

Announcement to ASX

22 September 2021

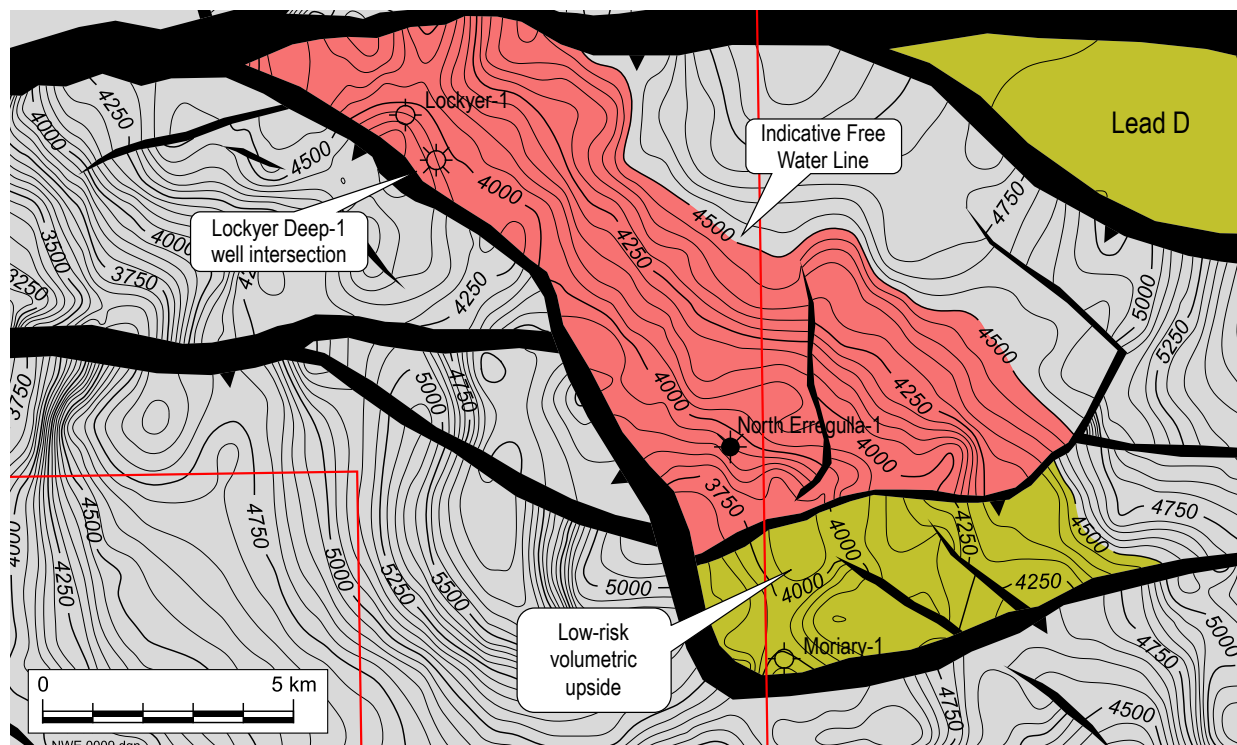
LOCKYER DEEP-1 GAS DISCOVERY EXCEEDS PRE-DRILL EXPECTATIONS

HIGHLIGHTS

- Petrophysical analysis of wireline data confirms exceptional reservoir quality in Kingia Sandstone
- Net gas pay 20.2 metres (TVD) with average porosity 16% and average permeability estimated 500 Millidarcies
- High reservoir pressures indicate an estimated 600-800 metre gas column
- Discovery is expected to exceed Norwest's pre-drill High Case prospective resource
- Well being completed for production testing
- Substantially upgrades EP368 & EP426 Permian exploration portfolio

Perth Basin oil and gas exploration company Norwest Energy NL ("**Norwest**" or the "**Company**") is pleased to provide the following update further to recent completion of wireline logging operations at the Lockyer Deep-1 conventional gas discovery well.

The EP368 Joint Venture's petrophysical analysis of the Kingia Fm. confirms a 34 metre (TVD) gross pay interval at the top of the Kingia Sandstone, between 3,888 metres and 3,922 metres (TVDSS), with gas interpreted down to low permeability or tight rock (i.e. no gas water contact). Based on an 8% porosity cutoff, net gas pay within this interval is 20.2 metres (TVD), predominantly within the upper section. This net pay zone is of exceptional quality, with average porosity of 16% and average permeability estimated at 500 Millidarcies. The maximum measured porosity is 28%.



Reservoir pressure at the top of the pay interval is 6,514 psi. A well-defined gas gradient was measured through the pay interval which, combined with the regional water gradient, indicates the presence of an up to 800 metre gas

column (from the North Erregulla crestal location) down to a Free Water Line at approximately 4,500 metres (TVDSS, Refer Figure 2). Norwest Energy regards this as remarkable as it confirms the fault-seal integrity of the structure's main bounding faults, regardless of orientation and despite a very significant gas column. This result substantially upgrades the additional prospectivity identified within EP368 and EP426, including Lead D (20 km²) directly to the northeast.

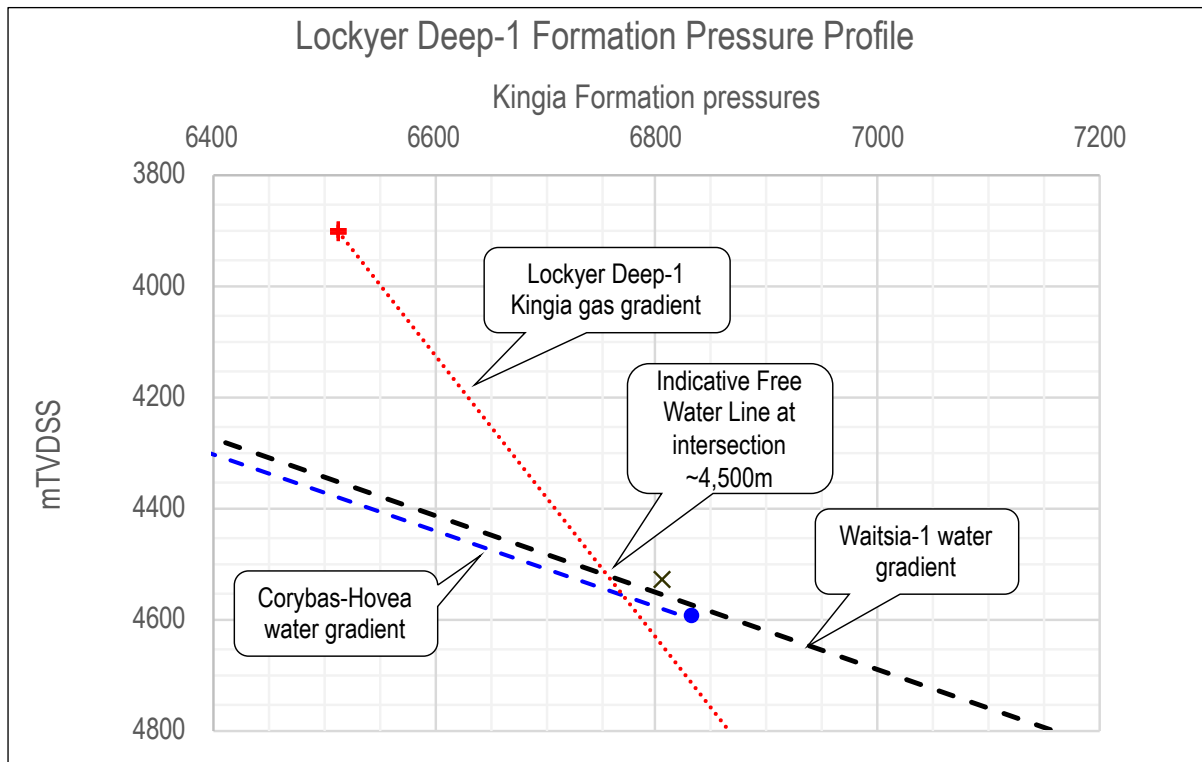


Figure 2: Lockyer Deep-1 Formation Pressure Profile

Based on a gas column of up to 800 metres the indicative areal extent of the discovery is approximately 66 km², with an additional 22 km² of low-risk upside in the downthrown fault block to the south of the North Erregulla culmination (refer Figure 1). The associated preliminary estimate of gas resources within the Kingia 66 km² area alone is believed to exceed the Company's pre-drill High Case prospective resources for the Kingia and High Cliff combined (refer ASX Announcement of 28 October 2019). The remaining 13.8 metres within the gross Kingia pay interval includes sandstones with porosity less than the 8% cutoff. While these sandstones are not regarded as conventional pay, the Company believes they may well provide incremental recoverable gas resources through secondary charge of the overlying high quality pay zone. Further study is required in this regard.

Norwest Energy Managing Director, **Iain Smith commented**, "The Lockyer Deep-1 discovery is an extraordinary outcome for Norwest Energy. The upper Kingia pay interval is arguably the highest quality reservoir encountered thus far within the deep Permian gas play of the north Perth Basin, and this fact combined with an inferred significant gas column gives us good reason to believe that the structure hosts gas resources that are greater than our pre-drill High Case prospective resource. Such an outcome happens only very rarely in our industry, and we now look forward to production testing of what we expect to be a very high deliverability reservoir."

High Cliff/Dongara/Wagina Intervals

Petrophysical analysis of the two other identified potential pay zones within Lockyer Deep-1 has also been completed. The High Cliff Sandstone section is deemed to be of generally low porosity and permeability, and is not regarded as offering conventional gas pay at the Lockyer Deep-1 location. However the High Cliff may well offer potential elsewhere within the overall Lockyer Deep/North Erregulla Deep structural closure. The Dongara/Wagina section contains a gross oil column of 66 metres thickness (TVD), of which some 30 metres has an average porosity of 9% (just above the 8% cutoff). Permeability appears to be generally low and further analysis of this interval is required. Norwest Energy believes that the North Erregulla Deep location likely offers better potential for oil within good quality Dongara/Wagina Sandstones, in an updip location from the North Erregulla-1 well which produced a small quantity of 38° API oil from two Drill Stem Tests, in the Kockatea Shale and Dongara Sandstone respectively.

Forward Program

The well is now being completed for production testing of the Kingia Sandstone by running and cementing 5 1/2" production liner to Total Depth. The Company's next scheduled announcement will occur upon release of the Ensign 970 rig, and timing of the production test will be confirmed in a subsequent announcement shortly thereafter. The joint venture has been preparing for a 3D seismic survey across the greater Lockyer Deep/North Erregulla Deep structure, and will now accelerate the program in addition to commencing planning and procurement for future appraisal drilling.

Note that all depths are now reported as TVDSS (True Vertical Depth Subsea) and interval thicknesses as TVD (True Vertical Depth).

Lockyer Deep-1 is located within Exploration Permit EP368, a joint venture between Norwest (20%) and Energy Resources Limited (80% and Operator). Energy Resources Limited is a wholly owned subsidiary of Mineral Resources Limited (ASX:MIN).

Authorised for release to ASX by the Board of Directors.

For further information please contact/follow Norwest Energy at:

Web: www.norwestenergy.com.au

Phone: +61 8 9227 3240

Email: info@norwestenergy.com.au



[@Norwest_Energy](https://twitter.com/Norwest_Energy)