

18 January 2024

## **DAYDREAM-2 UPDATE**

### **HIGHLIGHTS**

- Very positive log results for recently discovered deep permeable zone
- Extent of this new play could be significant
- Stimulation and testing phase due to commence imminently

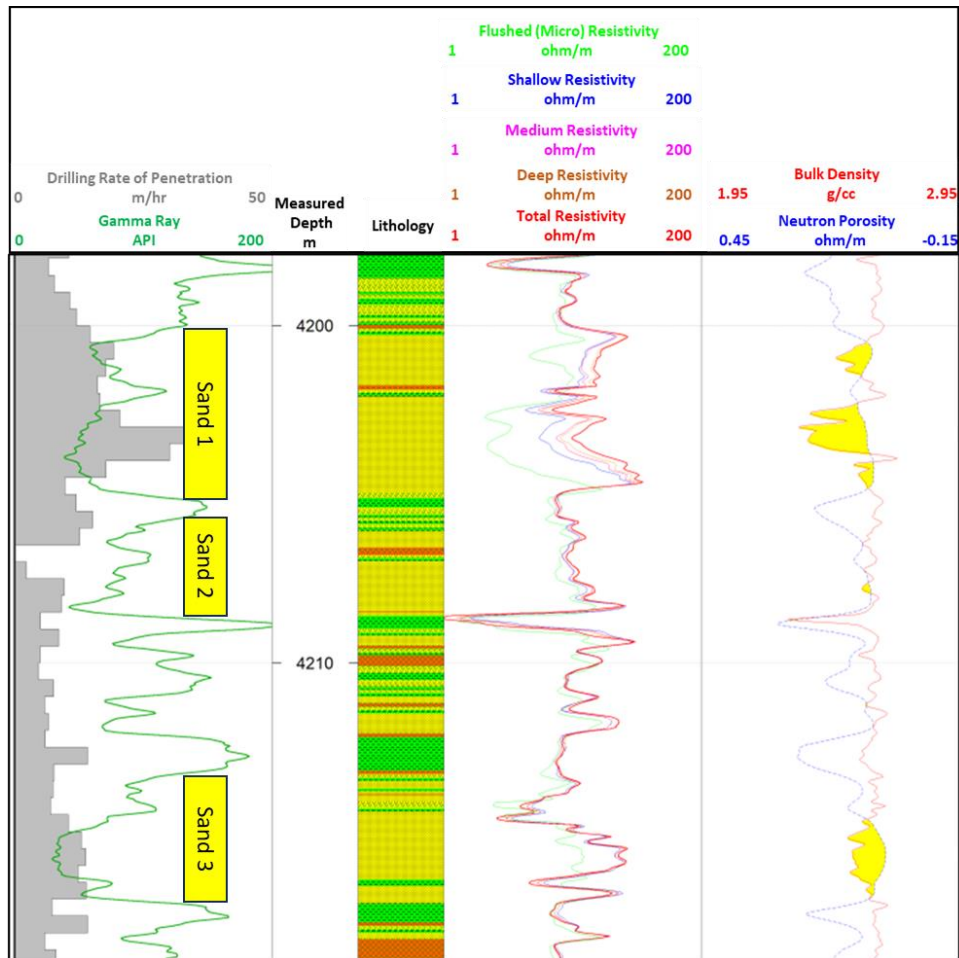
Elixir Energy Limited (“Elixir” or the “Company”) is pleased to provide an update on the next stages of its Daydream-2 appraisal well in its 100% owned Grandis Gas Project (ATP 2044), located in the Taroom Trough of the Bowen Basin, Queensland.

Following the rig release announced on 20 December 2023, Elixir’s technical team and various service providers have been evaluating the data gathered to date. Further inputs are due in the weeks to come from external laboratories.

The discovery of the presence of porous and permeable sandstone reservoirs at 4,200 metres in the Daydream-2 well - which produced gas to surface - has great significance for Elixir’s Grandis Project - and for the greater Taroom Trough. Daydream-2 was drilled to a total depth of 4,300 metres, which Elixir understands to be the deepest well in Queensland in over a decade.

During the drilling of Daydream-2 in December 2023, the well intersected a sandstone interval with significantly better than prognosed reservoir properties. Porosity of greater than 10% was logged, which is generally unusual for this depth onshore, other than in certain locations such as the Permian section of the Perth Basin.

The petrophysical log analysis and the recovery of gas indicates that there are three sandstone reservoirs in this section that are gas saturated. The gross thickness of these sands extends over ~12 metres.

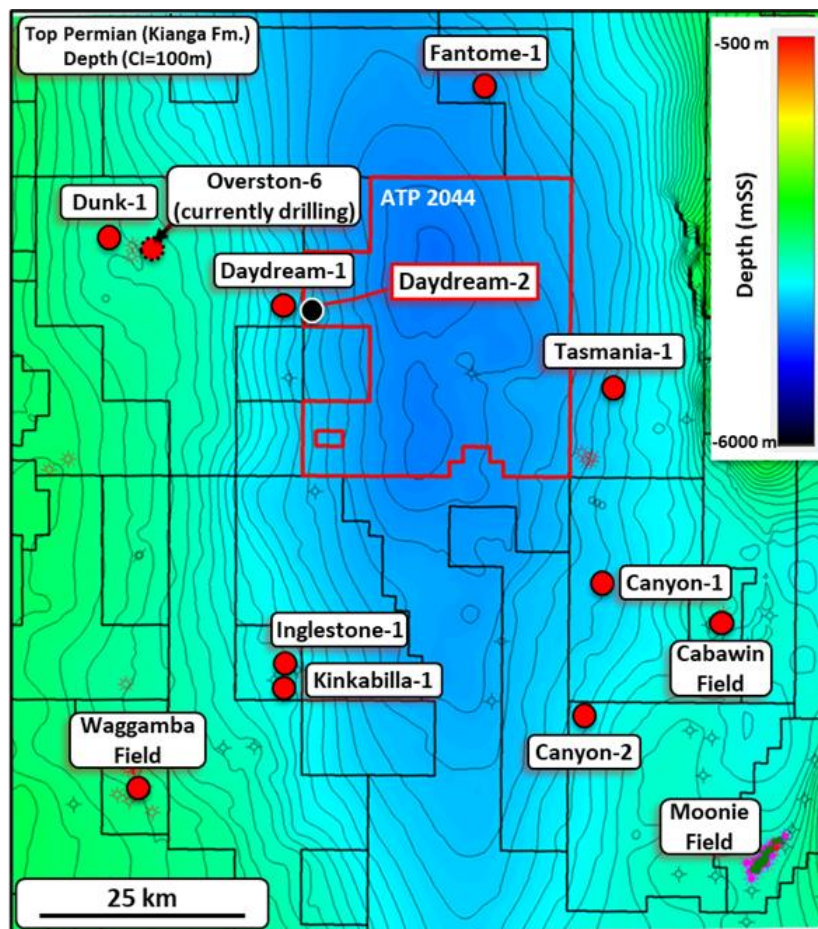


*Daydream-2 Petrophysical Logs over the Lower Lorelle Sandstone*

The log character of the zone reveals significant information about the sands, namely:

1. The sands have sharp bases and are generally fine upwards, indicating they were deposited in a channelised fluvial depositional setting.
2. A good “resistivity profile” is noted between the shallowest and deepest readings. This is considered a good indicator of permeable rock and is particularly evident in Sand 1.
3. The yellow highlighted cross-over of the neutron and density logs is generally an indicator of gas producing reservoir sandstone in the Cooper and Bowen Basins.

Stratigraphic correlations show a similarity with the Lower Lorelle Sandstone identified in the well reports from the Dunk-1 well drilled by BG Group around a decade ago – located in PCA 305 (Shell – 100%) some 26 kilometres away – see map below.



*Map of ATP-2044 and the Daydream-2 and Dunk-1 Locations*

Although the ultimate extent of these sandstone reservoirs are unknown, there are clear indications that a quality reservoir is present – potentially over an extensive area, given the correlations with Dunk-1. Identifying the extent and thickness of these sandstones are now a firm part of Elixir’s plans going forward.

These sands will now be incorporated into the Company’s extensive and novel stimulation testing regime, which will begin around the end of the month with the rigging up of a coiled tubing unit on location.

This equipment is required for the initial diagnostic fracture injection test (DFIT) stage of the stimulation program.

DFITs involve the injection of small volumes of fluid into carefully selected zones and are used to measure and calibrate the in-situ earth stress, formation permeability and pore pressure. These are key parameters for stimulation design and reservoir engineering in low permeability formations. Elixir will undertake DFITs into 5 separate zones to gather these data – including the recently identified permeable zone.

Such a comprehensive and detailed DFIT program has traditionally not been commonplace in Australia (the DFIT process will take around 4-8 weeks and the main stimulation program will follow thereafter). However Elixir has identified material benefits to conducting this extensive program as it underwrites the Research and Development aspect of the program and should facilitate an optimal stimulation design to unlock the discovered gas resources.

The key long lead items for the stimulation program – principally various sized proppants – have recently been ordered from manufacturers in China.

The timeline for the work program going forward is currently as follows:



- 1 Compilation of post well analysis (final pay information and initial production testing plans)
- 2 Additional Laboratory Analysis
- 3 Review of Resource Certification
- 4 Diagnostic Fracture Injectivity Testing (DFIT) to directly measure formation stress, pore pressure and permeability
- 5 Pre-stimulation optimisation and testing activity (to guide formal stimulation plans)
- 6 Working with Halliburton Global Technology Centre for optimal strategy on stimulation of Daydream 2 reservoirs
- 7 Long Lead Items including micro-proppant
- 8 Execution of stimulation program for sandstone and coal reservoirs
- 9 Completion and production testing (initial flow rates from specific isolated intervals in coals and sandstones)

Elixir’s Managing Director, Mr Neil Young, said: “The next stage of Elixir’s Daydream-2 well program is now imminent, with the expected arrival on site of equipment for the initial stimulation and testing phase in around a fortnight. Our technical team’s analysis to date indicates a potential new play that could be extensive. Our next stages of work are following to test that, starting with the imminent, comprehensive DFIT program.”

By authority of the Board:  
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