



JUNE 2016 QUARTERLY ACTIVITIES REPORT

Goldphyre achieves first strategic milestone

Maiden JORC Resource comprising 10.5Mt of extractable, high-grade 9.03kg/m³ Sulphate of Potash (SOP) within larger 18.4Mt extractable SOP Resource

Highlights

- Successful air core and diamond drilling campaign intersected essential, highly porous basal sand layer in Lake Wells Potash Project palaeochannelⁱ – without sand layers in an aquifer, brine abstraction is very difficult
- Upper sand layers were intersected leading to the identification of a previously unconsidered upper aquifer
- Further high-grade assays were recorded through the quarter
- Maiden JORC Mineral Resource Estimate was publishedⁱⁱ:



- Using *total porosity*¹ (for industry comparison purposes only), total in-situ Inferred Mineral Resource Estimate of

70 million tonnes of SOP at 8.05 kg/m³ including

High-grade zone: 40 Mt of SOP at 9.03 kg/m³

- Using specific yield² (*drainable porosity*), Inferred Mineral Resource Estimate of

18.4 million tonnes of SOP at 8.05 kg/m³ including

High-grade zone: 10.5 Mt of SOP at 9.03 kg/m³

¹ Total porosity does not give any consideration to the recoverability of the brine containing the Sulphate of Potash minerals

² Specific yield reflects the amount of recoverable Sulphate of Potash, in compliance with NI43-101, the only CRIRSCO reporting code to include a brine standard

Goldphyre Resources (ASX: GPH) is pleased to report another very successful quarter, with several targets achieved. The Company is very focussed on capturing the opportunity that currently exists in the Australian potash space, by being the first to develop its brine SOP project. To that end, Goldphyre is deliberately maintaining an achievable sized footprint and exploring all options to identify the fastest route to development, with the most efficient CAPEX spend.

Goldphyre's Executive Chairman, Matt Shackleton commented, "The June Quarter has been very successful for our team. We have established a real, extractable, high-grade sulphate of potash Resource that sits in the palaeochannel. The Lake Wells Potash Project continues to deliver highly favourable outcomes as we de-risk the project. Importantly, we believe our deposit is best positioned to be the first to development through the targeting of low cost and achievable sized operations."

Key Advantages of the Lake Wells Potash Project

- Ideally located closest to logistics solution, which is vital for a bulk project
- Simple, tried and common bore field brine abstraction method proposed, without the need for the more expensive, larger footprint trenching requirement
- High-grade core to the Resource located close to proposed evaporation pond sites
- Highly conducive sediment lithologies, with test-production bore pumping trial to commence (see below)
- High demand, high value premium fertiliser product (SOP), with strong incentive to capture the import replacement and first to market opportunity currently existing in Australia
- Strong, supportive and highly experienced shareholder base in complete alignment with management's strategy to exploit all options in ensuring the Lake Wells Potash Project is developed quickly and at the most efficient CAPEX spend

Mineral Resource Estimate

In compliance with internationally recognised reporting standards that include a brine standard, Goldphyre has reported its Resource estimate using **specific yield**, or **drainable porosity**. The Company believes this is an accurate estimate of the amount of brine that can be abstracted from the aquifers.

Goldphyre has also reported its Resource estimate using total porosity, which estimates the total amount of in-situ brine in the aquifer. This allows investors to more easily make a comparison between Goldphyre's Resource estimate and estimates made by companies that choose not to disclose their resource estimates using specific yield.

The Mineral Resource (JORC 2012 Code compliant), which has been measured taking into account potential future economic abstraction, has been classified as Inferred (Table 1, Figure 1) and is estimated at 18.4 Mt at 8050 mg/L (8.050 kg/m³) Sulphate of Potash ('SOP'). A high-grade zone occupying the western part of the Lake Wells Potash Project ('LWPP'), defined as the 'Western High Grade Zone' has an Inferred estimate of 10.5 Mt at 9028 mg/L (9.028 kg/m³) SOP.

Mineral Resource Estimate Summary

Inferred Resource for GPH Lake Wells Potash Brine (JORC compliant, taking account of Potential Future Economic Abstraction)

Hydrogeological Unit	Volume of Aquifer	Specific Yield	Drainable Brine Volume	K Concentration (mg/L)	SOP Grade (mg/L) (K * 2.23)	SOP Resource
	Mm ³	Mean	Mm ³	Weighted Mean Value	Weighted Mean Value	Mt
Western High Grade Zone						
Surficial Aquifer	5,207	16%	833	3842	8568	7.1
Clay Aquitard	4,947	6%	297	4,244	9464	2.8
Basal Sand Aquifer	222	23%	51	4,539	10121	0.5
Sub Total (Mm³/Mt)	10,376		1181	4049	9028	10.5
Eastern Zone						
Surficial Aquifer	3,435	16%	550	3428	7644	4.2
Clay Aquitard	2,833	6%	170	3,329	7423	1.3
Basal Sand Aquifer	231	23%	53	3,330	7426	0.4
Sub Total (Mm³/Mt)	6,499		773	3381	7540	5.9
Southern Zone						
Surficial Aquifer	1,296	16%	207	2742	6115	1.3
Clay Aquitard	1,901	6%	114	2,620	5842	0.7
Basal Sand Aquifer	82	23%	19	2,871	6401	0.1
Sub Total (Mm³/Mt)	3,279		340	2674	5963	2.1
Total						
Surficial Aquifer	9,937	16%	1383	3555	7929	12.6
Clay Aquitard	9,682	6%	467	3657	8155	4.7
Basal Sand Aquifer	535	23%	123	3761	8387	1.0
Total (Mm³/Mt)	20,154		1972	3610	8050	18.4

Inferred Resource based on modelled aquifer volume, mean specific yield and weighted mean K concentrations (derived from modelling)

Table 1: Inferred Mineral Resource measured using Specific Yield (drainable porosity)ⁱⁱⁱ

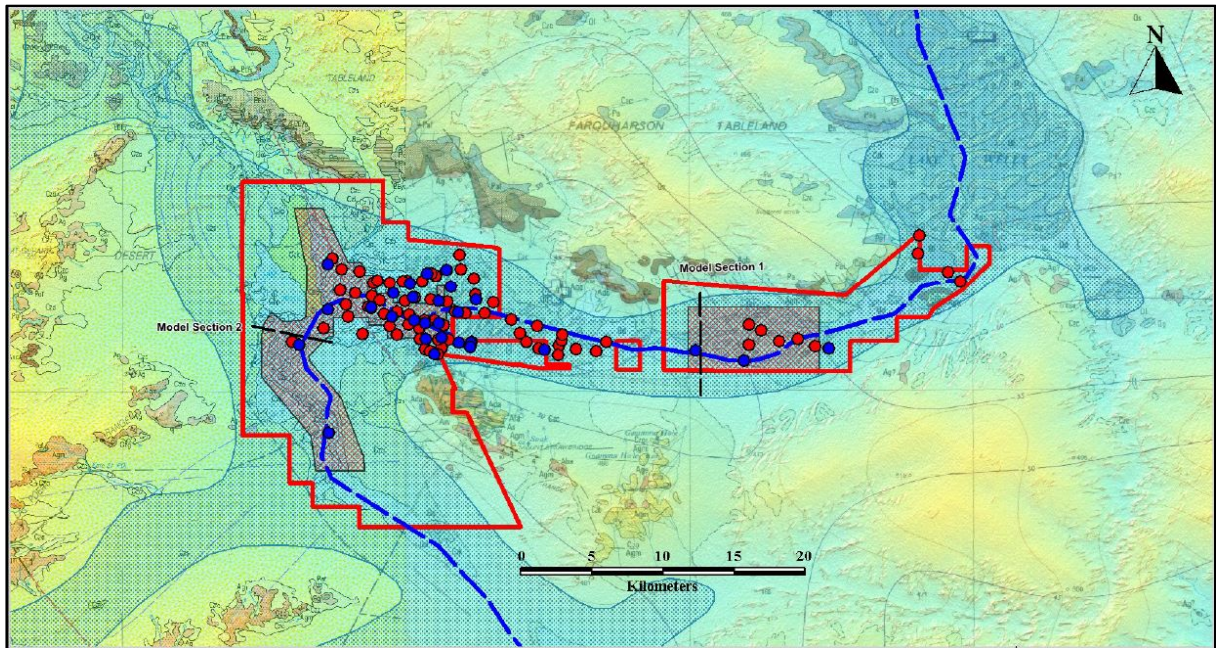


Figure 1: Inferred Resource Model Outline with hole & auger collar plan

Next Steps

Aquifer Testing

Four (4) test-production bores are planned at two sites, A and B as shown in Figure 2.

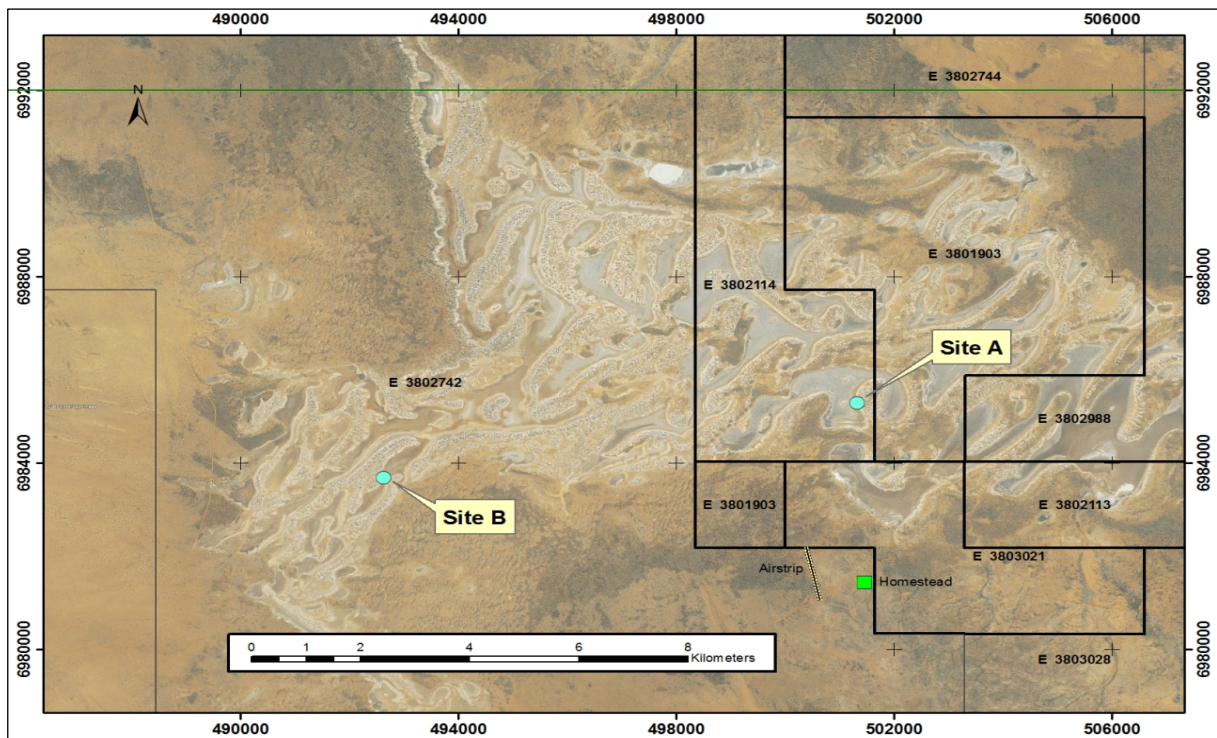


Figure 2: Test-production bore location plan

The installation of the simple, low-cost test production bores will be followed by test pumping, with the aim of confirming Lake Wells' status as WA's leading potash project, building on its superior high-grade Resource and close proximity to infrastructure.



Figure 3: **Site A**, bore location with view south to lake surface



Figure 4: **Site B**, bore location with view east across salt lake surface

The four test-production bores will be installed at two sites, with a shallow bore into the upper aquifer and a deeper bore into the basal aquifer at each site. The Company is reviewing consultant proposals to conduct the test-pumping program, scheduled to commence upon the completion of the bore installation program, with results expected in the December quarter.

Corporate

Equity

During the quarter the Company settled the Sale and Split Commodity transaction with the Mark Creasy controlled Lake Wells Exploration Pty Ltd, by the issue of 29m ordinary shares and options over a further 6.86m ordinary shares, exercisable in two equal tranches at 10c and 15c.

In addition, 1.7m listed options (ASX: GPHO) were exercised during the quarter, raising \$136,000.

Cash

At the end of the quarter, the Company had cash balances of \$495,173. Subsequent to quarter end, the Company received a GST refund of \$344,686, and a further \$267,600 has been received through the exercise of options. Total funds received after 30 June 2016 to the date of this report is \$612,286.

In addition to the above, the Company is preparing an application under the Federal Governments R&D Tax Incentive Scheme, which will be lodged in August.

Tenement schedule

Project	Tenement	Interest at 1 April 2016	Action	Interest at 30 June 2016
Lake Wells Potash Project	E38/1903	100%	-	100%
	E38/2901	100%	-	100%
	E38/2505	100%	-	100%
	E38/3021	100%	-	100%
	E38/3039	100%	-	100%
	E38/2113	100%	-	100%
	E38/2114	100%	-	100%
	E38/2744 ³	100%	-	100%
	E38/2742 ⁴	100%	-	100%
	ELA38/3109	0%	Application	0%
Laverton Downs	E38/2724	100%	-	100%
	E38/3014	100%	-	100%
Mailman Hill	E37/990	100%	-	100%
Hack Well	E38/2945	100%	-	100%

³ Goldphyre holds the rights to explore for and extract all potash minerals contained within brine from the tenement. Lake Wells Exploration Pty Ltd remains the holder of the tenement.

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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.

ⁱ Refer to ASX announcement 7 April 2016 'Drilling intersects substantial widths of key basal sands'. 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, are not aware of any new information that materially affects the information contained in the 7 April 2016 announcement.

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.

ⁱⁱⁱ Rounding may affect sub-totals and totals in all tables