ASX ANNOUNCEMENT



8 SEPTEMBER 2021

Lockyer Deep-1 Gas Discovery

Mineral Resources Limited (ASX: MIN; MRL or Company) is pleased to provide the following update on the drilling operations at the highly anticipated Lockyer Deep-1 conventional gas exploration well. Lockyer Deep-1 exploration well is located on Exploration Permit EP368, in the highly prospective northern section of the Perth Basin, Western Australia that is host to several significant recent conventional gas discoveries. Energy Resources Limited (ERL), a wholly owned subsidiary of MRL, is operator of the EP368 Joint Venture between ERL (80%) and Norwest Energy NL (20%) (ASX: NWE).

Highlights:

- Drilling results identify a significant gas discovery at Lockyer Deep-1
- Excellent reservoir quality encountered in the Kingia Sandstone
- Significant gas elevations observed throughout the IRCM and Kingia Sandstone
- Additional gas potential identified in the High Cliff Sandstone
- Several gas peaks encountered within the Dongara-Wagina Formation
- Potential conventional oil resource identified in the Dongara Sandstone
- Drilling reached Total Depth of 4,274 metres on 6 September 2021

The Company is pleased to advise that initial interpretation of logging while drilling and mud log data has identified a significant gas bearing reservoir in the primary objective Kingia Sandstone. The top of the Kingia Sandstone was intersected at 4041 metres and was marked by a significant drilling break and elevated gas readings. High gas readings were encountered across a gross sand interval of 26 metres to 4067 metres, with good, inferred porosities throughout with a high net/gross ratio. Elevated gas readings continued in sandstones to the top of the Bit Basher Shale at 4109 metres. Elevated gas readings were also observed from within the High Cliff Sandstone from 4172 metres to 4214 metres with some fair inferred porosities. Based on the available data no gas water contact is evident, supporting the case for very significant resource potential across the greater Lockyer Deep/North Erregulla Deep structure.

Additional hydrocarbon potential has been identified within the Dongara-Wagina sands, which also had a notable drilling break, with fair oil fluorescence and elevated gas readings. The Dongara Sandstone and Wagina Formation secondary objectives were encountered at 3,117 metres and 3,165 metres, respectively. Oil fluorescence was observed over a 158 metre (gross) section from the top Dongara Sandstone and into the Wagina Formation. Fair to good oil shows were observed within the upper 68 metres of this interval (of which approximately 48 metres is interpreted as the Dongara Sandstone).

Wellbore conditioning activities are continuing, after which wireline logs will be run. Positive wireline results will result in the well being cased for production testing. Following the completion of the wireline evaluation and production testing activities, ERL will complete an assessment of the recoverable volumes at the Lockyer Deep-1 exploration well.

ERL is the largest petroleum acreage holder in the Perth Basin with operating permits covering more than 7,300km². ERL also holds the largest petroleum acreage in the onshore Northern Carnarvon Basin, with the combination of the Perth and Northern Carnarvon Basins providing a total acreage position of 13,629km² in Western Australia.

The Lockyer Deep 1 exploration well aligns with MRL's strategy to secure its own natural gas supply to provide energy security for the Company's current and future mining operations at lower cost and with lower emissions. MRL has committed to achieving Net Zero Emissions by 2050 and is developing a decarbonisation

ASX ANNOUNCEMENT



roadmap to enable this target to be achieved as early as possible. A critical aspect of this journey is to reduce the Company's reliance on diesel fuel and utilise its own natural gas supply as part of the energy transition.

Mineral Resources Managing Director Chris Ellison said:

"The success at Lockyer Deep-1 exploration well is a fantastic start to our significant gas exploration program, as we seek to provide natural gas to power our own operations in conjunction with renewable energy sources such as solar and wind."

"Following positive wireline logging, a production test will be completed at Lockyer Deep-1 exploration well to fully evaluate gas flow rates, the results of which will inform our appraisal strategy to define the full extent of the gas field."

"This gas discovery is an important step to securing our decarbonisation pathway and providing energy services to the Western Australian mining industry as it transitions to a lower carbon future."

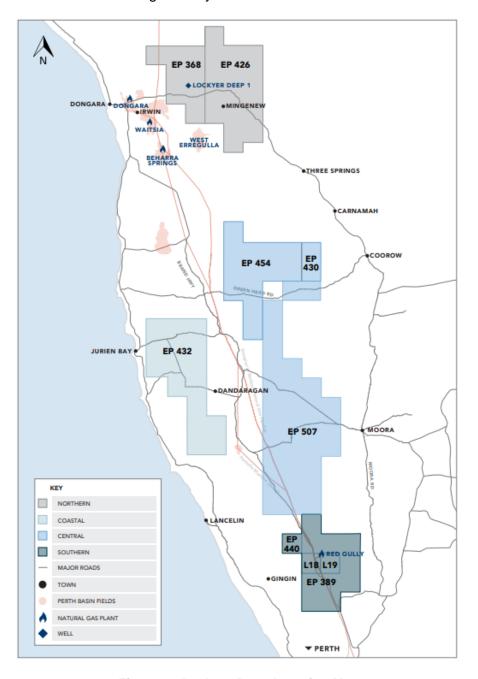


Figure 1: Lockyer Deep Location Map

ASX ANNOUNCEMENT



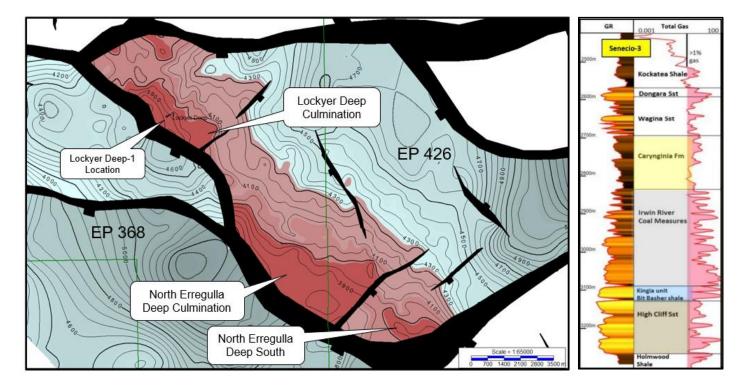


Figure 2: Lockyer Deep Kingia Sandstone Structure Map & Senecio-3 Stratigraphy (Waitsia Field)

ENDS

This announcement dated 8 September 2021 has been authorised for release to the ASX by Mark Wilson, Chief Financial Officer and Company Secretary.

For further information, please contact:

JAMES BRUCE

Head of Investor Relations Mineral Resources Limited

T: +61 8 9329 3706

E: iames.bruce@mrl.com.au

PETER KLINGER

Media Relations Cannings Purple T: +61 411 251 540

E: pklinger@canningspurple.com.au

About Mineral Resources

Mineral Resources Limited (ASX: MIN) is a Perth-based leading mining services provider, with a particular focus on the iron ore and hard-rock lithium sectors in Western Australia. Using technical know-how and an innovative approach to deliver exceptional outcomes, Mineral Resources has become one of the ASX's best-performing contractors since listing in 2006.