

# CLINTON DUFFY

Scientist and Shark Expert



Clinton Duffy is a marine biologist who understands the sensitivities of marine life after many years studying great white sharks.

New Zealand Oil & Gas is supporting his research, which is the subject of his Doctorate at the University of Auckland.

"It's a population of sharks that we know very little about," Clinton says. His study will help scientists understand conservation management requirements for these great explorers.

"We developed a proposal to satellite tag as many sharks as we could with a hope that we could track those sharks along the outer coast and then potentially fly aerial surveys in the areas that the sharks were transmitting from to see what they might be feeding on."

"What I am hoping to achieve from this research project is to develop a much better understanding about the habitats the Great White sharks are using around New Zealand."

As a science-based exploration business, New Zealand Oil & Gas supports scientific discovery that leaves our marine home better understood through our involvement.

Find out more about Clinton's work and watch video of the great whites he is studying at nzog.com. [Follow the link to Great Explorers in the Deep.]

Clinton inspecting his shark tagging beacon.



# **\$5 million**NPAT boost from Kupe royalty

# EXPLORATION AT TUI

Tui (PMP 38158)

27.5% New Zealand Oil & Gas

57.5% AWE (Operator)15% Pan Pacific Petroleum

The Tui partners looked to increase reserves by drilling two wells this year: Pateke-4H and Oi.

The thinking behind the Pateke well was that the existing reservoir was not being fully drained. Think of two shallow upturned bowls side by side, up to five or six kilometres across and only nine or ten metres deep. The existing Pateke field draws oil from one bowl and the bottom of the second. Pateke-4H drilled into the second bowl, and then horizontally across it to drain resources not being reached in the first.

As reported in the previous quarter, an oil bearing reservoir was intersected as expected. In May, horizontal drilling ceased at 4,772 metres, earlier than the 5,361 metres earlier planned because of concerns about instability in the well which had caused delays. As the reservoir conditions encountered were better than expected, the shorter horizontal section should provide a recovery rate similar to the excellent results experienced in the neighbouring Pateke 3H well.

While further work is ongoing to determine the expected recovery from Pateke-4H, initial evaluation suggests the combination of the better-than-expected reservoir and the reduced horizontal section will produce recoverable resources in line with pre-drill 2C estimates of 2.5 million barrels [687,500 barrels net to New Zealand Oil & Gas].

Pateke-4H has been suspended and planning is underway to install subsea infrastructure and a tie-line back to the Tui FPSO, Umuroa. Work will begin early next year with production expected in the first half of 2015.

Following Pateke, the Kan Tan IV rig moved to the Oi prospect about 12 kilometres to the Northeast, to test whether some of the resources that filled the Tui fields had migrated to this structure. New Zealand Oil & Gas assessed the chance of commercial success at 16 per cent, and participated at a reduced equity.

After encountering difficulties the joint venture decided to abandon Oi-1 and drill a new well, Oi-2, nearby.

It reached a total depth of 3,908 metres on 7 July, but no significant oil shows were encountered and real time well data indicated that the reservoir is water bearing. Oi-2 was plugged and abandoned.

The estimate of prospective resources referred to in this report is based on, and fairly represents, information and supporting documentation prepared by New Zealand Oil & Gas Vice President of Operations and Engineering Andrew Jefferies (B Eng Mech Hons, Msc Pet Eng, MBA), a Society of Petroleum Engineers Certified Petroleum Engineer who has over 23 years of industry experience, and reflects and summarises the most current information supplied by the joint venture operator.

# MORE REVENUE AT KUPE

Kupe (PML 38146)

15% New Zealand Oil & Gas 50% Origin Energy (Operator) 31% Genesis Energy 4% Mitsui

During the quarter New Zealand Oil & Gas reached agreement with Genesis Energy over the payment of overriding royalties from the Kupe asset.

The company increased expected net profit after tax by \$5 million in the financial year. The sum reflects increased royalty payments covering the 2013-14 financial year and payments relating to prior years net of tax.

In future, revenue from Kupe will increase by \$1-2 million each year. Negotiations are continuing with another Kupe partner, Origin Energy.

The entitlement arose in the early 1980s, when the prospecting licence in Kupe was farmed down in exchange for agreement to pay an overriding royalty from successful production in future.

The obligation to pay, and entitlement to receive, the overriding royalty shifted through a series of complex corporate reorganisations. Talks have continued at least since production from Kupe began in 2009.

Today the overriding royalty relates to 20% from Genesis Energy's 31% equity stake, and 10% from Origin Energy's 50% equity share.

### TARANAKI

#### Waru (PEP 54857)

Post seismic evaluation

#### 100% New Zealand Oil & Gas (Operator)

A 2D seismic survey over about 540 kilometres was completed in late April by the vessel Aquila Explorer, and finished under budget despite weather interruptions. The data has been sent for processing. Analysis will help geoscientists better understand the geological structures within Waru and identify areas of prospectivity

#### Kaheru (PEP 52181)

Drilling 2015



40% TAG Oil 25% Beach Energy

Planning for the Kaheru well is ongoing. Negotiations are being finalised to secure a suitable jack-up rig to drill.

Long lead items - casing and wellhead equipment - have been ordered and will be available in early 2015.

A change of conditions is being sought to extend the time available to drill because a rig will not become available in New Zealand before the second half of 2015.

### Vulcan (PEP 55793)

Early exploration



#### 30% New Zealand Oil & Gas

70% Woodside Energy (New Zealand) (Operator)

Planning is underway with a seismic survey to be conducted next summer. Engagement with the local community onshore is extensive.

#### **Takapou** (PEP 53473)

Post seismic evaluation

### 50% New Zealand Oil & Gas (Operator)

50% Octanex

Prospectivity in this permit immediately north of Tui is heavily influenced by results from the Oi well and from Matuku, drilled last summer. A decision is needed by September whether to commit to drilling a well in the permit before March 2016.

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#### Taranga (PEP 52593)

Post seismic evaluation

#### 50% New Zealand Oil & Gas (Operator)

50% Octanex

This permit contains the Karoro prospect where New Zealand Oil & Gas shot seismic last year. Efforts to farm out equity in the permit are proceeding ahead of a decision by September whether to drill a well before March 2016.

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#### Matuku (PEP 51906)

Post seismic evaluation

#### 12.5% New Zealand Oil & Gas

65% OMV (Operator)

22.5% Octanex

Analysis of the Matuku-1 well drilled over summer is continuing.

Processing is underway on the results of the 'Kaka' 3D seismic survey acquired last summer over exploration leads in the southern half of the Matuku permit. Results are expected in October. Interpretation of this data will contribute to a decision that must be made by November about the future of the permit. To continue, the joint venture must decide whether to collect more 3D seismic data and drop 25% of the permit area, or to drop 50% of the acreage without acquiring new seismic data.

## CANTERBURY GREAT SOUTH BASIN

### Toroa (PEP 55794)

**Early Exploration** 



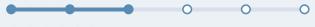
#### 30% New Zealand Oil & Gas

70% Woodside Energy (New Zealand 55794) (Operator)

Planning is underway for a seismic survey to be conducted next summer over this permit, which covers nearly 10,000 square kilometres off the Southeast coast of the South Island.

#### **Clipper** (PEP 52717)

Post seismic evaluation



#### 50% New Zealand Oil & Gas (Operator)

50% Beach Energy

Data from this permit was collected last summer in the 700 square kilometre Endurance 3D survey and sent overseas for processing by ION Geophysical. Processed data is expected to be available in October.

#### Galleon (PEP 55792)

Post seismic evaluation



#### New Zealand Oil & Gas (Operator)

The main value of this permit is in a small seismic tie line to the Clipper permit, which helps provide better understanding of the geological formations at work in the Canterbury basin. A sub-commercial discovery was made in Galleon in the mid-1980s, which proves a hydrocarbon system exists in the area.

#### **PROGRESS BAR KEY**

Progress bars indicate stages of exploration indicated in this report.

### Early exploration



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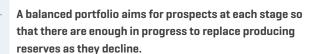
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#### Appraisal



#### Development



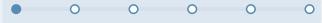
A typical portfolio has more prospects at early stages and fewer close to development because each stage of evaluation will screen out some prospects - the most promising theories are tested in seismic surveys, then prospects are weighed to test whether they are economic to drill. Unsuccessful drilling removes more. The portfolio also aims to keep annual exploration spend around the target by balancing equity levels, the cost of activities, jurisdiction and play types.

## INDONESIA

### New unconventional interest

### MNK Kisaran Production Sharing Contract (Baruman)

Early evaluation



#### 11.25% New Zealand Oil & Gas

33.75% Bukit Energy (Operator) 55% Pacific Oil & Gas

The partners in the conventional Kisaran PSC have been awarded the right to explore for 'unconventional' oil and gas resources in the same sub-basin. The equity shares in the unconventional resource differ from shares in the conventional PSC.

Unconventional resources are those where substantial volumes of oil and gas are believed to be present, but the rate of production is limited by low permeability in the rocks. Commercial development of some of these resources has been made possible by new extraction technology, particularly in North America.

The consortium will study the effective application of these technologies in onshore Sumatra over the next three years. The first firm, three-year exploration work commitment includes geological and geophysical studies in each year and drilling a vertical exploration well in year three.

MNK Kisaran, also known as Baruman, is one of the first PSCs for unconventional oil and gas resources issued in Indonesia, and the first time New Zealand Oil & Gas has had exposure to prospective oil and gas resources that qualify for concessional Indonesia government terms. Without those concessions the resources could not be developed commercially.

Central Sumatra is one of the major oil producing basins in South East Asia.

#### **Kisaran Production Sharing Contract**

**Appraisal** 



#### New Zealand Oil & Gas 22.5%

Pacific Oil & Gas (Operator) 55%

22.5% **Bukit Energy** 

Two wells in the PSC were successfully drilled in 2013. A Plan of Development is in the final stages of drafting and will be submitted to the government regulator before year end. The associated final investment decision is expected then.

#### Palmerah Baru Production Sharing Contract

Early evaluation



36% New Zealand Oil & Gas 54% Bukit Energy (Operator) 10% PT SNP Indonesia

Early work is underway to prepare for exploration in this Production Sharing Contract in onshore south Sumatra. The permit commits the partners to 2D and 3D seismic surveys and at least one well before 2017.

#### **Bohorok Production Sharing Contract**

Seismic survey



45% New Zealand Oil & Gas

45% Bukit Energy (Operator)

10% Surya Buana Lestarijaya Bohorok

Acquisition of a 2D seismic survey of approximately 260 kilometres was three quarters complete at publication date.

## TUNISIA

#### **Diodore Prospecting Permit**

#### New Zealand Oil & Gas (Operator) 100%

While results from seismic work confirmed the existence of the leads that attracted New Zealand Oil & Gas to the permit, the leads were believed to be smaller than the company (and potential farmin partners) were seeking.

The prospecting permit in Diodore expires at the end of September. New Zealand Oil & Gas has notified the regulator that it does not intend to commit to a well in the next three years, which would have been required to convert the permit to an exploration permit. When the prospecting permit expires the company will no longer have involvement in Tunisia.

## EXPLORATION MAPS\_INTERNATIONAL





#### INDONESIA

Palmerah Baru Production Sharing Contract 36% New Zealand Oil & Gas

Kisaran Production Sharing Contract 22.5% New Zealand Oil & Gas

Bohorok Production Sharing Contract 45% New Zealand Oil & Gas

#### MNK Kisaran

11.25% New Zealand Oil & Gas 33.75% Bulkit Energy (Operator) 55% Pacific Oil & Gas





### TUNISIA

Diodore Prospecting Permit 100% New Zealand Oil & Gas

#### MAP LEGEND

New Zealand Oil & Gas Permits

## **EXPLORATION MAPS\_NEW ZEALAND**





#### OFFSHORE TARANAKI BASIN

NEW PLYMOUTH

Vulcan (PEP 55793) 30% New Zealand Oil & Gas

Taranga (PEP 52593) 50% New Zealand Oil & Gas

Takapou (PEP 53473) 50% New Zealand Oil & Gas

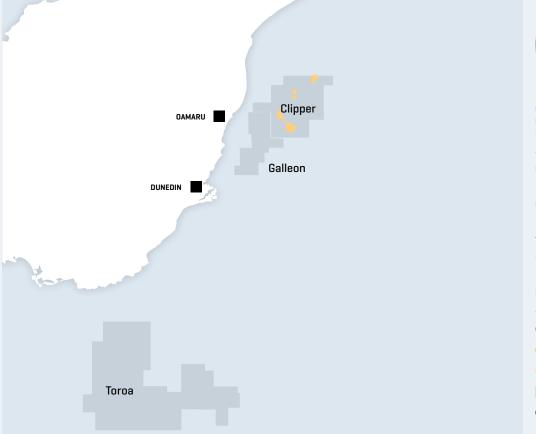
Matuku (PEP 51906) 12.5% New Zealand Oil & Gas

Tui (PEP 38158) 27.5% New Zealand Oil & Gas

Kaheru (PEP 52181) 35% New Zealand Oil & Gas

Waru [PEP 54857] 100% New Zealand Oil & Gas

Kupe (PEP 38146) 15% New Zealand Oil & Gas





#### **OFFSHORE CANTERBURY -GREAT SOUTH BASIN**

CANTERBURY

Clipper (PEP 52717) 50% New Zealand Oil & Gas

Galleon (PEP 55792) 100% New Zealand Oil & Gas

Toroa (PEP 55794) 30% New Zealand Oil & Gas

### MAP LEGEND

Gas

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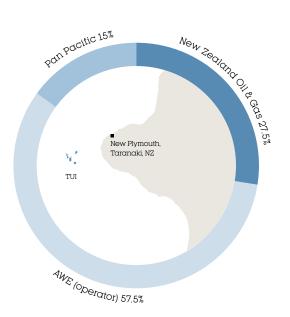
Prospects & Leads

New Zealand Oil & Gas Permits

O Wells



NEW PLYMOUTH, NEW ZEALAND



#### TUI

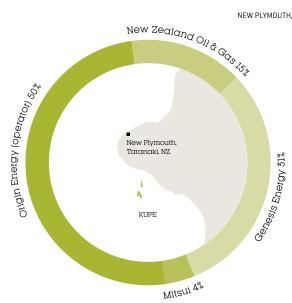
Tui area oil fields (PMP 38158) 27.5% New Zealand Oil & Gas interest

New Zealand Oil & Gas revenue from Tui in the quarter was NZ\$0.5 million.

Last Quarter: NZ\$13.7 million

A planned 10 day shutdown in June was completed in 8.4 days with no incidents or accidents.

Revenue from the quarter was affected by the timing of shipments. There were no tanker shipments during the quarter. As at quarter end there were approximately 362,000 barrels of oil in stock (New Zealand Oil & Gas share 99,500 barrels).



#### **KUPE**

Kupe oil and gas field [PML 38146] 15% New Zealand Oil & Gas interest

New Zealand Oil & Gas revenue from Kupe in the quarter was NZ\$29.2 million, including NZ\$7.1 million from overriding royalties

Last Quarter: NZ\$15.8 million

Production remained stable at normal levels throughout the quarter, with process uptime exceeding 99%.

Tui production	Total Field for quarter	New Zealand Oil & Gas share for quarter	New Zealand Oil & Gas share previous quarter	New Zealand Oil & Gas share for comparable quarter a year ago
Oil (bbls)	290,403	79,861	93,330	50,762
Revenue (NZ\$m)		0.5	13.7	7.7
Kupe production	Total Field for quarter	New Zealand Oil & Gas share for quarter	New Zealand Oil & Gas share previous quarter	New Zealand Oil & Gas share for comparable quarter a year ago
Gas (PJ)	6.59	0.99	0.76	0.82
LPG (tonnes)	27,163	4,074	3,013	3,585
Light Oil (bbls)	466,584	69,988	55,667	67,421
Revenue (NZ\$m)		29.2	15.8	21.3

## YOU'RE INVITED

#### **AUCKLAND INVESTOR BRIEFING**

Coinciding with the release of the preliminary result for the 2013-14 financial year.

12 Noon, Tuesday, 26 August 2014
 Great Northern Room, Ellerslie Racing Club

#### ANNUAL GENERAL MEETING

A formal Notice of Meetring will be sent later.

9:30am Tuesday, 4 November
 Intercontinental Hotel, Wellington

**Read quarterly reports online**Just type **nzog.today** into your browser

#### DINOSAUR FOOTPRINTS NOW IN ROTORUA

See footprints left by perhaps the largest animal ever to walk on Earth. Proudly sponsored by New Zealand Oil & Gas.

6 September – 12 October 2014
 Showcasing at Rotorua Museum





GNS Science's geologist Dr Greg Browne

#### FINANCIAL UPDATE

# Operating revenue for the quarter was NZ\$29.7 million

This included revenue from Kupe of NZ\$29.2 million, which included the sale of Kupe sales gas, LPG and light oil and a contribution of NZ\$7.1 million from overriding royalties.

Revenue from Tui was NZ\$0.5 million, with no tanker shipments in the quarter.

As at 30 June 2014, New Zealand Oil & Gas had a cash balance of NZ\$135.1 million, with cash holdings held in both NZ and US dollar accounts. New Zealand Oil & Gas had no outstanding debt at the end of the period.

More financial information is contained in the 30 June 2014 Quarterly Cash Flows Report, which has been released to the NZX and ASX.

Financial Update	3 months to 30 June 2014	Previous Quarter	Comparable quarter a year ago
Revenue (NZ\$m)	29.7	29.5	29.0
Cash Balance (NZ\$m)	135.1	138.4	158.0

#### **DIVIDENDS**

Shareholders resident in New Zealand or Australia are able to choose to invest all or part of their future dividends in taking up additional shares instead of receiving cash.

The plan is a convenient way to reinvest dividends in shares without incurring brokerage charges. Shareholders can join or leave the Dividend Reinvestment Plan by contacting COMPUTERSHARE.

#### **CONTACT COMPUTERSHARE**

To change your address or get help with your shareholding, CALL COMPUTERSHARE

#### New Zealand - 0800 467 335

[from outside New Zealand, use +64 9 488 8777]

#### Australia - 1800 501 366

(from outside Australia use +61 3 9415 4083)

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