# **ASX RELEASE**



31 July 2014

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SHARE PRICE \$0.66

SHARES ON ISSUE

**OPTIONS** 26.5M (\$0.25 - \$1.09)

MARKET CAPITALISATION \$71.8M (undiluted)

CASH & INVESTMENTS \$5.4M June'14 Qtly

#### **DIRECTORS & MANAGEMENT**

Colin McCavana Chairman

Rod Della Vedova

Non-Executive Director

Michael Ruane

Managing Director

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Projects Director

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#### **KEY PROJECTS**

Lake Disappointment Project Karly Project

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# QUARTERLY REPORT FOR THE PERIOD ENDING 30 JUNE 2014

# **Highlights**

- LD drilling supported the concept of a large Palaeovalley containing Potash brines in and to the north of the lake
- LD holes were drilled down to 100+ metres depth and encountered high brine flows (up to 8 litres/second) and significant Potassium values (up to 8.3g/litre)
- Scoping study commenced investigating a 400,000tpa operation at LD
- Dora West drilling completed with excellent results
- Karly access agreements have been executed and tenements granted, receipt of approved Program of Works imminent.

# **Corporate**

In May the Company completed an investor roadshow in Melbourne which included the Company presenting at the Melbourne Mining Club's Cutting Edge Series.

Reward was awarded a grant under the Western Australian Government's Exploration Incentive Scheme in June. Under the scheme the Company will receive up to \$150,000 in co-funding to support exploration at the Company's Karly Project. The co-funding is applicable to direct drilling costs only and the Company is require to meet the grant dollar-for-dollar.

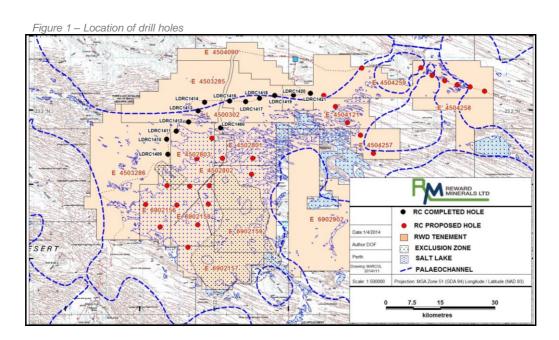
Cash and Investments on hand as at 30 June 2014 was \$5.4 million which includes \$344,000 in listed investments.

#### **LD Potash Project**

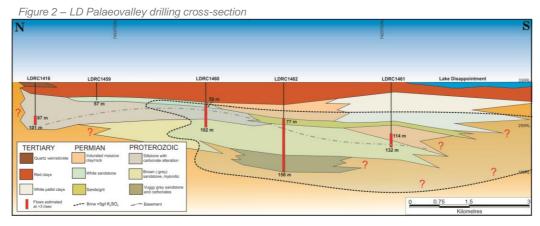
#### **Exploration**

On 2 April Reward Minerals Limited ("Reward" or the "Company") released the results of 13 sighter holes completed in the area north of Lake Disappointment. The results support the concept of a large Palaeovalley containing Potash brines in the lake and extending to the northeast.

13 Reverse Circulation (**RC**) holes were drilled for 1,404m on approximately 4km spacings in most cases down to 100 to 120m depths. Vigorous brine flows (2-3.5 litres/second) were encountered in deeper sections of the sediment pile and from the basement sandstones while Potassium values also increased significantly with depth (up to 8.1g/litre Potassium Sulfate "**SOP**").



Brine Potassium values were noted to increase significantly toward the Lake Disappointment evaporation basin which led the Company drilling an additional two holes along the Wiljabu Track closer to the lake proper.



Results from the two holes (LDRC1461 & 1462) were released on 28 April. The holes produced high brine flows (5-8 litres/second) over horizons in excess of 50m with SOP grades ranging from 7-8.3g/litre.

#### Development

In May the Company appointed engineering and project management company AMEC to undertake Scoping Studies on the LD Project. AMEC is a well-credentialed global engineering group with considerable experience in Potash recovery operations, particularly in North America.

The study is investigating the capital and operating cost parameters of a 400,000 tonne per annum operation recovering SOP from brine grading circa 12.37g/l derived from the existing LD JORC Indicated Resource base of 24.4Mt SOP.

The scope of work includes:

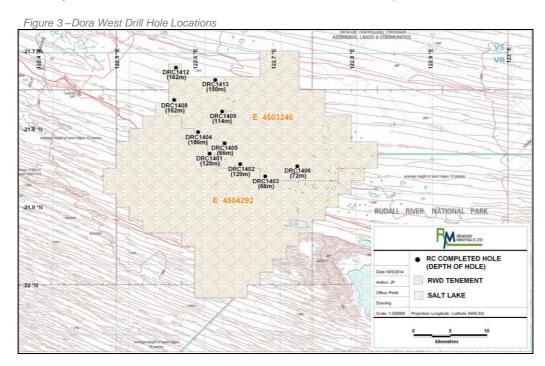
- Conceptual flow sheet review
- Preliminary mass balance review

- Preliminary equipment list and plant design
- Order of magnitude ±30% capital and operating costs.

Studies are progressing well. The Company anticipates the results of the study will be released to market during the September quarter.

### **Dora West Potash Project**

On 12 June the Company announced the results from 10 holes drilled at its Dora West Project. The Static Water Table (**SWT**) was identified as being very shallow in the central part of the Dora tenement, less than 4m from surface in most places. Heavy brine flows were encountered in five of the holes drilled-up to 5 litres/second at ~130m depth.



Interestingly, the Total Dissolved Ions (**TDI**) in the Dora West brines peaked at 150g/litre indicating that the brines are well below saturation level (ca.300g/litre). TDI values were highest in the holes between DRC1402 and DRC1412 (refer to Figure 3). The data suggests that these holes are located on the northeast margin of the brine aquifer. Drilling was confined to this tenement as the southern tenement was not granted at the time. An access agreement has since been executed with the Traditional Owners and the tenement was granted on 18 June 2014.

Brines recovered graded up to 7.5kg/m³ SOP (3.4kg/m³ Potassium, "K") and also contained significant levels of Magnesium (Mg) and Sulfate (SO<sub>4</sub>). The average Mg:K and SO<sub>4</sub>:K ratios for brines recovered from the drilling program were approximately 1.5 and 9.5 respectively. These are somewhat higher than the values of the current LD near surface resource brines (refer to Table 1). The average Sodium Chloride to SOP (NaCl:SOP) ratio was 14 which was approximately 25% lower than for LD brine.

Table 1 – Brine composition ratios

	Dora West	Lake Disappointment
Mg:K	1.5	1.1
SO <sub>4</sub> :K	9.5	4.7
NaCl:SO	P 14.0	19.2

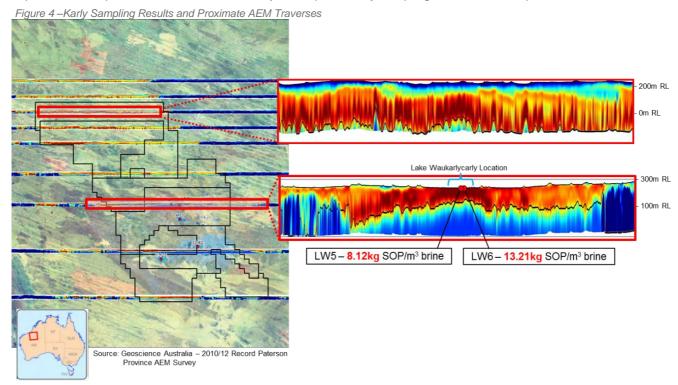
## **Karly Potash Project**

On 28 May Reward executed a Land Access & Mineral Exploration Agreement with the Traditional Owners of the Lake Waukarlycarly tenement area in Western Australia. Initial Heritage Surveys were undertaken by the Company and the tenements were granted on or around 19 June with consent of WDLAC.

The Karly Project now encompasses over 3,000km<sup>2</sup> of the Waukarlycarly embayment which is thought to be host to substantial quantities of Potassium bearing brines. Several Programs of Works (**PoW**) have been submitted to the Department of Mines and Petroleum (**DMP**). The Company is waiting on receipt of the approved PoWs which allow the Company to proceed with drilling and other activities.

Reward has previously completed a shallow sampling program on the tenement area which confirmed the presence of Potassium rich brines near surface with chemistry amenable to the production of SOP (refer to announcement dated 10 December 2013 for full details and results).

Analytical results referenced to the AEM traverses completed as part of the Geoscience publication suggest a potential correlation between the high conductivity detected and Potash bearing brine (refer to Figure 4). Further exploration is required to increase the reliability of the preliminary sampling which has been performed to date.



There has been limited historical exploration in the area by parties targeting Telfer-style deposits. The common theme in drill logs has been the presence of highly saline water down to significant depth and excellent flows.

# **Other Projects**

#### Lake MacKay Potash Project, Western Australia

Lake MacKay is a modern, playa lake with a surface area of over 2,250km2. The Lake is situated in the Gibson Desert, straddling the Western Australia–Northern Territory border, 50 kilometres north of the Tropic of Capricorn.

In 2009, Reward Minerals Ltd delineated a JORC compliant, Inferred Potash Resource at Lake Mackay. The

Resource included 4,780,400,000 BCM\* @ 4.3kg of SOP per BCM (Bench Cubic Metres) for a total of 20.56 Million Tonnes of SOP. The resource estimate was calculated on the basis of lakebed sediment volume (BCM) from surface to a depth of two metres and the water soluble potassium sulphate content of these sediments located within the Company's tenement holdings at Lake Mackay.

LEGEND

\* LM1 Drill collar, Hole Id

\* LM2

\* LM3

\* LM3

\* LM3

\* LM4

\* LM7

\* LM7

\* LM1

\* LM2

\* LM1

\* LM2

\* LM3

\* LM3

\* LM2

\* LM2

\* LM3

\* LM4

\* LM2

\* LM3

\* LM3

\* LM3

\* LM3

\* LM4

Figure 5: Lake Mackay Tenement Locations

Further work will require agreements with the Tjamu Tjamu traditional owners group. The Company has engaged in discussions with Tjamu Tjamu people and other Traditional Owner groups aimed at reaching agreement on terms which would be acceptable for development to proceed at Lake Mackay in the event feasibility analysis proved favourable.

While it is the understanding of Reward Minerals Ltd that the majority of the Native Title Holders are in favour of development of the Lake Mackay project, no satisfactory commercial agreement has been forthcoming to date.

Subsequent to the quarter Reward relinquished its Lake Mackay Project tenement holdings in Central Australia. The Lake Mackay tenements were approaching their sixth anniversary and as a result holding costs and DMP expenditure requirements reached levels which were difficult to justify, particularly in view of the lack of recent progress of the project. The relinquishing of these tenements meant that funds have now been redirected to the upcoming drilling programs at the LD, Karly and Dora West Projects as well as development activities at LD.

#### Officer Basin - Western Australia

Reward holds four Exploration Licences covering approximately 800km² in the Gibson Desert region of Western Australia prospective for Potash mineralisation. Exploration Licence 69/3244 which was recently applied for covers a circular topographic depression reported as the Connolly meteor impact crater. The origin of the feature remains the subject of debate and is assumed to be either the result of a meteor impact or a sinkhole depression created by the dissolution of diapiric evaporites and associated structural collapse.

The tenements cover areas of Officer Basin stratigraphy believed to be underlain by substantial evaporite horizons prospective for Potash mineralisation (Figure 6).

Recently, the Company executed a Land Access Agreement with WDLAC covering Exploration Licences E45/1928, 45/2599 and 45/2600 (Figure 5). The Licences have now been granted allowing exploration activities to commence following Heritage Clearances.

The tenements are located over regions where extensive evaporite (salt) flows have occurred resulting in typical circular diapiric structures and also linear salt walls covering considerable distances (100+ kms).

The uplift of salt diapirs and salt walls provides potential for relatively shallow mining scenarios should the evaporite flows host significant potash values.

Examination of satellite imagery of the northern block of tenements suggests several diapiric structures within a 50km zone trending north west – south east.

While exploration data are limited for this remote area, the exploration model is supported by a number of seismic lines and oil exploration holes drilled south of the tenement area. While no potash has been recorded in the evaporites intersected in Hussar and Dragoon exploration holes, a large number of targets – both salt wall and diapiric structures appear as exciting prospects worthy of drilling in this region.

#### Potash Exploration, Queensland

Reward Minerals Ltd holds three Exploration Permits covering 790km² within the Adavale Basin in Queensland which were granted in December 2008.

The area held by Reward Minerals Ltd covers an elongate northeast-trending structure west of the Warrego Fault and contains Bury 1 and Stafford 1 oil exploration wells (See Figure 6). In Bury 1, the salt horizon top was at a depth of 1,770m and salt thickness of 580m. Minor Potash mineralisation

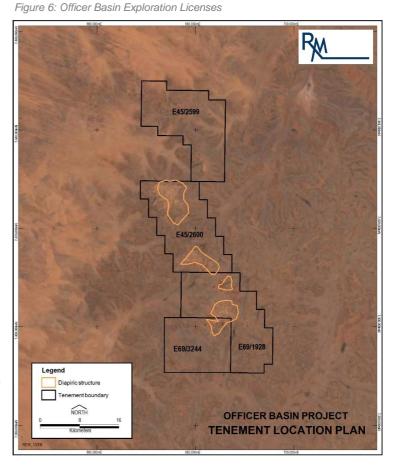
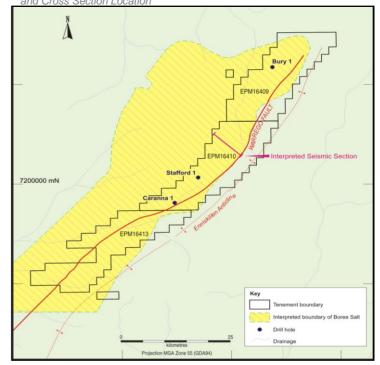
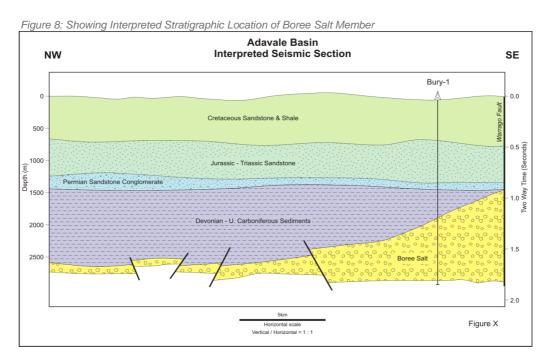


Figure 7: Adavale Tenements Showing Interpreted Extent of Boree Salt and Cross Section Location



was encountered in Bury 1 between 1,810 - 1,811m and 1,968 - 1,971m depths. Potassium values up to 4% were observed in thin layers (15cm) within these intervals. However, much of the evaporite horizon was not analysed for potassium. Figure 8 displays a seismic interpretation between Stafford 1 and Bury 1 drill holes which outlines the Boree Salt Member at depth and rising until it hits the Warrego Fault.

On the down throw side of this fault, a series of minor horsts and grabens are developed sub paralleling the major trend direction. It has been interpreted from seismic surveys that the evaporite horizon is up to 900m thick, coming to within 900m of surface in places. Figure 8 displays the gravity low associated with the Boree Salt Member adjacent to the Warrego Fault. The exploration strategy is to drill several 1,500m to 2,000m holes to intersect the uplifted salt horizon to ascertain the concentration and extent of potash mineralisation within the unit.



Boree Salt Member Depth to Top 1,919.5m
Thickness 506.9m

Boree Salt Member Thickness 0m

Boree Salt Member Depth to Top 2,225.7m
Thickness 100.6m

Boree Salt Member Thickness 500.2m

Boree Salt Member Depth to Top 2,725.5m
Thickness 500.2m

STAFFORD -1
Boree Salt Member Depth to Top 2,397.1m
Thickness 500.2m

CARANNA -1

LEGEND
Petroleum Wells
REWARD Tenements

The project area is near the coal mining site of Blackall 600km inland from Gladstone. In addition to their Potash potential the Adavale deposits could readily provide salt for the manufacture of caustic soda which is utilised in substantial quantities at the Gladstone Alumina operations of Comalco Ltd. Data available suggests that annual imports of caustic soda to Gladstone are of the order of 1.5 million tonnes at a cost in excess of \$500 million.

Reward's Adavale Potash Project tenements are over Freehold land. The Company had executed Access Agreements with holders of the two pastoral leases covering the Adavale prospect area and received clearance from the Queensland Department of Employment, Economic Development and Innovation. During the December 2010 quarter, in line with recent legislation, Reward Minerals Ltd sought Heritage clearance for the two drill sites from the relevant Traditional Owners of the area.

Since reaching agreement with the Martu people on development of the Lake Disappointment project, the Company has elected to farm out the Adavale Potash project. Several companies have expressed interest in earning an interest in the project and negotiations on this front are in progress.

For further information please visit our website: www.rewardminerals.com

Yours faithfully,

Michael Ruane Director on behalf of the Board

#### **Competent Persons Statement**

The information in this report that relates to Exploration Targets and Exploration Results is based on information compiled by Mr David O'Farrell, a Competent Person who is a Member of The Australasian Institute of Mining and Metallurgy. Mr O'Farrell is a consultant to Reward Minerals Ltd. Mr O'Farrell 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 O'Farrell consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The information in this report that relates to Mineral Resources or Ore Reserves is based on information compiled by Mr Mr Simon Coxhell, a Competent Person who is a Member of The Australasian Institute of Mining and Metallurgy. Mr Coxhell is a consultant to Reward Minerals Ltd. Mr Coxhell 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 Coxhell consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

# Tenement Holdings as at 30 June 2014

Tenement	Status	RWD Ownership at Quarter End	% Interest Acquired During the Quarter	% Interest Disposed During the Quarter
		Officer Ba	asin	
E69/1928	Granted	100%	-	-
E45/2599	Granted	100%	-	-
E45/2600	Granted	100%	-	-
EL(A)69/3244	Application	100%	-	-
		Lake Disappo	intment	
E45/2801	Granted	100%	-	-
E45/2802	Granted	100%	-	-
E45/2803	Granted	100%	-	-
E69/2156	Granted	100%	-	-
E69/2157	Granted	100%	-	-
E69/2158	Granted	100%	-	-
E69/2159	Granted	100%	-	-
E45/3285	Granted	100%	-	-
E45/3286	Granted	100%	-	_
E45/4090	Granted	100%	-	_
E45/4121	Granted	100%	_	-
L45/302	Granted	100%	_	_
M45/1227	Granted	100%	_	_
E45/4257	Granted	100%	_	_
E45/4258	Granted	100%	_	_
E45/4259	Granted	100%	_	_
EL(A)69/2902	Application	100%		
LL(A)09/2902	Арріїсаціон	Lake Au	ıld	-
E45/2804	Granted	100%	-	_
L43/2004	Oranieu	Winifre		-
EL(A)45/4272	Application	100%	-	_
LL(A)45/4212	Application	Dora We		-
E45/3246	Granted	100%	751	
•		100%	-	-
E45/4292	Application		-	-
E 45/4070	A 11 41	Lake Waukar	Tycariy	
E45/4273	Application	100%	-	-
E45/4274	Application	100%	-	-
EL(A)45/4291	Application	100%	-	-
E45/4293	Application	100%	-	-
E45/4294	Application	100%	-	-
E45/4299	Application	100%	-	-
EL(A)45/4321	Application	100%	-	-
E45/4324	Application	100%	-	-
		Lake Mac	kay	
E80/3748	Granted	0%	-	100%
E80/3749	Granted	0%	-	100%
E80/3750	Granted	0%	-	100%
E80/3751	Granted	0%	-	100%
		Tamala	a	
EL(A)09/1185	Application	100%	-	
		Adaval	e	
EPM16409	Granted	100%	-	-
EPM16410	Granted	100%	-	-
EPM16413	Granted	100%	-	-