ASX Release

21 December 2021



Lofin Gas Field discovery testing

Key highlights:

- Testing program approved, aiming for Q2 2022
- Plan to re-enter and conduct an extended test of the 2015 Lofin-2 appraisal well
- In 2015, Lofin-2 delineated a continuous gas column of up to approximately 1,300m¹, one of Indonesia's largest recent onshore gas discoveries
- Test is a key step toward commercialisation of the Lofin Gas Field Contingent Resources³ (2C) of 1450 Bcf (100%) / Lion share 36.3 Bcf² against a backdrop of strong gas prices and rapidly growing gas demand in the region.
- Gas buyers identified which will support an early development plan.

Lion Energy Limited ("Lion" or "Company") is pleased to report that the Seram (Non-Bula) PSC joint venturers have approved the re-entry and testing plan for the Lofin-2 well in the Lofin gas field. The Joint Venture is planning to conduct the test in mid 2022 following receipt of the required long lead items. The test will enable critical fluid and reservoir information to be obtained and will be key to planning commercialisation of the impressive Lofin gas field.

Miller and Lents Lofin	Gross Gas (100%)					
Field Resources (31 December 2020)	Original Gas-in-Place (BCF)			Technical Estimated Ultimatetly Recoverable (EUR) (BCF)		
Contingent Resources	1C	2 C	3C	1C	2 C	3C
Seram PSC Lofin Field	1671	2636	2714	752.0	1450.0	1764.0

(Contingent resources³ for the Lofin Field net to Lion are 1C: 18.8 2C: 36.3 3C 44.1 Bcf (Lion share) (refer Lion ASX release 13 April 2021))

A staged development plan for the Lofin gas field is anticipated with potential for initial gas sales to local industry in the Seram area during extended well testing with results guiding eventual full development plan for the Lofin field.

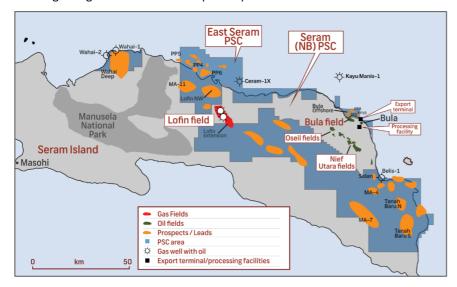


Figure 1: Map showing Lofin Field location, as well as the Seram (Non Bula) PSC and Lion operated East Seram PSC

Lion at a glance

- ASX listed oil and gas company with PSC's in Indonesia.
- Focus on conventional oil and gas production and development, appraisal and step out exploration risk opportunities
- Exploring green hydrogen opportunities in Australia
- Net production around 40 bopd from the Seram (Non-Bula) PSC which also contains the 1.5TCF Lofin gas/condensate discovery
- Leveraging synergies in conventional assets and access to both infrastructure and markets
- Executive team and investors with impressive track records for value creation in Asia.

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¹ Refer ASX release dated 8 October 2015 entitled 'Milestone Lofin Discovery – 2tcf continent resource'.

² Refer ASX release dated 13 April 2021 entitled 'Seram (Non-Bula) PSC Oseil and Lofin Field reserves and contingent resources update amende'

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The objectives of the well test are:

- Improving the understanding of the reservoir characteristics
- Re-affirming the contingent resource estimate of 1.45TCF for the discovery
- Assessing the gas deliverability of the well for early commercialisation
- Enabling the preparation of a Put-On-Production ("POP") application with the Indonesian regulatory body SKK Migas under which the joint venture would produce gas from the existing well

The well test is scheduled for Q2 2022 at a gross cost of US\$12.3m (net to Lion US\$0.3m) of which approx. US\$1.054m has already been paid by the joint venture.

As previously announced, the Lofin-2 appraisal well drilled in 2015 confirmed a material gas discovery at Lofin on Seram Island, East Indonesia. The Lofin structure is a thrust-faulted four-way dip anticline located 60km west of the Oseil oil field. Lofin-2 delineated a continuous gas column of up to approximately 1,300m, making it one of the largest onshore gas discoveries in Indonesia over the last 20 years.

Lion's Chairman, Tom Soulsby noted "Lion looks forward to the testing of Lofin-2 which is a key step in the commercialisation of the world-class Lofin gas resource. The testing program forms part of an exciting 2022 for Lion on Seram island as we will also be conducting a 200km onshore seismic survey in our East Seram PSC which will target an impressive inventory of prospects and leads some of which are analogous to the Lofin field."

Lofin Gas Field

The Lofin Field is a thrust faulted four way dip anticline located 60-km west of the producing Oseil Oil Field. The field is mapped on 1990 and 2008 vintage 2D seismic lines and is approximately 4km wide and 10km in length. The field is mapped to partly extend into the East Seram PSC in which Lion has a 60% interest.

The reservoir is the fractured carbonate of the Jurassic/Triassic age Manusela formation which is the reservoir in the nearby producing Oseil Oil Field. The overlying Jurassic marine Kola shale provides the regional seal with the main source rock interpreted to be the underlying mature Late Triassic Saman-Saman Formation.

The Lofin Gas Field was discovered in 2012 with the drilling of Lofin-1 which tested 15.7 mmcfgd and 171 bpd of 36.1° API condensate. The discovery was successfully appraised in 2015 with Lofin-2 well with results indicating a 1300m gas column. The Lofin-2 well flowed gas at up to 17.8 mmcfpd through a 52/64" choke at 2250psi wellhead flowing pressure. The well also flowed over 2000 bwpd interpreted to be from the lower part of well. The gas is good quality with less than 5% carbon dioxide. The planned new test procedures involve isolating the lower water zone by setting a cement plug above the interpreted water zone. The test procedure is designed to provide essential data on field reservoir and well deliverability.

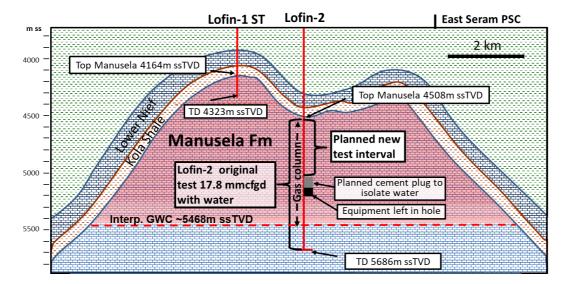


Figure 2 Lofin Field Schematic Diagram showing planned test interval

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³ Contingent Resources are those quantities of petroleum estimated, as of a given date, to be potentially recoverable from known accumulations using established technology or technology under development, but which are not currently considered to be commercially recoverable due to one or more contingencies. Contingent Resources have an associated chance of development (economic, regulatory, market and facility, corporate commitment or political risks). These estimates have not been risked for the chance of development. There is no certainty that any portion of the contingent resources will be developed and, if developed, there is no certainty as to either the timing of such development or whether it will be commercially viable to produce any portion of the resources.

The Contingent Gas resources for the Lofin Field provided in this announcement are based on analysis of Miller and Lents using a deterministic approach. Data was provided by the PSC Operator. The Lofin Gas Field development is subject to planned work including further testing of the Lofin-2 well, currently scheduled for mid 2022 to more accurately determine gas deliverability, reservoir characteristics, water contact information and potential reservoir extent. Planned 3D seismic in 2022/2023 over the Lofin Field area will more accurately assess the field extent and contingent resource volumes. Development plans and the potential gas marketing strategy will be partly contingent on the results of this planned work. The Lofin Gas Field is within the Seram (Non-Bula) PSC which had a 20 year extension granted effective 1st November 2019 to 1st November 2039.

The Company confirms that it is not aware of any new information or data that materially affects the information included in this market announcement and that all the material assumptions and technical parameters underpinning the contingent resource in the market announcement dated 13 April 2021 continue to apply and have not materially changed.

Glossary

bbl: barrels	GIP: gas in place	PSC: Production Sharing Contract		
Bcf: billion cubic feet	JV: joint venture	psi: pounds per square inch		
bpd: barrels per day	KB: Kelly bushing	ss; sub sea		
bcpd: barrels condensate per day	mmcfgd: million cubic feet gas per day	TCF: trillion cubic feet		
bopd: barrels oil per day	mmbbl: million barrels	TVD; true vertical depth		
bwpd: barrels water per day	mmboe: million barrels of oil equivalent			
CO2: carbon dioxide				

ENDS

This ASX announcement was approved and authorised for release by the Board of Directors.