

First test production bores successfully installed

- **First two of four planned test production bores successfully installed**
- **Next two test production bores will be installed over coming weeks**
- **Production flow-test work on track to commence early November, providing key information on SOP brine flow rates from both aquifers**
- **Cash at bank of circa \$6 million sees Goldphyre well-funded to advance development of the Lake Wells Potash Project**

Goldphyre Resources (ASX: GPH) is pleased to advise that it is making strong progress at its Lake Wells Potash Project in WA, with the first two of four planned test production bores successfully installed.

The next two bores will be installed over the coming weeks, with the key production flow-tests to commence at the beginning of November 2016.

The specialist production test-pumping contractor has allowed 35 - 45 days to complete the flow-test program, which will include comprehensive step and full flow tests on each test production bore. It is important that all four bores are installed prior to the flow-test work being conducted. This will provide a strong understanding of the properties of the aquifers under a production scenario and enable an accurate hydrogeological model to be developed.

Goldphyre will then upgrade the Inferred mineral resource estimate to the Indicated category (see ASX release dated June 29, 2016)¹.



Figure 1: Brine quality testing at test-production bore # 2, Site A

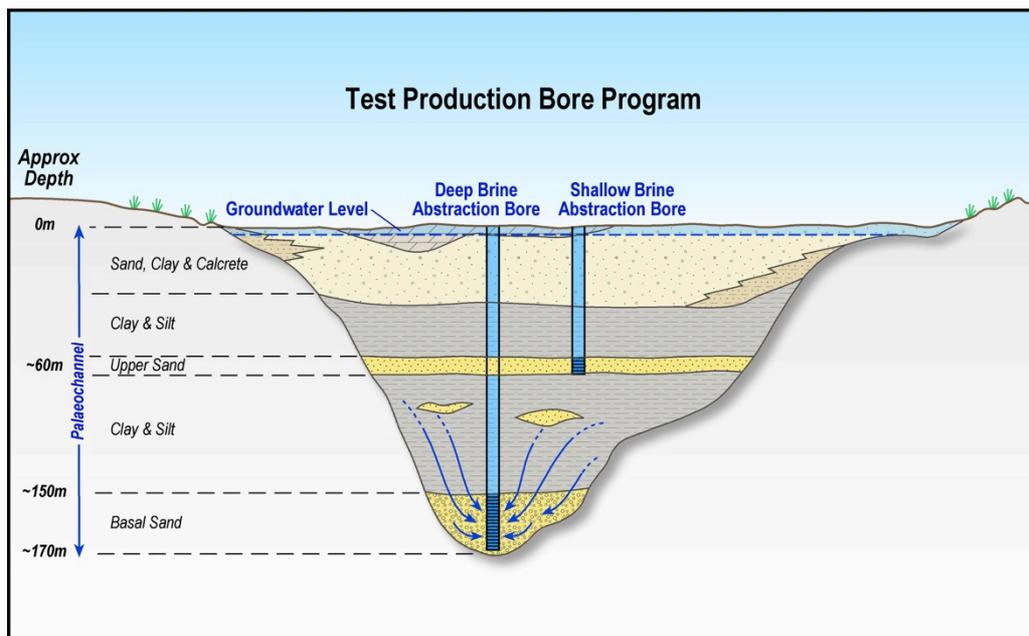
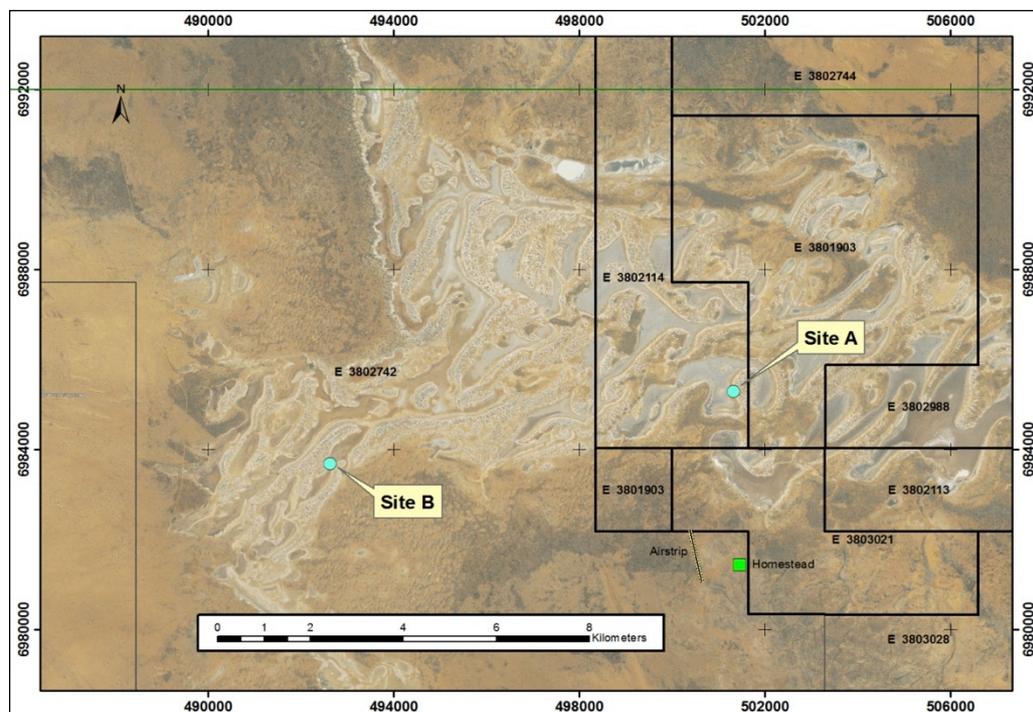


Figure 2: A shallow test-production bore into the upper aquifer and a deep test-production bore into the basal aquifer will be installed at each of sites A & B

The bores are being installed in the core high-grade zone (see figure 3) of the Resource¹ (10.5Mt of SOP at a grade of 9.03 kg/m³), and are within kilometers of the proposed trial evaporation pond site. At each site, a shallow bore will test the upper aquifer at depths of between 50m and 60m, and a deeper bore will test the lower or basal aquifer at between circa 139m and 174m. It is expected that the deeper basal bores will yield higher flow rates due to the greater thickness of permeable sand identified in earlier drill programs (see figure 2).

Figure 3: Two test-production bores have been installed at site A with two more to be installed at site B. Test-pumping to commence on completion of the installation program



The bore installation and subsequent test pumping programs are aimed at confirming Goldphyre's Lake Wells Potash Project as a leading WA potash project, building on its superior Resource and close proximity to existing infrastructure.

In parallel with the flow-test program, Goldphyre will conduct field evaporation trials aimed at developing a pilot brine evaporation model, which will ultimately determine the amount of potash that can be recovered from the brine solution using evaporation ponds.



Figure 4: Airlift development of test-production bore #2 Site A with v-notch testing



Figure 5: Completed test-production bore # 2 Site A



Figure 6: Sourcing well-development water from test-production bore #1 Site A



Figure 7: Clean brine flow sample after jetting

Options exercise and Underwriting

The Company was pleased to report the exercise of 67.4% of the previously listed GPPO series of options, raising \$4.07 million. The shortfall in the number of options exercised was underwritten by Hartleys Limited, with 24,662,270 subscribed for under this agreement, amounting to \$1.97 million.

Goldphyre Executive Chairman Matt Shackleton said the key pieces to advance the Lake Wells Potash Project are coming together rapidly.

“The seismic programs, drill programs and assays conducted on the high grade brines have already established that Lake Wells is an extensive resource containing substantial recoverable quantities of sulphate of potash,” Mr Shackleton said.

“We know that our Lake Wells Potash Project has the distinct advantage of not requiring the more expensive trenching brine production method, with the common, well-tested bore extraction method proposed.

“Lake Wells is also set to capitalise on the existing logistics infrastructure, meaning Goldphyre can avoid the large capital expenditure program usually required to establish this. Our project is approximately 180km north-east of Laverton, with heavy haulage access through the project area, making it the best located of the brine SOP projects in WA.

“We now have the financial resources to advance quickly the economic modelling of the project and towards development. We are very much looking forward to the next several months as we continue to progress the Lake Wells Potash Project.”



Figure 8: The Lake Wells Potash Project

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Competent Person's Statement

The information in the announcement that relates to Exploration Targets and Mineral Resources is based on information that was compiled by Mr Jeffery Lennox Jolly. Mr Jolly is a principal hydrogeologist with AQ2, a firm that provides consulting services to the Company. Neither Mr Jolly nor AQ2 own either directly or indirectly any securities in the issued capital of the Company. Mr Jolly has over 30 years of international experience. He is a member of the AusIMM and the International Association of Hydrogeologists. Mr Jolly has experience in the assessment and development of palaeochannel groundwater resources, including the development of water supplies in hypersaline palaeochannels in Western Australia. His experience and expertise is such that he qualifies 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 Jolly consents to the inclusion in this report on 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 is based on information compiled by Mr Brenton Siggs. Mr Siggs is the principal geologist of Reefus Geology Services, a firm that provides geological consulting services to the Company. Mr Siggs is a director and shareholder 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 2015). Mr Siggs is a Non-Executive Director of Goldphyre Resources Limited. He is a member of the Australasian Institute of Geoscientists. 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 "Australasian 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.

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.

¹ 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.