

Quarterly Report

1 October to 31 December 2020



Highlights – Marine 2D seismic survey completed, data processing well underway

Lion Energy Limited (“Lion” or “Company”) completed its marine seismic operations in the East Seram PSC during a busy fourth quarter of 2020. The Company also had steady production from the Oseil oil field in the Seram (Non Bula) PSC.

Highlights include:

- Safely completing the acquisition of 664kms of marine seismic data in the Bula Bay and Kobi Area of Seram Island in the East Seram PSC.
- Survey within budget while delivering 22% more seismic lines than planned allowing targeted areas to be more fully explored.
- Obtained good data quality with processing completion earmarked for March 2021.
- Interpretation of data planned to be finalised in Q2 2021
- Onshore seismic program has been delayed to later in 2021 due to Covid 19, with partner seismic funding arrangements remaining in place.
- Farmout efforts are ongoing for a further 10% divestment of East Seram by the Company.
- Seram (Non-Bula) Block (“SNB”) PSC production for the quarter was 3,502 bbls net to Lion.
- A crude oil lifting at SNB was completed 28 December 2020 with Lion’s revenue share (post-GOI share) expected to be USD295,000 to be received in February, 2021.
- Three well services are scheduled for this Quarter, the objective being to shut-off water inflow and increase oil production from those wells.
- Cash at quarter end was US\$0.633m (excluding joint-venture cash and latest lifting), a decrease of US\$0.14m from the end of Q3 2020.

Despite the ongoing Covid-19 pandemic, Lion was very productive in Q4 completing its marine seismic acquisition program.

Production from SNB averaged 1,640 bopd for the quarter (~39 bopd net to Lion). Gross crude oil production for the quarter was 150,877 bbl (3,772 bbl to Lion).

A crude oil lifting of 284,684 bbls was completed on 28 December 2020 at an expected price of USD44.65/bbl, with Lion’s share of revenue approx. USD295,000 after GOI entitlement.

Lion at a glance

- ASX listed oil and gas E&P company focused on Seram Island, East Indonesia; two conventional PSC’s on gross split terms.
- Net production of around 40bopd from the Seram PSC which also contains the Lofin gas/condensate discovery.
- New focus on production opportunities in Southeast Asia, initial focus on Seram Island.
- Executive team and strategic investors with impressive track records for value creation in Indonesia.

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Mr Soulsby, Lion's Chairman said that "Our increased momentum continued during Q4 2020 despite the challenges of the Covid pandemic. As promised in our Q3 report, we completed our offshore seismic acquisition and commenced initial processing. In fact, Lion had planned 500 line kms but we actually achieved 664 line kms. We did this within budget with focused attention to operational efficiency to avoid standby charges within strict Covid-19 protocols. This more targeted program is an exciting first step to delineating over 1 billion+ boe's of prospective resource¹ potential (P50, best estimate category) that exist in the East Seram PSC."

¹The estimated quantities of petroleum that may potentially be recovered by the application of a future development project(s) relate to undiscovered accumulations. These estimates have both an associated risk of discovery and a risk of development. Further exploration appraisal and evaluation is required to determine the existence of a significant quantity of potentially moveable hydrocarbons. Refer to the Company's ASX release on 04/03/2019 entitled Additional high impact leads identified at East Seram PSC release, Table 1 East Seram PSC Prospective Resources Summary.

Operations update

East Seram PSC

Lion, via its wholly owned subsidiary Balam Energy Pte Ltd, holds a 60% participating interest in the East Seram PSC, located on and offshore east Seram Island in eastern Indonesia.

Lion completed its planned marine seismic during the quarter.

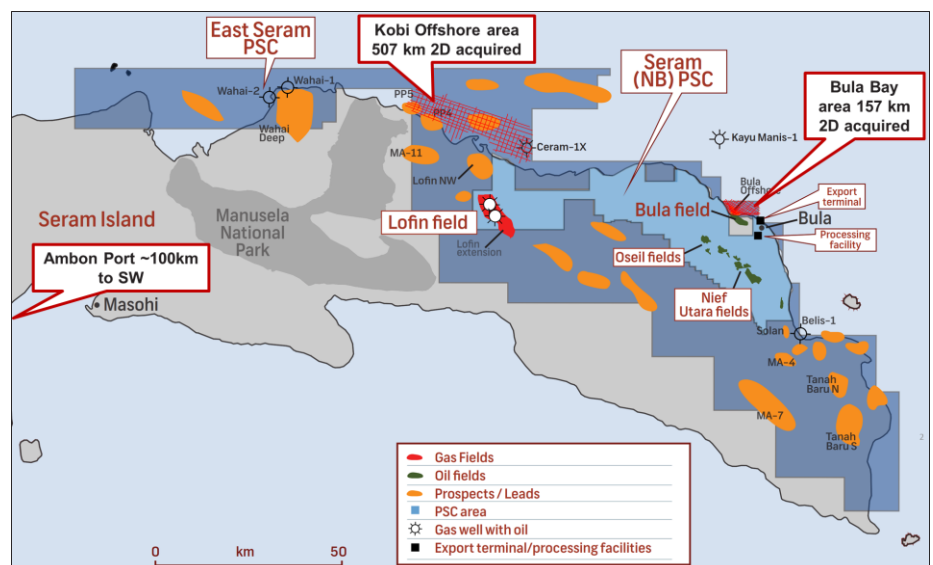
The East Seram PSC was signed in July 2018. As noted in Lion's press release on 27 September 2019, Lion signed a farmout agreement with OESC, a subsidiary of Taiwan's CPC Corporation.

OESC has taken a 40% working interest under the farmout agreement signed with the Company on 25 September 2019.

OESC funds seismic costs on a 2 for 1 basis, up to the gross firm commitment seismic cost cap of US\$8.5m, and Interests in the East Seram PSC are:

Balam Energy (Operator):	60%
OESC:	40%
Total:	100%

East Seram PSC – location map (UPDATE MAP)



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Work program update

Lion completed the acquisition of 664 kms of high resolution 2D data offshore Seram Island during the quarter. The survey commenced on 1 November 2020 and was completed on schedule on 9 November 2020. Weather was favourable throughout the survey and data quality looks good. Approximately 507 kms of high resolution 2D seismic was acquired in the NW Kobi area targeting both attractive shallow water prospects as well as a deeper water lead fairway. A total of 157 km was acquired in the Bula Bay area to investigate the potential offshore extension of the 20 mmbbl Bula oil field as well as other identified prospects and leads

Once processing, being undertaken at a processing centre in Jakarta, is complete (expected in March 2021), Lion will have met its firm commitment obligations in the East Seram (PSC).

The data is being processed in Jakarta and overseen by experts engaged by Lion. The survey is designed to investigate some large leads on the NW Kobi area with areal closure up to 30km² and also the potential extension of the 20 mmbbl Bula oil field and other leads in Bula Bay area. Interpretation of the data expected to be finalised in Q2, 2021.

The onshore seismic acquisition was planned for 2020, however it has been deferred due to concerns on Covid given the large numbers of personnel required in the field and it is now programmed to commence in late 2021 (Covid-19 protocols permitting).

A structural reconstruction study was completed during the quarter giving important new insights into the development of some of the major structural features that form attractive targets in the PSC.

Given the size of prospects in the onshore area, Lion will apply for a deferral of its relinquishment obligations in Q2 2021. Lion is confident the combination of the recently acquired offshore seismic program, and the planned onshore program, will result in a suite of drill ready targets and reinforce the East Seram PSC as one of the most high-potential exploration blocks in the South East Asian region

Background

The 6,510km² PSC covers much of the eastern part of Seram Island and surrounds the producing Seram (Non-Bula) PSC.

The PSC contains the southeast extension of the 2 TCF Lofin field, which was appraised by Seram (Non-Bula) PSC participants in 2015, and the offshore extension of the 20 mmbbl Bula Field of which Lion was operator from 2000-2005.

Lion's extensive knowledge and database of the area delivers the Company a competitive advantage and has proved critical in high grading and subsequently obtaining the East Seram acreage.

The East Seram PSC was awarded under Indonesia's new Gross Split PSC system which significantly reduces the bureaucratic burden on companies while providing internationally competitive fiscal terms with company profit share of at least 75% before corporate income tax. A modest commitment for the 3-year firm program consists of 500km 2D seismic (to be acquired either onshore or offshore and already acquired offshore) as well as geological and geophysical studies. No commitment wells are included in the primary 3-year term.

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Seram (Non-Bula) Block PSC

Lion, via its wholly owned subsidiary Lion International Investment Ltd, holds a 2.5% participating interest in the Seram (Non-Bula) Block PSC, located onshore Seram Island in eastern Indonesia.

The block contains the Oseil oilfield and surrounding structures that have yielded cumulative crude oil production of 18,709,476 barrels since production started in January 2003 through to 31 December 2020.

As previously reported by Lion, in 2015 the Lofin-2 appraisal well confirmed a highly material gas discovery in the SNB PSC.

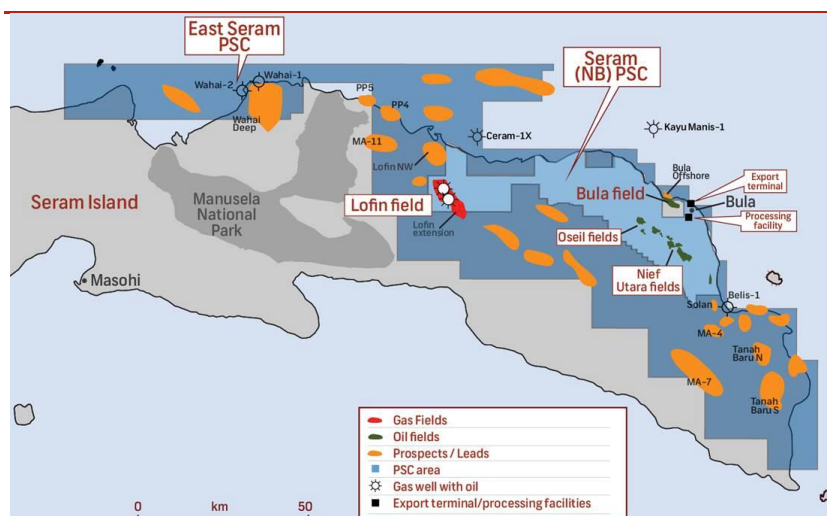
This significant milestone provides the joint venture participants:

- The opportunity to proceed with further appraisal and development of the significant Lofin gas discovery resource of in excess of 2 TCF. The Joint Venture is reviewing the timing for the Lofin-2 testing program.
- The opportunity to complete the full drilling program of the Plan of Further Development ("POFD") approved by the Indonesian regulatory body SKK Migas, on 5 May 2015. Only six of the 10 wells approved in the POFD were drilled due to the uncertainty of the SNB renewal, with the pending expiry of the block limiting the time for recovery of the drilling expenditure. The first of the remaining 4 POFD wells, Oseil-29 was drilled in 2020 and has produced 53,016 bbls since coming on stream in May 2020. The seven wells drilled in the POFD have produced 4.030 million barrels of crude oil up to 31 December 2020, since production commenced in January 2014. Of the 26 wells drilled in the Oseil oilfield, 13 are located in the Oseil-2 fault block and 7 of the 13 are POFD wells, with the remaining 3 approved under the POFD to be drilled in the Oseil-2 fault block. The eighth of the 10 approved POFD wells is scheduled to spud in Q2 2021.

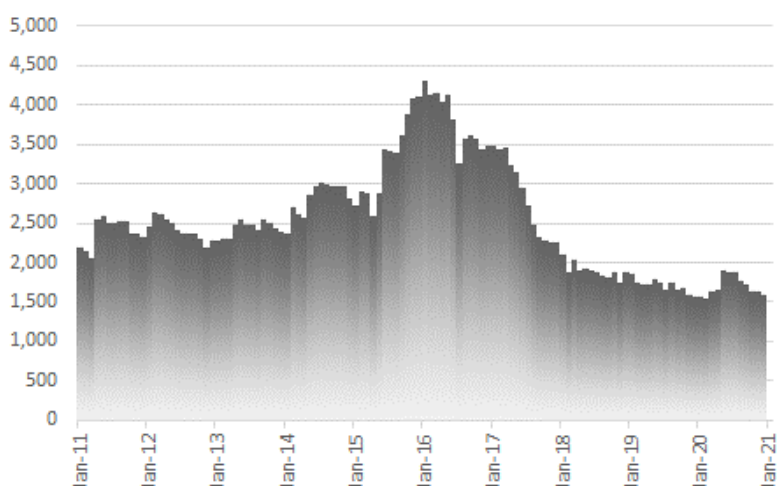
Production

During the quarter, gross crude oil production from Oseil and surrounding oilfields was 150,877 bbls (Lion's net share 3,502 bbls). Daily production averaged 1,640 bopd (Lion's net interest being 38 bopd). The well service on Oseil-22 was completed during the Quarter and the well was returned to production on 29 October.

Seram (Non-Bula) Block PSC - location map



Seram (Non-Bula) Block - daily production per calendar month (bopd)



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Crude oil available for lifting as at 31 December 2020 was only 1,621 bbls as inventory was shipped out during the December lifting that completed 28 December 2020.

Three well services are scheduled for Q1 2021, the objective being to shut-off water inflow and increase oil production from those wells.

Corporate

The Company continues to maintain a focus on costs, whilst pursuing an active new business program in Indonesia, initially focussed on Seram Island. Lion expects G&A costs to track steady year on year below US\$1m.

Related Party Payments

During the quarter, the Company made payments of \$117,000 to related parties and their associates. These payments relate to the existing remuneration agreements for the Executive and Non-Executive Directors.

Change of Registered Office and Principal place of business

The Company advises that the Company's registered office and principal place of business have changed with immediate effect to Suite 1/ 295 Rokeby Road, Subiaco WA 6008.

Summary of petroleum tenements held as at 31 December 2020

	% interest	Tenement	Location
Held at end of quarter	60%	East Seram PSC	Seram Island, Indonesia
	2.5%	Seram Non Bula PSC	Seram Island, Indonesia

Qualified petroleum reserves and resources evaluator requirements

In accordance with ASX Listing Rule 5.43 the Company confirms that references to petroleum reserves, contingent resources and prospective resources have previously been announced (7/9/2018, 10/9/2018 and 04/03/2019). The Company confirms that it is not aware of any new information or data that materially affects the information included in this announcement and that all the material assumptions and technical parameters underpinning the estimates in this announcement continue to apply and have not materially changed.

Glossary

bbl: barrels

bcf: billion cubic feet

bopd: barrels oil per day

BOP: blow out preventer

ESP: Electric submersible pump

FTP: first tranche petroleum

JV: joint venture

KB: Kelly bushing

mmscfd: million standard cubic feet of gas per day

mmbbl: million barrels

MD: measured depth

POS: probability of success

PSC: Production Sharing Contract

psi: pounds per square inch

tcf: trillion cubic feet

Sq.km: square kilometres

ss TVD: sub-sea true vertical depth

TD: total depth

END