

# New Zealand Oil & Gas Activities Report

## NEWS

- Gas indications in Taranaki.
- Drilling begins in Indonesia
- New Zealand Oil & Gas farms in to Ironbark, JV begins well planning

### Kohatukai gas indications

Electric logging tests were being planned at publication date in the Kohatukai-1 well in PEP 55768, onshore northern Taranaki.

The well has reached its total measured depth of 4280 metres. Indications of gas were observed within a number of levels in the wellbore in both the secondary Matapo and primary Mangahewa target intervals.

The gas indications were sufficiently encouraging that the operator intends to begin a comprehensive electric logging programme.

Following preliminary interpretation of the electric logs, a Modular Formation Dynamics Tester (MDT) tool, which measures formation pressures and samples reservoir fluids, may be run into the hole to further assess the interval.

Data obtained from these activities will help establish the fluid content and hydrocarbon saturation of possible reservoir intervals encountered, and to an extent, the permeability and producibility of these zones.

### Cue drilling underway in Indonesia

Meanwhile, drilling has also begun in the Paus Biru-1 exploration well in the Sampang PSC, offshore from East Java, Indonesia, where New Zealand Oil & Gas ASX-listed subsidiary Cue Energy Resources has a 15 per cent interest. Drilling operations commenced on 18 October 2018. The well is in 30 metres of water and is expected to reach its target depth of 650 metres around 1 November.

The primary objective of the Paus Biru-1 well is in the Mundu Formation, a proven producing reservoir in Oyong and Wortel fields to the west and Maleo and Peluang fields to the east. If successful, a horizontal production well will be drilled at a later stage.

### Farm in to Ironbark, JV begins well-planning

New Zealand Oil & Gas has agreed to join the joint venture in the giant Ironbark prospect offshore West Australia's Northwest Shelf, subject to conditions.

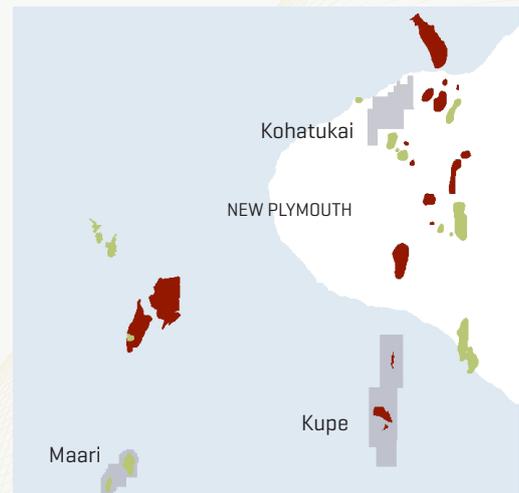
The permit is currently held by Cue Energy Resources. BP Developments Australia Pty Ltd and Beach Energy Limited also hold conditional agreements to enter into the permit. They have signed a coordination agreement with Cue and New Zealand Oil & Gas that sets out the parties' intention for BP, the nominated operator, to commence work on the committed well in the permit.

Ironbark is a Mungaroo Formation prospect that has a best estimate of 15 trillion cubic feet of prospective recoverable gas resource [based on an internal assessment by Cue. See disclaimer below]. It is an extension of an old play type in the Mungaroo Formation into a new deeper area. The Mungaroo hosts numerous giant fields and Ironbark is on trend with them.

The agreements are conditional on regulatory approvals, including approval of a suspension & extension application to extend the date by which the commitment well at Ironbark must be drilled. Approval of Cue shareholders is also required for the New Zealand Oil & Gas acquisition.

New Zealand Oil & Gas will also take an option for 5.36% equity in the adjoining WA-409-P permit [on the same terms, pro rated, as those agreed between Cue and Beach. Beach has an option at 7.5%.]

New Zealand Oil & Gas believes Ironbark is a genuinely world-scale prospect in a highly prospective address, with high quality partners seeking to join the drilling of a near-term well.



TARANAKI BASIN



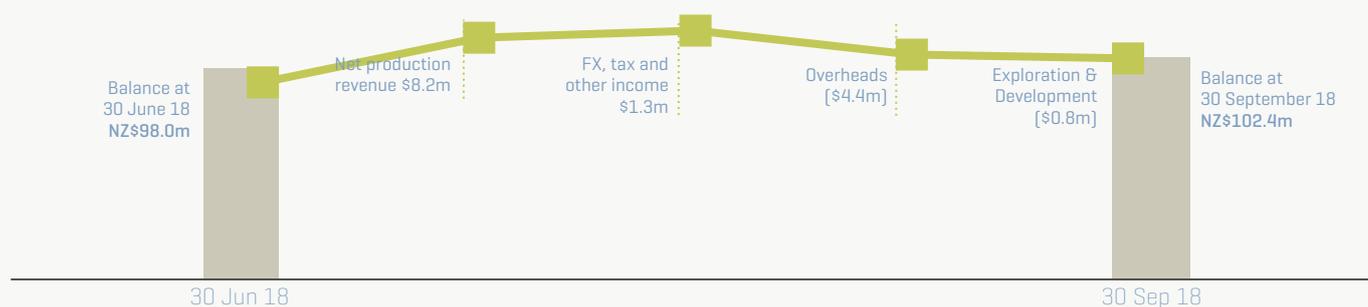
FINANCIAL SUMMARY

- Cash balance \$102.4 million.
- \$4.4m increase in cash for the quarter.
- Steady revenue from production.

Cash receipts from Kupe were \$4.7 million and receipts from Cue's Maari and Sampang production assets were \$7.5m. Production related outgoings were \$3.5m. Net exploration payments totalled \$0.8m and included adjustments and credits for the sale of equipment. Cash outflows for administration expenses across the group were \$4.4m and included one-off costs as well as work carried out for potential acquisitions. Cash balances held in USD denominated accounts were impacted by a weaker NZD giving rise to an FX gain of \$1.1m.



CASH BALANCE AT 30 SEPTEMBER 2018 NZ\$102.4M. INCREASE IN CASH OF \$4.4M IN THE QUARTER



PRODUCTION

FIELD		Total field for quarter [gross]	Our share previous quarter [net]	Our share Sep 2018 [net]
Kupe Taranaki, New Zealand	Oil Barrels	282,550	10,400	11,300
	Gas Petajoules	6.60	0.2	0.27
	LPG Tonnes	29,400	1,000.0	1,180
	Receipts NZD\$m		4.3	3.4
Maari* Taranaki New Zealand	Oil Barrels	529,191	26,460	
	Receipts AUD\$m		2.4	3.0
Sampang* Java, Indonesia	Oil Barrels	15,134	2,270	811
	Gas Petajoules	3328.00	499.0	0.40
	Receipts AUD\$m		3.6	3.8

\*The New Zealand Oil & Gas interest in Maari and Sampang is held through Cue Energy. New Zealand Oil & Gas has a 50.04% interest in Cue. Table shows Cue's full interest.

## TARANAKI

### Kupe oil and gas field [PML 38146]

4% New Zealand Oil & Gas

50% Beach Energy [Operator]

46% Genesis Energy

Gas production throughout the quarter was steady and high, in line with increased demand. LPG yields were solid.

As of 25 October, the Kupe Production station is going through a statutory required maintenance activity to overhaul the Amine system. The activity is expected to be completed by 25 November. During this period gas production will be curtailed to approximately 54TJ/day.

The JV has awarded a contract to evaluate the Phase 2 Development project to extend the field's production plateau and increase total field recovery.

Adding compression is expected to take the life of the field out to 2035. The FEED [front end engineering design] is expected to be completed by Q3 2019, with a final investment decision by Q4 2019. Adding another well would stabilise production out to about 2028, followed by a decline beyond 2036.

### Kohatukai exploration permit [PEP 55768]

25% New Zealand Oil & Gas

25% O.G. Oil & Gas Limited

37.5% Mitsui E&P Australia Pty Ltd [Mitsui]

12.5% AWE Holdings NZ Limited [AWE] 12.5% [Operator]

Drilling operations began on Monday, 24 September. Indications of gas were observed in both the secondary Matapo and primary Managehewa intervals. These were encouraging enough that the operator has decided to run comprehensive electric logging tests. These tests will help to assess the potential presence and porosity of a reservoir and the potential performance of a development.

The well is expected to reach total depth around the date of publication. Drilling was slightly ahead of time and under budget to date.

### Maari and Manaia oil field [PML 38160]

5% Cue Energy\*

69% QMV New Zealand [Operator]

16% Todd Maari

10% Horizon Oil International

A planned annual maintenance shutdown was successfully completed by the start of the quarter, with production back online during the first week of July.

During the quarter the planned conversion of the MR5 production well to a water injector to provide pressure support for the Maari Moki reservoir was undertaken. The Operator is currently testing the water injection rate, along with the MR1 well, the other field water injection well, to optimise production.

Workovers were completed on both MR3 and M10 wells during September after they experienced Electric Submersible Pump (ESP) operating issues. Both wells were back in production by the end of the quarter.

## CANTERBURY-GREAT SOUTH

### Clipper [PEP 52717]

50% New Zealand Oil & Gas [Operator]

50% Beach Energy

Technical work continues to improve understanding of the Barque structure.

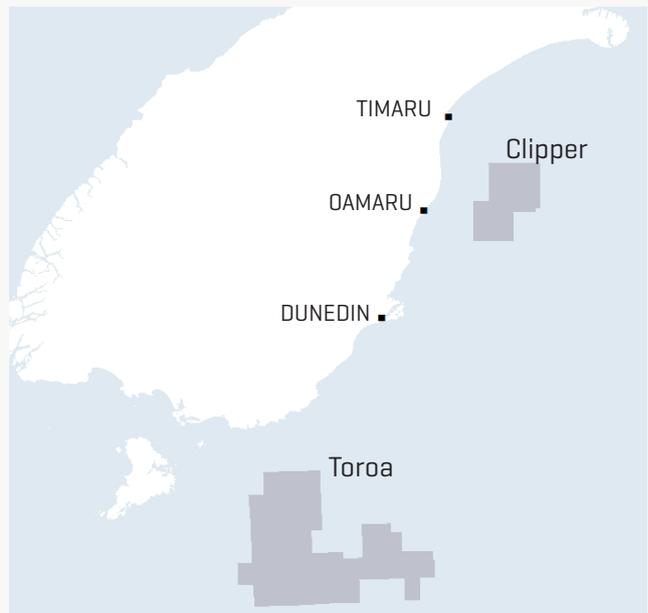
Discussions are continuing with potential farm-in partners reviewing the Barque opportunity.

### Toroa [PEP 55794]

100% New Zealand Oil & Gas

During the quarter New Zealand Oil & Gas received approval from the New Zealand regulator to take over 100% interest in the permit from Woodside Energy [New Zealand 55794] Limited and become operator.

Marketing is underway to promote the opportunity to potential farm-in partners.



## OFFSHORE CANTERBURY - GREAT SOUTH BASIN



\*New Zealand Oil & Gas has a 50.04% interest in Cue. Cue's full interest is shown.

## INDONESIA

**Sampang Production Sharing Contract**

15% Cue Energy\*

45% Santos [Sampang] Pty Ltd [Operator]

40% Singapore Petroleum Company

The Paus Biru-1 exploration well commenced operations subsequent to quarter end on 18 October 2018. The well is being drilled by the COSL HYSY 937 jackup drilling rig in 30 metre water depth and is expected to take two weeks to reach Total Vertical Depth Subsea [TVDS] of 650 metres.

The primary objective of the Paus Biru-1 well is to test the Early Pliocene Mundu Globigerina limestone reservoirs in the Paus Biru structure, which is defined by 3D seismic data as a 4- way dip closure with direct hydrocarbon indications. The secondary objective is the overlying siltstones within the Paciran Formation, which has proven productivity in the equivalent section in the Dyong field.

On 6 September, Ophir Energy announced the completion of the acquisition of Santos' Asian assets, making Ophir Energy the new parent company of Santos [Sampang] Pty Ltd, the PSC operator.

**Mahato**

Production Sharing Contract

12.5% Cue Energy\*

During the quarter, Cue was advised about a number of transactions which would alter the ownership of the PSC operator and other partners. Government approval of the change of control of the current operator has now been granted. The ownership and equity changes do not affect Cue's 12.5% and Cue is optimistic that new participants in the PSC will aggressively pursue exploration opportunities if an extension is granted.

An application for an extension to the exploration period is pending and notification on the extension is expected to be received within the current quarter.

**Mahakam Hilir**

Kutei Basin Production Sharing Contract

100% Cue Energy\*

Cue Kalimantan Pte Ltd [Operator]

The Mahakam Hilir PSC contains the Naga Utara prospect and the Naga Utara-4 Appraisal well. Cue is seeking partners to participate in the Mahakam Hilir PSC and Naga Utara-4 well.

During the quarter, field operations were conducted to successfully plug and abandon the Naga Selatan-2 well, drilled in 2016.

New Zealand Oil & Gas continues to review strategic options to extract value from Indonesian assets, including potentially selling out of the Kisaran and Bohorok PSCs.

**Bohorok**

25% New Zealand Oil &amp; Gas^

75% Bow Energy International Holdings^ [Operator]

Revised plans for a well to be drilled in early 2019 have been submitted to the regulator.

^ Interests are subject to regulator approval of a series of transactions.

**Kisaran**

22.5% New Zealand Oil &amp; Gas

55% Pacific Oil &amp; Gas [Operator]

22.5% Bukit Energy

There was minimal activity in the production sharing contract.



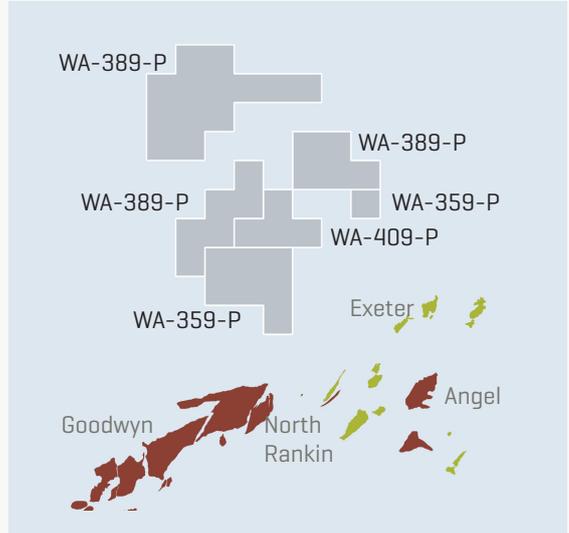
JAVA



KALIMANTAN



SUMATRA



AUSTRALIA



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## AUSTRALIA

### WA-359-P

#### 100% Cue Energy [Operator]\*

New Zealand Oil & Gas reached a conditional agreement to farm in to the permit, which holds the giant Ironbark prospect. All parties holding conditional agreements to enter the permit have concluded a coordination agreement that sets out their intention for the nominated operator, BP, to commence work on the committed well in the permit. It is conditional on regulatory approvals, including approval of a suspension & extension application to extend the date by which the commitment well at Ironbark must be drilled.

If the acquisitions of interests in WA-359-P go ahead as the parties anticipate, the participating interests will be:

**BP Developments Australia Pty Ltd 42.5%**

**Beach Energy 21%**

**Cue Energy\* 21.5%**

**New Zealand Oil & Gas 15%**

### WA-409-P

#### 20% Cue Energy\*

80% BP Developments Australia Pty Ltd [Operator]

The operator continued to analyse reprocessed seismic data.

New Zealand Oil & Gas has agreed to take an option for 5.36% equity in WA-409-P permit which adjoins WA-359-P. The option is on the same terms, pro rated, as those agreed between Cue and Beach. Beach has an option at 7.5%. The option in WA-409-P may be exercised until July 2019.

If all parties in the permit exercise their options, the participating interests will be:

**BP Developments Australia Pty Ltd 80% [Operator]**

**Beach Energy 7.5%**

**Cue Energy\* 7.14%**

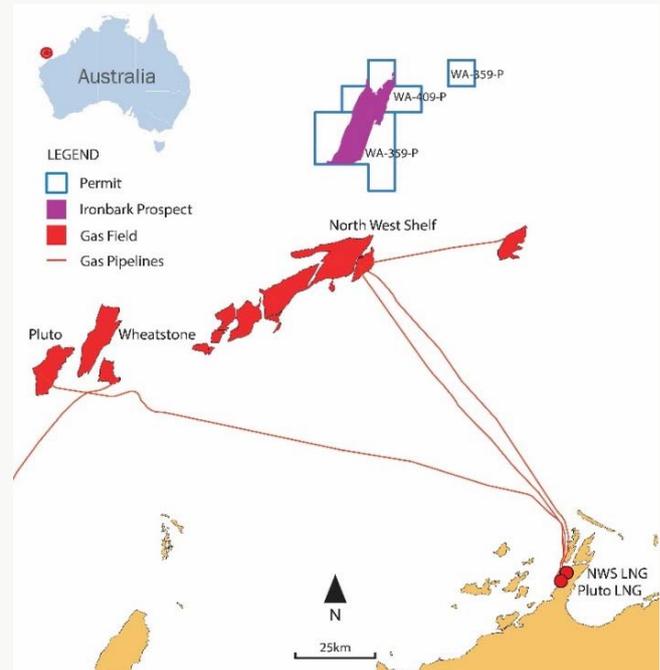
**New Zealand Oil & Gas 5.36%.**

### WA-389-P

#### 100% Cue Energy\*

Mapping and evaluation of the permit is continuing, with two leads analogous to the Ironbark prospect identified.

\*New Zealand Oil & Gas has a 50.04% interest in Cue. Cue's full interest is shown.



## STATEMENT ABOUT RESOURCE ESTIMATES

FOR RESOURCES REFERRED TO ABOVE 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. All volumes presented are based on a best estimate, derived from a probabilistic methodology, are net of royalties and have not been adjusted for risk. Ironbark oil and gas prospective resources reported in this statement are as at 28 February 2018 and follow the guidelines set out by Chapter 5 of the ASX listing rules (July 2014) and the PRMS Guidelines [2011]. Prospective Resources are those quantities of petroleum which are estimated, as of a given date, to be potentially recoverable from undiscovered accumulations. For the conversion to equivalent units; standard industry factors have been used of 6Bcf: 1mmboe and 1Bcf:1.05PJ. Nothing in this document constitutes an offer of financial products or an invitation to treat or submit any offer for any financial products. No money is currently being sought and shares or other financial products of New Zealand Oil & Gas Limited or any other entity referred to in this document cannot currently be applied for. If an offer is made, it will be made in accordance with the Financial Markets Conduct Act 2013 (NZ) and any other applicable legislation.

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