REWARD MINERALS LTD

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RWD

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**CASH POSITION**
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*Non-Executive Director*

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**KEY PROJECTS**

LD Project
Karly Project
Dora Project

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# LD SULFATE OF POTASH PROJECT DELIVERS GLOBALLY SIGNIFICANT BRINE RESOURCE

## Resource Expansion to 564Mt of SOP

## Highlights

- **LD Mineral Resource increased to 564 million tonnes of SOP with an average brine grade of 13.7kg/m$^3$.**
- **Mineral Resource places the LD Project as a globally significant SOP deposit.**
- **Mineral Resource based on a surface area of 1,241km$^2$ to an average depth of 63m and using a lower porosity cut-off of 40%.**
- **Mineral Resource estimate compiled by independent environmental and hydrogeological specialists Pendragon Environmental Solutions.**
- **Drilling and hydrogeological studies are ongoing aimed at expanding the Mineral Resource and better defining extractability parameters.**

Reward Minerals Limited ("**Reward**" or "**the Company**") is pleased to advise that it has reached a significant milestone in the Company's path to developing the 100% owned LD Sulfate of Potash ("**SOP**") Project located in Western Australia.

Following recent drilling the LD Project now contains a Mineral Resource estimate (JORC 2012) of 564 million tonnes of SOP contained in brine grading 13.7kg/m$^3$. This grade is equivalent to approximately 7.1kg/m$^3$ of lakebed sediment.

*Table 1: LD Project SOP Mineral Resource Estimate*

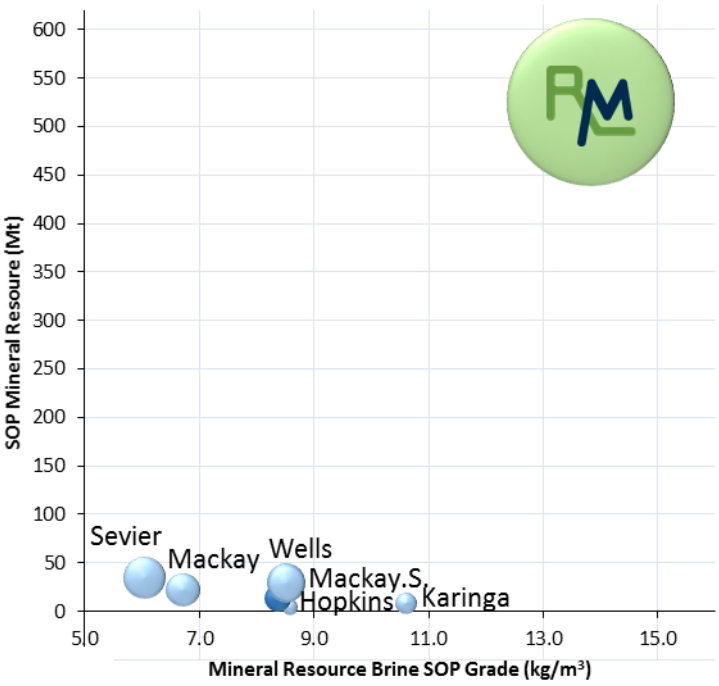
| Category | Area | Avg. Thickness | Volume | Avg. Porosity | Brine Volume | Brine SOP Grade | SOP Mineral Resource |
|---|---|---|---|---|---|---|---|
| Indicated | 749km$^2$ | 67m | 46bm$^3$ | 53% | 27bm$^3$ | 13.8kg/m$^3$ | 359Mt |
| Inferred | 492km$^2$ | 58m | 30bm$^3$ | 51% | 14bm$^3$ | 13.6kg/m$^3$ | 205Mt |
| **Total** | **1,241km$^2$** | **63m** | **78bm$^3$** | **52%** | **40bm$^3$** | **13.7kg/m$^3$** | **564Mt** |

*Figures have been rounded to 2 significant numbers*

Pendragon Environmental Solutions ("**PES**"), an independent hydrogeological specialist, compiled the estimate and is involved in the ongoing hydrogeological works and modelling being undertaken at the Project.

The Mineral Resource estimate is only for the exposed surface area of the lake. Earlier drilling indicated significant Resource potential extends beyond the lake edge and at depth. The resource also uses a 40% porosity cut-off.

*Figure 1: Brine Resource Bubble Chart*




## The LD Project contains the **Largest and Highest Grade** Undeveloped SOP Brine Resource in the World

Deposit located in the highest evaporation region in Australia

Large lake surface area ideal for pond construction and trenching

### Managing Directors' Comment

Reward's Managing Director Michael Ruane commented: "The 2015 LD drilling program has yielded excellent results not only in terms of the size of the Mineral Resource but also having favourable brine grade and chemistry. Favourable near-surface Magnesium-to-Potassium ratios and down-hole Potassium grades provides for well-established SOP recovery processes. The Company is in the process of defining the extractability parameters of the Mineral Resource brine and will provide results from on lake pumping trials shortly. Overall, this Mineral Resource confirms the significance of the LD basin as a potentially viable source for a long life SOP operation."

### LD SOP Project Background

The LD SOP Project is located within the Little Sandy Desert, northwest Western Australia and comprises of 5,305km$^2$ of granted Exploration Licences. Resource drilling has been underway at the Project since March 2015 with the aim of expanding the Company's previously stated Indicated Mineral Resource estimate contained in the upper 4 metres of the lake.

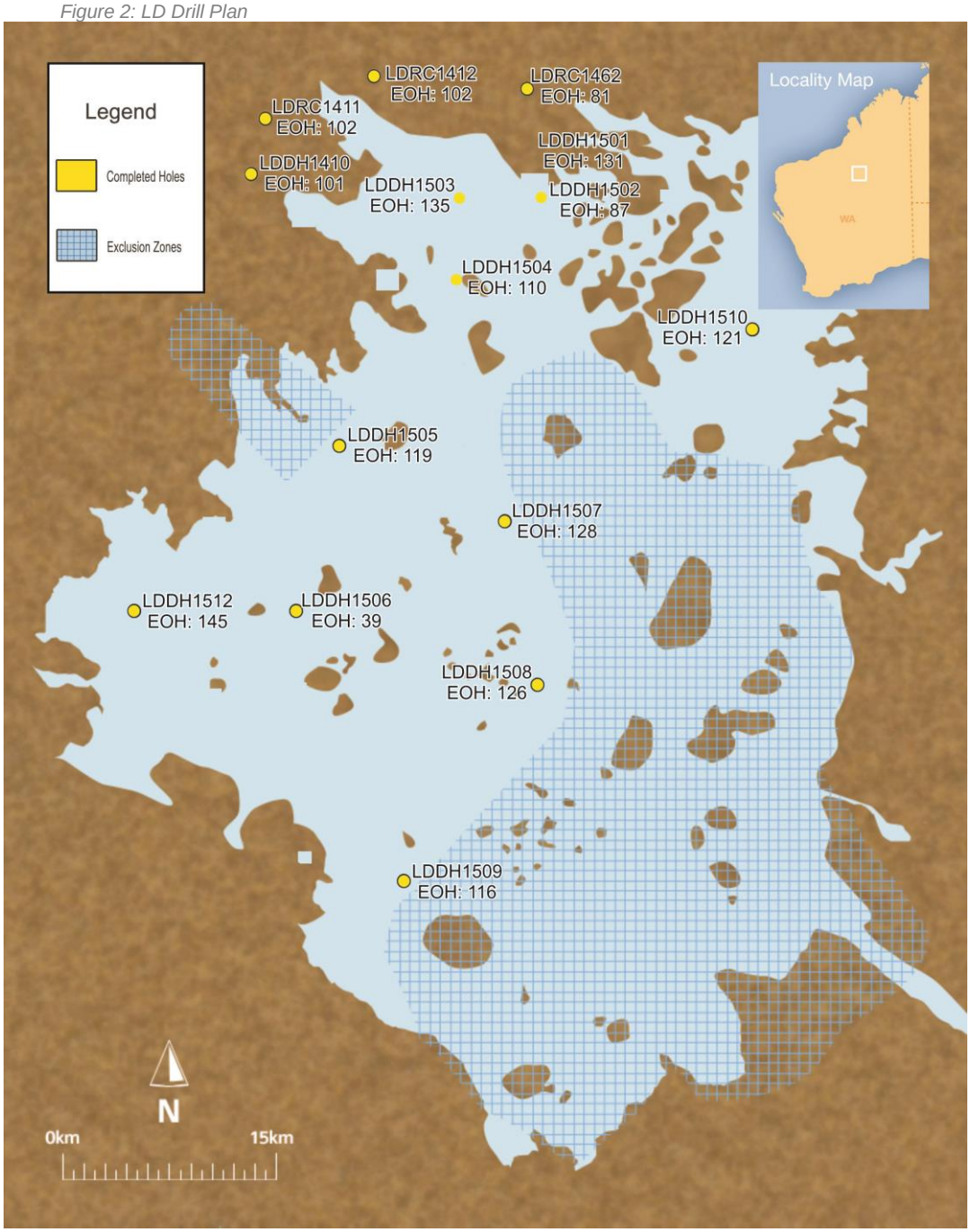
To the date of this release 12 vertical core holes have been completed followed by chemical analyses and gravimetric moisture (porosity) testing of the recovered core. This drilling and analytical work provides the basis of the Mineral Resource estimate compiled by PES.

Reward's activities have concentrated on exploration and development of SOP Resources in the region since early 2013. Works completed to date indicate very favourable brine grade/chemistry and evaporation parameters (high evaporation, low rainfall and low humidity, etc). The availability of substantial areas of flat lake surface and favourable geotechnics for constructing evaporation ponds are also important benefits of the Project site.

## Geology and Sampling Results

During 2015 the Company drilled 11 diamond holes to an average depth of 114 metres on LD. Drilling typically encountered clayey sediments from surface to 80+ metres depth before entering sandy/weathered or competent sediments. Holes were normally terminated after penetrating ±10 metres of fresh bedrock or as limited by rig power constraints.

*Figure 2: LD Drill Plan*




Cores were delivered from LD to Reward's in-house laboratory where over 450 samples were prepared for brine analysis at ALSM Laboratories. The in-house process was reviewed by PES and independent samples were analysed per Quality Assurance/Quality Control regimes.

Entrained brine retrieved from cores from all holes provided surprisingly consistent levels of Potassium and Sulfate while Magnesium levels fluctuated somewhat downhole with the highest values typically near the lake surface.

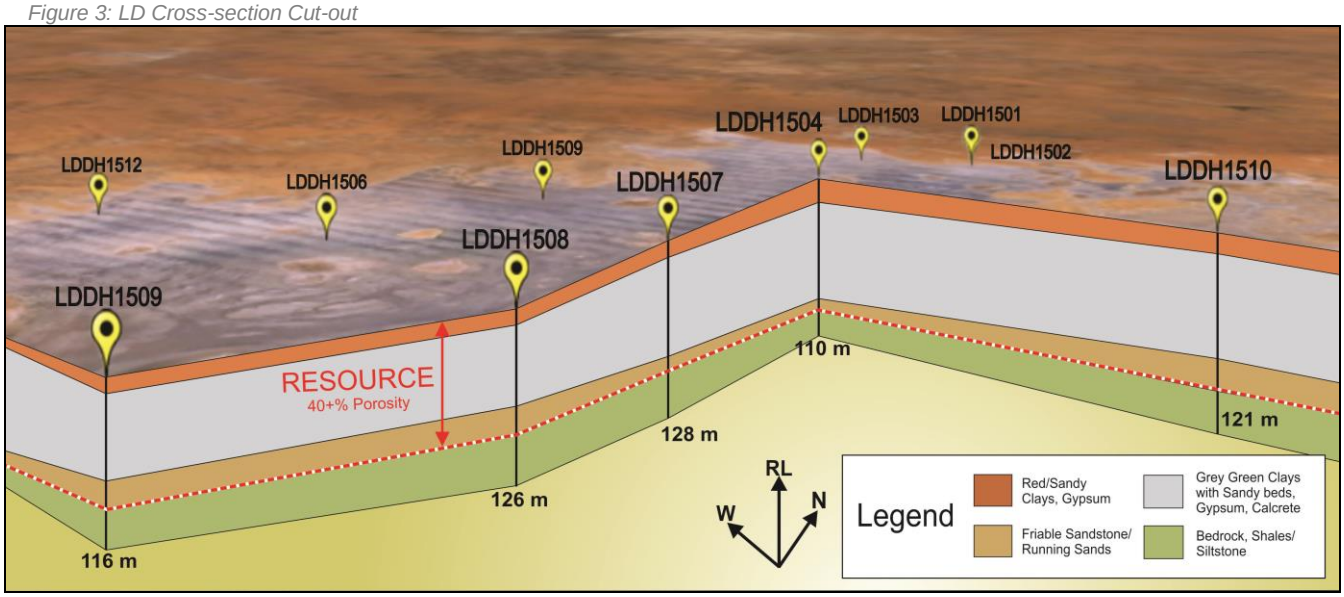
Reward established a maiden Mineral Resource at LD in 2007 based on shallow drilling (4 vertical metre average) noting high Potassium values and favourable chemistry for the production of SOP. The findings from this recent program correspond well with the 2007 data for the near surface horizons.

## Resource Estimation

While it has been demonstrated from earlier drilling that Potassium bearing brines are contained in lake and paleovalley sediments throughout the LD sub-basin, the Mineral Resource estimate is confined to 1,241km$^2$ within the surficial boundaries of the lake. The Mineral Resource estimate is based on core holes LDDH1501-10 located with a hand held GPS. Cross-sectional core samples were taken on a 1.5 to 2 metre vertical spacing (see Appendix 2 for details).

The Mineral Resource model is based on topography, stratigraphy and core analyses. The playa surface represents the top of the brine aquifer with accurate elevation measurements from recently completed surveys (refer to ASX Announcement 26 August 2015). Stratigraphy is documented via detailed geological logging. Drill hole data includes specific gravity of the sediments, gravimetric moisture content (weight/weight) and analyses of brine extracted from the core samples (for full details please refer to 2015 LD drilling exploration results ASX Announcements). Gravimetric moisture content was used to directly calculate porosity given lakebed sediment samples used in the resource calculation were fully saturated. Samples were also submitted to SGS and other independent laboratories for porosity and density determinations. Only sediments with a porosity of above 40% were included in the Mineral Resource estimate.

*Figure 3: LD Cross-section Cut-out*




The total Mineral Resource is contained within 78 billion cubic meters (bm$^3$) of sediments to an average depth of 63 metres below the lake surface. This Mineral Resource estimate does not represent the minable (extractable) portion of the SOP, nor does it include brine recharge likely to occur from areas outside the Mineral Resource boundary, particularly upon drawdown of Mineral Resource brines.

While the Mineral Resource estimate includes areas subject to an exclusion zone under the LD Project Indigenous Land Use Agreement, the consistency in stratigraphic sequences and sediments and earlier exploration has allowed for an Inferred Mineral Resource estimate within these areas. A breakdown is provided in Table 2 below.

*Table 2: LD Mineral Resource Estimate Break-down*

| Category | Avg. Thickness | Volume | Avg. Porosity | Brine Volume | Brine SOP Grade | SOP Mineral Resource |
|---|---|---|---|---|---|---|
| **Mineral Resource Estimate Outside of Exclusion Zone** | | | | | | |
| Indicated | 67m | 48bm$^3$ | 53% | 25bm$^3$ | 13.8kg/m$^3$ | 359Mt |
| Inferred | 58m | 16bm$^3$ | 42% | 0.7bm$^3$ | 11.7kg/m$^3$ | 8Mt |
| **Mineral Resource Estimate Within Exclusion Zone** | | | | | | |
| Inferred | 58m | 28bm$^3$ | 51% | 14bm$^3$ | 13.6kg/m$^3$ | 197Mt |
| **Total** | **63m** | **78bm$^3$** | **52%** | **40bm$^3$** | **13.7kg/m$^3$** | **564Mt** |

*Note: Refer to Figure 2 for identification of the areas within the Exclusion Zone, rounded to 2 significant numbers*

Due to the hydrogeology and postulated direction of flow throughout the LD sub-basin and paleovalley system the drainage of brines from the exclusion area is expected to occur during the course of production at the LD Project.

## Upcoming Resource Definition Activities

Brine pumping trials from trenches and cased bore holes are about to commence and will provide information on the hydraulic characteristics of the various strata within the Resource profile. This data will provide estimates of specific yield and brine drawdown characteristics to allow modelling of an extractable Mineral Resource estimate and Mineral Reserve. Core drilling on LD has indicated significant thicknesses (10-15m) of highly transmissive porous/fractured sandstone/running sand horizons in most holes.

Yours faithfully,

***Michael Ruane***
***Director***
***on behalf of the Board***

**Competent Persons Statement**

The information in this report that relates to Mineral Resources or Ore Reserves is based on information compiled by Mr Carel van der Westhuizen, a Competent Person who is a Member of The Australian Institute of Geoscientists, a Certified Environmental Practitioner (CEnvP) of the Environment Institute of Australia and New Zealand and a member of the International Association of Hydrogeologists. This information was prepared and disclosed under the JORC Code 2012. Mr van der Westhuizen is employed by Pendragon Environmental Solutions Pty Ltd and 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 van der Westhuizen 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 Brine and Sediment Assays and Analyses is based on information compiled by Dr Geoff Browne, a Competent Person who is a Member of The Australasian Institute of Mining and Metallurgy. Dr Browne is a consultant to Reward Minerals Ltd. Dr 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'. Dr Browne 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 Exploration Results, other than Brine and Sediment Assays and Analyses, 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.

## APPENDIX 1: LD Drill Hole Location

| Hole ID | East (51) | North (51) | Depth (m) | Dip |
|---|---|---|---|---|
| **LDDH1501** | 481267 | 7426549 | 131 | -90 |
| **LDDH1502** | 481565 | 7425422 | 87 | -90 |
| **LDDH1503** | 477902 | 7424581 | 135 | -90 |
| **LDDH1504** | 477755 | 7420600 | 110 | -90 |
| **LDDH1505** | 471900 | 7412600 | 119 | -90 |
| **LDDH1506** | 469900 | 7404600 | 39 | -90 |
| **LDDH1507** | 477900 | 7408599 | 128 | -90 |
| **LDDH1508** | 478044 | 7400513 | 126 | -90 |
| **LDDH1509** | 473900 | 7392600 | 116 | -90 |
| **LDDH1510** | 490503 | 7416790 | 121 | -90 |
| **LDDH1512** | 461900 | 7404600 | 145 | -90 |

# Appendix 2 – JORC Table

**Section 1 Sampling Techniques and Data**

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| ***Sampling techniques*** | *Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.* | The holes were drilled by an experienced in-house team using a heliportable coring rig recently acquired by the Company. Holes are nominally ϕ96mm (HQ) with core recovered being ϕ60-63mm. Core recovery varied significantly but was generally over 80%. Poor core recovery occurred in coarse grained/sandy horizons and in cavernous zones where mud circulation was lost.<br>The core was logged for stratigraphic and geological interpretation by a professional contract geologist. On site sampling was limited to SG measurement of brine solutions recovered during drilling. Cores were delivered to Perth on completion for all subsequent analytical procedures. |
| | *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* | Cores from the drilling were photographed and then wrapped in a plastic film sleeve prior to packing into core trays of appropriate size for transport.<br>The aim of the plastic wrapping was to minimize the water loss from the core material during transit to Perth. |
| | *Aspects of the determination of mineralisation that are Material to the Public Report.* | The essence of the recent sampling is to establish the quantity of soluble salts entrained in the core at different levels (depths). Owing to difficulties involved in cutting very wet core longitudinally (conventional procedure) cross sectional samples were selected at regular (1.5m-2.0m) intervals downhole for analysis. Samples were generally 500-800 grams wet weight and 100-150mm in length.<br>Initially the core SG was determined by the conventional wax-cover/water immersion procedure. Wet core sections were then cut longitudinally and disaggregated. A sample of the wet material (50-100g) was washed with a known mass (ca.500g) of water at 80ºC. The water leach test work was conducted by an experienced metallurgist consultant Dr Geoff Browne with analysis of the leach brines by ALS Ammtec Laboratories.<br>Combination of the analysis of the leach solutions and the wet core SG provides a reasonable estimate of the mass of soluble Potassium (K) and other ions per unit weight (tonnes) of core. From this figure and the SG of the wet core sample the value for the mass of soluble K, Mg, Na, Cl and $SO_4$ per $m^3$ of lake |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | | sediment can be calculated and used as the basis for estimation of the in-situ SOP Resource.<br>An approximate composition of the brine entrained in the core samples can be obtained from the mass of the soluble ions extracted (g/kg of core) divided by the total mass loss which occurs during the washing procedure – i.e. kg of K or SOP per tonne of brine. To convert to kg K per $m^3$ of brine the SG of the entrained brine must be known. Currently Reward does not have definitive data for the brine SG values. Approximate values will become available from sampling of the brine at different levels in the core holes drilled but pumping trials will be required to provide accurate assessment of brine composition parameters.<br>The data for SOP and $MgSO_4$ content in the (core) brine are approximations based on brine SG values versus Total Dissolved Solids in concentrated sea water brines provided in Baseggio – 4th Symposium on Salt (The Composition of Sea Water and Its Concentrates; Gino Baseggio, Morton Salt Company; www.salt-partners.com).<br>The washing procedure used overestimates Calcium (Ca) and Sulfate values in the entrained brine. This results from dissolution of much more gypsum from the core than would occur in the high density brine entrained naturally in the cores sampled to date.<br>The Total Dissolved Ion concentrations for the (core) entrained brines have generally exceeded 180g/litre hence the $CaSO_4$ solubility in these brines (in-situ) should not exceed 3g/l. To address this, the Ca and SO4 figures quoted for the brine analyses have been corrected using the Baseggio data comparison.<br>In general terms, Resource estimations should be made on the basis of kg SOP, SOM, etc. per $m^3$ of lakebed sediment. For completeness, Resource estimates were also made on the basis of porosity and volume/analysis (kg SOP and SOM per $m^3$) of brine entrained in lakebed sediments.<br>An alternative approach is to estimate the Resource on the basis of sediment porosity and composition of the brine entrained in the sediment. This approach was used to provide the Resource estimate reported herein. Porosities were estimated on the basis of determinations of mass loss which occurs on drying of the core samples to constant weight at 110ºC coupled with laboratory analyses of porosity and density. |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | | Importantly the Resource calculated by either methodology resulted in very similar estimates from the samples recovered via the drilling undertaken.<br>The Company has quoted K as SOP and SOM on the basis that the brines extracted contain more than sufficient sulfate for these salts to crystallise as sulfates, more specifically Schoenite, upon evaporation of the brines. |
| | *In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.* | See "drilling techniques" below. |
| ***Drilling techniques*** | *Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).* | Core Drilling was done with a heliportable diesel drive rig; depth capacity 150 metres (HQ – NQ Core). |
| ***Drill sample recovery*** | *Method of recording and assessing core and chip sample recoveries and results assessed.* | See logging below. |
| | *Measures taken to maximise sample recovery and ensure representative nature of the samples.* | Core was taken to assess core percentage recovery during logging. All available core was analysed as indicated herein. |
| | *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.* | Total core logged and photographed. |
| ***Logging*** | *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* | See above. |
| | *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.* | The core logging is qualitative in nature. |
| | *The total length and percentage of the relevant intersections logged.* | See logging above. |
| ***Sub-sampling techniques and sample*** | *If core, whether cut or sawn and whether quarter, half or all core taken.* | See sampling techniques above. |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| ***preparation*** | | |
| | *If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.* | Core. See above. |
| | *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* | Core sections were collected at 1.5-2.0m intervals and analysed separately.<br>Solid samples recovered have been retained for future analysis. |
| | *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* | As above. |
| | *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.* | As above. |
| | *Whether sample sizes are appropriate to the grain size of the material being sampled.* | Core samples collected regarded as representative of a particular stratigraphic section but also see above notes. |
| ***Quality of assay data and laboratory tests*** | *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* | The brine samples collected from leaching of the core sections were analysed at a NATA accredited independent laboratory (Australian Laboratory Services Ltd, ALS Metallurgical); using Australian, International and Internal standards and methods to calibrate equipment and for analytical procedures.<br>Samples for porosity determinations were submitted to SGS, E-Precision Laboratory and Soil and Water Group using Australian Standards and in-house methods and procedures.<br>Blanks, duplicates and spiked samples have been submitted on a regular basis with exploration samples sent to laboratories. |
| | *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* | No field analyses were undertaken. Samples were delivered to ALS and other laboratories after Company labelling/recording for security and assessment purposes. Chloride analysis conducted in house. |
| | *Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.* | See above.<br>NATA accredited laboratories were used together with duplicate sampling. Laboratory certificates were assessed to ensure results confirm expectations and appropriate QA/QC. |
| ***Verification of sampling and assaying*** | *The verification of significant intersections by either independent or alternative company personnel.* | See sampling techniques section above. |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | *The use of twinned holes.* | Individual holes only. |
| | *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* | Data storage as PDF/Excel files on Company PCs in Perth. |
| | *Discuss any adjustment to assay data.* | See Material Aspects above. |
| ***Location of data points*** | *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* | Collars of the holes were located by GPS (±5m). Reduced levels of hole collars were based on a recent topographical survey of LD by a licenced surveyor. The survey confirmed RL variances of less than 0.5m over 40km of the LD surface in a north-south direction and less than 1m over 30km in an east-west direction. |
| | *Specification of the grid system used.* | UTM grid – GDA 94 Z51 |
| | *Quality and adequacy of topographic control.* | See above regarding RLs. |
| ***Data spacing and distribution*** | *Data spacing for reporting of Exploration Results.* | See Figure 1 and Table 1. |
| | *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* | Drill hole spacing was variable, ranging from 3km to 10km in distance across the lake and was not based on a grid due to soft ground conditions limiting access to drill targets/sites.<br>Data from a total of 10 core holes used in the estimation indicate that the sediments are near horizontal and continuous, despite variations in thickness, across the lake. |
| | *Whether sample compositing has been applied.* | No. |
| ***Orientation of data in relation to geological structure*** | *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* | See above. |
| | *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.* | No sample bias. |
| ***Sample security*** | *The measures taken to ensure sample security.* | All samples were clearly marked and secured onsite before being transported and submitted to independent laboratories (ALS and others) clearly labelled with Company identifiers only. |
| ***Audits or reviews*** | *The results of any audits or reviews of sampling techniques and data.* | The Company and independent Consultants undertake detailed and regular data quality assurance, reviews and cross checks to verify |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | | the accuracy of all data and results. |

**Section 2 Reporting of Exploration Results**

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| ***Mineral tenement and land tenure status*** | *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* | Tenements drilled were E45/2801, E45/2802, E45/2803, E69/2156, E69/2157, E69/2158 and E69/2159 and are registered 100% in the name of Holocene Pty Ltd (Reward Minerals Ltd). Drilling and sampling was conducted in conjunction with Martu monitors within the Martu Determination Area. |
| | *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.* | Granted tenement subject to State Deed and Indigenous Land Use Agreement with the Martu Traditional Owners. |
| ***Exploration done by other parties*** | *Acknowledgment and appraisal of exploration by other parties.* | No known previous exploration performed by other parties on the exploration area. |
| ***Geology*** | *Deposit type, geological setting and style of mineralisation.* | The area drilled comprises the surface of a playa lake believed to contain buried paleovalleys or basins containing saline water/brines. |
| ***Drill hole Information*** | *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:*<br>*easting and northing of the drill hole collar*<br>• *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar*<br>• *dip and azimuth of the hole*<br>• *down hole length and interception depth*<br>• *hole length.*<br>*If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.* | Resource definition drilling comprised of 10 diamond core drill holes drilled to a depth of between 39m and 135m. All holes drilled were vertical (-90 dip).<br>See Appendix 1 above.<br>RLs not available for individual holes but the lake surface being drilled is extremely flat over large distances (RL±0.5m).<br>See Appendix 1.<br>See Appendix 1. |
| ***Data aggregation methods*** | *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.* | No grade cut-off used due to the uniform nature of assay data received. Assay data is numerous with frequent and regular intervals therefore no weighting was utilised.<br>A Porosity cut-off was used to remove layers with less than 40% porosity. |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* | No aggregation of results. |
| | *The assumptions used for any reporting of metal equivalent values should be clearly stated.* | Only direct assay/analytical results reported. SOP value quoted was calculated as K x 2.23 (K to $K_2SO_4$). |
| ***Relationship between mineralisation widths and intercept lengths*** | *These relationships are particularly important in the reporting of Exploration Results.*<br>*If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* | Stratigraphic drill holes for identification of paleovalley sediment profile. See text of announcement. |
| | *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').* | See Table 1 above.<br>Mineralisation is flat lying while drill holes were vertical therefore downhole length is equivalent to anecdotal thickness. |
| ***Diagrams*** | *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.* | See Figures within the announcement. |
| ***Balanced reporting*** | *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.* | Brine and core data obtained are regarded as indicative but significant. All analytical results available are provided in this release. |
| ***Other substantive exploration data*** | *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.* | All available data provided herein. |
| ***Further work*** | *The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).* | Drilling undertaken to date investigated the depth/thickness, presence and composition of sediments with brine within the playa.<br>Further drilling, trenching and pump testing programs are scheduled and about to commence to ascertain hydrogeological |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | | properties of the lake sediments. |
| | *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.* | Not applicable – commercially sensitive. |

## Section 3 Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| *Database integrity* | *Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.*<br>*Data validation procedures used.* | Blank, duplicate and spiked samples are regularly used to ensure that analytical data received is accurate and reproducible. Also refer to comments in Section 2 above.<br>Internal QA/QC procedures allow for verification and subsequent use of field/laboratory data. |
| *Site visits* | *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.*<br>*If no site visits have been undertaken indicate why this is the case.* | Pendragon Environmental Solutions are involved in all facets of geological, geotechnical, hydrological and hydrogeological investigations and assessments being undertaken at the LD Project. As a result they have completed a number of site visits during the drill program. |
| *Geological interpretation* | *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.*<br>*Nature of the data used and of any assumptions made.*<br>*The effect, if any, of alternative interpretations on Mineral Resource estimation.*<br>*The use of geology in guiding and controlling Mineral Resource estimation.*<br>*The factors affecting continuity both of grade and geology.* | The geology of the playa, demonstrated by drilling, is generally uniform/consistent requiring little geological interpretation. |
| *Dimensions* | *The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.* | The Mineral Resource has been confined to the surficial perimeter of the playa (1:250,000 Topographic Map, Geoscience Australia). However, it has been shown through drilling 5-10km north of the playa edge that the brine system continues outside of the confines of the lake boundaries. The average thickness of the Mineral Resources is 63m while all drill holes completed at between 39m and 135m vertical depth remained in brine hosted sediments at end of hole. |
| *Estimation and modelling* | *The nature and appropriateness of the* | The estimation technique is based upon |

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| *techniques* | *estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.*<br>*The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.*<br>*The assumptions made regarding recovery of by-products.*<br>*Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).*<br>*In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.*<br>*Any assumptions behind modelling of selective mining units.*<br>*Any assumptions about correlation between variables.*<br>*Description of how the geological interpretation was used to control the resource estimates.*<br>*Discussion of basis for using or not using grade cutting or capping.*<br>*The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.* | determining the volume of layers with significant porosity and brine concentrations and using porosity/volumetric content of SOP within the perimeter of the lake to calculate the indicated (where drilling data is available and access is granted) and inferred (where no drilling data and/or extrapolation is available/possible. Whilst minima and maxima were considered, average values were used for reporting purposes; taking due cognisance of adjusting porosities that exceed theoretical ranges.<br><br>A model was built using Groundwater Modelling System (GMS) software. GMS is a comprehensive modelling-graphic user environment developed by Aquaveo for performing groundwater simulations and can be used for site characterization, model conceptualization, mesh and grid generation, geostatistics, and post-processing. The Solid Module is used to construct 3-D geological models, using detailed bore lithological descriptions, for site characterization and visualization. The volume of each significant layer/horizon can then be calculated.<br><br>The layer horizons were interpolated using the inverse distance weighted (IDW) interpolation method, constant nodal function, with 500m vertices distribution, given relatively continuous distribution of the red sandy clay and pallid clay horizons considered the primary layers for the Resource Estimate. Interpolation was not applied to SOP grades due to the sheer volume of data and minimum, average and maximum concentrations and volumetric contents of SOP were used for estimation.<br><br>The lateral and vertical boundaries for the resource estimate are:<br>▪ Lateral: lake perimeter (1:250,000 Topographic Data, Geoscience Australia).<br>▪ Vertical at depth: layers having a porosity less than 40% and/or depth of drilling.<br>▪ Surface elevation was set at RL325mAHD.<br><br>Hydrogeological units are fully saturated.<br>Variable SG's were used in the estimation.<br>Porosities and concentrations of K and Mg were provided by Reward Minerals; porosities were confirmed using external independent laboratories using Australian Standard methods |

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| | | and procedures.<br>The resource estimated is indicative/inferred in-situ and not a recoverable resource; further hydrogeological investigation and assessment are underway to confirm extractability.<br><br>*In situ* resources are estimated using two methods: one is based on porosity, which assumes all hydrogeological units are fully saturated and voids are filled with brine and the other one is based on volumetric content.<br>The solid model was based on data from Bores from LDDH1502 to LDDH1509.<br><br>The model data/estimation was compared with earlier resource estimates (Reward Minerals ASX Release 13 March 2007) and a block model developed by Reward Minerals. There is a good correlation between the different models and estimates.<br><br>Refer above discussion on model software and interpolation parameters regarding block model interpolation.<br>Layers at depth with primary porosities less than 40% are unlikely to yield significant volumes of brine. Investigations continue to ascertain the secondary porosities and yields of these layers.<br><br>No Assumptions have been made about correlation between variables.<br><br>Sediments, albeit varying in thickness from south to north, are horizontal and continuous. The upper three layers with porosities exceeding 40% were included in the resource estimate. Limited geological interpretation was used to define the vertical thickness of the different horizons.<br><br>Refer discussion above (layers with less than 40% porosity) in regard to grade cutting.<br><br>The model was compared with the block model and earlier resource estimates by Reward Minerals. In addition, the model was discussed with and verified by a Consulting Geologist. |
| *Moisture* | *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture* | N/A – See below. |

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| | *content.* | |
| *Cut-off parameters* | *The basis of the adopted cut-off grade(s) or quality parameters applied.* | A minimum porosity of 40% was used as a cut-off for the Mineral Estimate. Grade cut-offs were not employed due to the consistent nature of results. |
| *Mining factors or assumptions* | *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.* | It is anticipated that brine extraction will be undertaken through trenching and/or bores. The applicability of these methods will be assessed during upcoming work programs. |
| *Metallurgical factors or assumptions* | *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.* | Brines are made up of sufficient concentrations of K and S for the planned extraction and production of $K_2SO_4$. Concentrations of Na, Cl, Ca and Mg are also such that crystallisation from lake brines will produce a harvest amenable to conventional evaporation and processing methods. |
| *Environmental factors or assumptions* | *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a green fields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.* | Key environmental impacts noted to date are effects on the water table due to brine extraction and the accumulation of unharvested salts from early evaporation stages. |
| *Bulk density* | *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.* | Gravimetric moisture content was used to determine bulk density of samples and were taken at regular intervals (<2m). Volumetric porosities were completed as a reasonableness cross check for samples selected at random |

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| | *The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.*<br>*Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.* | from all drill holes.<br>These were compared with determinations by external laboratories (SGS, E-Precision Laboratory and Soil and Water Group) using Australian Standards and/or in-house methods and procedures. |
| *Classification* | *The basis for the classification of the Mineral Resources into varying confidence categories.*<br>*Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).*<br>*Whether the result appropriately reflects the Competent Person's view of the deposit.* | All holes drilled to date have shown limited variability both laterally and downhole. Indicated portions of the Mineral Resource is constrained to those areas near drill hole locations or between holes of very similar stratigraphy.<br>All of the Mineral Resource within the Exclusion Zone (see Figure 2) has been classified as Inferred on the basis of limited drilling data. This makes up 98+% of the Inferred category mineralisation. The maximum extrapolation from holes drilled is ~20km.<br>This reflects the view of the Competent Person. |
| *Audits or reviews* | *The results of any audits or reviews of Mineral Resource estimates.* | A review of the Mineral Resource estimate was undertaken by an independent third party consultant with relevant experience. |
| *Discussion of relative accuracy/ confidence* | *Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.*<br>*The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.*<br>*These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.* | The Mineral Resource is the estimated tonnage of the in-situ brine SOP. It will not be possible to extract all of the in-situ brine and recovery of brines is based on a number of factors including permeability and drainable porosity of the sediments as well as recharge into the aquifer; aspects that are currently being investigated.<br>No recoverability or extractability has been assigned to the Mineral Resource. The Company has planned future test work to determine these properties. There is no production data available for comparison. |