture, solar, specialty glass and permanent magnets for EVs
  - U.S. world's 2nd largest boric acid market (23%) behind China (30%)
- **Market:**
  - Duopoly between Eti Maden (Turkey) and Rio (California)
  - Eti (50%) and Rio (30%) of refined borate market
- **Reserves:**
  - 72% of global Reserves are in Turkey
- **Pricing:**
  - Stable pricing over many decades (US$600-$800tpa)
  - Forecast CAGR of between 4% and 6%.

Boron used extensively in EVs



Estimated Demand Vs Supply



Source: ABR, Roskill, Rio Tinto, Eti Maden, Credit Suisse estimates

Ioneer's boric acid offtake strategy completed

Notes: Borates demand includes refined chemicals (~80% of demand) such as boric acid and raw mineral products (~20% of demand). Chart inputs are Ioneer estimates derived from industry research.

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Rhyolite Ridge Lithium-Boron Project

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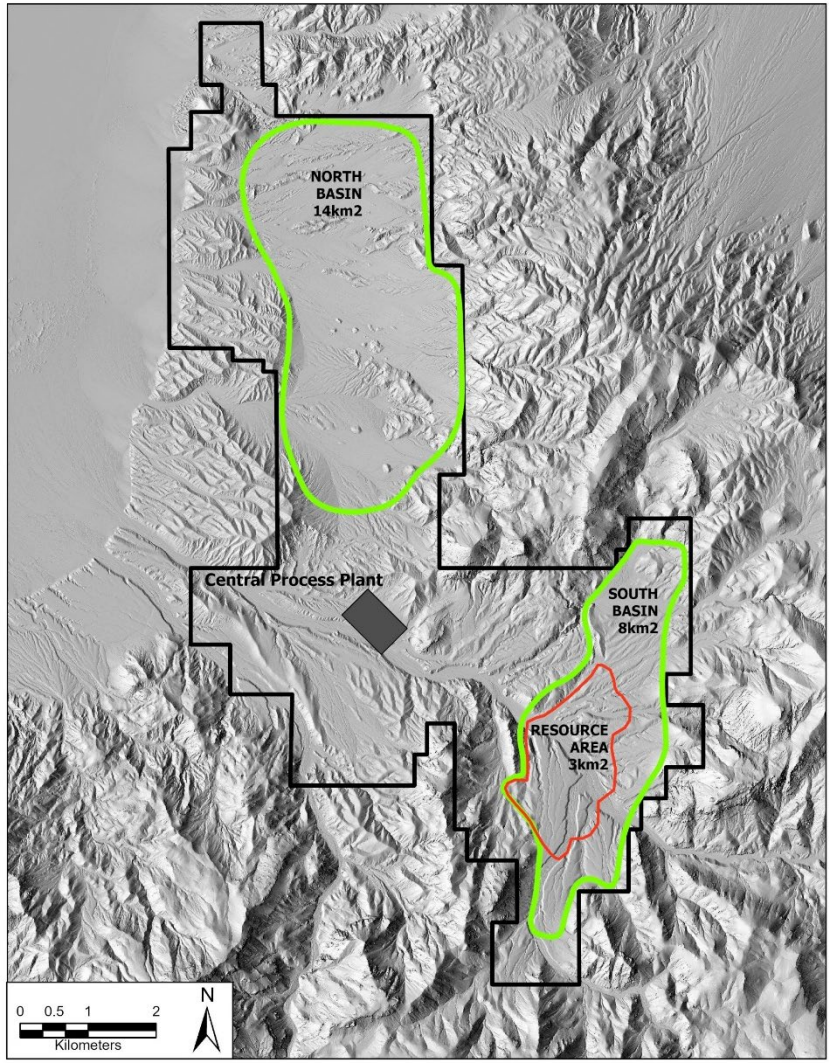
- 100% interest in two sedimentary basins with lithium-boron mineralisation
- ~5km apart with a total prospective area covering approx. 22km^2
- South Basin - only 3km^2 drilled to date
- Mineral Resource[1] of **146.5Mt** containing **1.2Mt of lithium carbonate** and **11.9Mt of boric acid** - exclusively high boron layers
- Mineral Reserve[1] of **60.0Mt** containing **0.6Mt of lithium** carbonate and **5.3Mt of boric acid**
- Potential to produce substantially more over time - expanding focus to evaluate future growth options



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 Economics

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INR

Fact Sheet[1]

Location	Nevada, USA
Project Stage	Bankable Feasibility Study (April, 2020)
Products	Lithium Carbonate, Boric Acid
Mine Plan	64Mt (2.5Mtpa x 26 years)
Production	Li 22,000 tpa B 174,400 tpa
Binding Offtakes	80% of Li production
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
Mine Life	26 years

Producing Two Products

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.

2020 DFS Confirmed Projects Compelling Economics

Best in Class Partners

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Technically led approach

>US$120m invested to date	Fluor led DFS and appointed EPCM

Signed binding lithium offtake agreements

Ford	Toyota/Panasonic (PPES)	EcoPro

Funding

Sibanye-Stillwater to be a 50% JV partner for US$490m[1]	U.S. Dept of Energy Loan Programs Office Conditional Commitment offer for a loan of up to US$700m[2]

[1]Subject to closing conditions as outlined in the 16 September 2021 announcement "Sibanye-Stillwater to Invest US$490 Million to Advance Rhyolite Ridge to Production"
[2]Subject to closing conditions as outlined in the 16 January 2023 announcement "U.S. Department of Energy Offers Conditional Commitment for a loan of up to US$700 Million"

Positioned to be a Cornerstone Supplier to the U.S. EV Market

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COMPLETE

1 To sign binding offtakes that support debt

Binding offtake agreements in place:

- Boric Acid
- Lithium

NEAR COMPLETE

2 To be fully funded

Conditional Commitments in place:

Equity - Sibanye-Stillwater

Debt - US Dept of Energy

ON TRACK

3 To be construction ready in engineering

PFS, Pilot Plant and DFS Complete

Key contracts awarded

ON TRACK

4 To be fully permitted

Air and Water Permits Awarded

NEPA Process for Federal permit underway

The white hill at Rhyolite Ridge, showing the Searlesite ore body at surface

Commitment to Sustainability

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Designed to minimise impact on the environment

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Low Emissions	• Majority of on-site power from CO^2-free energy production, low greenhouse gas emissions. • Mobile equipment meets Tier 4 EPA standards
Low Water Usage	• Project design implements best-in-class water utilization while recycling the majority of water usage. • Expected to use 30x less water per tonne than existing U.S. production
Small Mine Footprint	• No evaporation ponds or tailings dam
Efficient Equipment	• Generating all power on-site. • Automation of mine haulage equipment
Commitment to Sustainability	• All baseline studies for EIS completed over 2 years. • Ongoing commitment to the environment and the protection and conservation of Tiehm's buckwheat • Implementation of TSM[1] ESG program

[1] *Towards Sustainable Mining*

Proposed Rhyolite Ridge Process Plant

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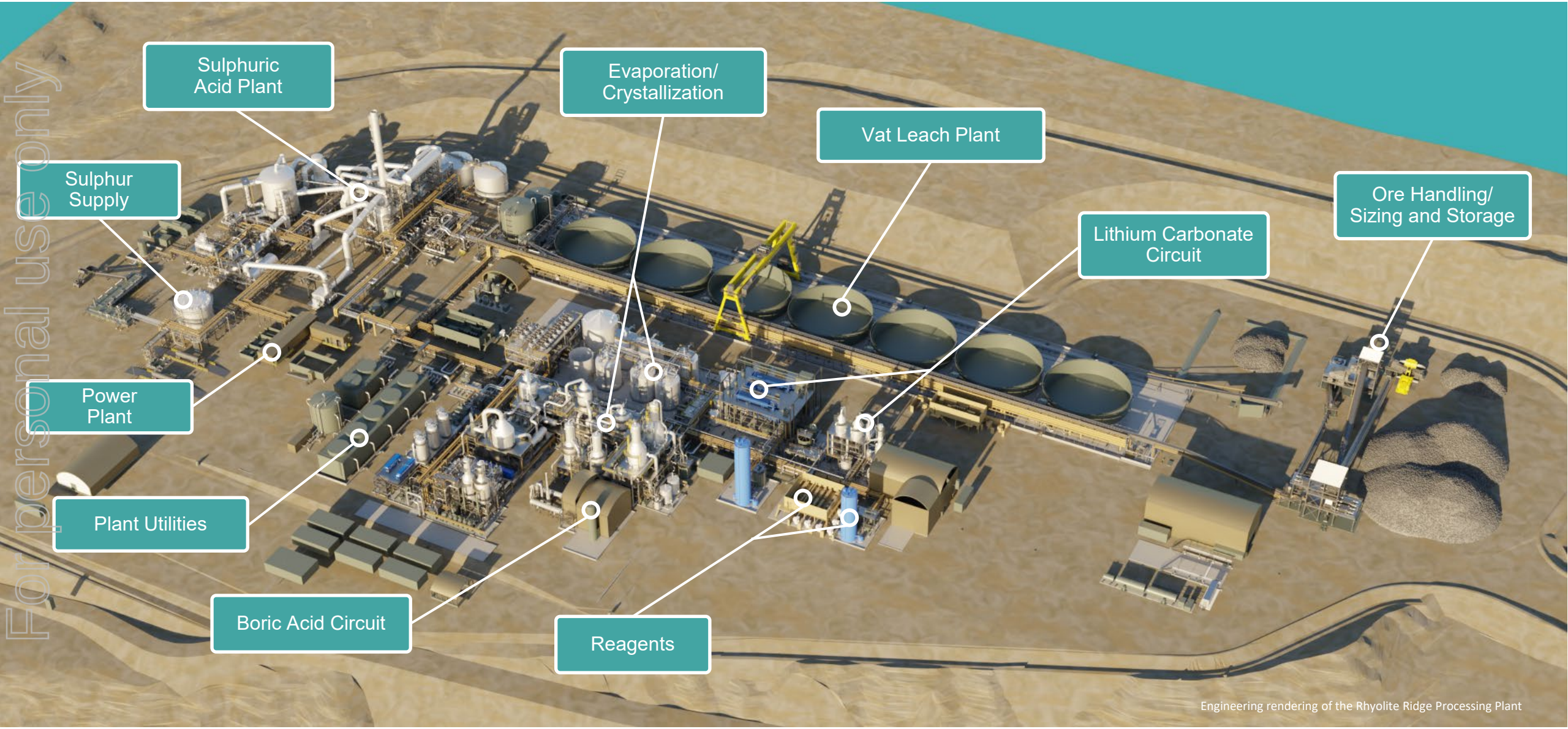

Engineering rendering of the Rhyolite Ridge Processing Plant

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Permitting (NEPA) Process

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Director of the DOE Loan Programs Office Jigar Shah "said the loan is intended to 'provide assurances to equity investors' that the administration believes the project has 'a pathway forward' to obtaining the permit." (The Electric 18/01/2023)

Pre-permitting

2016
Acquired initial interest in Rhyolite Ridge Project

2017
Exercised option to acquire interest

2018
Notice level (BLM-permitted) exploration drilling activity

Permitting Process

2019
Commenced environmental baseline studies

2020
Held pre-application meetings with BLM

2020
Submitted Mine Plan of Operations to BLM and BLM contracted Stantec to prepare and complete EIS

Summer 2021
Received
1) Air Quality and
2) Water Pollution Control permits from Nevada

June 2022
Submitted revised Mine Plan of Operations that incorporated additional key commitments relating to buckwheat conservation

Dec 2022
Publication of Notice of Intent by BLM

Dec 2022
Listing of Tiehi… buckwheat and designation of critical habitat under Endangered Species Act

Jan - Mar 2023
Public scoping comment period

We are Here

Expected Q3 2023*
Draft Environmental Impact Statement Issued

Expected Q3 2023*
Draft EIS public comment period (45 –days)

Expected Q4 2023 / Q1 2024*
Final EIS Published (30-day review period)

Expected Q1 2024*
Record of Decision Issued by BLM

Expected 2026*
Rhyolite Ridge Commences Operations

Next key permitting milestone is the publishing of the Draft Environmental Impact Statement

** All future dates subject to change without notice*

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Compelling Opportunities for Organic Growth

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Driven by…

Burgeoning Demand from OEMs

A unique opportunity – Inflation Reduction Act (IRA) requiring U.S. battery materials

Sheer quality and scale of opportunity within existing portfolio

Limited number of U.S. projects that can respond

Key Growth Opportunities

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Four areas aimed at increasing lithium production:

Within initial mine plan footprint

1. High boron-lithium

- Current 26-year mine plan based on only 41% of Resource
- B5 and L6 zones

2. Low boron-lithium

- M5, S5 and L6 zones
- Already in mine plan for stockpiling
- Evaluation of processing options is underway

3. North Basin

- 4x larger than South Basin footprint
- Leach tests in progress
- Well defined by gravity and historic drilling

4. Other Projects

- Non-Rhyolite Ridge
- Existing tenements
- Lithium and Boron

Near Term | Medium Term | Long Term

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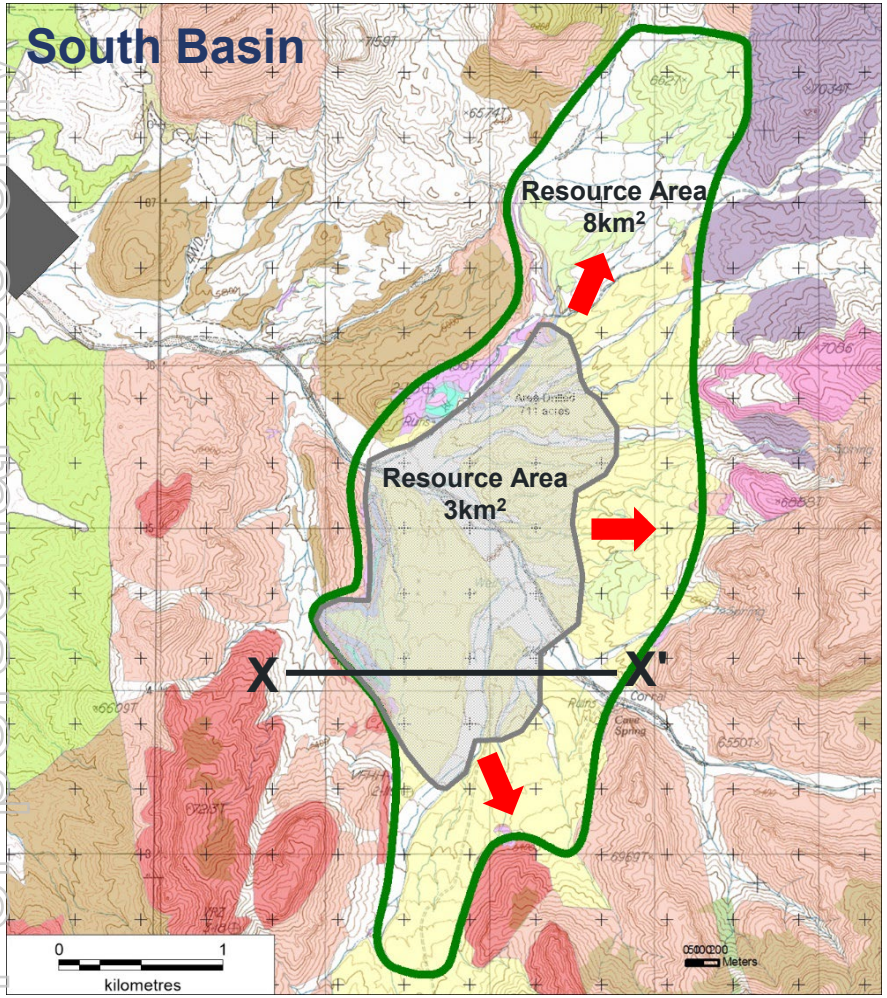
Significant growth opportunities

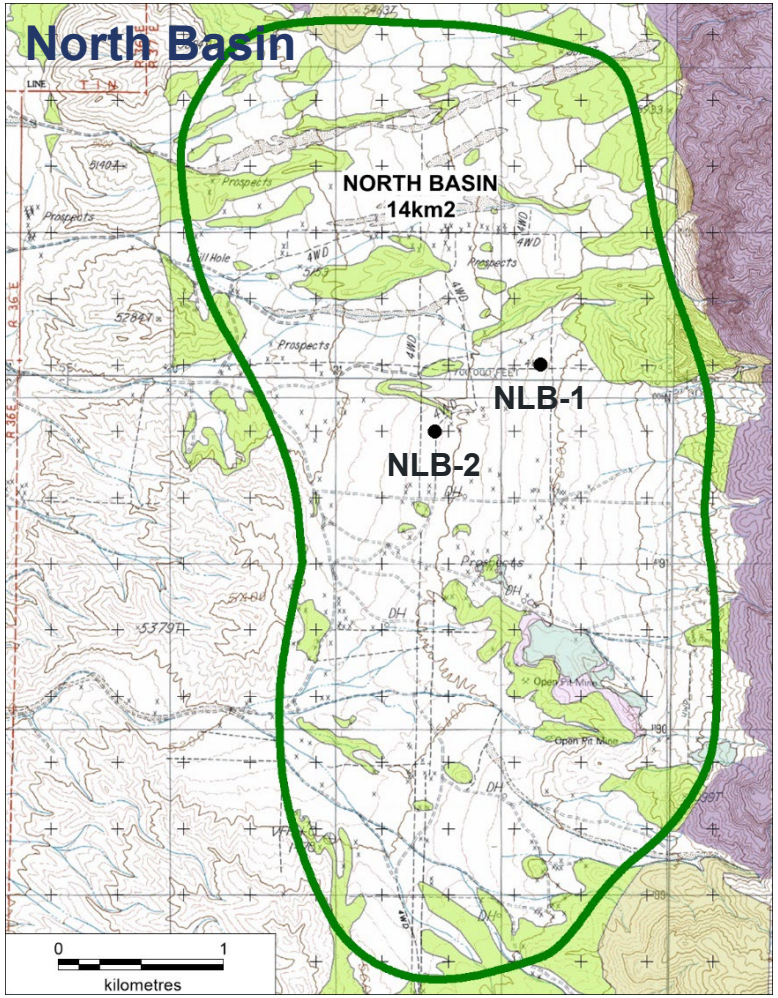


South Basin

- Over 2x larger than footprint of current **146.5Mt Mineral Resource containing 1.2Mt LCE**
- Mineralisation is open to north, south and east
- Mineral Resource update due March quarter 2023

North Basin

- Over 4x larger footprint than South Basin Resource
- US Borax (Rio) drilled >50 holes 1980-90s
- 2 holes drilled by INR in 2016[1]
- Leach tests in progress



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

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North Basin Vs South Basin

	South DFS Project	South Expansion	North
Total prospective area	3 km^2	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	Yes
JORC Ore Reserve[1]	60Mt 0.6Mt LCE	??	???
JORC Mineral Resource[1]	146.5Mt 1.2Mt LCE	??	???
Net Present Value[1] (Based on 64Mt)	US$1.265 billion (April 2020, 8% real)	??	???

South Basin

- Current DFS a 'starter pit' for mine
- Multiple mineralised zones not in current Reserve and Resource estimate
- Resource update due April 2023
- 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

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

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

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Why Ioneer

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THE RIGHT PRODUCTS
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

EXPANSION POTENTIAL
Resource update, Phase 2 and 3 expansions

THIRD PARTY VALIDATION
U.S. DOE, Sibanye-Stillwater, Ford Motor, PPES, EcoPro

CLEAR PATH TO PRODUCTION
With significant organic growth potential

Plug in to the Future

Contact Information

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Appendix

Providing Material for a Sustainable & Thriving Planet

US Department of Energy – Loan Programs Office

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Conditional Commitment

Key Terms

Amount	Up to US$700m
Term	Approx. 10 years
Interest Rate	Applicable U.S. Treasury rates
Rate Type	Fixed from date of advancement
Purpose	Develop Rhyolite Ridge Li-B Project

Highlights

- Proposed loan of up to US$700 million to develop the Rhyolite Ridge Project through the DOE Loan Programs Office's (LPO) Advanced Technology Vehicles Manufacturing (ATVM) program
- A term of approximately 10 years
- Interest rate fixed from the date of each advance for the term of the loan at applicable U.S. Treasury rates.
- Reflects continued strong and dedicated support under the Biden Administration to develop a U.S. domestic EV supply chain
- Financial close of the loan is conditional on several achievements including a positive Record of Decision and Final Investment Decision

"New Conditional Commitment: **Rhyolite Ridge** is a major step towards bolstering domestic lithium production for clean energy technologies, and LPO is excited to further develop an environmentally responsible U.S. supply chain for critical materials." - *Jigar Shah, Director of the DOE LPO 13/1/2023*

https://twitter.com/JigarShahDC/Status/1613901652649738247

** See Company announcement titled "U.S Department of Energy Offers Conditional Commitment for a loan of Up to US $700m for the Rhyolite Ridge Project" dated 16 January 2023*
A conditional commitment is offered by DOE prior to issuing a loan and indicates that DOE expects to support the Rhyolite Ridge Project, subject to the satisfaction of certain conditions including fulfilling remaining legal, contractual, and financial requirements.

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.

Growth Opportunity in Proposed Permitting Footprint

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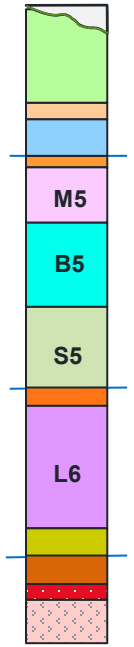

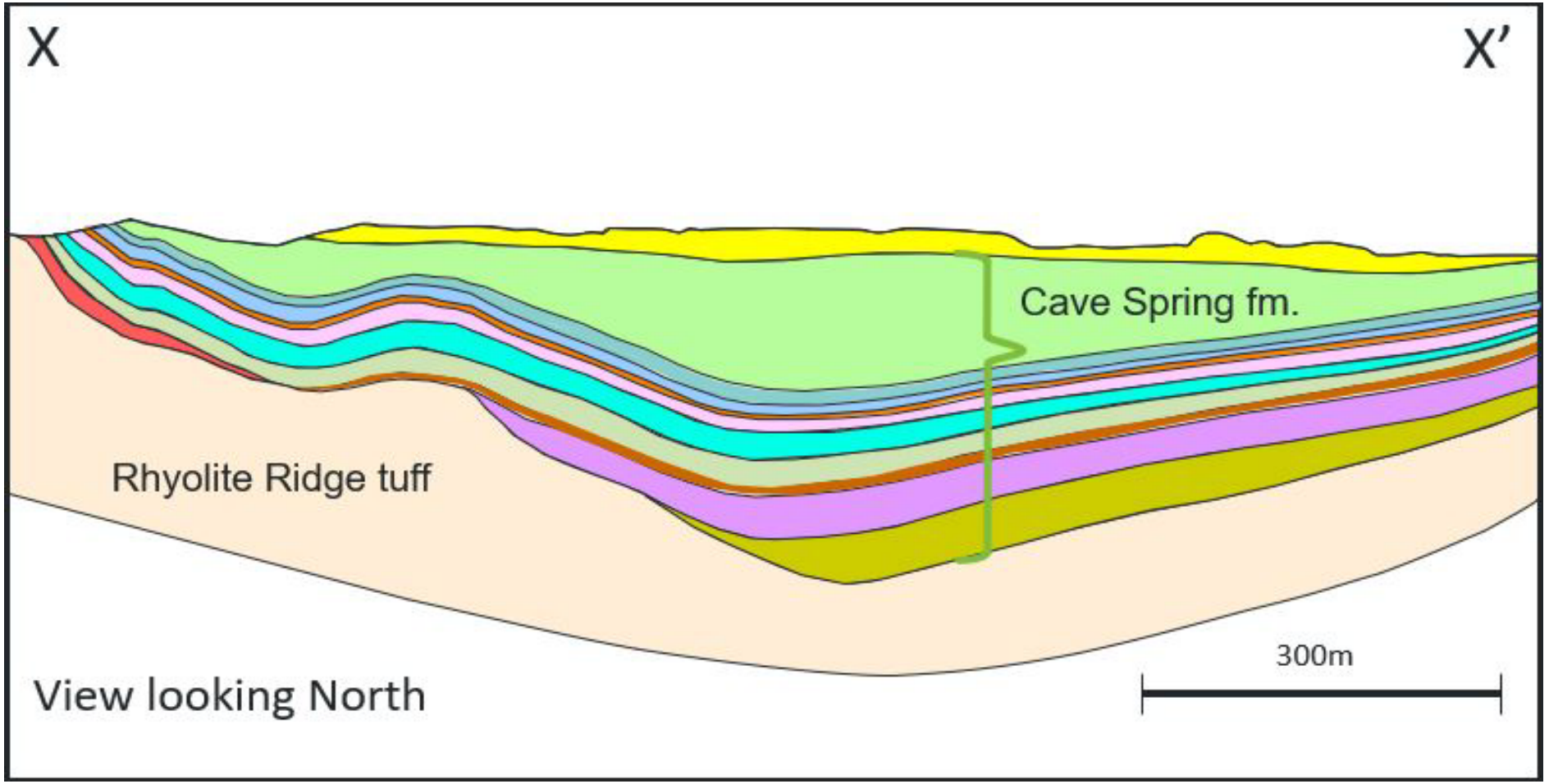

All four mineralised layers provide upside and optionality

History of Ioneer's Ownership of Rhyolite & Development Schedule

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Timing of permitting key driver to development time line

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.