

EXCEPTIONAL AIRLIFT DEVELOPMENT FLOW RATES FROM FIRST TEST-PRODUCTION BORES

Yields support Goldphyre's strategy to be a substantial potash supplier to the Australian agricultural industry

Goldphyre Resources Limited (ASX: GPH) ("**Goldphyre**" or the "**Company**") is pleased to announce outstanding airlift development yields from the first test-production bores completed at its Lake Wells Potash Project. Goldphyre has expedited the test-pumping programme, mobilising the test-pumping contractor to site immediately.

Basal Aquifer (main aquifer)

- Bore # 3 at site B (screened from 144m to 168m) yielded **35 litres per second**ⁱ
- Bore # 2 at site A (screened from 150m to 162m) yielded **22 litres per second**



Figure 1: Airlift development yields at Goldphyre's Lake Wells Potash Project are outstanding

Goldphyre's Executive Chairman Matt Shackleton said, "We've been able to demonstrate exceptional airlift development yields beyond our expectations, which are at the upper range for palaeochannel bores in the Eastern Goldfields. These bores are installed in the core, high-grade zone of the brine sulphate of potash Resourceⁱⁱ, nearby the proposed evaporation pond site.

It is important to note that airlift yields are strongly indicative but also typically lower than production yields. Production yields will be measured as part of the impending test-pumping program, and in light of these outstanding results, we have made the decision to expedite that program. The test-pumping contractor crew will mobilise to Lake Wells immediately, and we very much look forward to updating shareholders through November with these test-pumping flow rates.

These airlift development yields again reinforce the quality of the Lake Wells Resource and its potential to support an SOP operation. Goldphyre has previously identified the size and grade of the brine aquifers, the project location puts it in a very advantageous logistical position and now with these airlift development yields, we have further confidence in the exceptional production flows that can be achieved.”



Figure 2: Airlift development yields from test production bore installed nearby proposed evaporation pond site

The basal or lower aquifer is the primary target for development studies on the Lake Wells Potash Project. Pumping from this aquifer will be the main focus for potential

production and facilitate the drainage, or downward leakage, of brines contained in the upper strata. Developing a bore field brine abstraction operation allows Goldphyre to avoid the more costly trenching method for brine recovery. Establishing a network of bores is significantly cheaper than developing trenches to produce the equivalent volume of brine. Production trenches being modelled by peer companies in Australia extend for between 100 and 250 kilometres.

To test for additional production potential, Goldphyre constructed a test production bore into the secondary target, the upper aquifer. The upper aquifer at site A (Figure 6) yielded airlift development rates of 8 litres per second, and test pumping will identify the additional production potential of this secondary target.



Figure 3: Airlift development operations into containment bunds at the Lake Wells Potash Project

Test-pumping

Airlift development is the process where, upon completion of the bore's construction, air is injected down the bore to clear detritus, sediments and other material from the bore, until a clean brine flow is recorded. The rate at which water is lifted out of the bore during this process is an airlift yield, and is indicative, although usually lower, than the ensuing production yield measured during test-pumping.

Test-pumping involves running the bores under an operational scenario, with production pumps installed in the bore to replicate operating production wells. Over the ensuing 7 to 10 days, the bore is 'stressed' to understand how it performs at different flow rates.

At the same time, the other production bores, and bores installed specifically for monitoring purposes, will be monitored for changes in water levels. In this way, Goldphyre's hydrogeological team will be able to assess the impact of operating bores across the entire high-grade brine aquifer.

In line with all of its previous exploration and development work on the Lake Wells Potash Project, management are firmly committed to ensuring that the most rigorous techniques and practices are applied to all test work. Adhering to a comprehensive test-pumping regime will allow the Company to confidently release actual results of the test-pumping program without extrapolation or modelling of 'potential' yields.



Figure 4: Airlift development continued until a clear brine was produced at each bore

The Lake Wells Potash Project

Located approximately 500kms northeast of Kalgoorlie, in Western Australia's Eastern Goldfields (Figure 5), the Lake Wells Potash Project is a palaeochannel brine hosted sulphate of potash project. The Company has recently completed the construction of test production bores at two sites in the core high-grade zone of the Resource (Figure 6). Test pumping of these wells is due to commence in early November, and is scheduled to complete in 30 – 40 days.

For further information, please contact:

Matt Shackleton
Executive Chairman
e: m.shackleton@goldphyre.com.au
m: +61 (0)438 319 841

Media:
Paul Armstrong
Read Corporate
t: +61 (8) 9388 1474



Figure 5: The Lake Wells Potash Project is ideally located proximate to end-users, and established transport infrastructure

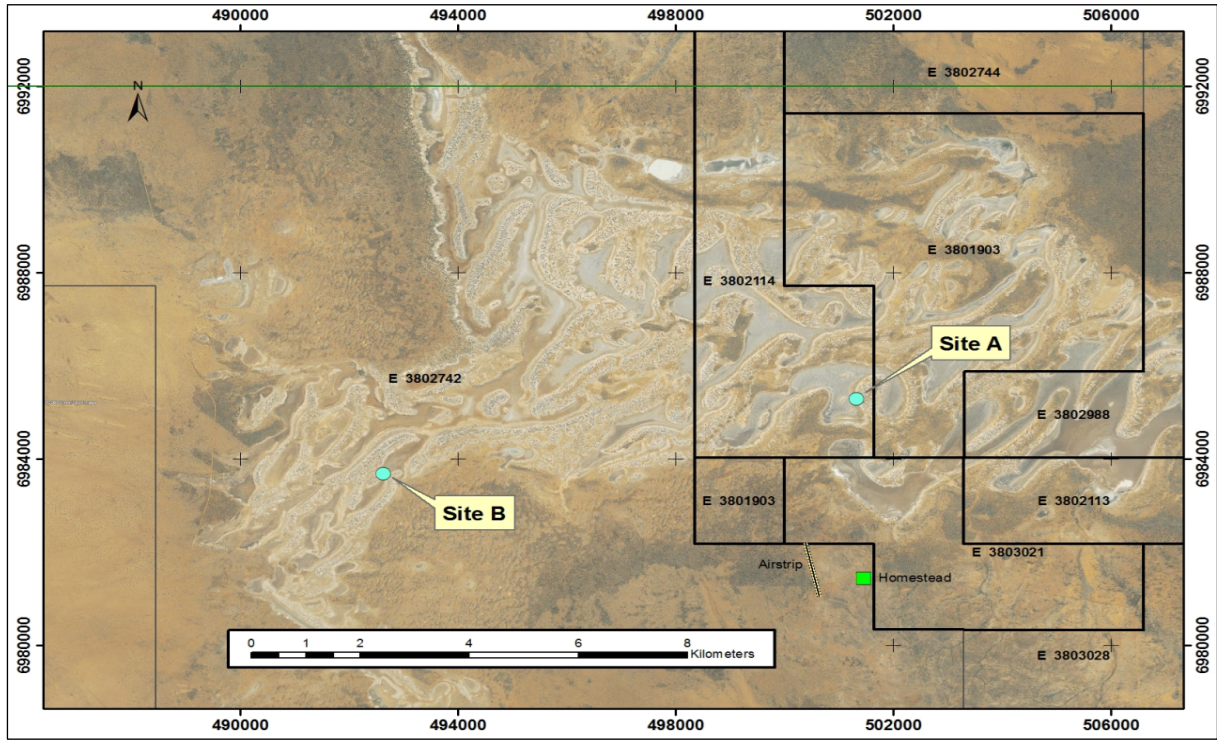


Figure 6: Test-production bore location plan

i Airlift development yields were recorded over 4 consecutive day shifts (bore 1: 2 consecutive day shifts) for up to 6 hours per shift.

ii Refer to ASX announcement 29 June 2016 'Maiden SOP Resource Estimate'. That announcement contains the relevant statements, data and consents referred to in this announcement. Apart from that which is disclosed in this document, Goldphyre Resources Limited, its directors, officers and agents: 1. Are not aware of any new information that materially affects the information contained in the 29 June 2016 announcement, and 2. State that the material assumptions and technical parameters underpinning the estimates in the 29 June 2016 announcement continue to apply and have not materially changed.