

## Quarterly Activities Report for the period ending 30 September 2020

### Highlights

- September quarter marked by advances in permitting, engineering and financing discussions
- Main federal permit application, the Plan of Operation, submitted to the Bureau of Land Management in May 2020 has been reviewed and accepted, marking a major milestone toward the completion of the National Environmental Policy Act process
- State Air Quality and Water Pollution control permit applications progressing to plan
- Engineering work continuing with design increasing from 30% (DFS level) to 50-100% complete
- First engineering packages issued for bid
- Continuing development of protection and conservation plans for Tiehm's buckwheat including ongoing research with UNR
- Upward revision in electric vehicle take-up and lithium demand has led to improved sentiment toward the lithium sector

**Friday 30 October 2020 – Emerging American lithium–boron supplier, ioneer Ltd (ioneer or the Company) (ASX: INR)**, is pleased to report on its activities for the quarter ending 30 September 2020 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:

*"ioneer continued to make notable progress in the quarter, despite a challenging macroeconomic backdrop. We reached a major milestone in advancing Project permitting with acceptance of our Plan of Operations as complete by the Bureau of Land Management. This milestone was the culmination of hard work done by our team, who completed 14 baseline studies over 2 years.*

*"Our attention in the coming months remains laser focused on furthering discussions with potential strategic partners and assessing various financing structures, while advancing our sales and marketing plan particularly related to lithium hydroxide and lithium carbonate, finalising and awarding a number of vendor packages, and working closely with relevant government agencies to secure permitting."*

### State and Federal Permitting Process

Notable progress was made in the quarter with regards to permitting applications, particularly as it relates to ioneer's Plan of Operations.



## Plan of Operations

In August, Ioneer announced that its Plan of Operations (Plan) had been deemed complete and accepted by the Bureau of Land Management (BLM), marking a major milestone toward the completion of the National Environmental Policy Act (NEPA) process.

The Plan of Operations is the foundational permitting document for the Project and will become the basis for compliance during operations and closure. The Plan represents the main body of work required for permitting and drew on 14 baseline studies that were completed over a 2-year period.

Following the BLM's acceptance of the Plan and in accordance with the NEPA process, the Plan is currently undergoing an environmental review which will inform the subsequent preparation of an Environmental Impact Statement (EIS) by Stantec. The Plan will be updated to reflect outcomes from the NEPA analysis before being finalised.

The NEPA process culminates in the BLM's Record of Decision (ROD), representing the BLM's final decision on Ioneer's application for an approved Plan of Operations. An approved Plan will allow the Company to commence construction at the site.

## Tiehm's Buckwheat Preservation

During the quarter, Ioneer has maintained its commitment to the preservation of Tiehm's Buckwheat, including through its ongoing research partnership with the University of Nevada, Reno (UNR).

In September, a regular survey conducted by UNR personnel at Rhyolite Ridge noted significant destruction of Tiehm's buckwheat by herbivory in known populations. The destruction was investigated by Ioneer's botanist team, in addition to formal government agency investigations by Nevada's Department of Conservation and Natural Resources (NDCNR), U.S. Bureau of Land Management and U.S. Fish and Wildlife Service.

Initial conclusions found that a rodent attack was the cause of the destruction. Ioneer has continued to support the investigation and has offered the NDCNR and other regulatory bodies its unwavering attention and assistance to facilitate a thorough investigation of this rodent attack. Ioneer is providing transect information, equipment, and access to the Company's botanist and geologic experts to ensure appropriate steps are taken to learn more about the nature of the event, and to find constructive and hopefully effective measures we can take together to address this latest threat from natural causes.

Importantly, this unfortunate event underlines the importance of the significant and sustained preservation work that Ioneer and UNR are undertaking to ensure the long-term viability of Tiehm's buckwheat in its natural habitat.

## Engineering and Vendor Packages

Ioneer released its first engineering packages during the quarter, which are now open for bids. Work during the quarter focused on progressing engineering from the DFS phase to the start of the full notice to proceed (FNTP) phase; also known as the engineering, procurement, and construction management (EPCM) phase. The key aim of ongoing activities is to be 'construction ready' in order to support construction mobilization following FNTP award.



To this end, activities during the quarter included:

- Issuing the first engineering packages for bid
- Negotiating the mining equipment MOU with Caterpillar, the acid plant boiler and blower, MECS equipment, vat unloading and material handling vendor packages
- Civil design and foundation engineering - Acid plant is well underway with the larger vessel complete and secondary foundations progressing
- Advancing process engineering design.

ioneer looks forward to making vendor award announcements in the coming months, with multiple agreements near completion.

## Strategic Partnering and funding

During the quarter, the Company continued to engage with potential industrial and financial strategic partners. Towards the end of the quarter the Company noted increasing interest in the Project as market participants began to move from concern about current oversupply, to a growing recognition that a looming shortage in supply may be developing in the timeframe of Rhyolite Ridge's planned production commencement.

In addition, markets began to focus more attention on the growing importance of security of supply and the next wave of demand emerging from the growing US and European EV sector. This shift from strong headwinds to the beginning of tailwinds for the sector is encouraging and offers the Company growing alternative funding strategies and opportunities. We intend to be deliberate in our actions given the strong belief that the tailwinds are growing, and the fact that we have the resources to maintain momentum to reach shovel ready status and completion of the permitting process, both necessary to reach FID and financial close.

Our Project is the most advanced lithium project in America, having reached high level design and engineering status, and our efforts with the regulatory agencies to obtain environmental permits is also well advanced. The Project is supported by solid science, comprehensive test work and detailed engineering by Fluor Corporation, one of the leading American engineering firms. Our co-product production allows iioneer to be the lowest cost lithium chemicals for the battery industry in the world and does so with the co-product credit that is contracted and real. This sets Rhyolite Ridge apart from all other American lithium projects.

## Sales & Marketing

ioneer continued to execute on its sales and marketing strategy during the quarter, following the completion of its Asian boric acid distribution and sales network in Q2. With boric acid volumes largely sold for the first five years of production, we continue to develop our strategy around placement of both lithium carbonate and lithium hydroxide.

## Upcoming Work Program

The work program over the coming months includes:

- Advancing State and Federal permitting process by obtaining the Notice of Intent (NOI) and moving the EIS into the public comment period.



- Continuing the engineering effort to move the Project to a shovel ready status. This will include:
  - Releasing further engineering and vendor packages/contracts for bid
  - Completing civil design and advancing foundation engineering design
  - Advancing process engineering design.
- Further advancing strategic partnering and financing process through continued technical and financial discussions.

## Corporate Activities

During the quarter, Ioneer announced that its chairman, James D. Calaway, had been appointed an executive of the Company for a 12-month period beginning in July 2020. This appointment was a reflection of Mr Calaway's ongoing contributions to the Company which exceeded the duties of a typical non-executive Chairman. Mr Calaway will continue his leadership position throughout the company's activities, including efforts to secure Project partners and funding commitments for the Project.

### Expenditure

Expenditure during the September quarter totalled:

- \$5.6 million on investing activities; and
- \$2.6 million on operation activities (net of interest received).

In addition, there was a \$1.2 million movement in exchange rates on cash held.

Ioneer is well-capitalised, with total cash on hand at 30 September 2020 of AUD \$28.8 million of which 78% is held in USD cash and cash equivalents.

### Capital Structure

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

- 1.68 billion ordinary shares
- 43.7 million options, and
- 22.6 million performance rights.

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## About Rhyolite Ridge and 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) completed in April 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.

Rhyolite Ridge's unique mineralogy allow lithium and boron to be extracted in a low-cost and environmentally sustainable manner. The Project's commercial viability is made possible by having both lithium and boron revenue streams.

Lithium is vital to enable technologies that combat climate change and reduce carbon emissions. It is a critical component for batteries essential to electric vehicles, and the conversion of intermittent green energy to base load power. The US Department of Interior listed lithium as a critical mineral in Executive Order 13817 (Federal Register, 83 FR 7065). There is only one producing lithium mine in the U.S. and no new projects are under construction. Rhyolite Ridge will help address the over-reliance on South American and Chinese supply to the lithium-ion battery industry.

Boron is also a very important material for clean technologies and sustainability and is only produced in a few locations globally. It is used in over 130 applications, including permanent magnets for electric cars and wind turbines, advanced glass for televisions, computers, handheld devices and solar panels. Over 70% of global boron reserves are located in Turkey with Rhyolite Ridge well positioned to geographically rebalance supply in the USA.

## Compliance Statement

In respect of Production Targets and Exploration Results referred to in this report and previously reported by the Company, the Company confirms that it is not aware of any new information or data that materially affects the information included in the public report titled "Ioneer Delivers Definitive Feasibility that Confirms Rhyolite Ridge as a World-Class Lithium and Boron Project" dated 30 April 2020. Further information regarding the production estimates can be found in that report. All material assumptions and technical parameters underpinning the estimates in the report continue to apply and have not materially changed.

In respect of Mineral Resources and Ore Reserves referred to in this report and previously reported by the Company in accordance with JORC Code 2012, the Company confirms that it is not aware of any new information or data that materially affects the information included in the public report titled "Rhyolite Ridge Ore Reserve Increased 280% to 60 million tonnes" dated 30 April 2020 and released on ASX. Further information regarding the Mineral Resource and Ore Reserve estimate can be found in that report. All material assumptions and technical parameters underpinning the estimates in the report continue to apply and have not materially changed.



## Recent Announcements

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

Date Released	Title
02/07/2020	ioneer Enters Employment Agreement with Chairman
02/07/2020	Appendix 2A
06/07/2020	Presentation on Non-deal Road Show
07/09/2020	Appendix 3G
15/07/2020	Appendix 2A - Correction
15/07/2020	Appendix 2A
20/07/2020	June 2020 Quarterly Activities Report
20/07/2020	June 2020 Quarterly Cashflow Report
31/08/2020	Plan of Operations for Rhyolite Ridge Approved by BLM
03/09/2020	ioneer Reiterates Commitment to Project Timeline
10/09/2020	Date of 2020 Annual General Meeting
15/09/2020	Cancel – Proposed issue of Securities
15/09/2020	Appendix 3G
15/09/2020	Appendix 2A
17/09/2020	Annual Report to Shareholders
17/09/2020	Appendix 4G
17/09/2020	Corporate Governance Statement - 2020



## Appendix 1 - Schedule of Tenements

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%	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%	100%	No change
USA	Tokop	NMC883619	TK claims (73)	4.82	100%	0%	Divested
USA	Tokop	NMC285234	Path Patents (11)	0.74	0%, option to purchase 100%	0%	Divested
USA	Tokop	NMC814692	Path Unpatented (5)	0.40	0%, option to purchase 100%	0%	Divested