

Oil & natural gas extraction data

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 Climate Mitigation Services
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Woodside Petroleum Ltd.

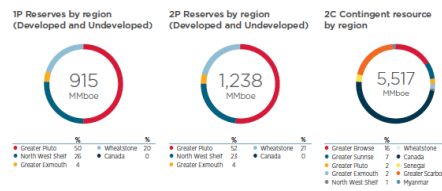
Perth www.woodside.com.au

yellow column indicates original reported units
 Investor-owned

Production / Extraction data

Year	Crude Oil & NGL			Natural Gas		
	Net production	Net production	Net production	Net production	Net production	Net production
	Thousand bbl / d	Million bbl /yr	Million bbl /yr	Mboe	Mboe	Billion cf/yr

- 1950
- 1951
- 1952
- 1953
- 1954
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- 2014
- 2015
- 2016
- 2017
- 2018



Woodside Energy (2019) Annual Report 2018, February, p. 66.

	Gas	LNG
	Mboe	Mboe
	1998-2018	1998-2018
TJ	1971-1997	
TJ	3,600	
TJ	4,100	
TJ	4,600	
TJ	5,200	
TJ	4,900	
TJ	7,600	
TJ	8,400	
TJ	9,800	
TJ	11,300	
TJ	13,200	
TJ	14,800	
TJ	15,900	
TJ	12,486	interpolated
TJ	9,072	
TJ	32,154	
TJ	49,314	
TJ	61,494	-
TJ	69,220	-
TJ	71,507	0.11
TJ	68,331	0.49
TJ	69,535	0.65
TJ	63,866	0.77
TJ	69,616	0.88
TJ	78,089	1.12
TJ	70,965	1.24
TJ	74,192	1.25
TJ	78,181	1.26
Mbd	26.3	
Mbd	26.7	
Mbd	25.2	
Mbd	28.5	
Mbd	28.3	
Mbd	31.1	
Mbd	31.5	
Mbd	35.0	
Mbd	15.6	18.6
Mbd	16.4	18.6
Mbd	18.9	18.6
Mbd	18.4	21.3
Mbd	14.8	22.7
Mbd	14.0	22.4
Mbd	13.9	42.6
Mbd	14.0	52.4
Mbd	13.3	58.3
Mbd	13.2	57.6
Mbd	12.9	63.6
Mbd	6.3	61.2
Mbd	4.6	69.6

condensate	oil, condensate, LPG
Mb	Mb
0.16	0
0.62	1
1.39	1
2.18	2
2.86	3
3.06	3
3.28	3
3.47	3
3.19	3
3.39	3
3.80	4
5.81	7
7.26	12
9.27	13
	13
	13
	40
	38
	36
	30
	26
	25
	36
	44
	40
	41
	35
	28
	27
	20
	22
	22
	18
	17
	15

1 million tonnes LNG	47.778 Bcf
1 TJ domestic gas	0.00092 Bcf
1 Mb	5.70 Bcf
OGJ100 Oil Mb	OGJ100 Gas Bcf
39.5	69.6
37.1	68.7
15.0	180.0
13.5	205.0
30.5	212.0
22.8	204.0
25.8	245.0
20.8	231.0
15.5	471.1
14.4	422.2

Total	592	641	7.77	6,611
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Ten-year comparative data summary

	2018	2017*	2016	2015	2014	2013	2012	2011	2010	2009
Volumes⁴										
Sales (million boe)										
Australia Pipeline Gas	4.6	6.3	12.9	13.2	13.3	14.0	13.9	14.0	14.8	18.4
Australia LNG	69.6	61.2	63.6	57.6	58.3	52.4	42.6	22.4	22.7	21.3
Australia LPG	0.4	0.7	0.7	0.7	0.8	0.9	1.1	1.1	1.3	1.5
Australia Condensate	9.2	7.7	9.3	8.5	9.4	9.5	8.6	7.8	9.1	9.7
Australia Oil	4.2	6.9	6.9	12.5	11.2	8.0	16.8	15.7	19.8	24.3
Other International	1.2	1.3	1.6	0.2	0.2	0.9	0.8	2.9	4.5	5.5
Total (million boe)	89.2	84.1	95.0	92.7	93.2	85.7	83.8	63.9	72.2	80.7
Production (million boe)										
Australia Pipeline Gas	4.6	6.0	12.9	13.1	13.3	13.9	13.8	14.0	14.8	18.4
Australia LNG	71.9	61.7	63.7	57.5	60.3	53.6	43.9	22.6	23.2	21.5
Australia LPG	0.6	0.6	0.7	0.7	0.8	0.9	1.1	1.2	1.4	1.5
Australia Condensate	9.3	8.0	9.3	8.4	9.1	9.3	7.9	9.1	9.5	9.5
Australia Oil	3.8	6.8	6.7	12.3	11.4	8.2	16.0	16.0	19.7	24.5
Other International	1.2	1.3	1.6	0.2	0.2	0.9	0.8	2.9	4.5	5.5
Total (million boe)	91.4	84.4	94.9	92.2	95.1	87.0	84.9	64.6	72.7	80.9
Other ASX Data										
Reserves (Proved plus Probable) Gas (Tcf)	6.05	6.54	7.09	7.59	6.65	7.09	7.51	7.80	8.02	7.79
Reserves (Proved plus Probable) Condensate (MMbbl)	108.2	117.0	124.2	133.5	117.1	125.2	130.9	138.7	154.7	147.8
Reserves (Proved plus Probable) Oil (MMbbl)	67.7	69.9	74.4	42.6	54.1	67.0	95.9	108.5	117.5	136.1

Woodside Energy Ltd. (2019) Annual Report 2018, page 152, 14 February.



Year Ended 31 December	2011	2010	2009	2008	2007	2006	2005 ¹⁰ (Reclassified)	2003	2002
Production (million boe)									
Australia									
Pipeline	14.0	14.8	18.4	18.9	16.4	15.6	-	-	-
LNG & LPG	23.8	24.6	23.0	18.6	18.6	18.6	-	-	-
NWS Gas	-	-	-	-	-	-	35.0	31.5	28.3
NWS Oil / Condensate	8.9	13.3	14.0	13.5	12.7	12.8	13.8	14.3	16.4
Australia Other	15.0	15.5	20.0	24.9	15.8	11.6	8.2	9.3	13.1
Gulf of Mexico	1.1	2.2	3.2	3.1	2.6	2.6	0.4	-	-
Mauritania	-	-	-	-	2.2	4.4	-	-	-
Algeria	1.8	2.3	2.3	2.3	2.3	2.3	2.3	2.3	0.1
Total (million boe)¹⁰	64.6	72.7	80.9	81.3	70.6	67.9	59.7	57.4	60.7
Reserves (Proved plus Probable)									
Gas (Tcf)	7.80	8.02	7.79	7.90	7.80	6.90	4.67	5.11	4.65
Condensate (MMbbl)	138.70	154.74	147.80	151.40	152.10	144.60	129.70	138.00	145.70
Oil (MMbbl)	108.50	117.50	136.10	168.80	170.20	221.10	294.50	258.80	341.50

Woodside Petroleum Ltd WPL Annual report 2011, page 147

Production (million boe)										
Australia										
Pipeline Gas		16.4	15.6							
LNG & LPG		18.6	18.6							
NWS Gas (Pipeline, LNG & LPG)		-	-	35.0	31.5	31.1	28.3	28.5	25.2	26.7
NWS Oil/Condensate		12.7	12.8	13.8	14.3	16.4	16.0	14.8	14.9	10.4
Australia - other		15.8	11.6	8.2	9.3	13.1	19.9	23.0	24.9	2.6
Gulf of Mexico		2.6	2.6	0.4	-	-	-	-	-	-
Mauritania		2.2	4.4	-	-	-	-	-	-	-
Algeria		2.3	2.3	2.3	2.3	0.1	-	-	-	-
Total (million boe)¹⁰		70.6	67.9	59.7	57.4	60.7	64.2	66.3	65.0	39.7
Reserves (Proved plus probable)										
Gas (Tcf)		7.8	8.9	4.7	5.1	4.7	4.8	4.5	4.6	4.7
Condensate (MMbbl)		152.1	144.6	129.7	138.0	145.7	154.9	154.6	149.4	159.2
Oil (MMbbl)		170.2	221.1	294.5	258.8	341.5	300.1	263.3	236.4	146.1

Woodside Petroleum Ltd WPL Annual report 2007, page 133.

10-YEAR COMPARATIVE DATA SUMMARY

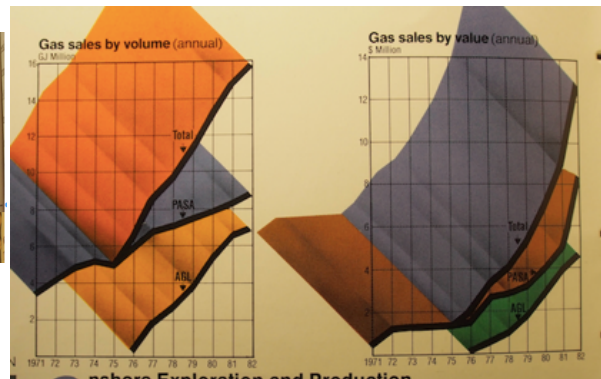
(Woodside's Share)

Year Ended 31 December	2002	2001	2000	1999	1998	1997	1996	1995	1994	1993
Production										
LNG (Tonnes)	1,272,685	1,291,703	1,279,944	1,291,740	1,285,232	1,255,290	1,252,949	1,242,959	1,115,141	877,031
Domgas (Tj)	97,455	97,820	88,572	90,155	86,576	78,181	74,192	70,873	78,013	69,615
Condensate (bbl)	9,859,899	8,741,254	8,935,707	9,130,320	10,159,334	9,182,002	7,199,067	5,801,076	3,803,822	3,391,836
NWS Oil (bbl)	7,291,695	7,147,796	7,068,042	2,281,375	3,955,874	3,648,807	4,316,060	1,560,902	-	-
Laminaria (bbl)	15,164,362	20,613,879	25,591,993	2,657,409	-	-	-	-	-	-
Legendre (bbl)	5,209,508	2,975,846	-	-	-	-	-	-	-	-
LPG (Tonnes)	135,188	133,937	133,655	107,978	111,952	92,100	56,199	6,660	-	-
Total boe 000's	64,210	66,322	64,988	39,735	39,270	36,312	34,232	28,088	26,030	22,192
Reserves (Probable)										
Gas (Tcf)	4.84	4.54	4.60	4.72	4.43	4.68	4.46	3.12	3.45	3.57
Condensate (MMbbl)	154.9	154.6	149.4	159.2	158.9	141.2	144.1	142.0	157.3	140.9
NWS Oil (MMbbl)	29.7	24.8	31.4	36.8	34.7	36.8	40.5	45.9	46.6	41.7
Laminaria (MMbbl)	34.0	59.0	62.2	89.0	102.6	77.1	83.0	-	-	-
Legendre (MMbbl)	18.2	15.5	20.3	20.3	-	-	-	-	-	-
Vincent & Enfield (MMbbl)	216.4	164.0	122.5	-	-	-	-	-	-	-

Woodside Petroleum Ltd WPL Annual Report 2002, page 82.

SALES VOLUMES					
Natural Gas Sales					
- terajoules	69,535	68,331	71,507	69,220	61,494
- million cubic metres	1,755	1,722	1,798	1,746	1,558
Condensate Sales					
- million litres	552.2	521.0	486.8	454.1	345.7
- barrels (000's)	3,473	3,282	3,064	2,858	2,175
Liquefied Natural Gas					
- tonnes	652,712	493,734	111,726		

Woodside Petroleum Ltd WPL Annual report 1991, page 46.



Woodside Petroleum Ltd WPL Annual report 1982

Cell: I9**Comment:** Rick Heede:

Woodside was incorporated on 26 July 1954. It was originally named Woodside (Lakes Entrance) Oil Co NL and it was named after the small town of Woodside, Victoria.[3] Woodside's early years were focussed on Victoria's Gippsland Basin. Switching to northern Western Australia in the early 1960s, Woodside joined up with Shell and Burmah Oil to form the original North West Shelf consortium. BHP later replaced Burmah, and with Shell, each became a 40% shareholder in Woodside. In the early 1990s both BHP and Shell agreed to sell down to 34% stakes each, before BHP sold out completely.
https://en.wikipedia.org/wiki/Woodside_Petroleum

Cell: M11**Comment:** Rick Heede:

On this worksheet we report extractive data for each company or state-owned enterprise. Three columns under crude oil and natural gas allow for data reported in one of three formats (e.g., thousand barrels per day, or million barrels per year, or million tonnes per year). Coal is normally reported in short tons or metric tonnes per year. The subtraction of the fraction typically sequestered in petrochemicals and other non-combusted uses such as road oils, waxes, lubricants, greases, etc. Non-fuel uses are accounted for in the emission factors and applied to each entity in the oil, gas, and coal summary worksheets.

Cell: F12**Comment:** Rick Heede:

Total net worldwide crude oil plus natural gas liquids produced by each company or state-owned enterprise. Where data is available, we list net production (after royalty production is deducted). We rely on company annual reports, Form 10-k, or other company data where available. In some cases -- particularly for state-owned oil and gas companies -- we use production data from the Oil & Gas Journal in its OJ150 and OJ100. Crude production includes natural gas liquids (NGL) unless noted.

Cell: J12**Comment:** Rick Heede:

Natural gas is typically reported as dry gas; natural gas liquids are reported under crude oil. Carbon dioxide is normally removed from the gas flow at the production site (see "Vented Carbon Dioxide"). "SCM/d" = standard cubic meters per day. "cf/d" = cubic feet per day. Net production typically excludes a number of diverted gas streams. Quantities and fractions vary; ExxonMobil's exclusions are typical of the industry: "Net production available for sale quantities are the volumes withdrawn from ... natural gas reserves, excluding royalties and volumes due to others when produced, and excluding gas purchased from others, gas consumed in producing operations, field processing plant losses, volumes used for gas lift, gas injections and cycling operations, quantities flared, and volume shrinkage due to the removal of condensate or natural gas liquids production." ExxonMobil Corporation (2004) 2003 Financial and Operating Review, www.exxonmobil.com, p. 55.

Cell: H38**Comment:** Rick Heede:

Woodside Petroleum Ltd Annual report 1982. Shows "Gas sales by volume (see chart below), from which we estimate annual sales 1971 to 1982.

Cell: D51**Comment:** Rick Heede:

Woodside Petroleum Ltd Annual report 1988. Condensate sales: 157,000 bbl.

Cell: H51**Comment:** Rick Heede:

Woodside Petroleum Ltd Annual report 1988. Natural gas sales, TJ. No data for 1983, and we interpolate.

Cell: D52**Comment:** Rick Heede:

Woodside Petroleum Ltd Annual report 1989, page 41. Condensate sales in Mb.

Cell: H52**Comment:** Rick Heede:

Woodside Petroleum Ltd Annual report 1989, page 41. Gas sales in TJ.

Cell: D54**Comment:** Rick Heede:

Woodside Petroleum Ltd WPL Annual report 1991, page 46. Condensate sales, 1987-1991, in Mb.

Cell: H54**Comment:** Rick Heede:

Woodside Petroleum Ltd Annual report 1991, page 46. Production not reported. We use sales data, in natural gas sales (TJ), plus LNG (tonnes; from 1989 fwd only).

Cell: D59**Comment:** Rick Heede:

Woodside Petroleum Ltd Annual report 1994, page 46. Condensate sales in Mb.

Cell: H59**Comment:** Rick Heede:

Woodside Petroleum Ltd Annual report 1994, page 46. Natural gas sales in TJ, and LNG in Mt.

Cell: L59**Comment:** Rick Heede:

<https://www.unitjuggler.com/convert-energy-from-MtLNG-to-GcftNG.html>

Cell: D60**Comment:** Rick Heede:

Woodside Petroleum Ltd WPL Annual Report 2002, page 82.

Cell: H60**Comment:** Rick Heede:

Woodside Petroleum Ltd Annual Report 2002, page 82. Gas production reported as "Domestic Gas" in TJ.

Cell: I60**Comment:** Rick Heede:

Woodside Petroleum Ltd Annual Report 2002, page 82. LNG production reported in tonnes, shown here as Mt. Conversion at right.

Cell: E65**Comment:** Rick Heede:

Woodside Petroleum Ltd WPL Annual report 2007, page 133.

Cell: H65**Comment:** Rick Heede:

Woodside Petroleum Ltd Annual report 2007, page 133. Gas production reported in Mboe.

Cell: E69**Comment:** Rick Heede:

Woodside Petroleum Ltd WPL Annual report 2011, page 147.

Cell: H69**Comment:** Rick Heede:

Woodside Petroleum Ltd WPL Annual report 2011, page 147.

Cell: E76

Comment: Rick Heede:

Woodside Energy Ltd. (2019) Annual Report 2018, 14 February, page 152.
Production (not sales) 2009-2018, in million bbl per year, and sums "oil, LPG, condensate, and other international."

Cell: H76

Comment: Rick Heede:

Woodside Energy Ltd. (2019) Annual Report 2018, 14 February, page 152.
Australia pipeline gas and Australia LNG, in million boe per year. Converted to Bcf with conversion factor of 1 Mb = 5.7 Bcf.