

RHYOLITE RIDGE

NEWSLETTER

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A MESSAGE FROM IONEER'S PRESIDENT

Dear readers,

At Rhyolite Ridge, we have always known that getting this Project right means doing our best to get every part of it right—from permitting and process design to cultural resource protection and community engagement. Over the past several months, our team has remained focused on that principle as we continue to transition from planning to execution.

This newsletter highlights several milestones that reflect our diligent progress. Our ability to unlock more value from the ore body without increasing our environmental footprint is a technical achievement, but also a reflection of our commitment to efficiency and stewardship. The recent designation of boron as a U.S. critical mineral affirms the national significance of our co-products and opens new avenues for engagement and support. And our 2025 Sustainability Report brings together, the full scope of our commitments—across environmental protection, cultural partnerships, and local investment—in a single, transparent document.

We also provide an update on the final steps that will lead us into construction, including the strategic partnering process and the pathway to Final Investment Decision. Each of these efforts has



required careful coordination and deep engagement with regulators, Tribal Nations, local leaders, technical teams, and our own workforce—and we're proud to say that this approach has resulted in real progress.

These achievements don't happen in a vacuum. They're the product of years of listening, learning, and adapting. And most importantly, they reflect the values we've committed to upholding since day one: responsibility, transparency, and a long-term view that prioritizes both environmental and community wellbeing.

We're proud of where we are—and more committed than ever to what comes next, and I continue to thank you for your continued engagement and partnership. We at Ioneer wish you all a safe, and joy-filled holiday season surrounded by friends and family.



BORON ADDED TO U.S. CRITICAL MINERALS LIST

Earlier this month, the U.S. Department of the Interior added boron to its Critical Minerals List.

"Adding boron to the Critical Minerals List underscores just how vital this material has become for American industries," said Bernard Rowe. "This designation validates what we've said for years: that Rhyolite Ridge is not just a lithium project—it is a critical supply solution for two essential minerals, both of which underpin our clean energy future and national economic competitiveness."

Boron's inclusion on the list has been under consideration for some time as its applications span a wide range of sectors—from agriculture to defense to high-tech manufacturing. It's a critical input in fiberglass, advanced ceramics, permanent magnets, and semiconductors, among others. It also plays a supporting role in the clean energy transition, including its use in wind turbine magnets and energy storage technologies.

Through the public comment process seeking input on the revisions of the U.S. critical minerals list, representatives of the boron industry provided additional information, specifically that 1) the U.S. does not manufacture enough of certain specialized boron-based products needed for national security and technology applications to meet its domestic needs and 2) relies primarily on imports from China. Rhyolite Ridge will provide a stable, secure domestic source of refined boric acid, helping reduce U.S. reliance on foreign suppliers and providing American industry with a homegrown alternative.

From a policy perspective, boron's addition to the Critical Minerals List means it will now be considered in federal planning for supply chain resilience, infrastructure investment, and defense preparedness. It can also inform future funding and incentive programs under the Defense Production Act or the Inflation Reduction Act—both of which aim to secure domestic sources of critical raw materials.



At the local level, this recognition has the potential to facilitate stronger support for the development of boron-related infrastructure, supply chain capacity, and end-use innovation in Nevada and the broader western U.S. It also reinforces the strategic value of the work that Esmeralda County, loneer, and community partners have done together over the past several years.

The inclusion of boron strengthens America's ability to secure its own future. It means agencies and policymakers now have a clearer path to support domestic boron supply, just as they've done for lithium. That's important for our national interests—and for Rhyolite Ridge as it is currently the only advanced-stage project in the United States permitted to co-produce both lithium and boron at commercial scale.

The timing of this designation is especially important as we approach the final stages of preparing the Project for construction. As the strategic partnering process concludes and we move toward a Final Investment Decision, the recognition of both lithium and boron as critical minerals underscores the long-term importance of the Project's output.



Boron is critical in military applications primarily due to its use in boron carbide, known for its exceptional hardness and lightweight properties, making it ideal for ballistic armor systems

LEACHING OPTIMIZATION ENHANCES PROJECT ECONOMICS

One of the defining features of the Rhyolite Ridge Project has always been its efficiency owing to the unique ore type present at Rhyolite Ridge. Accordingly, our ability to co-produce lithium and boron using a single integrated process has given us a structural advantage. Recently we announced that we have been able to improve our processing capabilities in this regard, further demonstrating the resiliency of the Project to perform throughout commodity cycles.

Following detailed engineering reviews and updated test work, our team implemented a key process optimization: reducing the leach vat residence time from 48 hours (which itself is an improvement to the previous 72 hour residence time assumptions within the mine plan operations) to just 36 hours. This adjustment allows for increased annual throughput—from 3.0 million tonnes of ore to 3.4 million tonnes.

The result is a significant increase in annual production capacity: Importantly, the increased output can be achieved without using more sulfuric acid, water, or energy. There will be no change to overall waste output, tailings, or the facility's physical footprint. All environmental impact assessments and permits remain valid under this updated plan.

In June 2025, loneer published 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 of US\$1,667.9 million, including a 10% contingency. The changes announced do not materially impact the capital cost estimate or the processing plant design, increasing the capital cost estimate by just US\$15 million.

Average Annual Production During Years 1-25 Rhyolite Ridge Operations (metric tons)

Product	(Previous) - 48 Hour Leach	UPDATED - 36 Hour Leach
Lithium Carbonate Equivalent	~22,400	~24,500
Boric Acid	~126,700	~135,500

"By cutting our leach processing time in half, Ioneer will now deliver more critical minerals faster to our partners as we collectively work to strengthen American critical mineral supply chains. The Rhyolite Ridge Lithium-Boron Project continues to exceed our high expectations with its unique mineralogy and project economics," said Bernard Rowe, Managing Director, Ioneer. "The need for additional production and processing has never been greater, and Rhyolite Ridge continues to deliver."

The work that led to this improvement involved considerable effort by the Ioneer team in producing detailed modeling, lab testing, and simulation. It reflects a larger theme in our development approach: that technical progress should go hand-in-hand with responsible stewardship of land, water, and community relationships.

From a local perspective, these improvements enhance the long-term sustainability of the operation. More consistent production means more stable employment, greater certainty for local suppliers and contractors, and stronger public revenue streams that benefit Esmeralda County and the State.

You can read the full press release at: ["Further Leach Optimisation Enhances Project Economics"](https://ioneer.com/investors/), which is available at ioneer.com/investors/.

THE PATH TO CONSTRUCTION: FINAL STEPS AHEAD FOR RHYOLITE RIDGE

Having secured a positive Record of Decision from the Bureau of Land Management and key state permits, the remaining steps to construction are to complete our strategic partner process and the Ioneer board of directors making a Final Investment Decision (FID). At our recent Annual General Meeting, Ioneer Board of Directors Chairman James Calaway's remarks included the following:

"Our foremost objective remains the successful completion of the global strategic partnering process, undertaken with the support of Goldman Sachs. This process seeks to secure partners of both financial strength and strategic alignment – one capable of advancing the project decisively through construction and into production. Upon completion, we will have secured not only a partner, but also a foundation for enduring value creation. This is an essential step toward transforming Rhyolite Ridge into a globally significant, vertically integrated lithium-boron operation – one that helps anchor the United States' position as a large producer of both, lithium chemicals suitable for direct use in battery production, and boric acid, essential to national security applications. Our project uniquely produces not one, but two critical minerals in the United States."



Reaching this point has been the result of years of steady work—scientific studies, design iterations, agency collaboration, and extensive engagement with stakeholders including Tribal Nations, local government, environmental organizations, and regional economic partners. The Project has also closed a \$996 million loan from the U.S. Department of Energy through its Loan Programs Office, which recognizes Rhyolite Ridge as a key domestic supply initiative.

The Final Investment Decision represents a financial and strategic commitment to construct the Project as permitted. It will mark the transition from preparation and design into execution, with site work, contractor mobilization, and facility construction soon to follow.

In the lead-up to FID, we've continued to refine our planning and build out critical relationships. Engineering is at approximately 70% complete. We've entered into formal agreements with Esmeralda County and Tribal partners. And we've engaged local suppliers and contractors, as well as community members who have expressed interest in a career with Ioneer, to ensure they're well positioned to participate when construction begins.

FID will also serve as a trigger for downstream planning, including workforce onboarding, housing coordination, and safety and transportation protocols. These are not afterthoughts—they're integrated into our startup planning and central to delivering the project responsibly.

"We stand at the threshold of a defining chapter – one that will see Rhyolite Ridge become not just a mine, but a cornerstone of western critical chemicals production through an integrated mine to final production of processed lithium and Boric acid, produced at the bottom of the global cost curve," concluded Calaway during his recent executive chair's address at Ioneer's 2025 Annual General Meeting.

For more information, please see the [Full Executive Chair's Address](#) which is available at ioneer.com



LONG-TERM COMMITMENT, CLEAR OUTCOMES: OUR 2025 SUSTAINABILITY REPORT

On September 16, Ioneer released its 2025 Sustainability Report—a comprehensive overview of the systems, actions, and partnerships that demonstrate how we are delivering on our long-standing commitments to environmental protection, cultural stewardship, and community investment.

While many of the individual programs and agreements described in the report have been discussed in earlier newsletters and community meetings, the value of this document is that it brings all of those efforts together in one place. Collectively, they tell a clear story: that we're not just planning to develop the Rhyolite Ridge Project responsibly—we are already living that responsibility today.

As Bernard Rowe, Managing Director, stated in the press release,

"We are proud to publish our 2025 Sustainability Report, which highlights the extensive work we have undertaken to ensure responsible development at Rhyolite Ridge. From cultural heritage protections and Tribal Nation agreements to water efficiency and community partnerships, this report demonstrates the seriousness with which we approach our obligations to the environment and the people who live and work near the project."

The 2025 report details the myriad technical systems, conservation commitments, and comprehensive program that will support responsible operations at Rhyolite Ridge including:

Water Conservation:

- Designed on-site facilities to reduce water usage by more than 30 times that of other domestic lithium mining operations.

Committed to offset groundwater for operations through suspension of an equivalent number of wells or pumping currently used for agriculture, ensuring the Project does not increase water usage in Fish Lake Valley as part of Ioneer's no net increase commitment.

Biodiversity Conservation Efforts

- Advanced biodiversity conservation through habitat monitoring, seed collection, and propagation of Tiehm's Buckwheat, implemented protective measures for Golden Eagles and Desert Bighorn Sheep, and formalized partnerships with USFWS and NDOW to support long-term species recovery and habitat stewardship.

OUR VALUES AT IONEER



Purpose

We exist to enable a sustainable world for all.



Vision

We see a world in which our global population, our environment and all future generations are thriving.



Mission

We responsibly and profitably provide the materials necessary for realizing a sustainable planet.



Tribal Engagement and Historic Properties Treatment Plan

- Worked closely with the BLM and interested Tribal communities, to complete the Historic Properties Treatment Plan, entailing numerous field visits and engagement meetings with interested Tribal Nations to ensure that their concerns were incorporated into the plan
- Created protocols to recover culturally sensitive resources and treat those resources in accordance with Tribal and regulatory requirements
- Completed a Memorandum of Agreement in consultation with the BLM and Tribal communities for implementation of the Historic Properties Treatment Plan
- Obtained our Archaeological Resources Protection Act Permit in June of 2025

Supporting Local Infrastructure and Community

The report also highlights Ioneer's Development Agreement with Esmeralda County (formally ratified by the County Commission in April) which helps support the County and its residents to directly benefit from development and long-term operation of the Project, as well as ensuring that the community has the proper resources to accommodate the increase in activity within the community during construction.

The development agreement includes provisions for:

- Road upgrades and ongoing maintenance
- Public safety investment, including emergency services
- Contributions to education and workforce development programs
- Environmental commitments such as dust minimization and noxious weed prevention

Transparency and Third-Party Review

The 2025 Sustainability Report is more than a summary—it's a record of accountability. Many of the systems described are subject to third-party review and regulatory oversight. Other systems including the development agreement with Esmeralda County—are enforceable legal frameworks.

To that end, we've also committed to annual updates and public availability of our sustainability reports, so that the community and interested observers can track our performance over time.

[Download Full Report](#)



IONEER SUPPORTS THE 2025 FISH LAKE VALLEY POKER RUN TO BENEFIT LOCAL FIRST RESPONDERS

Each year, the Fish Lake Valley Poker Run brings together riders, families, and neighbors to raise money for local emergency services—and each year, loneer is proud to play a part in making it happen.

We hosted a card stop near the Rhyolite Ridge site, offering water, shade, and conversation. Volunteer fire departments and EMS teams are essential in rural communities, yet often operate with limited funding. Events like the Poker Run are more than fun—they help purchase gear, pay for training, and keep services running.

We look forward to supporting the Poker Run, and other community events and the organizations and volunteers which make them possible, long into the future.



UPCOMING EVENTS

Thursday, November 27, 2025

Thanksgiving Dinner
Fish Lake Valley Community Center

Monday, December 8 | 5:00PM

loneer Listening Session

Esmeralda Market
Dyer, Nevada

Wednesday, January 8 | 12:00PM

loneer Listening Session

Esmeralda Market
Dyer, Nevada

HAPPY THANKSGIVING!

We are proud to once again support the Fish Lake Valley Thanksgiving Dinner that each year is put on by a group of fantastic volunteers.

All are invited to join us for an evening of food, beverages, and conversation as we take a moment to pause and give thanks. From loneer, we are thankful to all of those in the community who have supported the loneer team for many years.





CREATING A BETTER NEVADA
AND A BETTER WORLD.

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