

1 June 2023

ASX Release
Farmout of South Australian Acreage
Natural Hydrogen Production Potential to be Explored

Highlights:

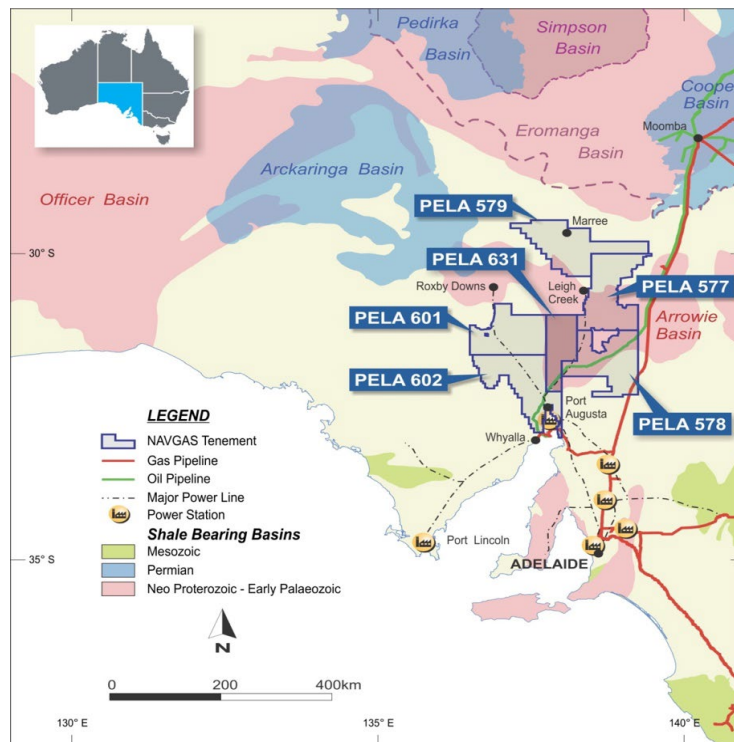
- ***Lakes Blue Energy is excited to announce a strategic relationship involving exploration for and development of natural hydrogen resources.***
- ***Lakes Blue Energy has agreed to sell a fifty percent interest in the Company's six South Australian Petroleum Exploration Licence Applications to Gehyra Flux Pty Ltd (Gehyra).***
- ***In consideration for acquisition of the fifty percent interest, Gehyra will, at its cost, carry out work, including negotiation of Native Title Agreements, necessary for the Licence Applications to be granted as Petroleum Exploration Licences.***
- ***Gehyra will have 100% rights to explore for and produce natural hydrogen from within the Licence areas. Lakes will retain 100% rights to explore for and produce petroleum from within the Licence areas.***
- ***The parties will coordinate their exploration efforts and, in the event of success, will respectively pay to each other a two percent royalty on hydrogen or petroleum produced.***

The Directors of Lakes Blue Energy NL (**Lakes**, or the **Company**; ASX:LKO) are pleased to announce that the Company has entered in to a series of agreements with Gehyra Exploration Pty Ltd (**Gehyra**) a wholly owned subsidiary of Gehyra Flux Pty Ltd pursuant to which:

- Lakes will transfer to Gehyra a fifty percent (50%) interest in six Petroleum Exploration Licence Applications (**PELAs**) that Lakes holds, through the Company's wholly owned subsidiary NavGas Pty Ltd, in the Arrowie Basin, South Australia (Figure 1);
- Gehyra will, at its cost, carry out work that is a necessary prerequisite for the PELAs to be granted as Petroleum Exploration Licences (**PELs**). This includes negotiation of native title matters and agreements;
- Gehyra will have exclusive 100% rights to explore for and produce natural hydrogen from within the area of the PELs. Lakes will retain exclusive 100% rights to explore for and produce petroleum from within the area of the PELs;
- Recognising the similarity between hydrogen and petroleum exploration techniques, Lakes and Gehyra have the opportunity to coordinate their exploration efforts and share technical information; and

- In the event discoveries are made, Gehyra will pay to Lakes a two percent (2%) royalty on the value of any hydrogen produced and Lakes will pay to Gehyra a two percent (2%) royalty on the value of any petroleum produced.

Figure 1: Arrowie Basin PELAs



Lakes Chief Executive Officer, Roland Sleeman, commented, “The agreement with Gehyra will allow the Company to retain a near-term focus on its highly prospective Victorian projects, especially the large Enterprise North prospect, while Gehyra carries out work to pave the way for investigation of the Arrowie Basin’s potential. Indeed, Gehyra’s hydrogen exploration effort may provide valuable information to support the petroleum investigation”.

Lakes Chairman, Richard Ash, added, “This is an exciting development that complements Lakes’ existing skill base whilst allowing for Lakes to diversify into an increasingly important new industry. Lakes Blue Energy is well positioned to take advantage of the opportunities presented by the changing Australian and international energy landscapes and to help support the transition to a low-carbon future”.

This announcement has been authorised and approved by the Board of Lakes Blue Energy NL for lodgement with ASX.

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Note: the petroleum potential of the Arrowie Basin is as set out in the Company's Prospectus dated 7 January 2022. The Company is not aware of any new information or data that materially affects the information included in the Prospectus and confirms that all the material the estimates in the relevant market announcements continue to apply and have not materially changed.

About the Arrowie Basin Project

The Company's six PELAs cover an area of approximately 53,000 square kilometres in South Australia's Arrowie Basin, to the north of Adelaide. The petroleum production potential of this region has been demonstrated through methane flows in historic wells and also at the Wilkatana oil field.

Analysis of oil from the Wilkatana oil field indicates that the oil was formed in a marine algal calcareous shale. This suggests the source of the oil was the Neoprotozoic Tindelpina Black Shale or the organic rich Tapley Hill Formation. The oilfield potential of these formations may be analogous to that of prolific systems in Russia, Oman and China. Lakes aims, in due course, to investigate this potential.

More recently, the Arrowie Basin region has been identified as a prospective source of natural Hydrogen with one of the more prospective areas being the Torrens Hinge Zone which is also Lakes' primary area of focus in the region. The Torrens Hinge Zone is a potential migration pathway for Hydrogen, generated from the interaction between deep formation waters and the iron rich rocks which underlie the region, to get to surface. The Torrens Hinge Zone lies along the North-South structural trend where previously reported natural hydrogen has occurred and current natural hydrogen exploration activities are being focused.

About Gehyra Flux Pty Ltd

Gehyra Flux is a pure play natural hydrogen company with a material holding of Petroleum Exploration License and Gas Storage Applications in South Australia. The company is aiming to become a leading natural hydrogen explorer in Australia. The Company's near-term activities are focused on working with Traditional Owner Groups to negotiate Native Title Agreements ahead of license awards and an Initial Public Offering. In parallel, the Company will work towards derisking exploration targets it has identified across its portfolio.

Gehyra Flux is a founding member of the Natural Hydrogen Association of Australia.

For more information please visit www.gehyraflux.com