

Strong gas flow from clean-up on Lofin gas discovery 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 1.5 TCF (2C) Lofin gas discovery in the Seram (Non-Bula) Production Sharing Contract (“PSC”). Lion has a 2.5% participating interest in the PSC.

Highlights

- Well re-entry successfully achieved.
- Gas rates up to 14.8 mmscfd recorded on an 80/64” choke, the maximum choke size during this well clean-up phase of the testing program.
- The water leg has been successfully isolated during this re-entry process by setting a cement plug.
- The original Lofin 2 well in 2015 indicated a large reservoir section of 1,300m.

Lion’s Chairman Tom Soulsby noted *“Lion is pleased with initial flow rates during this clean-up phase, confirming the good deliverability from the Lofin-2 well. This is a key step towards commercialisation and unlocking the value of the 1.5 tcf (2C) contingent gas resource. A successful well test will complement Lion’s 60% exposure to look-a-like structures in our adjacent East Seram PSC.”*

Following the initial 2-3 day shut-in period, which commenced on 13 February 2023, to monitor pressure build-up, the well will be re-opened for the multi rate flow test period. This will be followed by a more extended shut-in period to monitor pressure build up and help confirm reservoir volumes. Lion will continue to keep the market informed on the ongoing test results.

Testing overview

The objective of the Lofin-2 testing operations is to isolate the deep-water leg in the well and determine the reservoir hydrocarbon fluid characteristics and the deliverability of the target Manusela limestone.

The test string was run in the Lofin-2 wellbore on 4 February and the testing tool opened for an initial clean up period on 8th February. Gas to surface was achieved following controlled flow back of the water cushion/completion fluid. Rates of up to 14.8 mmscfd were recorded on the 80/64” choke with 800 psi well head pressure (WHP). The final test before first shut-in period was at a 16/64” choke with a rate recorded of 11.53 mmscfd/58.6 bcpd (API:37), less than 1 bwpd (representing completion fluid) with 4150 psi WHP. Only 3% CO₂ was recorded in the gas. Tested interval was at 15155’ measured depth (MD) - 16656’MD/4619-5077m MD.

Lofin Field Background

The discovery well, Lofin-1, was drilled in 2012 and provided encouragement for further appraisal drilling following 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.

In-place and Contingent Resources ^{1,2}						
Lofin Field, Seram (Non-Bula) Block PSC, Seram Island, Indonesia						
(as at 31 December 2022)						
Manusela Formation Reservoir	Gross (100%) PSC					
	In-place			Recoverable		
	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 Bcf 2C: 36.3 Bcf 3C 44.1 Bcf (refer Lion ASX release 27 April 2022)).

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.**

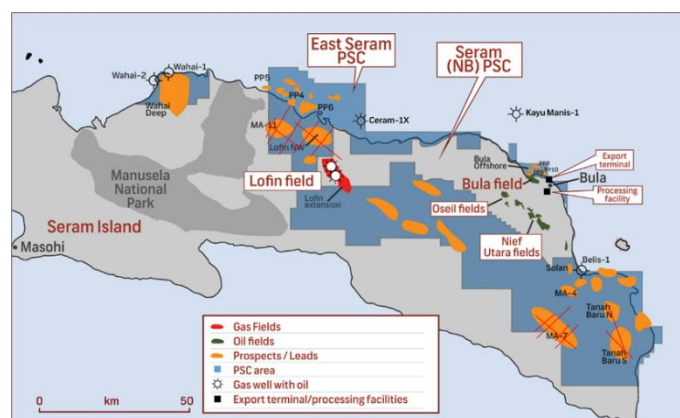


Figure 1 Map showing Lofin Field location, as well as the Seram (NB) PSC and Lion operated East Seram PSC

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	mmcfd: 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	
CO ₂ : 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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