### Ore Reserve Quadruples for Rhyolite Ridge Project; Reaffirms Robust Project Economics

- Rhyolite Ridge Ore Reserve more than quadrupled from 60 million tonnes in 2020 to **247** million tonnes, delivering a mine life of 95 years
- Ore Reserve now contains a total of **1.92 Mt of lithium carbonate** equivalent and **7.68 Mt of boric acid** equivalent
- Underpinning plans for a **large**, **long-life**, **low-cost expandable operation**, producing lithium carbonate, boric acid and then battery-grade lithium hydroxide
- Stable co-product boric acid accounts for an average 25% of annual revenue in the first 25 years; helping ensure positive EBITDA at low lithium prices and EBITDA margin of 65.7% based on average production over first 25 years
- All-in sustaining cash cost of US\$5,745 per metric tonne lithium carbonate equivalent places the Rhyolite Ridge Project in the bottom of the global lithium cost curve
- Compelling Project economics with an after-tax NPV of US\$1.367 billion, and an unlevered, after-tax internal rate of return (IRR) of 14.5%

June 2, 2025 – Sydney, Australia – Ioneer Ltd (ASX: INR, Nasdaq: IONR) (Ioneer) is pleased to announce a 308% upgrade to the Ore Reserve estimate for its 100%-owned Rhyolite Ridge Lithium-Boron Project ('Rhyolite Ridge' or the 'Project') in Nevada, USA, alongside updated Project economics.

The Ore Reserve has increased by 186.6 million tonnes (Mt) and approximately 48% of the Mineral Resource has been converted into Reserve, now estimated at:

- 246.6 Mt at 1,464 ppm lithium and 5,444 ppm boron
- Containing 1.92 Mt of Lithium Carbonate Equivalent (LCE) and 7.68 Mt of Boric Acid Equivalent (BAE)

"Today's updated Reserve and Mine Plan reinforces the importance of Rhyolite Ridge's remarkable mineralogy. Our Ore Reserve estimate of 247 Mt containing a total of 1.92 Mt LCE and 7.68 Mt BAE make it the **largest lithium-boron Reserve in the world**," said Bernard Rowe, Managing Director, Ioneer. "It allows Ioneer to match prevailing market conditions and blend or prioritise ore to produce a valuable boric acid co-product, whose market is uncorrelated with the Project's primary lithium product. No other lithium project offers this level of flexibility and economic advantage. In periods of low cycle lithium pricing, like today, we plan to prioritize the high-boron ore production to optimize the relative proportion of total revenue derived from boric acid."

By prioritising High-Boron (Hi-B) ore in the first 25 years of production, the Project is poised to produce an average of ~19,200 tonnes per annum (tpa) of LCE, and 116,400 tpa of boric acid (see *Table 1*).

The updated Ore Reserve estimate, 95-year mine plan for stage one operations, and Project economics reaffirms Rhyolite Ridge as a highly attractive global Project to produce lithium carbonate, lithium hydroxide and boric acid. The updated findings position loneer, on an LCE basis, **in the lowest cost quartile** for lithium

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production globally with an estimated all-in sustaining cash cost to produce battery grade lithium hydroxide of US\$5,745 and a cash cost of C1 \$3,858 per tonne net of expected boric acid revenue in the first 25 years.

The Project has a stable overall operating cost structure to produce lithium carbonate and battery grade lithium hydroxide due to the scale and reliability of its boric acid credit. Boron remains one of the most stable natural resource commodities over many decades.

Ioneer has refined Project plans over the past four years and updates now include an Association for the Advancement of Cost Engineering (AACE) Class 2 capital cost estimate (-10%, +15%) with approximately 70% of the Project's engineering complete. As a result of this and other engineering work including RAM analysis and detailed engineering design, Ioneer has adopted a more conservative approach to plant availability, equipment downtime and maintenance strategies. While this approach reduces bottom line economics, the Company believes it is appropriate for a Project of this type and scale.

The Company now estimates total capital expenditure to complete the Project will be US\$1,667.9 million, including a 10% contingency.

#### **Key Parameters**

KEY PARAMETERS	UNIT	YEARS 1-25 AVERAGE	LOM AVERAGE
PHYSICALS			
Ore processing rate	Mtpa	2.4	2.6
Total tonnes processed	Mt	60.3	246.6
Lithium carbonate grade (equivalent)	%	0.95	0.79
Boric acid grade (equivalent)	%	6.08	3.21
Recoveries – Lithium carbonate	%	85.3	84.9
Recoveries – Lithium hydroxide (year three and beyond)	%	96.0	96.0
Recoveries – Boric acid	%	79.3	67.9
Lithium carbonate equivalent (LCE) production <sup>1</sup>	tpa	~19,200	~17,200
Boric acid production	tpa	~116,400	~60,400
OPERATING AND CAPITAL COSTS			
LCE All-in Sustaining Cost (AISC) (net of boric acid credit)	US\$/t LCE	5,745	7,511
LCE direct cost (C1) (net of boric acid credit)	US\$/t LCE	3,858	6,237
Mining cost per ore tonne	US\$/t	23.5	9.9
Processing cost per ore tonne	US\$/t	71.1	61.6
Initial capital expenditure (including contingencies)	US\$M	1,667.9	

#### Table 1. Key Parameters

<sup>&</sup>lt;sup>1</sup> Lithium carbonate is produced in years 1 and 2, converting to lithium hydroxide from year 3 onwards.



KEY PARAMETERS	UNIT	YEARS 1-25 AVERAGE	LOM AVERAGE
Capitalized deferred pre-stripping costs	US\$M	399.2	692.2
Sustaining capital expenditure	US\$M	705.1	1,830.0
PRICING ASSUMPTIONS			
Lithium hydroxide index price <sup>2</sup>	US\$/t	23,040	23,011
Boric acid price <sup>3</sup>	US\$/t	1,296	1,373
FINANCIAL PERFORMANCE			
Annual revenue	US\$Mpa	618.7	497.1
Annual revenue – Lithium	US\$Mpa	462.5	414.6
Annual revenue – Boric acid	US\$Mpa	156.2	82.5
Annual EBITDA	US\$Mpa	406.4	318.9
Annual EBITDA margin	%	65.7	64.2
After-tax unlevered NPV @ 8% real discount rate	US\$M	1,007.6	1,367.4
After-tax Internal unlevered Rate of Return (IRR)	%	14.0	14.5
After-tax levered NPV @ 8% real discount rate	US\$M	1,139	1,499
After-tax levered Internal Rate of Return (IRR)	%	18.1	18.3
Payback period (from start of operations)	years	8	

The key parameters detailed above do not take into account several opportunities that, when finalised, are expected to materially increase lithium and boron output. Recently completed testwork demonstrated a reduction in leach time from the current three days to two days (reducing the vat cycle from seven to six days) increasing lithium and boron production per unit of acid (Acid Yield) by 7-14% with minimal capital cost and high operating cost leverage. Ioneer intends to adopt this reduction in leach time once a mine plan accounting for the increased throughput is completed.

The prioritisation of Hi-B ore in the first 25 years means a substantial amount of stockpiling of Lo-B ore is required. This is reflected in the materially lower average mining cost for LOM (\$9.90) versus Y1-25 (\$23.50). Most of the ore being processed in the later years comes from stockpiles. Recent testwork has shown that Lo-B ore can be upgraded by a factor of between 1.4-2.0 times using gravitational concentration, making this material an ideal candidate feed for a future Stage 2 plant dedicated to Lo-B ore. For further information please refer to Company announcement "Ioneer Announces Results of Initial Upgrading Testwork Demonstrating Growth Optionality" dated May 6, 2025.

<sup>&</sup>lt;sup>2</sup> The Lithium Hydroxide forward price curve is sourced from Benchmark Mineral Intelligence.

<sup>&</sup>lt;sup>3</sup> The boric acid forward price curve is based on Ioneer's own internal market study.



#### **Project Summary**

The Rhyolite Ridge Project is a large-scale, greenfield, lithium-boron project being developed on federal ands in southern Nevada in the United States. The Project is located in Esmeralda County, approximately halfway between Reno and Las Vegas, Nevada, and is easily accessible via state and county roads. Nevada is consistently rated as one of the world's most favourable and stable mining jurisdictions.

Rhyolite Ridge's unique lithium-boron mineralogy is the only known example of this type of deposit globally. The distinct mineralogy allows for low-cost processing of its ore into high-grade lithium and boric acid products using sulphuric acid leaching followed by industry standard evaporation and crystallisation methods.

When completed, the Project will be a large, long-life, low-cost operation and will play a vital role in supplying two critical materials (lithium and boron) essential for a sustainable future. Lithium demand is projected to grow by more than 15% year over year, driven by transportation, energy storage and general electrification. Boron is an increasingly strategic material with more than 70% of global reserves concentrated in Turkey and only one large, mature mine operating outside of that country.

The Project will produce at least three saleable chemical products. The mine will extract and process approximately 2.6 million tonnes of ore per year over a 95-year mine-life. Annual production of lithium and boron is outlined in *Figure 2* below. The saleable chemical products are:

- Lithium Carbonate (Technical Grade), available from start-up and reprocessed into lithium hydroxide monohydrate from year 3,
- Lithium Hydroxide Monohydrate (Battery Grade) from year 3, and
- Boric Acid (technical grade), available from start-up.

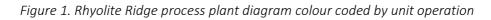
The Rhyolite Ridge ore will be processed by vat acid leaching, impurity removal, evaporation, and crystallization, following a flowsheet developed for this project using known and commercially proven equipment and technology. The process plant flowsheet development has been supported by extensive test work and pilot plant programs (see *Figure 1* below). Rhyolite Ridge is the only known lithium deposit globally to be amenable to vat or heap leaching technology.

The Project is designed to be an environmentally friendly operation with on-site power generation, lowwater usage, low emissions, and a modest surface footprint without a tailings dam or solar evaporation ponds.

Rhyolite Ridge will also be the first greenfield mining site in the United States to use automated haul trucks from the outset. Following the success of numerous international implementations, automation is expected to improve safety and reduce operating and capital costs.







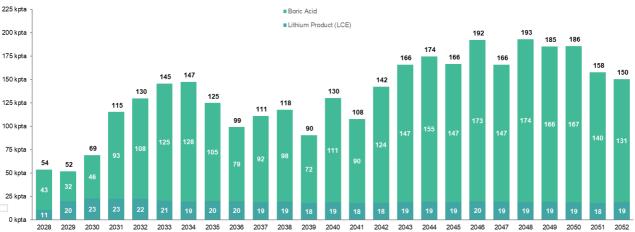


Figure 2. Lithium Carbonate Equivalent and Boric Acid Production years 1-25

While lithium carbonate and lithium hydroxide are expected to see exceptional growth, price volatility may continue. The Company is positioned to counter lithium volatility through its boric acid credit. Boric acid demand growth has been stable, is expected to continue, and is uncorrelated with the lithium market. *Figure 3* (below) shows boric acid prices have been historically stable when compared to lithium and many other natural resource commodities. Together, the two products enhance the Project's financial resilience and the ability to maintain profitability through commodity price cycles.

#### Historical Price Volatility | 15 Years

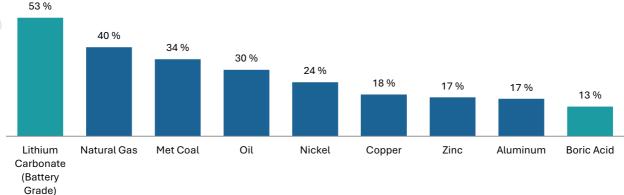


Figure 3. Historical price volatility of commodities over the past 15 years. Source: Ioneer market study and Bloomberg L.P.

#### KEY HIGHLIGHTS

- Fully permitted and engineering ready
- Water rights fully secured
- Closed DOE LPO loan for US\$996 million (including capitalised interest during construction of US\$28 million<sup>4</sup>). DOE LPO loan has conditions to first draw.
- Robust, strategic partner process ready for launch with Goldman Sachs
- Compelling Project Economics for Stage One of Project
- All-in Sustaining Cash Cost in the lowest quartile of the Global Cost Curve
- Well Defined and Reliable Operating Cost and Capital Cost Estimates (AACE Class 2)
- Long-Life Resource with Optimisation Upside and Verified Expansion Potential
- US Advantage and Low-Risk, Mining-Friendly Jurisdiction

#### **Capital Cost Overview**

The Rhyolite Ridge Project has been successfully completed to international mining project standards by Ioneer and Tier 1 Engineering, Procurement, and Construction Management (EPCM) companies Fluor and AtkinsRéalis. An AACE Class 2 capital cost estimates (-10%, +15%) has been produced, with engineering design at 68.5% complete. While Class 3 estimates are typically used for funding approval, Class 2 estimates are required for project cost control. The Class 2 estimate will form the baseline against which actual costs and resources will be monitored for variations to budget and will form part of the change management system.

The AACE Class 2 capital cost estimate covers the period from final investment decision to first production and is reported in Q1 2024 real U.S. dollars, excluding design growth allowances on neat quantities and risk costs. Total equipment pricing, including mine equipment, process/mechanical, electrical and

<sup>&</sup>lt;sup>4</sup> See Company announcement titled, "Rhyolite Ridge Lithium-Boron Project closes upsized US\$996 million loan ", dated 20 January 2025, for further information.



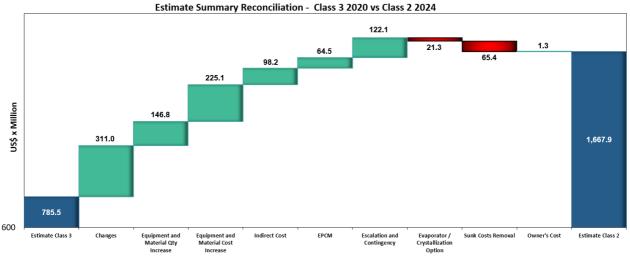
instruments/controls, is based 63% on firm pricing, and 36% on budget pricing from competitive bidders.

The AACE Class 2 capital cost estimate (Capex) is US\$1,667.9 million including a 10% contingency.

Capex increased from the 2020 DFS estimate of US\$785 million to the current estimate of US\$1,667.9 million. The increase was the result of changes related to escalation, quantity and cost growth. These are illustrated in the financial waterfall in *Figure 4* (below).

Changes in design accounted for US\$311 million of the Capex increase and were mainly associated with the addition of increased pre-stripping activities including mining equipment down payments and fees, and compliance with DOE loan requirements including compliance with the Davis Bacon Act (labour) and U.S. Cargo Preference Act (freight).

The capital cost estimates present all expected forecasted costs to complete costs for the Project as defined by the scope of work in the basis of estimate. All incurred or sunk costs up to the Report date were excluded. A contingency of 10% was applied to the capital costs estimate using a Monte Carlo simulation to achieve a P65 (the probability at the 65th percentile) confidence level for the estimate.



#### Figure 4. Capex Financial Waterfall – Rhyolite Ridge Project 2020 to Updated 2024

Sustaining capital expenditure is materially impacted by ground anchoring geotechnical support to ensure slope stability in areas adjacent to where Tiehm's buckwheat is growing. This additional ground support is required when mining is taking place in specific areas and is not linear over the LOM. During Y4-25, \$381m in anchoring is required and a further \$783m is required in Y26-95. Ioneer believes it is likely these amounts will reduce significantly through:

- Obtaining real-time geological information as mining progresses where that data can replace conservative model assumptions
- Completing successful trials to grow and transplant Tiehm's buckwheat
- Modifying pit design (the conceptual pit shell used for the ore reserve estimate aimed to maximise tonnes without minimising ground anchoring)



#### **Operating Cost Overview**

Annual operating costs average a total of US\$71.45 per metric ton for the life of the mine and are represented in *Figure 5* (below).

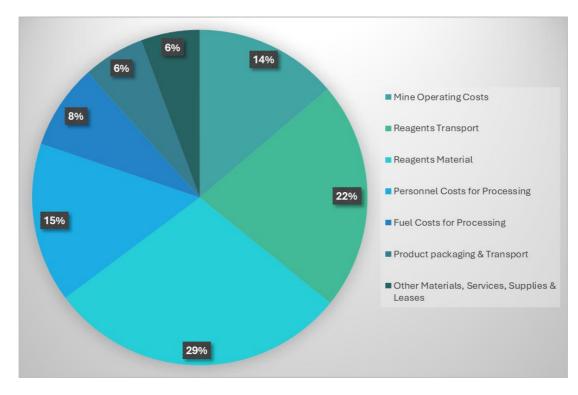


Figure 5. Rhyolite Ridge LOM operating costs by contributing areas

loneer is positioned, on an LCE basis, in the lowest cost quartile for lithium production globally with an estimated all-in sustaining cash (AISC) cost per LCE tonne of US\$5,745 and a C1 cash cost of C1 \$3,858 per tonne net of expected boric acid revenue in the first 25 years (See *Figure 6* below). C1 cash costs include raw materials, labour, utilities, maintenance materials, supplies, outside services and overburden storage costs. AISC incorporates all C1 cash costs, sustaining capex and estimated interest on the DOE Loan. For the life of mine, C1 cash cost is estimated to be \$6,237 per tonne and ASIC cost of \$7,511 net of expected boric acid revenue. The unique mineralogy at Rhyolite Ridge, including co-production of boron, allows for the Project to remain globally competitive in various lithium pricing environments.



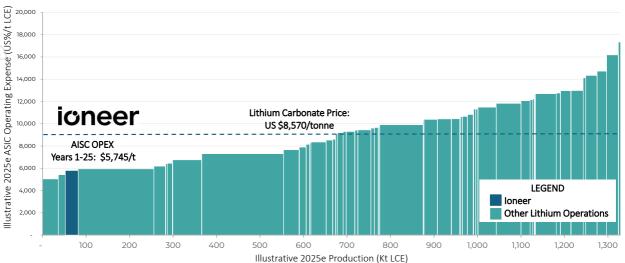


Figure 6. Rhyolite Ridge All-in Sustaining Costs (AISC) compared to other Projects (Source: Ioneer internal study and Benchmark Mineral Intelligence. Lithium Carbonate price estimate Benchmark Mineral Intelligence 30 April 2025 lithium carbonate spot CIF Asia)

#### **Mineral Resource and Ore Reserve**

Ioneer engaged the independent services of Independent Mining Consultants, Inc. (IMC) to compile and complete the updated South Basin Mineral Resource and Ore Reserve estimates, which has been verified and approved by their appointed Competent Person in compliance with JORC Code (2012).

The Mineral Resource is estimated at 510 million tonnes, including an Ore Reserve of 247 million tonnes, representing an increase in the Reserve of 308% from the previous estimate. The Mineral Resource is inclusive of the Ore Reserve. The Company expects to mine and process 247 million tonnes over the 95-year mine life at an average annual rate of 2.6 million tonnes per year. The 247 million tonnes represents 48% of the total Mineral Resource of 510 million tonnes.

The current 95-year mine plan is made up entirely of Reserve material (100%), and of that approximately 35% is Proved Ore Reserve. The resource flexibility allows for a potential extension to the life of the mine or expansion opportunities in the future. The Reserve and Resource are subdivided into High-Boron lithium mineralisation and Low-Boron lithium mineralisation as shown in *Table 2* and *Table 3* below.

	Units	High-Boron	Low-Boron	Combined
Reserve				
Reserve	Tonnes	91.2	155.4	246.6
Li grade	ppm	1715	1,318	1,464
B grade	ppm	12,329	1,402	5,444
Contained LCE	Mt	0.83	1.09	1.92
Contained BAE	Mt	6.43	1.25	7.68
Ratio BAE: LCE	Ratio	7.7:1	1.1:1	4:1



	Units	High-Boron	Low-Boron	Combined
Resource				
Resource	Tonnes	178.6	331.8	510.4
Li grade	ppm	1,624	2,470	1,461
B grade	ppm	11,754	2,607	5,023
Contained LCE	Mt	1.54	2.43	3.97
Contained BA	Mt	12.00	2.65	14.66
Ratio BA: LCE	Ratio	7.8:1	1.1:1	3.7:1

Table 2. Mineral Resource and Ore Reserve Estimates divided into High-Boron and Low-Boron ore types <sup>5</sup>

		Metric	Lithium	Boron	Contained	Equivalent	Conta	ained <sup>6</sup>
		Tonnes <sup>2,7</sup>	Grade <sup>7</sup>	Grade <sup>7</sup>	Gra		Equivaler	nt² Tonnes
			Li	В	Li <sub>2</sub> CO <sub>3</sub>	H₃BO₃	Li₂CO₃	H₃BO₃
		(ktonnes)	(ppm)	(ppm)	(Wt. %)	(Wt. %)	(kt)	(kt)
	Mineral Resource							
	Measured	64,380	1,752	12,670	0.93	7.24	600	4,664
	Indicated	87,372	1,551	11,280	0.83	6.45	721	5,636
Total Hi-B	Measured and Indicated	151,752	1,636	11,870	0.87	6.79	1,322	10,300
	Inferred	26,873	1,554	11,102	0.83	6.35	222	1,706
	Sub-total Hi-B (Stream 1)	178,625	1,624	11,754	0.86	6.72	1,544	12,005
	Measured	87,904	1,464	1,554	0.78	2.10	685	781
	Indicated	174,127	1,349	1,517	0.72	1.87	1,250	1,510
Total Lo-B	Measured and Indicated	262,031	1,387	1,529	0.74	1.94	1,935	2,291
	Inferred	69,717	1,323	910	0.70	0.52	491	363
	Sub-total Lo-B (Stream 2 & 3)	331,748	2,470	2,607	1.31	3.18	2,426	2,654
Total Measur	Fotal Measured & Indicated Ore Resource		1,479	5,321	0.79	12.69	3,969	12,590
Total Inferred	Ore Resource	96,590	1,387	3,745	0.74	2.14	713	2,069
Total Miner	al Resource	510,373	1,461	5,023	0.78	10.70	4,683	14,659

<sup>&</sup>lt;sup>5</sup> All ore reserve figures represent estimates as of May 2025. Ore reserve estimates are not precise calculations, being dependent on the interpretation of limited information on the location, shape and continuity of the occurrence and on the available sampling results. The totals have been rounded to reflect the relative uncertainty of the estimate. Totals may not sum due to rounding.



	Ore Reserve							
Total Hi-B	Proved	39,428	1,823	13,235	0.97	7.57	383	2,984
	Probable	51,812	1,632	11,640	0.87	6.66	450	3,448
	Sub-total Hi-B (Stream 1)	91,240	1,715	12,329	0.91	7.05	833	6,432
	Proved	46,321	1,358	1,348	0.72	2.04	335	357
Total Lo-B	Probable	109,065	1,300	1,425	0.69	0.82	755	889
	Sub-total Lo-B (Stream 2 & 3)	155,386	1,318	1,402	0.70	1.18	1,089	1,246
Total Proved	& Probable Ore Reserve	246,626	1,465	5,445	0.78	9.32	1,922	7,678

Table 3. Summary of 2025 Mineral Resource and Ore Reserve Estimates for Hi-B, Lo-B and combined

Notes:

- The statement of estimates of Ore Reserves has been compiled by Mr. Joseph S.C. McNaughton, a Competent
  Person is a Registered Professional Engineer in State of Arizona. Mr McNaughton is a full-time employee of IMC Inc.
  and is independent of Ioneer and its affiliates. Mr. Joseph McNaughton is responsible for the estimate, has
  sufficient experience that is relevant to the style of mineralization and type of deposit under consideration and to
  the activity being undertaken to qualify as a Competent Person as defined in the JORC Code (2012).
- 2. The ore reserve estimates the result of determining the measured and indicated resource that incorporates modifying factors demonstrating that it is economically minable, allowing for the conversion to proven and probable. In making this determination, constraints were applied to the geological model based upon a pit optimization analysis that defined a conceptual pit shell limit. The conceptual pit shell was based upon a net value per tonne calculation including a 5,000ppm boron cut-off grade for high boron high lithium (HiB-Li) mineralization (Stream 1) and a \$16.54/tonne net value cut-off grade for low boron (LoB-Li) mineralization below 5,000ppm boron broke into two material types, low clay and high clay material respectfully (Stream 2 and Stream 3). The pit shell was constrained by a conceptual Mineral Resource optimized pit shell for the purpose of establishing reasonable prospects of eventual economic extraction based on potential mining, metallurgical and processing grade parameters identified by mining, metallurgical and processing studies performed to date on the Project. The conceptual pit shell was used a guide to the engineered quarry designs used to constrain the Mineral Reserves.
- 3. Key inputs in developing the Mineral Resource pit shell included a 5,000ppm boron cut-off grade for HiB-Li mineralization, \$16.54/tonne net value cut-off grade for LoB-Li low clay mineralization and LoB-Li high clay mineralization; mining cost of US\$1.69 /tonne; G&A cost of US\$16.54 /process tonne; plant feed processing and grade control costs which range between US\$20.27/tonne and US\$98.73/tonne of plant feed (based on the acid consumption per stream and the mineral resource average grades); boron and lithium recovery for Stream 1 of 80.2% and 85.7%; Stream 2 and 3: M5 65% and 78%, B5 80.2% and 85.7%, S5 50% and 88%, L6 37% and 85%, respectively; boric acid sales price of US\$1,172.78/tonne; lithium carbonate sales price of US\$19,351.38/tonne were selected based on the market analysis.
- 4. Ore reserves are based on a block model that is 7.62m x 7.62m30 in plan and 9.14m high. The model block size used for the ore reserve estimate is based on selected mining equipment and approached used within the mine plan. As a result, the dilution and ore loss are incorporated within the block model. On average, the reserve experienced a 308% increase in process tonnage, with lithium and boron grades decreasing by 18% and 65%, respectively. This resulted in a 428% and 167% increase in the tons of contained lithium carbonate and boric acid in the process streams when transitioning from mineral resource to ore reserve.
- 5. Ore reserves reported on a dry in-situ basis. The contained and recovered lithium carbonate and boric acid are reported in the table above in metric tonnes. Lithium is converted to equivalent contained tonnes of lithium carbonate using a stochiometric conversion factor of 5.322, and boron is converted to equivalent contained tonnes of boric acid using a stochiometric conversion factor of 5.718. Equivalent stochiometric conversion factors are derived from the molecular weights of the individual elements which make up lithium carbonate and boric acid. The equivalent recovered tons of lithium carbonate and boric acid is the portion of the contained tonnage that can be recovered after processing.



- 6. All ore reserve figures represent estimates as of May 2025. Ore reserve estimates are not precise calculations, being dependent on the interpretation of limited information on the location, shape and continuity of the occurrence and on the available sampling results. The totals have been rounded to reflect the relative uncertainty of the estimate. Totals may not sum due to rounding.
- 7. Kt thousand metric tonnes, MT million metric tonnes, kst = thousand short tons; Li = lithium; B = boron; ppm= parts per million; Li<sub>2</sub>CO<sub>3</sub> = lithium carbonate; H<sub>3</sub>BO<sub>3</sub> = boric acid. Equivalent lithium carbonate and boric acid grades have been rounded to the nearest tenth of a percent.

#### **Next Steps**

- Secure equity financing to sit alongside U.S. Government debt (\$996 million)<sup>6</sup>
- Final Investment Decision once equity and debt are in place
- **Construction Phase**. Expected to take approximately 36 months (including procurement of long lead items)
- First Production 36 months from FID<sup>1</sup>
- Pathway to future growth

This ASX release has been authorised by Ioneer Managing Director, Bernard Rowe.

--ENDS--

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<sup>&</sup>lt;sup>6</sup> Note the DOE LPO loan is comprised of \$968 million in principal and \$28 million in capitalised interest and has conditions to first draw. See Company announcement titled, "Rhyolite Ridge Lithium-Boron Project closes upsized US\$996 million loan ", dated 20 January 2025, for further information.



#### **Resource and Reserve Estimate Advisers**

Ioneer engaged the independent services of Independent Mining Consultants, Inc. (IMC) to compile and complete the updated South Basin Mineral Resource estimate, which has been verified and approved by their appointed Competent Person in compliance with JORC Code (2012).

The February 2025 Mineral Resource estimate is an update to the April 2024 Mineral Resource estimate. The changes to the previous resource estimate (2023 vs 2024) were not material.

#### **Competent Persons Statement**

The information in this report that relates to the February 2025 Mineral Resource estimate is based on information compiled by Herbert E. Welhener, a Competent Person who is a Registered Member of the SME (Society for Mining, Metallurgy, and Exploration), and is a QP Member of MMSA (the Mining and Metallurgical Society of America). Mr. Welhener is a full-time employee of Independent Mining Consultants, Inc. (IMC) and is independent of Ioneer and its affiliates. Mr. Welhener has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity 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' (JORC Code 2012). Mr. Welhener 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 report that relates to the 2025 Ore Reserve estimate is based on information compiled by Joseph McNaughton, a Competent Person who is a certified Professional Engineer ('PE') in the US and is a registered professional engineer in the State of Arizona. Mr. McNaughton is a full-time employee of Independent Mining Consultants, Inc. (IMC) and is independent of Ioneer and its affiliates. Mr. McNaughton has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity 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' (JORC Code 2012). Mr. McNaughton consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

#### About Ioneer

Ioneer Ltd is an emerging lithium–boron producer and the 100% owner of the Rhyolite Ridge Lithium-Boron Project. Rhyolite Ridge is the only known lithium-boron deposit in North America, one of only two known such deposits in the world and a linchpin project in Nevada's burgeoning Lithium Loop.

In October 2024, Ioneer received the final federal permit for the Project from the Bureau of Land Management, concluding the formal federal permitting process which began in early 2020. Rhyolite Ridge closed a US\$996 million loan with the U.S. Department of Energy Loan Programs Office under the Advanced Technology Vehicles Manufacturing program in January 2025.

Ioneer signed separate offtake agreements with Ford Motor Company and Prime Planet & Energy Solutions (joint venture between Toyota and Panasonic) in 2022 and Korea's EcoPro Innovation in 2021.

To learn more about Ioneer, visit <u>www.Ioneer.com/investors</u> or find us on <u>X</u>, <u>Facebook</u>, <u>LinkedIn</u>, <u>Instagram</u> and <u>YouTube</u>.

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#### Important notice and disclaimer

#### Forward-looking statements

This announcement contains certain forward-looking statements and comments about future events,

including loneer's expectations about the Project and the performance of its businesses. Forward looking statements can generally be identified by the use of forward-looking words such as 'expect', 'anticipate', 'likely', 'intend', 'should', 'could', 'may', 'predict', 'plan', 'propose', 'will', 'believe', 'forecast', 'estimate', 'target' and other similar expressions within the meaning of securities laws of applicable jurisdictions. Indications of, and guidance on, the Conditional Commitment, financing plans, future earnings or financial position or performance are also forward-looking statements.

Forward-looking statements involve inherent risks and uncertainties, both general and specific, and there is a risk that such predictions, forecasts, projections and other forward-looking statements will not be achieved. Forward-looking statements are provided as a general guide only and should not be relied on as an indication or guarantee of future performance. Forward looking statements involve known and unknown risks, uncertainty and other factors which can cause Ioneer's actual results to differ materially from the plans, objectives, expectations, estimates, and intentions expressed in such forward-looking statements and many of these factors are outside the control of Ioneer. Such risks include, among others, uncertainties related to the finalisation, execution, and funding of the DOE financing, including our ability to successfully negotiate definitive agreements and to satisfy any funding conditions, as well as other uncertainties and risk factors set out in filings made from time to time with the U.S. Securities and Exchange Commission and the Australian Securities Exchange. As such, undue reliance should not be placed on any forward-looking statement. Past performance is not necessarily a guide to future performance and no representation or warranty is made by any person as to the likelihood of achievement or reasonableness of any forwardlooking statements, forecast financial information or other forecast. Nothing contained in this announcement, nor any information made available to you is, or shall be relied upon as, a promise, representation, warranty or guarantee as to the past, present or the future performance of loneer.

Except as required by law or the ASX Listing Rules, Ioneer assumes no obligation to provide any additional or updated information or to update any forward-looking statements, whether as a result of new information, future events or results, or otherwise.

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#### **Key Metrics Comparison**

2020 DFS		Current Estimate (Life of Mine)
\$1,265 million	Unlevered NPV8	\$1,367 million
\$422 million	Avg. LOM Annual Revenue	\$497 million
20,600 tpa	Avg. LOM Annual LCE Production	17,200 tpa
174,400 tpa	Avg. LOM Annual Boric Acid Production	60,400 tpa
60.0 Mt	Ore Processed	246.6 Mt
26 years	Life of Project	95 years
\$288 million	Average Annual EBITDA	\$319 million
\$785.4 million AACE Class 3 estimate	Capital Costs	\$1,667.9 million AACE Class 2 estimate
\$202	Sustaining Capex	\$1,830 million
20.8%	Unlevered IRR	14.5%
5.2 years (from operations)	Payback Period	8.0 years (from operations)
P50	Confidence Level	P65

#### Appendix A Mineral Resource Statement and Parameters

A summary of the February 2025 Mineral Resource estimate (inclusive of ore reserves) is provided in the table below.

	Februar	y 2025 Mineral	<b>Resource E</b>	stimate	for Rhyo	lite Ridge	South Ba						
			Tonnage	Li	в	Li2CO3	НЗВОЗ	Conta	ained				
Stream	Group	Classification	(ktonnes)	ppm	ppm	Wt. %	Wt. %	Li2CO3 (ktonnes)	H3BO3 (ktonnes)				
		Measured	38,404	1,891	15,282	1.01	8.74	386	3,356				
$\mathcal{D}$	Upper	Indicated	38,670	1,743	13,996	0.93	8.00	359	3,095				
	Zone B5 Unit	Inferred	10,627	1,712	10,564	0.91	6.04	97	642				
10		Total	87,701	1,804	14,143	0.96	8.09	842	7,092				
$\left  \mathcal{D} \right $		Measured	4,562	2,350	7,592	1.25	4.34	57	198				
6	Upper Zana MF	Indicated	4,224	2,231	7,450	1.19	4.26	50	180				
D	Zone M5 Unit	Inferred	763	2,197	6,515	1.17	3.73	9	28				
3		Total	9,549	2,285	7,443	1.22	4.26	116	406				
D a		Measured	3,693	1,419	7,641	0.75	4.37	28	161				
E	Upper Zone S5 Unit	Indicated	4,747	1,285	7,415	0.68	4.24	32	201				
Stream 1 (>= 5,000 ppm B)		Inferred	1,572	1,400	6,469	0.75	3.70	12	58				
2,00	00 01110	Total	10,012	1,352	7,350	0.72	4.20	72	421				
		Measured	46,659	1,899	13,926	1.01	7.96	471	3,715				
	Upper	Indicated	47,641	1,741	12,760	0.93	7.30	441	3,476				
ean	Zone Total	Inferred	12,962	1,703	9,829	0.91	5.62	117	728				
Str	rotar	Total	107,262	1,805	12,913	0.96	7.38	1,030	7,920				
$\mathcal{D}$		Measured	17,721	1,366	9,362	0.73	5.35	129	949				
6	Lower	Indicated	39,731	1,324	9,507	0.70	5.44	280	2,160				
Ð	Zone L6 Unit	Inferred	13,911	1,415	12,288	0.75	7.03	105	977				
		Total	71,363	1,352	10,013	0.72	5.73	514	4,086				
5	Total	Measured	64,380	1,752	12,670	0.93	7.24	600	4,664				
$\cup$	Stream 1	Indicated	87,372	1,551	11,280	0.83	6.45	721	5,636				
5	(all	Inferred	26,873	1,554	11,102	0.83	6.35	222	1,706				
	zones)	Total	178,625	1,624	11,754	0.86	6.72	1,544	12,005				
a`		Measured	4,963	2,229	2,213	1.19	1.27	59	63				
rade	Upper	Indicated	4,734	2,120	2,515	1.13	1.44	53	68				
ff g	Zone B5 Unit	Inferred	3,616	1,715	1,805	0.91	1.03	33	37				
nt-o	55 01110	Total	13,313	2,050	2,210	1.09	1.26	145	168				
o er		Measured	21,087	1,090	1,281	0.58	0.73	122	154				
valı	Upper	Indicated	26,144	988	1,242	0.53	0.71	138	186				
clay	Zone S5 Unit	Inferred	11,925	1,003	1,206	0.53	0.69	64	82				
onne net ' Low Clay)	55 0111	Total	59,156	1,027	1,248	0.55	0.71	323	422				
/tor L		Measured	26,050	1,307	1,458	0.70	0.83	181	217				
5.54	Upper	Indicated	30,878	1,162	1,437	0.62	0.82	191	254				
(\$1(	Zone Total	Inferred	15,541	1,169	1,345	0.62	0.77	97	120				
n 2	TOLAT	Total	72,469	1,215	1,425	0.65	0.81	469	590				
Stream 2 (\$16.54/tonne net value cut-off grade, Low Clay)	Lower	Measured	42,663	, 1,227	1,613	0.65	0.92	279	393				
St	Zone	Indicated	114,183	1,206	1,622	0.64	0.93	733	1,059				

	L6 Unit	Inferred	44,658	1,277	800	0.68	0.46	304	204	
	20 01110								-	
		Total	201,504	1,226	1,438	0.65	0.82	1,315	1,657	
	Total	Measured	68,713	1,257	1,554	0.67	0.89	460	611	
	Stream 2	Indicated	145,061	1,196	1,583	0.64	0.90	923	1,313	
	(all	Inferred	60,199	1,249	941	0.66	0.54	400	324	
	zones)	Total	273,973	1,223	1,434	0.65	0.82	1,783	2,247	
e e	e e	Measured	19,191	2,203	1,552	1.17	0.89	225	170	
am 54/ton value grade.	Total Stream 3	Indicated	29,066	2,112	1,187	1.12	0.68	327	197	
Stream Stream 3(\$16.54/ton ne net value cut-off grade.	(M5	(M5	Inferred	9,518	1,789	716	0.95	0.41	91	39
Stree 3(\$16.5 ne net cut-off	zone)	Total	57,775	2,089	1,231	1.11	0.70	642	407	
5		Measured	152,284	1,585	6,253	0.84	3.58	1,285	5,445	
Grand T	otal All	Indicated	261,499	1,417	4,779	0.75	2.73	1,971	7,146	
Streams an	d All Units	Inferred	96,590	1,387	3,745	0.74	2.14	713	2,069	
$ 5\rangle$		Total	510,373	1,461	5,023	0.78	2.87	3,969	14,659	

#### Notes:

1. ktonnes- thousand tonnes (metric); Li= lithium; B= boron; ppm= parts per million; Li2CO3 = lithium carbonate; H3BO3 = boric acid;

2. Totals may differ due to rounding, Mineral Resources reported on a dry in-situ basis. Lithium is converted to Equivalent Contained Tonnes of Lithium Carbonate ( $Li_2CO_3$ ) using a stochiometric conversion factor of 5.322, and boron is converted to Equivalent Contained Tonnes of Boric Acid ( $H_3BO_3$ ) using a stochiometric conversion factor of 5.718. Equivalent stochiometric conversion factors are derived from the molecular weights of the individual elements which make up Lithium Carbonate ( $Li_2CO_3$ ) and Boric Acid ( $H_3BO_3$ ).

3. The statement of estimates of Mineral Resources has been compiled by Mr. Herbert E. Welhener, a Competent Person is a Registered Member of the SME (Society for Mining, Metallurgy, and Exploration), and is a QP Member of MMSA (the Mining and Metallurgical Society of America). Mr. Welhener is a full-time employee of IMC Inc. and is independent of Ioneer and its affiliates. Mr. Welhener has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity 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' (JORC Code 2012).

4. All Mineral Resource figures reported in the table above represent estimates at February 2025. Mineral Resource estimates are not precise calculations, being dependent on the interpretation of limited information on the location, shape and continuity of the occurrence and on the available sampling results. The totals contained in the above table have been rounded to reflect the relative uncertainty of the estimate.

5. Mineral Resources are reported in accordance with the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (The Joint Ore Reserves Committee Code – JORC 2012 Edition).

6. The Mineral Resource estimate is the result of determining the mineralized material that has a reasonable prospect of economic extraction. In making this determination, constraints were applied to the geological model based upon a pit optimization analysis that defined a conceptual pit shell limit. The conceptual pit shell was based upon a net value per tonne calculation including a 5,000ppm boron cut-off grade for high boron – high lithium (HiB-Li) mineralization (Stream 1) and a \$16.54/tonne net value cut-off grade for low boron (LoB-Li) mineralization below 5,000ppm boron broke into two material types, low clay and high clay material respectfully (Stream 2 and Stream 3). The pit shell was constrained by a conceptual Mineral Resource optimized pit shell for the purpose of establishing reasonable prospects of eventual economic extraction based on potential mining, metallurgical and processing grade parameters identified by mining, metallurgical and processing studies performed to date on the Project. Key inputs in developing the Mineral Resource pit shell included a 5,000ppm boron cut-off grade for LoB-Li low clay mineralization and LoB-Li high clay mineralization, \$16.54/tonne net value cut-off grade for LoB-Li low clay mineralization and LoB-Li high clay mineralization; mining cost of US\$1.69 /tonne; G&A cost of US\$16.54 /process tonne; plant feed processing and grade control costs which range between US\$20.27/tonne and US\$98.73/tonne of plant feed (based on the acid consumption per stream and the mineral resource average grades); boron and lithium recovery for Stream 1 of 80.2% and 85.7%; Stream 2 and 3: M5 65% and 78%, B5 80.2% and 85.7%, S5

50% and 88%, L6 37% and 85%, respectively; boric acid sales price of US\$1,172.78/tonne; lithium carbonate sales price of US\$19,351.38/tonne.

In December 2022, the United States Fish and Wildlife Service (USFWS) listed Tiehm's buckwheat as an endangered species under the Endangered Species Act (ESA) and has designated critical habitat by way of applying a 500 m radius around several distinct plant populations that occur on the Project site. Ioneer is committed to the protection and conservation of the Tiehm's buckwheat. The Project's Mine Plan of Operations, approved by the BLM in October 2024, has no direct impact on Tiehm's buckwheat and includes measures to minimise and mitigate for indirect impacts within the designated critical habitat areas identified.

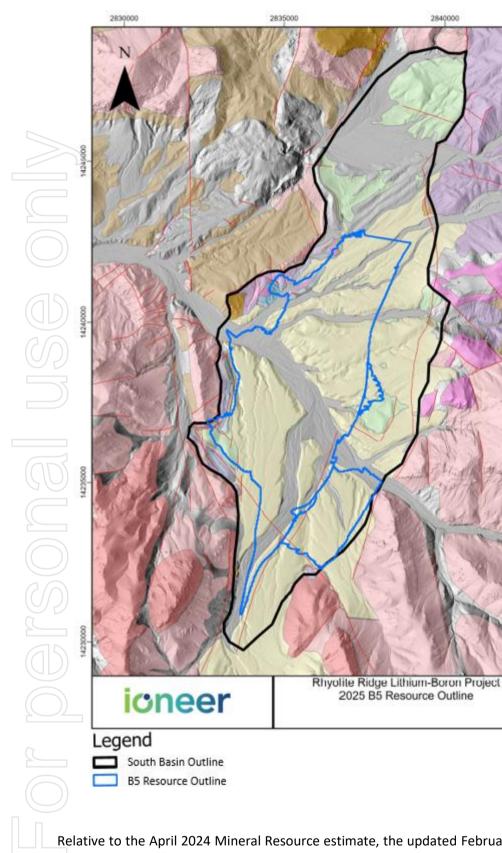
The mineral resource pit shell used to constrain the February 2025 Mineral Resource estimate was not adjusted to account for any impacts from avoidance of Tiehm's buckwheat or minimisation of disturbance within the designated critical habitat. Environmental and permitting assumptions and factors have not been taken into consideration during modifying factors studies for the Project. The tonnes and grade within the avoidance polygons have not been removed from the Mineral Resources for the February 2025 estimate. Environmental and permitting assumptions during future modifying factors studies for the Project. The February 2025 estimate. Environmental and permitting assumptions and factors may be taken into consideration during future modifying factors studies for the Project. These permitting assumptions and factors may result in potential changes to the Mineral Resource footprint in the future.

#### **C**omparison with Previous Resource

The Table below presents a summary comparison of the current February 2025 Mineral Resource estimate against the previous Mineral Resource estimate for the Project, prepared by IMC in April 2024 in association with the April 2024 JORC Mineral Resource Statement.

Processing Stream	Group	Classification	Tonnes (M)	Li (ppm)	B (ppm)	Li2CO3 (wt. %)	H₃BO₃ (wt. %)	Li₂CO₃ (kt)	H₃BO₃ (kt)
	February	Mea + Ind	413.8	1,479	5,321	0.79	3.04	3,256	12,590
	2025	Inf	96.6	1,387	3,745	0.74	2.14	713	2,069
$(\bigcirc)$	Resource	Total	510.4	1,461	5,023	0.78	2.87	3,969	14,659
Combined	Anril 2024	Mea + Ind	258.1	1731	6779	0.9	3.9	2,378	10,004
Combined	April 2024 Resource	Inf	93.3	1759	5272	1.0	3.0	873	2,813
Streams	Resource	Total	351.4	1739	6379	0.9	3.6	3,251	12,817
		Mea + Ind	155.7	1,060	2,905	0.56	1.66	878	2,586
65	Variation	Inf	3.3			-4.91	-22.80	-160	-744
((   L))		Total	159.0	849	2,026	0.45	1.16	718	1,842

The updated February 2025 Mineral Resource estimate has been constrained by applying a 5,000 ppm Boron cut-off grade to HiB-Li mineralisation within the B5, M5, S5 and L6 geological units (Stream 1) as well as a \$16.54/tonne net value cut-off grade to LoB-Li low clay mineralisation in the B5, S5 and L6 geological units (Stream 2) and LoB-Li high clay mineralization in the M5 geological unit (Stream 3). All three styles of mineralisation have also been constrained by the application of a single high-level optimised resource pit shell.



Relative to the April 2024 Mineral Resource estimate, the updated February 2025 Mineral Resource estimate for the Project reflects an increase in the estimated resource tonnes and grades. The impacts to this increase include:

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**NAD 83** 

4245000

- The change in the calculation of acid consumption during processing and accounting for this cost has lowered the process costs; the extraction of calcium (Ca) in seam S5 was reduced from 100% to 80% and in seam L6 from 100% to 89% when Ca <= 10% and 64% when Ca > 10%, based on metallurgical test work, thus lowering the acid consumption.
- The definition of the resource pit shell includes a G&A cost of \$US 16.54/tonne (not included for the April 2024 resource pit shell), but this cost did not negatively impact the size of the resource pit shell.

• The removal of the 1090 ppm Lithium cutoff for Streams 2 and 3, replacing it with a \$US 16.54/tonne net value cutoff. This increased the amount of lower grade Lithium tonnage to be included in the mineral resource.

#### Summary of Resource Estimate Parameters and Reporting Criteria

In accordance with ASX Listing Rules and the JORC Code (2012 Edition), a summary of the material information used to estimate the Mineral Resource is summarised below (for further information please refer to Table 1 in Appendix D).

- The Rhyolite Ridge Mineral Resource area extends over a north-south strike length of 4,240 m (from 4,337,540 mN 4,341,780mN), has a maximum width of 2,110m (863,330 mE 865,440 mE) and includes the 585 m vertical interval from 2,065mRL to 1,480 mRL.
- The Rhyolite Ridge Project tenements (unpatented mining claims) are owned by Ioneer Minerals Corporation, a company wholly owned by Ioneer Ltd. The unpatented mining claims are located on US federal land administered by the Bureau of Land Management (**BLM**).

#### Geology and Geological Interpretation

• Lithium and boron mineralisation is stratiform in nature and is hosted within Late Miocene-age carbonate-rich sedimentary rock, deposited in a lacustrine environment in the Basin and Range terrain of Nevada, USA.

#### **Drilling Techniques and Hole Spacing**

- Drill holes used in the Mineral Resource estimate included 50 reverse circulation (**RC**) holes and 110 core holes for a total of 32,530m within the defined mineralisation. The full database for the South Basin contains records for 166 drill holes for 33,519m of drilling.
- Drill hole spacing is 100m by 100m (or less) over most of the deposit.
- Drill holes were logged for a combination of geological and geotechnical attributes. The core has been photographed and measured for RQD and core recovery.

#### Sampling and Sub-Sampling Techniques

Drilling was conducted by American Lithium Minerals Inc., the previous owner of the property between 2010 and 2011 and by Ioneer in 2017 to 2019 and 2022 to 2024. For RC drilling, a 12.7-centimetre (cm) hammer was used with sampling conducted on 1.52m intervals and split using a rig mounted rotary splitter. The hammer was replaced with a tri-cone bit in instances of high groundwater flow. For diamond core, PQ and HQ core size diameter with standard tube was used. Core recoveries of 93% were achieved by Ioneer at the project. The core was sampled as half core at 1.52m intervals using a standard electric core saw.

#### Sampling Analysis Method

- Samples were submitted to ALS Minerals Laboratory in Reno, Nevada for sample preparation and analysis. The entire sample was oven dried at 105°C and crushed to -2 millimetre (mm). A sub-sample of the crushed material was then pulverised to better than 85% passing -75 microns (μm) using a LM5 pulveriser. The pulverised sample was split with multiple feed in a Jones riffle splitter until a 100-200 gram (g) sub-sample was obtained for analysis.
- Analysis of the samples was conducted using aqua regia 2-acid for ICP-MS on a multi-element suite. This method is appropriate for understanding sedimentary lithium deposits and is a total method.
- Standards for lithium and boron and blanks were routinely inserted into sample batches and acceptable levels of accuracy were reportedly obtained. Based on an evaluation of the quality assurance and quality control (QA/QC) results all assay data has been deemed by the IMC Competent Person as suitable and

fit for purpose in Mineral Resource estimation.

#### **Cut-off Grades**

- The Mineral Resource estimate presented in this Report has been constrained by the application of an optimized Mineral Resource pit shell. The Mineral Resource pit shell was developed using the Independent Mining Consultants, Inc. (IMC) Mine Planning software.
- The Mineral Resource estimate assumes the use of three processing streams: one which can process ore with boron content greater than 5,000 ppm and two which can process ore with boron content less than 5,000 ppm.
- The Mineral Resource estimate has been constrained by applying a 5,000 ppm Boron cut-off grade to HiB-Li mineralisation within the B5, M5, S5 and L6 geological units as well as a \$16.54/tonne net value cut-off grade to LoB-Li mineralisation in the M5, B5, S5 and L6 geological units.
- Key input parameters and assumptions for the Mineral Resource pit shell included the following:
  - B cut-off grade of 5,000 ppm for HiB-Li processing stream and no B cut-off grade for LoB-Li processing stream
  - No Li cut-off grade for HiB-Li processing stream and net value cutoff of \$16.54/tonne for LoB-Li processing stream
  - Overall pit slope angle of 42 degrees in all rock units (wall angle guidance provided by Geo-Logic Associates who developed the geotechnical design).
  - Fixed mining cost of US\$1.69 /tonne and a variable incremental mining cost of \$0.005/tonne per vertical meter from reference elevation of 6,210ft amsl
  - G&A cost of US\$16.54/tonne processed
  - Ore processing and grade control costs include a fixed cost per tonne and a variable cost of acid based on the acid consumption rate which is calculated for each block within the mineralized seams. For HiB-Li Processing Stream the fixed cost is \$30.50/mt and the acid costs range between \$30.93/mt to \$52.12/mt based on the average grades per seam. For LoB-Li Processing Streams, the fixed cost ranges between \$17.53/mt to \$30.80/mt and the acid costs range between \$26.33/mt to \$50.01/mt based on the average grades per seam.
  - Boron and Li recovery of 80.2% and 85.7% respectively for HiB-Li Processing Stream.
  - Boron Recovery for LoB-Li Processing Stream variable by lithology as follows: 65% in M5 Unit, 80.2% in B5 unit, 50% in S5 unit, and 37.3% in L6 unit.
  - Lithium Recovery for LoB-Li Processing Streams variable by lithology as follows: 78% in M5 unit, 85.7% in B5 unit, 88% in S5 unit, and 85% in L6 unit.
  - Boric Acid sales price of US\$1,172.78/tonne.
  - Lithium Carbonate sales price of US\$19,351.38/tonne.
  - Sales/Transport costs are included in the G&A cost

#### **Estimation Methodology**

- Drill core samples were assayed on nominal 1.52m lengths and this data set was composited to 1.52m lengths which respected seam contacts and was used for the interpolation of grade data into a 1.52m bench height block model. The data set honoured geological contacts (i.e. assay intervals did not span unit contacts).
- Based on a statistical analysis, extreme B grade values were identified in some of the units other than the targeted G5, B5, M5, S5, G6, L6 and Lsi units. The units other than these units were not estimated so no grade capping was applied to the drill hole database. The units B5, M5, S5 and L6 are the units of economic interest and the grades in these units and the adjacent units were estimated for completeness when re-blocking to a 9.14m bench height block model used to tabulate the mineral resource.
- The geological model was developed as a gridded surface stratigraphic model with fault domains included which offset the stratigraphic units in various areas of the deposit. The geological model was developed by GSI under direction of loneer and provided to IMC as the geologic basis for grade estimation. IMC has reviewed the geological model and accepts the interpretation.

- Domaining in the model was constrained by the roof and floor surfaces of the geological units. The unit boundaries were modelled as hard boundaries, with samples interpolated only within the unit in which they occurred.
- The geological model used as the basis for estimating Mineral Resources was developed as a stratigraphic gridded surface model using a 7.6m regularized grid. The grade block model was developed using a 7.6m north-south by 7.6m east-west by 1.52m vertical block dimension (no sub-blocking was applied). The grid cell and block size dimensions represent 25 percent of the nominal drill hole spacing across the model area. The model was reblocked to 9.14 m high blocks (six 1.52m blocks combined vertically) for assigning the economic attributes and tabulating the mineral resource.
- Inverse Distance Squared ('ID<sup>2</sup>') grade interpolation was used for the estimate, constrained by stratigraphic unit roof and floor surfaces from the geological model. The search direction for estimating grade varied and followed the floor orientation of the seams which changed within some of the fault block domains. The search distances ranged from 533 m in B5 to 229 m in S5. The number of drill hole composites used to estimate the grades of a model block ranges from a minimum of two composites to a maximum of 10 composites, with no more than 3 composites from one drill hole.
- The density values used to convert volumes to tonnages were assigned on a by-geological unit basis using mean values calculated from 120 density samples collected from drill core during the 2018 and more recent 2022-2023 P1 and P2 drilling programs. The density values by seam ranged from 1.53 grams per cubic centimeter ('g/cm<sup>3</sup>') for S3 to 1.98/cm<sup>3</sup> in seam L6. The density analyses performed by geotechnical consultants present during both the 2018 and 2022-2023 drilling programs (P1 and P2) followed a strict repeatable process in sample collection and analysis utilizing the Archimedes-principle (water displacement) method for density determination, with values reported in dry basis. This provided consistent representative data. The 2018 and 2022-2023 data aligned well and proved to be representative across the resource.

#### **Classification Criteria**

- Estimated Mineral Resources were classified as follows:
  - Measured: Between 107 and 122m spacing between points of observation depending on the seam, with sample interpolation from a minimum of four drill holes.
  - Indicated: Between 168 and 244m spacing between points of observation depending on the seam, with sample interpolation from a minimum of two drill holes.
  - Inferred: To the limit of the estimation range (maximum 533m, depending on the seam), with sample interpolation from a minimum of one drill hole (2 composites).
- The Mineral Resource classification included the consideration of data reliability, spatial distribution and abundance of data and continuity of geology, fault structures and grade parameters.

#### Mining and Metallurgical Methods and Parameters

- The Mineral Resource estimate presented in this Report was developed with the assumption that the HiB-Li mineralization within the Mineral Resource pit shell has a reasonable prospect for eventual economic extraction using current conventional open pit mining methods.
- The basis of the mining assumptions made in establishing the reasonable prospects for eventual economic extraction of the HiB-Li mineralization are based on preliminary results from mine design and planning work that is in-progress as part of an ongoing update to the Feasibility Study for the Project based on new information.
- The basis of the metallurgical assumptions made in establishing the reasonable prospects for eventual economic extraction of the HiB-Li (Stream 1) mineralization are based on results from metallurgical and material processing work that was developed as part of the ongoing Feasibility

Study for the Project. This test work was performed using current processing and recovery methods for producing Boric acid and Lithium carbonate products.

- A second process stream (Stream 2) to recover Li from low boron mineralized- low clay (LoB-Li) units has been confirmed. Current results indicate a reasonable process and expectation for economic extraction of the LoB-Li from the S5, B5 and L6 units. This test work was performed using current processing and recovery methods for producing Boric acid and Lithium carbonate products.
- A third process stream (Stream 3) to recover Li from low boron high clay mineralized (LoB-Li) units has been confirmed. Current results indicate a reasonable process and expectation for economic extraction of the LoB-Li from M5 unit. This test work was performed using current processing and recovery methods for producing Boric acid and Lithium carbonate products.

#### Appendix B Ore Reserve Statement and Parameters

A summary of the 2025 Ore Reserve estimate is provided in the table below. The Ore Reserve is the economically mineable part of the Measured and Indicated Resource. It includes allowances for mining dilution and ore losses in mining. Appropriate assessments and studies have been carried out and include consideration of and modification by realistically assumed mining, metallurgical, economic, marketing, legal, environmental, social, and governmental factors. These assessments demonstrate at the time of reporting that the extraction could be reasonably justified. After the application of modifying factors, the Measured and Indicated resources within the engineered pit design have been converted to the following Proven and Probable Reserves:

2025 Ore Reserve Estimate for Rhyolite Ridge South Basin (Metric)           Metric         Lithium         Boron         Contained         Contained <sup>6</sup> Recovered <sup>6</sup> Equivalent         Equivalent         Equivalent2         Equivalent2         Equivalent2											
)			Metric Tonnes <sup>2</sup>	Lithium Grade <sup>7</sup>	Boron Grade <sup>7</sup>		alent	Equiv			alent2
Area	Group	Classification		Li	в	Li <sub>2</sub> CO <sub>3</sub>	H <sub>3</sub> BO <sub>3</sub>	Li <sub>2</sub> CO <sub>3</sub>	H₃BO₃	Li <sub>2</sub> CO <sub>3</sub>	H <sub>3</sub> BO <sub>3</sub>
			(ktonnes)	(ppm)	(ppm)	(Wt. %)	(Wt. %)	(kt)	(kt)	(kt)	(kt)
	Upper Zone	Proven	27,990	1,880	15,364	1.00	8.78	280	2,459	240	1,972
2	B5 Unit	Probable	31,456	1,742	14,169	0.93	8.10	292	2,549	250	2,044
		Sub-total B5 Unit	59,446	1,807	14,732	0.96	8.42	572	5,007	490	4,016
	Upper Zone	Proven	3,489.3	2,401	7,652	1.28	4.38	45	153	38	122.45
	M5 Unit	Probable	3,410.5	2,262	7,430	1.20	4.25	41	145	35	116.20
T		Sub-total M5 Unit	6,899.8	2,332	7,542	1.24	4.31	86	298	73	238.64
2	Upper Zone	Proven	2,237	1,326	7,754	0.71	4.43	16	99.17	13.53	79.54
B)	S5 Unit	Probable	3,354	1,166	7,533	0.62	4.31	21	144.49	17.85	115.88
n 1 mq		Sub-total S5 Unit	5,591	1,230	7,622	0.65	4.36	37	243.67	31.38	195.42
Stream 1 ,000 ppm	Upper Zone	Proven	33,716	1,897	14,061	1.01	8.04	340	2,711	292	2,174
Stream 1 (>= 5,000 ppm B)	(B5, M5 & S5)	Probable	38,221	1,738	12,985	0.93	7.43	354	2,838	303	2,276
)	Sub- Total	Sub- total Upper Zone	71,937	1,813	13,489	0.96	7.71	694	5,549	595	4,450
)	Lower Zone	Proven	5,712	1,389	8,357	0.74	4.78	42	273	36	219
<i>J</i>	L6 Unit	Probable	13,591	1,334	7,856	0.71	4.49	97	611	83	490
		Sub- total Lower Zone	19,303	1,351	8,004	0.72	4.58	139	883	119	709
	Total Stream 1	Proven	39,428	1,823	13,235	0.97	7.57	383	2,984	328	2,393
	(all	Probable Sub-	51,812	1,632	11,640	0.87	6.66	450	3,448	386	2,766
	zones) Upper	total Stream 1	91,240	1,715	12,329	0.91	7.05	833	6,432	714	5,159
Low	Zone	Proven	4,525	2,220	2,144	1.18	1.23	53	55	46	44
ade, I	B5 Unit	Probable Sub-total B5	4,378 8,903	2,120 2,171	2,418 2,279	1.13 1.16	1.38 1.30	49 103	61 116	42 88	49 93
off gra	Upper	Unit									
cut-c	Zone	Proven	13,895	1,062	1,189	0.57	0.68	79	94	69	47
Stream 2 et value cu Clay)	S5 Unit	Probable Sub-total S5	22,183	899	1,007	0.48	0.58	106	128	93 162	64
St net v	Upper	Unit	36,077	962	1,077	0.51	0.62	185	222	163	111
<b>Stream 2</b> (\$16.54/tonne net value cut-off grade, <b>Clay)</b>	Zone (B5 &	Proven	18,419	1,347	1,424	0.72	0.81	132	150	115	92
3.54/t	(B3 & S5)	Probable	26,561	1,100	1,239	0.59	0.71	156	188	136	112
(\$16	Sub- Total	Sub- total Upper Zone	44,980	1,201	1,315	0.64	0.75	288	338	251	204

#### 2025 Ore Reserve Estimate for Rhyolite Ridge South Basin (Metric)

	Lower Zone	Proven	24,772	1,259	1,287	0.67	0.74	166	182	141	68
	L6 Unit	Probable	68,231	1,203	1,547	0.64	0.88	437	603	371	225
		Sub- total Lower Zone	93,003	1,217	1,478	0.65	0.84	603	786	512	293
	Total	Proven	43,192	1,296	1,345	0.69	0.77	298	332	256	160
	Stream 2	Probable	94,792	1,174	1,461	0.62	0.84	592	792	507	337
	(all zones)	Sub- total Stream 2	137,983	1,212	1,424	0.65	0.81	890	1,124	763	497
Stream 3	<b>T</b>	Proven	3,129	2,210	1,394	1.18	0.80	37	25	29	16
(\$16.54/tonne net value cut-	Total Stream 3	Probable	14,273	2,140	1,186	1.14	0.68	163	97	127	63
off grade, High Clay)	(M5 zone)	Sub-total Stream 3	17,403	2,153	1,224	1.15	0.70	199	122	156	79
TOTAL of All Streams, All Seams, and All Proven & Probable		,	246,626	1,464	5,444	0.78	3.11	1,922	7,678	1,632	5,735

Notes:

- The statement of estimates of Ore Reserves has been compiled by Mr. Joseph S.C. McNaughton, a Competent Person is a Registered Professional Engineer in State of Arizona. Mr McNaughton is a full-time employee of IMC Inc. and is independent of Ioneer and its affiliates. Mr. Joseph McNaughton is responsible for the estimate, has sufficient experience that is relevant to the style of mineralization and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the JORC Code (2012).
- 2. The ore reserve estimates the result of determining the measured and indicated resource that incorporates modifying factors demonstrating that it is economically minable, allowing for the conversion to proven and probable. In making this determination, constraints were applied to the geological model based upon a pit optimization analysis that defined a conceptual pit shell limit. The conceptual pit shell was based upon a net value per tonne calculation including a 5,000ppm boron cut-off grade for high boron high lithium (HiB-Li) mineralization (Stream 1) and a \$16.54/tonne net value cut-off grade for low boron (LoB-Li) mineralization below 5,000ppm boron broke into two material types, low clay and high clay material respectfully (Stream 2 and Stream 3). The pit shell was constrained by a conceptual Mineral Resource optimized pit shell for the purpose of establishing reasonable prospects of eventual economic extraction based on potential mining, metallurgical and processing grade parameters identified by mining, metallurgical and processing studies performed to date on the Project. The conceptual pit shell was used a guide to the engineered quarry designs used to constrain the Mineral Reserves.
- 3. Key inputs in developing the Mineral Resource pit shell included a 5,000ppm boron cut-off grade for HiB-Li mineralization, \$16.54/tonne net value cut-off grade for LoB-Li low clay mineralization and LoB-Li high clay mineralization; mining cost of US\$1.69 /tonne; G&A cost of US\$16.54 /process tonne; plant feed processing and grade control costs which range between US\$20.27/tonne and US\$98.73/tonne of plant feed (based on the acid consumption per stream and the mineral resource average grades); boron and lithium recovery for Stream 1 of 80.2% and 85.7%; Stream 2 and 3: M5 65% and 78%, B5 80.2% and 85.7%, S5 50% and 88%, L6 37% and 85%, respectively; boric acid sales price of US\$1,172.78/tonne; lithium carbonate sales price of US\$19,351.38/tonne were selected based on the market analysis.
- 4. Ore reserves are based on a block model that is 7.62m x 7.62m30 in plan and 9.14m high. The model block size used for the ore reserve estimate is based on selected mining equipment and approached used within the mine plan. As a result, the dilution and ore loss are incorporated within the block model. On average, the reserve experienced a 308% increase in process tonnage, with lithium and boron grades decreasing by 18% and 65%, respectively. This resulted in a 428% and 167% increase in the tons of contained lithium carbonate and boric acid in the process streams when transitioning from mineral resource to ore reserve.
- 5. Ore reserves reported on a dry in-situ basis. The contained and recovered lithium carbonate and boric acid are reported in the table above in metric tonnes. Lithium is converted to equivalent contained tonnes of lithium carbonate using a stochiometric conversion factor of 5.322, and boron is converted to equivalent contained tonnes of boric acid using a stochiometric conversion factor of 5.718. Equivalent stochiometric conversion factors are derived from the molecular weights of the individual elements which make up lithium carbonate and boric acid. The equivalent recovered tons of lithium carbonate and boric acid is the portion of the contained tonnage that can be recovered after processing.
- 6. All ore reserve figures represent estimates as of May 2025. Ore reserve estimates are not precise calculations, being dependent on the interpretation of limited information on the location, shape and continuity of the occurrence and on the available sampling results. The totals have been rounded to reflect the relative uncertainty of the estimate. Totals may not sum due to rounding.
- 7. Kt thousand metric tonnes, MT million metric tonnes, kst = thousand short tons; Li = lithium; B = boron; ppm= parts per million; Li<sub>2</sub>CO<sub>3</sub> = lithium carbonate; H<sub>3</sub>BO<sub>3</sub> = boric acid. Equivalent lithium carbonate and boric acid grades have been rounded to the nearest tenth of a percent.

#### Comparison with Previous Ore Reserve

The table below presents a summary comparison of the 2025 Ore Reserve estimate presented above, against the previous March 2020 Ore Reserve estimate.

Group	Classification	Tonnes (Mt)	Li (ppm)	B (ppm)	Li₂CO₃ (wt. %)	H₃BO₃ (wt. %)	Li₂CO₃ (kt)	H₃BO₃ (kt)
	Proved	85.7	1,753	9,356	0.9	5.3	239	1,369
May 2025	Probable	160.9	1,676	5,211	0.9	3.0	598	1,999
Reserve	Total	246.6	1,697	6,356	0.9	3.6	837	3,368
	Proved	29.0	1,900	16,250	1.0	9.3	290	2,700
March 2020	Probable	31.5	1,700	14,650	0.9	8.4	280	2,620
Reserve	Total	60.0	1,800	15,400	1.0	8.8	580	5,310
Variation	Proved	56.7 (+196%)	-328	-9,436	-0.16	-5.4	1,002	3,823
	Probable	129.4 (+411%)	-293	-9,935	-0.15	-5.7	1,439	5,063
	Total	186.1 (+308%)	-331	-9,973	-0.17	-5.7	2,441	8,886

Compared with the 2020 estimate, the updated 2025 Ore Reserve estimate has been:

- revised with 35% of the Reserve now in the Proved category
- Proven and Probable increased by 186.1mt to a total of 246.6mt, representing a 308% tonnage increase for the total Ore Reserve
- overall lithium grade has decreased by 18% and the boron grade has decreased by 65%.
- The changes to the previous ore reserve estimate primarily relate to 1) inclusion of lowboron lithium mineralisation in the Ore Reserve estimate for the first time 2) additional drilling completed 3) avoidance of Tiehm's buckwheat and Cave Springs in the mine plan 4) additional ore streams to process plant.

#### Summary of Reserve Estimate Parameters and Reporting Criteria

In accordance with ASX Listing Rules and the JORC Code (2012 Edition), a summary of the material information used to estimate the Ore Reserve is summarised below (for further information please refer to Table 1 in Appendix D).

#### Mineral Resource Estimate for Conversion to Ore Reserves

The Ore Reserves are based on an updated February 2025 Mineral Resource by IMC Competent Person. The Mineral Resource reported for the M5, B5, S5 and L6 domains is outlined in Appendix A, and the Mineral Resources are reported inclusive of the Ore Reserves.

#### **Cut-off Parameters**

A cut-off grade of 5,000 ppm boron cut-off grade for HiB-Li mineralization (Stream 1), a \$16.54/tonne net value cut-off grade for LoB-Li low clay mineralization (Stream2) and a \$16.54/tonne net value cut-off for LoB-Li high clay mineralization (Stream3). The formula for calculating "Net Value" is as follows: (Value of Saleable Lithium Product + Value of Saleable Boron Product) – Processing Cost = "Net Value".

#### Mining Method and Assumptions

The Rhyolite Ridge Project is designed to use conventional truck-shovel methods for operation.

Geotechnical quarry slope designs were completed with designed bench height of 9.14m and catch bench width between 6.8m to 8.8m (depending on rocktype). A phased approach to the quarry design has been used to develop the mine plan. The ore production to the processing facility is planned at a target rate of approximately 6,900 tpd (2.6 Mt/y), which is constrained by plant acid consumption of approximately 3,500 tpd (1.28 Mt/y). The life of mine plan indicates an expected mine life of approximately 96 years under the target annual production rate.

Five separate overburden storage facilities were designed to contain the 765.9 Mt of overburden and nonore grade material to be removed from quarry. Four overburden storage facilities were located external to the quarry and the fifth one will be the quarry itself. An autonomous haulage system and conventional support equipment were considered for estimating quarry equipment requirements, labor requirements, capital costs, and operating costs. The use of autonomous haulage in mining and quarry operations has proven to be reliable, safe, and cost effective in the long term.

IMC performed numerous pit targeting exercises under various scenarios and assumptions to identify the economic extents of the LOM Quarry using the 9.14m mine planning geological block model and Hexagon MinePlan<sup>®</sup> software's quarry optimization capabilities. These pit targeting exercises formed the basis of IMC's subsequent quarry designs.

Key inputs influencing the pit targeting exercise included:

- Modifying factors;
- Unit costs, including mining, processing, and sales costs;
- Metallurgical recovery;
- Sales prices;
- Cut-off grades;
- Geotechnical criteria, including overall quarry slopes;
- Other external constraints such as the locations of buckwheat, permit boundaries, public utilities and infrastructure.

Modifying factors were applied to the in-situ block model to estimate tonnages and grades that can be expected from the mining process.

Due to the geology and varying geotechnical constraints in the quarry area, differing inter-ramp slope angles were used in the quarry optimization based upon GLA initial geotechnical recommendations (GeoLogic, 2024). Based on the pit targeting criteria, IMC performed nested quarry optimizations at static input costs and incremental revenue factors ranging from 10% to 110% of the base selling prices using the Lerchs-Grossmann algorithm to test the sensitivity of the deposit to selling prices and identify the best 50 years of process feed.

Based upon the results of this pit targeting exercise, approximately the first 60 years of production are contained within a pit design that targets a 15% revenue factor quarry shell was chosen as a basis for the development of the first six phases. The LOM quarry design contains roughly 246 Mt of ore, which equates to a mine life of approximately 96 years at an average production rate of 2.6 Mtpa ore.

Stated Ore Reserves have only been reported from the Measured and Indicated Resource categories with Modifying Factors applied.

#### **Processing Method and Assumptions**

The process flowsheet and process plant assumptions developed for the 2020 FS by Fluor, and the subsequent metallurgical optimization and flowsheet derisking programs completed between 2020 and 2025 were used for this Ore Reserve estimate. In-depth metallurgical test work and pilot plant programs were performed over the 18-month duration of the 2020FS where over 27 tonnes of ore to optimise the process flowsheet. Metallurgical programs completed between 2020 and 2025 focussed of process optimization and addressed specific risk areas associated with blending other orezones into the process, mine plan variability and startup. These programs were successful in derisking the flowsheet and demonstrating other orezones may be processed without major engineering modifications or material impacts to overall system recovery. The Lithium hydroxide monohydrate (LHM) circuit was successfully tested and produced battery grade LHM material from technical grade lithium carbonate based on Rhyolite Ridge specific chemistries.

Ore will be processed by ore sizing, vat acid leaching, impurity removal, evaporation, and crystallisation using a flowsheet developed specifically for the Project to generate technical-grade

lithium carbonate and technical grade boric acid. Test work has also confirmed that refining the technical-grade lithium carbonate (>98.5% purity) into battery-grade lithium hydroxide Monohydrate (>56.5% purity) is technically and commercially feasible via a liming route (a well-established and widely used conversion route in the Lithium industry). The integrated LHM conversion plant does not form part of the initial scope of the Rhyolite Ridge project to allow time for stable operations to be achieved. The LHM conversion facility will be installed following startup with conversion operations to commence in year 3.

#### Environmental

The Project is designed to be a sustainable, environmentally sensitive operation with no grid energy requirements, low water usage, low emissions, and a modest surface footprint.

The permits deemed critical to the advance of the overall Project include the Bureau of Land Management ('BLM') Plan of Operations, the State of Nevada Water Pollution Control Permit ('WPCP') Nevada Bureau of Air Pollution Control Class II Operating Permit, and State of Nevada Reclamation Permit which are required to construct, operate, and close a mining facility in Nevada. Ioneer currently holds and maintains compliance with all of these permits.

Other ancillary state and local operating permits are required for specific components of the Project construction and operations and will be submitted as the project advances through construction to commissioning.

In October 2024, Ioneer received its federal permit for the Rhyolite Ridge Lithium-Boron Project from the BLM. The formal Record of Decision (ROD) approving the Project's Mine Plan of Operations follows the publication of the final Environmental Impact Statement (EIS) by the BLM, which incorporated public feedback received during the April-June 2024 open comment period, and concludes the rigorous and comprehensive formal federal permitting process, which began in early 2020. Ioneer's pre-permitting work began in early 2019 and, in December 2022, the company formally entered the final stages of the NEPA review, as required by all projects on federal lands.

As part of the final EIS, the U.S. Fish and Wildlife Service, which oversees the administration of the Endangered Species Act (ESA), also formally released the ESA Section 7 Biological Opinion concluding Rhyolite Ridge will not jeopardise Tiehm's buckwheat or adversely modify its critical habitat. The Project, as permitted, will not directly impact Tiehm's buckwheat and any indirect impacts will be minimized, monitored and mitigated for. Project-related disturbance will be a maximum of 21% (191 acres) of the designated critical habitat.

#### Infrastructure

TheProjectiscurrentlyinthedevelopmentstage, and no site-specificinfrastructure hasbeen built to date. Sufficient land exists to locate all proposed infrastructure required for the Project, including haul roads, highwall support structures, Overburden Storage Facilities ('OSFs'), Spent Ore Storage Facility ('SOSF'), Contact Water Ponds ('CWPs'), the processing plant ('which includes processing structures and facilities'), maintenance facilities, warehousing, shipping and receiving, fuel island, Sulphuric Acid Plant ('SAP'), Steam Turbine Generator ('STG') responsible for power generation/transmission, and administrative buildings.

The entire facility is not connected to the Nevada state power grid. Utilizing Steam generated from the Sulphuric acid plant, and waste heat boiler, a steam turbine generator "STG" will be installed to generate 42 mega Watts of electricity. Two backup diesel generators will also be available to provide black-start capability and provide power to essential systems should the STG be down.

The Project has been designed to be an environmentally sensitive operation with low water usage and water recycling and reuse where possible. There is sufficient water available to meet processing and

#### **Revenue Factors**

The revenue factors used in the economic analysis were based on work performed for the 2020FS. Annual saleable lithium carbonate, and boric acid tonnages reflect the head grade dictated by the mine plan and anticipated metallurgical recoveries estimated from test work. Based on this test work, the recovery of boron to boric acid and lithium to lithium carbonate vary based on the process stream and the seam. The average recoveries used for the calculation of the net value are shown in the table below.

	Boron to Boric Acid		Lithium to Lithium Carbonate		
Seam	Stream 1	Streams 2 & 3	Stream 1	Streams 2 & 3	
M5	80.2%	65.0%	85.7%	78.0%	
B5	80.2%	80.2%	85.7%	85.7%	
S5	80.2%	50.0%	85.7%	88.0%	
L6	80.2%	37.3%	85.7%	85.0%	

The Rhyolite Ridge processing facilities were designed to produce technical grades of boric acid and lithium carbonate (purities of 99.9-100.9% H<sub>3</sub>BO<sub>3</sub> eq and 98.5% Li<sub>2</sub>CO<sub>3</sub>, respectively). The stream 1 material is characterized as having boron grades > 5,000 ppm, which is mostly seen in the B5, M5, and L6 mineralized units where boron grades exceed 5,000 ppm. Lithium-bearing zones with boron content < 5,000 ppm, primarily in the L6, M5 and S5 mineralized units, are identified as stream 2 and stream 3. These recoveries have been applied to reflect the cumulative recovery of the unit processes that span from vat leaching to product production. Leaching test work on stream 2 material demonstrated comparable lithium extractions when using the vat leaching method. Boron extractions were observed to be lower in stream 2 material which was attributed to the lower boron head grade. The lower boron leach recovery in stream 2 is an issue of extraction, and not of permeability, washability or co-precipitation, it is therefore not expected to impact the boron grade and overall boron extraction has been adjusted to reflect the proportions of stream 1,2 and 3 material. Lithium carbonate and boric acid tonnages have been estimated using stochiometric conversion factors based on the lithium and boron grades.

Price forecasts for lithium carbonate and lithium hydroxide were obtained from a range of market researchcompanies, investmentbanks, and other reputables ources. For the financial model of the Project, price forecasts rather than the current or historical prices were used. This approach allows to better account for future market conditions and potential price trends, providing a more accurate financial assessment for the Project.

The offtake agreement prices of lithium chemicals are based on the delivered price formula using the battery-grade lithium hydroxide index price from the Benchmark Mineral Intelligence (Q1, 2025) battery-grade lithium hydroxide price forecast. Though the offtake agreements are for 3 and 5 years, we have continued the price formula through the mine life. The lithium hydroxide index price forecast (in real terms) ranges from US\$9,928/t to US\$25,00/t between 2025 and 2040. The model assumes a flat price form 2040 through the remainder of the mine life.

In line with major borate supplier, Rio Tinto Minerals, Ioneer boric acid price forecasts were based on internal analysis of historical prices and volumes extracted from Datamyne's trade data, import prices and volumes from Japan, South Korea, Southeast Asia, and China, customers and dealers' interviews, China Boron Association data, and Internal market equilibrium assumptions. The price forecast for boric acid ranges from US\$830/t to US\$1,400/t between 2025 and 2040. The model assumes a flat price from 2040 through the remainder of the mine life.

#### Costs

The capital and operating cost estimates used as inputs into the economic analysis that formed the basis of the Ore Reserve estimate are based on work completed for the Reserve update. The capital cost estimate has an estimated accuracy of +15%/-10% and a contingency of 10% and engineering design is ~70 % complete. All capital costs were expressed in Q1 2024 US dollars. The total initial capital costs were estimated at US\$1,667.9 million. The estimate reflects the Project's EPCM execution strategy and baseline project schedule. Capital costs for various Work Breakdown Structure (WBS) codes were independently developed by third parties and consolidated by Fluor. More than 1,500 deliverables were produced during the 2024FS to support the capital costs estimate.

The capital cost estimate covers the period from final investment decision to first production and is reported in Q1 2024 real US dollars. It was assumed that 20% of the workforce will be local and 80% will travel from outside the region and will be eligible for travel subsistence. The contractors selected to execute the Project will adhere to Davis Bacon prevailing wage rates for the State. The labour productivity factor selected for the Project was 1.0 and was applied to all base construction work hours for all Project labour. Contractor quotes for civil works were used to confirm the unit rates and the productivity used in the capital cost estimate. These rates were also benchmarked with historical data from similar projects in the region (reference benchmark report from Fluor). Pre-assembly and modularization strategies, where feasible, have been considered and are reflected in the estimates. A per diem allowance of US\$110/day for 80% of the direct labor and 90% of the indirect labor force was included for living-out and travel expenses.

Total equipment pricing, including mine equipment, process/mechanical, electrical and instruments/controls, is based as 63% on firm price, and 36% on budget price from competitive bidders. The balance of equipment pricing, representing 1% of total equipment cost, is based on historical data. The capital cost estimates present all expected forecast to complete costs for the Project as defined by the scope of work in the basis of estimate, while any spent or sunk costs up to the Report date were excluded. A contingency of 10% was applied to the capital costs estimate using a Monte Carlo simulation to achieve a P65 (i.e., the probability at the 65th percentile) confidence level for the estimate and P50 for schedule according to the model and ranges established by Fluor. The estimate, including contingency, has an expected accuracy range of +15%/-10% as per the basis of estimate.

Capital costs for the mining equipment and the process plant mobile equipment are based on a firm quote and a leasing strategy contract with Caterpillar, and other selected equipment vendors. The costs for a twoyear lease plus 20% lease down payment and fees are included in the capital cost estimate. The remaining lease costs are included in the sustaining capital estimates. Capital costs for the haul roads, overburden storage facilities, spent ore storage facility, the processing plant (which includes processing structures and facilities), maintenance facilities, warehousing, shipping and receiving, fuel island, sulfuric acid plant, steam turbine generator, and administrative buildings were estimated from material take-off quantities developed by various third parties. Each of the above has an engineering design that supports the FS level of design maturity.

#### Economic

The financial analysis, carried out for the feasibility study and updated for this Report, was conducted using a discounted cash flow analysis. This method calculates annual cash flows (based on a calendar year) using various sources of inputs, including operating expenses, capital expenses (both initial and sustaining), pricing forecasts, run-of-mine ore production, processing rates, etc. The annual cash flows are based on revenue in a specific period (calendar year) minus the projected expenses or taxes associated with life-of-mine operations. The result is then discounted using the discount rate that adjusts the cash flows for the time value of money. This method produces the present value of the expected future cash flows, also known as net present value (NPV).

The economic analysis and sensitivities were completed using  $\pm 15\%$  variation in one variable at a time. There was no sensitivity analysis performed for two variables or multi-variable. Note that the equation to determine revenue is based on a linear relationship between prices of the metal (either lithium or boric acid) and the corresponding recovery rate. This linear relationship forces the sensitivities to be equal

The Project's total cash flows result in post-tax cash flow of US\$23.2 billion total for the 96-year life-of-mine.

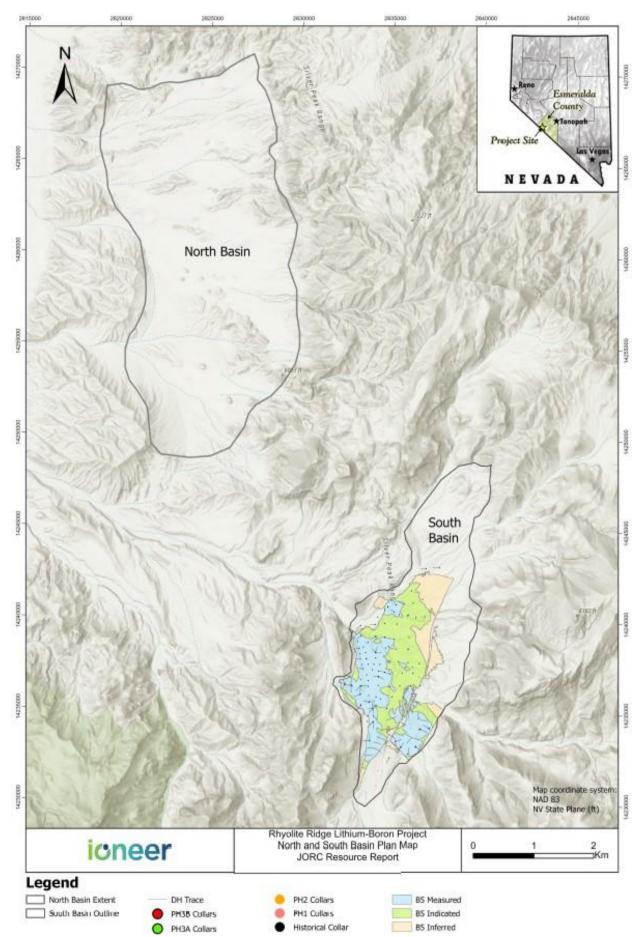
The Project's key financial metrics are shown below.

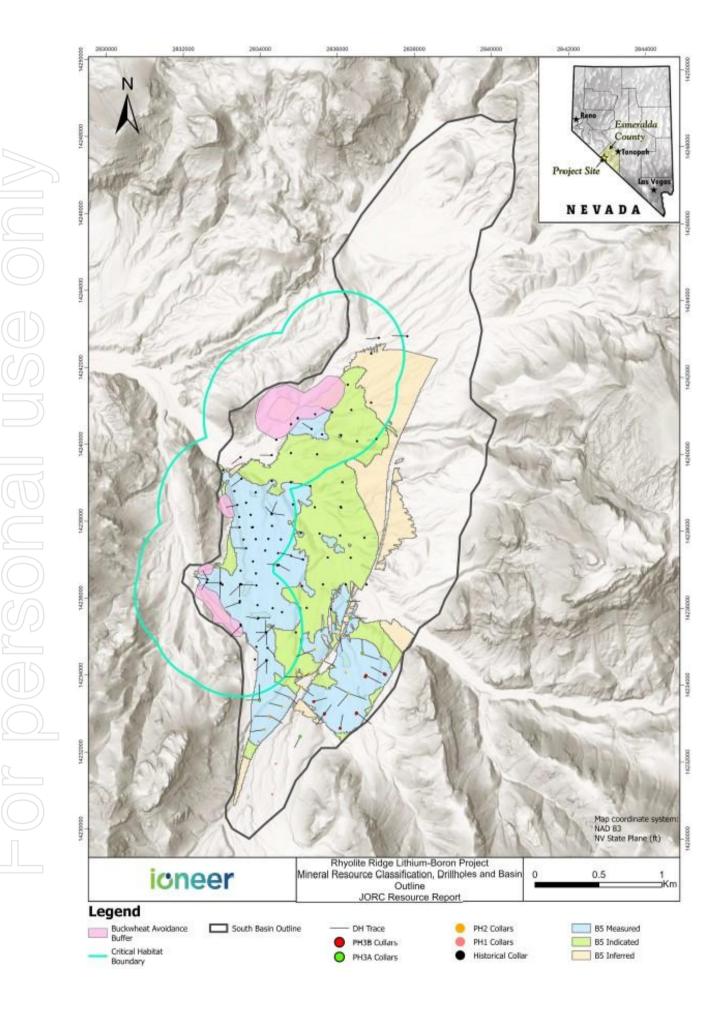
Item	Unit	Description
Revenue	US\$ million	47,225
Pre-tax cash flow	US\$ million	26,114
Post-tax cash flow	US\$ million	23,234
Unlevered post-tax net present value	US\$ million	1,367
Unlevered post-tax internal rate of return	%	14.45%
Payback period (including construction)	Years	11
Mine life	Years	96
Ore Processing period	Years	95

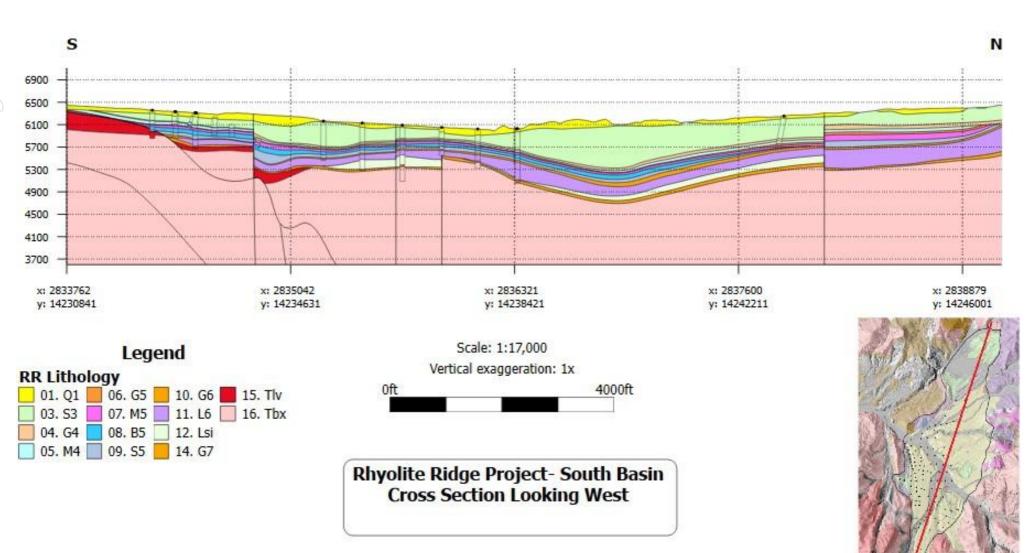
#### **APPENDIX C – FIGURES**

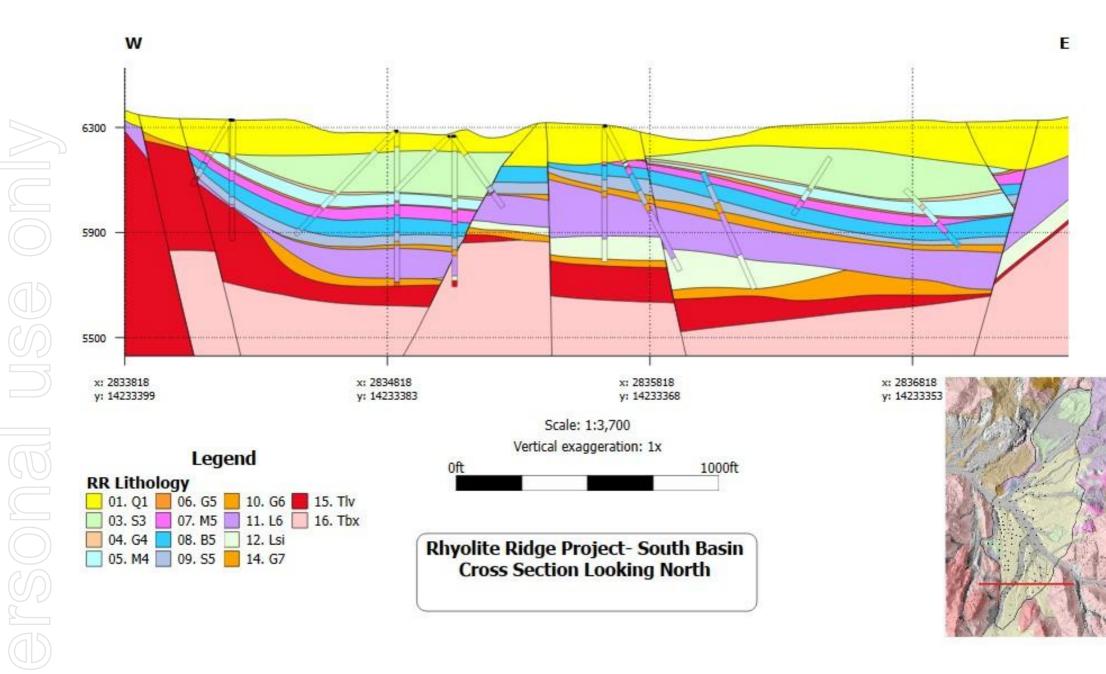
Appendix C contains the following Figures:

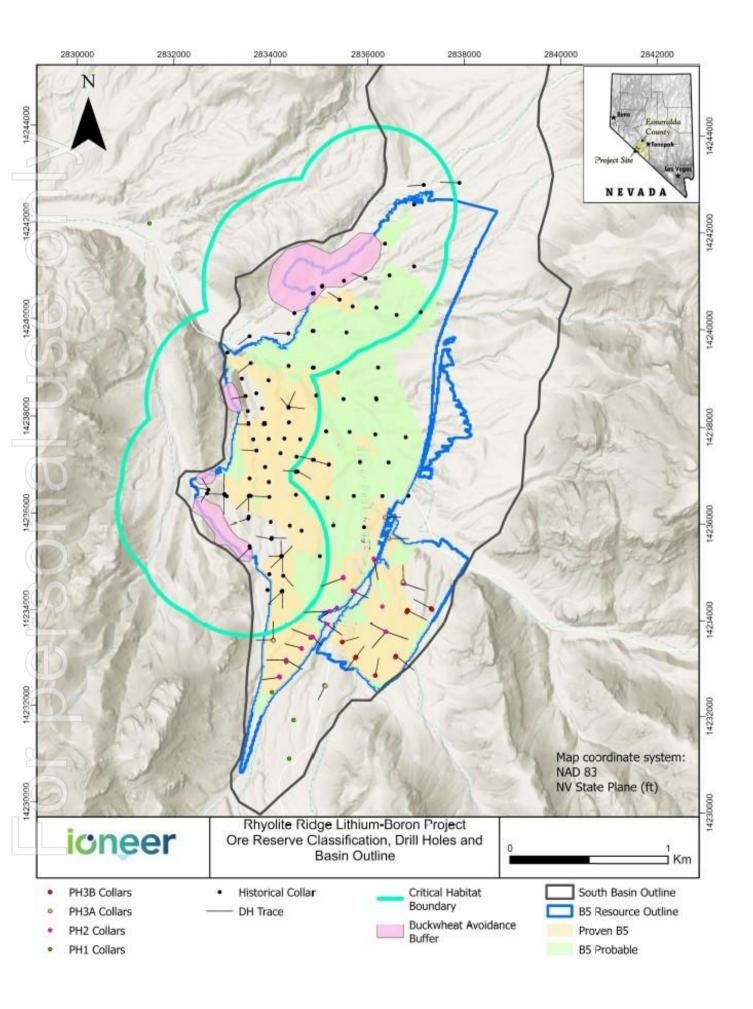
- 1. North and South Basin plan showing the location of drill holes, Resource and tenement boundary.
- 2. South Basin plan showing outlines of Measured, Indicated and Inferred Mineral Resources
- 3. South Basin South- North Cross Section looking West
- 4. South Basin Cross Section Looking North
- 5. South Basin plan showing outlines of Proved and Probable Ore Reserves











# **APPENDIX D – JORC TABLE 1**

The following table provides a summary of important assessment and reporting criteria used at the Ioneer Ltd. Rhyolite Ridge Project (the Project) for the reporting of exploration results and Lithium-Boron Mineral Resources and Ore Reserves in accordance with the Table 1 checklist in The Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves (The JORC Code, 2012 Edition). Table 1 is a checklist or reference for use by those preparing Public Reports on Exploration Results, Mineral Resources, and Ore Reserves.

# JORC TABLE 1

## SECTION 1 SAMPLING TECHNIQUES AND DATA

(Criteria listed in this section apply to all succeeding sections.)

Criteria	JORC Code 2012 Explanation	Commentary
Sampling Techniques	<ul> <li>Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling</li> </ul>	<ul> <li>The nature and quality of the sampling from the various sampling programs includes the following:</li> <li>Reverse circulation (RC) Drilling: a sample was collected every 1.52 metre (m) from a 127-millimetre (mm) diameter drill hole and split using a rig-mounted rotary splitter. Samples, with a mean weight of 4.8 kilograms (kg) were submitted to ALS Minerals laboratory in Reno, NV where they were processed for assay. RC samples represent 49% of the total intervals sampled to date.</li> <li>Core Drilling: Core samples were collected from HQ (63.5 mm core diameter) and PQ (85.0 mm core diameter) drill core, on a mean interval of 1.52 m, and cut using a water-cooled diamond blade core saw. Samples, with a mean weight of 1.8 kg, were submitted to ALS where they were proceeded for assay.</li> <li>Drill Hole Deviation: Inclined core drill holes were surveyed to obtain downhole deviation by the survey company (International Directional Services, LLC) or drilling company (Idea Drilling, Alford Drilling, IG Drilling, Boart Long Year, Major Drilling,) with a downhole Reflex Mems Gyros and Veracio TruShot tools and, for all but three of the drill holes. One drill hole could not be surveyed using an Acoustic Televiewer (SBH-60, SBH-79).</li> <li>Trenches: In addition to sampling from the outcrop/subcrop using a backhoe and or hand tools. Chip samples were then collected from the floor of the trench. Due to concerns with correlation and reliability of the results from the trenches, The Competent Person</li> </ul>

Criteria	JORC Code 2012 Explanation	Commentary
		has not included any of this data in the geological model or Mineral Resource estimate.
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	<ul> <li>Measures taken to ensure sample representivity include the following: <ul> <li>Due to the nature of RC samples, lithological boundaries are not easily honoured; therefore, continuous 1.52 m sample intervals were taken to ensure as representative a sample as possible. Lithological boundaries were adjusted as needed by a senior loneer geologist once the assay results were received.</li> <li>Core sample intervals were selected to reflect visually identifiable lithological boundaries wherever possible, to ensure sample representivity. In cases where the lithological boundaries were gradational, the best possible interval was chosen and validated by geochemical assay results.</li> </ul> </li> <li>All chip and core sampling were completed by or supervised by a senior loneer geologist. The senior loneer, Newfield's and WSF geologists referenced here, and throughout this Table 1, have sufficient relevant experience for the exploration methods employed, the type of mineralization being evaluated, and are registered professional geologists in their jurisdiction; however, they are not Competent Persons according to the definition presented in JORC as they are not members of one of the Recognized professional Organization" included in the ASX list referenced by JORC.</li> </ul>
		<ul> <li>The Competent Person was not directly involved during the exploration drilling programs and except for observing sampling procedures on two drill holes during the site visit (August 10, 2023), was not present to observe sample selection. Based on review of the procedures during the site visit and subsequent review of the data, it is the opinion of the Competent Person that the measures taken to ensure sample representivity were reasonable for the purpose of estimating Mineral Resources.</li> </ul>
	• Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry	<ul> <li>Aspects of the determination of mineralization included visual identification of mineralized intervals by a senior loneer geologist using lithological characteristics including clay and carbonate content, grain size and the presence of key minerals such as Ulexite (hydrated sodium calcium borate hydroxide) and Searlesite</li> </ul>

Criteria	JORC Code 2012 Explanation	Commentary
	standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information	<ul> <li>(sodium borosilicate). A visual distinction between some units, particularly where geological contacts were gradational was initially made. Final unit contacts were then determined by a senior loneer geologist once assay data were available.</li> <li>The Competent Person was not directly involved during the exploration drilling programs; however, the visual identification of mineralized zones and the process for updating unit and mineralized contacts was reviewed with the loneer senior geologist during the site visit. The Competent Person evaluated the identified mineralized intervals against the analytical results and agrees with the methodology used by loneer to determine material mineralization.</li> </ul>
Drilling techniques	Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).	<ul> <li>Both RC and core drilling techniques have been used on the Project. Exploration drilling programs targeting Lithium-Boron (Li-B) mineralization on the Project have been implemented by American Lithium Minerals Inc. (2010-2012) and Ioneer (formerly Global Geoscience) in 2016, 2017, 2018, 2019, 2022, and 2023.</li> <li>Prior to 2018, all RC drilling was conducted using a 127 mm hammer. All pre-2018 core drill holes were drilled using HQ sized core with a double-tube core barrel.</li> <li>For the 2018-2023 drilling programs, all core holes (vertical and inclined) were tricone drilled through unconsolidated alluvium, then cored through to the end of the drill hole. A total of 91 core holes were drilled, 64 holes were PQ diameter and 27 were drilled as HQ diameter. Drilling was completed using a triple-tube core barrel (split inner tube) which was preferred to a double-tube core barrel (solid inner tube) as the triple-tube improved core recovery and core integrity during core removal from the core barrel.</li> </ul>
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed.	<ul> <li>Prior to 2017, chip recovery was not recorded for the RC drilling therefore the Competent Person cannot comment on drill sample recovery for this period of drilling. For the 2017 RC drilling program, the drill holes were geologically logged as they were being drilled; however, no estimates of chip recoveries were recorded. Therefore, the Competent Person cannot comment on drill sample recovery for this period of drilling.</li> <li>For the 2010-2012 and 2016 core drilling programs, both core recovery and rock quality index (RQD) were recorded for each</li> </ul>

Criteria	JORC Code 2012 Explanation	Commentary
		<ul> <li>cored interval. Core recovery was determined by measuring the recovered linear core length and then calculating the recovered percentage against the total length of the core run from the drill advance. The core recovery for all the drilling ranged from 0% to 100%, with over 65 % of the drill holes having greater than 80% mean core recovery. The core recovery values were recorded by the logging geologist and reviewed by the senior loneer geologist. The majority of the 2010-2012 and 2016 core drill holes reported greater than 95% recovery in the B5, M5 and L6 mineralized intervals.</li> <li>For the 2018-2019 drilling program, both core recovery and RQD were recorded for each cored interval. Core recovery was determined by measuring the recovered linear core length and then calculating the recovered percentage against the total length of the core run from the drill advance. The core recovery for all the drilling ranged from 41% to 100%, with over 65% of the drill holes having greater than 90% mean core recovery. The core recovery values were recorded by the logging geologist and reviewed by the senior loneer geologist. In the target mineralized intervals (M5, B5 &amp; L6), the mean core recovery was 86% in the B5, 87% in the M5 and 95% in the L6 units, with most of the drill holes reporting greater than 90% recovery in the mineralized intervals.</li> <li>The Competent Person considers the core recovery for the 2023, 2022, 2018- 2019, 2016 and 2010-2012 core drilling programs to be acceptable based on statistical analysis which identified no grade bias between sample intervals with high versus low core recoveries. On this basis, the Competent Person has made the reasonable assumption that the sample results are reliable for use in estimating Mineral Resources.</li> </ul>
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	<ul> <li>Chip recoveries were not recorded for the 2010-2012 and 2017 RC drilling programs, and there is no indication of measures taken to maximize sample recovery and ensure representative nature of samples.</li> <li>No specific measures for maximizing sample recovery were documented for the 2010-2012 and 2016 core drilling programs.</li> <li>During the 2018-2023 drilling programs, loneer used a triple-tube core barrel to maximize sample recovery and ensure</li> </ul>

Criteria	JORC Code 2012 Explanation	Commentary
		<ul> <li>representative nature of samples. The use of triple-tube was originally used during the 2018 drill program. A triple-tube core barrel generally provides improved core recovery over double-tube core barrels, resulting in more complete and representative intercepts for core logging, sampling and geotechnical evaluation. It also limited any potential sample bias due to preferential loss/gain of material.</li> </ul>
	• Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	<ul> <li>Chip recovery was not recorded for the 2010-2012 and 2017 RC drilling program and, therefore, there is no basis for evaluating the relationship between grade and sample recovery for samples from these programs.</li> <li>Based on the Competent Person's review of the 2010-2012, 2016 and 2018-2019, 2022-2023 core drilling recovery and grade data there was no observable relationship between sample recovery and grade.</li> </ul>
Logging	Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.	<ul> <li>All core and chip samples have been geologically logged to a level of detail to support appropriate Mineral Resource estimation, such that there are lithological intervals for each drill hole, with a correlatable geological/lithological unit assigned to each interval.</li> <li>The 2018-2019 and 2022-2023 drilling were also geotechnically logged to a level of detail to support appropriate Mineral Resource estimation.</li> <li>The Competent Person has reviewed all unit boundaries in conjunction with the loneer senior geologist, and where applicable, adjustments have been made to the mineralized units based on the assay results intervals to limit geological dilution.</li> </ul>
	• Whether logging is qualitative or quantitative in nature.	• The RC and core logging were both qualitative (geological/lithological descriptions and observations) and quantitative (unit lengths, angles of contacts and structural features and fabrics).
2	Core (or costean, channel, etc.) photography.	• All chip trays and Core photography was completed on every core drill hole for the 2010-2012, 2016, 2018-2019 and 2022-2023 drilling programs.
5	• The total length and percentage of the relevant intersections logged.	<ul> <li>Prior to 2018, a total length of 8,900 m of RC drilling and 6,000 m of core drilling was completed for the Project, 100% of which was geologically logged by a logging geologist and reviewed by the senior loneer geologist.</li> <li>For the 2018-2019 drilling, a total length of 548 m of RC drilling and</li> </ul>

Criteria	JORC Code 2012 Explanation	Commentary
	The total length and percentage of the relevant intersections logged. (Con't)	<ul> <li>9,321 m of core drilling was completed for the Project, 100% of which was geologically logged by a logging geologist and reviewed by the senior loneer geologist</li> <li>For the 2018-2019 drilling, 86% of the 9,321 m of core was geotechnically logged by an engineering geologist/ geotechnical engineer and reviewed by the senior loneer geologist.</li> <li>For the 2022-2023 drilling, 100% of the 7,362m of core was geotechnically logged by an engineering geologist/ geotechnical engineer and reviewed by the senior loneer geologist.</li> <li>For the 2022-2023 drilling, 100% of the 7,362m of core was geotechnically logged by an engineering geologist/ geotechnical engineer and reviewed by the senior loneer geologist.</li> </ul>
	If core, whether cut or sawn and whether quarter, half or all core taken.	<ul> <li>The following sub-sampling techniques and sample selection procedures apply to drill core samples:</li> <li>During the 2010-2012 and 2016 program, core samples were collected on a mean 1.52 m down hole interval and cut in two halves using a manual core splitter. The entire sample was submitted for analysis with no sub-sampling prior to submittal.</li> <li>During the 2018-2019 drilling program, core samples were collected for every 1.52 m down hole interval and cut using a water-cooled diamond blade core saw utilizing the following methodology for the two target units. For the M5 unit, ½ core samples were submitted for assay, while the remaining ½ core was retained for reference. For the B5 unit, ¼ core samples were submitted for assay, while ¼ was reserved for future metallurgical test work and ½ core was retained reference.</li> <li>During the 2022-2023 drilling programs, core samples were collected for target units every 1.52 m down hole interval. Target units were cut using a water-cooled diamond blade core saw utilizing the following methodology for the target units. For the M4, M5, B5, S5 and L6 unit, ½ core samples (HQ) or ¼ core samples (PQ) were submitted for assay, while the remaining ½- ¾ core was retained for reference.</li> </ul>
		6

Criteria	JORC Code 2012 Explanation	Commentary
Sub-sampling techniques and sample preparation Sub-sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</li> </ul>	<ul> <li>The following sub-sampling techniques and sample selection procedures apply to drill core samples:</li> <li>During the 2010-2012 and 2016 program, core samples were collected on a mean 1.52 m down hole interval and cut in two halves using a manual core splitter. The entire sample was submitted for analysis with no sub-sampling prior to submittal.</li> <li>During the 2018-2019 drilling program, core samples were collected for every 1.52 m down hole interval and cut using a water-cooled diamond blade core saw utilizing the following methodology for the two target units. For the M5 unit, ½ core samples were submitted for assay, while the remaining ½ core was retained for reference. For the B5 unit, ¼ core samples were submitted for assay, while ¼ was reserved for future metallurgical test work and ½ core was retained for reference.</li> <li>During the 2022-2024 drilling programs, core samples were collected for target units every 1.52 m down hole interval. Target units were cut using a water-cooled diamond blade core saw utilizing the following methodology for the two target units. For the metallurgical test work and ½ core was retained for reference.</li> <li>During the 2022-2024 drilling programs, core samples were collected for target units every 1.52 m down hole interval. Target units were cut using a water-cooled diamond blade core saw utilizing the following methodology for the target units. For the M4, M5, B5, S5 and L6 unit, ½ core samples (HQ) or ¼ core samples (PQ) were submitted for assay, while the remaining ½-¾ core was retained for reference.</li> </ul>
		<ul> <li>The following sub-sampling techniques and sample selection procedures apply to RC Chip Samples:</li> <li>Pre-2017 RC chips samples were collected using a wet rotary splitter approximately every 1.52 m depth interval. Two samples were collected for every interval (one main sample and one duplicate). Only the main sample was submitted for analysis. 2017 RC chip samples were collected using a wet rotary splitter attached to a cyclone. One, approximately 10 kg, sample was collected every 1.52 m depth interval. All samples were submitted for analysis.</li> </ul>

Criteria	JORC Code 2012 Explanation	Commentary
$\sum$	• For all sample types, the nature, quality and appropriateness of the sample preparation technique.	• The Competent Person considers the nature, type and quality of the sample preparation techniques to be appropriate based on the general homogeneous nature of the mineralized zones and the drilling methods employed to obtain each sample (i.e., RC and core).
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	<ul> <li>Quality control procedures adopted for sub-sampling to maximize representivity include the following:         <ul> <li>During 2016-2017 and 2018-2023 drilling programs, field duplicate/replicate samples were obtained. For the 2017 and 2023 RC drilling, a duplicate sample was collected every 20<sup>th</sup> sample. For the 2016 and 2018-2023 core drilling programs two ¼ core samples were taken at the same time and were analysed in sequence by the laboratory to assess the representivity.</li> <li>Twin drill holes at the same site were drilled during the 2010-2012 drilling program. The twin drill hole pairing comprises one RC drill hole (SBH-04) and one core drill hole (SBHC-01). The Competent Person recommends twinning additional drill hole pairs as part of any future pre-production or infill drilling programs to allow for a more robust review of sample representivity.</li> </ul> </li> <li>The Competent Person reviewed the results of the duplicate/replicate samples, the R<sup>2</sup> value is 0.99, which is very good. Visual observation of the lithological intervals and the assays for the twin drill holes show that they are very similar, despite the difference in drilling techniques.</li> </ul>
	Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.	• The Competent Person considers the samples to be representative of the in-situ material as they conform to lithological boundaries determined during core logging. A review of the primary and duplicate sample analyses indicates a high degree of agreement between the two sample sets (R <sup>2</sup> value of 0.99).
	Whether sample sizes are appropriate to the grain size of	• The Competent Person considers the sample sizes to be

Criteria	JORC Code 2012 Explanation	Commentary
	the material being sampled.	appropriate given the general homogeneous nature of the mineralized zones. The two main types of mineralization are lithium mineralization with high boron >/=5,000 parts per million ( <b>ppm</b> ) ( <b>HiB-Li</b> ) and lithium mineralization with low boron <5,000 ppm ( <b>LoB-Li</b> ). The HiB-Li mineralization occurs consistently throughout the B5, M5 and L6 target zones, while LoB-Li mineralization occurs throughout the M5, S5 and L6 units, and is not nuggety or confined to discreet high-grade and low-grade bands.
Quality of assay data and laboratory tests	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.	<ul> <li>The nature and quality of the assaying and laboratory procedures used include the following: <ul> <li>All RC and core samples were processed, crushed, split, and then a sub-sample was pulverized by ALS Minerals in Reno, Nevada.</li> <li>All sub-samples were analysed by Aqua Regia with ICP mass spectrometry (ICP-MS) finish for 51 elements (including Lithium (Li)) and Boron (B) by Na2O2 fusion/ICP high grade analysis (&gt;/=10,000 ppm B).</li> <li>Additionally, 95% of the 2018-2019 samples were analysed for Inorganic Carbon and 30% were analysed for Fluorine (F).</li> <li>The laboratory techniques are total.</li> </ul> </li> <li>The Competent Person considers the nature and quality of the laboratory analysis methods and procedures to be appropriate for the type of mineralization.</li> </ul>
	• For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc	Not applicable to this Report, no geophysical tools, spectrometers, handheld XRF instruments were used on the Project.
	<ul> <li>Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</li> </ul>	<ul> <li>The following Quality Assurance and Quality Control (QA/QC) procedures were adopted for the various drilling programs:</li> <li>During the 2010-2012 program, Standard Reference Material (SRM) samples and a small number of field blanks were also inserted regularly into the sample sequence to QA/QC of the laboratory analysis.</li> <li>For 2016-2017 program, a duplicate sample was collected every 20th primary sample. Field blanks and SRM's were also inserted approximately every 25 samples to assess QA/QC.</li> <li>During the 2018-2019 and 2022-2023 programs, QA/QC samples comprising 1 field blank and 1 SRM standard inserted into each</li> </ul>

Idata and iaboratory (Con't)       Iaboratory coarse/pulp replicates submitted in later stages of the 201 programs.         • The Competent Person reviewed th duplicates and determined the follow       SRMs: Review of the five SRMs use reasonable variability for Li betweer limits (± 2 standard deviation (SD)), bias towards lower than expected var for all sample programs. For each of sample outliers (both low and high); f the control limits. It is recommend samples be added which have grades grade samples and are closer to the ppm).         • Field Blanks: Review of the field blar variability in both the Li and B result that return higher than expected valt being from the 2018-2019 drilling programs. Review of the pairs from the 2018-2019 drilling programs. Review of a strong correlation between each pa of 0.99 for Li.         • Umpire Laboratory Duplicates: 20 as ALS to American Assay Laboratories laboratory analysis in 2018 Review	<ul> <li>data and laboratory coarse/pulp replicates and umpire assays wer submitted in later stages of the 2018-2019 and 2022-2023 drillin programs.</li> <li>The Competent Person reviewed the SRM, field blanks and fiel duplicates and determined the following:</li> <li>SRMs: Review of the five SRMs used determined that there was reasonable variability for Li between the upper and lower control limits (± 2 standard deviation (SD)), however B shows an overal bias towards lower than expected values (i.e. less than the mean for all cample programs. For each of the 5 SPMs. there were composited to all cample programs.</li> </ul>
similar results <ul> <li>The Competent Person reviewed th</li> </ul>	<ul> <li>Field Duplicates: No field duplicates were submitted for the pre2018 drilling programs. Review of the 230 field duplicate sampl pairs from the 2018-2019 drilling program determined that there was a strong correlation between each pair, as evidenced by an R<sup>2</sup> value of 0.99 for Li.</li> <li>Umpire Laboratory Duplicates: 20 assay pulp rejects were sent from ALS to American Assay Laboratories (AAL) in Sparks, NV for umpil laboratory analysis in 2018 Review of the 20 umpire duplicate pair found a strong correlation between each pair, with B returning R2 value of 0.98. 44 Assay pulp rejects were sent from ALS American Assay Laboratories in Sparks, NV for umpire labo</li></ul>

		purpose of estimating Mineral Resources.
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Criteria	JORC Code 2012 Explanation	Commentary
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.	<ul> <li>Significant intersections have been verified by visual inspection of the drill core intervals by at least two loneer geologists for all drilling programs.</li> </ul>
	The use of twinned holes.	<ul> <li>One pair of twin drill holes at the same site were drilled during the 2010-2012 drilling program. The twin drill hole pairing comprises one RC drill hole (SBH-04) and one core drill hole (SBHC-01).</li> <li>The Competent Person reviewed and assessed two drill holes and the variance for thickness and grade parameters were within acceptable levels.</li> </ul>
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	<ul> <li>For the 2022-2023 drilling programs, the field protocols utilized in the 2018-2019 drilling program were reviewed by both loneer and WSP. These protocols were refined and improved to assure proper compliance. Formal Documentation and enforcement by WSP and loneer personnel actively involved in the program.</li> <li>For the 2018-2019 drilling program, Newfields developed a series of field protocols covering all aspects of the exploration program, including surveying, logging, sampling and data documentation. These protocols were followed throughout the 2018-2019 drilling program. Formal documentation of field protocols does not exist prior to the 2018-2019 program; however, the same senior personnel were involved in the earlier programs and field protocols employed were essentially the same as those documented in the 2018-2019 protocols.</li> <li>Primary field data was captured on paper logs for the 2010-2012 drilling program, then transcribed into Microsoft (MS) Excel files. For the 2016 through 2019 drilling, all field data was captured directly into formatted MS Excel files by logging geologists. All primary field data was reviewed by the senior loneer geologist.</li> <li>2019 Data was stored in digital format in a MS Access database. This database was compiled, updated and maintained by Newfields personnel during the 2018-2019 drilling program.</li> </ul>
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols	<ul> <li>maintained by loneer.</li> <li>The Competent Person used the relevant information from various tabular data files provided by loneer and Newfields in a MS Access database, which was reviewed and verified by the Competent Person prior to inclusion in the geological model.</li> </ul>

Criteria	JORC Code 2012 Explanation	Commentary
	Discuss any adjustment to assay data.	There has been no adjustment to assay data.
Location of data points	Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.	<ul> <li>Accuracy and quality of surveys used to locate drill holes is as follows:         <ul> <li>All inclined core drill holes were surveyed to obtain downhole deviation using a downhole Reflex Mems Gyros tool, except fo SBH-72, which could not be surveyed due to tool error. Two core drill holes (SBH-60, SBH-79) were surveyed using an Acoustic Televiewer instead of the Gyros tool.</li> <li>All 2018-2019 drill hole collars were surveyed using a differentially corrected GPS (DGPS).</li> <li>Locatable pre-2018 drill holes that were previously only surveyed by handheld GPS have been re-surveyed in 2019 using DPGS. Some pre-2018 drill holes could not be located by the surveyor in 2019, and the original locations were assumed to be correct.</li> </ul> </li> <li>Upon completion, drill casing was removed, and drill collars were marked with a permanent concrete monument with the drill hole name and date recorded on a metal tag on the monument.</li> </ul>
	Specification of the grid system used.	<ul> <li>All pre-2018 and 2018-2019 drill holes were originally surveyed using handheld GPS units in UTM Zone 11 North, North Americar Datum 1983 (NAD83) coordinate system. Pre-2018 drill holes were re-surveyed using DPGS in NAD83 in 2017/2018.</li> <li>All 2018-2019 drill holes and locatable pre-2018 drill holes were re surveyed in 2019 using DPGS in NAD83 coordinate system. All surveyed coordinates were subsequently converted to Nevada</li> <li>State Plane Coordinate System of 1983, West Zone (NVSPW 1983 for use in developing the geological model. Those holes that could not be located had the original coordinates converted to NVSPW 1983 and their locations verified against the original locations.</li> <li>All 2022-2023 holes were surveyed Nevada State Plane Coordinate System of 1983, West Zone (NVSPW 1983) for use in developing the geological model.</li> </ul>
	Quality and adequacy of topographic control.	<ul> <li>The quality and adequacy of the topographic surface and the topographic control is very good based on comparison against survey monuments, surveyed drill hole collars and other surveyed surface features.</li> </ul>

Criteria	JORC Code 2012 Explanation	Commentary
D	Quality and adequacy of topographic control. (Con't)	<ul> <li>A 2018 satellite survey with an accuracy of ± 0.17 m was produce for the Project by PhotoSat Information Ltd. The final repo generated by PhotoSat stated that the difference between th satellite and loneer provided ground survey control points was less than 0.8 m.</li> <li>The topographic survey was prepared in NAD83, which was converted to NVSPW 1983 by Newfields prior to geologica modelling.</li> </ul>
Data spacing and distribution	Data spacing for reporting of Exploration Results.	<ul> <li>Drill holes are generally spaced between 90 m and 170 m on eas west cross-section lines spaced approximately 180 m apart. Ther was no distinction between RC and core holes for the purpose of drill hole spacing.</li> <li>For the 2018-2023 drilling program, there were multiple occurrences where several inclined drill holes were drilled from the same drill pad and oriented at varying angles away from each othe The collar locations for these inclined drill holes drilled from the same pad varied in distance from 0.3 m to 6.0 m apart; intercept distances on the floors of the target units were typically in excess of 90 m spacing.</li> </ul>
	Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.	<ul> <li>The spacing is considered sufficient to establish geological and grade continuity appropriate for a Mineral Resource estimation.</li> </ul>
	Whether sample compositing has been applied.	<ul> <li>Samples were predominately (91%) 1.52 m intervals honourir lithological boundaries. The sample intervals were composited 1.52m lengths, respecting the seam contacts to regularize th database used for grade estimation. The 1.52 m sample leng represents the modal value of the sample length distribution and th 1.52m vertical block height in the model.</li> </ul>
Orientation of data in relation to geological structure	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	

Criteria	JORC Code 2012 Explanation	Commentary
2	• If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	<ul> <li>Inclined drill holes orientated between 0- and 220-degrees azimuth especially those that were drilled at between 20- and 135-degrees azimuth, generally intercepted the beds down dip (14 drill holes with intercept angles between 20-70 degrees), exaggerating the mineralized zone widths in these drill holes.</li> </ul>
Sample security	The measures taken to ensure sample security.	<ul> <li>The measures taken to ensure sample security include the following:</li> <li>For the 2010-2012 drill holes, samples were securely stored on site and then collected from site by ALS. Chain of custody forms were maintained by ALS.</li> <li>For the 2016-2017 drill holes, samples were securely stored on site and then collected from site by ALS and transported to the laboratory by truck. Chain of custody forms were maintained by ALS.</li> <li>For the 2018-2019 and 2022-2023 drill holes, core was transported daily by loneer and/or Newfields personnel from the drill site to the loneer secure core shed (core storage) facility in Tonopah. Core awaiting logging was stored in the core shed until it was logged and sampled, at which time it was stored in secured sea cans inside a fenced and locked core storage facility on site. Samples were sealed in poly-woven sample bags, labelled with a pre-form numbered and barcoded sample tag, and securely stored until shipped to or dropped off at the ALS laboratory in Reno by either loneer or Newfields personnel Chain of custody forms were maintained by either Newfields or loneer and ALS.</li> </ul>
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	<ul> <li>There were no audits performed on the RC sampling or for the pre 2018 drilling programs.</li> <li>The Competent Person reviewed the core and sampling techniques during a site visit in August 2023. The Competent Person found tha the sampling techniques were appropriate for collecting data for the purpose of preparing geological models and Mineral Resource estimates.</li> </ul>

# SECTION 2 REPORTING OF EXPLORATION RESULTS

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code 2012 Explanation	Commentary
Mineral tenement and land tenure status	Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.	<ul> <li>The mineral tenement and land tenure for the South Basin of Rhyolite Ridge (the Project) comprise 386 unpatented Lode Mining Claims (totalling approximately 3,150 hectare (Ha)); claim groups SLB, SLM and RR, spatial extents of which are presented in maps and tables within the body of the Report are held by loneer Minerals Corporation, a wholly owned subsidiary of loneer. The Competent Person has relied upon information provided by loneer regarding mineral tenement and land tenure for the Project; the Competent Person has not performed any independent legal verification of the mineral tenement and land tenure.</li> <li>The Competent Person is not aware of any agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings relating to the 386 Lode Mining Claims for the Project.</li> <li>The mineral tenement and land tenure referenced above excludes 241 additional unpatented Lode Mining Claims (totaling approximately 2,000 Ha) for the North Basin which are located outside of the current South Basin Project Area presented in this Report. These additional claims and BH claim group; 81 claims).</li> </ul>
2	• The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	• There are no identified concerns regarding the security of tenure nor are there any known impediments to obtaining a license to operate within the limits of the Project. The 386 unpatented Lode Mining Claims for the Project are located on federal land and are administered by the United States Department of the Interior - Bureau of Land Management (BLM).
Exploration	Acknowledgment and appraisal of exploration by other	There have been two previous exploration campaigns targeting Li-

Criteria	JORC Code 2012 Explanation	Commentary
done by other parties	parties.	<ul> <li>B mineralization at the Project site.</li> <li>US Borax conducted surface sampling and drilling in the 1980s targeting B mineralization, with less emphasis on Li mineralization A total of 44 drill holes (totalling approximately 14,900 m) wer drilled in the North Borate Hills area, with an additional 16 drill hole (unknown total meterage) in the South Basin area. These drill hole were not available for use in the current Study.</li> <li>American Lithium Minerals Inc and Japan Oil, Gas and Metal National Corporation (JOGMEC) conducted further Li exploration included a least 465 surface and trench samples and 36 drill holes (totallin approximately 8,800 m), of which 21 were core and 15 were RC Data collected from this program, including drill core, was mad available to loneer. The Competent Person reviewed the data available from this program and believes this exploration program except for the trench data, was conducted appropriately and the information generated is of high enough quality to include in preparing the current geological model and Mineral Resource estimate.</li> <li>Due to concerns regarding the ability to reliably correlate the trenches with specific geological units as well as concerns regarding representivity of samples taken from incomplete exposures of the units in the trenches, the Competent Person does not feel the trench sample analytical results are appropriate for use and has exclude them from use in preparing the geological model and Mineral Resource estimate.</li> </ul>
Geology	Deposit type, geological setting and style of mineralisation.	<ul> <li>The HiB-Li and LoB-Li mineralization at Rhyolite Ridge occurs it two separate late-Miocene sedimentary basins; the North Basin and the South Basin, located within the Silver Peak Range in the Basin and Range terrain of Nevada, USA. The South Basin is the focus of the Study presented in this Report and the following is focused of the geology and mineralization of the South Basin.</li> <li>The South Basin stratigraphy comprises lacustrine sedimental rocks of the Cave Spring Formation overlaying volcanic flows and volcaniclastic rocks of the Rhyolite Ridge Volcanic unit. The Rhyolite Ridge Volcanic unit is dated at approximately 6 megaannum (Ma) and comprises rhyolite tuffs, tuff breccias and flows.</li> </ul>

<ul> <li>The Rhyolite Ridge Volcanic rocks are underlain by sedimentary rocks of the Silver Peak Formation.</li> <li>The Cave Spring Formation comprises a series of 11 sedimentary units deposited in a lacustrine environment, as shown in the following table. Within the study area the Cave Spring Formation can reach total thickness in excess of 400 m. Age dating of overlying units outside of the area and dates for the underlying Rhyolite Ridge Volcanic unit bracket deposition of the Cave Spring Formation between 4-6 Ma; this relatively young geological age indicates limited time for deep burial and compaction of the units. The Cave Spring Formation metaers of the units care generally laterally continuous over several miles across the extent of the South Basin; however, thickness of the units care generally laterally continuous over several wards, from coarse clastic units at the base of the formation, upwards, through sitistones, maris and carbonate units towards the top of the sequence.</li> <li>The key mineralized units are in the Cave Spring Formation and are, from top to bottom, the MS (high-grade Li, low- to moderate grade B bearing carbonate-clay rich marily discontinuous low- to high-grade I and B mineralized horizons within a larger low-grade to barren sequence of sitistone-clays role. The sequence is marked by a series of four the Gloroad zone of laterally discontinuous low- to high-grade Li and B mineralized horizons within a larger low-grade to barren sequence of sitistone-claystone]. The sequence is marked by a series of our the indexing solution all appearance of sitistone-claystone]. The sequence is marked by a series of our the grintsone layers (G4 through G7); these solutes and along with the sticret visual appearance of sitistone-claystone]. Area, the siting environment has the four gat a parameter of sitistone-claystone]. Area, the sitistone-fourtion by a unit of porty sorted allowium is unconsolidated and comprises and the four gat as parameted to be grind and sthe four gat a parameter.</li> <!--</th--></ul>

RC Code 2012 Explanation C	Comment	ary				
	Volcani	c Rocks	and othe	r nearby	volcanio	: units.
	Formation	Model Unit	Mean Thick (m)	Min. Thick (m)	Max. Thick (m)	Lithology Description
	Alluvium	Q1	21	2	61	Sand through cobble sized clasts, isolated boulder size clasts of Rhyolite Ridge Volcanic Rocks and other nearby volcanic units
		S3	70	3	235	Mixed lacustrine sediments (claystone, marl, siltstone, and thin sandstone)
		G4	6	1	24	Coarse gritstone (immature volcaniclastic wacke)
		M4	12	6	30	Carbonate rich, with interbedded ma
		G5	3	1	12	Coarse gritstone Carbonate-clay rich marl, high-grade
	Cave Springs Fm. –	M5	13	3	94	Lithium, low- to moderate-grade Boron
		B5	19	6	40	Marl, high-grade Boron, moderate- grade Lithium
	Springs Fill.	S5	21	3	43	Siltstone-claystone, moderate to high grade Lithium and low to-very low grade-Boron
		G6	9	1	43	Coarse gritstone
		L6	40	3	107	Marl, siltstone-claystone, laterally discontinuous low- to high-grade Lithium and Boron mineralized horizons within a larger low-grade to barren sequence
	_	Lsi	30	3	64	Silicified siltstone-claystone Coarse gritstone, diamictite, grading
		G7	17	2	52	into tuff
	Dhualli	Πv		0	>30	Latite flows and breccia, believed to be the Argentite Canyon formation
	Rhyolite Ridge Volcanics	Tbx	43	6	168	Quartz-feldspar lithic tuff containing minor biotite, phenocrystic-rich lithic tuff, and massive lithic tuff breccia, volcanic lava flows and welded tuff

Criteria	JORC Code 2012 Explanation	Commentary
		<ul> <li>the basin. Displacement on these faults is generally poorly known but most appear to be on the order of tens of meters of displacement although several located along the edge of the basin may have displacements greater than 30 m. Major fault structures within the basin tend to have a series of minor faults associated with them. These tend to have smaller offset than the parent fault structure. Along the western side, South Basin is folded into a broad, open syncline with the sub-horizontal fold axis oriented approximately north-south. The syncline is asymmetric, moderate to locally steep dips along the western limb. The stratigraphy is further folded, including a significant southeast plunging syncline located in the southern part of the study area.</li> <li>HiB-Li and LoB-Li mineralization is interpreted to have been emplaced by hydrothermal/epithermal fluids travelling up the basin bounding faults; based on HiB-Li and LoB-Li grade distribution and continuity it is believed the primary fluid pathway was along the western bounding fault. Differential mineralogical and permeability characteristics of the various units within the Cave Spring Formation resulted in the preferential emplacement of HiB-Li bearing minerals in the B5 and L6 units and LoB-Li bearing minerals in the M5, S5 and L6 units. HiB-Li mineralization occurs in isolated locations in some of the other units in the sequence, but with nowhere near the grade and continuity observed in the aforementioned units.</li> </ul>
Drill hole Information	<ul> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:         <ul> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in feet) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> </ul>	<ul> <li>Exploration Results are not being reported.</li> <li>A summary table providing key details for all identified drill holes for the Project is presented by type and drilling campaign in the following table:</li> </ul> Drill Type Year Total Total Total Total Depth (f) Count Depth (f)
1		20

Criteria	JORC Code 2012 Explanation	Commentary
	• If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	<ul> <li>Of the 166 drill holes reviewed, 162 (50 RC and 112 core) were included in the geological model and 4 were omitted. One RC twin hole was omitted in favour of the cored hole at the same location. Three water/geotechnical drill holes were omitted due to a lack of lithology and quality data relevant to the geological model.</li> </ul>
Data aggregation methods	<ul> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.</li> </ul>	<ul> <li>Exploration Results are not being reported.</li> <li>All grade parameters presented as part of the Mineral Resource estimates prepared by IMC are presented as mass weighted grades.</li> <li>Drill core samples are predominately 1.52 m lengths (91%) and this data set composited to regularized 1.52m lengths, respecting seam contacts and used for the interpolation of grade data into the block model. The data set honoured geological contacts (i.e. composite intervals did not span unit contacts). The data set is the 1.52 m composited developed from the drill hole assay database.</li> <li>No minimum bottom cuts or maximum top cuts were applied to the thickness or grade data used to construct the geological models. No interpolation was applied to B and Li grade data for units other than the targeted units (G5, M5, B5, S5, G6, L6 and Lsi; discussed further in the Estimation and Modelling Techniques section of this Table 1).</li> <li>A cut-off grade of 5,000 ppm B for the HiB-Li mineralization and 16.54/tonne net value for the LoB-Li mineralization was applied during the Mineral Resource tabulation for the purpose of establishing reasonable prospects of eventual economic extraction based on high level mining, metallurgical and processing grade parameters identified by mining, metallurgical and processing studies performed to date on the Project.</li> </ul>
	<ul> <li>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> </ul>	<ul> <li>Not applicable as individual intercepts or Exploration Results are not being reported.</li> </ul>
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	<ul> <li>Metal equivalents were not used in the Mineral Resource estimates prepared by IMC.</li> </ul>

Criteria	JORC Code 2012 Explanation	Commentary
Relationship between mineralisation widths and	These relationships are particularly important in the reporting of Exploration Results.	• All drill hole intercepts presented in the Report are down hole thickness not true thickness. As discussed in the Orientation of Data section of this Table 1, most drill hole intercepts are approximately orthogonal to the dip of the beds (intercept angles between 70-90 degrees).
intercept lengths	• If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.	<ul> <li>Based on the geometry of the mineralization, it is reasonable to treat all samples collected from inclined drill holes at intercept angles of greater than 70 degrees as representative of the true thickness of the zone sampled.</li> </ul>
	<ul> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').</li> </ul>	Not applicable as individual down hole intercepts or Exploration Results are not being reported.
Diagrams	<ul> <li>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</li> </ul>	Appropriate plan maps and sections are appended to the Report.
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	Exploration Results are not being reported.
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	<ul> <li>Surficial geological mapping performed by a senior loneer geologist was used in support of the drill holes to define the outcrops and subcrops as well as bedding dip attitudes in the geological modelling. Mapped geological contacts and faults were imported into the model and used as surface control points for the corresponding beds or structures.</li> <li>Magnetic and Gravity geophysical surveys were performed and interpreted to inform the geological model, particularly in the identification of faulting and geologic structures.</li> </ul>
Further work	<ul> <li>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step- out drilling).</li> </ul>	Additional in-fill drilling and sampling may be performed based on the results of current mining project studies
	<ul> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	Refer to Figure 1 in the body of this report.

# SECTION 3 ESTIMATION AND REPORTING OF MINERAL RESOURCES

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	JORC Code 2012 explanation	Commentary
Database integrity	Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.	transcription or keying errors or omissions included recording of drill
	Data validation procedures used.	<ul> <li>IMC performed data validation on the drill hole database records using available underlying data and documentation including but not limited to original drill hole descriptive logs, core photos and laboratory assay certificates. Drill hole data validation checks were performed using a series of in-house data checks to evaluate for common drill hole data errors including, but not limited to, data gaps and omissions, overlapping lithology or sample intervals, miscorrelated units, drill hole deviation errors and other indicators of data corruption including transcription and keying errors.</li> <li>Database assay values for every sample were visually compared to the laboratory assay certificates to ensure the tabular assay data was free of errors or omissions by Golder for the 2020 resource estimate. IMC compared database to certificates for about 20% of the phase 2 and 3 drill holes and found no errors.</li> </ul>
Site visits	Comment on any site visits undertaken by the Competent Person and the outcome of those visits.	<ul> <li>The IMC Competent Person Herbert E. Welhener made a personal site inspection, this visit was performed on the Project site on August 10th 2023 for the Project. During the site visit the IMC Competent Person visited the Ioneer core shed in Tonopah NV, and the South Basin area of the Rhyolite Ridge Project site, which is the focus of the current exploration and resource evaluation efforts by Ioneer.</li> </ul>

Criteria	JORC Code 2012 explanation	Commentary
		<ul> <li>The IMC Competent Person observed the active drilling, logging and sampling process and interviewed site personnel regarding exploration drilling, logging, sampling and chain of custody procedures.</li> <li>The outcome of the site visit was that the IMC Competent Person developed an understanding of the general geology of the Rhyolite Ridge Project. The IMC Competent Person was also able to visually confirm the presence of a selection of monumented drill holes from each of the previous drilling programs as well as to observe drilling, logging and sampling procedures during the current drilling program and to review documentation for the logging, sampling and chain of custody protocols for previous drilling programs.</li> </ul>
	If no site visits have been undertaken indicate why this is the case.	Not applicable.
Geological interpretation	Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.	• The IMC Competent Person is confident that the geological interpretation of the mineral deposit is reasonable for the purposes of Mineral Resource estimation.
	Nature of the data used and of any assumptions made.	<ul> <li>The data used in the development of the geological interpretation included drill hole data and observations collected from 112 core and 50 RC drill holes, supplemented by surface mapping of outcrops and faults performed by loneer personnel. Regional scale public domain geological maps and studies were also incorporated into the geological interpretation.</li> <li>It is assumed that the mineralized zones are continuous between drill holes as well as between drill holes and surface mapping. It is also assumed that grades vary between drill holes based on a distance-weighted interpolator.</li> </ul>
	The effect, if any, of alternative interpretations on Mineral Resource estimation.	There are no known alternative interpretations.
	The use of geology in guiding and controlling Mineral Resource estimation.	Geology was used directly in guiding and controlling the Mineral Resource estimation. The mineralized zones were modelled as stratigraphically controlled HiB-Li and LoB-Li deposits. As such, the primary directions of continuity for the mineralization are horizontally within the preferentially mineralized B5, M5, S5 and L6

Criteria	JORC Code 2012 explanation	Commentary
		geological units.
	The factors affecting continuity both of grade and geology.	<ul> <li>The primary factor affecting the continuity of both geology and grade is the lithology of the geological units. HiB-Li mineralization is favourably concentrated in marl-claystone of the B5 and L6 units and LoB-Li in the M5, S5 and L6 units. Mineralogy of the units also has a direct effect on the continuity of the mineralization, with elevated B grades in the B5 and M5 units associated with a distinct reduction in carbonate and clay content in the units, while higher Li values tend to be associated with elevated carbonate content in these units and sometimes k-felspar.</li> <li>Additional factors affecting the continuity of geology and grade include the spatial distribution and thickness of the host rocks which have been impacted by both syn-depositional and post- depositional geological processes (i.e. localized faulting, erosion and so forth).</li> </ul>
Dimensions	• The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.	<ul> <li>The Mineral Resource evaluation presented in this Report covers an area of approximately 458 Ha within the South Basin of Rhyolite Ridge. The Mineral Resource plan dimensions, defined by the spatial extent of the B5 unit Inferred classification limits, are approximately 3,650 m North-South by 1,400 m East-West. The upper and lower limits of the Mineral Resource span from surface, where the mineralized units outcrop locally, through to a maximum depth of 420 m below surface for the base of the lower mineralized zone (L6 unit).</li> <li>Variability of the Mineral Resource is associated primarily with the petrophysical and geochemical properties of the individual geological units in the Cave Spring Formation. These properties played a key role in determining units that were favourable for hosting HiB-Li and LoB-Li mineralization versus those that were not.</li> </ul>
Estimation an modelling techniques	<ul> <li>The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.</li> </ul>	<ul> <li>Geological modelling and Mineral Resource estimation for the Project was performed under the supervision of the Competent Person</li> <li>Based on a statistical analysis, extreme B grade values were identified in some of the units other than the targeted B5, M5, S5 and L6 units. Boron, Lithium and the other elements were estimated in only units B5, M5, S5 and L6, and the adjacent units of G5, G6 and Lsi. Grades in the adjacent units were incorporated</li> </ul>

Criteria	JORC Code 2012 explanation	Commentary	Commentary				
Estimation and modelling techniques		<ul> <li>1.52 m benches).</li> <li>The geological model was stratigraphic model by NewFi as surfaces and solids. The block model was developed which are computer-assiste estimation software application.</li> <li>Domaining in the model was surfaces of the geological unit as hard boundaries, with same which they occurred. The ime blocks which generated subaltered the orientation of the grade estimation process. If aults which in some cases of A larger vertical window was estimation of grades across estimated.</li> </ul>	<ul> <li>The geological model was developed as a gridded surface stratigraphic model by NewFields and Ioneer and provided to IM as surfaces and solids. The stratigraphically constrained grad block model was developed using Hexagon and IMC software which are computer-assisted geological, grade modelling, an estimation software applications.</li> <li>Domaining in the model was constrained by the roof and flow surfaces of the geological units. The unit boundaries were modelle as hard boundaries, with samples interpolated only within the unit which they occurred. The impact of faulting is represented in faut blocks which generated sub-sets of the seam units. The faultir altered the orientation of the seam floors and was used during the grade estimation process. Grade continuity is assumed across faults which in some cases offset the seams in a vertical directio A larger vertical window was used during grade estimation to allo estimation of grades across faults, still limited to the seam bein</li> </ul>				
_		Estimation Parameter	Description				
		Estimation Block Size	7.62 x 7.62 x 1.524 m				
		Estimation Method	Inverse Distance Squared				
		Seams for Grade Estimation	G5, M5, B5, S5, G6, L6, Lsi				
		Maximum search distance, G5	305 x 305 x 61 m				
		Maximum search distance, M5	533 x 305 x 61 m				
		Maximum search distance, B5	533 x 305 x 61 m				
		Maximum search distance, S5	229 x 229 x 61 m				
		Maximum search distance, G6	229 x 229 x 61 m				
		Maximum search distance, L6	305 x 305 x 61 m				
		Maximum search distance, Lsi	305 x 305 x 61 m				
		Minimum & Maximum samples	2 and 10				
		Maximum samples per hole	3				

Criteria	<ul> <li>JORC Code 2012 explanation</li> <li>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</li> </ul>	<ul> <li>Commentary         <ul> <li>The Table below presents a summary comparison current February 2025 Mineral Resource estimate against the previous Mineral Resource estimate fo Project, prepared by IMC in April 2024.</li> </ul> </li> </ul>									
		Processin g Streams	Group	Class	Tonnage	Li	В	Li2Co3	НЗВОЗ	Contained Li2Co3	НЗВОЗ
					ktonnes	ppm	ppm	Weight %	Weight %	ktonnes	ktonnes
		Combined Streams	February 2025 Resource	Meas + Ind	413,783	1,479	5,321	0.79	3.04	3,256	12,590
				Infer Total	96,590 510,373	1,387 1,461	3,745 5,023	0.74	2.14 2.87	713 3,969	2,069
			April 2024	Meas + Ind	258,079	1,731	6,779	0.92	3.88	2,378	10,004
			Resource	Infer	93,324	1,759	5,272	0.94	3.01	873	2,81
200			Variation	Total Meas +	351,403 155,704	1,739 1,060	6,379 2,905	0.93	3.65 1.66	3,251 878	12,81 2,58
				Ind Infer	3,266			-4.91	-22.80	-160	-74
705	<ul> <li>The assumptions made regarding recovery of by- products.</li> <li>Estimation of deleterious elements or other non- grade variables of economic significance (e.g.</li> </ul>	Pro     No     pre     In	pject to bject to by-pro esent. additio additio	date. oducts	are be i and E	eing co 3, the g	onsider geolog	ed for ical m	recove odel al	ry at so incl	ludec
	sulphur for acid mine drainage characterisation).	Cs val ele	, Mo, F lues fo ments	<sup>-</sup> e, Al) or the were	to allo e met estima	w for o allurgi ted.	calcula cal pr	tion of ocess	acid c . No	onsum delete	nption erious
	<ul> <li>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</li> </ul>	usi 7.6 de No din rep	e strat ing a 52 m velopee rth-Sou nension present d 6 per	regula d from uth by n with t 12 pe	rized n the 7.62 r no sul ercent o	grid. stratigi n East b-block	The g raphic t-West ks. Th closer	rade mode by 1.5 le bloc space	block I using 52 m ve sk size d drill h	model g a 7.0 ertical dimen iole sp	was 62 m block block block block

Criteria	JORC Code 2012 explanation	Commentary
D		area. Grade interpolation into the model blocks was performed using an Inverse Distance Squared (ID <sup>2</sup> ) interpolato with unique search distances for each of the 7 seams being estimated as shown in the table above. The same search parameters were used for all of the elements being estimated (B, Li Sr, Ca, Mg, Na, K, Rb, Cs, Mo, Fe, Al) within each of the seams.
	Any assumptions behind modelling of selective mining units.	<ul> <li>The mining selective vertical unit of 9.14m is based on the selected mining equipment. The 1.52 m bench block model was re-blocked after grade estimation to 9.14m bench height blocks keeping the horizontal dimensions the same at 7.62 by 7.62m.</li> <li>The re-blocked 9.14m was developed in the following steps: <ul> <li>Seams and fault block domains were assigned to the mode from the surfaces and solids files;</li> <li>Tonnes per block from the 1.52 m model were added together;</li> <li>Grades were weighted averaged by tonnes per 1.52 m blocks</li> <li>Class was assigned by majority; when equal number of 1.52m blocks were present, the lower class was assigned;</li> <li>Fault block domains with no drill data and received grade estimates from surrounding data received a classification o inferred.</li> </ul> </li> </ul>
	Any assumptions about correlation between variables.	No assumptions or calculations relating to the correlation between variables were made at this time.
	Description of how the geological interpretation was used to control the resource estimates.	<ul> <li>The geological interpretation was used to control the Mineral Resource estimate by developing a contiguous stratigraphic mode (all units in the sequence were modelled) of the host rock units deposited within the basin, the roof and floor contacts of which ther served as hard contacts for constraining the grade interpolation Grade values were interpolated within the geological units using only samples intersected within those units.</li> </ul>
	Discussion of basis for using or not using grade cutting or capping.	<ul> <li>Grade capping or cutting was not applied for the targeted mineralized units B5, M5, S5 and L6, and adjacent units included in the estimation process as a statistical analysis of the grade data indicated there was no bias or influence by extreme outlier grade values.</li> <li>Mineral Resources were not estimated for the other units. Grades have been estimated for adjacent units to allow for potential mining dilution.</li> </ul>

Criteria	JORC Code 2012 explanation	Commentary
2	The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.	<ul> <li>The geological model validation and review process involved visual inspection of drill hole data as compared to model geology and grade parameters using plan isopleth maps and approximately 300 m spaced cross-sections through the model. Drill hole and model values were compared statistically along with grade estimates using polygon and ordinary kriging approaches.</li> <li>No reconciliation data is available because the property is not in production.</li> </ul>
Moisture	Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	<ul> <li>The estimated Mineral Resource tonnages are presented on a dry basis.</li> <li>A moisture content evaluation needs to be done as part of future analytical programs.</li> </ul>
Cut-off parameters	The basis of the adopted cut-off grade(s) or quality parameters applied.	<ul> <li>The Mineral Resource estimate presented in this Report has been constrained by the application of an optimized Mineral Resource pit shell. The Mineral Resource pit shell was developed using the IMC Mine Planning software.</li> <li>The Mineral Resource estimate assumes the use of three processing streams: one which can process ore with boron content greater than 5,000 ppm and two which can process ore with boron content greater than 5,000 ppm.</li> <li>Key input parameters and assumptions for the Mineral Resource pit shell included the following: <ul> <li>B cut-off grade of 5,000 ppm for HiB-Li processing stream and no B cut-off grade for LiB-Li processing stream</li> <li>No Li cut-off grade for HiB-Li processing stream</li> <li>Overall pit slope angle of 42 degrees (wall angle guidance provided by Geo-Logic Associates who developed the geotechnical design).</li> </ul> </li> <li>Mining cost of US\$16.54/tonne processed based on recent studies by loneer.</li> <li>Ore processing and grade control costs vary by process stream and seam unit and are divided into fixed cost and the cost of acid consumption. Shown below are the costs based on the average grades of the acid consuming elements in the Mineral Resource:</li> <li>Stream 1 (HiB-Li): fixed process cost = \$30.50/mt and acid</li> </ul>

Criteria	JORC Code 2012 explanation	Commentary
		<ul> <li>costs range between \$33.93/mt and \$52.12/mt based on the average grades of the acid consuming elements in each seam.</li> <li>Streams 2 &amp; 3 (LoB-Li): both the fixed and acid costs vary by seam with the fixed cost ranging between \$15.19.mt to \$30.80/mt and the acid costs range between \$5.08/mt and \$67.93/mt.</li> </ul>
		<ul> <li>Boron and Li recovery of 80.2% and 85.7% respectively for HiB-Li Processing Stream .</li> <li>Boron Recovery for LoB-Li Processing Stream variable by lithology as follows: 65% in M5 Unit, 80.2% in B5 unit, 50% in S5</li> </ul>
		<ul> <li>unit, and 37% in L6 unit.</li> <li>Lithium Recovery for LoB-Li Processing Stream variable by lithology as follows: 78% in M5 unit, 85.7% in B5 unit, 88% in S5</li> </ul>
		<ul> <li>unit, and 85% in L6 unit.</li> <li>Boric Acid sales price of US\$1,172.78/tonne.</li> <li>Lithium Carbonate sales price of US\$19,351.380/tonne.</li> <li>Sales/Transport costs are included in the process fixed cost/t.</li> </ul>
Mining factors or assumptions	Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining	• The Mineral Resource estimate presented in this Report was developed with the assumption that the HiB-Li and LoB-Li mineralization within the Mineral Resource pit shell, as described in the preceding section, has a reasonable prospect for eventual economic extraction using current conventional open pit mining methods.
	methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.	• Except for the Mineral Resource pit shell criteria discussed in the preceding section, no other mining factors, assumptions or mining parameters such as mining recovery, mining loss or dilution have been applied to the Mineral Resource estimate presented in this Report.

Criteria	JORC Code 2012 explanation	Commentary			
Metallurgical factors or assumptions	The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	<ul> <li>The basis of the metallurgical assumptions made in establishing the reasonable prospects for eventual economic extraction of the Hill Li mineralization are based on results from metallurgical are material processing work that was developed as part of the ongoin Feasibility Study for the Project. This test work was performed using current processing and recovery methods for producing Boric act and Lithium carbonate products</li> <li>A second process stream to recover Li from low boron mineraliz (LoB-Li) units is being developed. Current results indicate reasonable process and expectation for economic extraction of the LoB-Li from the S5, M5 and L6 units. This test work was perform using current processing and recovery methods for producing Boric act and Lithium carbonate products.</li> </ul>			
Environment- al factors or assumptions	Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.	<ul> <li>The project will require waste and process residue dispose Assumptions have been made that all environmental requirement will be achieved through necessary studies, designs and permits.</li> <li>Currently, baseline studies and detailed designs have been completed for both waste and process residue disposal facilities.</li> <li>In December 2022, the United States Fish and Wildlife Service (USFWS) listed Tiehm's buckwheat as an endangered species under the Endangered Species Act (ESA) and has designate critical habitat by way of applying a 500 m radius around severalistic plant populations that occur on the Project site. Ioneer committed to the protection and conservation of the Tiehm buckwheat. The Project's Mine Plan of Operations was submitted the BLM in July 2022. In October 2024, loneer received its feder permit for the Rhyolite Ridge Lithium-Boron Project from the BLN. The formal Record of Decision (ROD) follows the issuance September 2024 of the final EIS, the U.S. Fish and Wildlif Service, which oversees the administration of the Endangered Species Act (ESA), also formally released the ESA Section Biological Opinion concluding Rhyolite Ridge will not jeopardis Tiehm's buckwheat or adversely modify its critical habitat.</li> <li>The mineral resource pit shell used to constrain the February 2022 mineral resource estimate was not adjusted to account for ar impacts from avoidance of Tiehm's buckwheat or minimisation of disturbance within the designated critical habitat. Environment and permitting assumptions and factors will be taken into</li> </ul>			

Criteri	a J	ORC Code 2012 explanation	Commentary
			consideration during future modifying factors studies for the Project. These permitting assumptions and factors may result in potential changes to the Mineral Resource footprint in the future.
Bulk de	ensity		• The density values used to convert volumes to tonnages were assigned on a by-geological unit basis using mean values calculated from 120 density samples collected from drill core during the 2018-2019 and the 2023-2024 drilling programs. The density analyses were performed using the water displacement method for density determination, with values reported in dry basis.
	•	Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.	• The application of assigned densities by geological unit assumes that there will be minimal variability in density within each of the units across their spatial extents within the Project area. The use of assigned density with a very low number of samples, as is the case with several waste units, is a factor that increases the uncertainty and represents a risk to the Mineral Resource estimate confidence
$\supset$		The bulk density for bulk material must have been measured by methods that adequately account for void aces (vugs, porosity, etc.), moisture and differences between ck and alteration zones within the deposit.	The Archimedes-principle method for density determination accounts for void spaces, moisture and differences in rock type.

Criteria	JORC Code 2012 explanation	Cor	nmentary					
Bulk density (Con't)	Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.	<ul> <li>Density values were assigned for all geological units in the model, including mineralized units as well as overburden, interburden and underburden waste units. By-unit densities were assigned in the grade block model based on the block geological unit code as follows:</li> </ul>						
					Mean of			
			Modeled		Density			
1			Seams		(gm/cm3)			
)			Q1	<u>_</u>	1.80			
			S3	]	1.53			
			G4	Overburden	1.62			
			M4		1.86			
			G5		1.65			
			M5	Mineralized	1.64			
			B5		1.78			
				Mineralized/				
			S5	Interburden	1.84			
			G6	Interburden	1.85			
			L6	Mineralized	1.98			
			Lsi		1.98			
/			G7	Underburden	1.86			
1			Tbx		1.86			

Criteria	JORC Code 2012 explanation	Commentary		
Classification	The basis for the classification of the Mineral Resources into varying confidence categories.	<ul> <li>The Mineral Resource estimate for the Project is reported here accordance with the "Australian Code for Reporting of Explorati Results, Mineral Resources and Ore Reserves" as prepared by a Joint Ore Reserves Committee (the JORC Code, 2012 Edition).</li> <li>IMC performed a statistical and geostatistical analysis for the purpose of evaluating the confidence of continuity of the geologi units and grade parameters. The results of this analysis we applied to developing the Mineral Resource classification criteria the 1.52m bench height block model.</li> <li>Estimated Mineral Resources were classified as follows:</li> <li>Measured: Between 107 and 122 m spacing between points observation depending on the seam, with sample interpolation from a minimum of four drill holes.</li> <li>Indicated: Between 168 and 244 m spacing between points of observation, with sample interpolation from a minimum of two dri holes.</li> <li>Inferred: To the limit of the estimation range (maximum 533 m, depending on the seam), with sample interpolation from a minim of one drill hole.</li> <li>The class was assigned from the 1.52m model to the 9.14m mode by majority of the six 1.52m blocks combined to one 9.14m block with the following exceptions:     <ul> <li>If equal number of two classes (3 blocks and 3 blocks the lower class was assigned, if the block is located within a fault block of a particula seam that has no drill data or less than two holes and was assigned grades from surrounding data, the class was set to inferred.</li> </ul> </li> </ul>		
	• Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).	The Mineral Resource classification has included the considerati of data reliability, spatial distribution and abundance of data a continuity of geology and grade parameters		
	Whether the result appropriately reflects the Competent Person's view of the deposit.	• It is the Competent Persons view that the classification crite applied to the Mineral Resource estimate are appropriate for treliability and spatial distribution of the base data and reflect trend confidence of continuity of the modelled geology and grap parameters.		

	Criteria	JORC Code 2012 explanation	Commentary
	D	The results of any audits or reviews of Mineral Resource estimates.	• Beyond high level review for the purpose of understanding the Project history, no formal audits or reviews of previous or historical Mineral Resource estimates were performed as part of the scope of work; Mineral Resource estimation evaluation is limited to the estimate prepared by IMC and presented in this Report.
5		<ul> <li>Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the</li> <li>relative accuracy and confidence of the estimate.</li> </ul>	<ul> <li>IMC performed a statistical and geostatistical analysis and applied Mineral Resource classification criteria to reflect the relative confidence level of the estimated Mineral Resource tonnes and grades estimated globally across the model area for the Project.</li> </ul>
	Audits or reviews	<ul> <li>The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions</li> <li>made and the procedures used.</li> </ul>	The Mineral Resource tonnes and grade have been estimated globally across the model area for the Project.
	Discussion of relative accuracy/ confidence	These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	<ul> <li>Reconciliation against production data/results was not possible as the Project is currently in the development stage and there has been no production on the Project to date.</li> </ul>

# **SECTION 4 ESTIMATION AND REPORTING OF ORE RESERVES**

(Criteria listed in section 1, and where relevant in sections 2 and 3, also apply to this section.)

Criteria	JORC Code 2012 Explanation	Commentary
Mineral Resource estimate for conversion to Ore Reserves	Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.	<ul> <li>The February 2025 Mineral Resource estimate is based on information compiled by Herbert E. Welhener, a Competent Person is a Registered Member of the SME (Society for Mining, Metallurgy, and Exploration), and is a QP Member of MMSA (the Mining and Metallurgical Society of America). Mr. Welhener is a full-time employee of Independent Mining Consultants, Inc. (IMC) and is independent of Ioneer and its affiliates. Mr. Welhener has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity 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' (JORC Code 2012). Mr. Welhener consents to the inclusion in this report.</li> <li>The May 2025 Mineral Reserve estimate is based on information compiled by Joseph S.C. McNaughton, a Competent Person is a Registered PE (Professional Engineer) in the state of Arizona. Mr. McNaughton is a full-time employee of Independent Mining Consultants, Inc. (IMC) and is independent of loneer and its affiliates. Mr. McNaughton has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration for 'Australasian Code for Reporting of Exploration to the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' (JORC Code 2012). Mr. McNaughton consents to the inclusion in this report.</li> </ul>
0	<ul> <li>Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.</li> </ul>	The Mineral Resources are reported inclusive of the Ore Reserves.
Site visits	Comment on any site visits undertaken by the Competent Person and the outcome of those visits.	<ul> <li>The IMC Competent Person Herbert E. Welhener and Joseph Mc Naughton made personal site inspections, this visit was performed on the Project site on August 10th 2023 for the Project.</li> <li>During the site visit the IMC Competent Persons visited the loneer core shed in Tonopah NV, and the South Basin area of the Rhyolite Ridge Project site, which is the focus of the current exploration and resource evaluation efforts by loneer.</li> <li>The IMC Competent Persons observed the active drilling, logging and sampling process and interviewed site personnel regarding exploration drilling, logging, sampling and chain of custody procedures.</li> <li>The outcome of the site visit was that the IMC Competent Persons developed an understanding of the general geology of the Rhyolite Ridge Project. The IMC Competent Person was also able to visually confirm the presence of a selection of monumented drill holes from each of the previous drilling programs as well as to observe drilling, logging and sampling procedures during the current drilling program and to review documentation for the logging, sampling and chain of custody protocols for previous drilling programs.</li> </ul>
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Criteria	JORC Code 2012 Explanation	Commentary
		<ul> <li>During the site visit, the Competent Person confirmed that the type of data was applicable for Ore Reserve estimation. The Competent Person observed project surface conditions for the purpose of understanding project boundaries, physical characteristics of the resource for determining appropriate extraction methodology. drainage and infrastructure requirements, appropriate locations for overburden storage facilities (<b>OSFs</b>), as well as access from the proposed quarry to the proposed process plant site location.</li> </ul>
	If no site visits have been undertaken indicate why this is the case.	Not Applicable
Study status	The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.	• As part of the May 2025 Ore Reserves estimate, an open-pit mine plan was developed that was technically achievable and economically viable. The mine plan considered material Modifying Factors such as dilution and ore loss, various boundary constraints, processing recoveries and all costs associated with mining, processing, transportation and selling product.
	The Code requires that a study to at least Pre- Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.	<ul> <li>The 2024FS was undertaken to convert Mineral Resources to Ore Reserves. The 2024FS determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors were considered.</li> <li>The Mineral Resources have been converted to Ore Reserves by means of an open-pit optimisation and pit design supported by geotechnical studies undertaken by Geo-Logic Associates (GLA). Only Measured and Indicated Mineral Resources have been included in the Ore Reserves. Modifying factors have been applied as stated below.</li> </ul>
Cut-off parameters	<ul> <li>The basis of the cut-off grade(s) or quality parameters applied.</li> </ul>	<ul> <li>IMC applied a two-phase approach to defining the cut-off grade, including a grade-tonnage evaluation and an economic evaluation.</li> <li>The grade tonnage evaluation limited the stream 1 process feed to material with boron grades &gt;5,000 ppm boron cut-off grade for high boron – high lithium (HiB-Li) mineralization (M5, B5, L6) and net value (net of process) cut-off grade of \$16.54/t for low boron (LoB-Li) mineralization below 5,000 ppm boron which is split into two material types: low clay and high clay material, respectfully, Stream 2 and Stream 3.</li> </ul>

Criteria	JORC Code 2012 Explanation	Commentary
Mining factors or assumptions	<ul> <li>The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).</li> </ul>	<ul> <li>This Ore Reserve estimate is based on work completed for a 2025FS. The ore reserve was developed from the 9.14m(30ft) mine planning block model and is the total of all proven and probable category ore that is planned for processing.</li> <li>The mineral ore reserve was estimated by tabulating the contained tonnage of measured and indicated mineral resources (proven and probable ore reserves) within the designed final pit geometry at the planned cut-off grade. The final pit design and the internal phase (pushback) designs were guided by the results of the Lerchs-Grossmann algorithm, project constraints, and other relevant factors. Multiple quarry design objectives and constraints were incorporated into the pit targeting exercise, resulting in five pushback designs that guided the mine planning. These phase designs had a significant impact on various outcomes, including the final quarry designs, the quarrying approach, and the corresponding mine production plan.</li> <li>Modifying Factors (listed below) and GLA's geotechnical recommendations listed below IMC's pit design was further analysed by GLA to check for pit slope stability. The analysis found that the pit design is predicted to be in a stable configuration</li> </ul>
	The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc	<ul> <li>The deposit is to be mined by open-pit mining methods with 9.14 metre (m) bench heights using 27 cubic metre (m<sup>3</sup>) wheel loader, and 136-tonne autonomous haul trucks (AHTs). This is the most appropriate mining method for extraction of the resource due to the moderately steep dip of the deposit, moderate stripping ratio, mining equipment access requirements to remove overburden and extract ore, and rock properties of the various stratigraphic units present in the deposit.</li> <li>The planned quarry area includes problematic adversely oriented bedding conditions where very low strength materials (i.e. layers M4, M5a, M5, and B5) daylight on the proposed slope faces. GLA notes that there are some aspects of the quarry design that are based on limited geotechnical laboratory testing, in particular, the northern extents of the LOM quarry limits.</li> </ul>

Criteria	JORC Code 2012 Explanation	Commentary
Mining factors or assumptions	The assumptions made regarding geotechnical parameters (e.g. pit slopes, stope sizes, etc), grade control and pre- production drilling.	• Geo-Logic Associates (GLA) completed the geotechnical quarry slope designs, which included limit equilibrium stability and kinematic stability evaluations, including structurally controlled failures and toppling evaluations. The planned quarry area includes problematic adversely oriented bedding conditions where very low strength materials (i.e. layers M4, M5a, M5, and B5) daylight on the proposed slope faces. The results of the kinematic and backbreak analyses indicate that these factors would not control the quarry designs. The inter-ramp angle (IRA) results from the backbreak and kinematic analyses for the LOM quarry was 42° in all materials other than Alluvial, alluvial material has an IRA of 35°. The ground anchor support structure recommended by GLA is included within the pit design and mine plan prepared by IMC.
	The assumptions made regarding geotechnical parameters (e.g. pit slopes, stope sizes, etc), grade control and pre- production drilling.	• Control of blasting will be extremely important as production progresses; especially where steeply dipping materials are present. The potential need for controlled blasting techniques near the final quarry wall may be required during normal operations. Such techniques may include buffer blasting, trim blasting, pre-splitting, post-split blasting, and line drilling. GLA recommends that radar monitoring and prisms be implemented, at a minimum, for increased safety and productivity, as well as for protection of the Tiehm's buckwheat population

Criteria	JORC Code 2012 Explanation	Commentary
Mining factors or assumptions	The major assumptions made and Mineral Resource model used for pit and slope optimisation (if appropriate).	<ul> <li>Pit optimisations were performed on September 2024 Mineral Resource model, IMC performed numerous pit targeting exercises under various scenarios and assumptions to identify the economic extents of the LOM Quarry using the 9.14m mine planning geological block model and Hexagon MinePlan® software's quarry optimization capabilities. Using the above geotechnical parameters and applied recovery, pro-forma mining cost, processing cost, transportation cost and sales price assumptions listed below:</li> <li>Boron cut-off grade of 5,000 ppm (Stream 1)</li> <li>Boron cutoff grade &lt; 5,000 ppm and Net value of \$16.54/t (Stream 2 &amp; 3)</li> <li>Boron recovery of between 37.3% to 80.2%, based on process stream and seam.</li> <li>Lithium recovery between 78.0% to 88.0%, based on process stream and seam.</li> <li>Mining cost of US\$1.69 per tonne (t)</li> <li>Additional haulage cost of US\$0.0059/t per vertical metre</li> <li>Average Processing cost of US\$69.49/t</li> <li>Transportation cost of US\$159.84/t</li> <li>Boric Acid sales price of US\$1,172.78/tonne</li> <li>Lithium Carbonate sales price of US\$19,351.38/tonne</li> </ul>
	The mining dilution factors used.	<ul> <li>Mining will be done on a horizontal 9.14m high bench. It is assumed that no split benches will be mined. To incorporate the estimate of dilution and ore loss from adjacent seams, a 9.14m bench height block model was developed for use in the mine plan and tabulation of the Ore Reserves. The steps to develop this block model are:</li> <li>Composite the drill hole assay database to a 9.14m composite length which respects the 9.14m benches. The seam data was assigned on a majority of the composite length. Drill holes with a dip flatter than 45 degrees were composited as down hole 9.14m lengths.</li> <li>The geologic solids and surfaces were assigned to the block model with a block size of 7.62 by 7.62 meter in plan and 9.14m high. In instances where a model block intersected more than one seam, the</li> </ul>

Criteria	JORC Code 2012 Explanation	Commentary
		<ul> <li>seam with the majority of the block volume was assigned to the total block.</li> <li>Tonnages, grades and confidence clasification was</li> </ul>
)	• The mining recovery factors used.	• The mining recovery factor assumes the use of front end loaders and dozers outfitted with high- precision GPS and integrated FMS and competent operators mining on a 9.14m bench. The recovery and losses are assumed to be incorporated into the 9.14m bench height model used to tabulate the ore reserve and mine plan tonnages and grades.
	Any minimum mining widths used.	• Due to the continuous thickness of the B5 and L6 seams within the designed pit, no minimum mining thickness was applied in the Ore Reserves estimate.
1	• The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.	Stated Ore Reserves have only been reported from the Measured and Indicated Resource categories with Modifying Factors applied.
	The infrastructure requirements of the selected mining methods.	• The Project is currently in the design stage, and no site-specific infrastructure has been built to date. Infrastructure required for the Project includes haul roads, ground anchoring highwall support structure, Overburden Storage Facilities ( <b>OSFs</b> ), Spent Ore Storage Facility ( <b>SOSF</b> ), Contact Water Ponds ( <b>CWPs</b> ), the processing plant which includes processing structures and facilities, maintenance facilities, warehousing, shipping and receiving, fuel island, Sulphuric Acid Plant ( <b>SAP</b> ), Steam Turbine Generator ( <b>STG</b> ) responsible for power generation/transmission, and administrative buildings.

Criteria	JORC Code 2012 Explanation	Commentary
Metallurgical factors or assumptions	The metallurgical process proposed and the appropriateness of that process to the style of mineralization.	<ul> <li>The Rhyolite Ridge Li-B ore is unique, and no reference installation exist for processing this type of ore. Advanced scientific investigative and confirmatory test work was therefore required to optimise the process flowsheet for the 2020FS. Bench and pilot plant testing were conducted at Kemetco Research, Inc. (Kemetco) in Richmond, British Columbia, and overseen by Norm Chow and Anca Nacu PhD with Kemetco; Patrick Glynn P.E., Jaegan Mohan and Kyle Marte, PEng with Fluor; and Peter Ehren and Michael Osborne with loneer. Kappes Cassiday Associates (KCA) performed baseline metallurgical test work for vat leaching test work, FLSmidth performed crushing and filtration test work, and Veolia performed evaporation and crystallisation test work that formed the basis of the 2020FS.</li> <li>Ore will be processed by ore sizing, vat acid leaching, impurity removal, evaporation, and crystallisation using a flowsheet developed specifically for the Project to generate technical-grade lithium carbonate and boric acid. Test work has also confirmed that refining the technical-grade lithium carbonate to battery-grade lithium carbonate through at liming route. No impediments have been identified to the technical and commercial feasibility for conversion of the technical-grade lithium carbonate the block flow diagram (BFD), process flow diagrams (P&amp;IDs), moress desig criteria, piping and instrumentation diagrams (P&amp;IDs), and heat and mass balance has been compiled using the Metsim process simulation software package and is a fully integrated model comprising all major process unit operations and recycle streams. The model tracks all elements/compounds of interest throughout the process. Notably lithium wash losses, which can be significan</li></ul>

Criteria	JORC Code 2012 Explanation	Commentary
		• An on-site SAP will produce commercial-grade sulphuric acid for vat leaching the ore. The selection of the technology for the large SAP is based on a proven operating design and specialty technology provider. The SAP is a double conversion, double adsorption system that has proven to be reliable and predictable.
	Whether the metallurgical process is well-tested technology or novel in nature.	The Rhyolite Ridge Li-B ore is unique, and no reference installations exist for processing this type of ore. Advanced scientific investigative and confirmatory test work was therefore required to optimise the process flowsheet. Bench and pilot plant testing were performed by Kemetco, KCA performed baseline metallurgical test work for vat leaching test work, FLSmidth performed crushing and filtration test work, and Veolia performed evaporation and crystallisation test work that formed the basis of the 2020FS. However, the proposed metallurgical process uses known and commercially proven equipment and technology and is ready for commercialisation.
	The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.	• The Rhyolite Ridge Li-B ore is unique, and no reference installations exist for processing this type of ore. Advanced scientific investigative and confirmatory test work was therefore required on bulk samples taken from the outcrop and on core samples. Bench and pilot plant testing were performed by Kemetco, KCA performed baseline metallurgical test work for vat leaching test work, FLSmidth performed crushing and filtration test work, and Veolia performed evaporation and crystallisation test work that formed the basis of the 2020FS. The metallurgical testing programs were fit for purpose and no standardized test methods were used to govern testing programs. Test work was structured and guided using the general principles and definition of the CIM Best Practice Guidelines for mineral processing. At a finer level each metallurgical laboratory has their own standard operating procedures ( <b>SOPs</b> ) and use a wide range of standards for individual test procedures and assaying. A list of these procedures has not been compiled. The majority of metallurgical test work has been performed on material from the South Basin, which was the focus of the 2020FS and the proposed location of the quarry, though some test work has also been done on core from the North Basin where operations could potentially expand in the future.
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Criteria	JORC Code 2012 Explanation	C	ommen	itary			
		•	<ul> <li>In-depth metallurgical test work and pilot plant programs performed over the 18-month duration of the 2020FS or tonnes of material (primarily limited to the B5 unit) to op process flowsheet. Some metallurgical test work is still a confirm and further reduce risk of specific areas in the p flowsheet. The results from the test work will be incorpoupdated during the detailed engineering phase, over the based on the criticality of the effect on the current desig</li> <li>The process flowsheet was customised to the metallurg chemical characteristics of the unique Rhyolite Ridge process flowsheet in the process flowsheet and reducing procure tables. This extensive effort has resulted in achieving of confidence in the process flowsheet and reducing procurertainty. The major unit operations of the Rhyolite Ridge or each unit operated for treating the Rhyolite Ridge or each unit operation of the proposed Rhyolite Ridge process flowsheet have been operated at pilot plant scale on ow of material. The metallurgical test work is representative process planned for treating the Rhyolite Ridge ore delived the mine.</li> <li>Based on the metallurgical test work, corresponding recolution and for boron to be applied to all ore planned to based on stream and seam as follows.</li> </ul>	D20FS on over 27 nit) to optimise the rk is still ongoing to s in the process e incorporated and , over the next year, ent design. metallurgical and Ridge ore to reflect idge processing chieving a high level ucing process risk an hyolite Ridge ale on over 27 tonnes esentative of the e ore delivered from			
				Boron to Boric Acid Lithium to Lithium Carbonate		thium Carbonate	
(CO)			Seam	Stream 1	Streams 2 & 3	Stream 1	Streams 2 & 3
			M5	80.2%	65.0%	85.7%	78.0%
$\bigcirc$			B5	80.2%	80.2%	85.7%	85.7%
			S5	80.2%	50.0%	85.7%	88.0%
			L6	80.2%	37.3%	85.7%	85.0%
		•			cumulative recoven in the secoven secoven secoven second sec		unit processes that
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Criteria	JORC Code 2012 Explanation	Commentary
	Any assumptions or allowances made for deleterious elements.	<ul> <li>In addition to lithium and boron, deleterious elements including magnesium, calcium, aluminium, potassium, and iron impact the amount of sulphuric acid consumed by processing plant feed material and annual ore throughputs. The process plant design is based on maximising the sulphuric acid output by the SAP. The ore throughput through the processing plant is therefore variable to counter the effect of varying acid consumptions to give a constant annual acid consumption. The ore throughput of the process plant is based on achieving the maximum ore throughput anticipated in the mine plan on a monthly basis.</li> </ul>
)	• The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole.	<ul> <li>Extensive test work and pilot plant programs were performed as part of the 2020FS on bulk samples taken from the outcrop and on core samples. The majority of metallurgical test work has been performed on material from the proposed quarry location in the South Basin, which was the focus of the 2020FS. Most test work was performed on B5. Test work has been performed on over 27 tonnes of material, and the samples are representative of the ore body as a whole.</li> </ul>
	• For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?	<ul> <li>Kemetco, KCA, FLSmidth, and Veolia have performed sufficient bench scale and pilot plant test work to indicate that technical grade lithium carbonate with 99% purity, battery-grade lithium hydroxide with 99.5% purity, and boric acid with 99.9% purity can be produced from the Rhyolite Ridge ore. The Ore Reserves are of the mineralogy that the plant is designed to process and support these specifications based on metallurgical test work.</li> </ul>
Environmental	The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.	<ul> <li>The Project is designed to be a sustainable, environmentally sensitive operation with no grid energy requirements, low water usage, low emissions, and a modest surface footprint.</li> <li>The BLM permitting process required compliance with the National Environmental Policy Act (NEPA); The NEPA requirements included baseline reports for 14 different resource areas of the Project, including air quality, biology, cultural resources, groundwater, recreation, socioeconomics, soils, and rangeland.</li> <li>Baseline environmental studies were performed as part of the 2020FS. Updates to the air quality impacts assessment, and groundwater were completed in 2023 and 2024.</li> <li>The permits deemed critical to the advance of the overall Project included the Bureau of Land Management (BLM) Plan of Operations, the State of Nevada Water Pollution Control Permit (WPCP) required to construct, operate, and close a mining facility, and the Nevada Bureau of Air Pollution Control air quality permit. loneer has received these three critical permits as of October 2024.</li> </ul>

<ul> <li>Bureau of Land Management (BLM) – Mine Plan of Operations, and State of Nexada Bureau of Mining Regulation and Reclamation (BMRR) – Nevada Reclamation Permit – applications were submitted to both agencies and the BLM determined the applications was submitted to the BLM and BMRR in July 2022.</li> <li>The State of Nexada Bureau of Air Pollution Control – Air Quality Permit – was obtained on June 14, 2021 (AP1099-4256).</li> <li>The State of Nevada BMRR – Water Pollution Control Permit (required to construct, operate, and dolse a mining facility) – was obtained on June 14, 2021 (AVN-2020107).</li> <li>The Permit – Was obtained on June 14, 2021 (AVN-2020107).</li> <li>The Permit – Was obtained on June 14, 2021 (AVN-2020107).</li> <li>The Plan of Operations filing triggered the environmental review process under the NEPA that is expected to follow an Environmental Impact Statement (EIS) pathway. The NEPA regulations under 40 Code of Federal Regulations 1500 and other U.S. Department of Interior guidance, as well as the BLM Battle Mountain District Instruction that streamiline the overall anvironmental review and permitting processes. The BLM selected a third-party EIS contractor in September 2020. That contractor subsequenty commenced prelimingry NEPA work for the BLM. Holding assessing the adequacy of the baseline data for use in the EIS. The BLM sublished a Notice of Intent to prepare an EIS in December 2022. Scooping was scondybeted in April 2024 and the Notice of Availability was published in the scond quadre to 2024. In Cotober 2024, Incerr received its federal permit for the Rhyolite Ridge Lithium-Boron Project from the BLM. The formal Record of Decision (ROD) follows the issuance in September 2024 of the final Environmental Impact Statement (EIS) by the BLM, which incorporated public feedback received during the April-June 2024 on the finat Environmental Impact Statement (EIS) by the BLM, which incorporated public feedback received during the April-June 2024 of the finat Envi</li></ul>	Criter	ria JORC Code 2012 Explanation	Commentary
preparing permit applications for the larger LOM, which is effectively an expansion of the current planned quarry. The permitting process		JORC Code 2012 Explanation         Image: Code 2012 Explanation	<ul> <li>Bureau of Land Management (BLM) – Mine Plan of Operations, and State of Nevada Bureau of Mining Regulation and Reclamation (BMRR) – Nevada Reclamation Permit – applications were submitted to both agencies and the BLM determined the application complete on August 26, 2020. An amended version of the applications was submitted to the BLM and BMRR in July 2022.</li> <li>The State of Nevada Bureau of Air Pollution Control – Air Quality Permit – was obtained on June 14, 2021 (AP1099-4256).</li> <li>The State of Nevada BMRR – Water Pollution Control Permit (required to construct, operate, and close a mining facility) – was obtained on July 1, 2021 (NVN-2020107).</li> <li>The Plan of Operations filing triggered the environmental review process under the NEPA that is expected to follow an Environmental Impact Statement (EIS) pathway. The NEPA process was guided by the 2023 implemented requirements in the NEPA regulations under 40 Code of Federal Regulations 1500 and other U.S. Department of Interior guidance, as well as the BLM Battle Mountain District Instruction that streamline the overall environmental review and permitting processes. The BLM selected a third-party EIS contractor in September 2020. That contractor subsequently commenced preliminary NEPA work for the BLM, including assessing the adequacy of the baseline data for use in the EIS. The BLM published a Notice of Intent to prepare an EIS in December 2022. Scoping was completed in the first quarter of 2023. The Draft EIS was completed in April 2024 and the Notice of Availability was published in the second quarter of 2024. In October 2024, loneer received its federal permit for the Rhyolite Ridge Lithium-Boron Project from the BLM. The formal Record of Decision (ROD) follows the issuance in September 2024 open comment period.</li> <li>Ioneer has focused its efforts to date on preparing permits for the initial phases of the quarry south of the county road estimated to</li> </ul>
an expansion of the current planned quarry. The permitting process	)		allow for the first 20 years, and little work has been done to date on
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	the quarry have been approved. Based on the current mine plan, the
	LOM Quarry permits will need to be secured by the end of the twentieth year of production, which is currently slated for 2046.
	<ul> <li>A geochemistry study was conducted as part of the 2020FS to</li> </ul>
	assess acid rock drainage ( <b>ARD</b> ), metals leaching ( <b>ML</b> ), and
	salinity generation potential of all major lithologic units and residual
	process materials. The study also aimed to understand mineral
	composition and geochemical controls on water quality, evaluate
	potential impacts from the project and associated protection
	measures and provide information to support geochemical models
	and evaluations for water quality predictions. Overburden and ore samples were collected from existing exploration drill core and 137
	samples were conected from existing exploration drift core and 137 samples representing 15 different units were geochemically analysed
	to characterise the potential of these materials to generate acidic
	drainage or to leach metals based on regulatory guidance
65	documents published by the Nevada Division of Environmental
	Protection ( <b>NDEP</b> ) and the Nevada BLM. Testing included acid-base
	accounting (ABA), net acid generation pH, short-term leach testing
$(\mathcal{E}(\mathcal{O}))$	by meteoric water mobility procedure, bulk elemental content, X-ray diffraction, optical mineralogy, and humidity cell testing ( <b>HCT</b> ). While
0 D	most Project materials are non-potentially acid generating ( <b>non-</b>
7	PAG), HCTs for all major lithologic units are required because a
	post-closure quarry lake will develop. A geochemistry study was
	conducted by Piteau in 2023 to support the application to modify
	the Project's existing WPCP NEV2020107 issued August 24, 2021. The updated Geochemical Report was completed and
GDI	submitted to NDEP with the modification application submitted July
(C(U))	17, 2024Two ex-pit OSFs have been designed to accommodate
	the storage of overburden and low-grade M5 material, namely, the
	South OSF and the North OSF. The South OSF is located to the
	south of the quarry. This site was selected due to its proximity to
	the quarry to minimise haul distances and prevent sterilisation of Mineral Resources; as well as not move the OSF out of critical
	habitat. The North OSF is located approximately 1.1 kilometres
20	(km) northwest of the quarry between the quarry limits and the
	processing plant. The North OSF site was selected due to
	boundary restrictions and the location of the Cave Springs
	Formation outcroppings. In-pit storage of overburden and low- grade M5 material can commence as soon as sufficient pit floor
	grade M5 material can commence as soon as sufficient pit floor space is available and the orientation of the advancing mining face
	becomes conducive to in-pit backfilling. The initial South OSF with
	an estimated three years of capacity was designed to a relative
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Criteria	JORC Code 2012 Explanation	Commentary
		<ul> <li>accuracy and confidence level consistent with a Feasibility Study, whereas the North OSF, and In-Pit Overburden Backfill (IOB) designs were performed to a relative accuracy and confidence level consistent with a Pre-Feasibility Study. To date, no additional issues have been identified that would materially impact the proposed locations of the South and North OSFs.</li> <li>A tail gas scrubber will be installed on the SAP to remove remaining sulphur dioxide (SO<sub>2</sub>) from the gas stream to make certain that environmental emissions requirements are met.</li> <li>Process residue will be stacked in a Spent Ore Storage Facility (SOSF) located 1.6 km south of the processing plant that has been designed to store a composite consisting of leached ore from the vats plus sulphate salts generated in the evaporation and crystallisation circuits. This material is suitable for dry stacking, so there is no need for a conventional tailings dam. A double-sided, textured high-density polyethylene (HDPE) geomembrane liner will provide containment and will be protected by a granular layer to facilitate long-term drainage. The SOSF engineering has been completed to a detailed design level with drawings issued for construction as this level of engineering completion is required by regulatory authorities and will be submitted as part of the overall permitting process. To date, no issues have been identified that would materially impact the proposed location of the SOSF.</li> </ul>
	<ul> <li>The existence of appropriate infrastructure: availability or land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed.</li> </ul>	<ul><li>site-specific infrastructure has been built to date.</li><li>Sufficient land exists to locate all proposed infrastructure required for</li></ul>
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Criteria JO	ommentary	JORC Code 2012 Explanation
Infrastructure (con't)	Two backup diesel generators will also be available to provide bla start capability and provide power to essential systems should the STG be down. The Project has been designed to be an environmentally sensitive operation with low water usage and wat recycling and reuse where possible. There is sufficient water available to meet processing and dust control requirements. The Rhyolite Ridge site is currently accessed from the cities of Re and Las Vegas, Nevada from Nevada Stage Highway 264 and the unpaved Hot Ditch and Cave Springs county roads. Ioneer is work with Esmeralda County officials in developing a traffic management plan that will integrate new access roads to the facility with the existing county roads in the area. Consideration will be given to make certain that the safety of all users of county roads is not compromised through development of the Project. Nevada is considered one of the world's most favourable and stab mining jurisdictions, and there is a high degree of experienced, competent, and skilled personnel available to meet workforce requirements for the Project. A workforce camp is not foreseen for use in housing Owner personnel. Ioneer staff conducted a study of local housing options Local housing, apartments, motels, and recreational vehicle ( <b>RV</b> ) sites were located, evaluated, and quantified. Only a very limited amount of accommodation is available in the nearest residential next closest available accommodations are in the city of Tonopah, Nevada, which is roughly 1.5 hours to the Project site. A few inacti RV sites were located near the site, but re-activation potential was not evaluated, and these sites are limited to 25 by regulation due to needs for infrastructure for larger RV areas. Due to the potential areas, the small town of Dyer, Nevada, and Bishop, California. Th need to develop housing, loneer may contribute individual housing support, which is included in the operating costs estimate for those employees hired before turnover. In addition, loneer may invest on two years in lo	

Criteria	JORC Code 2012 Explanation	Commentary
D		<ul> <li>delivery framework. Project execution is based on continuing with the same companies (Fluor, SNC-Lavalin, MECS, Kemetco, KCA, FLSmidth, Veolia, EM Strategies, NewFields, and Trinity) that completed the FS to maintain continuity and retain project knowledge. In addition to new service providers like IMC &amp; GLA. Construction of processing plant, SAP, and SOSF facilities is planned to be facilitated by various consultants and contractors with loneer oversight, whereas construction of the mine haul roads and initial box-cut is planned to be performed by loneer.</li> </ul>
Costs	The derivation of, or assumptions made, regarding projected capital costs in the study.	<ul> <li>The capital cost estimate is based on work completed to update the 2020FS to an AACE Class 2 capital cost estimate with an accuracy range of -10%/+15% to produce an updated 2024FS, where engineering design is ~70% complete. The estimate reflects the Project's EPCM execution strategy and baseline project schedule.</li> <li>Capital costs for various Work Breakdown Structure (WBS) codes were independently developed by third parties and consolidated by Fluor. More than 1,500 deliverables were produced during the 2024FS to support the capital costs estimate.</li> <li>The capital cost estimate covers the period from 2024FS completion to commissioning and is reported in first Quarter (Q1) 2024 real US dollars without allowances for escalation or currency fluctuation. The estimate does not include sunk costs. A contingency of 10% was applied to the capital costs estimate using a Monte Carlo simulation to achieve a P65 (i.e., the probability at the 65th percentile) confidence level for the estimate and P50 for schedule according to the model and ranges established by Fluor. The estimate, including contingency, has an expected accuracy range of +15%/-10% as per the basis of estimate. The capital schedule for mining equipment includes new equipment required to meet production targets of the 96-year mine plan and replacement equipment based on useful service lives provided by the vendor or based on other industry standards. Rebuilds have also been included in the capital schedule at regular intervals based on rebuild lives provided by the vendor or other industry standards.</li> <li>Capital costs of mining equipment were derived from quotes received in April 2024 from an equipment vendor with offices in</li> </ul>

Criteria	JORC Code 2012 Explanation	Commentary
		<ul> <li>Nevada. Taxes for the AHTs were estimated using a tax rate of 6.85%, but freight and assembly costs were assumed to remain unchanged from the conventional haul truck.</li> <li>The capital cost estimates are not 100% equity based. Capital cost estimates for new and replacement mining equipment assume that 90% of the total equipment cost inclusive of the base cost, taxes, freight, and assembly would be financed and included in the operating costs estimate based on terms provided by the equipment manufacturer. The 20% down payment for equipment was included in the capital costs estimate.</li> <li>Capital costs for the haul roads, OSFs, SOSF, CWPs, the processing plant (which includes processing structures and facilities), maintenance facilities, warehousing, shipping and receiving, fuel island, SAP, STG, and administrative buildings were estimated from material take-off (MTO) quantities developed for the 2024FS by various third parties. Each of the above have an engineering design that is at least 30% complete with some items with a level of design maturity completed to detailed engineering and issued for construction.</li> </ul>
	The methodology used to estimate operating costs	<ul> <li>Operating costs are based on loneer's basis of operating cost estimates dated March 2024 and their latest operating cost estimate model.</li> <li>Sustaining capital costs have been included in the operating costs estimate.</li> <li>Operating cost estimates for the quarry and processing plant were developed by loneer and Fluor and consolidated by Fluor for input into the cash flow model.</li> <li>Direct mine operating costs are zero-based and developed from first-principles from the mine plan production statistics using methodologies consistent with a 2024FS. Except for blasting and preventative maintenance, all production tasks are assumed to be self-performed by the owner (loneer). Mine mobile equipment will be monitored and maintained through a through Master Service Agreement with the Empire Southwest Caterpillar dealership. The contract includes cost of service, management, supplies, and parts management. Operation costs and component sustainable capital costs were based on a firm bid. Blasting is assumed to be performed by a qualified subcontractor.</li> </ul>
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Criteria	JORC Code 2012 Explanation	Commentary
		• SNC Lavalin from first principles using the ore production schedule from the mine plan. These costs were estimated using methodologies consistent with a 2020FS and included quoted firm pricing from major reagent suppliers, quoted freight costs from transport firms, and workforce costs based on industry norms for salary and wage data within the region consistent with the mine workforce costs. Reasonable scenarios for other requirements such as outsourced services with quoted rates or estimates were also included. Quantities of reagents were established during pilot testing with ore.
	Allowances made for the content of deleterious elements.	No penalties for deleterious elements were forecast in the economic analysis.
)	The source of exchange rates used in the study.	Exchange rates not applicable
)	Derivation of transportation charges.	Transportation charges for all significant materials were derived from quotes. Historical data were used for some minor charges.
	<ul> <li>The basis for forecasting or source of treatment and refining charges, penalties for failure to meet</li> <li>specification, etc.</li> </ul>	Not applicable.
5	The allowances made for royalties payable, both     Government and private.	<ul> <li>Net proceeds (in the form of taxes) were included in the economic analysis. No royalties are paid to private organisations or individuals.</li> </ul>
	The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.	<ul> <li>The revenue factors used in the economic analysis were based on work performed for the 2020FS and updated in Q1 2025.</li> <li>Annual saleable lithium carbonate, lithium hydroxide, and boric acid tonnages reflect the head grade dictated by the mine plan and anticipated metallurgical recoveries estimated from test work.</li> <li>Price forecasts for lithium carbonate and lithium hydroxide were obtained from a range of market research companies, investment banks, and other reputable sources. For the financial model price forecasts rather than the current or historical prices were used. This approach allows to better account for future market conditions and potential price trends, providing a more accurate financial assessment.</li> </ul>
)		The offtake agreement prices of technical-grade lithium carbonate are based on the delivered price formula using the

	battery-grade lithium hydroxide index price from Benchmark Mineral Intelligence (Q1, 2025) battery-grade lithium hydroxide price forecast. The offtake price formulas are the agreed price index minus the agreed conversion cost and discount, the
	agreed price index minus the agreed discount minus the agreed conversion cost, or the agreed price index minus the conversion cost.

Criteria	JORC Code 2012 Explanation	Commentary
	The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc. (Con't)	<ul> <li>The estimated price for boric acid was based on an analysis by loneer's Sales and Marketing team using 1) loneer current contracts, and 2) based on internal analysis of historical prices and volumes extracted from Datamyne's trade data, import prices and volumes from Japan, South Korea, Southeast Asia, and China, customers and distributors' interviews, China Boron Association data, and Internal market equilibrium assumptions.</li> <li>No exchange rates were applied to metal or commodity prices. All commodity prices are transacted and stated in US Dollars.</li> <li>Transportation charges for all significant materials were derived from quotes in Q4 2024. Historical data were used for some minor charges not derived from quotes.</li> </ul>
		<ul> <li>No penalties were forecast in the economic analysis.</li> </ul>
	The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.	

Criteria	JORC Code 2012 Explanation	Commentary
Revenue factors		<ul> <li>The offtake agreement prices of lithium chemicals are based on the delivered price formula using the battery-grade lithium hydroxide index price from Benchmark Mineral Intelligence (Q1 2025) battery-grade lithium hydroxide price forecast. The offtake price formulas are the agreed price index minus the agreed conversion cost and minus discount, or the agreed price index minus the agreed discount minus the agreed conversion cost. In year three loneer will construct a Lithium Hydroxide facility at site allowing the battery grade lithium hydroxide price to be realized thus eliminating the conversion cost.</li> <li>The estimated price for boric acid used in the economic analysis was based on an analysis by loneer's Sales and Marketing team using 1) loneer current contracts, and 2) based on internal analysis of historical prices and volumes from Japan, South Korea, Southeast Asia, and China, customers and distributors interviews, China Boron Association data, and Internal market equilibrium assumptions.</li> </ul>
Market assessment	• The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.	<ul> <li>Market demand and supply trends for lithium products and borates were completed by loneer's Sales &amp; Marketing team.</li> <li>Ioneer's efforts were led by Yoshio Nagai, Ioneer's Vice President of Sales &amp; Marketing. Mr. Nagai has more than 30 years of experience in the chemical and mining industry sales and marketing, most recently as Sales Vice President of Rio Tinto Minerals, accountable for borates, salt, and talc products in Asia and the USA.</li> <li>Lithium</li> </ul>
		<ul> <li>Lithium extraction produces lithium carbonate, lithium hydroxide, lithium chloride, butyl lithium, and lithium metal. Lithium carbonate can be produced with different qualities, such as industrial grade (typically ≥98.5% purity), technical grade (≥99% purity), and battery grade (≥99.5% purity). Some industrial-grade lithium carbonate (i.e., from brines in China) has a lower purity than 95%. Industrial- grade and technical-grade lithium carbonate are typically used for glass, fluxing agents, ceramics, and lubricants. Battery-grade lithium carbonate and hydroxide are used to produce lithium-ion battery cathodes.</li> </ul>
		<ul> <li>Lithium Supply Demand Balance -The current market demand for lithium is substantial, driven primarily by the increasing adoption of electric vehicles (EVs) and the growing use of lithium-ion batteries in various applications, including consumer electronics and energy storage systems. While the lithium market is experiencing price</li> </ul>

D		<ul> <li>pressures due to the market oversupply, the market is forecasted to enter a market deficit from 2030, and the long-term outlook remains positive, driven by the ongoing shift towards electric mobility and renewable energy storage solutions.</li> <li>Lithium demand will increase from 1.45 Mt in 2025 to 2.445 Mt in 2030 and 4.37 Mt in 2040 (Wood Mackenzie, Q1 2025).</li> </ul>
Criteria	JORC Code 2012 Explanation	Commentary
		<ul> <li>The most significant growth is expected in battery-grade lithium hydroxide. It is forecasted to increase by a CAGR of 9.46%, reaching 969 kt by 2030 and 2.09 Mt by 2040. It is driven by the increased adoption of medium to higher-density cathodes, providing higher density and a more extended range.</li> <li>Battery-grade lithium carbonate is expected to grow at a CAGR of 6.7%, reaching 1.26 Mt by 2030 and 1.97 Mt by 2040. This growth will be driven by the global market adoption of lower-density, less expensive lithium iron phosphate (LFP) cathodes.</li> <li>According to Wood Mackenzie's "all-case scenario," the battery-grade lithium chemicals market is expected to be oversupplied over the next five years, with the surplus peaking in 2026/2027 and then a shortage starting in 2030 (Wood Mackenzie, Q1 2025). In contrast, Benchmark Mineral Intelligence (Q1 2025) forecasts a market surplus from 2025 to 2028 and a deficit beginning in 2029. It is</li> </ul>
		<ul> <li>essential to consider the new supply risks in market balance forecasting.</li> <li>Boric acid</li> <li>Large-scale borate commercial production is confined to five main areas of the world: Turkey, the southwest US, the Andes belt of</li> </ul>

	<ul> <li>South America, Northeast China, and the eastern region of Russia. The borates market is supplied principally by two major players, Eti Maden (Eti) and Rio Tinto, though there are other smaller players. The term "borates" describes a commercial source of chemical boric oxide (B<sub>2</sub>O<sub>3</sub>) in the form of sodium borate compounds, minerals, refined (i.e., boric acid), calcined, or specialty forms of borate.</li> <li>Borate is typically refined, but some producers sell some of the raw or concentrated minerals as a substitute for the refined product at a lower price.</li> <li>Borates have more than 300 applications, including specialty glasses (i.e., borosilicate and TFT glasses), fiberglass, ceramics, insulation, agricultural, industrial/chemical, pesticides, cleaning products, cosmetics, and pharmaceuticals</li> </ul>
Criteria • JORC Code 2012 Explanation	Commentary
	<ul> <li>Boric Acid Supply-Demand Balance The 2024 boric acid demand was estimated at 1,138 ktpy at a 78% utilization rate of the nameplate capacity of 1,45 ktpy, with a historic industry capacity utilization rate of 85%. Demand is expected to grow at a minimum of 3% (compound annual growth rate, CAGR) through 2040. The growth of borate demand is relative to the growth of global gross domestic product (GDP).</li> <li>The utilization rate is expected to increase through 2040 and exceed historic capacity utilization of 85%, reaching 86% by 2033, and 100% by 2037. Additional boric acid will be required from 2033, when the utilization rate exceeds 85%.</li> <li>Boric acid demand may fluctuate as customers switch between various borate products, considering price, product availability, and technology developments.</li> </ul>

• A customer and competitor analysis along with the identification of likely market windows for the product.	<ul> <li>Customer and competitor analyses were performed as part of the 2020FS and updates in Q1 2025.</li> <li>Lithium         <ul> <li>The major producers of lithium concentrates and brine, such as Albemarle, Sociedad Química y Minera de Chile (SQM), and Ganfeng Lithium, continue to promote production capacity expansion (Wood Mackenzie, Q1 2025). Albemarle is undertaking an expansion project to</li> </ul> </li> </ul>
	increase its production capacity from 184.1 ktpy in 2025 to 282.8 ktpy in 2035; however, it is delaying and adjusting production due to the existing oversupply market. SQM will increase its production capacity from 242.8 ktpy in 2025 to 274.4 ktpy in 2035. The largest Chinese producer, Ganfeng Lithium, is also expected to increase its production capacity from 190.9 ktpy in 2025 to 309.7 ktpy in 2035, surpassing Albemarle and becoming the largest lithium supplier.
	<ul> <li>Existing producers have experienced extreme price volatility over the past few years and are expected to take a proactive approach to impact the lithium market in the future.</li> </ul>
	<ul> <li>Lithium prices have recently declined, and as a result, some existing spodumene producers have temporarily or permanently been shut down, and new greenfield producers are delaying or suspending the project.</li> </ul>

Criteria	JORC Code 2012 Explanation	Commentary
		<ul> <li>Lithium prices are anticipated to rebound as demand continues to grow. The offtake agreements have been secured with four customers in the lithium-ion battery sector, with diversified customers in various industrial sectors, such as cathode manufacturers, battery makers, and OEMs who will further process the carbonate and convert it to battery-grade lithium.</li> <li>A lithium compound operating cost curve was developed as part of the 2020FS, updated in Q1 2025. If loneer car produce as anticipated, all-in cost per tonne, it will be at the competitive end of the cost curve.</li> </ul>
		Boric acid
		The borates market is supplied principally by two major players, Eti and Rio Tinto, though other smaller players exist. Eti, a Turkish state-owned mining and chemicals company, is the world's largest borate supplier by market share and Proven Ore Reserves and holds 72% of worldwide borate reserves. Rio Tinto has a large borate product portfolio but has not announced any plans to expand borate production. However, they have built a pilot plant to produce lithium from mine waste with a plan to invest additional money to produce a small amount of borate as a by-product of lithium production if the associated pilot production of boric acid demand and is regarded as the best quality in terms of impurities. However, Bor has historically struggled with production due to financial and employee relationship issues and has faced sanctions from Western countries. In addition to Rhyolite Ridge, five other boron greenfield projects worldwide are in various exploration and engineering development stages. These greenfield projects are the Rio Tinto Jadar project, which was stopped due to local protests, the 5E/Fort Cady project in California, the Magdalena Basin project in Mexico, the Pobrdje project to financing, while production of the other projects is delayed or cancelled.

	line with major borate supplier Rio Tinto Minerals, loneer boric acid price forecasts were based on internal analysis of historical prices and volumes extracted from Datamyne's trade data, import prices, and volumes from Japan, South Korea, Southeast Asia, and China, customers and dealers' interviews, China Boron Association data, and Internal market equilibrium assumptions.
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Criteria JORC Code 2012 Explanation	Commentary
Criteria       JORC Code 2012 Explanation         •       • <td><ul> <li>2024 average delivered boric acid price (CIF and FO West Coast) was US\$848/t.</li> <li>Price arbitration exists between regions, and by custome size results in wider price ranges.</li> <li>loneer's price forecast is based on demand and suppl assumptions.</li> <li>Trend analysis was used as the methodology for price forecasting. The price forecast ranges from US\$830/t t US\$1,400/t between 2025 and 2040, with an averag price of US\$1,172.78/t.</li> <li>The 2024 boric acid demand was estimated at 1,138 kt at a 78% utilization rate of the nameplate capacity of 1, ktpy, with a historic industry capacity utilization rate 85%. Demand is expected to grow at a minimum of 3 (compound annual growth rate, CAGR) through 2040. T growth of borate demand is relative to the growth of glot gross domestic product (GDP).</li> <li>The utilization rate is expected to increase through 20 and exceed historic capacity utilization of 85%, reachi 86% by 2033, and 100% by 2037.</li> <li>Additional boric acid will be required from 2033, when the utilizatin rate reaches 91%, exceeding historic capacity rate of 85%.</li> </ul></td>	<ul> <li>2024 average delivered boric acid price (CIF and FO West Coast) was US\$848/t.</li> <li>Price arbitration exists between regions, and by custome size results in wider price ranges.</li> <li>loneer's price forecast is based on demand and suppl assumptions.</li> <li>Trend analysis was used as the methodology for price forecasting. The price forecast ranges from US\$830/t t US\$1,400/t between 2025 and 2040, with an averag price of US\$1,172.78/t.</li> <li>The 2024 boric acid demand was estimated at 1,138 kt at a 78% utilization rate of the nameplate capacity of 1, ktpy, with a historic industry capacity utilization rate 85%. Demand is expected to grow at a minimum of 3 (compound annual growth rate, CAGR) through 2040. T growth of borate demand is relative to the growth of glot gross domestic product (GDP).</li> <li>The utilization rate is expected to increase through 20 and exceed historic capacity utilization of 85%, reachi 86% by 2033, and 100% by 2037.</li> <li>Additional boric acid will be required from 2033, when the utilizatin rate reaches 91%, exceeding historic capacity rate of 85%.</li> </ul>

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	<ul> <li>The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.</li> </ul>	•	<ul> <li>The production schedule a costs estimates were ar developed by loneer. Inputs capital and operating costs acid tonnages, commodity transportation and manage estimate with an accuracy ra the 2024FS, and enginee estimate reflects the Proj baseline project schedule. estimate Project Net Preser</li> </ul>	nalyzed using a into the econom , saleable lithium / price and rev ement costs. An ange of -10% / + ring design is ect's EPCM ex An 8% discoun	an economic n ic analysis includ carbonate, and renue forecasts, AACE Class 2 15% was produce ~70% complete. ecution strategy	nodel le the boric and cost ed for The and
	NPV ranges and sensitivity to variations in the significant	•	,			
Economic	assumptions and inputs.		Sensitivity Factor	NPV with (-15%) Adjustment Factor (US\$ Millions)	NPV with (+15%) Adjustment Factor (US\$ Millions)	
2			Lithium Grade	765	1,895	
			Lithium Recovery	765	1,895	
			Lithium Carbonate Price	768	1,831	
7			Capital Costs	1,619	1,116	
9			Operating Costs	1,666	1,069	_
			Boric Acid Price	1,217	1,516	_
			Boron Grade	1,231	1,502	_
$\mathcal{D}$			Boric Acid Recovery	1,231	1,502	_
		r	Labour Value (NPV) in real dollars wa ate. The outcomes of this ana order of highest to lowest sens	lysis are shown i		
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Criteria	JORC Code 2012 Explanation	Commentary
Economic	•	• A sensitivity analysis on the applied discount rate used to estimate Project NPV below was also performed. The results of this analysis are summarised in the table below.
		Discount         NPV (US \$           Rate (%)         Millions)           12%         311           11%         491           10%         716
		9%         1,001           8%         1,367           7%         1,846           6%         2,487
		Based on the above sensitivity factors, the Project is most sensitive to increases in discount rate and least sensitive to changes in labour cost.
Social	The status of agreements with key stakeholders and matters leading to social licence to operate.	<ul> <li>The Project has been evaluated under an EIS, completed by a BLM approved third-party contractor selected by loneer. Public comment periods were required as part of the EIS process and taken into consideration in the final EIS published in September 2024. A Record of Decision was issued by the BLM in October 2024.</li> <li>Ioneer has entered into three different water rights lease, purchase, and options agreements with a local corporation and LLC (limited liability corporation) along with local landowners that grant rights for water usage, primarily for irrigation.</li> </ul>
Other	<ul> <li>To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the</li> <li>Ore Reserves:</li> </ul>	No Comment
	Any identified material naturally occurring risks.	<ul> <li>See the "Mining factors or assumptions" subsection above for a discussion on the risks associated with the M5a geological unit.</li> <li>No hydrogeological data was incorporated into the geotechnical analyses of the underlying geology, pit configurations, or pit design parameters. As such, GLA's geotechnical analyses were completed under the assumption that the underlying geology and pit walls wou be dry. If the pit walls cannot be fully dewatered, then the outcomes</li> </ul>

Criteria JORC Code 2012 Explanation	Commentary
	<ul> <li>of pit slope stability analyses may change and could result in a decrease of the maximum allowable inter-ramp angle used to desig the pit walls, thereby increasing strip ratio and associated overburden tonnages. If the M5 material that is stockpiled within the OSFs is above 18% moisture saturation by weight, then the Engineer should be contacted to review and provide recommendations for design or material handling revisions. Actions that can be performed to remedy high moisture M5 are: spreading and drying prior to stockpiling; stacking and sequencing revisions; additional geotechnical testing and analyses to support higher moisture contents; or design revision to achieve geotechnical stability (which may result in reduced storage capacity of the OSFs)</li> <li>The Project area is in a moderately high seismic zone as determined by the NewFields Seismic Hazard Assessment prepared for the SOSF. The pit wall slope stability analyses have been performed assuming from a seismic return period of 475-years as determined by the USGS. However, there are always a risk of larger earthquakes occurring. A 475-year event has a probability decreases while intensity increases. Typically, pit walls are designed to remain stable during the 475-year earthquake. A larger earthquake than the 475-year event could cause pit wall failure in areas of the quary where there is no in-pit backfill stacked against the pit walls.</li> <li>The OSF slope stability analysis has been performed assuming an earthquake with a peak ground acceleration of 0.31g, resulting from a seismic return period of 475-year sed (e.g., from 475 years to 2,475 year event has a probability of recurrence is increased (e.g., from 475 years to 2,475 years to 2,475 year event has a probability of annual exceedance of 2%. As the probability for encurrence is increased (e.g., from 475 years to 2,475 years to 2,475 years to 2,475 year event has a probability of annual exceedance of 2%. As the probability of recurrence is increased (e.g., from 475 year</li></ul>

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		of permanent facilities risk being washed out during minor storm events that could cause a short-term disruption in ore delivery to the processing plant.
7	The status of material legal agreements and marketing arrangements.	<ul> <li>Ioneer currently holds a Water Rights Lease Agreement, an Option and Purchase Agreement, and an Option for Water Rights Lease. These permits are for non-mining and milling purposes. The Water Rights Lease Agreement and the Option and Purchase Agreement allow for permitted use of water for irrigation. The Option for Water Rights Lease grants the rights to lease water for irrigation, stockwater, and commercial use on an annual basis with the option to increase leased water rights.</li> <li>Ioneer has signed offtake and sales distribution company for lithiur</li> </ul>
		and boric acid as follows. The volume is stated in short tonnes
		Company         Product         Duration         Y0 lume (st)           Y1         Y2         Y3         Y4         Y5
		Ford Motors         TG Li-carbonate         5 years         7,716         7,71
		EcoPro Innovation TG Li-carbonate 3 years 7,716 7,716 7,716
		DragonflyEnergy TG Li-carbonate 3 years 551 551 551
		Total contracted volume         TG Li-carbonate         20,393         20,393         20,393         12,125         12           Datian Jinma Boron Technology         Boric acid         5 years         115,743
		Dalian Jinma Boron Technology         Boric acid         5 years         115,743 <t< td=""></t<>
		Boron Bazar Boric acid 3years 3,307 3,996 4,519
		Iwatani Corporation         Boric acid         3 years         5,512         12,125         19,842           Total contracted volume         Boric acid         134,592         146,414         159,835         115,743         115,
		<ul> <li>Source:         <ul> <li>EcoPro Innovation Co. Ltd.'s offtake agreement dated June 30<sup>th</sup>, 2021, and volume amendment agreement dated February 14, 2022.</li> <li>Ford Motor Company offtake agreement dated July 21, 2022</li> <li>Prime Planet Energy &amp; Solutions, Inc. offtake agreement dated August 1, 2022.</li> <li>Dragonfly Energy Corporation offtake agreement dated May 9, 2023.</li> </ul> </li> <li>Boric acid agreements         <ul> <li>Dalian Jinma Boron Technology Group Co. Ltd offtake agreement dated December 16, 2019.</li> </ul> </li> </ul>

Criteria	JORC Code 2012 Explanation	Commentary
	• The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.	<ul> <li>Iwatani Corporation sales/distributor agreement dated July 15, 2020.</li> <li>Kintatamani Resources Pte Ltd sales/distributor agreement dated April 20, 2020.</li> <li>Boron Bazar Ltd sales/distributor agreement dated April 20, 2020.</li> <li>Ioneer plans to secure additional boric acid distributor sales agreements in North America following Financial Investment Decision (FID) to increase sales. Ioneer's contracts embed a volume adjustment clause to mitigate increased or decreased volume risk.</li> <li>Even in oversupplied markets, Ioneer can increase sales across all contracts through market intelligence and existing customer relationships.</li> <li>Please refer to the "Environmental" subsection for a discussion on the status of government agreements and approvals for permits.</li> </ul>
	The basis for the classification of the Ore Reserves into varying confidence categories.	<ul> <li>The Ore Reserves estimate for the Project is reported in accordance with the "Australian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves" as prepared by the Joint Ore Reserves Committee (the JORC Code, 2012 Edition).</li> <li>Only Measured and Indicated Mineral Resources within the final 41 year pit design with the above Modifying Factors applied have been included in the Ore Reserves and classified into Proved and Probable categories. Ore Reserves within the Measured Mineral Resource classification have been categorised as Proved Ore Reserves, whereas Ore Reserves within the Indicated Mineral Resource classification have been categorised as Probable Ore Reserves.</li> <li>The Ore Reserves are stated as dry tonnes of ore delivered at the processing plant ore stockpile.</li> </ul>
)	Whether the result appropriately reflects the Competent Person's view of the deposit.	<ul> <li>The Ore Reserves consist of 35% Proved Reserve</li> <li>The Competent Person is satisfied that the stated Ore Reserves classification reflects the outcome of the technical and economic studies performed as part of the 2025AFS.</li> </ul>
Classification		

Criteria	JORC Code 2012 Explanation	Commentary
Audits or	The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any). The results of any audits or reviews of Ore Reserve estimates	<ul> <li>No Probable Reserves have been derived from Measured Mineral Resources.</li> <li>Not applicable.</li> </ul>
reviews Discussion of relative accuracy/ confidence	Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within staged confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.	<ul> <li>The economic analysis supporting the Ore Reserve has been completed with a relative accuracy and confidence level consistent with a Feasibility Study.</li> <li>An AACE Class 2 cost estimate with an accuracy range of -10% / +15% was produced for the 2024FS, and engineering design is ~70% complete.</li> <li>Appropriate assessments and studies have been carried out and include consideration of and modification by realistically assumed mining, metallurgical, economic, marketing, legal, environmental, social, and governmental factors. These assessments demonstrate at the time of reporting that the extraction could be reasonably justified.</li> <li>Project economics were tested with a suite of sensitivities (described in the "Economics" subsection) which indicate that the Project is economic under reasonable variations in key cost and price parameters.</li> </ul>
	<ul> <li>The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include</li> <li>assumptions made and procedures used.</li> </ul>	• The Ore Reserve tonnes and grade have been estimated globally across the model area (i.e., the South Basin) for the Project.
	<ul> <li>Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.</li> <li>It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should</li> <li>be compared with production data, where available.</li> </ul>	<ul> <li>Reconciliation against production data/results was not possible as the Project is currently in the development stage and there has been no production on the Project to date.</li> <li>Ore head grade, lithium recovery and price have the largest impacts on NPV and Ore Reserve viability.</li> </ul>

