ASX Release

21 December 2022



Re-entry underway on critical Lofin Gas field test

Lion Energy Limited ("Lion" or "Company"; ASX: LIO) is pleased to provide an update on the testing of the Lofin-2 gas well as part of the ongoing evaluation of the Lofin gas discovery. The test program is designed to enable the Seram (Non-Bula) Production Sharing Contract ("PSC") to move forward with numerous commercialization options currently under review. Lion has a 2.5% participating interest in the PSC. Rig up of the drilling rig is completed and well re-entry began on 19th December 2022, testing to be undertaken in January 2023, with completion expected early February.

Testing Program Objectives

- To enable critical fluid and reservoir information to be obtained and will be key to planning commercialisation of the Lofin gas field.
- Re-affirming the contingent resource¹ estimate of 1.45 TCF for the discovery
- Assessing the gas deliverability of the well for early commercialisation

The discovery well, Lofin-1, was drilled in 2012 and provided encouragement for further appraisal drilling following gas flow rates reaching 15.7 MMscfD. The well measured depth of 4,427m (4,410m TVD) was however constrained by mechanical issues and therefore an appraisal well was planned.

The appraisal well Lofin-2 was drilled in 2015 to a measured depth of 5,861m (5,791m TVD) and confirmed a significant gas discovery, with a reservoir section of up to 1,300m. On pulling out of the hole, drill pipe became stuck and despite a number of attempts to free the pipe, the lower section of the pipe string was left in the hole. Subsequent testing of the well was thus compromised, with a gas rate of up to 17.8 MMscfD limited by water influx of 2,634 barrels per day.

Tom Soulsby, Lion's Chairman said today that "Lion Energy books net 2C contingent gas resources of 36 BCF in relation to the field. As a result, this well test is an extremely important value driver for Lion in the pathway to commercialisation of the Lofin Gas Field against a backdrop of strong Asian gas prices. Lion will provide investors further updates during the testing program and we look forward to the results."

In-place and Contingent Resources ^{1,2} Lofin Field, Seram (Non-Bula) Block PSC, Seram Island, Indonesia (as at 31 December 2021)							
	Gross (100%) PSC						
	In-place			Recoverable			
Manusela Formation Reservoir	1C	2C	3C	1C	2C	3C	
	(P ₉₀)	(P ₅₀)	(P ₁₀)	(P ₉₀)	(P ₅₀)	(P ₁₀)	
Gas (bcf)	1671	2636	2714	752	1450	1764	
Condensate (mmbbl) ³				6.4	12.3	15.0	
Total (mmboe) ⁴	279	439	452	132	254	309	

(Contingent resources¹ for the Lofin Field net to Lion are 1C: 18.8 2C: 36.3 3C 44.1 Bcf (refer Lion ASX release 27 April 2022)).



Lofin Field

The Lofin Field is a thrust faulted four-way dip anticline located 50-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. While Lion has a 2.5% interest in the Seram (Non-Bula) PSC portion of the Lofin discovery, part of the field is mapped to extend into the East Seram PSC in which Lion has a 60% interest (Figure 1).

The reservoir is the fractured carbonate of the Jurassic/Triassic age Manusela formation which is the reservoir in the nearby producing Oseil oilfield. 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.

Lion notes that the process for the sale of 10% of the participating interest in the Seram (Non-Bula PSC) continues and is now expected to complete in early 2023. At completion, Lion's participating interest in Seram (Non-Bula) PSC will reduce to 2.25% from 2.5% currently.

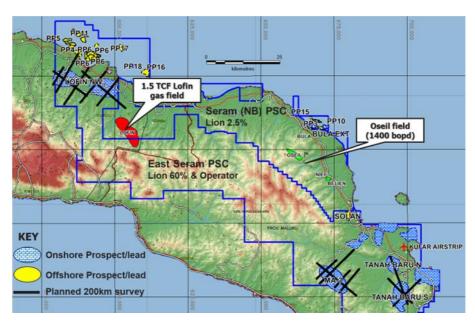


Figure 1 Map showing Lofin Field location, as well as the Seram (NB)

PSC and Lion operated East Seram PSC

Notes

¹Contingent 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, CITIC Seram Limited.

²Conversion factor: 6 mcf = 1 bbl oil equivalent (boe).



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	Conversion factor: 6 mcf = 1 bbl oil equivalent	
	(boe).	

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

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