

**Investor Update** 



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## SUMMARY



### **Key Value Drivers for Reward Minerals**

- 1. Development of new Potassium Sulphate ("SOP") processing technology (the "**Reward Process**") and confirm potentially significant operating and capital costs savings compared to existing technology.
- 2. Worldwide engagement with third party SOP, solar salt and strategic investment companies to form a development and production Joint Ventures using the Reward Process.
- 3. Include the Reward Process in development studies at the Kumpupintil Lake ("KP") Potash project in Western Australia to improve technical and economic viability.
- Fortescue Metals Group (ASX: FMG) exploration RC drilling for Cu/Au mineralisation at the McKay Range Joint Venture;
  - FMG earning 80% by spending \$2 million on exploration over 4 years;
    - RC drilling results expected March Quarter 2023.



# REWARD CORPORATE SNAPSHOT (ASX:RWD)



### **Capital Structure**

| Ordinary Shares on Issue           | 195.2M  |
|------------------------------------|---------|
| Options on Issue (\$0.20)          | 20.9M   |
| Share Price                        | \$0.11  |
| Undiluted Market Capitalisation    | \$21.5M |
| Short Term Debt (end September)    | ~\$2.3M |
| Cash & Equivalents (end September) | ~\$1.9M |
| Undiluted Enterprise Value         | \$19.3M |

### **Major Shareholders**

| Name              | Shares (M) | %    |
|-------------------|------------|------|
| Dr. Michael Ruane | 78.5       | 40.2 |
| W.P. Brooks       | 10.8       | 5.5  |
| Top 20            | 124.6      | 63.8 |

### Management

#### Colin McCavana - Non-Executive Chairman

+30 years experience in resources and earthmoving industries

Ex MD of Haddington Resources Ltd. & Chair of Northern Minerals Ltd Current NED of PVW Resources Ltd

Dr. Michael Ruane PhD (Chemistry), MRACI - Executive Director

+40 years experience in chemical and metallurgical fields

Founder of Reward and numerous resource companies and successful technical ventures

#### Rod Della Vedova BSc. (Chemistry) – Non-Executive Director

+35 years in the Solar Salt industry 35 years with Dampier Salt Ltd (Rio Tinto)

11 years as Chief Chemist and 24 years as Process Superintendent

#### Lorry Hughes BSc. (Geology) MAusIMM – Chief Executive Officer

- +28 years in the resources industry including Potash, Au, Cu, Pb, U & V
- Founder and Ex MD of Yandal Resources Ltd, Ex MD of Danakali Ltd.

#### Warren Hinchliffe BSc. (Chemistry) – Metallurgist, Chemist, Engineer

- +40 years in the resources industry including Potash, Au, Cu, Fe, Rare Earths & U
- Senior roles at Tenova Mining & Minerals, Outotec, Tronox & ALS



## HIGHLY EXPERIENCED POTASH & SALT TEAM



### +100 years combined potash experience

- Reward Minerals has been exploring and developing potash brine and buried evaporite deposits in Australia (+16 years).
- <u>Director Dr. Michael Ruane PhD (Chemistry)</u> has been leading technical assessments on solar salt and potash projects since the 1970's commencing at Lake Macleod salt operation in Western Australia (+40 years).
- <u>Director Rod Della Vedova BSc. (Chemistry)</u> worked directly for Dampier Salt Ltd operations in Western Australia for +35 years as Chief Chemist and Process Superintendent (+35 years).
- <u>CEO Lorry Hughes BSc. (Geology)</u> Former Managing Director & CEO of Danakali Ltd. during discovery of the Colluli buried potash deposit in Eritrea (+5 years).
- Warren Hinchliffe BSc. (Chemistry) Metallurgist, Chemist, Engineer +40 years in the resources industry (+6 years).



# THE REWARD PROCESS (PATENT PENDING)



### **Key Aims**

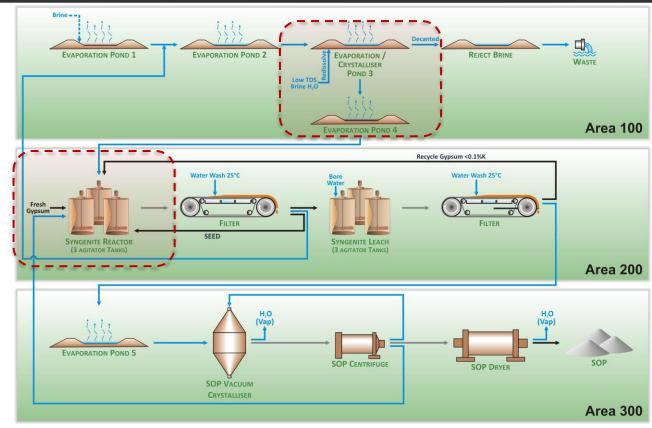
- Complete the development of the Reward Process (International Patent Application Submitted), for the recovery of SOP from brine resources and directly from solar salt operation bitterns.
- Confirm the model for production of +200,000t per annum of SOP from the KP Project brine Resource in Western Australia Engineering Scoping Study ("ESS") in progress.
- Develop the capital and operating cost parameters for the Reward Process via Pilot scale operations at 3<sup>rd</sup> party Solar Salt operations ESS and Pre-feasibility Studies.
- Establish that operations based on seawater bitterns can produce SOP at the lowest cost globally.



# THE REWARD PROCESS (PATENT PENDING)



- No mechanical harvesting.
- No flotation upgrade required.
- Uses off the shelf fixed plant components.
- Potential for significantly reduced operating & capital costs.
- Applicable for most sulphate brine resources.
- Seawater solar salt operations Bitterns contains ~21 kg/m<sup>3</sup> SOP





# THE REWARD PROCESS (PATENT PENDING)



### **Key Advantages**

- The Reward Process extracts Potassium (K) and Sulfate (SO<sub>4</sub>) components directly from amenable brines avoiding mechanical harvesting and flotation upgrade of crude Potash solids (KMS);
  - Mechanical harvesting of KMS is expensive and requires sophisticated pond construction
  - Flotation of low-grade Potash salts is technically challenging & costly.
- The process provides efficient single stage separation of K from sodium (Na), magnesium (Mg) and chloride (Cl) ions in the feed brine.
- Adding gypsum (CaSO<sub>4</sub>.2H<sub>2</sub>O) to the brine produces solid Syngenite (CaSO<sub>4</sub>.K<sub>2</sub>SO<sub>4</sub>.H<sub>2</sub>O) which is readily processed to release high-purity SOP (+44% K).
- It is a much simpler process than established operating and developmental flowsheets.



# THIRD PARTY SOLAR SALT OPERATIONS



• The Reward Process is flexible and can be used to recover SOP from solar salt bitterns and other sulphate brine Resources.

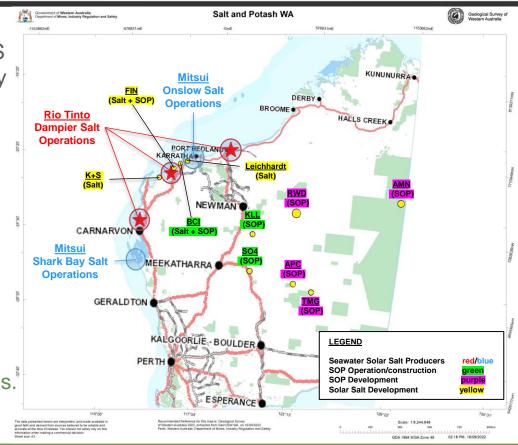




# 3RD PARTY SOLAR SALT AND POTASH - WA



- WA has >14Mt pa Salt output and with the proposed BCI, K+S and Leichhardt projects capacity could increase by ~90%.
- Critical issues in terms of economics are emerging at SO4, KLL and BCI.
- All SOP projects are utilising or proposing to utilise the same process flowsheet except for RWD.
- All Salt and SOP projects could benefit from the Reward Process.





## **NEXT STEPS**



### Focus on developing Reward's technology

- Worldwide engagement with third party SOP and solar salt companies, aiming to secure a strategic partner for a development and production JV using the Reward Process;
  - Currently engaged with a number of solar salt and potash companies operating in WA under non-disclosure agreements
  - Currently investigating and engaging with international solar salt and potash companies under non-disclosure agreements
  - Initially targeting established seawater solar salt operations on the coast with sufficient size potential to support a viable SOP business.
- Complete Scoping Studies for Reward's KP Potash project to demonstrate improved economics using the new Reward Process.
  - Continue to seek at JV partner for the KP Potash project.

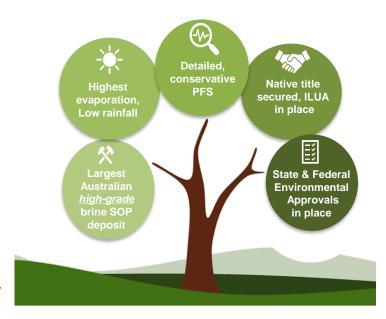


## APPENDIX - KUMPUPINTIL LAKE POTASH PROJECT



### **Advantages**

- Globally significant SOP Project, located in Little Sandy Desert where there is very high evaporation rates and low rainfall.
  - Insitu SOP Resource 596Mt
  - Drainable SOP Resources 153Mt
  - High Grade SOP brine @11.35kg/m<sup>3</sup> SOP.
- Registered Native Title Agreement (ILUA) in place with the Martu Traditional Owners.
- **Pre-Feasibility Study completed** in 2018, reviewed in 2020 with further revision in progress using the Reward Process.
- Full State and Commonwealth environmental approvals in place for 40-year LOM period (and beyond).
- In June 2021, the Project was awarded Major Project Status by the Australian Government Major Projects Facilitation Agency

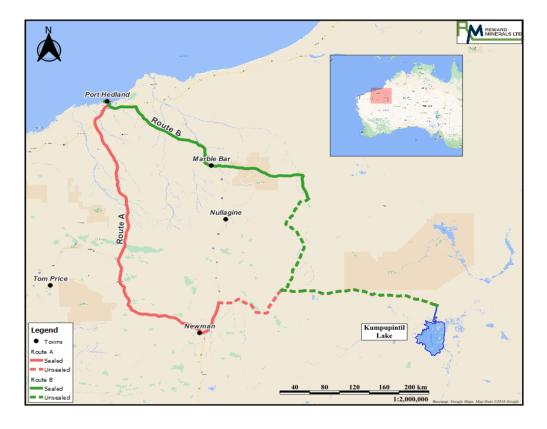




# **LOGISTICS: ROUTES FOR SOP TO PORT**



- Route A via Newman = 840 km
  - Sealed ~500 km
  - Unsealed ~340 km
- Route B via Marble Bar = 750 km
  - Sealed ~370 km
  - Unsealed ~380 km





# **FUTURE OUTLOOK - KP POTASH PROJECT**



#### Continued work on the PFS review

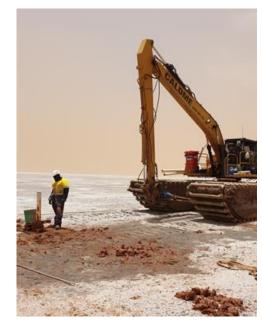
- Preliminary review of material movement parameters completed ready for update of engineering, capital and unit operational costs by appropriate technical firms.
- Laboratory testwork continuing to enhance the SOP recovery flowsheet and to test alternative low-cost routes for Potash recovery.

#### **Cultural Heritage Management Plan ("CHMP") in progress**

- A comprehensive CHMP is currently being developed between Reward and JYAC (the Prescribed Body Corporate for the Martu Traditional Owners) with the help of Integrate Sustainability Pty Ltd
- Two Traditional Owner site visits undertaken in 2022
- The CHMP will aid Reward and the Traditional Owners to manage cultural heritage matters during the development and operation of the KP Potash project.

Reward continues to investigate financing options / Joint Venture routes to advance the development of the project





# **REWARD MINERALS - CONTACTS**



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### **COMPLIANCE SECTION**



#### Competent Person Statement

The information in this presentation that relates to the existing Kumpupintil Lake (Lake Disappointment) Project Mineral Resource Estimate and hydrogeology is extracted from the report titled "Lake Disappointment (LD) Project Confirmed as a Globally Significant Tier 1 Sulphate of Potash Deposit" which was published in an ASX announcement dated 7 February 2017 and is available to view on <a href="https://www.rewardminerals.com">www.rewardminerals.com</a>. The information in the original report was based on information compiled by Mr Robert Kinnell, a hydrogeologist and Competent Person who is a Member of The Australian Institute of Mining and Metallurgy and a Fellow of the Geological Society of London. Mr Kinnell was employed by Strategic Water Management and was a consultant to Reward Minerals. He has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Kinnell consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The Company confirms that it is not aware of any new information or data that materially affects the information included in the 2017 Mineral Resource Estimate announcement and that all material assumptions and technical parameters underpinning the Mineral Resource Estimate continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original ASX announcement.

The information in this presentation that relates to Brine and Sediment Assays and Analyses is based on information compiled by Mr Geoff Browne, a Competent Person who is a Member of The Australasian Institute of Mining and Metallurgy. Mr Browne is a consultant to Reward Minerals Ltd. Mr Browne has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Browne consents to the inclusion in the presentation of the matters based on his information in the form and context in which it appears.

#### **Additional Statements**

- The Company confirms that it is not aware of any new information or data that materially affects the information included in the 2017 announcement ("Lake Disappointment (LD) Project Confirmed as a Globally Significant Tier 1 Sulphate of Potash Deposit") and that all material assumptions and technical parameters underpinning the Mineral Resource Estimate continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings were presented in the original ASX announcement have not been materially modified.
- The Company confirms that all material assumptions and technical parameters underpinning the Kumpupintil Lake (Lake Disappointment) Project Pre-Feasibility Study and its enhancements continue to apply and have not materially changed nor been materially modified.
- Additional information in relation to trench pumping trials, including volumes abstracted, flow rates and grades have been reported in the Company's quarterly reports published subsequent to the Pre-Feasibility Study Announcements.



### **COMPLIANCE SECTION**



#### Information Sources: a list of Reward's ASX Releases as sources of information contained in this Presentation

- 1. See ASX announcement released 7 February 2017, titled "Lake Disappointment (LD) Project Confirmed as a Globally Significant Tier 1 Sulphate of Potash Deposit".
- 2. See ASX Announcement released 1 May 2018, titled "PFS Confirms LD Project as a Globally Significant SOP Project"
- 3. See ASX announcement released 13 July 2018 titled "LD SOP Project PFS Enhancements"
- 4. See ASX announcement released 4 June 2020, titled "LD Project: WA State Environmental Minister Approves Project Implementation"
- 5. See ASX announcement released 2 October 2020, titled "Commonwealth Environmental Approval for LD Potash Project"
- 6. See ASX announcement released 14 October 2020, titled "Bechtel Commences PFS Review of Lake Disappointment Potash Project"
- 7. See ASX announcement released 31 March 2021, titled "Quarterly Report for Period Ending 31 March 2021" (see Section 'Bechtel Completes LD SOP Project PFS Review and Options Study')
- 8. See ASX announcement released 28 June 2021, titled "Major Project Status awarded to Reward's Lake Disappointment SOP Project"
- 9. See ASX announcement released 14 July 2021, titled ""Kumpupintil Lake" to be Adopted by Reward Minerals, Replacing "Lake Disappointment" Title"

