# **Quarterly Report**

for the period ended 31 December 2016



#### **KEY HIGHLIGHTS**

- Cash reserves increased by \$55 million, benefiting from cost saving initiatives and leverage to higher realised oil prices; available liquidity increased to approximately \$650 million.
- Record half year sales volumes of 6.4 MMboe, up 11% from the prior period and 25% from H1 FY16.
- Record half year production of 5.5 MMboe, up 8% from the prior period and 22% from H1 FY16.
- Quarterly sales revenue of \$176 million, up 4% primarily due to higher realised oil prices.
- Quarterly sales and production volumes down 7% and 9% respectively, with successful development activities
  partially mitigating the impact of natural field decline.
- Western Flank operated field costs below \$3.00/boe, down more than 20% year-to-date.
- SACB JV delivering operating cost savings and on track to beat our full year cost reduction guidance of 15%.
- Capital expenditure up 38% to \$42 million due to increased Western Flank exploration, appraisal and development activity.
- Oil discoveries at Osmanli-1 and September-1 in ex PEL 91, representing Birkhead and Poolowanna oil exploration success.
- 15 wells drilled with an 80% success rate; 24 wells drilled during H1 FY17 with an 88% success rate.
- Reduced FY17 capital expenditure guidance of \$170 185 million (previously \$180 200 million); expanded drilling program to be delivered at a lower overall cost.
- Increased FY17 production guidance of 10.3 10.7 MMboe (previously 9.7 10.3 MMboe).

## **COMMENTS FROM CHIEF EXECUTIVE OFFICER, MATT KAY**

"Net quarterly operating cash flow of \$87 million and an increase in cash reserves of \$55 million clearly demonstrate Beach's low cost operating model and leverage to higher oil prices. Our strict focus on costs continues to deliver results, including a year-to-date reduction in Western Flank operated field costs of more than 20%. Our financial position has strengthened and we now have available liquidity of approximately \$650 million.

"In the field we are delivering our capital program on time and under budget. Our 80% drilling success rate includes the Osmanli-1 Birkhead oil discovery, which provided encouragement for the Birkhead play within our Western Flank acreage. In addition, production facilities for the Kangaroo-1 Birkhead oil discovery have been installed and the well is now on extended production test. For the first half of FY17, Beach has achieved record production of 5.5 MMboe, with successful field development activities helping to mitigate the impact of natural production decline.

"Our revised FY17 capital expenditure and production guidance announced today reinforces progress made this year. Due to record half-year production, success in the field and cost efficiencies, we have materially increased our drilling activity for FY17. We now plan to drill 16 operated wells (+3) and up to 42 non-operated wells (+5). Thanks to cost savings and efficiency gains, we expect to deliver the expanded program at a lower overall cost of \$170 – 185 million (previously \$180 – 200 million).

"Results in the field have also allowed us to increase production estimates, with guidance now in the range of 10.3 - 10.7 MMboe (previously 9.7 - 10.3 MMboe). These guidance revisions reflect positive outcomes achieved in the first half, including exploration success and increased investment in our core Western Flank acreage."

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| Key Statistics             | December<br>Q2 FY16 | September<br>Q1 FY17 | December<br>Q2 FY17 | Qtr on Qtr<br>Change | YTD   |
|----------------------------|---------------------|----------------------|---------------------|----------------------|-------|
| Production (kboe)          | 2,253               | 2,902                | 2,628               | (9%)                 | 5,530 |
| Sales Volumes (kboe)       | 2,519               | 3,290                | 3,073               | (7%)                 | 6,363 |
| Sales Revenue (\$ million) | 126                 | 169                  | 176                 | 4%                   | 344   |
| Oil Price (\$/bbl)         | 56.1                | 62.6                 | 73.2                | 17%                  | 67.5  |
| Cash (\$ million)          | 164                 | 243                  | 298                 | 22%                  | 298   |
| Drawn debt (\$ million)    | 150                 | 150                  | 150                 | _                    | 150   |

## **FINANCIAL**

#### **SALES VOLUMES**

Record half year sales volumes of 6.4 MMboe were achieved, representing an increase of 11% from the prior period and 25% from H1 FY16. Quarterly sales volumes of 3,073 kboe were 7% lower than the prior quarter, due mainly to lower production volumes and one less oil shipment.

| Sales Volume      | es  | December<br>Q2 FY16 | September<br>Q1 FY17 | December<br>Q2 FY17 | Qtr on Qtr<br>Change | YTD   |
|-------------------|---|---------------------|----------------------|---------------------|----------------------|-------|
|                   | Cooper and Eromanga Basins  – Own Product | 1,089               | 1,637                | 1,405               | (14%)                | 3,042 |
| Oil               | Cooper and Eromanga Basins  – Third Party | 351                 | 147                  | 143                 | (3%)                 | 290   |
| (kbbl)            | Total Cooper Basin Oil                    | 1,440               | 1,784                | 1,548               | (13%)                | 3,332 |
|                   | Egypt                                     | 40                  | _                    | -                   | -                    | _     |
|                   | Total Oil                                 | 1,480               | 1,784                | 1,548               | (13%)                | 3,332 |
|                   | Cooper Basin – Own Product                | 4.8                 | 7.3                  | 7.0                 | (4%)                 | 14.3  |
| Sales Gas         | Cooper Basin – Third Party                | 0.1                 | 0.1                  | 0.2                 | 94%                  | 0.3   |
| (PJ)              | Egypt                                     | 0.1                 | _                    | -                   | -                    | _     |
|                   | Total Gas                                 | 5.0                 | 7.4                  | 7.2                 | (3%)                 | 14.6  |
|                   | Cooper Basin – Own Product                | 10.4                | 10.7                 | 13.8                | 29%                  | 24.5  |
| LPG<br>(kt)       | Cooper Basin – Third Party                | 0.2                 | 0.4                  | -                   | (100%)               | 0.4   |
| (110)             | Total LPG                                 | 10.6                | 11.1                 | 13.8                | 24%                  | 24.9  |
|                   | Cooper Basin – Own Product                | 89                  | 142                  | 176                 | 24%                  | 318   |
| Condensate (kbbl) | Cooper Basin – Third Party                | 2                   | 4                    | 2                   | (45%)                | 6     |
| (1122)            | Total Condensate                          | 91                  | 146                  | 178                 | 22%                  | 324   |
| Total Oil and     | Total Oil and Gas Sales (kboe)            |                     | 3,290                | 3,073               | (7%)                 | 6,363 |
| Total – Own       | Total – Own Product (kboe)                |                     | 3,116                | 2,890               | (7%)                 | 6,006 |
| Total – Third     | d Party (kboe)                            | 374                 | 174                  | 183                 | 5%                   | 357   |



#### **REVENUE**

Total sales revenue of \$176 million was 4% higher than the prior quarter, mainly due to higher realised oil and liquids prices. The average realised Australian dollar oil price increased by 17% to \$73/bbl (from \$63/bbl), and the average realised sales gas price remained unchanged at \$5.92/GJ.

| Sales Revenue<br>(\$ million) | December<br>Q2 FY16 | September<br>Q1 FY17 | December<br>Q2 FY17 | Qtr on Qtr<br>Change | YTD   |
|-------------------------------|---------------------|----------------------|---------------------|----------------------|-------|
| Oil                           | 83.0                | 111.6                | 113.3               | 2%                   | 224.9 |
| Sales Gas                     | 30.5                | 43.9                 | 42.8                | (2%)                 | 86.7  |
| LPG                           | 6.8                 | 5.0                  | 7.4                 | 48%                  | 12.4  |
| Condensate                    | 6.1                 | 8.4                  | 12.0                | 42%                  | 20.4  |
| Sales Gas and Gas Liquids     | 43.4                | 57.3                 | 62.2                | 9%                   | 119.5 |
| Total Oil and Gas             | 126.4               | 168.9                | 175.5               | 4%                   | 344.4 |
| Total – Own Product           | 104.5               | 158.9                | 164.7               | 4%                   | 323.6 |
| Total – Third Party           | 21.9                | 10.0                 | 10.8                | 8%                   | 20.8  |
| Average Realised Prices       | December<br>Q2 FY16 | September<br>Q1 FY17 | December<br>Q2 FY17 | Qtr on Qtr<br>Change | YTD   |
| All Products (\$/boe)         | 50.1                | 51.3                 | 57.1                | 11%                  | 54.1  |
| Oil (\$/bbl)                  | 56.1                | 62.6                 | 73.2                | 17%                  | 67.5  |
| Sales Gas (\$/GJ)             | 6.1                 | 5.9                  | 5.9                 | 0%                   | 5.9   |
| LPG (\$/t)                    | 638.7               | 446.9                | 534.5               | 20%                  | 495.4 |
| Condensate (\$/bbl)           | 66.2                | 57.6                 | 67.4                | 17%                  | 63.0  |

#### **CAPITAL EXPENDITURE**

Capital expenditure of \$42 million was 38% higher than the prior quarter, due mainly to increased exploration and appraisal activity within Beach's Western Flank acreage, and increased activity associated with the Bauer facility expansion and Middleton compression project. Capital expenditure totalled \$72 million in H1 FY17, representing a 41% reduction from H1 FY16.

| Capital Expenditure<br>(\$ million) | December<br>Q2 FY16 | September<br>Q1 FY17 | December<br>Q2 FY17 | Qtr on Qtr<br>Change | YTD  |
|-------------------------------------|---------------------|----------------------|---------------------|----------------------|------|
| Exploration and Appraisal           | 20.1                | 6.5                  | 16.2                | 151%                 | 22.7 |
| Development, Plant and<br>Equipment | 57.4                | 23.9                 | 25.7                | 8%                   | 49.6 |
| Total                               | 77.5                | 30.4                 | 41.9                | 38%                  | 72.3 |



Subsequent to quarter-end, Beach announced reduced FY17 capital expenditure guidance of \$170 – 185 million (previously \$180 – 200 million). Due to record half year production, success in the field and cost efficiencies, Beach has materially increased its drilling activity for FY17. Furthermore, Beach is confident that the expanded program can be undertaken at a cost below original guidance. Additional discretionary projects to be undertaken in H2 FY17 include:

- Installation of production facilities in ex PEL 91 to bring the Kangaroo-1 oil well online and provide capacity for future discoveries.
- Two follow-up exploration wells in ex PEL 91 to further appraise the Birkhead Formation oil play near the Kangaroo discovery.
  - Nine operated exploration wells planned for FY17.
- Two development wells in the Pennington Field in ex PEL 91 to optimise field commerciality and accelerate production.
  - Seven operated appraisal / development wells planned for FY17.
- Additional SACB and SWQ joint venture wells proposed by the operator due to improved drilling efficiencies which have resulted in faster drilling times.
- Up to 36 wells proposed for FY17. Certain wells are subject to Beach review and confirmation of participation.
   Further details are contained in the announcement of 31 January 2017.

#### **LIQUIDITY**

Cash reserves increased by \$55 million during the quarter, which included net operating cash flow of \$87 million, capital expenditure of \$42 million and net receipts from asset sales. At quarter-end, cash reserves were \$298 million, with drawn debt of \$150 million and undrawn debt facilities of \$350 million.

Beach's strengthening liquidity position demonstrates the company's leverage to improving oil prices, and ongoing efforts to reduce costs and improve operating efficiencies. Field operating cost savings of more than 20% were achieved in H1 FY17 in Beach's operated Western Flank acreage, and the SACB and SWQ JVs are on track to beat our full year operating cost reduction guidance of 15%. Further detail on cost savings will accompany the FY17 Half Year Report, which is due for release on 20 February 2017.

| Liquidity<br>(\$ million) | December<br>Q2 FY16 | September<br>Q1 FY17 | December<br>Q2 FY17 | Qtr on Qtr<br>Change |
|---------------------------|---------------------|----------------------|---------------------|----------------------|
| Cash Reserves             | 164.0               | 243.5                | 298.2               | 22%                  |
| Drawn debt                | 150.0               | 150.0                | 150.0               | _                    |
| Net Cash                  | 14.0                | 93.5                 | 148.2               | 59%                  |
| Undrawn Facilities        | 350.0               | 350.0                | 350.0               | _                    |

#### **CAPITAL STRUCTURE**

| Capital Structure          | September<br>Q1 FY17 | December<br>Q2 FY17 | Qtr on Qtr<br>Change |
|----------------------------|----------------------|---------------------|----------------------|
| Fully Paid Ordinary Shares | 1,865,094,804        | 1,865,094,804       | -                    |
| Unlisted Employee Rights   | 4,774,239            | 6,907,656           | 45%                  |



#### **HEDGING**

Beach undertook a review of its hedging policy during the quarter and consequently reduced hedging limits to reflect the company's sound financial position. Beach now seeks to hedge sufficient volumes to cover up to 70% of its total oil production costs and total corporate costs (previously 80%). A range of instruments is used to protect against downside oil price scenarios, and all hedging transactions since June 2016 have been entered into using zero-cost instruments.

A three-way collar was entered into during Q2 FY17 which provides a \$50-96/bbl collar, as well as full upside participation if oil prices exceed \$106/bbl. The following hedges were in place as at 31 December 2016.

| Hedges<br>(Brent)   | Floor<br>\$45 per bbl | Collar<br>\$40-111<br>per bbl | Collar<br>\$40-102<br>per bbl | Three-way collar<br>\$50-96-106<br>per bbl | Total Hedged<br>Volumes (bbl) |
|---------------------|-----------------------|-------------------------------|-------------------------------|--|-------------------------------|
| FY17<br>(remaining) | 405,000               | 765,000                       | 180,000                       | -  | 1,350,000                     |
| FY18                | -                     | 517,500                       | 517,500                       | 405,000                                    | 1,440,000                     |
| Total               | 405,000               | 1,282,500                     | 697,500                       | 405,000                                    | 2,790,000                     |

### **OPERATIONS**

#### **PRODUCTION**

Increased production from Western Flank development wells brought online and artificial lift installations helped mitigate the impact of natural field decline. These activities contributed to record half year production of 5,530 kboe, an increase of 8% from the prior period and 22% from H1 FY16. Half year production includes record operated oil production of 3,095 kbbl. Quarterly production of 2,628 kboe was 9% lower than the prior period.

Subsequent to quarter-end, Beach announced increased FY17 production guidance of 10.3 - 10.7 MMboe (previously 9.7 - 10.3 MMboe), following record production in H1 FY17 and greater investment in its Western Flank acreage. Upward revisions to guidance were made due to better than expected oil and gas performance from operated Western Flank acreage, new production from the Kangaroo-1 oil discovery, and additional development drilling to be undertaken in the Pennington Field. Further details are contained in the announcement of 31 January 2017.

| Production            |              | December<br>Q2 FY16 | September<br>Q1 FY17 | December<br>Q2 FY17 | Qtr on Qtr<br>Change | YTD   |
|-----------------------|--------------|---------------------|----------------------|---------------------|----------------------|-------|
|                       | Cooper Basin | 1,096               | 1,631                | 1,464               | (10%)                | 3,095 |
| Oil (kbbl)            | Egypt        | 41                  | _                    | -                   | -                    | _     |
|                       | Total Oil    | 1,137               | 1,631                | 1,464               | (10%)                | 3,095 |
| Sales Gas and         | Cooper Basin | 5.4                 | 6.0                  | 5.5                 | (9%)                 | 11.5  |
| Ethane (PJ)           | Egypt        | 0.1                 | _                    | _                   | _                    | _     |
| LPG (kt)              | Cooper Basin | 10.8                | 14.6                 | 12.6                | (14%)                | 27.2  |
| Condensate (kbbl)     | Cooper Basin | 86                  | 116                  | 122                 | 5%                   | 238   |
| Total Sales Gas and   | Gas Liquids  | 1,117               | 1,271                | 1,164               | (8%)                 | 2,435 |
| Total Oil and Gas (kl | boe)         | 2,254               | 2,902                | 2,628               | (9%)                 | 5,530 |

NB. Preliminary data for ex PEL 106 and ex PEL 104 / 111



#### **Cooper Basin**

Western Flank Oil - ex PEL 91

(Beach 100%)

New production was brought online from the Hanson-4 and Stunsail-3 development wells, with Stunsail-3 the permit's only current producer from the Birkhead Formation. Additional artificial lift installations were completed in the Hanson and Pennington fields, which provided initial incremental production of approximately 400 bopd. These activities helped mitigate natural field decline and were undertaken as part of a broader development campaign which completed toward the end of the quarter. Quarterly oil production of 950 kbbl (10,350 bopd) was 12% lower than the prior period.

Work commenced on the Kangaroo production facility, with mechanical installation completed subsequent to quarter-end. The Kangaroo-1 exploration well commenced an extended production test in late January 2017. The Bauer facility expansion continued, although some weather related delays did necessitate minor re-build of the site. Mechanical installation and commissioning of the expansion by the end of Q3 FY17 is targeted. The expansion will increase fluids handling capacity by 60% from 75,000 bfpd to 120,000 bfpd.

Western Flank Oil – ex PEL 92

(Beach 75% and operator, Cooper Energy 25%)

New production was brought online from the Callawonga-12 development well, and installation of artificial lift at Callawonga-1 provided initial incremental production of approximately 400 bopd. These activities broadly offset natural field decline. Quarterly average daily oil production of 1,915 barrels (gross) was approximately 4% lower than the prior period, with total net oil production of 175 kbbl.

Western Flank Oil – ex PEL 104 / 111

(Beach 40%, Senex 60% and operator)

Various production optimisation activities and well workovers continued, which broadly offset natural field decline. Average daily oil production of 2,800 barrels (gross) was approximately 4% lower than the prior period, with total net oil production of 105 kbbl.

Queensland Oil - Kenmore and Bodalla; ATP 299

(Kenmore and Bodalla: Beach 100%; ATP 299: Beach 40%, Santos 60% and operator)

Beach completed the sale of its operated Queensland oil assets on 19 October 2016, consistent with its strategy to optimise core operations. The transaction delivered efficiencies in Cooper Basin operating costs and liability management. As a result of the sale, quarterly Queensland oil production of 42 kbbl (net) was 38% lower than the prior period.

Western Flank Gas and Gas Liquids – ex PEL 106; ex PEL 513 / 632

(Ex PEL 106: Beach 100%; ex PEL 513 / 632: Beach 40%, Santos 60% and operator)

Ex PEL 106 production of 200 kboe (2,150 boepd) was 24% lower than the prior period, mainly due to downtime from a lightning strike and shut-in requests from the Moomba processing plant operator. Production comprised sales gas of 130 kboe (down 28%), LPG of 30 kboe (down 39%) and condensate of 40 kboe (up 24%).

Work continued on the Middleton gas compression project, with all equipment delivered to site and mechanical installation commencing subsequent to quarter-end. Compression will enable greater gas throughput as fields decline, and is expected to provide peak production capacity of 3,700 boepd. The project is expected to be completed in Q3 FY17, and the Middleton East-1 and Coolawang-1 wells are expected to be connected during the quarter.

Ex PEL 513 / 632 contributed 42 kboe (net) of sales gas and gas liquids production, down 16% from the prior quarter due to natural field decline.

SACB and SWQ JVs

(Various non-operated interests)

Production from new gas wells online partially offset natural field decline. Sales gas and gas liquids production of 925 kboe (net) was 4% lower than the prior period and comprised sales gas of 790 kboe (down 5%), LPG of 70 kboe (up 4%) and condensate of 65 kboe (down 1%).

Oil production was assisted by various production optimisation initiatives and limited downtime. Production of 190 kbbl (net) was 2% higher than the prior period.



#### **DEVELOPMENT**

#### **Cooper Basin**

South Australian Gas - SACB JV

(Fixed Factor Area Joint Venture: Beach 20.21%, Santos 66.6% and operator, Origin 13.19%)

A five-well gas appraisal and development campaign on the central flank of the Big Lake Field was completed. The campaign included one standalone appraisal well (Big Lake-134) and four development wells drilled from a single pad (Big Lake-135 to -138). The campaign aimed to expand the central development area and targeted the Patchawarra Formation, Tirrawarra Sandstone and Merrimelia Formation, with the Epsilon Formation providing a secondary target. Big Lake-137 and Big Lake-138 were the final wells of the campaign. Big Lake-137 intersected approximately 80 metres of net gas pay across a 545 metre gross section in the target zones, which was marginally below pre-drill estimates. Big Lake-138 intersected approximately 83 metres of net pay across a 463 metre gross section in the target zones, which was in-line with pre-drill estimates. All five wells of the campaign were cased and suspended as future producers.

A two-well gas development program was undertaken in the Allunga Field, which is located approximately 30 kilometres southeast of the Moomba processing facility. The Allunga structure is a four-way dip closure with reservoir properties similar to those of the neighbouring Big Lake Field. Allunga-2 and Allunga-3 were drilled from a single pad and targeted the Epsilon and Patchawarra formations. Both wells were cased and suspended as future producers, with Allunga-2 intersecting 48 metres of net pay across a 622 metre gross section, and Allunga-3 intersecting 62 metres of net pay across a 585 metre gross section. Results were in line with pre-drill estimates and support potential follow-up drilling as part of a broader field development plan.

#### Queensland Gas - SWQ JV

(Beach 23.2%, Santos 60.06% and operator, Origin 16.74%)

A two-well gas development program was undertaken in the Galex Field, which is located approximately 10 kilometres southeast of the Ballera processing facility. The wells targeted undeveloped reserves in the Patchawarra Formation, with the Toolachee Formation providing a secondary target. Galex-4 intersected 45 metres of net pay across a 183 metre gross section. Results were in-line with pre-drill estimates and the well

was cased and suspended as a future producer. Galex-5 intersected six metres of net pay across a 211 metre gross section. The well was cased and suspended as a future producer, with results broadly in-line with predrill estimates.

Windigo-3 was drilled as a deviated gas development well in the Windigo Field, which is located in the central region of the Cooper Basin's south west Queensland area. The well was identified following a regional review of the Windigo and Roti fields, and targeted sands within the Patchawarra Formation as a primary objective and sands within the Epsilon Formation as a secondary objective. Windigo-3 was cased and suspended as a future Patchawarra Formation producer following intersection of 50 metres of net pay across a 243 metre gross section, with results in-line with pre-drill estimates.

#### **EXPLORATION AND APPRAISAL**

#### **Cooper Basin**

Western Flank Oil – ex PEL 91 (Beach 100%)

The September-1 oil exploration well is located approximately seven kilometres east of the Stunsail Field. The well targeted oil within a structural closure at the Namur Sandstone level and tested the McKinlay Member, Birkhead Formation and Poolowanna Formation as secondary targets. September-1 intersected an eight metre gross interval with oil shows within the Poolowanna Formation. A drill stem test was undertaken over the interval 1,927.8 metres to 1,936.0 metres and recovered 15.2 barrels of approximately 42 degree API oil from the drill string over a 1.5 hour flow period. There were no indications of formation water from the test. The flow rate was calculated to be 210 bopd and the well was cased and suspended as a future producer. This discovery validates the Poolowanna Formation as an additional reservoir target within the ex PEL 91 permit area. Review of results is currently underway and further production testing is planned to assess the resource size. Further mapping of the Poolowanna oil play will be undertaken through FY17, with potential appraisal and near-field exploration activities in FY18.

The Osmanli-1 oil exploration well, located within the primary ex PEL 91 oil fairway approximately four kilometres west of the Stunsail Field, was drilled to test a four-way dip closed anticlinal structure. The well targeted the Namur Sandstone, with the mid-Namur Sandstone, Birkhead Formation and Poolowanna



Formation providing secondary targets. shows were intersected at two levels within the Birkhead Formation. A drill stem test was conducted over the lower interval of 1,689 - 1,697 metres for a six-hour flow period. The test recovered 52 degree API oil at a calculated rate of 50 barrels of oil per day, plus 50 barrels of water per day. A second drill stem test was conducted over the upper interval of 1,651 – 1,664 metres for a sixhour flow period. The test recovered 47 degree API oil at a calculated rate of 55 barrels of oil per day, plus 30 barrels of water per day. The well was subsequently cased and suspended as a future producer, with results indicating a potential western extension of the Birkhead Formation play area, and providing encouragement for the Kangaroo-1 follow-up exploration wells (to be drilled in Q3 FY17).

Western Flank Oil - ex PEL 92

(Beach 75% and operator, Cooper Energy 25%)

The Penneshaw-1 oil exploration well was drilled to test a four-way dip closed anticlinal structure located between the Christies Field and the Butlers-Parsons oil fairway. The well targeted the Namur Sandstone, with the mid-Namur Sandstone, Birkhead Formation and Hutton Formation providing secondary targets. Penneshaw-1 was plugged and abandoned due to lack of commercial pay.

The Butlers-9 oil appraisal well was drilled to test a possible northwest extension of the Butlers Field. The well is located approximately 15 kilometres southwest of the Callawonga Field and targeted the Namur Sandstone, with the mid-Namur Sandstone, Birkhead Formation and Poolowanna Formation providing secondary targets. Butlers-9 was plugged and abandoned due to lack of commercial pay.

Western Flank Oil - ex PEL 111 and PEL 424

(Beach 40%, Senex 60% and operator)

The 295 km² Liberator 3D seismic survey was acquired in ex PEL 111. The survey covers the unmapped northern extent of the Snatcher Field and area to its west, and is targeting Namur Sandstone and Birkhead Formation oil prospects. Processing of data will be undertaken during H2 FY17.

The 220 line kilometre Koonchera 2D seismic survey was acquired in PEL 424. The survey is located 25 kilometres northwest of the Snatcher Field, where minimal exploration activity has been undertaken. Processing and interpretation of data is expected to be completed by the end of FY17.



Drilling Osmanli-1



Western Flank Gas - ex PEL 106

(Beach 100%)

Canunda-3 is the first well of a three-well gas exploration and appraisal campaign within Beach's 100% owned ex PEL 106 permit area. The Canunda Field is located on the western edge of the Patchawarra Trough, approximately 45 kilometres northwest of the Moomba processing facility. Canunda-3 targeted liquids-rich gas within a stratigraphic trap in the Patchawarra Formation and reached total depth of 2,811 metres on 31 December 2016. Subsequent to quarter-end, wireline evaluation of the primary Patchawarra target indicated 1.6 metres of net pay. A drill stem test of the primary target produced liquids-rich gas at a rate of 1.9 MMscf/d on a 16/64" choke and 1,302 psig flowing pressure. In addition, wireline evaluation of the secondary Patchawarra target indicated 1.2 metres of net pay. A drill stem test of the secondary target produced liquids-rich gas at a rate of 1.3 MMscf/d on a 16/64" choke and 730 psig flowing pressure. Canunda-3 was cased and suspended as a future producer, with further testing required. Analysis of test results is expected to confirm that the primary and secondary targets of Canunda-3 represent new discoveries which are not connected to existing reservoirs within the Canunda Field.

#### South Australian Gas - SACB JVs

(Fixed Factor Area Joint Venture: Beach 20.21%, Santos 66.6% and operator, Origin 13.19%)

Namur-4 was drilled as a standalone gas appraisal well in the Namur Field, which is located approximately 25 kilometres southeast of the Moomba processing facility. The field was the first Namur Sandstone gas producing discovery in the Eromanga Basin. Namur-4 was drilled to evaluate reservoir potential of the Patchawarra Formation, and also to assess remaining recovery within the Namur Sandstone. The well intersected approximately 28 metres of net pay across a 221 metre gross section in the Namur Sandstone, and approximately 45 metres of net pay across a 214 metre gross section in the Patchawarra Formation. Subsequent to guarterend, Namur-4 was cased and suspended as a future Patchawarra Formation producer. Analysis of results is currently underway to gauge potential for production from the other reservoirs, and to assess future drilling potential in the field.

#### Queensland Gas

(Beach 23.2%, Santos 60.06% and operator, Origin 16.74%)

The Dunadoo East-1 near-field gas exploration well is located within the Coolah Complex, approximately 40 kilometres north of the Ballera processing facility. The well was drilled to test a potential continuation of regional sand trends following recent successful drilling in the Dunadoo, Coolah and Durham Downs fields. Dunadoo East-1 was plugged and abandoned due to lack of commercial pay.

Roti South-1 was drilled as a standalone gas appraisal well to the south of the Roti and Roti West fields. The well is located southeast of the Windigo Field in the central region of the Cooper Basin's south west Queensland area, and was identified following a review of the Roti and Windigo fields. Roti South-1 targeted sands within the lower Patchawarra Formation, with upper Patchawarra sands and the Epsilon Formation providing secondary targets. The well was cased and suspended as a future producer following intersection of approximately 36 metres of net pay across a 193 metre gross section within the target zone. Results were pre-drill estimates and in-line with encouragement for follow-up development drilling on the Roti South structure.

#### Other Australia – Otway Basin

T/49P - Offshore Otway

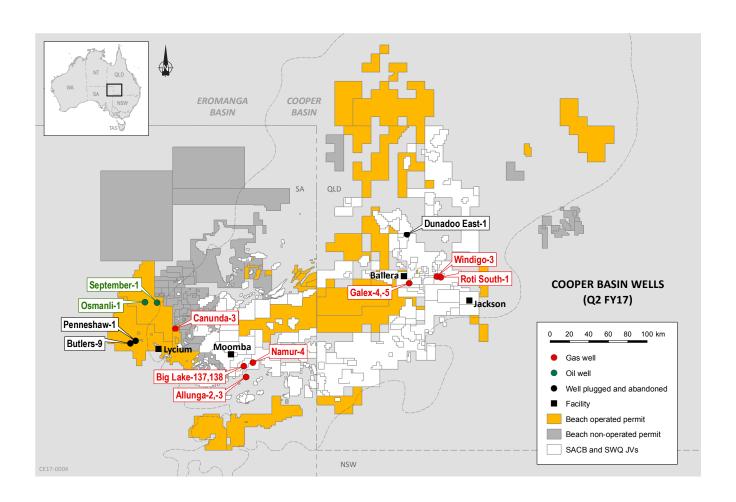
(Beach 30%, 3D Oil 70% and operator)

Interpretation and mapping of the 974 km² Flanagan 3D seismic survey was completed. Based on Beach's assessment of the permit's risk-weighted financial return profile relative to other projects in its portfolio, the decision was made to cease participation in the joint venture. Consequently, Beach advised 3D Oil of its intention to withdraw from T/49P, and its 30% nonoperator interest will be assigned to 3D Oil for nil consideration. This decision is consistent with Beach's ongoing focus on portfolio optimisation and disciplined allocation of capital to projects with near-term line of sight to production and financial return.



#### **WELL RESULTS**

| Area            | Category          | Wells<br>Spudded | Rig<br>Released | Successful<br>Wells | Success<br>Rate | Successful Wells   |
|-----------------|-------------------|------------------|-----------------|---------------------|-----------------|--|
|                 | Oil – Exploration | 3                | 3               | 2                   | 67%             | September-1; Osmanli-1                                       |
|                 | Oil – Appraisal   | 1                | 1               | -                   | _               |  |
|                 | Gas – Exploration | 1                | 1               | _                   | _               |  |
| Cooper<br>Basin | Gas – Appraisal   | 3                | 3               | 3                   | 100%            | Canunda-3; Namur-4;<br>Roti South-1                          |
|                 | Gas – Development | 5                | 7               | 7                   | 100%            | Big Lake-137,-138;<br>Galex-4,-5; Allunga-2,-3;<br>Windigo-3 |
| Total           |                   | 13               | 15              | 12                  | 80%             |  |
| All Explo       | oration Wells     | 4                | 4               | 2                   | 50%             |  |
| All Appr        | aisal Wells       | 4                | 4               | 3                   | 75%             |  |
| All Deve        | lopment Wells     | 5                | 7               | 7                   | 100%            |  |





# CORPORATE AND COMMERCIAL

Gas sales agreement with Adelaide Brighton

Beach signed a gas processing agreement with the SACB JV in regard to its wholly owned ex PEL 106 gas. Beach also signed a GSA with Adelaide Brighton Cement Limited, a wholly owned subsidiary of Adelaide Brighton Limited (ASX: ABC), for supply ex-Moomba of processed sales gas from Beach's Western Flank acreage. The GSA replaces Beach's former ex PEL 106 raw gas sales contract. Supply of gas commenced on 1 January 2017 and will continue for a 12 month term. Gas liquids recovered through processing at Moomba are being sold to the SACB JV.

Beach expects a substantial uplift in net revenue from its Western Flank gas acreage as a result of the GSA and gas processing arrangements with the SACB JV. Any gas production beyond GSA contract volumes will be available for sale via the spot market or new contracts.

#### Changes to Board size and composition

At the AGM held on 10 November 2016, Beach shareholders approved an increase to the maximum number of directors from seven to nine. This increase was considered prudent in order to provide flexibility and allow additional appropriately skilled directors to be appointed. The Board intends to appoint a second Seven Group Holdings Limited nominee as a non-executive director.

Subsequent to the AGM, Beach advised of the unexpected passing of Doug Schwebel. Doug joined Beach in 2012 as a non-executive director and brought to the Board over 30 years of energy sector experience. Doug's technical expertise and leadership skills proved invaluable to Beach, and his contribution to the Board and support for fellow directors were significant. The Board has commenced a process to recruit a director with appropriate experience.

#### Changes to senior executive team

Beach announced changes to the composition and structure of its senior executive team, which are consistent with Beach's growth strategy and follow recommendations from the 2016 organisational review. Changes are summarised below and further details are contained in the announcement of 23 November 2016.

#### • Chief Operating Officer

Mike Dodd, formerly Group Executive Exploration and Development, was appointed to the role of Chief Operating Officer, with effect from 3 January 2017. Mike has 28 years of oil and gas experience. He joined Beach in 2007 and has been integral to the growth of its operated Western Flank oil and gas business. Prior to Beach, Mike's global experience includes the UK, USA, Egypt, Algeria and Kazakhstan, and he has held senior technical and leadership roles at BG, Santos and Anadarko.

#### • Group Executive Exploration and Development

Jeff Schrull was appointed to the role of Group Executive Exploration and Development, with effect from 3 January 2017, and brings to Beach over 30 years of upstream oil and gas experience. Jeff was formerly General Manager Exploration and Production at Cue Energy. He has also held several senior international positions with Chevron over a 19 year period, and was subsequently Corporate General Manager of Exploration at Addax Petroleum. Jeff has a strong track record in creating and delivering growth through exploration, development, operations, mergers and acquisitions.

#### • Group Executive Human Resources

Kevin Hollingsworth was appointed to the newly created role of Group Executive Human Resources, with effect from 5 December 2016. The role recognises the importance of leading, managing and developing Beach's people as part of its growth strategy. Kevin brings to Beach over 30 years of experience in human resources, with particular expertise in executive leadership development, talent development and the creation of high performance cultures. Kevin was most recently Executive Vice President Human Resources at Clough, and previously held senior management positions with Woodside Energy.



## **GLOSSARY**

| \$               | Australian dollars   | GSA          | Gas sales agreement  |
|------------------|--|--------------|--|
| AGM              | Annual General Meeting   | H(1) (FY17)  | (First) half year period (of FY17)                                 |
| API              | American Petroleum Institute   | kbbl         | Thousand barrels of oil  |
|                  | gravity measure  | kboe         | Thousand barrels of oil equivalent                                 |
| ATP              | Authority to Prospect  | kt           | Thousand tonnes  |
| bbl              | Barrels  | LPG          | Liquefied petroleum gas  |
| Beach            | Beach Energy Ltd   | MMbbl        | Million barrels of oil   |
| Bcf              | Billion cubic feet   | MMboe        | Million barrels of oil equivalent                                  |
| bfpd             | Barrels of fluid per day   | MMscfd       | Million standard cubic feet of gas                                 |
| boe              | Barrels of oil equivalent – the                                      |              | per day  |
|                  | volume of hydrocarbons expressed in terms of the volume of oil which | Origin       | Origin Energy Ltd  |
|                  | would contain an equivalent  | PEL          | Petroleum Exploration Licence                                      |
|                  | volume of energy   | PEP          | Petroleum Exploration Permit                                       |
| bopd             | Barrels of oil per day   | PRL          | Petroleum Retention Licence  |
| Cooper Energy    | Cooper Energy Ltd  | PJ           | Petajoule  |
| Cooper Basin     | Includes both Cooper and   | Q(1) (FY17)  | (First) quarter (FY17)   |
|                  | Eromanga basins  | Qtr          | Quarter  |
| Delhi            | Delhi Petroleum Pty Ltd  | SACB JV      | South Australian Cooper Basin                                      |
| Drillsearch      | Drillsearch Energy Pty Ltd   |              | joint Ventures, which include the Fixed Factor Area (Beach 20.21%, |
| DST              | Drill stem test  |              | Santos 66.6%, Origin 13.19%) and                                   |
| EP               | Exploration permit   |              | the Patchawarra East Block (Beach                                  |
| Ex PEL 91        | PRLs 151 to 172 and various production licences                      |              | 17.14%, Santos 72.32% and Origin<br>10.54%)                        |
| Ex PEL 92        | PRLs 85 to 104 and various   | SACB and SWQ | The Delhi operations, which  |
| 5 DEL 404        | production licences  | JVs          | incorporate the SACB JVs and                                       |
| Ex PEL 101       | PRLs 173 and 174 and various production licences                     | 6 .          | SWQ JVs  |
| Ex PEL 104 / 111 | PRLs 136 to 150 and various  | Santos       | Santos Ltd   |
| •                | production licences  | Senex        | Senex Energy Ltd   |
| Ex PEL 106       | PRLs 129 and 130 and various production licences                     | SWQ JV       | South West Queensland joint ventures, incorporating various        |
| Ex PEL 107       | PRLs 175 to 179  |              | equity interests (Beach 20-40%)                                    |
| Ex PEL 218       | PRLs 33 to 49  |              |  |
| Ex PEL 513 / 632 | PRLs 191 to 206 and various production licences                      |              |  |
| FY(17)           | Financial year (2017)  |              |  |
| GJ               | Gigajoule  |              |  |
|                  |  |              |  |