REWARD MINERALS LIMITED

"An Innovative Leader in the Potassium Sulphate Industry"



Global Investor Roadshow

Lorry Hughes - CEO May 2023, Perth, Western Australia

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FORWARD LOOKING STATEMENTS & DISCLAIMER



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This Presentation has been prepared by Reward Minerals Ltd ("RWD") for the purpose of providing an overview of its Potash recovery technology and development strategy.

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Key Value Targets for Reward Minerals

- Development of new Potassium Sulphate ("SOP") processing technology (the "**Reward Process**") to confirm potentially significant operating and capital cost savings compared to existing technology;
 - New testwork confirms the efficacy of the Reward Process to recover SOP from seawater and other high sulphate brines – Independent Engineering Study Underway¹
- Engagement with third party SOP, solar salt, desalination and strategic investment companies to form development and production Joint Ventures using the Reward Process.
- Inclusion of the Reward Process in development studies at the Kumpupintil Lake Potash project ("KP Lake") aimed at improving technical and economic viability
- □ Fortescue Metals Group Ltd ("Fortescue") first pass RC drilling returned <u>encouraging copper results</u> at the McKay Range Joint Venture follow-up plans pending².

WARD 1 See ASX announcements released 20 March & 6 April 2023, ² See ASX announcement released 24 April 2023.

CORPORATE SNAPSHOT (ASX: RWD, RWDO) 🗡

Capital Structure	Current
Ordinary Shares on Issue	227.8M
Options on Issue (\$0.20)	39.1M
Share Price	\$0.07
Market Capitalisation	\$16.0M
Debt	~\$3.2M
Cash & Equivalents	~\$2.7M
Enterprise Value	\$16.5M

Major Shareholders – current

Name	Shares (M)	%
Dr. Michael Ruane	90.2	39.6
W.P. Brooks	10.7	4.7
Тор 20	144.1	63.2

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) FAusIMM – 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 and Outotec.



KEY PERSONNEL - EXPERIENCE



+50 years combined salt & potash experience – highly experienced

- Reward Minerals has been exploring and developing potash brine and buried evaporite deposits in Australia (+16 years)
- <u>Director Dr. Michael Ruane PhD (Chemistry) MRACI</u> has been leading technical assessments on solar salt and potash projects since the 1970's commencing at Lake Macleod Salt/Potash operation in Western Australia (+40 years)
- ✓ <u>Warren Hinchliffe BSc. (Chemistry)</u> Metallurgist, Chemist, Engineer +40 years in the resources industry (+6 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) FAusIMM</u> Former Managing Director & CEO of Danakali Ltd. during discovery of the Colluli buried potash deposit in Eritrea (+6 years).

THE REWARD SOP PROCESS

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THE REWARD PROCESS

Key Advantages

- The Reward Process extracts Potassium (K) and Sulfate (SO₄) components directly from high sulphate brines avoiding mechanical harvesting and flotation upgrade of crude Potash solids (KTMS);
 - Mechanical harvesting of KTMS 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 (CaSO₄.2H₂O) to the brine produces solid Syngenite (CaSO₄.K₂SO₄.H₂O) which is readily processed to release high-purity SOP (>52% K₂O)
- ✓ **Potentially a much simpler process than operating and developmental flowsheets.**



THE REWARD PROCESS – RECENT RESULTS¹

- Recent laboratory work program confirmed the efficacy of the Reward Process
- ✓ +50% (max. 57%) first pass extraction of K to the solid Syngenite salt achieved from concentrated seawater brine
- Produced very high-purity SOP with specification;
 - ✓ 53.7% K₂O
 - ✓ 56.8% SO₄
 - ✓ 0.1% Calcium
 - ✓ <0.1% Chloride</p>







THE REWARD PROCESS – NEXT STEPS



- Advance the development of the Reward Process (Australian Provisional Patent Application Lodged) – submission due prior to 11 August 2023
- □ New Engineering Scoping Study in progress for completion June Quarter 2023
 - confirm models for production of SOP from seawater bitterns better defining the capital and operating cost parameters
 - Design of Pilot Plant facility for SOP recovery in conjunction with Solar Salt operations using the Reward Process
 - Establish that operations using the Reward Process can produce SOP at the lowest cost globally from seawater and high sulphate brine resources.
- Revisit the model for production of SOP from the KP Lake Project brine Resource in W.A. using the Reward Process.



SOLAR SALT OPERATIONS

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





POSITIVE ESG CONTRIBUTION GOALS

Aims

- ✓ Replace Mannheim process route for SOP substantially reducing CO₂ emissions
- ✓ Build resilient infrastructure, promote sustainable industrialisation, foster innovation
- ✓ Reduce energy requirements for fertilizer production
- ✓ Increase availability of healthy organic produce
- Promote sustainable agriculture to meet global food demand and reverse land degradation
- ✓ Respect Traditional Owner cultural values
- ✓ Create opportunities within remote and regional communities
- ✓ Ensure inclusive and quality education and lifelong learning opportunities
- ✓ Enhance economic livelihood and productive employment





Environment



Governance

SOP PRICES AT ALL TIME HIGHS



SOP pricing is underpinned by

- Global transition to sophisticated farming methods
- ✓ Global scarcity
- Low-chloride fertilizer demand
- ✓ Increased SOP usage for higher value crops.





SOP SUPERIOR TO MOP



Sulphate of Potash (SOP)



A premium-quality and priced potash fertilizer with two distinct nutrients: potassium (K) and sulphur (S). The key advantage of SOP is:

- ✓ Free of chloride and therefore can be applied on high value crops and leafy plants such as fruits and vegetables.
- Improves quality and crop yields, and makes plants more resilient to drought, frost, insects and disease.
- ✓ Known to make food taste and appear better. Improves plants ability to absorb other essential nutrients such as phosphorous, iron and other micronutrients.
 - SOP has a salinity index of 46, the lowest of the potassium fertilizers compared to MOP at 116.

Muriate of Potash (MOP)



Applied to low value, chloride tolerant crops such as rice, maize and wheat.

- Not suitable for low-rainfall climates.
- Often unsuitable for leafy plants causing burns and taste problems.
- The higher salinity of MOP may cause difficulty in water and nutrient absorption diminishing crop quality and yield.
- If high levels of chloride are present in the soil or if irrigation water is being used to grow crops, adding MOP can create a toxic imbalance in plant nutrients.

SOLAR SALT AND POTASH - WA

- WA has >12Mt pa Salt output and with the proposed BCI, K+S and Leichhardt projects capacity could increase by ~90%
- <u>Critical technical issues</u> encountered at emerging <u>Australian SOP developers</u> using old technology
- All WA Salt and SOP projects could benefit from the Reward Process.





NEXT STEPS FOR REWARD



Focus on developing Reward's technology

- Worldwide engagement with third party SOP, solar salt and desalination companies, aiming to secure a strategic partner for a development and production JV using the Reward Process;
 - Reward is currently engaged with a number of solar salt and potash companies operating in WA and globally under non-disclosure agreements
 - Initially targeting established solar salt operations with sufficient size potential to support a viable SOP business.
- □ Complete ESS for SOP recovery from seawater Bitterns and from Reward's KP Lake project brine to demonstrate the scope of the new Reward Process.
- Continue to seek a JV partner for the KP Potash project.



APPENDIX A - KP LAKE POTASH PROJECT

Advantages

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- **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/m³ 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.





For Sources and Notes – See "Compliance Section"

APPENDIX A – KP LAKE ROUTES 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

Rail infrastructure (Iron ore) 388km from KP Lake, thence 450km to Port Hedland.







APPENDIX A - FUTURE OUTLOOK

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)
- Two Traditional Owner site visits undertaken in 2022
- The CHMP will assist 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.





APPENDIX B – MCKAY RANGE JV PROJECT

Joint Venture with FMG Resources Pty Ltd

- FMG Resources Pty Ltd is a wholly owned subsidiary of Fortescue Metals Group Ltd ("Fortescue");
 - Fortescue is the operator of the JV and has the right to earn an 80% interest in E45/3285 and E45/4090 by spending \$2 million over four years on exploration
 - Reward retains 100% of the potash rights over all its tenure including Fortescue tenements E45/5360 and E45/4090.
- If the \$2 million expenditure threshold is met, a Joint Venture will be established after which both parties will either contribute to expenditure in accordance with their respective FJV interests or dilute
- If a party's JV interest falls below 5%, that party's JV interest will be converted to a 1% net smelter return royalty to be paid over the first five years of commercial production.





APPENDIX B – MCKAY RANGE JV PROJECT



Potential New Discovery

 Anomalous copper mineralisation returned from maiden wide spaced RC drilling program

Best Result

- ✓ 5m @ 0.15% Cu from 212m incl.
 - / 1m @ 0.52% Cu
- ✓ 4 of 7 holes intersected anomalous copper from holes on 2 lines located ~6km apart and 1-2km apart along the lines
- ✓ Follow-up plans are pending.
- ¹ See ASX announcement released 24 April 2023.

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LOCATION MAP Marble Bar B E45/4090 Legend McKay Dome priority drill holes FMG-Holocene FJVA Tenements E45/3285 MO0004 5m @ 0.15% Cu from 212m incl -1m @ 0.52% Cu from 216m 00005 * No 21 W 2m @ 0.13% Cu from 202m incl. -1m @ 0.18% Cu from 202m McKay Range FMG Planned Drilling Date: 12/10/2022 Drawn By: Sim All Revised By manier Department: EXPLORATION Scale 1 112 894 ordinate System: GDA 1994 MGA Zone 50 Fortescue Metals Group Ltd

For Sources and Notes – See "Compliance Section"



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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 <u>www.rewardminerals.com</u>. 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 report that relates to Brine metallurgical testwork and Analyses is based on information compiled by Mr Warren Hinchliffe who is a Member of The Australian Institute of Mining and Metallurgy. Mr Hinchliffe is a consultant to Reward Minerals Ltd. Mr Hinchliffe 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 Hinchliffe consents to the inclusion in the report of the matters based on the 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"
- 10. See ASX announcement released 18 October 2022, titled "McKay Range RC Drilling Commenced".
- 11. See ASX announcement released 13 February 2023, titled "Prospectus"
- 12. See ASX announcement released 20 March 2023, titled "Engineering Scoping Study Update"
- 13. See ASX announcement released 6 April 2023, titled "Testwork Returns Highly Positive Results"
- 14. See ASX announcement released 24 April 2023, titled "Encouraging Copper Results"

