

## US Lower 48

The US Lower 48 business comprises BP's onshore oil and gas operations in the 'Lower 48' states of the US. The business has significant activities producing natural gas, NGLs and condensate across seven states, including production from unconventional gas, coalbed methane (CBM) and shale gas assets.

	<b>Second quarter 2017</b>	<b>First quarter 2017</b>	<b>Second quarter 2016</b>	<b>First half 2017</b>	<b>First half 2016</b>
<b>Production (net of royalties)</b>					
Liquids <sup>(a)</sup> (mb/d)	<b>43</b>	43	50	<b>43</b>	50
Natural gas (mmcf/d)	<b>1,389</b>	1,392	1,481	<b>1,390</b>	1,446
Total hydrocarbons <sup>(b)</sup> (mboe/d)	<b>282</b>	283	305	<b>282</b>	299
<b>Average realizations</b>					
Total liquids (\$/bbl)	<b>26.94</b>	28.12	19.47	<b>27.53</b>	18.06
Natural gas (\$/mcf)	<b>2.37</b>	2.52	1.55	<b>2.44</b>	1.56
Total hydrocarbons (\$/boe)	<b>15.73</b>	16.66	10.68	<b>16.19</b>	10.56
<b>Production costs<sup>(c)</sup> per boe (excluding rationalization costs) (\$/boe)</b>					
	<b>7.52</b>	7.30	7.34	<b>7.27</b>	7.58
<b>Capital expenditure (\$ million)</b>					
	<b>217</b>	167	221	<b>384</b>	463
<b>Estimated net proved reserves at 31 December 2016</b>					
	<b>Developed</b>	<b>Undeveloped</b>	<b>Total</b>		
Crude oil <sup>(d)</sup> (million barrels)	30	13	<b>43</b>		
Natural gas liquids (million barrels)	153	51	<b>204</b>		
Natural gas (billion cubic feet)	4,416	2,348	<b>6,764</b>		
Total net proved reserves on an oil equivalent basis (million barrels oil equivalent)	945	469	<b>1,414</b>		

(a) Liquids comprise crude oil, condensate and natural gas liquids.

(b) Hydrocarbons comprise liquids and natural gas. Natural gas is converted to oil equivalent at 5.8 billion cubic feet = 1 million barrels.

(c) Production costs do not include depreciation, depletion and amortisation, ad valorem and severance taxes and certain other costs.

(d) Crude oil includes condensate.