

Appendix B

Top 100 Oil and Gas Fields for 1999

Top 100 Oil and Gas Fields for 1999

This appendix presents estimates of the proved reserves and production of the top 100 oil and gas fields. The oil field production and reserve data include both crude oil and lease condensate. The gas field production and reserve data is total wet natural gas (associated-dissolved natural gas and nonassociated natural gas, wet after lease separation).

Table B1. Top 100 Oil Fields for 1999

The top 100 oil fields in the United States as of December 31, 1999, had 14,681 million barrels of proved reserves accounting for 63 percent of the total United States (Table 6 and Table 15). Although there is considerable grouping of field-level statistics within the tables, rough orders of magnitude can be estimated for the proved reserves and production of most fields. Many of the fields in the top 100 group are operated by only one or two operators, therefore, the totals for proved reserves are grouped as top 10, top 20, top 50, and top 100 to avoid revealing company proprietary data.

In the top 20 oil fields for 1999 there are two fields, Mississippi Canyon Block 807 (Mars) and Mississippi Canyon Block 810 (Ursa) which are in the deep water of the Gulf of Mexico Federal Offshore.

The top 100 oil fields in the United States as of December 31, 1999, had 1,120 million barrels of production, or 52 percent of the total (Table 6 and Table 15). Many of the oil fields in the top 100 are very old, 49 of the oil fields in Table B1 were discovered prior to 1950. The oldest, Coalinga in California, was discovered in 1887. The newest, Mississippi Canyon Block 127, in the Gulf of Mexico Federal Offshore was reported to EIA in 1999.

The oil fields with newer discovery dates are typically located in the Gulf of Mexico Offshore and Alaska. Of

the top 100 oil fields; 25 percent are in Texas, 24 percent are in the Gulf of Mexico Federal Offshore, 20 percent are in California, and 11 percent are in Alaska. There were 17 different fields in this year's tabulation than in last years.

Table B2. Top 100 Gas Fields for 1999

The top 100 gas fields in the United States as of December 31, 1999, had 82,759 billion cubic feet of wet natural gas proved reserves, or 47 percent of the total (Table 9).

The top 100 gas fields in the United States as of December 31, 1999, had 6,700 billion cubic feet of production, or 34 percent of the total (Table 9). Fewer of the gas fields in the top 100 are as old as the top 100 oil fields. There were 20 gas fields in Table B2 that were discovered prior to 1950. Gas fields in the top 100 are newer than the oil fields, 51 gas fields were discovered after 1967. The oldest, Big Sandy in Kentucky, was discovered in 1881. The newest, Mississippi Canyon Block 810, in the Gulf of Mexico Federal Offshore was only reported to EIA in 1996.

The gas fields with newer discovery dates are located in the Gulf of Mexico Offshore, south Texas and Virginia. Several of the same fields are in both tables. Of the top 100 gas fields 26 percent are in Texas, 14 percent in the Gulf of Mexico Offshore, an additional 24 percent are in Oklahoma and Wyoming. There were 11 different fields in this year's tabulation than in last year's table.

Table B3. Top U.S. Operators Ranked by Reported 1999 Operated Production Data

Table B3 lists the top U.S. operators ranked by reported 1999 operated production data. Pending mergers and acquisitions announced in 1999 between these top operators are indicated in the left margin with linked arrows.

Table B1. Top 100 U.S. Fields Ranked by Oil^a Proved Reserves, from Reported 1999 Field Level Data
(Million Barrels of 42 U.S. Gallons)

Field Name	Location	Discovery Year	Proved Reserves Rank Group	Reported Production Rank Group
Prudhoe Bay	AK	1967	1-10	193.2
Kuparuk River	AK	1969	1-10	81.9
Midway-Sunset	CA	1901	1-10	56.9
Belridge South	CA	1911	1-10	42.3
Wasson	TX	1937	1-10	24.9
Yates	TX	1926	1-10	14.3
Kern River	CA	1899	1-10	48.1
Elk Hills	CA	1920	1-10	23.6
Mississippi Canyon Blk 807	GF	1989	1-10	51.5
Slaughter	TX	1937	1-10	14.5
Top 10 Volume Subtotal			7,686.4	551.2
Top 10 Percentage of U.S. Total			33.2%	25.6%
Milne Point	AK	1982	11-20	19.6
Spraberry Trend Area	TX	1951	11-20	17.7
Hondo	CA	1969	11-20	12.1
Levelland	TX	1945	11-20	9.6
Alpine	AK	1994	11-20	0.0
Point McIntyre	AK	1988	11-20	33.7
Endicott	AK	1978	11-20	13.7
Cymric	CA	1916	11-20	17.8
Mississippi Canyon Blk 810	GF	1996	11-20	8.5
San Ardo	CA	1947	11-20	4.2
Top 20 Volume Subtotal			9,821.0	688.1
Top 20 Percentage of U.S. Total			42.4%	32.0%
Wilmington	CA	1932	21-50	16.3
Sho-Vel-Tum	OK	1905	21-50	8.7
Cowden North	TX	1930	21-50	8.2
Lost Hills	CA	1910	21-50	10.9
Ventura	CA	1916	21-50	4.8
Green Canyon Blk 244	GF	1994	21-50	35.0
Pescado	CA	1970	21-50	9.2
Vacuum	NM	1929	21-50	7.7
Alaminos Canyon Blk 25	GF	1997	21-50	0.0
Greater Aneth	UT	1956	21-50	6.1
Rangely	CO	1902	21-50	6.0
Fullerton	TX	1942	21-50	5.7
Hawkins	TX	1940	21-50	3.4
Mississippi Canyon Blk 127	GF	1999	21-50	0.0
Green Canyon Blk 205	GF	1988	21-50	10.8
Coalinga	CA	1887	21-50	8.1
Seminole	TX	1936	21-50	10.8
McElroy	TX	1926	21-50	6.3
Wattenberg	CO	1970	21-50	5.1
Goldsmith	TX	1935	21-50	4.2
Howard-Glasscock	TX	1925	21-50	3.1
Salt Creek	TX	1950	21-50	7.1
Monument Butte	UT	1964	21-50	1.6
Garden Banks Blk 426	GF	1992	21-50	21.4
Mississippi Canyon Blk 935	GF	1994	21-50	0.0
Robertson North	TX	1956	21-50	3.0
Jay	FL & AL	1970	21-50	4.2
Green Canyon Blk 158	GF	1992	21-50	0.0
Arroyo Grande	CA	1906	21-50	0.6
Wasson 72	TX	1940	21-50	2.2
Top 50 Volume Subtotal			12,531.7	898.8
Top 50 Percentage of U.S. Total			54.1%	41.8%

**Table B1. Top 100 U.S. Fields Ranked by Oil^a Proved Reserves, from Reported 1999 Field Level Data
(Continued)
(Million Barrels of 42 U.S. Gallons)**

Field Name	Location	Discovery Year	Proved Reserves Rank Group	Reported Production Rank Group
Hobbs	NM	1928	51-100	2.7
Monument	NM & UT	1935	51-100	2.8
Niakuk	AK	1984	51-100	16.0
Viosca Knoll Blk 990	GF	1981	51-100	15.1
West Delta Blk 30	GF	1949	51-100	7.7
Giddings	TX	1960	51-100	11.7
East Texas	TX	1930	51-100	12.9
Pennel	MT	1955	51-100	1.7
Tarn	AK	1991	51-100	9.5
Sacate	CA	1970	51-100	0.2
West Sak	AK	1969	51-100	1.2
Inglewood	CA	1924	51-100	2.5
Mississippi Canyon Blk 84	GF	1993	51-100	0.0
Garden Banks Blk 260	GF	1995	51-100	22.6
Jo-Mill	TX	1954	51-100	2.3
Ewing Bank Blk 873	GF	1991	51-100	18.0
Viosca Knoll Blk 956	GF	1985	51-100	16.9
Cedar Lake	TX	1939	51-100	2.5
Fiord	AK	1992	51-100	0.0
Fitts	OK	1934	51-100	1.3
Foster	TX	1932	51-100	2.7
Bay Marchand Blk 2	GF & LA	1949	51-100	5.4
Beverly Hills	CA	1900	51-100	1.5
Eugene Island SA Blk 330	GF	1971	51-100	8.5
Lisburne	AK	1967	51-100	2.0
Elk Basin	WY	1915	51-100	2.2
Eunice Monument	NM	1929	51-100	1.4
T X L	TX	1944	51-100	1.9
Dollarhide	TX & NM	1945	51-100	3.2
Lookout Butte East	MT	1986	51-100	1.3
Bluebell	UT	1949	51-100	2.0
Viosca Knoll Blk 915	GF	1993	51-100	0.0
Cogdell	TX	1949	51-100	0.7
Garden Banks Blk 171	GF	1988	51-100	0.9
Mississippi Canyon Blk 755	GF	1986	51-100	0.0
Dos Cuadras	CA	1968	51-100	2.3
Brea-Olinda	CA	1897	51-100	0.8
Means	TX	1934	51-100	3.9
Huntington Beach	CA	1920	51-100	3.6
Kern Front	CA	1925	51-100	1.5
Westbrook	TX	1920	51-100	0.9
Grayburg-Jackson	NM	1929	51-100	3.3
Viosca Knoll Blk 786	GF	1996	51-100	0.0
South Pass EA Blk 62	GF	1967	51-100	3.4
Main Pass SA Blk 299	GF	1967	51-100	4.6
Cedar Hills	ND	1995	51-100	3.8
Mississippi Canyon Blk 899	GF	1998	51-100	0.0
Hartzog Draw	WY	1976	51-100	2.3
Hamilton Dome	WY	1918	51-100	1.7
Pecan Lake	LA	1982	51-100	7.7
Top 100 Volume Subtotal			14,681.0	1,120.0
Top 100 Percentage of U.S. Total			63.4%	52.1%

^aIncludes lease condensate.

Notes: The U.S. total production estimate of 2,151 million barrels and the U.S. total reserves estimate of 23,168 million barrels, used to calculate the percentages in this table, are from the combined totals of Table 6 and Table 15 in this publication. Column totals may not add due to independent rounding.

Source: Energy Information Administration, Office of Oil and Gas.

Table B2. Top 100 U.S. Fields Ranked by Gas^a Proved Reserves, from Reported 1999 Field Level Data
(Billion Cubic Feet)

Field Name	Location	Discovery Year	Proved Reserves Rank Group	Reported Production Rank Group
Blanco / Ignacio-Blanco	NM & CO	1927	1-10	713.6
Basin	NM	1947	1-10	673.7
Prudhoe Bay	AK	1967	1-10	198.3
Hugoton Gas Area	KS & OK & TX	1922	1-10	442.5
Madden	WY	1968	1-10	71.3
Carthage	TX	1944	1-10	203.9
Mobile Bay	AL	1979	1-10	150.0
Wattenberg	CO	1970	1-10	125.9
Natural Buttes	UT	1952	1-10	63.4
Oakwood	VA	1990	1-10	36.8
Top 10 Volume Subtotal			38,938.5	2,679.3
Top 10 Percentage of U.S. Total			22.1%	13.5%
Fogarty Creek	WY	1975	11-20	31.1
Antrim	MI	1965	11-20	126.1
Panhandle West	TX	1918	11-20	109.8
Big Sandy	KY & WV	1881	11-20	48.5
Jonah	WY	1977	11-20	79.2
Spraberry Trend Area	TX	1951	11-20	64.9
Raton	CO	1994	11-20	27.7
Panoma Gas Area	KS	1956	11-20	83.7
Red Oak-Norris	OK	1910	11-20	54.2
Lake Ridge	WY	1981	11-20	15.8
Top 20 Volume Subtotal			49,617.4	3,320.3
Top 20 Percentage of U.S. Total			28.2%	16.7%
Giddings	TX	1960	21-50	240.3
Elk Hills	CA	1920	21-50	133.3
Cook Inlet North	AK	1962	21-50	51.3
Beluga River	AK	1962	21-50	34.9
Wasson	TX	1937	21-50	20.2
Gomez	TX	1977	21-50	62.4
Mocane-Laverne Gas Area	KS & OK & TX	1979	21-50	69.5
Whitney Canyon-Carter Crk	WY	1978	21-50	74.7
Viosca Knoll Blk 956	GF	1985	21-50	103.3
Newark East	TX	1981	21-50	36.6
East Breaks Blk 945	GF	1994	21-50	0.0
Strong City District	OK	1966	21-50	67.1
Sawyer	TX	1975	21-50	44.4
Oak Hill	TX	1958	21-50	62.1
Knox	OK	1916	21-50	62.4
Drunkards Wash	UT	1989	21-50	47.7
Mobile Blk 823	GF	1983	21-50	66.7
Lower Mobile Bay-Mary Ann	AL	1979	21-50	28.7
Mississippi Canyon Blk 810	GF	1996	21-50	14.5
Nora	VA	1949	21-50	23.4
Golden Trend	OK	1945	21-50	38.9
Mississippi Canyon Blk 731	GF	1987	21-50	92.0
Watonga-Chickasha Trend	OK	1962	21-50	61.6
Bruff	WY	1969	21-50	42.0
Bob West	TX	1990	21-50	52.2
Wilburton	OK	1941	21-50	47.7
Indian Basin	NM	1971	21-50	90.3
Kinta	OK	1914	21-50	37.2
Elk City	OK	1947	21-50	47.2
Agua Dulce	TX	1928	21-50	8.1
Top 50 Volume Subtotal			67,829.4	5,081.3
Top 50 Percentage of U.S. Total			38.5%	25.6%

**Table B2. Top 100 U.S. Fields Ranked by Gas^a Proved Reserves, from Reported 1999 Field Level Data
(Continued)
(Billion Cubic Feet)**

Field Name	Location	Discovery Year	Proved Reserves Rank Group	Reported Production Rank Group
Garden Banks Blk 426	GF	1992	51-100	89.6
Judge Digby	LA	1977	51-100	42.8
La Perla	TX	1958	51-100	58.0
Vaquillas Ranch	TX	1978	51-100	78.5
Viosca Knoll Blk 915	GF	1993	51-100	0.1
McArthur River	AK	1965	51-100	70.0
Wamsutter	WY	1958	51-100	28.6
Ozona	TX	1962	51-100	33.6
Mississippi Canyon Blk 807	GF	1989	51-100	55.0
Belridge South	CA	1911	51-100	18.5
Dew	TX	1982	51-100	20.7
McAllen Ranch	TX	1986	51-100	61.0
Kuparuk River	AK	1969	51-100	28.9
Fairway	AL	1986	51-100	28.6
Elm Grove	LA	1958	51-100	13.1
Verden	OK	1948	51-100	36.6
Standard Draw	WY	1979	51-100	21.6
Garden Banks Blk 171	GF	1988	51-100	16.5
Rulison	CO	1956	51-100	12.8
Anschutz Ranch East	UT & WY	1980	51-100	58.0
A W P	TX	1981	51-100	19.1
Mimms Creek	TX	1978	51-100	14.6
Painter Reservoir East	WY	1979	51-100	35.3
Matagorda Island Blk 623	GF	1980	51-100	97.9
Grand Valley	CO	1985	51-100	7.9
Table Rock	WY	1946	51-100	12.4
Double A Wells	TX	1980	51-100	33.0
South Pass SA Blk 89	GF	1969	51-100	35.4
Pegasus	TX	1949	51-100	23.7
Willow Springs	TX	1954	51-100	26.8
Hondo	CA	1969	51-100	22.6
Cedar Cove Coal Degas	AL	1983	51-100	20.2
Lake Arthur South	LA	1955	51-100	20.2
Blanco South	NM	1952	51-100	17.4
Waltman	WY	1959	51-100	41.2
Moorewood NE	OK	1979	51-100	29.4
Wild Rose	WY	1975	51-100	18.2
Tip Top	WY	1928	51-100	18.5
Mississippi Canyon Blk 354	GF	1977	51-100	36.9
Monte Christo	TX	1982	51-100	16.2
Cement	OK	1917	51-100	24.0
Boonsville	TX	1950	51-100	29.9
Kenai	AK	1959	51-100	10.1
Sugg Ranch	TX	1985	51-100	7.8
Bryceland West	LA	1952	51-100	29.9
Sarita East	TX	1967	51-100	31.8
Endicott	AK	1978	51-100	10.1
Jeffress NE	TX	1975	51-100	27.6
Green Canyon Blk 244	GF	1994	51-100	68.3
Viosca Knoll Blk 783	GF	1985	51-100	59.5
Top 100 Volume Subtotal			82,759.0	6,699.8
Top 100 Percentage of U.S. Total			47.0%	33.7%

^aTotal wet gas after lease separation.

Note: The U.S. total production estimate of 19,856 billion cubic feet and the U.S. total reserves estimate of 176,159 billion cubic feet, used to calculate the percentages in this table, are from Table 9 in this publication. Column totals may not add due to independent rounding.

Source: Energy Information Administration, Office of Oil and Gas.

Table B3. Top U.S. Operators Ranked by Reported 1999 Operated Production Data

Rank	Company Name	Crude Oil Production (thousand barrels/day)	Rank	Company Name	Total Natural Gas Production (billion cubic feet/day)
→ 1	Arco Exploration & Production	682	1	Exxon Mobil Production Co.	3,611
→ 2	BP Amoco	581	2	BP Amoco	3,540
3	Shell Oil Co.	359	3	Shell Oil Co.	2,699
4	Chevron U S A Production Co	346	4	Burlington Resources Oil & Gas	2,302
5	Texaco Inc.	310	→ 5	Chevron U S A Production Co	2,116
6	Exxon Mobil Production Co.	310	→ 6	Texaco Inc.	1,715
7	Aera Energy LLC	260	7	Unocal Corp	1,333
8	Altura Energy Ltd	170	→ 8	Santa Fe Snyder Corp	1,306
9	Marathon Oil Co	165	9	Union Pacific Resources	1,275
10	Amerada Hess Corp	117	→ 10	Vastar Resources Inc	1,191
	Top 10 Volume Subtotal	3,298		Top 10 Volume Subtotal	21,088
	Top 10 Percentage of U.S. Total	56%		Top 10 Percentage of U.S. Total	39%
11	Oxy USA Inc	99	→ 11	Devon Energy Corp.	1,157
12	Unocal Corp	74	12	Conoco Inc	1,125
13	Kerr McGee O&G Corp	74	→ 13	Phillips Petroleum Co	1,123
14	Apache Corp	72	→ 14	Coastal Oil & Gas Corp.	1,042
→ 15	Devon Energy Corp.	67	15	Marathon Oil Co.	862
→ 16	Union Pacific Resources	54	16	EOG Resources Inc.	855
17	Ocean Energy Inc	46	→ 17	Oxy USA Inc.	847
18	Burlington Resources Oil & Gas	46	18	Apache Corp	742
→ 19	Vastar Resources Inc	41	→ 19	Arco Exploration & Production	673
20	City Of Long Beach	38	→ 20	El Paso Production Co.	635
	Top 20 Volume Subtotal	3,910		Top 20 Volume Subtotal	30,149
	Top 20 Percentage of U.S. Total	66%		Top 20 Percentage of U.S. Total	55%
21	Conoco Inc	37	21	Amerada Hess Corp.	600
22	Nuevo Energy Co	36	22	Kerr McGee O&G Corp	561
23	Phillips Petroleum Co	36	23	Cross Timbers Operating Co	490
24	Pioneer Natural Resources USA	35	24	Anadarko Petroleum Corp	466
→ 25	Santa Fe Snyder Corp	32	25	Newfield Exploration Co.	454
26	Plains Resources Inc	29	26	Ocean Energy Inc	439
27	Merit Energy Co	24	27	Chesapeake Operating Inc	429
28	British Borneo USA Inc	24	28	Pioneer Natural Resources USA	416
→ 29	Anadarko Petroleum Corp.	23	29	Questar Exploration & Production	387
30	Goodrich Petroleum Co.	22	30	C N G Producing Co	378
31	Citation Oil & Gas Corp.	22	31	Samedan Oil Corp	368
32	Samedan Oil Corp.	22	32	Louis Dreyfus Natural Gas Corp	352
33	Newfield Exploration Co	22	33	Mitchell Energy Corp	320
34	Hunt Oil Co	21	34	Samson Resources Co	317
35	EOG Resources Inc	21	35	Houston Exploration Co The	257
36	Vintage Petroleum Inc.	21	36	Walter Oil & Gas Corp	251
→ 37	Coastal Oil & Gas Corp.	17	37	Cabot Oil & Gas Corp	239
38	Meridian Resource Corp	16	38	Murphy Exploration & Production.	230
39	Duncan Oil Inc.	16	39	Barrett Resources Corp	206
40	Berry Petroleum Co.	16	40	Equitable Production Co	196
41	Denbury Resources Inc.	15	41	Tom Brown Inc.	190
42	Swift Energy Co	15	→ 42	River Gas Corp	182
43	Cross Timbers Operating Co	15	43	Helmerich & Payne Inc.	180
→ 44	El Paso Production Co	15	44	Fina Oil & Chemical Co	177
45	C N G Producing Co	14	45	Hunt Oil Co.	177
46	Seneca Resources Corp.	14	46	Kaiser - Francis Oil Co.	172
47	Prize Energy Corp.	13	→ 47	Altura Energy Ltd	172
48	Continental Resources Inc	13	48	Yates Petroleum Corp	164
49	Murphy Exploration & Production	13	49	Koch Exploration Co	164
50	Howell Petroleum Corp	13	50	Forest Oil Corp.	161
	Top 50 Volume Subtotal	4,542		Top 50 Volume Subtotal	39,244
	Top 50 Percentage of U.S. Total	77%		Top 50 Percentage of U.S. Total	72%

Note: Arrows indicate mergers, acquisitions in 2000, and announced plans.

^aCrude oil production includes production of lease condensate. Total natural gas is wet after lease separation.