29 January 2016

DECEMBER 2015 QUARTERLY ACTIVITIES REPORT

HIGHLY SUCCESSFUL QUARTER SEES LAKE WELLS POTASH PROJECT EMERGE AS A SIGNIFICANT WA POTASH PROJECT

Maiden Resource on track for middle of this year

HIGHLIGHTS

Lake Wells Potash Project

- **Sulphate of potash (SOP) Project area tripled in size through agreement with Mark Creasy controlled Lake Wells Exploration Pty Ltd. Additional 1,000km^2 of ground added**
- **Seismic survey across Goldphyre's 100 percent-owned tenements defines extensive, deep palaeovalley. The palaeovalley hosts the potash**
- **Survey shows the palaeovalley trends west into neighbouring tenements held by Lake Wells Exploration Pty Ltd: Agreement gives Goldphyre the potash rights on these tenements**
- **Further seismic survey conducted across expanded Project area with results pending**
- **Goldphyre awarded $108,000 grant under the WA Government's Exploration Incentive Scheme (EIS) for upcoming diamond drilling program**

UPCOMING ACTIVITY

- **Results from further seismic survey completed across expanded project area imminent**
- **RC drilling program to commence Q1 2016 to test the sand profile in the deepest sections of the palaeovalley**
- **Co-funded EIS drilling planned to commence Q1/Q2 2016**
- **Exploration Target for release Q1 2016 leading to a maiden resource estimate in H1 2016**

LAKE WELLS POTASH PROJECT

Goldphyre Resources' 100 percent-owned Lake Wells Potash Project is a brine-hosted sulphate of potash (SOP) project located in the Eastern Goldfields region of Western Australia (Figure 1). Goldphyre aims to supply the Australian domestic demand for SOP.

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Australia currently imports 100 percent of all potash used, estimated at 500,000 – 600,000 tonnes per annum.

Goldphyre Triples Project Area

In December 2015 the Company announced that it had entered into a Sale & Split Commodity Agreement with a company controlled by successful WA prospector Mark Creasy. The agreement grants Goldphyre the rights to all potash minerals on two tenements adjoining its existing Lake Wells Potash Project tenure, effectively tripling the

Figure 1: The Lake Wells Potash Project is ideally located to end users and distribution centres

Project area (Figure 2). Within 6 months of completing the transaction, Goldphyre will in turn issue to Mr Creasy's entity Yandal Investments Pty Ltd shares equalling 19.9 percent of its issued ordinary share capital at that time and a total of 6.8m options with exercise prices of 10 and 15 cents.

Goldphyre is in the fortunate and unique position of having established infrastructure to hand adjacent to and within the expanded project area, with effectively no restrictions on access to the brine hosting palaeovalley.

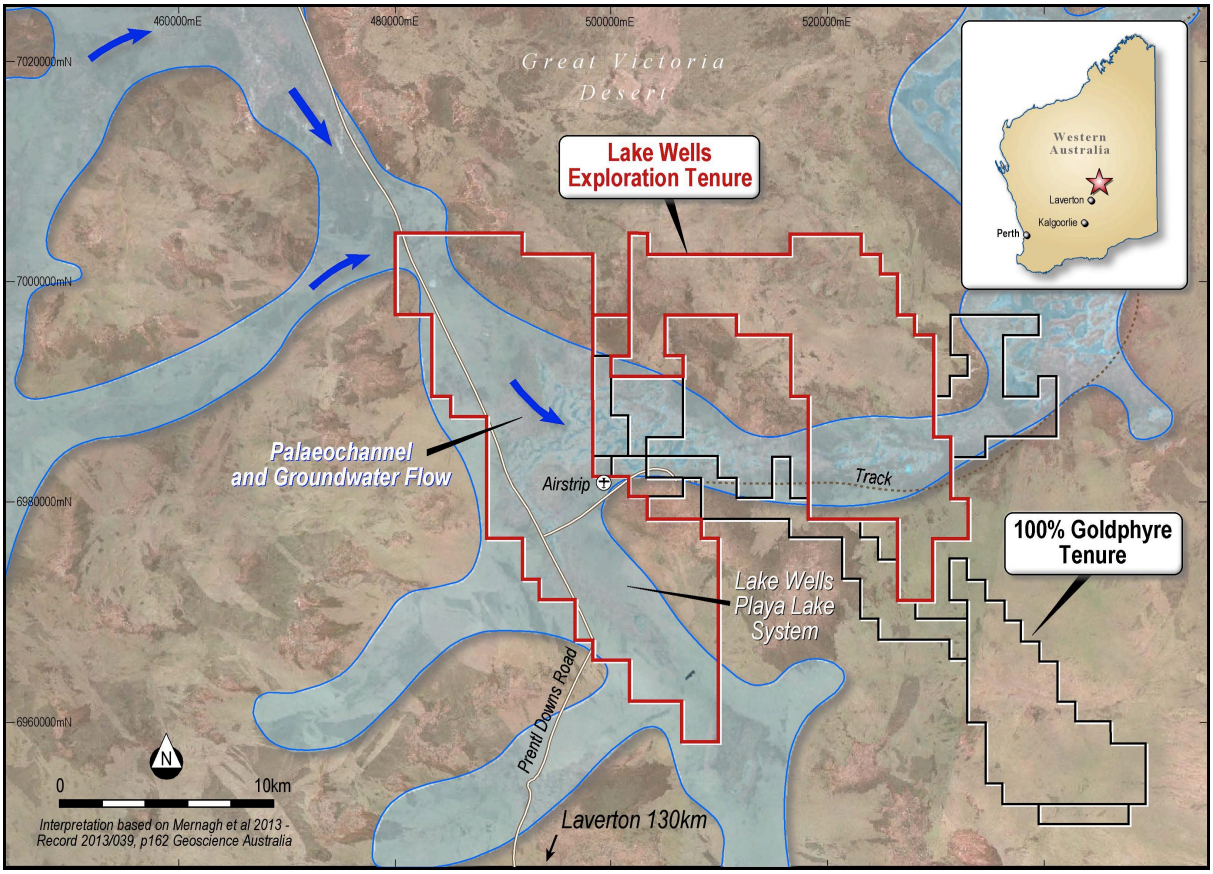

Figure 2: The Lake Wells Potash Project's footprint has been extended to over 200km^2 of lake surface area

Highly Successful Seismic Survey Conducted

Goldphyre completed a seismic survey across its Lake Wells Potash Project tenure in November 2015. The survey consisted of 120 data stations with data recorded using Tromino 3G units.

The seismic survey was aimed at mapping the depth of the transported cover with the aid of existing historic drill coverage and if possible, highlighting the thalweg, or basal section of the palaeovalley. The Company aimed to vector in on the deepest section of palaeovalley in order to assist deep drill targeting for potash brine. This has been achieved.

The survey data was very good quality and with calibration against existing drill holes with known depths to basement has successfully delineated an approximately east-west trending palaeovalley on five survey section lines (Figure 3).

The section line spacing was approximately 1,200m with station centres at 100m-200m. The peak H/V (Horizontal/Vertical) frequencies show an excellent correlation coefficient and also show very uniform shear wave velocity in the palaeovalley fill.

The modelling shows that depths of approximately 150m-170m for the base of the palaeochannel are likely. Several aircore (AC) holes completed by Goldphyre in the July

2015 drill program reached depths of 141m (the extent of the drilling rig's depth capacity) and terminated in transported sediments.

The generated data and imaging (Figures 4 & 5) permits the clear targeting of drill holes into the deepest parts of the palaeovalley, allowing Goldphyre to assess the characteristics of the sand layers traditionally found in the bottom strata of the palaeovalley sediments. This coarse, unconsolidated material often has a high permeability and porosity, which facilitates drainage of the overlying hydrogeological units.

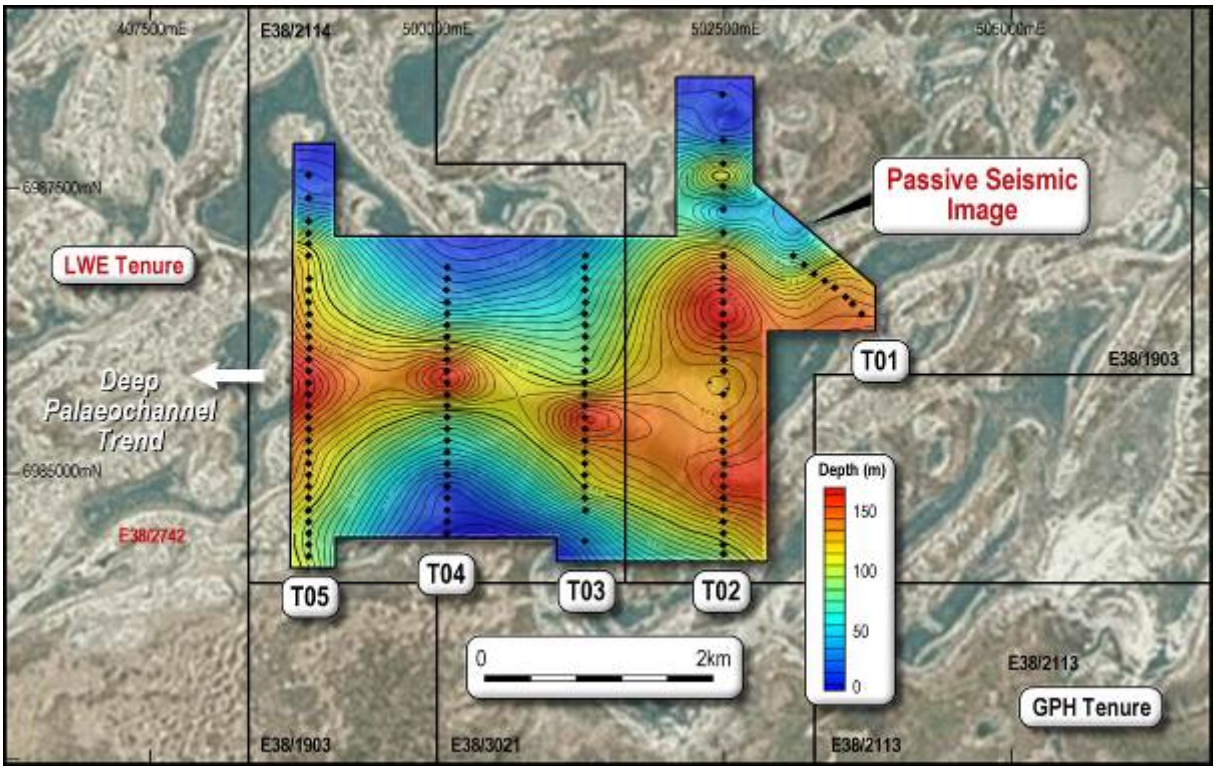

Figure 3: The seismic program delineated an east-west trending palaeovalley with depths up to 170m

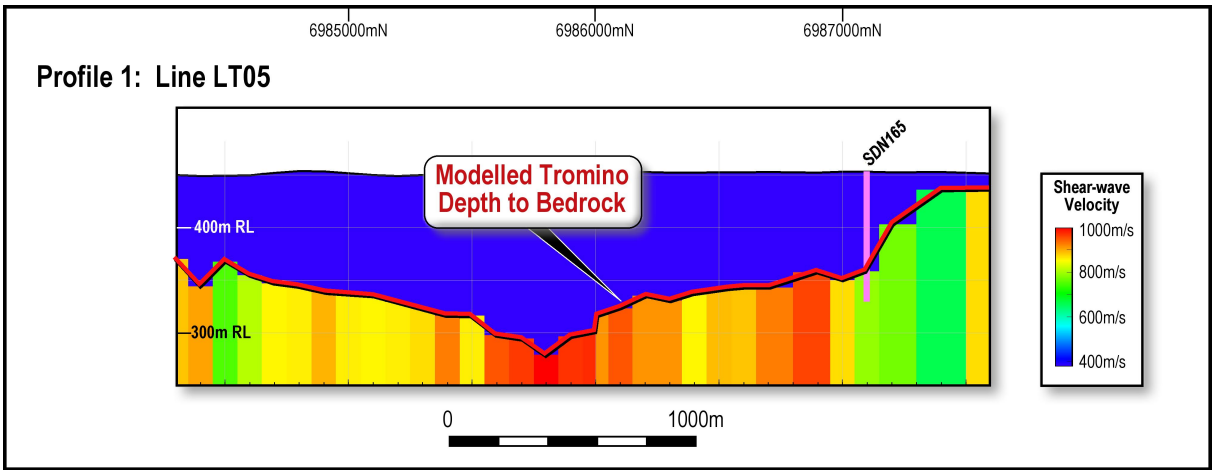

Figure 4: Line 5, the western most survey line & historic drill hole SDN165

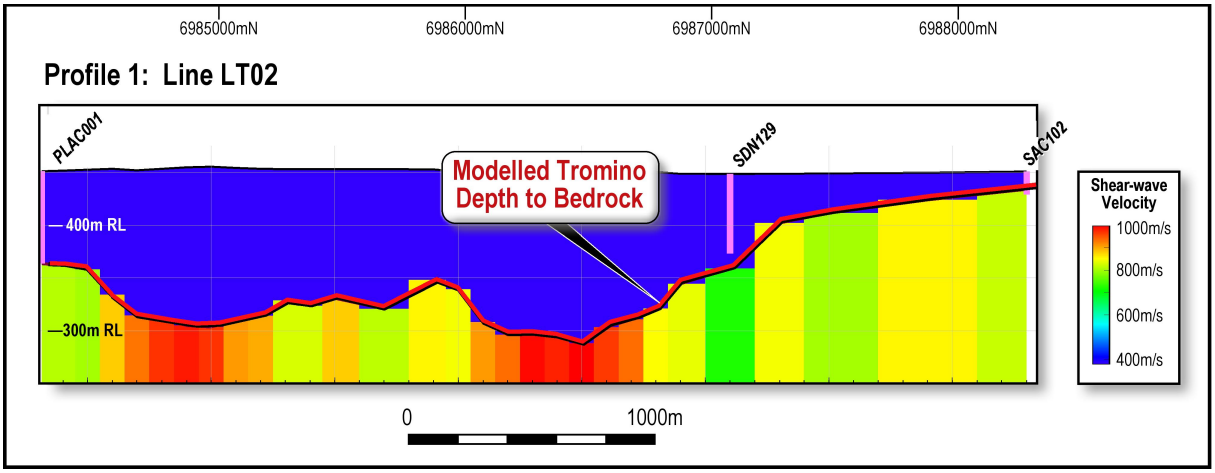

Figure 5: Line 2, historic drill holes PLAC001, SDN129 & SAC102.

Follow-Up Seismic Survey Currently Underway

Following the highly successful initial seismic survey conducted on the 100 percent-owned Lake Wells Potash Project tenure, the Company conducted an identical survey across the tenure rights acquired through the Sale & Split Commodity Agreement (Figure 6).

Data from over 200 stations along 6 lines traversing the most western project tenement was generated using Tromino 3G units. This data is currently being processed, and the Company expects to make an announcement regarding this work in February.

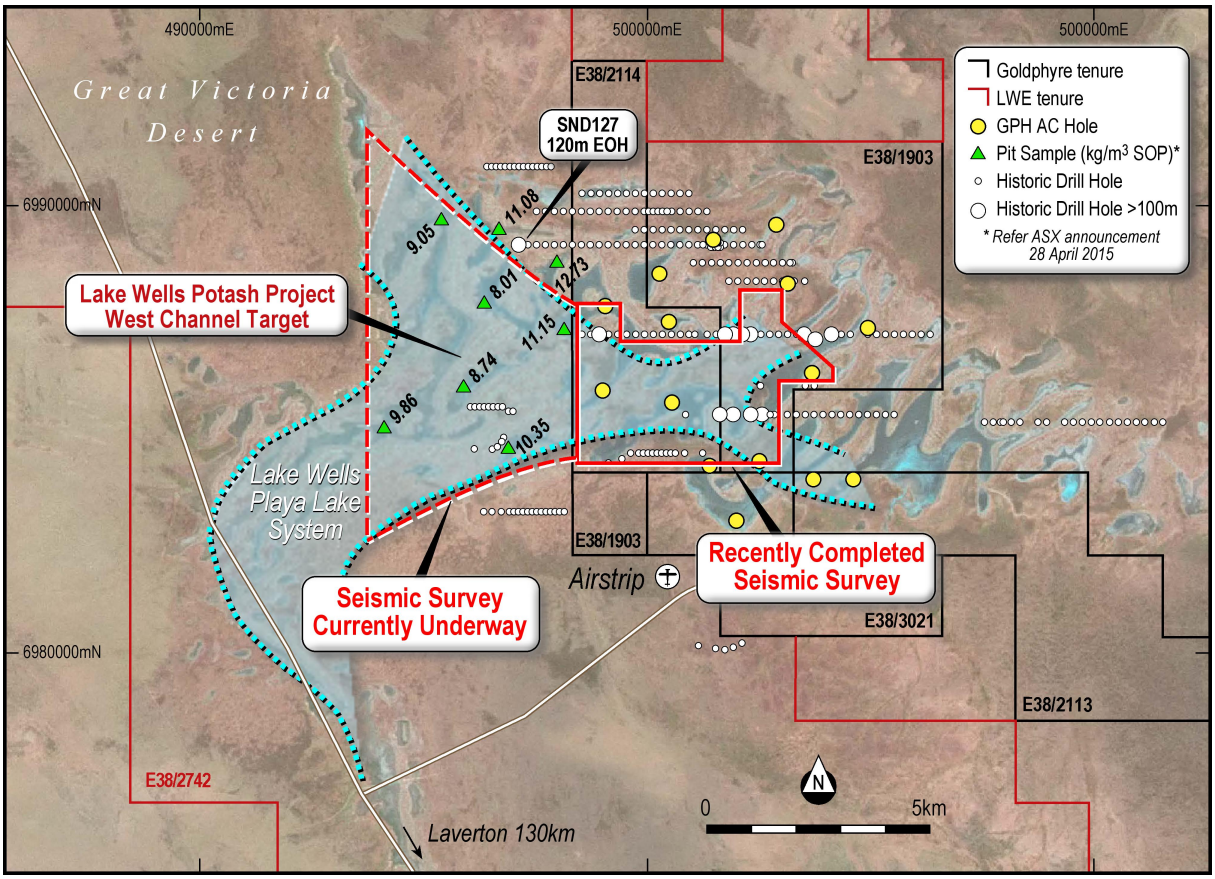

Figure 6: Processing of seismic program is currently underway on the LWE tenure contiguous and to the west of GPH's ground

Exploration Incentive Scheme (EIS) Grant

During the quarter, Goldphyre was awarded a $108,000 grant by the WA Government to co-fund exploration drilling at the Lake Wells Potash Project. The funding, which will be provided under the Exploration Incentive Scheme administered by the Department of Mines and Petroleum, will be put towards the core drilling program planned as part of Goldphyre's strategy to establish a maiden potash Resource at Lake Wells by mid-2016.

Next Steps

On completion of the follow-up seismic work, the Company will be able to target accurately deeper drilling across the Lake Wells Potash Project. The aim of the next round of work will be to determine the presence and extent of the bottom of channel sand layer at several points along the +20km length of palaeovalley already modelled.

The presence of sand at the bottom of the palaeovalley is important to the future success of the project because it is often highly porous with good permeability. Material that is porous and permeable can allow the free abstraction of water, which in turn determines potential flow rates for pumping of the brines to the surface.

The data generated through that drilling will go to the estimation of a maiden inferred potash resource, which the Company aims to release in Q2 this year.

Goldphyre is aiming to release an Exploration Target for the Lake Wells Potash Project in Q1 2016.

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Tenement Schedule at 31 December 2015

Project	Tenement	Interest at 1 Oct. 2015	Action	Interest at 31 Dec. 2015
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[1]	0%	Grant of right	100%
	E38/2742[2]	0%	Grant of right	100%
Fraser Range	E28/2501	0%	Grant of tenure	100%
Laverton Downs	E38/2724	100%	-	100%
	E38/3014	100%	-	100%
Mailman Hill	E37/990	100%	-	100%
Hack Well	E38/2945	100%	-	100%

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 Brenton Siggs who is a member of the Australasian Institute of Geoscientists. Brenton Siggs is contracted to the Company through Reefus Geology Services and is a Non-Executive Director (Exploration Manager) of Goldphyre Resources Limited. Brenton 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". Brenton 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 2015).

The information in this release that relates to Geophysical Results is based on information compiled by Dr Jayson Meyers who is a Fellow of the Australian Institute of Geoscientists. Dr Meyers is a consultant to Goldphyre Resources Limited and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the Australasian

[1] *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.*

[2] *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.*

Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Dr Meyers consents to the inclusion in this report of the matters based on information provided by him and 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.

In accordance with Listing Rule 5.23.2, the Company confirms in the subsequent public report that it is not aware of any new information or data that materially affects the information included in the relevant market announcement and, in the case of estimates of mineral resources or ore reserves, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed.

Please note with regard to exploration targets, the potential quantity and grade is conceptual in nature, that there has been insufficient exploration to define a Mineral Resource and that it is uncertain if further exploration will result in the determination of a Mineral Resource.