

## QUARTERLY ACTIVITIES REPORT for the period ending 30 September 2021

### Highlights

- Sibanye-Stillwater to make US\$490M strategic investment in Rhyolite Ridge, substantially funding the Project.
- Investment underpins Rhyolite Ridge's quality and future as a major lithium and boron producer in the US.
- Ioneer and Sibanye-Stillwater JV to secure debt financing to ensure the Project is fully funded to production.
- Sibanye-Stillwater to subscribe for a strategic placement of US\$70M in Ioneer ordinary shares.
- Rhyolite Ridge awarded key air and water permits necessary to commence construction.
- Key engineering contracts awarded to FLSmidth, Veolia and DuPont Clean Technologies.

**Wednesday, 20 October 2021 – 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 30 September 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 signing of a strategic partnership with Sibanye-Stillwater is the most significant milestone in the history of Ioneer. The partnership will provide the majority of funding to bring Rhyolite Ridge into operation and is a testament to the importance of this Project in supplying critically needed lithium chemicals into US supply chains. Sibanye-Stillwater is a strong strategic partner with a proven track record of developing and operating major mining projects around the world, including the United States. We share Sibanye-Stillwater's strong ESG credentials, and we will draw on its expertise to ensure Rhyolite Ridge is at the very forefront of sustainable production and operation.*”

*“The quarter saw significant progress towards commencement of construction of Rhyolite Ridge. We have now been awarded the air and water permits necessary for Project approval. The awarding of the Water Pollution Control Permit during the quarter means we now have two of the three critical permits required for construction. We are continuing to correspond with relevant US regulators on the publication of the Notice of Intent, which will lead to a Record of Decision for an approved Plan of Operation, which is the final approval for the Project.”*

*“We also signed three material engineering contracts in the period, with international partners, FLSmidth, Veolia and DuPont Clean Technologies, which have all commenced design and engineering work on the Project.*”

*“As the most advanced lithium development project in the US, Ioneer is in a strong position to capitalise on the increased demand for lithium products in line with the US Government's efforts to secure critical minerals supply chains for end uses like EVs and renewable energy infrastructure in the US. There was a noticeable uptick in inbound enquires from potential offtake parties this quarter, and the Company is assessing multiple lithium supply opportunities.”*

## Sibanye-Stillwater Announced as Strategic Partner

The quarter was marked with the achievement of one of the most important milestones in the Company's history in securing a strategic funding partner for the Rhyolite Ridge Project. In September, the Company reached an agreement to establish a joint venture with Sibanye-Stillwater Limited to develop the 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<sup>1</sup>, upon the election of Sibanye-Stillwater to contribute an additional US\$50 million, subject to certain terms and conditions.

In addition, the Company has entered into a subscription agreement with Sibanye-Stillwater for a strategic placement (Placement) of US\$70 million of Ioneer ordinary shares. The Placement shares will be issued to Sibanye-Stillwater at \$0.6553 per share, representing the 10-day VWAP per ordinary share as of ASX market close on 15 September 2021. The Placement is subject to shareholder approval at an Extraordinary General Meeting of the Company's shareholders to be held on 21 October 2021.

## Project Debt Funding

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.

The Company continues to engage with a number of potential debt funders and is encouraged by feedback to date. This includes working with vendors to assess Export Credit Agency (ECA) financial support, as recently

<sup>1</sup> The North Basin is contiguous with Ioneer claims in the area but separate from the Rhyolite Ridge Project in the South Basin. The North Basin was not included in the DFS given its different geological setting and early-stage exploration status.

disclosed with FLSmidth and EKF, the Danish ECA.

## State and Federal Permitting

During the quarter, Ioneer received a second important Project permit, the Water Pollution Control Permit.

The Project is designed to minimise water usage given the arid environment surrounding it. Ioneer will recycle and reuse much of its water resources, and there will be no tailing dams or evaporations ponds on site. Water usage at Rhyolite Ridge will be thirty times less than other US lithium operations.

Ioneer has now obtained two of the three key permits required to commence construction at Rhyolite Ridge:

- A Class II Air Quality Permit issued by the Nevada Division of Environmental Protection<sup>2</sup>
- A Water Pollution Control Permit issued by the Nevada Division of Environmental Protection<sup>3</sup>

Rhyolite Ridge is the only lithium development project to have received the dual permits from the Nevada Division of Environmental Protection (NDEP).

The third key permit is the Plan of Operation (Plan) that must be approved by the federal Department of Interior (DOI). 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 March 2021, the Nevada State Bureau of Land Management (BLM) sought DOI approval to publish a NOI for the Rhyolite Ridge project. This timing coincided with a period of

<sup>2</sup> Refer ASX release titled 'Ioneer Issued Air Quality Permit for Rhyolite Ridge' announced 24 June 2021

<sup>3</sup> Refer ASX release titled 'Issuance of Water Pollution Control Permit' announced 19 July 2021

transition to the Biden administration in which no permit assessments or publication of permitting decisions were expected for an anticipated 60 days<sup>4</sup>. Since the expiration of the 60-day period, there has been ongoing delay to the publication of Notices in the federal register, including for Rhyolite Ridge.

ioneer remains in close contact with US regulators regarding the publication timeframe.

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

During the quarter, the US Fish and Wildlife Service (FWS) announced that it has 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.

FWS announced in June 2021<sup>5</sup> that an investigation into an ESA listing of the plant was "warranted." It followed an herbivory

incident in September 2020, where Tiehm's buckwheat populations at Rhyolite Ridge were impacted by rodents seeking moisture amid severe drought conditions. ESA criteria for listing a species as "threatened" or "endangered" 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. 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 buckwheat species is found along the western margin of Rhyolite Ridge. 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, operational and environmental considerations.

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 co-existence of Rhyolite Ridge and Tiehm's buckwheat is achievable.

<sup>4</sup> Refer ASX release titled 'New US Administration Transition and Rhyolite Ridge Update' announced 10 February 2021

<sup>5</sup> Refer to ASX release dated 4 June 2021: 'ioneer Comments on FWS 12 Month Finding Regarding Tiehm's Buckwheat'

## 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 917 execution deliverables inclusive of vendors PFDs & P&IDs (28%) in addition to 409 other vendor deliverables.
- Award of the following key engineering packages:
  - Engineering and equipment contract to FLSmidth
  - Engineering design contract which includes evaporation, crystallization and dewatering equipment to Veolia
  - Sulphuric acid plant license and proprietary equipment contracts to DuPont Clean Technologies
- Vendor engineering for the following packages is in progress.
  - Vat Unloading
  - Dryer Package
  - Acid Plant proprietary Equipment
  - Evaporation & crystallisation system
  - Lithium Carbonate reactor
  - Truck wash
  - Deaerator
- Vendor engineering has been completed for the following packages.
  - Service Crane
  - Blower
  - Air Filter
  - Boiler Equipment

The table below shows other procurement

activity to date:

	Count	Cost (US)
Purchase orders signed	19	~\$134-156M*
Bid received (Final negotiation ongoing)	4	~\$4-6M
Major Packages under negotiation	5	~\$50-608M
Issued for Bid	3	~ \$4-6M

\*Open Book packages final cost upon finalized engineering

Procurement activity has focused on long lead items and items required for initial construction<sup>6</sup>. Currently about 70% of the equipment and material budget is in the procurement process.

## 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 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

<sup>6</sup> 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.

## Secondary US Stock Exchange Listing

Significant work has been completed on submission documents for a secondary listing of Ioneer shares on NASDAQ. Key workstreams have included US Audit sign-off and US Reserves and Resource statements. The Company intends to submit these documents with SEC this quarter for review.

Whilst the secondary listing was previously expected to take place in the second half of CY2021, the focus on completing the joint venture agreement with Sibanye-Stillwater as well as broad (non-specific to Ioneer) delays in US regulatory reviews, means Ioneer now anticipates the secondary listing taking place in the first half of CY2022.

## 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 on a major US stock exchange
- Continuing the engineering effort to further decrease execution risk. This will include:
  - Releasing further engineering and vendor packages/contracts for bid
  - Prepare Class II final budget estimate for completion 1H 2022
  - Advancing vendor engineering packages

## Corporate Activities

The Company will hold 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. The Annual General Meeting will be held at 10:00am (Sydney time) on Friday, 5 November 2021. The AGM will be streamed virtually, recognising COVID-19 restrictions and related government restrictions.

In early July 2021, the Company advised it had renewed an executive employment agreement for Executive Chairman James D. Calaway for a further 12-month period, effective 1 July 2021.

Mr Calaway has been Chairman of Ioneer since 2017 and was appointed Executive Chairman in July 2020 in recognition of his increased focus on the sales and marketing efforts, strategic partner discussions and funding considerations for Rhyolite Ridge. Mr Calaway has also been active in US investor relations and stakeholder meetings, especially with COVID-19 impeding the travel of the Company's Australian-based management.

In renewing his contract, Mr Calaway continues his close level of involvement in the Company and its activities.

## ASX Additional Information

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

1. **ASX LR 5.3.1:** Expenditure and Evaluation  
Expenditure during the quarter was \$11.6 million. Details of the exploration activity are set out in this report. A breakdown of the expenditure is shown below:

Expenditure	Cost (\$'000)
Engineering	8,752
Environmental	853
Other	2,002
Total	11,607

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 \$645k, 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 30 September 2021 was A\$69.9 million of which 72% is held in USD cash and cash equivalents.

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

- 1.9 billion ordinary shares
- 45.4 million options, and
- 29.5 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)<sup>7</sup> 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 2021<sup>8</sup>, 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.

<sup>7</sup> 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.

<sup>8</sup> 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
02/07/2021	Application for quotation of securities - INR
02/07/2021	Notification regarding unquoted securities - INR
06/07/2021	Executive chairman employment agreement renewal
07/07/2021	ioneer strengthens US operations team
13/07/2021	ioneer awards engineering and equipment contract to FLSmidth
15/07/2021	Application for quotation of securities - INR
19/07/2021	Issuance of water pollution control permit
26/07/2021	Rhyolite Ridge project update
27/07/2021	June 2021 Quarterly activities report
27/07/2021	June 2021 Quarterly cashflow report
24/08/2021	ioneer awards engineering design contract to Veolia
07/09/2021	ioneer awards sulphuric acid plant contract to DuPont
09/09/2021	Date of 2021 Annual General Meeting
13/09/2021	Notification regarding unquoted securities - INR
15/09/2021	Annual Report to shareholders - 2021
15/09/2021	Appendix 4G - 2021
15/09/2021	Corporate Governance Statement - 2021
15/09/2021	Late lodgement of appendix 3Y
16/09/2021	Sibanye-Stillwater to invest US\$490M in Rhyolite Ridge
16/09/2021	Investor presentation – Sibanye-Stillwater investment
16/09/2021	Conference call Sibanye-Stillwater strategic partnership
16/09/2021	Proposed issue of securities - INR
20/09/2021	Notice of Extraordinary General Meeting/Proxy Form

## Appendix 1 - Schedule of Tenements

### ASX listing rule 5.3.3

Country	Project	Tenement ID	Tenement Name	Area (km <sup>2</sup> )	Interest at beginning of quarter	Interest at end of quarter	Note
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
USA	New Morenci	AMC393550	MP claims (2)	0.12	100%	0%	Relinquished

During the quarter the Company announced a strategic investment by Sibanye-Stillwater<sup>9</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. Ioneer anticipates these conditions precedent to be satisfied during the second half of calendar year 2022.

<sup>9</sup> Refer ASX release titled 'Sibanye-Stillwater to invest US\$490M in Rhyolite Ridge' announced on 16 September 2021