

D3 ENERGY ACQUIRES HIGHLY PROSPECTIVE HELIUM & HYDROGEN PERMITS IN SOUTH AUSTRALIA

HIGHLIGHTS

- Acquisition of PEL 121 and PEL 122 via the purchase of all issued share capital in Unleash Energy Pty Ltd
- PEL 121 and PEL 122 are located in the South Australian Arckaringa Basin, a region of increasing activity in helium and hydrogen exploration
- The deal provides low-cost entry into highly prospective licences, which have minimal work commitments and low ongoing holding costs
- Independent assessment of helium and hydrogen resources to commence in due course
- Technical work conducted by D3 Energy has identified relatively shallow near-term drill ready prospects
- D3 Energy has commenced a Joint Venture partner process to secure project funding

D3 Energy Limited (**ASX:D3E**) (**OTCQB:DNRGF**) (**D3 Energy** or the **Company**) is pleased to announce that it has agreed to acquire two highly prospective exploration permits, PEL 121 and PEL 122, in the Arckaringa Basin in South Australia by way of the purchase of 100% of the shares in Unleash Energy Pty Ltd.

The new permits provide complementary portfolio diversification in addition to the Company's flagship helium appraisal project in the Free State province in South Africa, where D3 Energy has defined a significant helium and methane Contingent Resource and production tested multiple wells with world class helium compositions.

D3 Energy Managing Director Casey said: *"This is an important next step on the back of early success in South Africa for D3 Energy to become a significant player in the helium sector across the globe. The addition of new acreage in the emerging helium and hydrogen exploration hotspot of South Australia provides portfolio diversification with the potential to create significant shareholder value via low-cost exploration work supporting a farmout process with external funding from industry partners."*

While the Arckaringa is relatively underexplored with no sub-salt penetrations to date, the fact that the only wells drilled beneath the salt and into fractured basement in the adjacent and analogous Amadeus Basin both recorded excellent helium concentrations of 6% and 9%, with Mt Kitty-1 also measuring 11% Hydrogen, provides significant scope and encouragement for success.

Whilst this acquisition is an exciting opportunity, ER 315 remains our primary focus where we have generated outstanding results to date. Our work in South Africa sees us positioned to notably accelerate lodgement of a Production Right application ahead of schedule and significantly under budget."

Overview of PEL 121 and PEL 122

PEL 121 and PEL 122 (together, the **Permits**) are contiguous blocks with a combined area of 5,865 km², situated in the Arckaringa Basin just south of Oodnadatta and to the north-east of Coober Pedy in South Australia.

The area around the Permits in South Australia has become an exploration hotspot for helium and hydrogen in recent times, seeing a rush to acquire early-stage acreage positions as a result of positive regulatory changes, easy access to historical data and the identification of potential source rock ideal for the generation of both helium and hydrogen.

Recent successes such as at the Gold Hydrogen Ramsay Project demonstrate the potential for the state of South Australia to become a future substantial helium and hydrogen province.

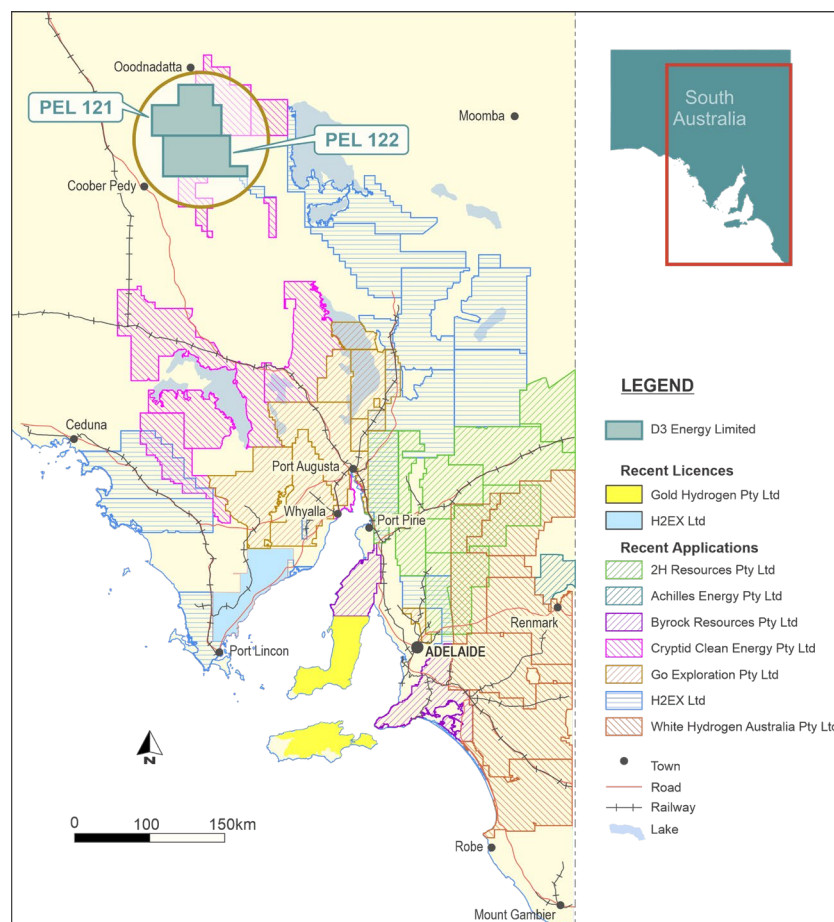


Figure 1 Map of South Australian Helium and Hydrogen Permit Activity

Overview of the Arckaringa Basin

The Arckaringa Basin covers an area of 80,000km² and is a lightly explored part of the emerging helium and hydrogen exploration region in South Australia.

The Arckaringa Basin is similar to the Amadeus Basin, 250km to the north where the Mt Kitty-1 well measured helium (9%), hydrogen (11.5%) and methane (13%). A second well, Magee-1 located further northeast, was drilled below the Gillen Salt and recovered helium (6%) and methane (39%). These two analogue wells are the only sub-salt penetrations in the region to date.

Key to the technical case in the Arckaringa Basin is the presence of a salt layer to provide an effective seal for helium and hydrogen. To date, the Arckaringa Basin has not had well penetrations deep enough to test the pre-salt sediments or fractured basement. Work undertaken by D3 Energy as part of project evaluation indicate the presence on seismic of several salt structures thick enough to seal large offset faults.

The basement rocks underlying the Arckaringa Basin are part of the Gawler Craton. The craton is composed of three domains, each of which have the potential to be sources of helium and hydrogen. These source rocks combined with a potential salt seal identified by seismic, provide early levels of confidence in the prospectivity of the Arckaringa Basin.

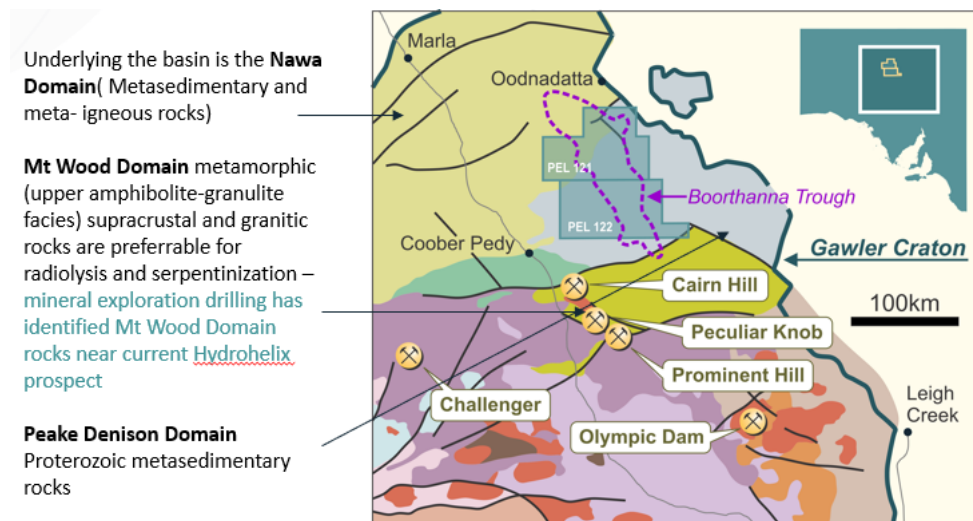


Figure 2 Basement Rocks of the Gawler Craton from Regional Geology

Current prospectivity

On initial review, the Company has identified two early-stage exploration prospects, Hydrohelix and Cootanoorina.

The drill ready and relatively shallow Hydrohelix Prospect, located within PEL 121, is a large fault and dip bounded structure in the middle of the Boorthanna Trough with an areal closure of 148km².

Work completed by D3 Energy on Hydrohelix has revealed several important characteristics in line with the Mt Kitty-1 analogue well:

- similar structural depth to basement
- similar thickness of evaporites (salt)
- both appear heavily faulted
- both have structural closure controlled by faults

It is worth noting that, at 148km² Hydrohelix is significantly larger than the Mt Kitty prospect area.

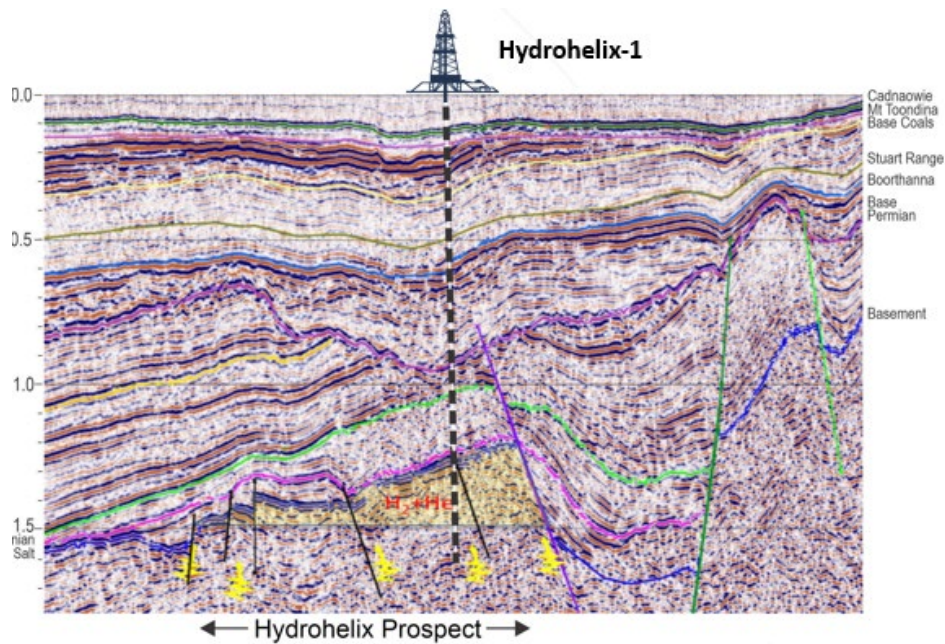


Figure 3 West to East Seismic line LNC 11-26

The Cootanoorina Prospect is a thrustured basement feature similar to Mt Kitty-1. It is situated beneath the Cootanoorina 1 and 2 wells on a 3-way dip closed structure against the western fault. The two wells on the structure did not drill deep enough to test the Heavitree Sandstone or the fractured basement.

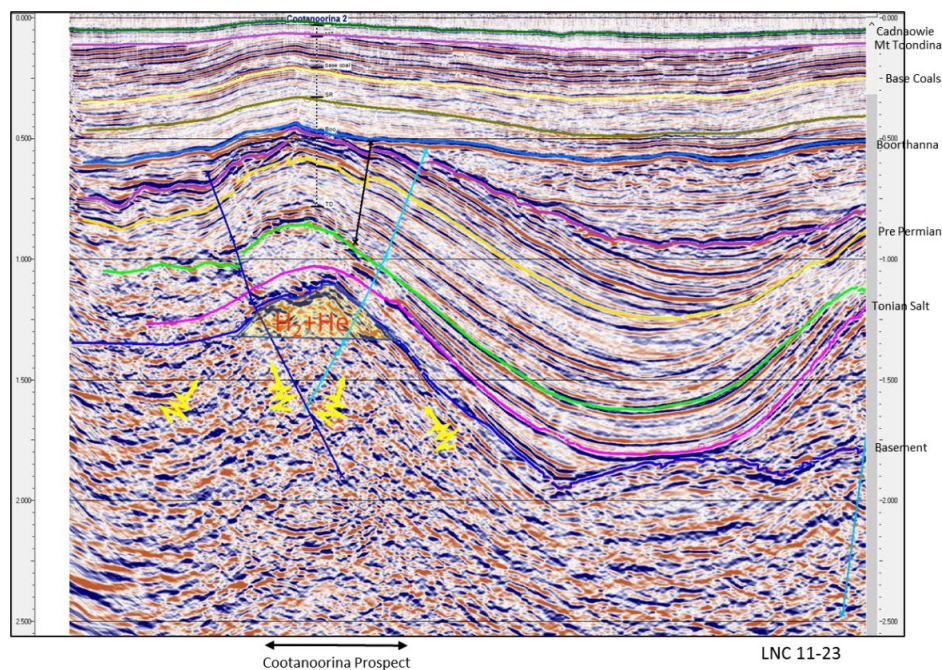


Figure 4 Seismic Line across Cootanoorina Prospect showing Cootanoorina-2 well

Work will commence shortly to have an independent resource certified over both Hydrohelix and Cootanoorina.

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Nine other early-stage leads have been identified on PEL 121 (see Figure 5 below), with work ongoing to elevate them to Prospect status. Successful drilling at either Hydrohelix or Cootanoorina has the potential to open a new basin for helium and hydrogen exploration and the leads identified would provide meaningful follow-on upside potential.



Figure 5 Other Leads in the Boorthana Trough on PEL 121

Material Terms of Agreement

A summary of the key terms of the Share Sale and Purchase Agreement (SPA):

1. **(Sale and Purchase)** D3 Energy will acquire 100% of the shares in Unleash Energy Pty Ltd (**Unleash**) free from encumbrances.
2. **(Consideration):** As consideration for the shares in Unleash, D3 Energy agrees to provide the following consideration to the shareholders of Unleash:
 - a. **(Cash Consideration):** a one-off cash payment of \$200,000 which is equal to the financial security provided by Unleash to the Regulator and which Unleash will retain the benefit of post completion
 - b. **(Initial Consideration Shares):** 5,000,000 fully paid ordinary shares (**Shares**) in the capital of D3 Energy
 - c. **(Bonus Consideration Shares):** Additional shares will be issued to the shareholders of Unleash as follows:
 - i. **(Tranche 1 Contingent Shares):** upon the announcement by D3 Energy of a contingent resource booking in respect of any regulated substance (ie, helium or hydrogen) (as defined in the *Energy and Resources Act, 2000* (SA)) within 5 years from the Completion Date, D3 Energy shall issue Shares to the value of \$250,000 calculated at the greater or \$0.20 and the 5-day VWAP of D3 Energy shares on the date the relevant condition is satisfied
 - ii. **(Tranche 2 Contingent Shares):** if a well targeting helium or hydrogen is spudded within PEL 121 or PEL 122 within 5 years of the Completion Date, D3 Energy shall issue Shares to the value of \$250,000 calculated at the greater or \$0.20 and the 5-day VWAP of D3 Energy shares on the date the relevant condition is satisfied
3. **(Conditions Precedent):** approval by the Minister to various assignments and transfers contemplated under the SPA.
4. **(Other Terms):** The SPA also includes terms and conditions for an agreement of its nature including apportionment of liabilities, provision of representations and warranties, assignment of agreements and the like.

Authorised for release by the Board of Directors of D3 Energy Limited

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About D3 Energy Limited

D3 Energy (ASX: D3E) is an Australian-listed company focused on the exploration and development of helium and natural gas assets in South Africa's Free State Province, The Company's ER315 project holds significant contingent and prospective helium and natural gas resources, positioning D3 Energy as a key player in the global energy transition.