# **Quarterly Report for the period ended 31 December 2017**



31 January 2018 Ref: #007/18

### **Key Highlights**

#### Transformational Lattice acquisition due to financially close today, 31 January 2018

- Strong H1 FY18 Lattice cash generation reduces expected net gearing on financial close at 31 January 2018 to <33% (previous estimate of 35% at 31 March 2018)</li>
- Free cash of approximately \$155 million generated by Lattice from 1 July 2017 to 31 December 2017
- New executives appointed to lead the enlarged operations; significant offshore oil and gas experience gained with leading global energy companies
- Successful capital raising of \$297 million (net proceeds) to assist with the purchase of Lattice;
  new bank debt successfully syndicated more than two times oversubscribed

#### Uninterrupted focus on improving returns from Cooper Basin acreage

- Strong operating performance underpins an increase in Beach standalone FY18 production guidance to 10.6 11.0 MMboe (previously 10.0 10.6 MMboe)
- Production up 3% to 2.6 MMboe, including record operated gas production in December
- Revenue increase of \$30 million to \$208 million, demonstrating leverage to rising oil prices
- Active field development activity continues to offset natural field decline
  - o Five Western Flank artificial lift installations delivered initial production of ~2,600 bopd
  - Five development wells in ex PEL 92 delivered initial production of ~1,400 bopd
- Well count and success rates increasing, delivering a growing inventory of new producers
  - 88% drilling success rate from 25 wells, including an 86% exploration success rate
  - o Participation in up to 98 wells in FY18 now expected (previously up to 78 wells)
- Outstanding safety and environmental standards maintained, including no lost time injuries

#### **Execution of growth strategy continues**

- Operated Western Flank gas progress, including: two new wells brought online, three exploration successes, new GSAs executed and planning for Middleton phase 1 expansion
- Potential farm-in to high impact Ironbark exploration prospect in the Carnarvon Basin, WA
- Otway and Bass Basin interests to be acquired; resultant 100% interest in Otway Gas Project
- South Australian PACE grant awarded for drilling an onshore Otway Basin exploration well

#### Strong momentum carried into H2 FY18

- Potentially significant gas field discovery at Haselgrove-3 ST1 in the onshore Otway Basin;
  constrained flow rate of 25 MMscfd on test
- FY18 pro forma production guidance increased to 25.5 27.6 MMboe; pro forma capital expenditure guidance reduced to \$405 455 million

### **Comments from Chief Executive Officer, Matt Kay**

"It has been an active and successful quarter for Beach, headlined by outstanding operating and safety performance in the Cooper Basin, announcement of various growth initiatives, an increase in full year production guidance, and strong earnings and cash generation from Beach and Lattice assets.

During the quarter, all conditions in relation to the acquisition of Lattice were satisfied, and the transaction is due to financially close today, 31 January 2018. Strong performance and cash generation by Lattice has seen our expected net gearing level on financial close at 31 January 2018 reduce to less than 33% (previous estimate of 35% at 31 March 2018). For the half year to 31 December 2017, Lattice generated free cash of approximately \$155 million.

In the field, ongoing connection of wells and strong flow rates from artificial lift installations contributed to a 3% increase in production to 2.6 MMboe. We also achieved our highest successful well count since the March 2015 quarter, with 22 of 25 wells cased and suspended as future producers. We expect this momentum to continue and as such have increased FY18 Beach standalone production guidance to 10.6 - 11.0 MMboe, from 10.0 - 10.6 MMboe.

We also announced progress on growth initiatives beyond the Cooper Basin. These include the potential farm-in to the high impact Ironbark exploration prospect in the Carnarvon Basin, bolt-on acquisitions in the Otway and Bass basins, and plans for a second onshore Otway Basin exploration well.

Subsequent to quarter-end, exploration success at Haselgrove-3 in the onshore Otway Basin was an exciting result. Strong flow rates on test of 25 MMscfd and large gas intersections have provided encouragement for commercialisation of this potentially significant resource.

As part of preparations for the expanded Beach, we were pleased to announce new executive appointments and the leadership structure for the enlarged operations. Our new appointments and existing executives bring decades of upstream oil and gas experience from leading global energy companies. The leadership team is focused on successfully integrating Lattice, the ongoing delivery of value from the expanded asset portfolio and continued growth in shareholder value."

### **Key statistics**

Beach standalone (pre-Lattice), unless stated otherwise.

Key statistics							
	December Q2 FY17	September Q1 FY18	December Q2 FY18	Qtr on Qtr Change	YTD		
Production (kboe)	2,640	2,553	2,627	3%	5,180		
Sales Volumes (kboe)	3,073	2,883	2,797	(3%)	5,680		
Sales Revenue (\$ million)	176	178	208	17%	386		
Realised Oil Price (\$/bbl)	73.2	77.6	97.4	25%	87.5		
Net Cash (\$ million)	148	230	552	140%	552		

### **Acquisition of Lattice Energy**

#### **Transaction update**

As announced on 19 December 2017, all conditions precedent relating to the acquisition of Lattice from Origin were satisfied. In accordance with agreed completion procedures, the transaction is due to financially close today, 31 January 2018.

The effective date of the acquisition is 1 July 2017, with the benefit of Lattice cash flows from this date to financial close accruing to Beach via the completion payment and acquired cash. Due to strong year-to-date cash generation, Beach's net gearing on financial close of the transaction at 31 January 2018 is expected to be less than 33%, compared with the previous estimate of 35% at 31 March 2018.

Confirmation of financial close will be announced, and further information in relation to Lattice will accompany Beach's half year report, to be released on 19 February 2018.

### Lattice quarterly production and capital expenditure

Quarterly production of 20.1 PJe (3.5 MMboe) was 22% lower than the prior quarter, mainly due to seasonally lower customer demand and a planned seven day shutdown at the Otway gas processing plant. Production for the first half of FY18 was in line with expectations and full year production outlook of 14.9 - 16.6 MMboe has been maintained.

Quarterly production by basin is set out below.

Lattice Energy Production							
		December Q2 FY17	September Q1 FY18	December Q2 FY18	Qtr on Qtr Change	YTD	
Cooper Basin	PJe	4.0	3.9	4.1	6%	8.1	
Otway Basin	PJe	13.2	13.1	7.4	(44%)	20.5	
Bass Basin	PJe	1.7	2.5	2.8	12%	5.3	
Perth Basin	PJe	1.2	1.3	1.2	(9%)	2.4	
Taranaki Basin	PJe	4.1	4.8	4.6	(4%)	9.5	
Total Production	PJe	24.2	25.6	20.1	· (22%) -	45.8	
	MMboe	4.2	4.4	3.5	(2270)	7.9	

The average realised sales gas price of \$5.94/GJ in Q2 FY18 was 5% lower than the prior quarter, mainly due to less higher-priced Otway gas in the sales mix.

Capital expenditure of \$35 million was 16% lower than the prior quarter. Capital expenditure for the first half of FY18 of \$76 million was below expectations and guidance for full year expenditure has been reduced to \$150 - 170 million (previously \$205 - 275 million). The reduction is primarily due to prudent value-based deferral of long lead item purchases for the Otway Gas Project, extended review of Waitsia development plans following recent strong flow test results, deferral of Bonaparte Basin 3D seismic acquisition, and a reduction to contingency assumptions.

Further details in relation to production and capital expenditure guidance are contained in the announcement of today, 31 January 2018, and later in this quarterly report.

### **Financial**

Beach standalone (pre-Lattice), unless stated otherwise.

#### **Sales volumes**

Quarterly sales volumes of 2,797 kboe were 3% lower than the prior quarter, with higher production offset by timing of LPG and condensate shipments.

Sales volumes							
		December Q2 FY17	September Q1 FY18	December Q2 FY18	Qtr on Qtr Change	YTD	
	Own Product	1,405	1,290	1,301	1%	2,590	
Oil (kbbl)	Third Party	143	153	153	(0%)	306	
(110.01)	Total Oil	1,548	1,443	1,453	1%	2,896	
Sales Gas	Own Product	7.0	6.1	6.0	(1%)	12.1	
and Ethane	Third Party	0.2	0.1	0.1	(5%)	0.2	
(PJ)	Total Gas	7.2	6.2	6.1	(1%)	12.3	
	Own Product	13.8	19.8	18.5	(6%)	38.3	
LPG (kt)	Third Party	_	0.7	0.1	(87%)	0.8	
(,	Total LPG	13.8	20.5	18.6	(9%)	39.1	
	Own Product	176	214	138	(36%)	352	
Condensate	Third Party	2	4	1	(78%)	5	
(kbbl)	Total Condensate	178	218	139	(36%)	357	
Total Oil and	Total Oil and Gas Sales (kboe)		2,883	2,797	(3%)	5,680	
Total – Own I	Product (kboe)	2,890	2,703	2,627	(3%)	5,330	
Total – Third Party (kboe)		183	179	170	(5%)	350	



Artificial lift in the Cooper Basin

#### Sales revenue

Total sales revenue of \$208 million was 17% higher than the prior quarter, principally due to a 25% increase in the average realised Australian dollar oil price to \$97/bbl (from \$78/bbl) and a small increase in oil sales volumes. The average realised sales gas and ethane price increased by 2% to \$6.50/GJ.

Sales revenue (\$ million)							
	December Q2 FY17	September Q1 FY18	December Q2 FY18	Qtr on Qtr Change	YTD		
Oil	113.3	112.0	141.5	26%	253.5		
Sales Gas and Ethane	42.8	39.5	39.9	1%	79.4		
LPG	7.4	11.6	14.6	26%	26.2		
Condensate	12.0	14.7	12.2	(17%)	26.9		
Sales Gas and Gas Liquids	62.2	65.8	66.7	1%	132.5		
Total Oil and Gas	175.5	177.8	208.2	17%	386.0		
Total – Own Product	164.7	166.1	194.4	17%	360.6		
Total – Third Party	10.8	11.7	13.8	18%	25.4		

Average realised prices							
	December Q2 FY17	September Q1 FY18	December Q2 FY18	Qtr on Qtr Change	YTD		
All Products (\$/boe)	57.1	61.7	74.4	21%	68.0		
Oil (\$/bbl)	73.2	77.6	97.4	25%	87.5		
Sales Gas and Ethane (\$/GJ)	5.9	6.4	6.5	2%	6.4		
LPG (\$/t)	534.5	566.2	783.9	38%	669.9		
Condensate (\$/bbl)	67.4	67.6	87.7	30%	75.4		

### **Capital expenditure**

Capital expenditure of \$78 million was 68% higher than the prior quarter as Beach accelerated its previously announced multi-year capital program. Exploration activity in the Otway Basin at Haselgrove-3 ST1, active field development in Beach's operated Western Flank acreage and contracting of a new rig by the Cooper Basin JV were key contributors to the increase.

Capital expenditure (\$ million)							
	December Q2 FY17	September Q1 FY18	December Q2 FY18	Qtr on Qtr Change	YTD		
Exploration and Appraisal	16.2	10.5	33.0	213%	43.5		
Development, Plant and Equipment	25.7	35.7	44.8	26%	80.5		
Total	41.9	46.2	77.8	68%	124.0		

Beach has reviewed FY18 full year capital expenditure guidance to reflect expected financial close of the acquisition of Lattice today, 31 January 2018, and the transaction's effective date of 1 July 2017. FY18 pro forma capital expenditure is expected to be within the range of \$405 - 455 million, comprising Beach expenditure of \$255 - 285 million (previously \$220 - 260 million) and Lattice expenditure of \$150 - 170 million (previously \$205 - 275 million).

Beach capital expenditure guidance has been increased by \$25 - 35 million, primarily due to an additional rig contracted within the Cooper Basin JV and participation in an extra 20 wells, more field development activity planned within operated and non-operated Cooper Basin acreage, and onshore Otway Basin production testing following exploration success at Haselgrove-3. Increased capital expenditure has supported higher FY18 production guidance of 10.6 - 11.0 MMboe (previously 10.0 - 10.6 MMboe) and participation in up to 98 wells to be drilled (previously 78 wells).

Lattice capital expenditure guidance has been reduced by \$55 – 105 million, primarily due to prudent value-based deferral of long lead item purchases for the Otway Gas Project, extended review of Waitsia development plans following recent strong flow test results, deferral of Bonaparte Basin 3D seismic acquisition, and a reduction to contingency assumptions. The cash flow impact of Lattice capital expenditure from the effective date of 1 July 2017 to expected financial close on 31 January 2018 has accrued to Beach and will be reflected in the completion payment and acquired cash.

Additional information in relation to FY18 capital expenditure guidance is contained in the announcement of today, 31 January 2018, and further information in relation to capital programs will accompany Beach's FY18 half year report, to be released on 19 February 2018.

#### Liquidity

Beach increased net cash by \$323 million with quarter-end reserves of \$552 million. Material cash flows included net operating cash flow of \$69 million, capital expenditure of \$78 million and \$34 million from asset sales, primarily the sale of Beach's Cooper Energy shareholding. Operating cash flow was impacted by a \$45 million working capital increase in part attributable to rising oil prices and timing of payments.

Beach also realised net proceeds of \$297 million from the institutional and retail entitlement offers to assist with the purchase of Lattice. Beach cancelled \$300 million of available credit facilities which will no longer be required due to new, Lattice acquisition, debt facilities.

Liquidity (\$ million)								
	December Q2 FY17	September Q1 FY18	December Q2 FY18	Qtr on Qtr Change				
Cash Reserves	298.2	229.5	552.2	322.7				
Drawn Debt	150.0	_	_	-				
Net Cash	148.2	229.5	552.2	322.7				
Undrawn Facilities	350.0	500.0	200.0	(300.0)				

### **Capital structure**

Beach's capital structure as at 31 December 2017 is set out below. During the quarter, 401,543,843 fully paid ordinary shares were issued pursuant to the institutional and retail entitlement offers to assist with funding of the acquisition of Lattice. The remaining shares issued related to vesting of long term executive incentive rights.

Capital structure						
	September Q1 FY18	December Q2 FY18	Qtr on Qtr Change			
Fully Paid Ordinary Shares	1,873,812,484	2,276,155,671	21%			
Unlisted Employee Rights	6,820,796	9,084,691	33%			

### Hedging

Beach seeks to hedge sufficient volumes to cover up to 70% of its total oil production costs and total corporate costs. 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. The following hedges were in place as at 31 December 2017.

	Hedges (Brent)							
	Collar \$40 – 102 per bbl	3-way Collar \$50 – 96 – 106 per bbl	Collar \$40 – 90 per bbl	3-way Collar \$40 – 90 – 100 per bbl	3-way Collar \$40 – 103 – 113 per bbl	Total Hedged Volumes (bbl)		
FY18 (remaining)	172,500	165,000	660,000	285,000	_	1,282,500		
FY19	_	-	285,000	577,500	630,000	1,492,500		
Total	172,500	165,000	945,000	862,500	630,000	2,775,000		



Cooper Basin field work

### **Operations**

Beach standalone (pre-Lattice), unless stated otherwise.

#### **Production**

Quarterly production of 2,627 kboe was 3% higher than the prior quarter and benefited from field development and production optimisation activities across operated and non-operated acreage. Ongoing field development initiatives and increased drilling activity continue to offset natural field decline and support our objective to maintain Cooper Basin production levels.

In Beach's Western Flank acreage, six new oil wells were brought online, three with artificial lift and three as free flow Namur Sandstone producers, and a further four artificial lift installations were completed which increased production rates. Two new gas wells were also brought online in the Western Flank. Ongoing connection of new wells and active workover operations by the Cooper Basin JV resulted in increased oil and gas production.

Production						
	December Q2 FY17	September Q1 FY18	December Q2 FY18	Qtr on Qtr Change	YTD	
Total Oil (kbbl)	1,463	1,316	1,331	1%	2,647	
Sales Gas and Ethane (PJ)	5.6	5.8	6.1	5%	11.8	
LPG (kt)	12.4	15.1	15.6	(0%)	30.6	
Condensate (kbbl)	119	124	131	6%	255	
Total Sales Gas and Gas Liquids (kboe)	1,177	1,237	1,296	4%	2,533	
Total Oil and Gas (kboe)	2,640	2,553	2,627	3%	5,180	

Beach has reviewed FY18 full year production guidance to reflect year-to-date performance and expected financial close of the acquisition of Lattice today, 31 January 2018. Due to successful field development initiatives, high drilling success rates and additional wells to be drilled, Beach production guidance has been increased to 10.6 - 11.0 MMboe (previously 10.0 - 10.6 MMboe). Lattice has performed in line with expectations and production guidance of 14.9 - 16.6 MMboe has been maintained. FY18 pro forma production is therefore expected to be within the range of 25.5 - 27.6 MMboe (previously 24.9 - 27.2 MMboe).

Beach production guidance has been increased due to an increase in expected wells to be drilled and connected by the Cooper Basin JV, better than expected incremental oil production from Western Flank artificial lift installations, and strong initial production from recent well connections.

Lattice operations are performing in line with expectations and production has tracked to budget. Full year production guidance has therefore been maintained. The benefit of Lattice production from the effective date of 1 July 2017 to expected financial close on 31 January 2018 has accrued to Beach and will be reflected in the completion payment and acquired cash.

Additional information in relation to FY18 production guidance is contained in the announcement of today, 31 January 2018.

#### **Cooper Basin**

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

Oil production of 821 kbbl (8,920 bopd) was 4% lower than the prior quarter, with active field development and production activities broadly offsetting natural field decline. This activity included five artificial lift installations which provided incremental production toward the end of the quarter of approximately 2,600 bopd.

Stanleys-1 was brought online following installation of artificial lift. The well commenced production late in the quarter as a Birkhead Formation producer at a daily rate of approximately 170 bbl.

Beach completed a further four artificial lift installations. A beam pump was commissioned at Bauer-26, Beach's first Western Flank horizontal oil well. This work was completed in mid-December and resulted in incremental daily oil production of approximately 600 bbl. Electric submersible pumps were installed at Balgowan-1, Bauer-4 and Bauer-23 leading to initial incremental daily oil production of approximately 1,800 bbl.

The Bauer flowline enhancement project was completed, expanding and redirecting certain lines to the new Bauer facility separators. This will allow increased flow rates and throughput from new and existing wells.

## Western Flank Oil – ex PEL 92 (Beach 75% and operator, Cooper Energy 25%)

Average daily oil production of 3,090 barrels (gross) was 22% higher than the prior quarter, with total net oil production of 213 kbbl.

The five Callawonga development wells drilled in Q4 FY17 commenced production. Callawonga-15, -16 and -18 were brought online as free flow Namur Sandstone producers with initial combined production of up to 1,400 bopd. Callawonga-14 and -17 were brought online in mid-December as McKinlay Member producers following installation of artificial lift.

## Western Flank Oil – ex PEL 104 / 111 (Beach 40%, Senex 60% and operator)

Average daily oil production of 2,750 barrels (gross) was 6% higher than the prior quarter, with total net oil production of 101 kbbl. Production benefited from a full quarter of contribution from Marauder-1, a Birkhead Formation producer brought online late in Q1 FY18.

## Queensland Oil – ATP 299 (Beach 40%, Santos 60% and operator)

ATP 299 contributed 32 kbbl (net) of oil production, 6% lower than the prior quarter.

## Western Flank Gas and Gas Liquids – ex PEL 91, ex PEL 106 (Beach 100%)

Quarterly production of 323 kboe (3,500 bopd) was 4% higher than the prior quarter and comprised sales gas of 225 kboe (up 6%), LPG of 51 kboe (up 3%) and condensate of 46 kboe (down 4%).

Mokami-1 and Crockery-1 were brought online in December 2017, which contributed to a peak daily production rate of 5.3 kboe and record monthly throughput of approximately 150 kboe at the Middleton facility. These new producers also offset a period of 21 days of compressor maintenance.

Engineering work continued on the phase 1 expansion of the Middleton facility, which will increase daily raw gas capacity from 25 MMscf to 40 MMscf. Completion is expected in late FY18. Engineering work also commenced to bring online four currently cased and suspended wells from the initial phase of Beach's FY18 operated gas exploration program.

## Western Flank Gas and Gas Liquids – ex PEL 513 / 632 (Beach 40%, Santos 60% and operator)

Ex PEL 513 / 632 contributed 24 kboe (net) of sales gas and gas liquids production, down 12% from the prior quarter due to natural field decline.

#### **Cooper Basin JV**

#### (Various non-operated interests)

Sales gas and gas liquids production of 949 kboe (net) was 6% higher than the prior quarter and comprised sales gas of 801 kboe (up 5%), LPG of 77 kboe (up 4%) and condensate of 71 kboe (up 14%). Oil production of 164 kbbl (net) was 6% higher than the prior quarter. Drilling efficiencies, prioritisation of well connections and continued innovation in field operations, such as the use of special purpose workover equipment to bring wells back online, resulted in production uplift that more than offset natural field decline.

#### Development

#### **Cooper Basin**

## South Australian Oil – Cooper Basin JV (Fixed Factor Area JV: Beach 20.21%, Santos 66.60% and operator, Origin 13.19%)

A six-well oil development campaign in the McKinlay Field, located approximately 50 kilometres southeast of the Moomba processing facility, was undertaken. The campaign comprised four horizontal wells and two vertical wells and was designed to develop the McKinlay Member reservoir, which is a proven producer. The low relief nature of the McKinlay Member is considered highly suited for horizontal drilling and results in fewer wells required relative to a pure vertical program, with expected improved flow rate and ultimate recovery.

The four horizontal oil wells, McKinlay-12, -13, -14 and -15, drilled lateral sections of 1,220, 1,397, 811 and 870 metres respectively. Good oil and gas shows were encountered in the primary target of each well. McKinlay-12, -13 and -14 were cased and suspended as future producers. While McKinlay-15 was suspended as a future producer.

The two vertical oil wells of the campaign, McKinlay-16 and -17, were successfully completed by the Ensign 950 shallow rig which was contracted during the quarter. The wells intersected 4.4 and 6.3 metres of net oil pay respectively and were cased and suspended as future producers.

These six McKinlay Field development wells are expected to be brought into production during Q3 FY18.

A single oil development well was drilled in the Odonata Field, located on the Nappacoongee-Murteree Horst approximately 50 kilometres south of the Moomba processing facility. Odonata-2 targeted the Coorikiana Sandstone as a primary objective. The well encountered 6.7 metres of net oil pay and was cased and suspended as a future producer.

## South Australian Gas – Cooper Basin JV (Fixed Factor Area JV: Beach 20.21%, Santos 66.60% and operator, Origin 13.19%)

A four-well gas development and appraisal campaign was completed in the Namur Field, located approximately 20 kilometres southeast of the Moomba processing facility. The campaign targeted the Patchawarra Formation as a primary objective and consisted of three development wells and one appraisal well, with the first two development wells and the appraisal well drilled from a single pad.

The first development well, Namur-8, was drilled to develop the central area of the crestal part of the Namur Field. The well intersected 61 metres of net gas pay and was cased and suspended as a future producer.

The second development well of the campaign, Namur-9, intersected 53 metres of net gas pay and was cased and suspended as a future producer. The rig was subsequently moved two kilometres to drill Namur-10. Namur-10 intersected 61.5 metres of net gas pay and was cased and suspended as a future producer.

#### Queensland Gas – Cooper Basin JV

(Southwest Queensland JV: Beach 23.20%, Santos 60.06% and operator, Origin 16.74%)

A two-well gas development and appraisal campaign was completed on the Costa / Judga Complex, located approximately 20 kilometres east of the Ballera processing facility. The second well of the campaign, development well Costa-2, targeted the Toolachee and Patchawarra formations as primary objectives and the Epsilon Formation as a secondary objective. The well intersected five metres of net gas pay in the Toolachee Formation and was cased and suspended as a future producer.

#### **Exploration and appraisal**

#### **Cooper Basin**

Western Flank Gas – ex PEL 106, ex PEL 91 (Beach 100%)

Beach completed the initial phase of its FY18 operated gas exploration and appraisal campaign, which focused on the Southwest Patchawarra (SWP) and Permian Edge (PE) play fairways. Crawford-1, the third exploration well of the campaign, is located approximately two kilometres northwest of the Middleton gas facility and proximal to the Brownlow, Middleton and Udacha fields. Crawford-1 tested stratigraphic traps within the gas and condensate system of the SWP play fairway and targeted Mid-Patchawarra Formation intervals. Crawford-1 intersected 4.1 metres of net gas pay in the target interval and was cased and suspended as a future producer. Reservoir pressure information indicated good permeability and connection to the Brownlow Field, which is expected to enable incremental reserves to be booked and produced.

The fourth exploration well of the campaign, Naiko-1, is located in the SWP play fairway approximately two kilometres northeast of the Middleton gas facility. Naiko-1 was designed to test viability of the gas and condensate system within the SWP play fairway in the mid-to-lower intervals of the Patchawarra Formation. The well intersected two metres of net pay in the mid interval and was cased and suspended as a future producer. An open hole drill stem test was conducted over the interval 2,692 to 2,697 metres and flowed at up to 5.8 MMscfd on a 32/64" choke at 1,149 psi flowing tubing head pressure. Preliminary analysis of test results indicates that Naiko-1 is potentially connected to the Middleton Field and as pressure is higher than at Middleton, will likely add reserves.

The fifth exploration well, Largs-1, is located in the SWP immediately south of the Middleton gas facility and targeted stratigraphically trapped gas in the mid-to-lower intervals of the Patchawarra Formation. Largs-1 intersected reservoir sands of sub-commercial quality and was sidetracked in a north-westerly direction. The sidetrack well, Largs-1 DW1, intersected three gas pay zones totalling 12.8 metres of net pay across a 19.2 metre gross interval. Pressure data confirmed the shallowest gas sand to be a new field discovery. Further testing was not required and the well was cased and suspended as a future producer.

The initial phase of the campaign was completed with exploration well Squeaky-1. Squeaky-1 is located in ex PEL 91 in the PE play fairway, approximately eight kilometres west of the Middleton gas facility, and targeted a stratigraphic prospect. Despite moderate gas shows, gas pay of subcommercial quality was interpreted and the well was plugged and abandoned.

The initial phase of Beach's FY18 operated gas drilling campaign proved successful with four exploration successes from six wells (Lowry-1, Crawford-1, Naiko-1, Largs-1 DW1), including new field discoveries at Lowry and Largs. The cased and suspended wells will be brought online progressively in early FY19.

## South Australia Gas – Cooper Basin JV (Fixed Factor Area Joint Venture: Beach 20.21%, Santos 66.60% and operator, Origin 13.19%)

The appraisal well of the previously mentioned four-well Namur Field gas development and appraisal campaign was pad drilled. Namur-7 intersected net gas pay of 23 metres in the target Patchawarra Formation and was cased and suspended as a future producer.

A two-well gas appraisal campaign targeting the Coorikiana Sandstone in the Namur Field was successfully completed using the Ensign 950 shallow rig. The Coorikiana Sandstone was unproven in the Namur Field, however was supported by gas shows and reservoir intersections comparable to those observed in nearby fields. The first well of the campaign, Namur-5, encountered 6.5 metres of net gas pay in the Coorikiana Sandstone and was cased and suspended as a future producer. The second well of the campaign, Namur-6, encountered 5.3 metres of net gas pay in the target zone and was also cased and suspended as a future producer.

The Caraka-3 gas appraisal well was drilled on the southern sub-culmination of the Caraka Field. The field is located approximately 60 kilometres southeast of the Moomba processing facility and proximal to the Toolachee and Strzelecki fields. Caraka-3 targeted the Patchawarra Formation as a primary objective and intersected three metres of net pay. The well was cased and production tested, however, rates were considered insufficient for completion and connection.

Gooranie-1 DW1 is a deep coal directional gas appraisal well spudded from the non-producing Gooranie-1 wellbore. Gooranie-1 DW1 sought to appraise deep coal prospects in the Patchawarra Formation in the Tirrawarra-Gooranie fields. The well was unable to evaluate the primary objective and was plugged and abandoned.

## South Australian Oil – Cooper Basin JV (Fixed Factor Area JV: Beach 20.21%, Santos 66.60% and operator, Origin 13.19%)

A two-well near field oil exploration campaign was successfully completed using the Ensign 950 shallow rig. The campaign was designed to assess near field exploration opportunities that might not have been economic with other drill rigs.

The first well of the campaign, Warumpi-1, targeted a Birkhead Formation prospect located approximately 40 kilometres south of the Moomba processing facility and to the north of the Alwyn Field. The McKinlay Member was a secondary objective. The well intersected seven metres of net oil pay in the primary target and was cased and suspended as a future producer.

The second well of the campaign, Isoptera-1, targeted a Coorikiana Sandstone prospect located between the Bugito and Ulandi fields, approximately 45 kilometres south of the Moomba processing facility. The well intersected net oil pay of 6.5 metres in the primary target and was cased and suspended as a future producer.

## Queensland Oil – ATP 299P Tintaburra JV (Beach 40%, Santos 60% and operator)

A four-well oil appraisal campaign commenced using the Ensign 950 shallow rig. The campaign is designed to appraise the Kooroopa, Mulberry and Takyah fields in southwest Queensland approximately 100 kilometres northeast of the Jackson facility. The first well of the campaign, Mulberry-37, targeted the Birkhead Formation and was designed to assess the remaining potential of the Mulberry Field. The well intersected 3.7 metres of net oil pay in the primary target and was cased and suspended. The well is being assessed as a water injector to assist with future field production.

The second well of the campaign, Takyah-3, targeted the Birkhead Formation as a primary objective and the Murta Formation as a secondary objective. The well intersected 4.1 metres of net oil pay in the Murta Formation and was cased and suspended as a future producer.

#### **Otway Basin**

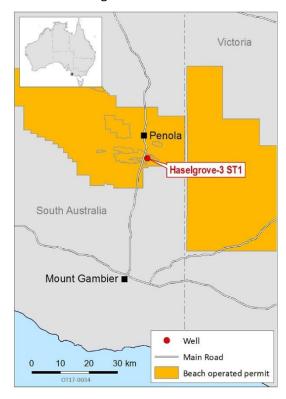
## South Australian Gas – PPL 62 (Beach 100%)

Beach completed drilling Haselgrove-3 ST1 in the onshore Otway Basin. The well is located on state forestry land in PPL 62 (Beach 100%), approximately eight kilometres south of Penola. Haselgrove-3 ST1 was drilled as a deviated well to a total measured depth of 4,331 metres and targeted the Sawpit Sandstone and shallower Pretty Hill Sandstone.

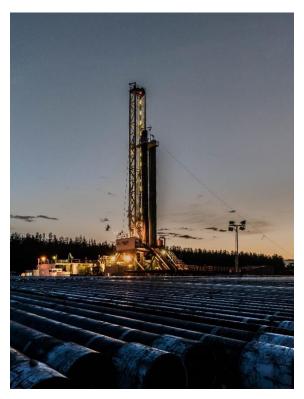
On 11 January 2018, Beach announced Haselgrove-3 ST1 as a new gas field discovery. The well intersected an estimated gross gas column of 104 metres TVT in the Sawpit Sandstone, with estimated net pay of 25.6 metres TVT. An estimated gross gas column of 11.6 metres TVT was also intersected in the shallower Pretty Hill Sandstone, with estimated net pay of 8.5 metres TVT.

Initial testing of the Sawpit Sandstone was undertaken to enable preliminary assessment of well deliverability and gas composition. A cased hole test was undertaken over the 4,023-4,185 metre interval and flowed gas at a rate of 25 MMscfd sustained over a 100 minute period through a 36/64" choke and at 2,700 psig well head pressure. Flow rates were constrained to 25 MMscfd due to the size of completion tubing (2 7/8"). Early indications suggest the Sawpit Sandstone could flow at rates greater than 25 MMscfd. Preliminary gas sample analysis indicates low inert content, which should minimise gas processing requirements.

The well is currently shut-in with preparations underway for commencement of an IPT in late January 2018. The IPT will confirm well deliverability and gas composition, and will assist field development planning. Results will be integrated with other subsurface data to enable estimation of the size of the gas resource.

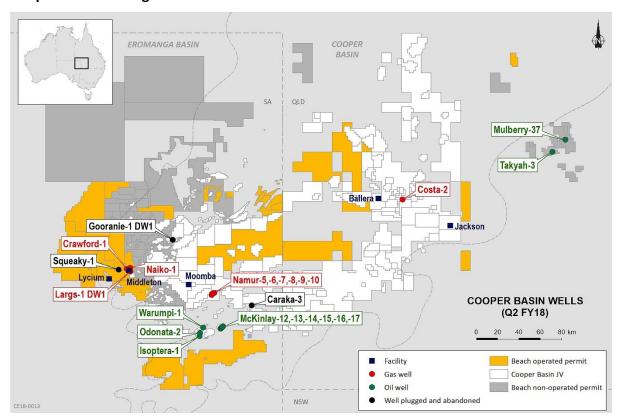






Drilling Haselgrove-3 in the Otway Basin

### **Cooper and Eromanga Basins**



#### **Well results**

Well Results						
Basin	Category	Wells Spudded	Rig Released	Successful Wells	Success Rate	Successful Wells
	Oil – Exploration	2	2	2	100%	Isoptera-1; Warumpi-1
	Oil – Appraisal	2	2	2	100%	Mulberry-37, Takyah-3
Cooper	Oil – Development	7	7	7	100%	McKinlay-12, -13, -14, -15, - 16, -17; Odonata-2
Cooper	Gas – Exploration	4	4	3	75%	Crawford-1; Largs 1 DW1; Naiko-1
	Gas – Appraisal	5	5	3	60%	Namur-5, -6, -7
	Gas – Development	4	4	4	100%	Costa-2; Namur-8, -9, -10
Otway	Gas – Exploration	-	1	1	100%	Haselgrove-3 ST1
Total W	ells	24	25	22	88%	
All Explo	ration Wells	6	7	6	86%	
All Appra	aisal Wells	7	7	5	71%	
All Deve	lopment Wells	11	11	11	100%	

### **Corporate and Commercial**

#### Execution of North West Shelf farm-in and call option agreements with Cue Energy

Beach entered into binding agreements with Cue Exploration Pty Ltd, a 100% owned subsidiary of Cue Energy (ASX:CUE) to acquire, subject to terms and conditions, equity in North West Shelf exploration permits WA-359-P and WA-409-P in the Carnarvon Basin, offshore Western Australia.

WA-359-P and WA-409-P are adjoining exploration permits which contain the giant Ironbark gascondensate prospect. Ironbark is a Mungaroo Formation structural closure that covers an area of approximately 400 square kilometres, and is defined by high-quality 3D seismic data. The Ironbark prospect is interpreted to have reservoirs of similar age to nearby giant fields such as Gorgon and Goodwyn. A discovery at Ironbark could result in a multi-Tcf gas field.

Beach will acquire a 21% equity interest in WA-359-P in exchange for a one-off payment to Cue Energy of \$900,000 for past costs, and future payments equating to 4% of Cue Energy's cost of drilling the Ironbark-1 exploration well within the permit. The agreement is subject to the following conditions precedent:

- BP exercising its option to acquire a 42.5% equity interest in WA-359-P. BP has until
  25 April 2018 to exercise its option, unless extended. Refer to announcements by Cue on
  13 December 2017 for further information.
- Formation of a Joint Venture and associated Joint Operating Agreement with full funding for the Ironbark-1 exploration well.
- Permit holders obtaining an extension to the current permit expiry date of 25 April 2018, to allow satisfactory timing for planning and drilling of the Ironbark-1 exploration well.
- Other terms, conditions and approvals customary for transactions of this nature.

In relation to WA-409-P, Beach has acquired for nominal consideration a call option over a 7.5% equity interest in the permit. If exercised, Beach will make future payments equating to 7.5% of Cue Energy's cost of drilling an exploration well within the permit (timing to be confirmed), and pay Cue Energy a 10% royalty on all future revenue earned by Beach from the permit. The option may be exercised until 31 July 2019.

Further details are contained in the announcement of 29 November 2017.

#### New gas sales agreements with Adelaide Brighton and Alinta Energy

Beach executed new GSAs with Adelaide Brighton Cement Ltd, a wholly owned subsidiary of Adelaide Brighton Ltd (ASX: ABC), and Alinta Energy for the supply ex-Moomba of processed sales gas from Beach's 100% owned Western Flank acreage.

Under the terms of the GSAs, Beach will supply these customers up to a total of 4 PJ of sales gas at pricing reflective of current market conditions over an initial 12 month period commencing 1 January 2018. Gas sales pricing is attractive relative to Beach's current weighted average realised gas price. Associated LPG and condensate production from Beach's Western Flank acreage will continue to be sold to the Cooper Basin JV.

Further details are contained in the announcement of 5 December 2017.

#### PACE gas grant awarded to drill a conventional exploration well in the Otway Basin

Beach commenced preparations for drilling a conventional onshore gas exploration well in the Penola Trough, Otway Basin in South Australia. Beach will be supported by the South Australian Government through the PACE gas grant scheme, which aims to bring new gas to market within three years.

Dombey-1 will be drilled in PEL 494 (Beach 70% and operator, Cooper Energy 30%). The well is expected to be drilled approximately 20 kilometres west of Penola and proximate to Beach's Katnook facility and pipeline network, and the SEA Gas transmission system. The well will target conventional gas and gas liquids in the Pretty Hill Formation, a proven gas producing formation. It will also target the Sawpit Sandstone which recently flowed gas on test at Haselgrove-3 ST1. Dombey-1 is expected to be drilled in FY19 and will not be fracture stimulated.

Depending on the scope of well design and evaluation program, the \$6.89 million PACE grant is expected to cover 50% of the estimated drilling and testing costs. Under the terms of the PACE grant, if a discovery is deemed to be commercial, Beach will enter bilateral negotiations with prospective South Australian customers for supply of gas from Dombey-1 at prevailing market terms.

Further details are contained in the announcement of 19 December 2017.

#### Further Otway and Bass basin interests to be acquired

Beach entered into binding agreements with Toyota Tsusho to acquire its interests in the Otway Gas Project and BassGas Project (collectively the "Transaction"). The Otway Gas Project includes production from the Thylacine and Geographe offshore gas fields, the Thylacine well head platform and the onshore Otway gas plant. The BassGas Project includes the Yolla offshore gas field, the BassGas pipeline and onshore Lang Lang gas plant, and various exploration permits and retention licenses.

Beach will acquire Toyota Tsusho's 5% stake in the Otway Gas Project and 11.25% stake in the BassGas Project for cash consideration, to be funded from Beach's existing cash reserves. The purchase price remains confidential, however is consistent with pricing parameters of recent comparable transactions within the sector. The Transaction is subject to standard conditions precedent including relevant third party consents. Completion is expected in early 2018 with an effective date of 1 January 2017 for the Otway Gas Project interest and 1 July 2017 for the BassGas interests.

Assuming successful completion of the acquisition of Lattice (refer Beach announcements of 28 September 2017 and 19 December 2017), Beach will hold a 100% interest in the Otway Gas Project, a 53.75% interest in BassGas producing assets, and a 50.25% in BassGas exploration permits. Full control of the Otway Gas Project will allow Beach to optimise future work programs efficiently as it progresses with the next phase of activities in the region.

Further details are contained in the announcement of 21 December 2017.

### **Subsequent Events**

#### Change of external auditor

On 22 January 2018, Beach announced the appointment of Ernst & Young as auditor to Beach. The appointment follows the outcome of a tender process and resignation of KPMG.

#### New executive appointments and leadership structure

On 31 January 2018, Beach announced new executive appointments and functional leadership structure, which follow an extensive recruitment process undertaken as part of preparations for the acquisition of Lattice. The new appointments bring to Beach significant upstream oil and gas experience gained with leading global energy companies, and extensive offshore operations experience. Beach's executive structure is summarised below and further details are contained in the announcement of today, 31 January 2018.

Matt Kay
Dawn Summers <sup>1</sup>
Jeffrey Schrull
Geoff Barker <sup>2</sup>
Brett Doherty <sup>2</sup>
Morné Engelbrecht
Cathy Oster
Lee Marshall <sup>3</sup>

- 1. Commencing 1 February 2018
- 2. Commencing 19 February 2018
- 3. Commenced 15 January 2018

#### For further information contact the following on +61 8 8338 2833:

Investor Relations Derek Piper, Investor Relations Manager

Mark Hollis, Investor Relations Advisor

Media Rob Malinauskas, Group Manager - Corporate Affairs

## **Glossary**

\$	Australian dollars
Alinta Energy	Alinta Energy Retail Sales Pty Ltd
ATP	Authority to Prospect
bbl	Barrels
Beach	Beach Energy Ltd
Bcf	Billion cubic feet
boe	Barrels of oil equivalent – the volume of hydrocarbons expressed in terms of the volume of oil which would contain an equivalent volume of energy
bopd	Barrels of oil per day
CBOS JV	Cooper Basin Origin Senex Joint Venture
Cooper Energy	Cooper Energy Ltd
Cooper Basin	Includes both Cooper and Eromanga basins
Cooper Basin JV	The Delhi operations, which incorporate the SACB JVs and SWQ JVs
Cue Energy	Cue Energy Resources Ltd
Delhi	Delhi Petroleum Pty Ltd
Ex PEL 91	PRLs 151 to 172 and various production licences
Ex PEL 92	PRLs 85 to 104 and various production licences
Ex PEL 101	PRLs 173 and 174 and various production licences
Ex PEL 104 / 111	PRLs 136 to 150 and various production licences
Ex PEL 106	PRLs 129 and 130 and various production licences
Ex PEL 107	PRLs 175 to 179
Ex PEL 513 / 632	PRLs 191 to 206 and various production licences
FY(18)	Financial year (2018)
GSA	Gas sales agreement
GJ	Gigajoule
H(2) (FY18)	(Second) half year period (of FY18)
IPT	Initial production test
kbbl	Thousand barrels of oil
kboe	Thousand barrels of oil equivalent
kt	Thousand tonnes
Lattice	Lattice Energy Ltd
LPG	Liquefied petroleum gas
MMbbl	Million barrels of oil
MMboe	Million barrels of oil equivalent
MMscfd	Million standard cubic feet of gas per day
Net gearing	Net debt / (net debt + book equity)
Origin	Origin Energy Ltd
PACE	Plan for Accelerating Exploration

PEL	Petroleum Exploration Licence
PEP	Petroleum Exploration Permit
PPL	Petroleum Production Licence
PRL	Petroleum Retention Licence
PJ	Petajoule
Q(2) (FY18)	(Second) quarter of (FY18)
Qtr	Quarter
SACB JV	South Australian Cooper Basin Joint Ventures, which include the Fixed Factor Area (Beach 20.21%, Santos 66.6%, Origin 13.19%) and the Patchawarra East Block (Beach 17.14%, Santos 72.32% and Origin 10.54%)
Santos	Santos Ltd
Senex	Senex Energy Ltd
SWQ JV	South West Queensland Joint Ventures, incorporating various equity interests (Beach 20-40%)
Toyota Tsusho	Toyota Tsusho Corporation and related parties
TVT	Total vertical thickness