

# **QUARTERLY ACTIVITIES REPORT**

# for the period ending 30 September 2024

# **Highlights**

- Ioneer's Rhyolite Ridge Li-Bo Project clears major US Federal permitting step and advances toward a construction decision. Publication by the Bureau of Land Management (BLM) of the project's Final Environmental Impact Statement (EIS).
- Reaching the final stage of the National Environmental Policy Act (NEPA) permitting
  process reflects federal inter-agency collaboration and agreement that environmental
  impacts have been fully analysed and evaluated.
- **Bureau of Land Management** is expected to issue a Record of Decision (ROD) in October 2024. Upon issuance of a positive ROD, construction at Rhyolite Ridge can begin following a Final Investment Decision (FID).
- Newly identified Shelf Zone delivers standout drill results ahead of Ore Reserve update
  - o Shelf Zone outside of Critical Habitat
  - o Li grades in all 12 holes average >2000ppm Li in the main B5 ore unit<sup>1</sup>
- Release of 2024 Sustainability Report

Monday, 21 October 2024 – Ioneer Ltd ("Ioneer" or "the Company") (ASX: INR, Nasdaq: IONR), an emerging lithium-boron supplier, is pleased to report on its activities for the quarter ending September 30, 2024 and provide an update on the development of its 100%-owned Rhyolite Ridge Lithium-Boron Project in Esmeralda County, Nevada ("Rhyolite Ridge Project" or "the Project").

Ioneer Managing Director, Bernard Rowe commented:

"Following the June quarter updated Mineral Resource Estimate, highlighting a 71% increase in overall Measured Resource, we are very proud to report on the successful delivery of the final EIS by the Bureau of Land Management. Following the statutory waiting period to October 21, we'll have a clear path forward to construction. These milestones bring us nearer to making Rhyolite Ridge a reality. Rhyolite Ridge will be a significant, reliable and sustainable source of critical minerals for the United States.

I reiterate that Ioneer is committed to working with the local community, Tribal Nations and state and federal agencies to help the U.S. secure a domestic supply of the critical minerals vital to the clean energy transition."

Ioneer Executive Chairman, James D. Calaway noted:

"The September Quarter was another milestone period for loneer. Publication of the BLM EIS affirms all the work and dedication of loneer's whole team and reinforces our commitment to loneer's strategy to develop Rhyolite Ridge to support America's critical minerals supply chain and reaffirms the viability of our investment in Nevada. Once developed, Rhyolite Ridge will help accelerate the electric vehicle transition and secure a cleaner future for our children and grandchildren.

<sup>&</sup>lt;sup>1</sup> See ASX announcement titled "Newly identified Shelf Zone delivers standout drill results ahead of Ore Reserve update" dated 18 July 2024



As we move through the final steps in the federal permitting process, loneer will keep working to ensure this world-class project will operate efficiently and sustainably"

## **Rhyolite Ridge Permitting**

#### **National Environmental Policy Act (NEPA) Permitting Process**

During the September quarter Ioneer moved one step closer toward construction at its Rhyolite Ridge Lithium-Boron Project following the announced publication by the Bureau of Land Management (BLM) of the project's Final Environmental Impact Statement (EIS).

Rhyolite Ridge, which will create hundreds of jobs in rural Esmeralda County, Nevada, becomes the first lithium project to reach this advanced stage of the environmental permitting review process under the Biden Administration as part of its efforts to accelerate U.S. lithium production.

Rhyolite Ridge is set to quadruple the nation's lithium supply, reduce reliance on foreign suppliers and processors, and develop a domestic source of urgently needed materials for the U.S. electric vehicle battery production supply chain. The Final EIS incorporates feedback received during the earlier public comment period and provides decision-makers and the public with detailed information related to the project, including its on-site processing facility. Issuance of the Final EIS is the result of years of effective collaboration between loneer and federal, state and local agencies and Tribal Nations.

"The publication of the Final EIS is a significant milestone for Rhyolite Ridge. This achievement underscores our company's unwavering commitment to environmental stewardship and sustainable development," said James Calaway, Executive Chairman, Ioneer. "We look forward to the conclusion of the 30-day statutory waiting period and timely issuance of the Record of Decision to advance Rhyolite Ridge into construction. We are eager to get to work in contributing to the domestic supply of critical materials essential for the transition to a clean energy future."

As part of the Final EIS, the US Fish and Wildlife Service (USFWS) also formally released the Endangered Species Act (ESA) Section 7 Biological Opinion, concluding Ioneer's Rhyolite Ridge Lithium-Boron Project will not jeopardize the ESA-listed Tiehm's buckwheat or adversely modify its critical habitat. Its issuance marks the end of the ESA consultation process between USFWS and the Bureau of Land Management regarding Rhyolite Ridge.

Following its formal publication in the Federal Register, the Final EIS is subject to a statutory waiting period through to Monday, October 21, after which a Record of Decision (ROD) will be issued. The Final EIS and supporting documentation can be viewed on the BLM's ePlanning website for Rhyolite Ridge: <a href="https://eplanning.blm.gov/eplanning-ui/project/2012309/570">https://eplanning.blm.gov/eplanning-ui/project/2012309/570</a>.

Reaching the final stage of the National Environmental Policy Act (NEPA) permitting process reflects federal inter-agency collaboration and agreement that environmental impacts have been fully analysed and evaluated.

The BLM is expected to issue a ROD in October 2024. Upon issuance of a positive ROD, construction at Rhyolite Ridge can begin following a Final Investment Decision (FID). Based on that timeline, Ioneer anticipates production to commence in 2028.



#### **Estimated Project Timeline**

Ioneer's estimated timing\* for the Rhyolite Ridge Lithium-Boron Project is as follows:

Milestone	Targeted timing	Note	
Anticipated ROD	October 2024	Based on the current BLM timeline.	
Targeted FID	1Q 2025	Based on current management	
		targets.	
Construction	Circa 36 months	Includes supply of long-lead items and	
		construction. Subject to lead times	
		and when orders are placed.	
Targeted Commercial	2028	Produce and process high-grade	
Production and Delivery to		technical lithium and boron on-site at	
Partners		Rhyolite Ridge.	

<sup>\*</sup>As of the date of this quarterly, and subject to change. The timing of FID is contingent upon completion of joint venture approval and financing, which includes the closing of the agreement with Sibanye-Stillwater, closing of the conditional loan from the DOE Loans Programs Office, and procurement of any additional funding requirement.

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

Work to optimize the Ore Reserve to accompany the Mineral Resource Estimate for Rhyolite Ridge Project continued to progress through the September quarter. This work included geotechnical analysis, NPV and production optimization, all the while respecting environmental boundaries of the Tiehm's buckwheat. It is expected that an updated Mineral Resource and Ore Reserve Estimate will be released in the December quarter.

## Sales & Marketing

#### **Lithium Market and Price**

According to Wood Mackenzie, the market is experiencing a surplus of lithium chemicals, with an oversupply peak in 2026 and 2027, while prices continue to be under pressure. This market downcycle has affected the forecasted supplies; Wood Mackenzie has revised the mine supply downward compared with the Q2 2024 report following the postponement of a few projects, such as Manono and Mt. Cattlin, which was put on care and maintenance, and other adjustments. For demand, it is forecasted to grow at an annual average growth rate of 11%, reaching 3.4 Mt LCE in 2034. It forecasts a deficit in the supply starting in 2029 and a risk of sustained deficit due to the strong growth in demand for battery-grade chemicals from 2030 onwards.

Similarly, Benchmark Minerals reported that the anticipated supply deficit has been brought forward by two years due to reduced supply, now expected in 2028, with a balanced market in 2027. The demand fundamentals for lithium have been adjusted downward due to a higher expected hybrid share and a slower EV growth rate in Western countries; however, the rechargeable batteries sector continues to be strong.

Wood Mackenzie forecasts prices to rebound slightly in 2025; spot prices (nominal terms) for battery-grade chemicals, carbonate, and hydroxide are expected to reach US\$12,531/t and US\$12,199/t in 2025, respectively.

In comparison, Benchmark Minerals forecasts that prices will remain subdued in the near term, averaging between \$9 and \$10/kg over the next few quarters. Spodumene concentrate prices are expected to begin recovering in the second half of 2026 in anticipation of a projected market deficit. The price peak is now expected two years earlier than previously forecast, reaching \$29/kg by 2028 as the market re-enters a deficit. Following this peak, prices are anticipated to stabilize at the long-



term forecast of \$21/kg.

#### **Boric Acid Market and Price**

Global boric acid demand and supply remained balanced, with prices holding during Q3 2024 compared to the previous quarter. According to market sources, Rio Tinto intends to increase the price by 5%. The sodium borate market is strong, with increasing price pressure. This may cause the Chinese two-step boric acid producer using sodium borate as boron feedstock to reduce production if the price rises further, positively impacting the boric market. We expect the boric acid demand-supply balance to become tighter midterm and enter a deficit beyond 2034.

The largest boric acid market, China, is recovering and forecast to import 306kmt in 2024, a 20% increase compared to 255kmt in 2023 and a recovery above 2022 imports of 291kmt. This import growth is led by the recovery of the home electronics market, which is entering a replacement cycle and strong boron carbide demand in the semiconductor and the defence industry.

# **Environmental, Health, Safety & Sustainability (EHSS) Program**

#### Sustainability Road Mapping /External Disclosure Alignment

loneer continues to refine and implement the findings from our comprehensive Materiality Assessment, which identified 5 priority sustainability topics. These focus areas remain central to our three-year sustainability strategic plan and will play a key role in shaping our ongoing climate resiliency initiatives.

The FY2024 Sustainability Report was successfully completed and published in September, alongside our ongoing efforts to align with emerging best practices. This report underscores our commitment to transparency and highlights the significant progress we've made toward our sustainability goals.

loneer is in the process of collecting data for the upcoming S&P Global Corporate Sustainability Assessment report. This data will provide deeper insights into our sustainability performance and support further benchmarking against industry peers, ensuring that we remain aligned with investor and stakeholder expectations for transparency and accountability.

#### **Environmental Regulatory Compliance**

Ioneer continues to maintain compliance with the issued State of Nevada Water pollution Control and Class 2 Air Permits. No compliance issues were noted during the quarter and Ioneer continues to report ongoing monitoring and compliance related activities as required under these obligations.

An application to modify to the State of Neveda Water Pollution Control Permit to align with the revised Mine Plan of Operations has been submitted. We anticipate the State Regulatory Branch will issue a draft permit in October.

A similar application to modify the Class II Air Permit to align with the revised Mine Plan of Operations is expected to be submitted to the State in the coming weeks.

#### **Health & Safety**

During the quarter no lost time incidents, first aid incidents, or fatalities were reported for loneer staff.



Ioneer has offered the following Health & Safety training this quarter:

- 1. Office Workplace Inspection
- 2. Supply Chain Safety

#### **Tiehm's Buckwheat Conservation Centre Propagation**

The new 2023 seedlings exhibited good growth through the quarter with indications of entering dormancy in Mid-September. Adult plants continued to produce flowers until mid-September with the dried flowers collected in preparation of the years seed collection efforts scheduled to begin in late October.

# **Community & Tribal Nations**

loneer continues to engage with local communities and Tribal Nations to address any environmental and social concerns and enhance local economic opportunities.

During the quarter, the Company held listening sessions with community members and continued to work with Esmeralda County officials to further a Development Agreement between the County and Ioneer which is expected to be finalized in the coming months. Ioneer sponsored and participated in local events like the 4<sup>th</sup> of July Rodeo and annual fundraiser for local Emergency Medical Services. Ioneer also attended multiple site visits with Tribal Nations leaders to further our goal of gaining a better understanding of, and respect for, cultural traditions that tribes may have for land associated with the Project.

## **Engineering**

During the quarter, Ioneer continued to progress an Association for the Advancement of Cost Engineering (AACE) 47 R 11 Class 2 (Class 2) capital estimate for stage 1 of the Rhyolite Ridge Project, with Fluor and its other service providers across their respective fields of speciality. Preparation of the Class 2 cost estimate is a necessary precondition to the preparation of an Approved Feasibility Study (AFS) and the making of a Final Investment Decision (FID) on the Project by the Company and Sibanye-Stillwater. The making of the FID decision by the Company and Sibanye-Stillwater is the precondition for the Project to proceed from the development to the construction phase.

The Class 2 cost estimates are being developed to have an accuracy range of +15%/-10% in accordance with the applicable engineering standard based on circa 70% of engineering complete. The updated economic analysis is expected to be finalised soon after delivery of the ROD (expected in late October).

Ioneer continues to progress engineering details to be ready for the construction phase.

## **Organic Growth Projects**

#### **EcoPro Lithium Clay Project**

The EcoPro Lithium Clay R&D project is progressing on schedule with the plan to develop a commercially feasible sulfuric leaching process flow sheet by the end of 2024 and a calcining process by Q1 2025.

#### **North Basin Growth Project**

The North Basin is located 5km north of the South Basin. Minimal work was undertaken at North Basin during the quarter.



### **Corporate Activities**

#### Caterpillar's Pathway to Sustainability Program

During the quarter loneer joined Caterpillar's Pathway to Sustainability Program for Energy Transition. This is a four-year educational program aimed at supporting the mining, quarry and aggregates industries through the energy transition. Caterpillar, the world's largest manufacturer of construction and mining equipment, developed the program to provide participants with holistic business-applicable learning opportunities and access to industry-specific advice related to energy transition projects and sustainable products.

The program, which focuses on six strategic areas tied to the energy transition – strategy, people, product, process, technology and infrastructure – aligns with loneer's business priorities and integrated approach to embed sustainability across its operations. Ioneer has designed its Rhyolite Ridge site, planned to commence operations in 2028 and quadruple the nation's supply of lithium, with aims of setting the standard for sustainability in the industry. The announcement builds on loneer and Caterpillar's 2022 agreement to supply an autonomous haul system for Ioneer's Rhyolite Ridge Lithium-Boron Project in Esmeralda County, Nevada.

#### 2024 Sustainability Report

In September Ioneer was very pleased to release and publish the 2024 Sustainability Report, our third annual report on our advancing sustainability strategy, initiatives and performance for FY2024. This report can be found on the Ioneer website at <a href="https://www.ioneer.com">www.ioneer.com</a>

#### **Annual General Meeting**

The Annual General Meeting will be held at 10:00 am (AEDT) on Friday, November 1, 2024. Shareholders are invited to attend the AGM at the Vibe Hotel North Sydney, 171 Pacific Highway, North Sydney or online. The Notice of Meeting and instructions on how to participate in the meeting can be found on the loneer website.

## **Upcoming Work Program**

The work program over the coming months includes:

- Advancing federal permitting through to a Record of Decision.
- Updated resource/reserve estimate including SK1300 technical report.
- Updated Class 2 capex and opex estimates, and Project economics.
- Continuing to close CP's required for Sibanye's FID and the DOE loan.
- Evaluation of growth opportunities including leach testwork on low-boron non-clay mineralisation.



#### **ASX Additional Information**

The Company provides the following information pursuant to ASX Listing Rule requirements.

**1. ASX LR 5.3.1:** Exploration and Evaluation Expenditure during the quarter was US\$7.3 million. Details of the exploration activity are set out in this report. A breakdown of the expenditure is shown below:

Expenditure	US\$'000		
Exploration	22		
Engineering	3,842		
Environmental	1,927		
Sales & Marketing	197		
Other	1,294		
Total	7,282		

- 2. **ASX LR 5.3.2:** The Company confirms there were no production or development activities during the quarter.
- 3. **ASX LR 5.3.5:** Related party payments for the quarter totalled US\$283,500, comprising salaries and fees for the Company's executive and non-executive directors. No other payments were made to any related parties of the entity or their associates.
- 4. **ASX LR 5.3.3:** INR confirms that it has not acquired tenements during the quarter (see appendix 1).

#### **Capital Structure**

Total cash and cash equivalents as of 30 September 2024, was US\$27.2 million of which 59.9% was held in USD with the balance held in AUD.

At the end of the quarter, Ioneer had on issue:

- 2.3 billion ordinary shares
- 2.9 million options, and
- 46.0 million performance rights.

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

--ENDS--

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## **About Ioneer**

Ioneer Ltd is an emerging lithium—boron producer and the 100% owner of the Rhyolite Ridge Lithium—Boron Project located in Nevada, USA. Rhyolite Ridge is the only known lithium-boron deposit in North America and one of only two known such deposits in the world. Once operational, the low-cost, world-class project is expected to power upward of 50 million electric vehicles and will instantly become a globally significant source of critical materials vital to the clean energy transition.

Upon anticipated completion of the U.S. federal permitting process, construction at Rhyolite Ridge, largely funded through the combination of \$490 million USD in equity from Sibanye-Stillwater and a \$700 million USD in debt from the U.S. Department of Energy's Loan Programs Office, will begin in 2024. Production and on-site processing are expected to follow in 2026.

To date, Ioneer has major offtake agreements with Ford Motor Company, Prime Planet Energy & Solutions (PPES), a joint venture between Toyota Motor Company and Panasonic, and EcoPro Innovation.

#### **Recent Announcements**

The table below lists announcements made by the Company during the quarter.

Date Released	Title		
30/09/2024	Notification regarding unquoted securities		
20/09/2024	Ioneer webinar on Final EIS		
20/09/2024	Rhyolite Ridge Project clears major permitting step		
18/09/2024	Appendix 4G – 30 June 2024		
18/09/2024	Corporate Governance Statement – 30 June 2024		
18/09/2024	Sustainability Report 2024		
18/09/2024	Annual Report to shareholders		
05/09/2024	Date of 2024 Annual General Meeting		
29/07/2024	June 2024 - Quarterly Cash Flow Report		
29/07/2024	June 2024 – Quarterly Activities Report		
18/07/2024	Shelf zone delivers standout drill results		
11/07/2024	Notification of cessation of securities - INR		
03/07/2024	Ioneer joins Caterpillar's Sustainability Program		
01/07/2024	Change of Director's Interest Notice – Bernard Rowe (correction)		
01/07/2024	Change of Director's Interest Notice – Bernard Rowe		
01/07/2024	Change of Director's Interest Notice – James Calaway		
01/07/2024	Notification of cessation of securities - INR		
01/07/2024	Application for quotation of securities - INR		

# **Appendix 1 - Schedule of Tenements**

#### **ASX listing rule 5.3.3**

Country	Project	Tenement ID	Tenement Name	Area	Interest at beginning of	Interest at end of quarter	Note
				(km²)	quarter		
USA	Rhyolite Ridge	NMC1118666	NLB claims (160)	13	100%	100%	No change
USA	Rhyolite Ridge	NV106310781	NLB claims (41)	1.2	100%	100%	No change
USA	Rhyolite Ridge	NMC1117360	SLB claims (199)	16.5	100%	100%	No change
USA	Rhyolite Ridge	NMC1117360	SLB claims (18)	1.5	100%	100%	No change
USA	Rhyolite Ridge	NMC1171536	SLM claims (122)	9.7	100%	100%	No change
USA	Rhyolite Ridge	NMC 1179516	RR claims (65)	5.4	100%	100%	No change
USA	Rhyolite Ridge	NMC 1179516	RR claims (14)	1.1	100%	100%	No change
USA	Rhyolite Ridge	NMC 1129523	BH claims (81)	7	100%	100%	No change
USA	Rhyolite Ridge	NV105272779	RMS claims (23)	0.5	100%	100%	No change
USA	Rhyolite Ridge	NMC1147932	SLP claims (120)	9.7	100%	100%	No change
USA	Rhyolite Ridge	NV105272053	PR claims (11)	0.9	100%	100%	No change
USA	SM	NMC1166813	SM claims (96)	7.7	100%	100%	No change
USA	GD	NMC1166909	GD claims (13)	1.1	100%	100%	No change
USA	CLD	NMC1167799	CLD claims (65)	5.2	100%	100%	No change

On September 16, 2021, the Company announced a strategic investment by Sibanye-Stillwater<sup>2</sup> in the Rhyolite Ridge Project. Under the terms of the agreement, Sibanye-Stillwater will contribute US\$490 million for a 50% interest in the Joint Venture, with Ioneer to maintain a 50% interest and retain operatorship. Ioneer has also agreed to provide Sibanye-Stillwater with an option to participate in 50% of the North Basin, upon the election of Sibanye-Stillwater to contribute up to an additional US\$50 million, subject to certain terms and conditions. Establishment of the Joint Venture and Sibanye-Stillwater's funding commitment is subject to certain terms and conditions precedent, including receipt of final permits, commitments for remaining debt financing, and other customary approvals.

<sup>&</sup>lt;sup>2</sup> Refer ASX release titles 'Sibanye-Stillwater to invest US\$490M in Rhyolite Ridge' announced on September 16, 2021.