22 July 2015

Drilling Commences at Lake Wells Potash Project

HIGHLIGHTS

Lake Wells Potash Project

- Track mounted Air-core (AC) rig mobilised to site and drilling has commenced
- Program includes a planned 2,000m of AC drilling to depths of up to 150 metres
- Drilling has been designed to test the depth extensions to the previously recorded near surface samples, including a best assay of **7.36 kg/m³ K**, equivalent to **16.41 kg/m³ SOP** and an average across 31 brine samples of **4.84 kg/m³ K**, equivalent to **10.79 kg/m³ SOP**
- **Forward Steps** – drill test the potassium grades of the brine aquifer at depth, estimate an exploration target, and subsequently undertake further drilling to define a JORC Resource

LAKE WELLS POTASH PROJECT

Potash explorer Goldphyre Resources (ASX: GPH, Goldphyre) is pleased to advise the commencement of drilling at its 100% owned Lake Wells Potash Project. The program consists of a planned 2,000m of Air-core drilling (up to 20 holes proposed) utilising a salt lake modified track mounted rig.

The drilling program will target depths of up to 150 metres and holes have been planned to evaluate the downhole potassium sulphate concentration throughout the aquifer (*Figure 1: Planned Air-core drilling program)*. It is only on assaying the brine samples that potassium sulphate concentrations can be determined. However, using Air-core and drilling to blade refusal can potentially produce discrete core samples that may provide information on the physical characteristics of the weathered bedrock underlying the aquifer (*Figure 2: Stylised cross section with proposed drilling through regolith and aquifer)*.

Executive Chairman of Goldphyre Matt Shackleton, said, "It was pleasing to see the support for our potash exploration program in the Company's recently completed, oversubscribed capital raising, and it is now satisfying to be out at the Project drill testing this exciting prospect. We plan to be finishing the program in August 2015, and look forward to reporting assay results as soon as practically possible."

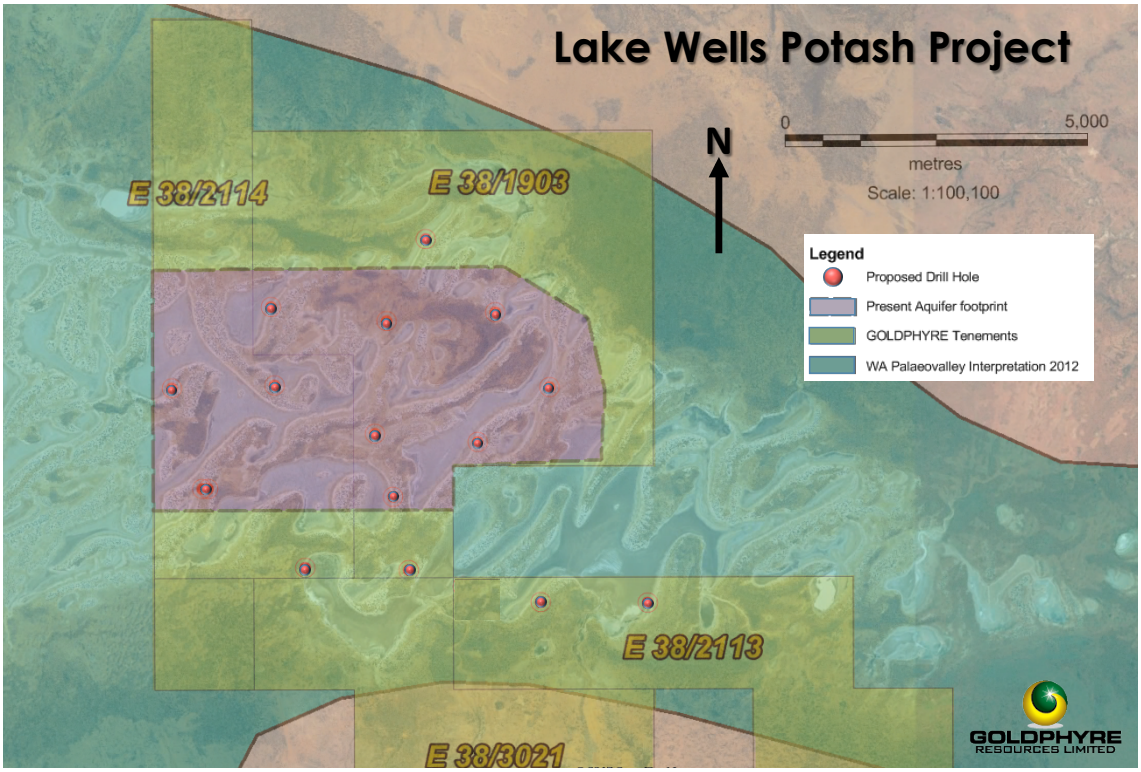

Figure 1: Lake Wells Potash Project, Planned Air-core drilling program

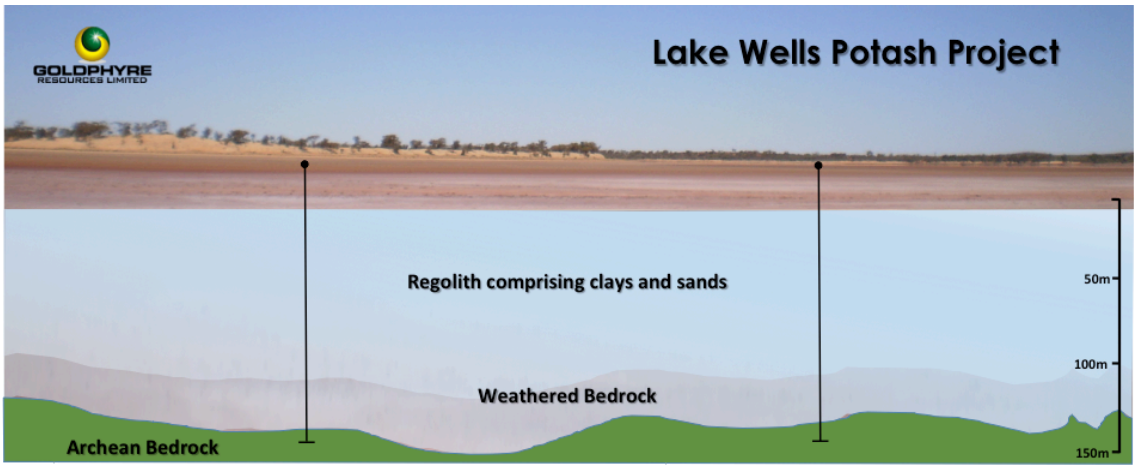

Figure 2: Lake Wells Potash Project, Schematic cross section with proposed drill hole trace demonstrating blade refusal penetration through regolith and deep palaeochannel section

MODELLING THE BRINE AQUIFER

Goldphyre is uniquely positioned in Australia's emerging potash sector through possession of previous worker Western Mining Corporation's (WMC) drilling data[i] on Lake Wells, encompassing 93 vertical air-core drill holes[ii] across the western end of the ring shaped playa lake system. No Native Title Claim exists over the Project area.

Goldphyre has modeled the WMC drill data and it indicates the volumetric estimate for the aquifer at the Project at **over 1.6 billion cubic metres** (*Table 1: Lake Wells Potash Project, Aquifer modelling* and *Figure 3: Lake Wells Potash Project, Aquifer model*), and indicating highly suitable regolith profiles for brine extraction.

Area (km^2)	Average thickness (m)	Bulk volume (million m^3)	Porosity estimate	Brine volume (million m^3)
26	62	1,602	0.4 (upper)	641
			0.33 (middle)	529
			0.25 (lower)	400

Table 1: Lake Wells Potash Project, Aquifer modelling

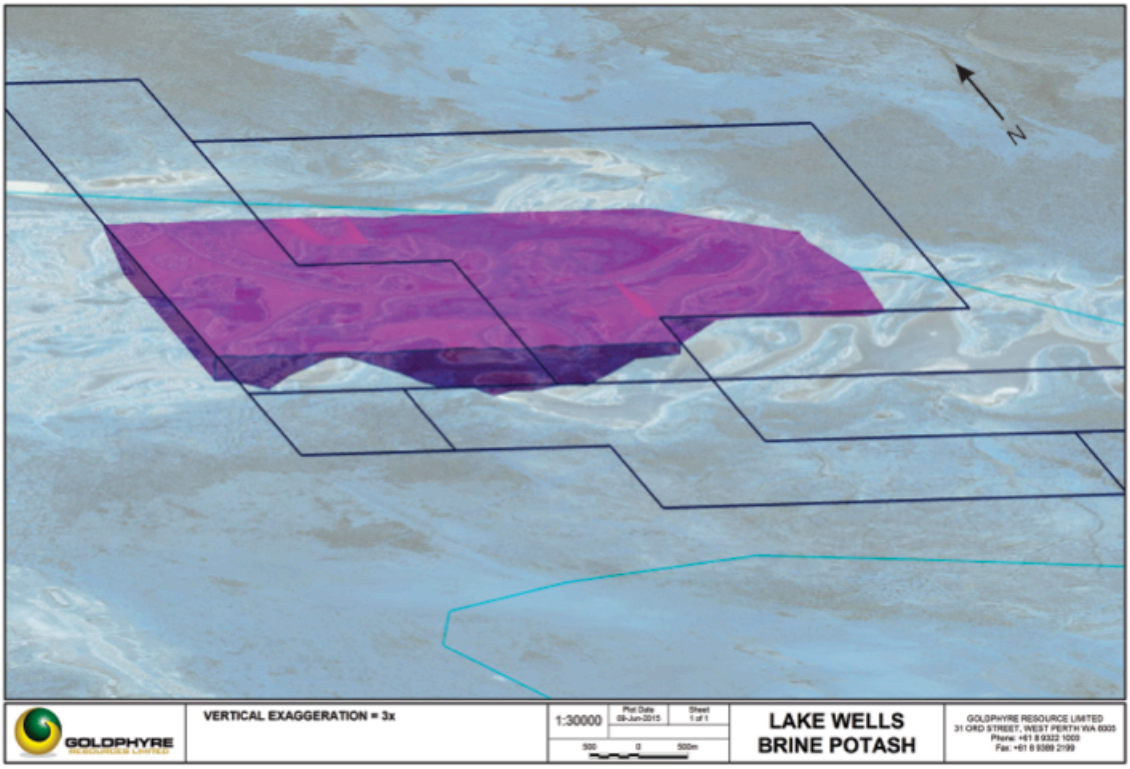

Figure 3: Lake Wells Potash Project, Aquifer model

Technical Discussion

The Lake Wells Potash Project' brine potash results previously released[iii] are very strong, and the Company considers this aquifer modelling to be an important advance in understanding brine potash exploration at depth. A resource target of depth as opposed to breadth greatly reduces the Project's footprint, and is expected to reduce infrastructure cost, environmental impact and potential overall CAPEX and OPEX cost of a future brine potash extraction operation.

Research into brine groundwater systems[iv] [v] and current work being undertaken by Reward Minerals Ltd at the LD Project outlines a sound technical model for testing the brine potash concentration at depth potential. Detailed logs from gold and base metal exploration work dating back to the 1990's have recorded sample condition, water table data and lithological information that has been used to generate a first pass aquifer volume model.

Four wide spaced lines of AC drilling were used for the model with the upper surface fixed to the top of the water table or first damp/wet sample in hole, and the lower surface fixed to the Archaean/hard rock basement. This drilling data has revealed an interpreted deep paleochannel in the central part of the project area (+80m deep) which may play a critical role in recharge of the near surface brine and add substantial potash brine volume potential.

Goldphyre's Technical Director Brenton Siggs commented, "Goldphyre is fortunate to have significant existing and recent drilling with quality data that shows good potential for a substantial palaeochannel or potash brine aquifer at depth".

The Company emphasizes that this modelling is of a preliminary nature only and drilling is required to test the brine potash concentration and aquifer properties, including but not limited to, sediment type(s), porosity and permeability throughout the target aquifer interval (near surface water table level to basement rock).

About Goldphyre Resources Limited			
ASX Code:	GPH	Market capitalisation at 5.6cps:	$5.4m
Issued shares:	99.7m*	Cash on hand (30 June 2015):	$1.2m*
** includes placement funds announced 24 June 2015 (tranche 2 due to settle early August)*			

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Potassium, Potash and SOP

Grade, volume and recharge rates

Brine SOP resources are typically contained within aquifers. Three essential technical parameters to address when considering these types of deposits are grade, volume and re-charge rates of the aquifer.

Logistics

Goldphyre's exploration base at the Lake Wells Potash Project is located approximately 300 kilometres from Leonora (*Figure 4*). Accessed by sealed roads for some 140 kilometres, with a further 160 kilometres of high quality, road train haulage capacity gravel roads, the Company has commenced a desktop study into the logistical solution to a potential development.

Figure 4: The Lake Wells Potash Project is the best placed part of the playa system to access vital freight infrastructure

Sulphate of Potash – SOP

SOP (*Figure 5*) is prized as the premium source of potassium for fertiliser use, with its high potassium, accompanying sulphur and low chlorine content (typically 45% K, 18% S and < 1% Cl respectively).

Brine SOP deposits are relatively uncommon, with only 3 producing operations globally. Subject to location and access to infrastructure however, brine SOP projects typically occupy the lower end of the production cost curve. Currently there is not a brine SOP operation in Australia.

Potash brine exploration in Australia is growing strongly. The relatively slow development progress of high CAPEX potash projects, and global macro-economic circumstances more generally, provide strong incentives for the development of domestic potash supplies.

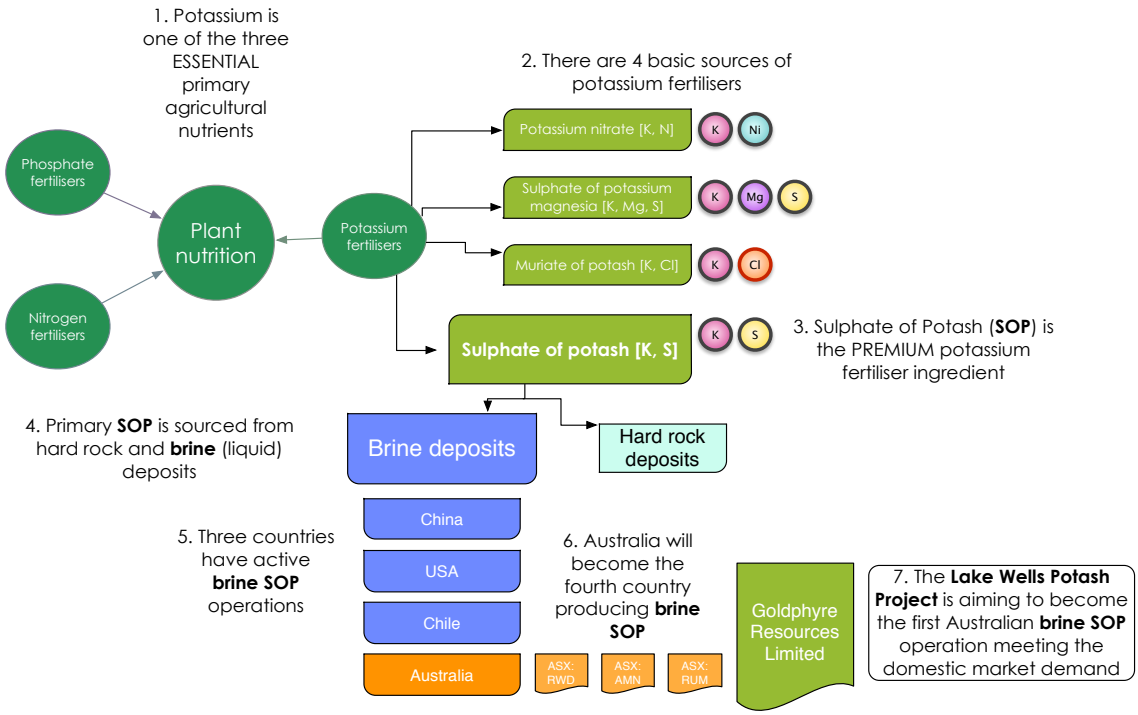

Figure 5: Potash essentials

Competent Person's Statement

The information in this report that relates to Exploration results, Mineral Resources or Ore Reserves is based on information compiled by Mr Brenton Siggs who is a member of the Australasian Institute of Geoscientists. Mr Siggs is contracted to the Company through Reefus Geology Services and is a Non-Executive Director (Exploration Manager) of Goldphyre Resources Limited. Mr Siggs has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity currently being undertaken to qualify as a Competent Person as defined in the 2012 edition of the 'Australian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Siggs consents to the inclusion in this report of the matters based on his information in the form and context in which it appears. Mr Siggs is a shareholder and director of Goldphyre WA Pty Ltd, a company that holds ordinary shares and options in the capital of Goldphyre Resources Limited (Goldphyre Resources Limited, Annual Report 2014).

Forward Looking Statements Disclaimer

This announcement contains forward-looking statements that involve a number of risks and uncertainties. These forward-looking statements are expressed in good faith and believed to have a reasonable basis. These statements reflect current expectations, intentions or strategies regarding the future and assumptions based on currently available information. Should one or more of the risks or uncertainties materialise, or should underlying assumptions prove incorrect, actual results may vary from the expectations, intentions and strategies described in this announcement. No obligation is assumed to update forward looking statements if these beliefs, opinions and estimates should change or to reflect other future developments.

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[i] Williams, R.I. (1998), Sand Dune JV Annual Report for the Period 22 November 1996 to 31 December 1997, *WMC Ltd*, a54285

[ii] Refer to ASX Announcement 11 June 2015 'Lake Wells Potash Project, Extensive brine aquifer modelling'. That announcement contains the relevant statements, data and consents referred to in this announcement. Goldphyre Resources Limited, its directors, officers and agents, are not aware of any new information that materially affects the information contained in the 11 June 2015 announcement.

[iii] Refer to ASX Announcement 10 March 2015 'High grade brine exploration project'. That announcement contains the relevant statements, data and consents referred to in this announcement. Goldphyre Resources Limited, its directors, officers and agents, are not aware of any new information that materially affects the information contained in the 10 March 2015 announcement.

[iv] Holzbecher, E. (2005), Groundwater flow pattern in the vicinity of a salt lake, *Hydrobiologica*, 532, 233 - 242

[v] Nield, D.D., Simmons, C.T., Kuznetsov, A.V., Ward, J.D. (2008), On the evolution of salt lakes: Episodic convection beneath an evaporating salt lake, *Water Resources Research*, *44*, W02439