

# **Quarterly Report**

Period ending 31 March 2013



## HIGHLIGHTS

### Corporate

- Chevron farm-in to Cooper Basin PEL 218 and ATP 855 unconventional acreage
- PEL 106B gas sales agreement ("GSA") finalised with SACB JV, with first gas sales on 19 March 2013

### **Operations**

- Total production of 1.8 MMboe, 2% down on previous quarter, mainly due to lower SACB JV gas production offset by higher oil production
- Sales volumes of 1.9 MMboe, 4% down on previous quarter, mainly due to timing of condensate sales
- Total revenue of \$155.6 million, 10% down on previous quarter, mainly due to no condensate sales
- Participation in 22 wells, with a success rate of 68%
- Halifax-1 vertical well flowed gas at up to 4.5 MMscf/d
- Holdfast-2 horizontal well reached total depth and will be stimulated in upcoming program

### **Subsequent Events**

- Major GSA signed with Origin for up to ~139 PJ over eight years, with option for Origin to extend contract for up to ~173 PJ over 10 years
- Bauer to Lycium oil flowline operational, the gross capacity of which is 10,000 bopd

### Financial

• Strong balance sheet with \$245 million in cash reserves and a multi-option financing facility of \$150 million available

	Mar 2012 Quarter	Dec 2012 Quarter	Mar 2013 Quarter	Qtr on Qtr Change	YTD
Production (kboe)	1,995.0	1,844.2	1,815.7	(2%)	5,766.0
Sales (kboe)	1,975.7	2,022.2	1,935.6	(4%)	6,501.1
Revenue (\$ million)	157.1	173.0	155.6	(10%)	498.5
Oil Price (\$ per bbl)	121.9	111.1	112.0	1%	110.9
Cash (\$ million)	56.5	342.6	245.0	(29%)	245.0

### contacts

Beach Energy Ltd ABN: 20 007 617 969 ASX Code: BPT

25 Conyngham Street GLENSIDE SA 5065

GPO Box 175 ADELAIDE SA 5001 Tel: +61 8 8338 2833 Fax: +61 8 8338 2336

Web: www.beachenergy.com.au Email: info@beachenergy.com.au

Investor Relations: Chris Jamieson Tel: +61 8 8338 2833

Media: Ian Howarth Collins Street Media Tel: +61 3 9223 2465

### directors

Independent Non-executive Chairman

Glenn Davis

Managing Director

Reg Nelson Independent Non-executive Directors

John Butler Franco Moretti Belinda Robinson Fiona Bennett Doug Schwebel



Reg Nelson Managing Director 30 April 2013

Ref: #026/13

This report contains information on Beach's Reserves and Resources which have been compiled by Mr Tony Lake, who is a full time employee of Beach, is qualified in accordance with ASX listing rule 5.11 and has consented to the inclusion of this information in the form and context in which it appears.



## CORPORATE

### Chevron farm-in

Beach has signed documents with Chevron Australia Exploration 1 Pty Ltd and Chevron Australia Holdings Pty Ltd ("Chevron") to farm-out a portion of its interests in the PEL 218 (South Australia) and ATP 855 (Queensland) joint ventures.

Completion of the transaction is conditional upon certain government approvals, including FIRB approval, being received. These approvals are expected in the coming months.

Subject to joint venture approvals, the key work program across the two permits will involve initial exploration programs, to be followed by pilot production programs. Key details of the unconventional farmout to Chevron are:

### PEL 218

Stage 1 – Chevron to acquire an initial equity interest of 30% via US\$36 million of cash and a US\$95 million carry. On completion of Stage 1, Chevron can elect to withdraw or proceed to Stage 2.

Stage 2 – Chevron to acquire an additional 30% interest via US\$41 million of cash and a US\$47 million carry. On completion of Stage 2, Chevron can elect to withdraw or proceed.

Post Stage 2 - Commitment bonus payment of US\$35 million to be paid by Chevron.



### ATP 855

Stage 1 – Chevron to acquire an initial equity interest of 18% via US\$59 million of cash. Chevron can elect to withdraw or proceed to Stage 2 from 1 September 2014 to 31 March 2015.

Stage 2 – Chevron to acquire an additional 18% interest via US\$36 million of cash. Chevron can elect to withdraw or proceed from 1 October 2016 to 31 December 2016.

If after Stage 1, Chevron elects not to proceed to Stage 2, the interest held by Chevron will be re-assigned to Beach for no consideration. If after Stage 2, Chevron elects not to proceed, Beach may elect to receive a re-assignment of the interests held by Chevron. Post Stage 2, Beach will support Chevron should it nominate for operatorship.

### Icon put option

A put option has been granted by Beach to Icon, exercisable by Icon up to 30 June 2013, for Beach to acquire 4.9% of ATP 855 from Icon on payment by Beach of US\$18 million.

Chevron deal signing. Left to right: Raymond James, MD - Icon Energy Stephen Barry, Chairman - Icon Energy Roy Krzywosinski, MD - Chevron Australia, Glenn Davis, Chairman - Beach Energy Reg Nelson, MD - Beach Energy

QUARTERLY PRO	DUCTION	March 2012 Quarter	Dec 2012 Quarter <sup>1</sup>	March 2013 Quarter <sup>2</sup>	Qtr on Qtr Change	YTD <sup>2</sup>
	Cooper and Eromanga Basins	774.8	823.7	869.7	6%	2,505.3
Oil (kbbl)	Egypt	3.2	28.3	30.9	9%	91.3
· · /	Williston Basin	4.4	2.9	2.5	(15%)	8.7
	Total Oil	782.4	854.9	903.1	6%	2,605.3
Sales Gas and Ethane (PJ)	Cooper Basin	5.8	4.8	4.5	(7%)	15.4
LPG (kt)	Cooper Basin	13.5	9.8	8.6	(11%)	31.9
Condensate (kbbl)	Cooper Basin	102.1	81.4	72.5	(11%)	252.2
TOTAL OIL AND GAS (kboe)		1,995.0	1,844.2	1,815.7	(2%)	5,766.0

<sup>1</sup> Final reconciled production figures

<sup>2</sup> Preliminary data for the Williston Basin



### PEL 106B GSA

Beach and Drillsearch agreed terms for a new gas sales agreement with the SACB JV for gas and gas liquids from PEL 106B. The key terms of the three year GSA are that raw gas sales of up to 10 Bcf will be guaranteed on a firm supply and purchase basis, with additional quantities over and above the 10 Bcf supplied on an as-available basis.

## SUBSEQUENT EVENTS

### **Origin GSA**

Beach, through subsidiary Delhi Petroleum, signed а gas sales agreement with Origin Energy Retail ("Origin") in relation to its equity interests in gas produced primarily by the SACB JV and SWQ JV ("Delhi Gas JV's"). The agreement will result in the sale of up to approximately 139 PJ of sales gas from the Cooper Basin for a term of eight years. Origin has an option to extend the term of the agreement by two years, which would result in the sale of up to approximately 173 PJ of sales gas.

For implementation purposes, the operational framework of the agreement is conditional upon acceptance by the operator of the relevant Delhi Gas JV's. Gas for this agreement will be delivered ex-Moomba, with the price incorporating a combination of oil linkage and other parameters. Costs associated with carbon will be passed through to Origin under the terms of the agreement. The commencement date window for supply under the agreement is from July 2014 to June 2015.

## PRODUCTION, SALES and REVENUE

### Production

December quarter production of 1.82 MMboe was 2% lower than the December quarter, mainly due to:

- Lower Santos operated gas and gas liquids production due to major shutdowns of the Moomba facility; partly offset by
- Higher Western Flank crude production, driven by new flowlines, partly offset by reduced trucking of crude resulting from localised rain events.

### **PEL 91**

(Beach 40% and operator, Drillsearch Energy 60%) Production of ~110 kbbl (net) was 73% up on the previous quarter, mainly due to the connection of Bauer-5,-6,-7 and -8 and optimised trucking. This increase was negatively impacted by localised rain events in early March. The Hanson facility was also completed and, subsequent to quarter end, Hanson crude was trucked to Bauer.

Installation of the flowline from Bauer to Lycium commenced in December, with the line completed at the end of the quarter. Subsequent to quarter end, the final end of line and facility commissioning was completed, with production commencing late April 2013. The gross capacity of the flowline is 10,000 bopd.

### PEL 92

(Beach 75% and operator, Cooper Energy 25%) Production of ~350 kbbl (net) was 20% up on the previous quarter, mainly due to the Callawonga to Lycium flowline being operational, enabling additional wells to be brought back on production. Complimenting this production is the recently connected Butlers-5 and -6 wells, with the Christies-6 and -7 development wells expected to be on line in Q2 2013.

QUARTERLY SALES		March 2012 Quarter	Dec 2012 Quarter	March 2013 Quarter <sup>1</sup>	Qtr on Qtr Change	YTD <sup>1</sup>
	Cooper and Eromanga Basins	897.9	1,121.7	1,059.2	(6%)	3,079.7
Oil (kbbl)	Egypt	3.2	28.9	29.8	3%	88.5
	Williston Basin	4.1	1.8	4.1	126%	9.1
	Total Oil	905.2	1,152.4	1,093.0	(5%)	3,177.3
Sales gas and Ethane (PJ)	Cooper Basin	5.2	4.0	4.4	10%	16.2
LPG (kt)	Cooper Basin	12.7	7.6	10.3	36%	32.6
Condensate (kbbl)	Cooper Basin	75.5	130.7	1.4	(99%)	274.7
TOTAL OIL and GAS (kboe)		1,975.7	2,022.2	1,935.6	(4%)	6,501.1

<sup>1</sup> Includes sales of oil & gas liquids and gas purchased from third parties for the March quarter of 215 kboe (YTD: 620 kboe) and 0 PJ (YTD: 0.7 PJ) respectively



QUARTERLY F	REVENUE	Mar 2012 Quarter A\$000	Dec 2012 Quarter A\$000	Mar 2013 Quarter <sup>1</sup> A\$000	Qtr on Qtr Change	YTD <sup>1</sup> A\$000
	Cooper and Eromanga Basins	109,622	124,874	119,178	(5%)	343,128
Oil	Egypt	341	3,023	2,855	(6%)	8,504
	Williston Basin	370	176	381	116%	834
	Total Oil	110,333	128,073	122,414	(4%)	352,466
Gas and Gas Liquids	Cooper Basin	46,782	44,908	33,220	(26%)	146,062
TOTAL OIL and GAS		157,115	172,981	155,634	(10%)	498,528
Average Realised Price (A\$/boe)		79.5	85.5	80.4	(6%)	76.7
Average Realised Oil P	rice (A\$/bbl)	121.9	111.1	112.0	1%	110.9

<sup>1</sup> Includes sales of oil & gas liquids and gas purchased from third parties for the March quarter of \$24.3 million (YTD: \$68.2 million) and \$0.2 million (YTD: \$4.1 million) respectively

QUARTERLY CAPITAL EXPENDITURE	Mar 2012 Quarter A\$ million	Dec 2012 Quarter A\$ million	Mar 2013 Quarter A\$ million	Qtr on Qtr Change	YTD A\$ million
Exploration and Appraisal	36.0	73.8	74.5	1%	184.2
Development, Plant and Equipment	33.2	63.6	47.3	(26%)	166.4
TOTAL	69.2	137.4	121.8	(11%)	350.6

### **PEL 106B**

(Beach 50% and operator, Drillsearch Energy 50%)

Beach and Drillsearch agreed terms for a new gas sales agreement with the SACB JV for gas and gas liquids from PEL 106B. Sales under the new contract commenced on 19 March, with initial production of 21 MMscfd and 300 bbls of condensate and LPG. The more liquids rich Canunda well is expected to be tied in during Q2 2013.

### Santos operated

Production of gas and gas liquids from the Cooper Basin was 9% lower than the previous quarter, mainly due to major planned shutdowns of the Moomba and satellite facilities for maintenance purposes.

### Senex operated

(Senex Energy 60%, Beach 40%)

Production of ~160 kbbl (net) was down 7% on the previous quarter, mainly due to natural decline in the Growler oil field.

### Egypt

Gross production in Egypt was around 2,250 bopd (~470 bopd net). The North Shadwan (Beach 20%) NS 377 and NS 385 wells produced ~1,550 bopd (~310 bopd net), just over half of which was trucked to the Ras Budran facility. Extended production testing at the Abu Sennan concession (Beach 22%) continues to deliver gross production of ~700 bopd (~150 bopd net).

### Sales

March quarter sales volumes were 1.9 MMboe, a reduction of 4% on the December quarter, mainly due to timing of shipments, with no condensate sales during the quarter.

### Revenue

Total revenue for the March quarter was \$155.6 million, 10% down on the December quarter, mainly due to no condensate revenue.

### **Capital expenditure**

Capex was down by 11% on the December quarter, mainly due to:

- Lower levels of SACB JV infill development drilling; partly offset by
- Increased unconventional exploration and appraisal activities.



# EXPLORATION & DEVELOPMENT

### AUSTRALIA

### COOPER AND EROMANGA BASINS

### DEVELOPMENT

### Santos operated

Gas development drilling was completed in the Baryulah field in Queensland (Beach 23.2%), with Baryulah-13, -14, and -16 and Brumby-13 all cased and suspended as future gas producing wells. All wells intersected multiple gas sands within the Toolachee, Daralingie and Patchawarra Formations. The rig has moved to the Lepard-2 gas development well, which is currently drilling ahead.

In the South Australian sector of the Cooper Basin (Beach 20.21%), the Munkarie-10, Dullingari-61, Dullingari North-20, Burke-12 and Goyder-6 gas development wells were all cased and suspended as future producers. Cowralli-22 reached total depth subsequent to period end, with the Patchawarra Formation the main development target. Cowralli-22 is the first of sixteen development wells planned for the Cowralli field that will use deviated drilling from a single multi-well surface pad. This approach is aimed at improving efficiency in the drilling of the wells to deliver cost savings.

### **OPERATED - EXPLORATION**

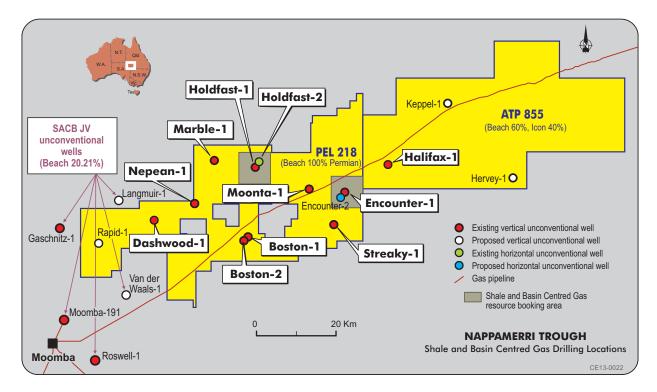
### PEL 218 (Beach 100%)

Moonta-1 continues to be flow tested and is now producing at 0.6 MMscfd after approximately four months. Gas flow from Moonta-1 represents the proof of concept for the deep tight basin centred gas play that is believed to extend across the entire PEL 218 acreage.

Beach committed to a vertical well exploration program in early 2012 after the Holdfast-1 and Encounter-1 results proved the existence of shale gas in the same area. The aim of the program was to confirm the lateral extent of the shale play, address the deeper potential of a basin centred gas play, and ascertain which areas in the permit might be highgraded for early pilot production wells. Moonta-1 is the first well to demonstrate recoverable gas through the full Patchawarra section, with gas flow from intervals up to half a kilometre deeper than previous exploration wells drilled on structural highs.

Beach's program is a stepwise fracture stimulation progression such that it incorporates previous results to build a thorough understanding of individual geological units, prospective areas and optimal fracture stimulation design. The shallower Permian targets within Moonta-1 (the Toolachee Formation, Daralingie Formation, Roseneath Shale and Epsilon Formation) are yet to be fracture stimulated and will be assessed in stimulation and testing activities, possibly later in 2013.

The post-fracture stimulation clean out of Streaky-1 was suspended pending the arrival of specialised equipment required to retrieve implements stuck in the hole. Following the resumption of coiled tubing operations, the production tubing will be installed after which the well will be flow tested.





Nepean-1, the fifth well in the program, reached a total depth of 3,527 metres and will be stimulated in the upcoming batch stimulation program. Dashwood-1, the sixth well in the program, is drilling ahead in the Nappamerri Group at ~3,800 metres. Subsequent to period end, the Boston-2 vertical well spudded and is drilling ahead at ~2,600 metres.

The first horizontal well of the unconventional gas campaign, Holdfast-2, was cased and suspended after penetrating ~700 metres of Murteree Shale, of which ~600 metres was horizontal. Holdfast-2 has the largest step-out of any Cooper Basin horizontal well to date at 988 metres. This step-out is the distance, or offset, from the spud location to the end of the horizontal, which represents a significant achievement for the first well of its type in this unconventional program. The well design of the next horizontal well, Encounter-2, is currently under review and will incorporate lessons learned from the drilling of Holdfast-2. The horizontal section of Holdfast-2 is expected to be fracture stimulated in July 2013, with the optimal number of stages for this lateral currently being assessed.

### ATP 855

#### (Beach 60% and operator, Icon Energy 40%)

Fracture stimulation was completed in the Halifax-1 well with 14 stages successfully placed across the Permian targets (Patchawarra Formation, Murteree Shale, Epsilon Formation, Roseneath Shale, Daralingie Formation and Toolachee Formation). Flowback commenced on 11 February and was initially choked back due to temperature constraints on surface equipment. It was shut-in as a result of localised rains, after which it was fully opened briefly, recording a peak rate of 4.5 MMscfd, and then choked back again, due to temperature constraints, to 2.0 MMscfd for the majority of March. Currently the well is flowing at an unconstrained rate of 1.4 MMscf/d.

### PEL 91

Oil drilling re-commenced in the Western Flank region with the Kalladeina-2 exploration well. Subsequent to period end, the well reached total depth with a four metre net oil column in the McKinlay Sandstone and a one metre net oil column in the Namur Sandstone. The recoverable 2P reserves are currently being estimated.

### **PEL 106B**

Two gas exploration wells, Rosetta-1 and Destrees-1, were drilled in PEL 106B (Beach 50%). The wells are located approximately six kilometres north and three kilometres east. respectively, from Brownlow-1. Gas shows were encountered in each well, however, reservoir quality associated with the shows was poor. With other good-quality sands water-saturated at these locations, the joint venture elected to plug and abandon both wells. The fourth and final well in the approved PEL 106B program, Euler-1, is scheduled to be drilled in June.

### NON-OPERATED - EXPLORATION Santos operated

The Gaschnitz-1 ST1 (total depth of 3,889 metres) and Roswell-1 (total depth of 3,218 metres) unconventional gas exploration wells in PPL 101 (Beach 20.21%) were both cased and suspended for future evaluation.

In Queensland, a six well oil drilling program in the T66 block (Beach 30%) concluded with the plugging and abandonment of the Cudgel-1, Rheims-2 and Achilles-1 oil exploration wells, after they failed to encounter significant hydrocarbons.

### OTHER EXPLORATION/ DEVELOPMENT

Bonaparte Basin – EP 126 and EP 138 (Beach earning up to 90%) EP 135 and EP NTC/P10 (Beach earning up to 50%)

The 15,000 line kilometre airborne geophysical survey was completed, with the data now acquired. Interpretation of the data is currently underway.

### Otway Basin – Penola Trough

(Beach farming-in to earn 35%)

Sawpit-2, an oil exploration well in South Australia's PEL 495, reached a total depth of 2,585 metres and encountered minor oil shows in the Upper Sawpit Shale and basement. A total of 56 metres of core from shales in the Casterton Formation and Lower Sawpit Shale was recovered and the well was subsequently plugged and abandoned. Detailed analyses of these core samples will continue over the coming months.

## INTERNATIONAL EGYPT

### Kuwait Energy operated – Abu Sennan Concession (Beach 22%)

The Al Ahmadi-2X well is appraising the recent Al Ahmadi-1 oil discovery and reached total depth of 3,679 metres in the Kharita Formation. The well is currently being completed with formation testing to follow.

The ASC-1X exploration well, located five kilometres south west of the El Salmiya-1 discovery well, reached a total depth of 4,282 metres within the Kharita Formation. The well is being prepared for a testing program.

### BP/GUPCO operated – North Shadwan concession (Beach 20%)

The NS 385-1 ST3 long-reach onshoreto-offshore development well was completed, with the primary target, the Lower Rudeis Formation, intersected 15 metres high to prognosis. The well is currently on-production.



### Melrose Resources operated – Mesaha concession (Beach 15%)

Drilling operations on the Mesaha-1X ST1 frontier exploration well in southern Egypt were completed, with the well reaching a total depth of 2,129 metres. The well failed to encounter any hydrocarbon indicators and was plugged and abandoned. The well provided the first sub-surface samples of the Mesaha Graben stratigraphy which will be used to review the regional geology and the local prospectivity.

### TANZANIA

Lake Tanganyika South (Beach 100%) Processing of the 2D seismic data was completed in February 2013 and is now being interpreted. It is anticipated that a suite of prospects and leads will be identified prior to the end of Q2 2013.

## WELL RESULTS

Beach participated in 22 oil and gas wells for the quarter, 68% of which were successful.

Area	Category	Wells	Success	Success Rate	Successful Well Name
Cooper Basin	Exploration – gas	2	0	0%	
	Unconventional exploration – gas	4	4	100%	Holdfast-2, Nepean-1, Gaschnitz-1 ST1, Roswell-1
	Exploration – oil	2	0	0%	
	Appraisal – oil	1	0	0%	
	Development – gas	9	9	100%	Goyder-6, Baryulah-13, -14, -16*, Burke-12, Dullingari North-20, Brumby-13, Dullingari-61, Munkarie-10
Otway Basin	Exploration – oil	1	0	0%	
Egypt	Exploration – oil	2	1	50%	Al Ahmadi 2X
	Development – oil	1	1	100%	NS 385-1 ST3
	Total	22	15	68%	

\* Cased and Suspended for future testing

### FINANCIAL INFORMATION Cash and equity

The balance sheet remained strong with cash reserves of \$245 million at quarter end and a \$150 million multi-option facility available for use. Cash decreased by \$98 million during the quarter, mainly due to continued investment in exploration and development and working capital movements.

### **Oil Hedging**

The following hedges were entered into:

- A\$60 Brent Floor for 50,000 bbls/ month for the period July 2013 – June 2014
- A\$65 Brent Floor for 45,000 bbls/ month for the period October 2013
  September 2014

CAPITAL STRUCTURE	Dec 2012 Quarter	Mar 2013 Quarter	Qtr on Qtr Change
Fully paid ordinary shares	1,263,677,572	1,264,889,397	0.1%
Unlisted employee options	7,108,977	7,108,977	0.0%
Unlisted employee rights	11,771,776	11,767,747	(0.0%)

		Total Hedged		
Period	Floor A\$55/bbl	Floor A\$60/bbl	Floor A\$65/bbl	Volumes (bbl)
Remaining 2012/2013	570,000			570,000
2013/2014	900,000	600,000	405,000	1,905,000
2014/2015			135,000	135,000
Total	1,470,000	600,000	540,000	2,610,000



## GLOSSARY

\$	Australian dollars	kbbl	thousand barrels of oil
1P	Proved	kboe	thousand barrels of oil equivalent
2P	Proved and probable	kt	thousand tonne
ATP	Authority to prospect	LNG	Liquefied natural gas
bbl	barrels	LPG	Liquefied petroleum gas
bcf	billion cubic feet	MMbbl	Million barrels of oil
boe	barrels of oil equivalent - the volume	MMboe	Million barrels of oil equivalent
	of hydrocarbons expressed in terms of	MMscfd	Million standard cubic feet of gas per day
	the volume of oil which would contain an equivalent volume of energy. (For	PEL	Petroleum exploration license
	example, 1 BCF of gas equals	PJ	Petajoule
	approximately 0.18 million boe,	Q1 2013	First quarter calendar year 2013
	the exact conversion being dependent	Q2 2013	Second quarter calendar year 2013
	on the gas composition)	REM	Roseneath Shale, Epsilon Formation,
bopd	barrels of oil per day		Murteree Shale
capex	Capital expenditure	SACB JV	South Australian Cooper Basin Joint
Company	Beach Energy Limited		Venture
DST	Drill stem test	SWQ JVs	South West Queensland Joint Ventures
EGPC	Egyptian General Petroleum Corporation	Tcf	Trillion cubic feet of gas
EPT	Extended production test	TJ	Terajoule
FY	Financial year	YTD	Year to date
GJ	Gigajoule		

