

## 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.

Fourth quarter 2015	Third quarter 2016	Fourth quarter 2016		Full year 2016	Full year 2015
			<b>Production (net of royalties)</b>		
52	47	45	Liquids <sup>(a)</sup> (mb/d)	48	51
1,356	1,523	1,489	Natural gas (mmcf/d)	1,476	1,353
286	310	302	Total hydrocarbons <sup>(b)</sup> (mboe/d)	302	284
			<b>Average realizations</b>		
19.39	20.51	24.92	Total liquids (\$/bbl)	20.30	22.74
1.73	2.21	2.30	Natural gas (\$/mcf)	1.92	2.10
11.73	13.98	15.07	Total hydrocarbons (\$/boe)	12.57	14.08
			<b>Production Costs<sup>(c)</sup> per boe (excluding rationalization costs) (\$/boe)</b>	<b>7.44</b>	<b>8.73</b>
8.62	7.45	7.16			
398	79	270	<b>Capital expenditure (\$ million)</b>	<b>812</b>	<b>1,044</b>

### Estimated net proved reserves at 31 December 2015

	Developed	Undeveloped	Total
Crude oil (million barrels)	44	11	55
Natural gas liquids (million barrels)	182	39	221
Natural gas (billion cubic feet)	4,818	1,810	6,628
Total net proved reserves on an oil equivalent basis (million barrels oil equivalent)	1,057	363	1,419

(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.