

QUARTERLY ACTIVITIES REPORT

for the period ending 31 December 2021

Highlights

- Sibanye-Stillwater complete US\$70M strategic investment in ioneer Limited.
- U.S. Department of Energy's Loan Programs Office invites ioneer into Due Diligence.
- Major progress on secondary listing of ioneer shares in the U.S.
- Significant advancement of offtake discussions with a focus on US supply chain
- Detailed engineering and procurement activities advanced.

Tuesday, 25 January 2022 – ioneer Ltd (ioneer or the Company) (ASX: INR), an emerging American lithium—boron supplier, is pleased to report on its activities for the quarter ending 31 December 2021 and to provide an update on the development of its 100%-owned Rhyolite Ridge Lithium-Boron Project (Rhyolite Ridge or the Project) in Nevada, USA.

ioneer Managing Director, Bernard Rowe said:

"The quarter continued ioneer's march toward a Final Investment Decision on the Rhyolite Ridge Project. In particular, the quarter saw tangible progress in the financing workstream with both the completion of the Sibanye-Stillwater placement in ioneer and the invitation by the U.S. Department of Energy Loan Programs Office into their due diligence process.

"We were pleased to welcome Sibanye-Stillwater to our register. Sibanye-Stillwater share our vision of becoming a major force in the battery materials supply chain and their investment further aligns our two companies as we look to bring the Rhyolite Ridge Project into production.

"Equally, it was a major milestone to be invited by the U.S. Department of Energy Loan Programs Office into their due diligence process. We believe the Rhyolite Ridge Project, with its ability to produce lithium materials onsite, will be an integral part of the U.S. Electric Vehicle supply chain. This potential debt financing for the Project follows our announcement of a joint venture with Sibanye Stillwater to fund the equity portion of the Project.

"In addition, progress was made on several other fronts, including nearing the conclusion of preparation of submission documents for a secondary listing of ioneer shares on NASDAQ, ongoing lithium offtake discussions, continuing detailed engineering and the contracting of major packages.

"We continue to see increased demand globally for lithium products and are well positioned to capitalise on the US Government's efforts to secure critical minerals supply chains for end uses like EVs and renewable energy infrastructure in the US. The uptick in inbound enquiries from potential offtake parties has only strengthened this quarter, as lithium supply is short, and prices have been rising.

"During the period, FWS proposed a rule to list Tiehm's buckwheat as an endangered species under the Endangered Species Act. We support the proposed action and are confident that ioneer's proposed operations will have a positive impact on the future viability of the plant."



Sibanye-Stillwater invests US\$70m in ioneer

The quarter saw the completion of a US\$70 million (A\$96 million) strategic investment by Sibanye Stillwater Limited ("Sibanye-Stillwater") in ioneer. The issue of 145,862,742 fully paid ordinary shares was conducted at the agreed price of A\$0.6553 per share, equivalent to the 10-day VWAP as of ASX market close on 15 September 2021.

As announced in the September quarter, ioneer and Sibanye-Stillwater reached an agreement to establish a joint venture to develop the flagship Rhyolite Ridge Lithium-Boron Project located in Nevada, USA. In addition to this agreement, the Company entered into a subscription agreement with Sibanye-Stillwater for a strategic placement of US\$70 million. The placement was subject to shareholder approval, which was obtained at the Extraordinary General Meeting held 21 October 2021 and approval from the Financial Surveillance Department of the South African Reserve Bank announced 20 October 2021.

The money secured from the placement will fund costs necessary to advance the Project to commencement of construction, the purchase of certain long lead items and for general working capital purposes.

Project Debt Funding

At the end of the quarter, we announced that the U.S. Department of Energy ("DOE") Loan Programs Office ("LPO") had invited Ioneer USA Corporation into the LPO's due diligence process.

This invitation was based on the LPO's determination that the Company's application for a loan from the DOE to finance the Company's proposed Rhyolite Ridge Project was "substantially complete."

Additional steps remain in the process and the DOE's invitation is not an assurance that the

¹ Refer ASX release titled 'ioneer Issued Air Quality Permit for Rhyolite Ridge' announced 24 June 2021

Project will secure a loan.

This was the culmination of 10 months' work with ioneer having commenced the LPO process in Q1 2021 with pre-application consultations and later the formal application process. The invitation into due diligence will include more detailed engagement by LPO and third-party experts to be followed potentially by negotiation of a term sheet and consideration in LPO's credit approval process.

The Company continues to engage with a number of potential debt funders and is encouraged by feedback to date.

Sibanye-Stillwater and ioneer will work collaboratively to secure debt financing for the Project on acceptable terms to ensure the Project is fully financed to production.

Secondary US Stock Exchange Listing

During the quarter, significant progress was made on the submission documents for a secondary listing of ioneer shares in the US.

As reported in the September quarterly, we anticipate the secondary listing to take place in the first half of CY2022.

State and Federal Permitting

ioneer requires three key permits to commence construction at Rhyolite Ridge:

- A Class II Air Quality Permit issued by the Nevada Division of Environmental Protection¹ - Received 24 June 2021
- A Water Pollution Control Permit issued by the Nevada Division of Environmental Protection² - Received 19 July 2021
- 3. The Plan of Operation (Plan) that must be approved by the federal Department of Interior (DOI) **Awaiting**

² Refer ASX release titled 'Issuance of Water Pollution Control Permit' announced 19 July 2021

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The Plan requires assessment under the National Environmental Policy Act (NEPA) process, which includes public consultation and preparation of an Environmental Impact Statement (EIS).

In August 2020, ioneer announced that its Plan of Operations had been deemed complete and accepted by the Bureau of Land Management (BLM)³, initiating the National Environmental Policy Act (NEPA) process. It was anticipated that a Notice of Intent ("NOI") would be published shortly thereafter starting the NEPA process. The publishing of the NOI has been delayed, initially due to the change in Administration, and more recently the process associated with the listing of Tiehm's buckwheat as an endangered species.

ioneer remains in close contact with US regulators regarding the publication timeframe and is optimistic that the NOI will be published in Q1 2022.

Once the NOI is published, the BLM will hold a series of public meetings to provide a description of the Project and allow for public comment. Comments are then collated and reviewed with potential changes and mitigants made to the Plan in response to comments. This process ultimately culminates in an EIS and a Record of Decision (ROD). From the publishing of a NOI through to the ROD can take up to 12 months.

Once the Plan of Operation has been approved via a ROD, construction of the Rhyolite Ridge Project can begin.

Tiehm's buckwheat

The US Fish and Wildlife Service (FWS) announced in October 2021 that it had proposed a rule to list Tiehm's buckwheat as an endangered species under the Endangered Species Act (ESA).

The decision was in-line with ioneer's expectations and prior announcements, and the Company continues to fully support the FWS' decisions regarding the ongoing management and protection of Tiehm's buckwheat populations, including an ESA listing.

The decision follows an announcement in June 2021 by FWS that an investigation into an ESA listing of the plant was "warranted." As previously reported, in September 2020, Tiehm's buckwheat populations at Rhyolite Ridge were impacted by an herbivory incident, where rodents seeking moisture amid severe drought conditions destroyed some of the plants. ESA criteria for listing a species as "endangered" "threatened" or includes whether it is subject to predation like herbivory or other natural or manmade factors that could affect its continued existence.

Publication of the notice of the proposed FWS action initiated a public comment period that ended in December where ioneer and others made submissions. In addition to considering public comments, FWS is required by the ESA to make its listing decision based upon the best available scientific data. FWS is expected to make a final listing decision by September 2022, as agreed upon by court stipulation.

The protection and conservation of Tiehm's buckwheat, which is already classified as a Sensitive Species by the US Bureau of Land Management (BLM), is, and has always been, a central part of ioneer's environmental planning and approvals process for the Project.

ioneer has long anticipated the potential for the listing of Tiehm's buckwheat as an endangered species due to the relative rarity of the species. This has been factored into every aspect of Rhyolite Ridge's project planning including its design, engineering, operations and environmental considerations. The plant grows along the western edge of the

³ Refer ASX release titled 'ioneer's Plan of Operations for Rhyolite Ridge Lithium-Boron Project Accepted by BLM' announced 31 August 2020.

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deposit, meaning the proposed mining operations will have no direct impact on the population.

ioneer continues to work in coordination with FWS and BLM, along with academics and scientists, to develop the best understanding of this species and its needs, and to ensure that it can be successfully managed alongside ioneer's planned operations. Technical work and studies undertaken to date show that coexistence of Rhyolite Ridge and Tiehm's buckwheat is achievable.

Engineering and Vendor Packages

Work during the quarter focused on further progressing detail and vendor engineering. The key aim of ongoing activities is to be construction ready to support construction mobilisation following the Full Notice to Proceed (FNTP) award.

Activities during the quarter included:

- Cumulative completion of approximately 1,100 execution deliverables from Fluor and SNC Lavalin and an addition to 1,000 deliverables from venders.
- Award of the following key engineering packages:
 - Reagents Package
 - o Auxiliary Boiler
 - o Deaerator
 - Boiler feed water pump
 - Fire Pump Package
 - o Fabric Buildings
 - Fuel Storage
- Vendor engineering for the following packages is in progress.
 - Dryer Package
 - Acid Plant proprietary Equipment
 - Evaporation & crystallisation system

- Lithium Carbonate reactor
- Aux Boiler
- Fire Water Pump
- Diesel Generators
- Oxidation Air Blower
- o Material Handling System
- Fuel Storage Vendor engineering has been completed for the following packages.
 - Service Crane
 - Main Blower
 - o Air Filter
 - o Boiler Equipment
 - o Deaerator
 - Vat Unloading
 - o Truck Wash
 - o Inlet Air Filter

Status of procurement activity:

- Large Packages over US\$2.5M 19/27 (70%)
- Packages less than US\$2.5 and greater than US\$1M - 7/13 (54%)
- Packages under US\$1M 16/76 (21%)

Procurement activity has focused on long lead items and items required for initial Construction. Currently about 15 of the equipment and material Packages are active in the procurement process. The work to award the electrical and controls package is nearing completion⁴.

An open book contracting strategy has been frequently employed to minimize escalation risks.

Sales & Marketing

During the quarter, discussions with other potential lithium offtake partners continued. ioneer anticipates conclusion of these discussions in first half of CY2022. The

⁴ Contracts are subject to a Notice to Proceed (NTP) decision which will be taken as part of the Final Investment Decision (FID) for the Rhyolite Ridge Project.

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Company has received strong inbound inquiry since the announcement of the Sibanye-Stillwater joint venture and is taking time to assess various options. As with the EcoPro offtake agreement, ioneer's strategy for additional offtake agreements include:

- Diversified cathode battery manufacturers and industrial users
- Binding offtake agreements with several parties across the US, as a priority, and Europe
- Product: Lithium carbonate (technical grade) & lithium hydroxide (battery grade)
- Contract duration: three-year term or more from commencement of supply
- Quantity: ~5000 tonnes per annum per offtake (~25% of production each)
- Pricing: USD per metric tonne with regular adjustments to market

Upcoming Work Program

The work program over the coming months includes:

- Advancing Federal permitting process by obtaining the Notice of Intent (NOI) and commencing the NEPA process.
- Progressing additional binding offtake agreements for lithium sales.
- Securing Debt funding including associated due diligence.
- Progressing a secondary listing of ioneer's shares in the US.
- Finalising a work program to advance early-stage exploration of the North Basin.
- Continuing the engineering effort to further decrease execution risk. This will include:
 - Releasing further engineering and vendor packages/contracts for bid/award
 - Prepare updated budget estimate for completion 1H 2022
 - Advancing vendor engineering packages

Corporate Activities

The Company held an Extraordinary General Meeting of shareholders on 21 October 2021, to seek approval for the issue of US\$70 million of ioneer ordinary shares to Sibanye-Stillwater. Shareholders overwhelmingly supported the issue of shares.

The Annual General Meeting was held on Friday, 5 November 2021, again via a virtual format. More than 25% of votes were cast against the resolution to adopt the Remuneration Report constituting a second strike for the purposes of the Corporations Act 2001 (Cth). This triggered a spill resolution to be put to members. Members overwhelming supported the Board and the spill resolution was not passed. All other resolutions were passed on a poll and without amendment.

ASX Additional Information

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

 ASX LR 5.3.1: Exploration and Evaluation Expenditure during the quarter was A\$9.0 million. Details of the exploration activity are set out in this report. A breakdown of the expenditure is shown below:

Expenditure	Cost (A\$'000)		
Engineering	8,295		
Environmental	441		
Other	297		
Total	9,033		

- 2. **ASX LR 5.3.2:** The Company confirms there was no production or development activities during the quarter.
- 3. **ASX LR 5.3.5:** Related party payments for the quarter totalled A\$518k, 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.



Capital Structure

Total cash on hand as of 31 December 2021 was A\$149.0 million (US\$108.2 million) of which 30% is held in USD cash and cash equivalents.

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

- 2.05 billion ordinary shares
- 45.4 million options, and
- 31.5 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 the 100% owner of the Rhyolite Ridge Lithium-Boron Project located in Nevada, USA, the only known lithium-boron deposit in North America and one of only two known such deposits in the world. The Definitive Feasibility Study (DFS)⁵ completed in 2020 confirmed Rhyolite Ridge as a world-class lithium and boron project that is expected to become a globally significant, long-life, low-cost source of lithium and boron vital to a sustainable future. In September 2021⁶, ioneer entered a 50/50 joint venture agreement with Sibanye Stillwater Ltd to advance the Rhyolite Ridge project. ioneer will be the operator of the Project, which is expected to come onstream in 2024.

⁵ Refer ASX release titled 'ioneer Delivers Definitive Feasibility Study that Confirms Rhyolite Ridge as a World-Class Lithium and Boron Project' announced 30 April 2020.

⁶ Refer ASX release titles 'Sibanye-Stillwater to invest US\$490M in Rhyolite Ridge' announced on 16 September 2021



Recent Announcements

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

Date Released	Title
04/10/2021	Proposed ruling to list Tiehm's buckwheat
04/10/2021	Notice of Annual General Meeting/Proxy Form
11/10/2021	Ioneer to present at virtual conference
18/10/2021	Supplementary information for AGM Notice of Meeting
20/10/2021	Sibanye-Stillwater receives SARB approval for ioneer investment
20/10/2021	September 2021 – Quarterly activities report
20/10/2021	September 2021 – Quarterly cash flow report
21/10/2021	EGM Presentation
21/10/2021	Results of Meeting - EGM
28/10/2021	Completion of US\$70m investment from Sibanye-Stillwater
28/10/2021	Application for quotation of securities - INR
28/10/2021	Placement cleansing notice
28/10/2021	Becoming a substantial holder
05/11/2021	Chairman's address 2021 AGM
05/11/2021	2021 AGM Presentation
05/11/2021	Results of Meeting – 2021 AGM
05/11/2021	Notification regarding unquoted securities - INR
05/11/2021	Proposed issue of securities - INR
05/11/2021	Appendix 3Y – Alan Davies
05/11/2021	Appendix 3Y – Bernard Rowe
05/11/2021	Appendix 3Y – James Calaway
05/11/2021	Appendix 3Y – Julian Babarczy
05/11/2021	Appendix 3Y – Margaret R Walker
05/11/2021	Appendix 3Y – Rose McKinney-James
16/11/2021	Application for quotation of securities - INR
16/11/2021	Notification regarding unquoted securities - INR
30/11/2021	2021 Macquarie WA Forum Investor Presentation
14/12/2021	Notification of cessation of securities - INR
20/12/2021	Ioneer invited by US DOE into Loans Program due diligence
21/12/2021	Notification regarding unquoted 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	NMC1117360	SLB claims (199)	16.5	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 1129523	BH claims (81)	7	0%, option to purchase 100%	0%, option to purchase 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 16 September 2021, the Company announced a strategic investment by Sibanye-Stillwater⁷ 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. ioneer anticipates these conditions precedent to be satisfied during the during second half of calendar year 2022

⁷ Refer ASX release titles 'Sibanye-Stillwater to invest US\$490M in Rhyolite Ridge' announced on 16 September 2021