Western Flank Update
Disclaimer

This presentation contains forward looking statements that are subject to risk factors associated with oil, gas and related businesses. It is believed that the expectations reflected in these statements are reasonable but they may be affected by a variety of variables and changes in underlying assumptions which could cause actual results or trends to differ materially, including, but not limited to: price fluctuations, actual demand, currency fluctuations, drilling and production results, reserve estimates, loss of market, industry competition, environmental risks, physical risks, legislative, fiscal and regulatory developments, economic and financial market conditions in various countries and regions, political risks, project delays or advancements, approvals and cost estimates.

Underlying EBITDAX (earnings before interest, tax, depreciation, amortisation, evaluation, exploration expenses and impairment adjustments), underlying EBITDA (earnings before interest, tax, depreciation, amortisation, evaluation and impairment adjustments), underlying EBIT (earnings before interest, tax, and impairment adjustments) and underlying profit are non-IFRS measures that are presented to provide an understanding of the performance of Beach’s operations. They have not been subject to audit by Beach’s external auditors but have been extracted from audited financial statements. Underlying profit excludes the impacts of asset disposals and impairments, as well as items that are subject to significant variability from one period to the next. The non-IFRS financial information is unaudited however the numbers have been extracted from the audited financial statements.

All references to dollars, cents or $ in this presentation are to Australian currency, unless otherwise stated. References to “Beach” may be references to Beach Energy Limited or its applicable subsidiaries. Unless otherwise noted, all references to reserves and resources figures are as at 30 June 2018 and represent Beach’s share. Certain FY19 planned activities are subject to joint venture approvals. References to planned activities beyond FY19 are subject to finalisation of work programs, joint venture approvals and Board approvals.

Reserves disclosure

Petroleum Resources Management System (PRMS) published by the Society of Petroleum Engineers. The reserves and contingent resources presented in this report were originally disclosed to the market in ASX release #034/18 from 2 July 2018. Beach confirms that it is not aware of any new information or data that materially affects the information included in the aforesaid market announcement and that all the material assumptions and technical parameters underpinning the estimates in the aforesaid market announcement continue to apply and have not materially changed.

Conversion factors used to evaluate oil equivalent quantities are sales gas and ethane: 5.816 TJ per kboe, LPG: 1.389 bbl per boe, condensate: 1.069 bbl per boe and oil: 1 bbl per boe. The reference point for reserves determination is the custody transfer point for the products. Reserves are stated net of fuel and third party royalties.
Beach Energy portfolio

FY19 production

- Western Flank
- Cooper Basin
- Otway Basin
- Perth Basin
- Bass Basin
- Taranaki Basin

29.4 MMboe

FY19 2P reserves

- Western Flank
- Cooper Basin
- Otway Basin
- Perth Basin
- Bass Basin
- Taranaki Basin

326 MMboe
## Asset summary

<table>
<thead>
<tr>
<th>Asset</th>
<th>Beach Interest</th>
<th>Operator?</th>
<th>FY19 production(^1) (MMboe)</th>
<th>FY19 2P reserves(^2) (MMboe)</th>
<th>FY20 capex(^3) range ($million)</th>
<th>Key FY20 proposed activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Western Flank Oil</td>
<td>40 – 100%</td>
<td>Op/Non-op</td>
<td>5.2</td>
<td>42</td>
<td>200 – 225</td>
<td>Drill up to 77 wells</td>
</tr>
<tr>
<td>Western Flank Gas</td>
<td>100%</td>
<td>Op</td>
<td>1.9</td>
<td>16</td>
<td>40 – 60</td>
<td>Drill up to 7 wells</td>
</tr>
<tr>
<td>Cooper Basin JV</td>
<td>Various</td>
<td>Non-op</td>
<td>8.3</td>
<td>84</td>
<td>200 – 220</td>
<td>Drill ~100 wells</td>
</tr>
<tr>
<td>SA Otway</td>
<td>70 - 100%</td>
<td>Op</td>
<td>-</td>
<td>1</td>
<td>30 – 35</td>
<td>Drill 2 wells. Gas facility construction</td>
</tr>
<tr>
<td>Vic Otway</td>
<td>60%</td>
<td>Op</td>
<td>8.4</td>
<td>62</td>
<td>205 – 225</td>
<td>Commence 10 well drilling campaign</td>
</tr>
<tr>
<td>BassGas</td>
<td>53.75%(^4)</td>
<td>Op</td>
<td>1.7</td>
<td>20</td>
<td>10 – 25</td>
<td>Trefoil concept select</td>
</tr>
<tr>
<td>Kupe (New Zealand)</td>
<td>50%</td>
<td>Op</td>
<td>3.2</td>
<td>27</td>
<td>15 – 20</td>
<td>Compression project FID</td>
</tr>
<tr>
<td>Perth Basin</td>
<td>50%(^5)</td>
<td>Op/Non-op</td>
<td>0.7</td>
<td>73</td>
<td>30 – 35</td>
<td>Drill 1 well. Waitsia Stage 2 FID</td>
</tr>
<tr>
<td>Frontier Exploration</td>
<td>Various</td>
<td>Op/Non-op</td>
<td>-</td>
<td>-</td>
<td>15 – 15</td>
<td>Preparation for FY21 drilling</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td></td>
<td><strong>29.4</strong></td>
<td><strong>326</strong></td>
<td><strong>750 – 850</strong></td>
<td></td>
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</tbody>
</table>

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1. Refer to Q4 FY19 quarterly report ref: #020/19 dated 24th July 2019 for further details
2. Refer to FY19 annual report for further details
3. Based on data contained within slide 13
4. Beach interest in producing permits. 50.25% interest in retention licenses.
5. Note that Perth Basin, Beharra Springs interest of 50% is subject to completion of sale of 17% interest to Mitsui E&P Australia
Cooper Basin Overview

Key assets include Western Flank (operated and non-operated) and CBJV (non-operated)

- Cooper Basin has been explored over the past 60 years
- Few operators active in the Basin over this period
- Western Flank play was discovered following large acreage relinquishment in 1999. Its full potential has only been recently unlocked following a change in appraisal strategy
- Infrastructure ownership (Western Flank oil/gas and Moomba gas plant) provides secure access to markets
- Cooper Basin Joint Venture operator Santos is targeting a 10-23% increase in output from 2018 to 2025

Beach’s Cooper Basin interests span more than 8 million acres with surface infrastructure
Western Flank Oil
Successful year of appraisal and development

FY19 Highlights:
✓ 10% increase in production on FY18, 2P reserves now 42MMbbl, +7 MMbbl over FY18
✓ Increased drilling activities. 34 Western Flank oil wells drilled, +127% over FY18, at a higher success rate
✓ Included eight horizontal wells; six operated
✓ Successful oil appraisal programs in Bauer and Hanson fields, field limits increased vs prior 2P reserves mapping

FY19 production
- Western Flank Oil 5.2 MMboe
- Rest of Beach 29.4 MMboe

FY19 2P reserves
- Western Flank Oil 42 MMbbl,
- Rest of Beach 326 MMboe
Western Flank Oil
Record year of investment and drilling activity planned in FY20

FY20 proposed activities

• ~$200 million to be invested in Western Flank oil, a record for Beach

• Up to 77 oil wells to be drilled in FY20, including:
  • 36 exploration and appraisal wells
  • 41 development wells (including up to 17 horizontal wells)

• ~15% of FY20 growth investment for infrastructure expansion and debottlenecking to unlock Western Flank potential

• Continued roll out of the Bauer appraisal strategy across fields as well as follow-up appraisal drilling at Bauer, Hanson and Kalladeina-Congony complex
Western Flank Oil
Bauer (Beach 100% interest) – keeps on getting bigger

Success of the Bauer appraisal strategy

- Flat structural relief means seismic is of limited value in defining field extent
- In FY19 Beach appraised “through the drill bit”
- Four step-out appraisal wells in Bauer discovered an easterly extension to the field
- Further appraisal is required at Bauer to define the field structure, remaining oil potential and full field development
- In FY20 Beach plans on drilling 8 appraisal wells at Bauer and 15 development wells, including 7 horizontal wells
- Further recent appraisal success at Bauer North West-2 and Bauer North-2, coming in 6 metres and 8 metres high to prognosis respectively.
- Field remapping to follow completion of appraisal campaign and reserves updated at the end of FY20
Western Flank Oil
Bauer Field development

Horizontal vs vertical wells

- Beach has increased the application of horizontal well technology, targeting the lower permeability McKinlay and Birkhead reservoirs
- Three horizontal wells drilled in all of FY18
- Five operated horizontal wells drilled in H1 FY19
- Horizontal wells drilled in H1 FY19 show an 8.2x average well productivity improvement over vertical wells for 1.5x the cost
- Forecast aggregate 30-day initial production rate of ~7,000 bopd on pump from horizontal wells Bauer-29,-30,-31,-32

<table>
<thead>
<tr>
<th></th>
<th>Vertical McKinlay Producers</th>
<th>Horizontal McKinlay producers</th>
<th>Horizontal vs vertical wells</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average well cost¹</td>
<td>$2.8 million</td>
<td>$4.3 million</td>
<td>1.5x</td>
</tr>
<tr>
<td>Well productivity index²</td>
<td>0.4</td>
<td>3.3</td>
<td>8.2x</td>
</tr>
</tbody>
</table>

Improvement in drilling/connection times

- In FY18 Beach’s first ever operated horizontal well, Bauer-26, achieved 12.7 days from spud-to-total depth (TD) and 31 days from spud to online
- In FY19, the first four operated horizontal wells averaged spud-to-TD of 8.5 days and spud to online time of 23.5 days
- Improved spud-to-TD times means cheaper wells and more wells drilled per year per rig
- The 24% improvement in spud-to-online time means oil production is accelerated

<table>
<thead>
<tr>
<th></th>
<th>Total measured depth</th>
<th>Spud-to-TD</th>
<th>Spud-to-online</th>
</tr>
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<tbody>
<tr>
<td>Bauer-26</td>
<td>2,260 metres</td>
<td>12.7 days</td>
<td>31 days</td>
</tr>
<tr>
<td>Bauer-29 -30 -31 and -32</td>
<td>2,660 metres</td>
<td>8.5 days</td>
<td>23.5 days</td>
</tr>
</tbody>
</table>

Seven additional horizontal development wells currently planned in Bauer Field for FY20

¹ Average well cost includes drill, complete, connect and artificial lift costs.
² Well productivity index (PI) calculated as bbl/day/psi.
Western Flank Oil
Bauer Field activity

Bauer Field with four active rigs (3 drilling, 1 workover)

September 2019
Western Flank Gas
ex PEL 106, ex PEL 107 and ex PEL 91, Beach 100% and operator

FY19 Highlights:
✓ 35% increase in production on FY18, 2P reserves now 16MMboe, +8 MMboe over FY18
✓ Successful gas exploration/appraisal programs in Lowry and Udacha South fields extended field limits vs prior 2P reserves mapping
✓ Lowry field is a high liquids content gas field (50 bbl/mmscf)

FY20 Focus:
• Potential further appraisal drilling at Lowry and Middleton
• Drill 3-5 prospects delineated by Spondylus 3D seismic survey to extend proven stratigraphic play and test new exploration plays
• Aim is to increase reserves to extend plateau at Middleton and/or expand capacity
## Western Flank Gas
Stratigraphic Overview- Key Patchawarra Intervals

<table>
<thead>
<tr>
<th>Age Ma</th>
<th>Palynology zone</th>
<th>Litho-stratigraphy</th>
<th>Seismic Package markers</th>
<th>Type Logs from Composite of Wells, Gas zones</th>
<th>Seismic Package name</th>
<th>Wells with Hydrocarbon Pools</th>
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<tbody>
<tr>
<td>290.1</td>
<td>Artinskian</td>
<td>Murturee</td>
<td>Vs18</td>
<td>Vs18</td>
<td></td>
<td></td>
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<tr>
<td>295.0</td>
<td>Sakmarian</td>
<td></td>
<td>Vs30</td>
<td>Vs30</td>
<td></td>
<td>Moonanga 1*, Jack Lake 1*, Raven 4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Vs45</td>
<td></td>
<td></td>
<td>Canunda Vs45</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Vs50A</td>
<td></td>
<td></td>
<td>Raven 4, Lowry 1, Smegsy 1, Nulla 1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Brownlow Vs50A</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Vs50</td>
<td></td>
<td></td>
<td>Lowry 1, 2, 3, 4, 5, Udarha South 1, 2, Mkami 1, Smegsy 1, Admella 1, Aratna 1, Carrickalinga 1, Southend 1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Vs80A</td>
<td></td>
<td></td>
<td>Coolawang Vs80B</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Vs80B</td>
<td></td>
<td></td>
<td>Coolawang 1, Canunda 2, Canunda 3, Maupertuis 1</td>
</tr>
</tbody>
</table>

*Moonanga & Jack Lake are stacked plays east of PEL106 – producing gas from all intervals – included here in upper section (Vs30) to indicate shallow reservoirs possible.
Western Flank Gas
Patchawarra stratigraphic play concept

Permil Edge Fairway

Southwest Patchawarra Fairway

Structural play along GMI Ridge

Upper Patchawarra to Toolachee Continuous - few stratigraphic traps

Mid & Lower Patchawarra: Discontinuous stratigraphic gas traps

Warburton: Cambrian-Ordovician carbonates/clastics

Cadna Owie

2000 m

2500 m

3000 m

Morgan

Lyckum

Mokami

Upper

Brownlow

Middleton East

Peven 1

Jurassic

Triassic
Western Flank Gas
Lowry Field activity

Lowry 1 Patchawarra DST

Lowry 2,3,4,5 Pad