

28 October 2015

**ASX CODE**  
RWD

**SHARE PRICE**  
\$0.70

**SHARES ON ISSUE**  
119.0M

**OPTIONS**  
24.1M (\$0.25 - \$1.09)

**MARKET CAPITALISATION**  
\$83.3M (undiluted)

**CASH**  
\$6.7M  
Sept'15 Qly

#### DIRECTORS & MANAGEMENT

Colin McCavana  
*Chairman*

Rod Della Vedova  
*Non-Executive Director*

Michael Ruane  
*Managing Director*

Daniel Tenardi  
*Projects Director*

Paul Savich  
*Corporate Development Officer  
& Company Secretary*

Bianca Taveira  
*Company Secretary*

#### KEY SOP PROJECTS

LD Potash Project  
Karly Potash Project  
Dora Potash Project

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## QUARTERLY REPORT FOR THE PERIOD ENDING 30 September 2015

### Corporate

Cash on hand at 30 September 2015 was approximately \$6.7 million.

Reward Minerals Limited ("**Reward**" or "**the Company**") finalised the placement of 7,291,667 fully paid ordinary shares to institutional and sophisticated investors raising \$5.25 million. The placement which was completed at 72 cents per share was well supported and utilised the Company's 15% capacity under listing rule 7.1. As a result of the placement the Company remains well funded for its near-term development activities.

### LD Potash Project

#### Recent Drilling Results

During the September quarter the Company continued its Resource definition drilling at the LD Project. Drilling is being undertaken to expand the existing LD Potassium Sulfate ("**SOP**") Resource at depth using a Company-owned heli-transportable coring rig.

LD currently hosts a JORC (2004) Indicated 24.4Mt SOP Resource grading 6.17kg/m<sup>3</sup> in-situ from surface to an average depth of only four metres. The SOP content of the associated Resource brine is 12.37kg/m<sup>3</sup>. The Company anticipates a Resource estimate based on recent drilling will be completed during the December 2015 quarter.

At quarter end the Company had completed seven core holes on the surface of LD to establish the lake stratigraphy and brine parameters over a substantial portion of the lake. A collar positions and depth details for the holes are provided in Figure 1.

The holes drilled to date cover over 26 kilometres of LD in a north-south direction and approximately 6 kilometres east-west.

Results of the drilling program to date have been excellent and a summary of results obtained are provided in Table 1.

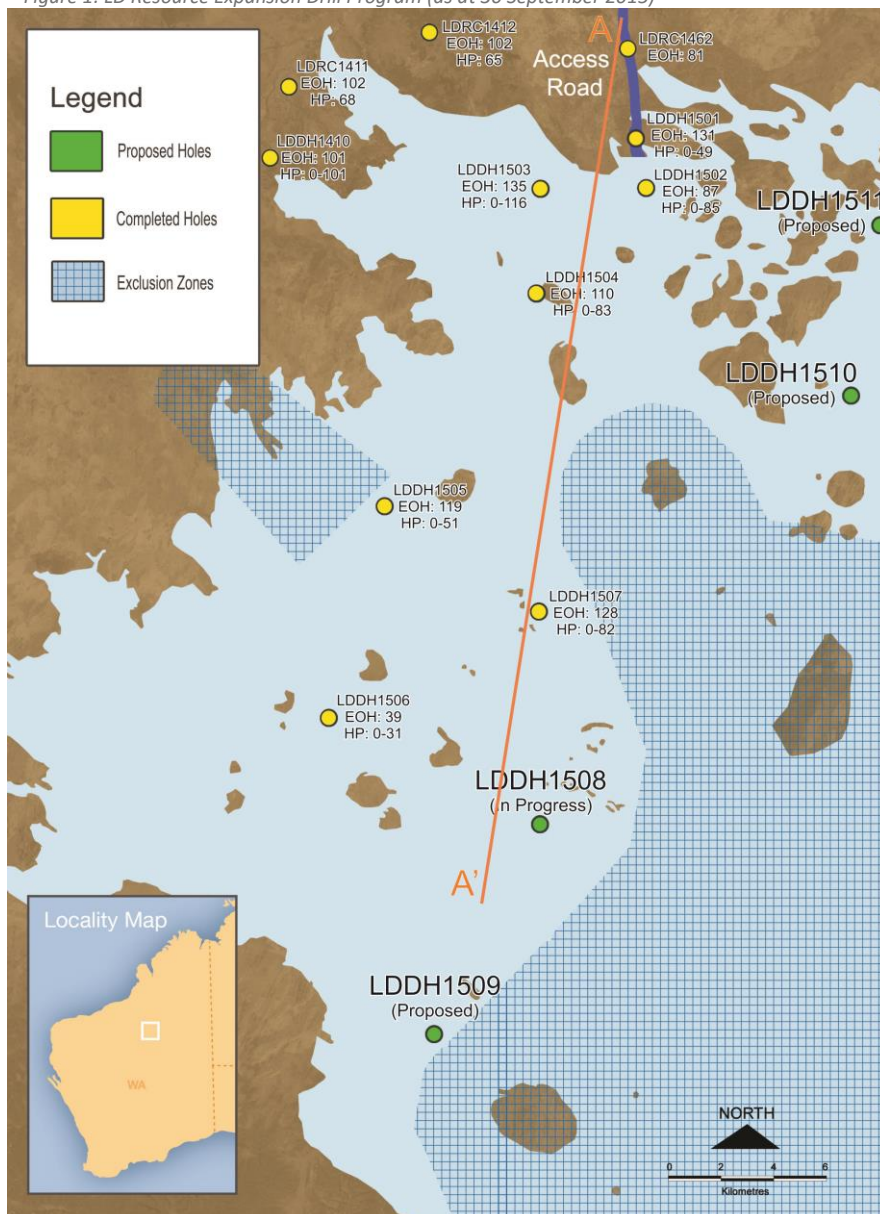
Important results from the drilling of LDDH1501-07 and analyses are as follows.

- 1) The average depth of holes LDDH1501-1507 was 88 metres. LDDH1506 was terminated at 39 metres when it entered cavernous ground and further core recovery was not possible. Average depth of the other six holes was 118 metres. Core recovery was generally good (80+%) except where holes entered voids (LDDH1506) or friable sandstone/running sand zones, particularly in holes LDDH1507-1508 (see Photos 4 & 5). While the heliportable coring rig is somewhat underpowered, performance is regarded as very good under the conditions and a tribute to the drilling crew on site.

## LD Potash Project

### Recent Drilling Results (cont.)

Figure 1: LD Resource Expansion Drill Program (as at 30 September 2015)



- 2) The average thickness of +40% brine content (i.e. 40+% porosity) sediments for the core holes was 75 metres. Excluding abandoned hole LDDH1506 the average was 83 metres.
- 3) The in-situ SOP content of the high porosity sediments was remarkably consistent averaging 6.88kg of SOP per m<sup>3</sup> of sediment. This includes noticeably higher grades in the near surface layer (0-10 metres). This effect has been reported earlier and is consistent with the previously reported LD Resource data (0-4 metres). The Magnesium Sulfate ("**SOM**") content of the same sediment profiles averaged 6.95kg/m<sup>3</sup> (excluding LDDH1506 data). The SOP and SOM figures and are non-weighted averages.

## LD Potash Project

### Recent Drilling Results (cont.)

Magnesium and Sulfate in the brines are at levels which will result in crystallisation of Potash in the form of Shoenite/Leonite upon the evaporation of brines.

- 4) The SOP content of the brines extracted from the cores likewise have been quite consistent and of excellent grade. The brine SOP grade averaged 12.74kg SOP per m<sup>3</sup> of brine, which is close to the average grade of the current shallow LD Resource (24.4Mt at 12.37kg/m<sup>3</sup> SOP).

**Table 1: Summary of In-situ Sediment & Brine SOP Results (LDDH1501-07)**

Hole ID	LDDH1501	LDDH1502	LDDH1503	LDDH1504	LDDH1505	LDDH1506	LDDH1507
Total Hole Depth	131m	87m	135m	110m	119m	39m <sup>(2)</sup>	128m
High Porosity Section of Hole (40+%)	0-49m	0-85m	0-116m	0-83m	0-51m	0-31m	0-82m
Moisture % (H <sub>2</sub> O) <sup>(1)</sup>	-	26.4%	24.7%	25.4%	22.2%	27.4%	21.8%
Mass Leached % (w/w) <sup>1</sup>	-	35.0%	32.8%	34.7%	30.1%	39.8%	30.4%
In-Situ SOP Grade (kg/m <sup>3</sup> ) <sup>1,3</sup>	-	6.94	5.86	6.80	6.48	9.54	6.78
In-Situ SOM Grade (kg/m <sup>3</sup> ) <sup>1,6</sup>	-	5.89	5.47	7.60	7.04	13.93	6.54
Core SG <sup>1</sup>	-	1.86	1.94	1.93	1.97	1.78	1.94
Porosity <sup>1,4</sup>	47.1%	54.5%	54.1%	57.7%	48.8%	61.5%	49.4%
Brine SOP Grade (kg/m <sup>3</sup> ) <sup>1,5</sup>	-	13.0	11.8	12.0	13.0	15.6	13.6
Brine SOM Grade (kg/m <sup>3</sup> ) <sup>1,5,6</sup>	-	10.8	11.0	13.4	13.4	22.3	12.5

**Explanatory Notes:**

- 1: Data reported in the table refers to the high brine content (Porosity) core section only. Numbers provided are non-weighted averages (approximates only). Additional data is provided for the deeper horizons in the Appendices.
- 2: Terminated in cavity at 39 metres.
- 3: SOP (K<sub>2</sub>SO<sub>4</sub>) content of in-situ sediment in kilograms of SOP per cubic metre of sediment.
- 4: The 'Porosity' figure is the (calculated) volume of brine leached from a sample of core versus the volume of the same core sample. Values calculated in this method correlate well with Porosities determined independently by SGS Laboratories.
- 5: Estimate of the SOP content in the brine entrained in the section of core being reported. The brine SOP figure is estimated assuming a certain brine SG based on the soluble salts leached from the core and the moisture content of the core.
6. SOM refers to Sulfate of Magnesium, MgSO<sub>4</sub>.

In respect of the brine SOP data it is important to note that the values quoted are non-weighted averages over the high porosity sections of the cores and are based on estimated in-situ brine SG values. In practice it is difficult to accurately assess the brine content of the core received due to seepage and evaporation losses during transit. While indicative only, the data presented are regarded as a very useful guide as to brine grades likely to result from pump testing of bore holes to be drilled in the same locations.

## LD Potash Project

### Recent Drilling Results (cont.)

Of particular significance in relation to the brine data is that notwithstanding the brine content of the sediments decreases (lower porosity) with depth, the SOP grade of the brine entrained in sediments remains reasonably high grade. This is encouraging in relation to brines recoverable from potentially high permeability sandstone/running sand horizons encountered at depth in several holes (see below).

- 5) **The key parameter from the drilling and testwork to date is the figure of soluble SOP content per m<sup>3</sup> of sediment: 6.88kg/m<sup>3</sup>.** This figure can be used directly to estimate in-situ SOP Resources within the area drilled when acceptable drilling density and grade parameters become available.
- 6) An extremely encouraging feature of recent drilling has been the discovery of substantial widths of high permeability friable sandstone and running sands at depth in several of the latest holes drilled.

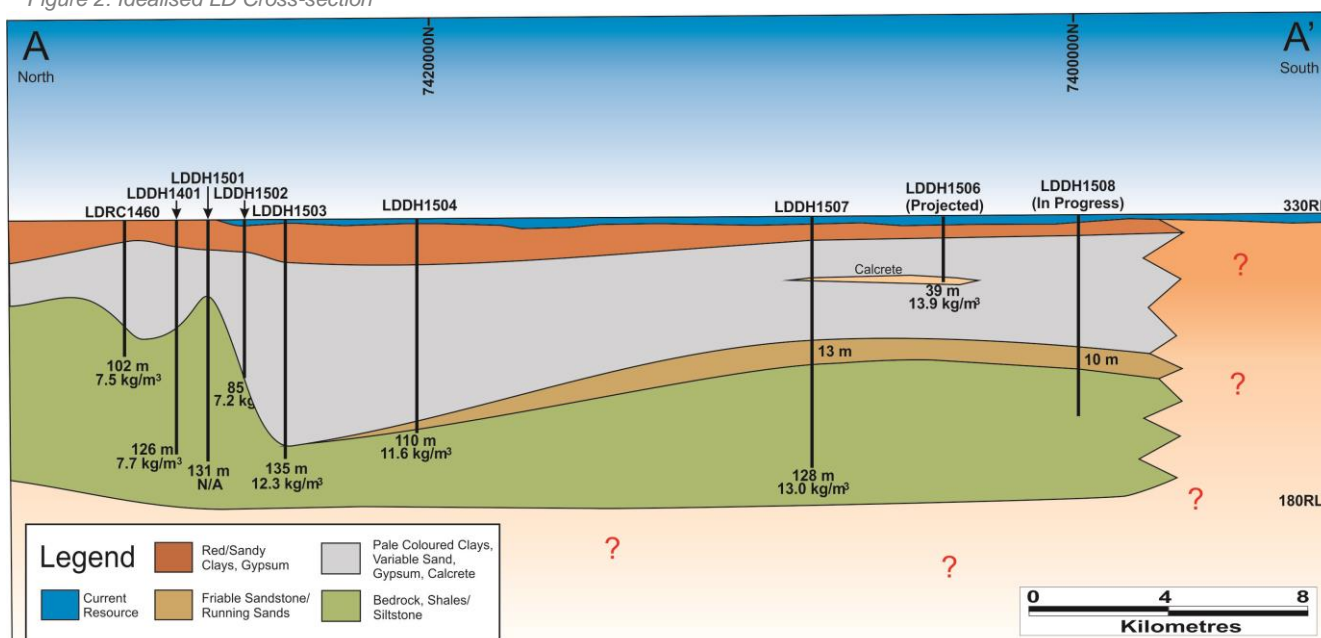
For example, in LDDH1507 the friable sandstone layer ran from approximately 67-83 metres while in LDDH1508 the horizon was from approximately 70-80 metres (see Photos 4 & 5). It appears that LDDH1507 & 1508 may have encountered significant Palaeochannel or deltaic sediments in the central south-eastern sector of LD.

Considerable additional drilling is required to define the aquifer volume parameters but the discovery is extremely encouraging in terms of potential brine flows and Resource recovery from the system.

**Importantly the SOP grade of the brine extracted from the high permeability zone of LDDH507 (69.4m depth) was excellent at approximately 10.6kg SOP/m<sup>3</sup> of brine.** Data for the high permeability zone in LDDH1508 will be available shortly.

A regolith profile of the lakebed sediments encountered in core holes LDDH1501-1508 is provided in Figure 2, below.

Figure 2: Idealised LD Cross-section





## LD Potash Project

### Recent Drilling Results (cont.)

Important features of the profile include:

- Near surface (1-1.5m) of slushy gypsum/sand/clay.
- Red brown sandy clays cemented by gypsum up to 15 metres thick in the northern sector of the lake thinning to the south (2-3m in LDDH1508). It is assumed this layer is derived from wind-blown sand and topsoil subsequently flooded and cemented together by crystalline gypsum.

Photo 1: Core – LDDH1507 (0.0 - 6.7m); High-grade near surface zone



Hole ID	LDDH1507
Sample Point	0.0-6.7m
In-Situ SOP Grade	8.25kg/m <sup>3</sup>
In-Situ SOM Grade	13.51kg/m <sup>3</sup>
Porosity	65.0%
Brine SOP Grade	12.5kg/m <sup>3</sup>

- Variable thicknesses of heavy clay interspersed with layers of gypsum and occasional calcrete. Significant brine flows occur from the gypsum and calcrete layers. However, the brine flows from these gypsiferous clay zones remains to be tested to establish their significance as an SOP Resource.

Photo 2: Core – LDDH1507 (30.8 – 34.2m)



Hole ID	LDDH1507
Sample Point	30.3 – 34.2
In-Situ SOP Grade	9.24kg/m <sup>3</sup>
In-Situ SOM Grade	5.79kg/m <sup>3</sup>
Porosity	53.7%
Brine SOP Grade	17.29kg/m <sup>3</sup>

- The gypsiferous clay zone thins to the south and gives way to a substantial layer (10-13 metres) of friable sandstone and coarse grained running sands. As mentioned earlier it appears that major inflow to LD comes from the southeast. This flow may have deposited coarse sandy material in a delta environment as it entered LD with the finer clayey solids transported further into the northerly sector of the lake.

## LD Potash Project

### Recent Drilling Results (cont.)

Further evidence of substantial brine flow into LD from the southeast is the presence of a large (surface) gypsum field extending from the eastern shoreline of LD almost to the centre of the lake.

Photo 3: Core – LDDH1507 (50.5 – 54.1m)



Hole ID	LDDH1507
Sample Point (m)	49.0 – 54.1
In-Situ SOP Grade	5.10kg/m <sup>3</sup>
In-Situ SOM Grade	3.02kg/m <sup>3</sup>
Porosity	47.4%
Brine SOP Grade	10.73kg/m <sup>3</sup>

Photo 4: Core – LDDH1507 (65.5 – 71.3m); Friable Sandstone/Running Sands



Hole ID	LDDH1507
Sample Point (m)	65.5 – 71.4
In-Situ SOP Grade	4.18kg/m <sup>3</sup>
In-Situ SOM Grade	4.27kg/m <sup>3</sup>
Porosity	37.9%
Brine SOP Grade	11.13kg/m <sup>3</sup>

Photo 5: Core – LDDH1508 (74.7 – 79.6m); Friable Sandstone/Running Sands



Hole ID	LDDH1508
Sample Point (m)	74.7 – 79.6
In-Situ SOP Grade	Unknown
In-Situ SOM Grade	Unknown
Porosity	Unknown
Brine SOP Grade	Unknown

## LD Potash Project

### Recent Drilling Results (cont.)

- e) A new hydrogeological model is being prepared for the LD system to assess the recharge input and its implications for brine extraction associated with various SOP production levels.

Photo 6: Core – LDDH1507 (83.4 – 87.5m); Lower porosity deeper and fresher sandstone horizon

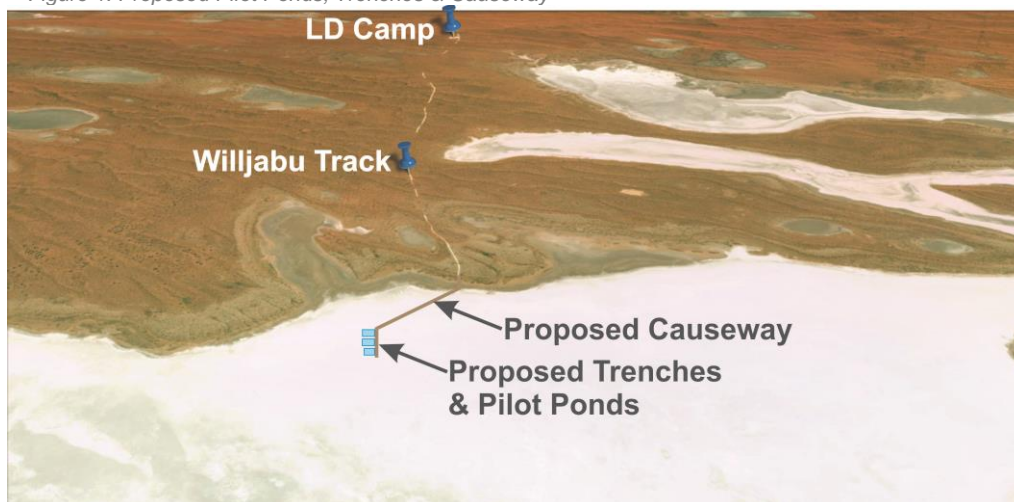
	
Hole ID	LDDH1507
Sample Point (m)	83.0 – 87.5
In-Situ SOP Grade	3.50kg/m <sup>3</sup>
In-Situ SOM Grade	6.00kg/m <sup>3</sup>
Porosity	30.8%
Brine SOP Grade	11.10kg/m <sup>3</sup>

## LD Potash Project

### Development

During the September quarter a Mining Proposal for Small Operations and accompanying Mine Closure Plan was lodged with the Department of Mines & Petroleum (“DMP”) for the construction of pilot ponds, trial trenching and an associated causeway.

Figure 1: Proposed Pilot Ponds, Trenches & Causeway



The works propose the construction of an access causeway to a brine trench and several small scale evaporation ponds (approximately Olympic pool size) on LD.



## LD Potash Project

### Development

The purpose of the ponds is to extract potassium, sulfate and magnesium salts and to conduct geotechnical, hydrogeological and operational investigations. These investigations will define design and cost parameters for brine supply and solar evaporation infrastructure required for a full scale Sulfate of Potash ("**SOP**") operation.

The LD Project Scoping Study (refer to ASX announcement dated 2 April 2015) estimated the total capital cost of the construction of trenching, evaporation ponds and supply infrastructure to be \$100 million.

The proposed works will examine construction methodologies as well as the requirement for specialist or conventional earthmoving equipment for production scale facilities with the aim of reducing this capital component.

In order to complete these earthmoving activities the Company recently acquired an amphibious excavator capable of traversing the surface of LD. An operator will be contracted to undertake the works.

*Figures 2 & 3: Company-owned Amphibious Excavator*



Of particular interest will be testing trench brine flows which will establish drawdown parameters for the design of the production trench network-spacing and depths.

A Program of Works ("**PoW**") was also submitted during the quarter for the drilling of a number of fresh water bores to the north of LD. This drilling aims to establish a low salinity water resource adequate for the SOP plant operations.

### Access/Haul Road Survey

A survey of the Talawana and Wiljabu (LD access road) Tracks was completed which will enable the Company to advance discussions with stakeholders with regard to transport of Sulfate of Potash (SOP) from the LD Project to port.

Access to the LD Project from Newman is via the Marble Bar Road, Jigalong Road, Balfour Downs Road and then the Talawana Track to the Project access road, the Wiljabu Track.



## LD Potash Project

### Development

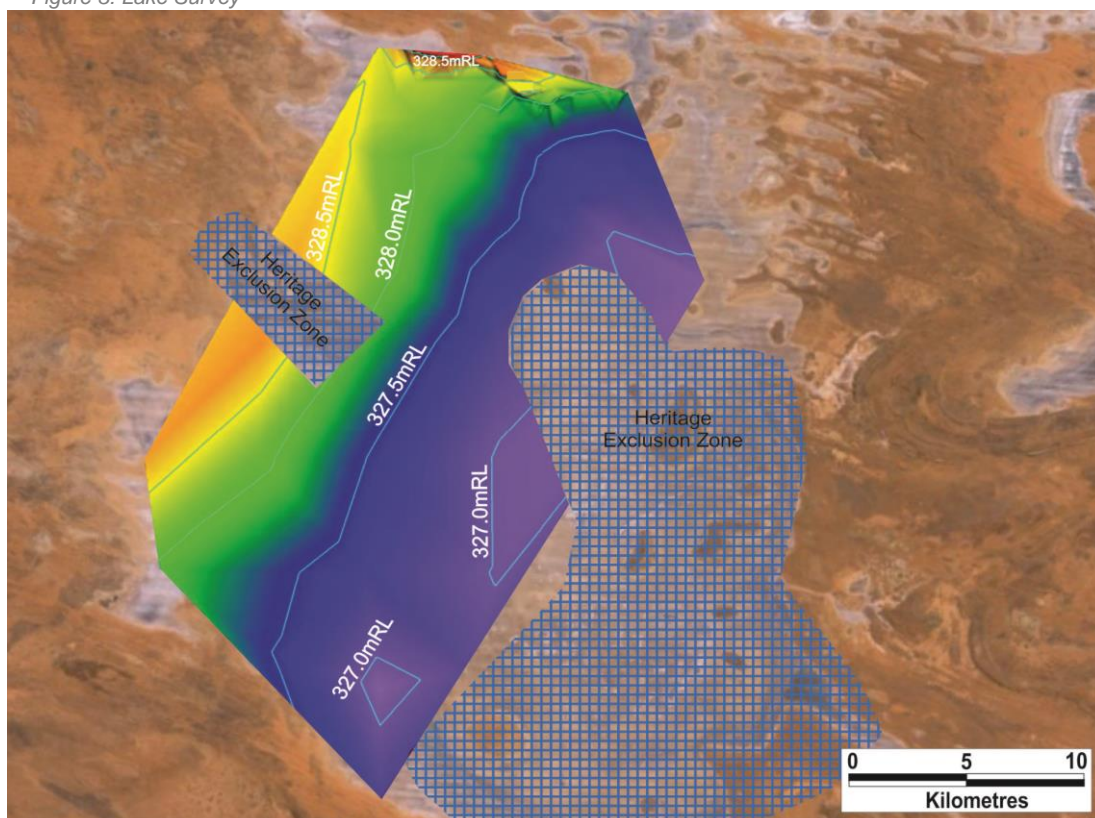
Figure 1: Haulage Route (LD to Port Hedland)



### Plant and Infrastructure Surveys

The Company also completed Reduced Level (RL) Surveys of relevant parts of Lake Disappointment, including the area in which it proposed plant and associated infrastructure will be located. Statutory surveys of LD Project Mining Lease 45/1227 have also been completed.

Figure 3: Lake Survey

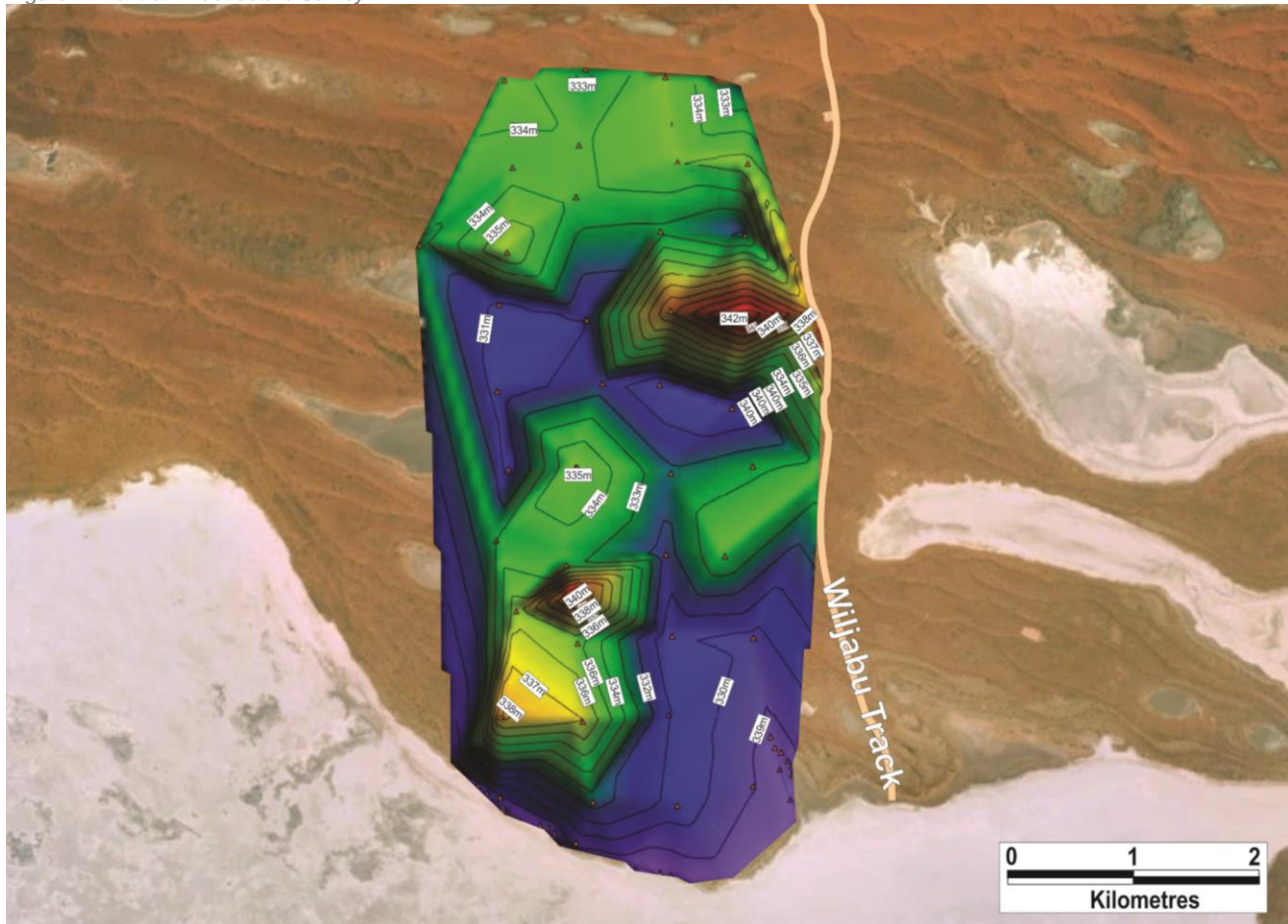


## LD Potash Project

### Development

Results of the survey indicate that the process plant and infrastructure can be located in reasonably elevated sites within close proximity to the LD evaporation pond system. Particularly pleasing was the low variance of surface RL's over the lake surface allowing the construction of evaporation ponds and trenching networks as contemplated within the LD Scoping Study.

Figure 4: Plant & Infrastructure Survey





## Dora Potash Project

With the Company's focus on the LD Project limited work has been completed during the quarter at the Dora Project.

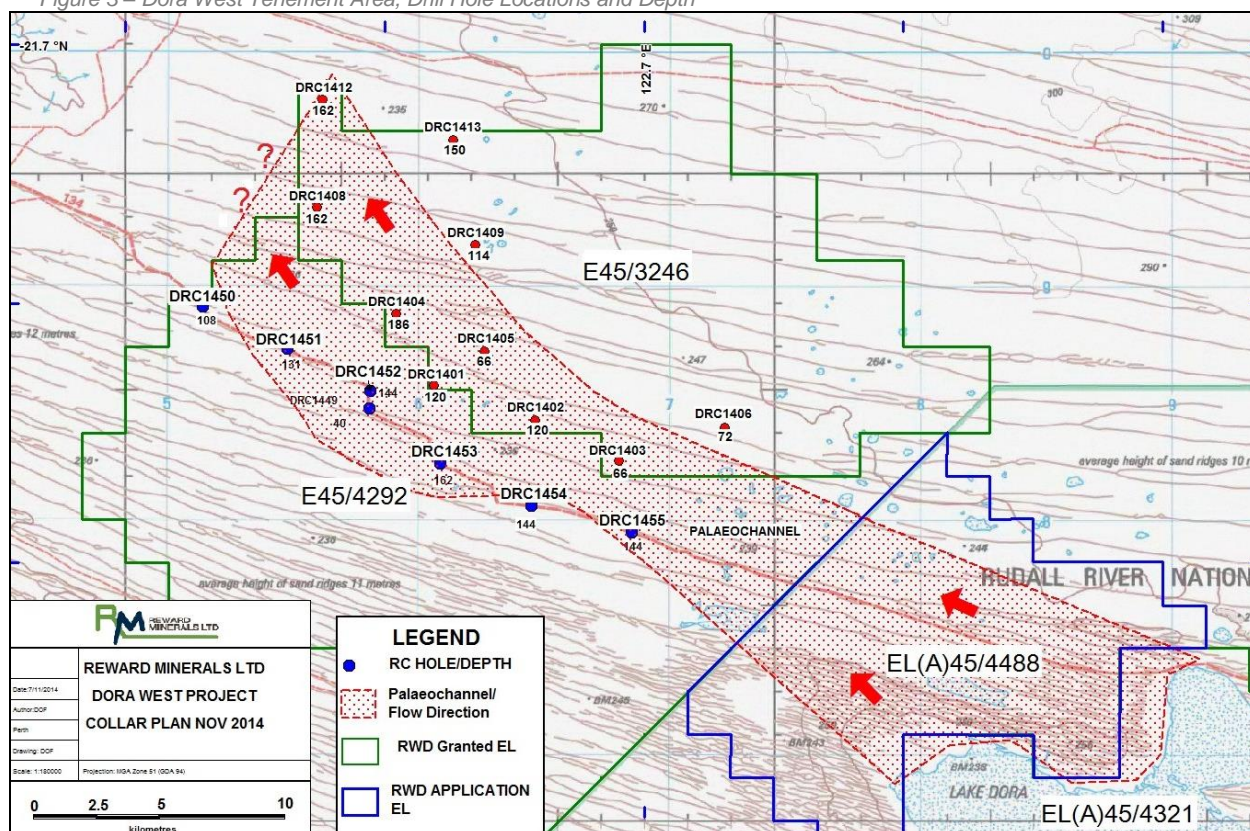
Earlier exploration at Dora targeted the palaeovalley which traverses the granted tenements located north-west of Lake Dora proper. To date 17 holes have been drilled. The static water table (SWT) in the drilling area is generally less than four metres below surface. Heavy brine flows encountered in seven of the holes drilled.

Brines recovered from the holes drilled were relatively low in Total Dissolved Salts ("TDS") indicating they are well under saturation levels, presumably due to incoming surface runoff. The chemistry of the brines is favourable in terms of K:Mg, SO<sub>4</sub>:K and Na:K ratios however the dilution of the Palaeochannel brines by fresh ground water percolating from the margins of the valley significantly reduces the SOP content of in-situ brines. While dilution is not ideal, favourable evaporation conditions in the region counteract the dilution effect of surface waters to a significant degree.

Additional drilling and brine analysis data is required to better define Palaeochannel depth and width dimensions for Resource estimation purposes.

**Refer to the announcement dated 11 October 2014 for full details and analytical results.**

Figure 3 – Dora West Tenement Area, Drill Hole Locations and Depth



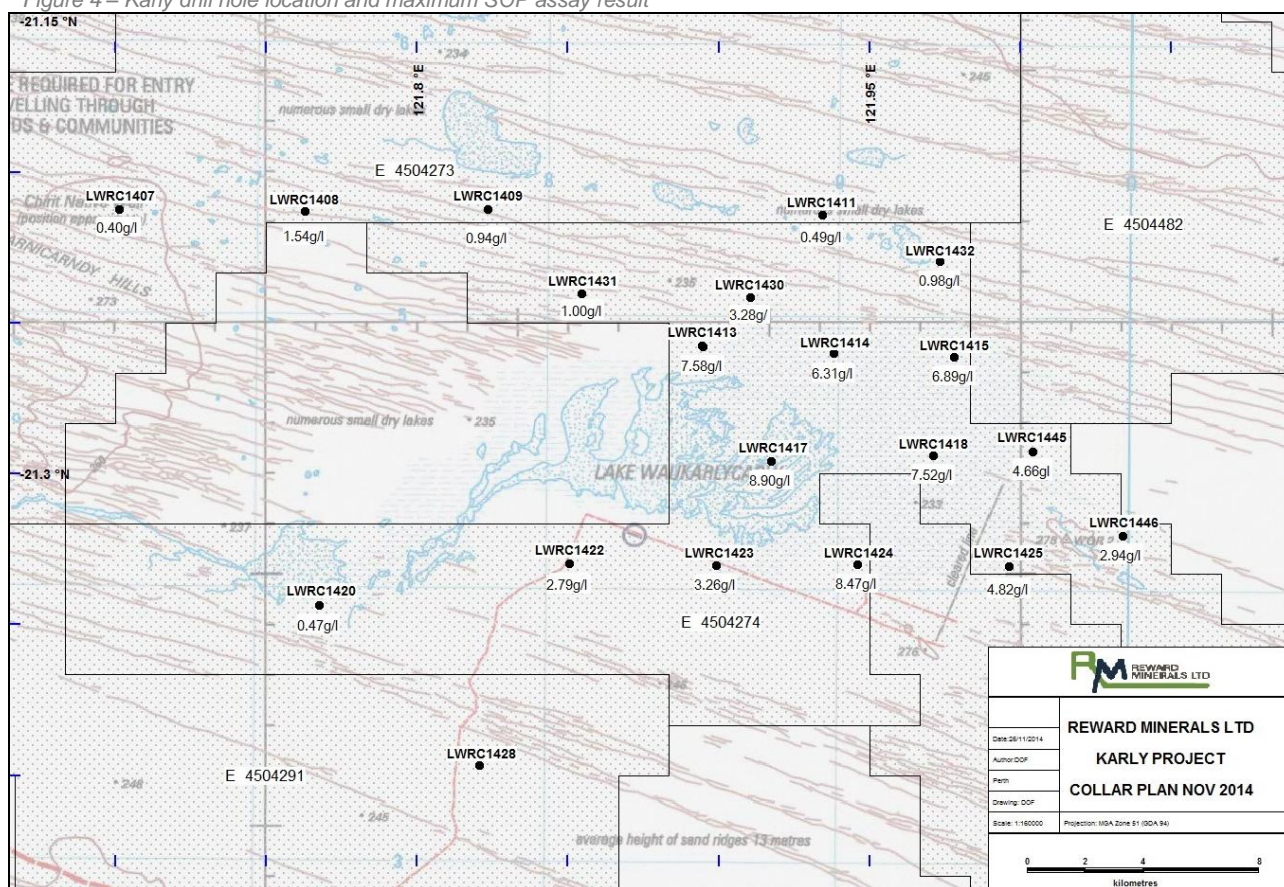


## Karly Potash Project

In line with the Company's focus on its flagship LD Project limited work was performed during the quarter at the Karly Project.

During 2014 the Company completed a maiden drilling program at the Karly Project. A total of 20 RC drill holes and one cased borehole were completed for a total of 2,909 metres. The widely spaced holes covered a north-west south-east distance of approximately 35km and an east-west distance of approximately 20km at the widest point (see Figure 5 below).

Figure 4 – Karly drill hole location and maximum SOP assay result



The Static Water Level ("SWL") was less than two metres in all areas tested therefore the ground drilled was effectively saturated with water or brine from near surface. Chemistry and ion ratios of brines encountered were similar to those observed at the LD and Dora West Projects and hence suitable for SOP recovery following evaporation.

Data recovered confirmed the Palaeovalley concept and the presence of a large Palaeo-system. Based on brine flows into the Waukarlycarly Embayment from a south-easterly direction which concentrate in the vicinity of Lake Waukarlycarly providing brines with SOP values of up to 9kg/m<sup>3</sup> near the evaporation epicentre. Considerable additional exploration is required to provide a meaningful assessment of the Waukarlycarly Embayment Potash potential.

Refer to the announcement dated 3 December 2014 for full details and analytical results.

For further information please visit our website: [www.rewardminerals.com](http://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. This information was prepared and first disclosed under the JORC Code 2004. It has not been updated since to comply with the JORC Code 2012 on the basis that the information has not materially changed since it was last reported. 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 2004 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 September 2015**

<b>Tenement</b>	<b>Status</b>	<b>RWD Ownership at Quarter End</b>	<b>% Interest Acquired During the Quarter</b>	<b>% Interest Disposed During the Quarter</b>
<b>LD, Western Australia</b>				
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%	-	-
E69/2902	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%	-	-
EL(A)69/3275	Application	-	-	-
EL(A)69/3276	Application	-	-	-
EL(A)69/3277	Application	-	-	-
<b>Lake Auld, Western Australia</b>				
E45/2804	Granted	100%	-	-
<b>Lake Winifred, Western Australia</b>				
E45/4272	Granted	100%	-	-
<b>Dora West, Western Australia</b>				
E45/3246	Granted	100%	-	-
E45/4292	Granted	100%	-	-
EL(A)45/4321	Application	-	-	-
EL(A)45/4488	Application	-	-	-
<b>Karly, Western Australia</b>				
E45/4273	Granted	100%	-	-
E45/4274	Granted	100%	-	-
E45/4291	Granted	100%	-	-
E45/4293	Granted	100%	-	-
E45/4294	Granted	100%	-	-
E45/4299	Granted	100%	-	-
E45/4324	Granted	100%	-	-
EL(A)45/4482	Withdrawn	-	-	-