

Top 100 Oil and Gas Fields of 2009

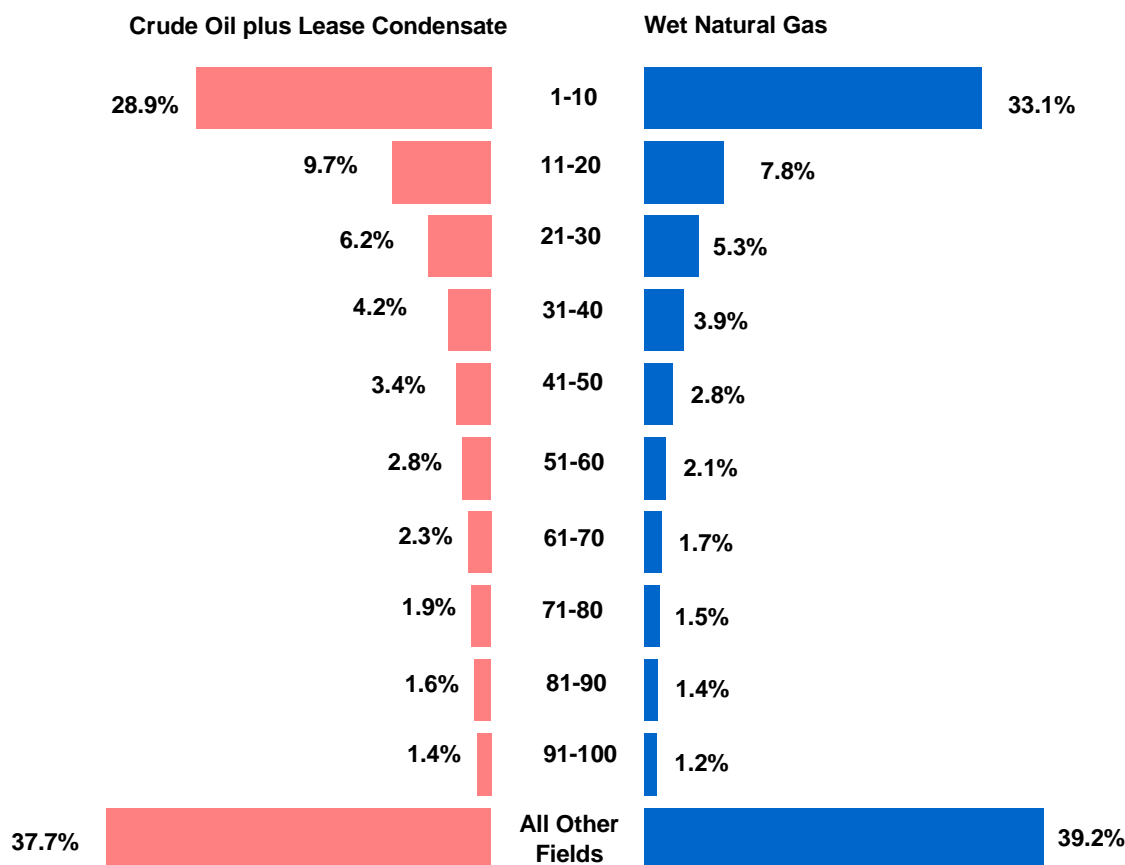
Introduction

This supplement to the Energy Information Administration's summary of [U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Proved Reserves, 2009](#) ranks the United States' largest oil and gas fields by their estimated 2009 proved reserves.

The Top 100's Share of U.S. Proved Reserves in 2009

The Top 100 oil fields and Top 100 gas fields each accounted for about 60 percent of the respective total proved reserves of the United States. The Top 100 oil fields have accounted for that much of the total for many years, but only in the past two years have the Top 100 gas fields have accounted for that much of the total. While the Top 100 fields' proved reserves of crude oil plus lease condensate increased from 13,385 million barrels to 13,990 million barrels in 2009, their share of the U.S. total decreased from 65 percent to 63 percent. The Top 100 fields' proved reserves of wet natural gas increased from 154,871 billion cubic feet to 172,726 billion cubic feet in 2009 and their share of the U.S. total remained flat at 61 percent.

Figure 1. Distribution of Proved Reserves Among the Top 100 Oil and Gas Fields of 2009 (in Groups of 10)



Source: U.S. Energy Information Administration

Just one or a very few operators may be the source of proved reserves estimates for a field. Therefore EIA does not provide field-specific proved reserves estimates, as publishing them could compromise company-proprietary data. Instead, we divide the fields ranked by proved reserves into groups of ten to provide a sense of the operated concentration of the Nation's total proved reserves, while still maintaining appropriate confidentiality (Figure 1). Note that the Top 10 fields for oil and natural gas account for almost a third of the U.S. total and that all other fields outside the Top 100 (an estimated 25,200 active fields out of a total pool of almost 65,000 field entries in the EIA Field Code Master List) account for less than 40 percent (two-fifths) of the U.S. total.

Top 100 Oil Fields

The top 100 fields had 14 billion barrels of proved reserves of crude oil plus lease condensate in 2009, or about 63 percent of the U.S. total. Alaska's Prudhoe Bay Field repeated as the country's largest oil field in 2009 followed by the Spraberry Trend Area of Texas, Mississippi Canyon Blocks 807 and 778 Fields in the Gulf of Mexico and Belridge South in California. A most notable addition to the Top 100 list was the inclusion of a number of fields in the State of North Dakota. This is associated with the vigorous activity in the Bakken and Three Forks formations. Fields such as Parshall, Ross, Sanish, and Stanley are in this rapidly developing area around the Nesson Anticline of North Dakota. With only two exceptions the Top 20 oil fields of 2008 carried over to 2009, although some changed places. This was in marked contrast to the Top 20 gas fields where a number of new entrants displaced previously listed fields.

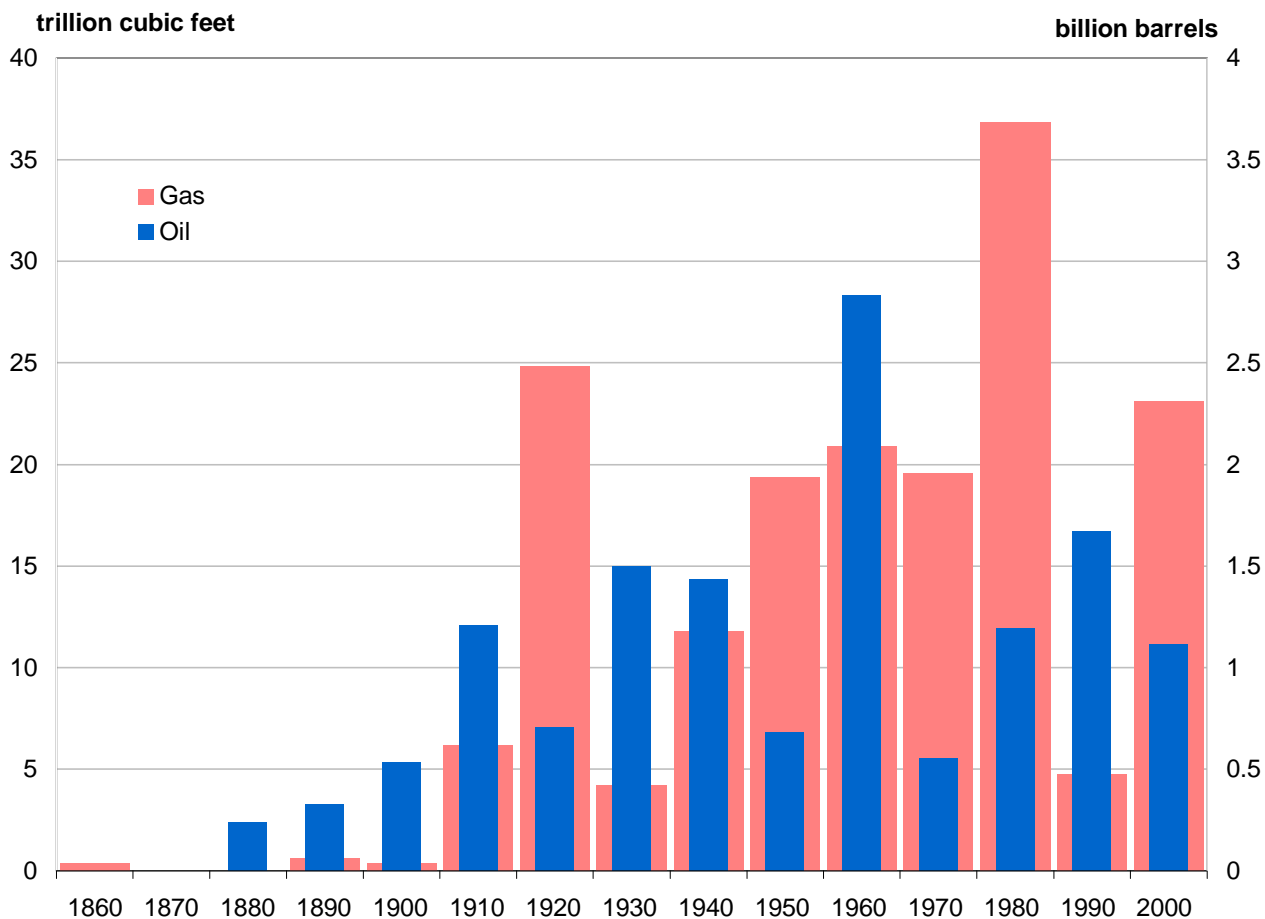
Top 100 Gas Fields

The top 100 gas fields for 2009 had 173 Tcf of wet natural gas proved reserves, or about 61 percent of the national total. The Newark East Field, which produces gas from the Barnett Shale in the Fort Worth Basin of Texas, remained the country's largest gas field as measured by proved reserves. The San Juan Basin Gas Area of Colorado and New Mexico was the second largest, and the Pinedale Field of Wyoming was third. The Haynesville Shale Unit in Louisiana became the fourth largest gas field (in the prior year some of these data were associated with several different fields, Elm Grove, Caspiana, Shreveport, Sligo, Logansport and Bethany-Longstreet among others). The B-43 Field in Arkansas, which produces from the Fayetteville Shale, also ranked among the nation's top five gas fields. The Marcellus Shale (at present primarily its Pennsylvania portion) made its first appearance in the list as a number of fields in the play (Sycamore, Dimock, and Carmichaels) were new to the top 100 gas field list. The fact that three of the top five gas fields as measured by proved reserves are now producing from organic (black) shales reflects the intense pace of domestic shale gas development in the last few years.

Top 100 Fields by Decade of Discovery

The following chart shows the proved reserves of the top 100 oil and gas fields by decade of discovery. The peak oil discovery decade reflects the 1967 discovery of Alaska's Prudhoe Bay Field. The gas discoveries are more evenly distributed. Note that some of the fields which still hold significant proved reserves were discovered as far back as the late 19th and early 20th centuries.

Figure 2. Top 100 Fields 2009 Proved Reserves by Decade of Discovery



Source: U.S. Energy Information Administration

Top 100 Fields Ranking Tables

The following tables rank the top 100 oil and gas fields by their estimated 2009 proved reserves, but the field-specific estimates are not disclosed for the reasons described earlier. Instead, field-specific estimated production volumes (provided by the respondents) are offered to give an idea of relative field size. Also included in the tables are estimates of nonproducing reserves (the subset of proved reserves that did not produce in 2009, inclusive of both proved undeveloped reserves and proved developed nonproducing reserves), the field discovery year, and the prior year rank of each field.

For additional reserves information, including breakouts by State and State subdivision, please refer to the following link: [U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Proved Reserves, 2009.](#)

**Table 1. Top 100 U.S. Crude Oil plus Lease Condensate Fields as Ranked by Estimated 2009 Proved Reserves
(Million Barrels of 42 U.S. Gallons)**

2009 Rank	Field Name	Location	2009 Proved Reserves	2009 Est. Production Volume	Non Producing Reserves	Discover Year	2008 Rank
1	PRUDHOE BAY	AK		95.9		1967	1
2	SPRABERRY TREND AREA	TX		39.6		1949	2
3	MISSISSIPPI CANYON BLK 807 (MARS-URSA)	FG		66.0		1989	4
4	MISSISSIPPI CANYON BLK 778 (THUNDER HORSE)	FG		73.7		1999	3
5	BELRIDGE SOUTH	CA		32.6		1911	5
6	KUPARUK RIVER	AK		38.0		1969	7
7	WASSON	TX		22.1		1937	6
8	GREEN CANYON BLK 743 (ATLANTIS)	FG		38.3		1998	10
9	MIDWAY-SUNSET	CA		34.1		1901	9
10	ELK HILLS	CA		13.4		1919	8
1-10 Subtotal			6,447.2	453.7	1,894.6		
11	KERN RIVER	CA		28.8		1899	11
12	GREEN CANYON BLK 826 (MAD DOG)	FG		23.6		1998	15
13	WATTENBERG	CO		15.6		1970	13
14	SLAUGHTER	TX		10.3		1937	16
15	CEDAR HILLS	MT & ND & SD		20.8		1951	12
16	GREEN CANYON BLK 640 (TAHITI)	FG		22.6		2002	14
17	MILNE POINT	AK		10.6		1982	17
18	SALT CREEK	WY		3.7		1889	18
19	WILMINGTON	CA		13.6		1932	25
20	LEVELLAND	TX		7.6		1945	22
11-20 Subtotal			2,155.5	157.2	669.6		
21	SEMINOLE	TX		6.9		1936	20
22	MONUMENT BUTTE	UT		4.6		1964	28
23	CYMRIC	CA		17.6		1916	21
24	GOLDSMITH	TX		6.0		1935	24
25	ORION	AK		0.0		2002	29
26	ALPINE	AK		27.8		1994	19
27	ELM COULEE	MT		13.3		2000	23
28	HONDO	FP		4.7		1969	26
29	GREEN CANYON BLK 562 (K2)	FG		4.1		1999	34
30	MISSISSIPPI CANYON BLK 383 (KEPLER)	FG		21.3		1987	35
21-30 Subtotal			1,379.4	106.3	462.6		
31	SHO-VEL-TUM	OK		7.7		1905	32
32	LOST HILLS	CA		11.6		1910	27
33	VENTURA	CA		4.2		1916	63
34	FUHRMAN-MASCHO	TX		4.1		1930	36
35	SACATE	FP		3.0		1970	31
36	PARSHALL	ND		15.1		2006	30
37	SAN ARDO	CA		5.3		1947	41
38	GREATER ANETH	UT		3.5		1956	44
39	HOBBS	NM & TX		3.9		1945	37
40	WARD-ESTES NORTH	TX		2.8		1927	45
31-40 Subtotal			927.1	61.1	208.7		
41	ALTAMONT-BLUEBELL	UT		3.9		1926	142
42	ENDICOTT	AK		4.2		1978	49
43	YATES	TX		9.7		1926	38
44	INGLEWOOD	CA		2.8		1924	59
45	NORTHSTAR	AK		8.0		1984	46
46	SANISH	ND		8.1		1953	108
47	POINT MCINTYRE	AK		8.4		1988	42
48	BOREALIS	AK		5.0		2001	47
49	PINEDALE	WY		3.6		1955	52
50	WEST SAK	AK		6.9		1969	48
41-50 Subtotal			763.1	60.8	248.0		

**Table 1. Top 100 U.S. Crude Oil plus Lease Condensate Fields as Ranked by Estimated 2009 Proved Reserves (Continued)
(Million Barrels of 42 U.S. Gallons)**

2009 Rank	Field Name	Location	2009 Proved Reserves	2009 Est. Production Volume	Non Producing Reserves	Discover Year	2008 Rank
51	GREEN CANYON BLK 644 (HOLSTEIN)	FG		10.9		1999	40
52	COWDEN NORTH	TX		4.2		1930	39
53	VACUUM	NM		5.3		1929	51
54	GREEN CANYON BLK 654 (SHENZI)	FG		30.5		2003	57
55	COALINGA	CA		5.9		1887	56
56	PESCADO	FP		4.5		1970	50
57	MISSISSIPPI CANYON BLK 127 (KING/HORN MT.)	FG		6.2		2000	33
58	HOWARD-GLASSCOCK	TX		2.5		1925	67
59	NATURAL BUTTES	UT		2.4		1940	58
60	ROBERTSON NORTH	TX		3.8		1956	53
51-60 Subtotal			629.5	76.1	115.8		
61	FULLERTON	TX		3.3		1942	55
62	KELLY-SNYDER	TX		11.0		1948	64
63	MCELROY	TX		4.3		1926	61
64	BELRIDGE NORTH	CA		3.4		1912	N/R
65	JONAH	WY		3.5		1977	90
66	NEWARK EAST	TX		4.3		1981	98
67	POSO CREEK	CA		2.0		1929	60
68	POLARIS	AK		1.4		2000	70
69	SALLIE ANN	TX		2.1		2004	92
70	ALAMINOS CANYON BLK 857 (GREAT WHITE)	FG		0.0		2002	N/R
61-70 Subtotal			507.9	35.5	239.8		
71	GARDEN BANKS BLK 171 (SALSA)	FG		8.4		1984	75
72	NIKAITCHUQ	AK		0.0		2005	87
73	TINSLEY	MS		1.7		1939	69
74	RANGELY	CO		4.5		1902	71
75	ANTON-IRISH	TX		3.1		1944	74
76	WESTBROOK	TX		2.6		1920	84
77	LISBURNE	AK		2.7		1967	72
78	MISSISSIPPI CANYON BLK 696 (BLIND FAITH)	FG		18.6		2005	54
79	BURBANK	OK		0.8		1920	196
80	AURORA	AK		2.5		1969	73
71-80 Subtotal			423.6	45.0	157.2		
81	KERN FRONT	CA		2.5		1925	78
82	LAKE WASHINGTON	LA		4.7		1931	66
83	WALKER RIDGE BLK 206 (CASCADE)	FG		0.0		2002	79
84	GIDDINGS	TX		6.8		1960	62
85	POSTLE	OK		0.0		1958	81
86	EUNICE MONUMENT	NM		1.8		1929	82
87	HAWKINS	TX		1.9		1940	80
88	BREA-OLINDA	CA		1.2		1897	76
89	SALT CREEK	TX		2.8		1942	18
90	TARN	AK		5.1		1991	86
81-90 Subtotal			367.3	26.8	133.9		
91	CEDAR LAKE	TX		1.7		1939	88
92	MEANS	TX		2.5		1934	83
93	STANLEY	ND		1.3		1977	43
94	GREEN CANYON BLK 339 (FRONT RUNNER)	FG		4.0		2001	94
95	GREEN CANYON BLK 244 (TROIKA)	FG		1.0		1994	97
96	EAST TEXAS	TX		3.8		1930	77
97	BEAVER LODGE	ND		1.6		1951	102
98	MAIN PASS BLK 61	FG		3.4		2001	133
99	FIORD	AK		8.4		1992	130
100	ROSS	ND		1.4		2005	174
91-100 Subtotal			307.4	29.2	137.4		
Top 100 Volume Subtotal			13,908.1	1,051.7	4,267.5		
U.S. Total			22,314.0	1,929.0	6,526.0		

Column totals may not add due to independent rounding. FG = Federal Offshore (Gulf of Mexico). FP = Federal Offshore (Pacific)
N/R = Not Ranked in prior year. Nonproducing Reserves are a subset of Proved Reserves. Source: U.S. Energy Information Administration

**Table 2. Top 100 U.S. Wet Natural Gas Fields as Ranked by Estimated 2009 Proved Reserves
(Billion Cubic Feet at 14.73 psia and 60° Fahrenheit)**

2009 Rank	Field Name	Location	2009 Proved Reserves	2009 Est. Production Volume	Non Producing Reserves	Discover Year	2008 Rank
1	NEWARK EAST	TX		1794.6		1981	1
2	SAN JUAN BASIN GAS AREA	CO & NM		1295.2		1927	2
3	PINEDALE	WY		487.8		1955	3
4	HAYNESVILLE SHALE UNIT	LA		203.7		2008	N/R
5	B-43 (FAYETTEVILLE)	AR		516.8		2004	7
6	PRUDHOE BAY	AK		166.7		1967	4
7	JONAH	WY		391.1		1977	8
8	NATURAL BUTTES	UT		224.4		1940	5
9	HUGOTON GAS AREA	KS & OK & TX		328.1		1922	6
10	WATTENBERG	CO		195.3		1970	9
1-10 Subtotal			93,906.8	5,603.7	37,509.8		
11	SPRABERRY TREND AREA	TX		113.8		1949	17
12	CARTHAGE	TX		273.0		1936	13
13	MAMM CREEK	CO		111.4		1959	23
14	FOGARTY CREEK	WY		34.7		1975	14
15	ANTRIM	MI		125.6		1965	12
16	GRAND VALLEY	CO		191.0		1985	11
17	PRB COAL BED	MT & WY		558.9		1915	16
18	BIG SANDY	KY & WV		70.6		1926	N/R
19	LAKE RIDGE	WY		15.7		1981	18
20	OAKWOOD	VA		136.7		1990	27
11-20 Subtotal			22,157.2	1,631.3	5,873.3		
21	RATON BASIN GAS AREA	CO & NM		140.4		1998	15
22	LOWER MOBILE BAY AREA	AL & FG		156.1		1979	19
23	MADDEN	WY		88.6		1968	26
24	RULISON	CO		127.2		1958	29
25	CARTHAGE NORTH	TX		24.9		1966	33
26	PARACHUTE	CO		114.9		1985	22
27	FREESTONE	TX		91.3		1949	28
28	ELK HILLS	CA		101.9		1919	34
29	PINON	TX		134.2		1982	25
30	SAWYER	TX		66.9		1960	24
21-30 Subtotal			15,035.2	1,046.4	5,181.0		
31	ELM GROVE	LA		130.1		1916	20
32	PINE HOLLOW SOUTH	OK		28.4		1959	44
33	COALGATE NE	OK		23.8		2003	71
34	JOHN AMORUSO	TX		113.3		2005	91
35	OAK HILL	TX		95.8		1958	31
36	STILES RANCH	OK & TX		91.0		1978	30
37	BALD PRAIRIE	TX		93.7		1976	32
38	PICEANCE CREEK	CO		30.8		1930	42
39	WAMSUTTER	WY		27.8		1958	37
40	CASPIANA	LA		64.0		1925	47
31-40 Subtotal			10,943.3	698.6	5,571.3		
41	BEAR GRASS	TX		57.7		1977	39
42	WILD ROSE	WY		26.3		1975	35
43	STRONG CITY DISTRICT	OK		76.5		1966	36
44	STANDARD DRAW	WY		29.7		1979	38
45	ECHO SPRINGS	WY		34.9		1976	43
46	FARRAR	TX		66.9		1963	40
47	FRENCHIE DRAW	WY		21.8		1961	96
48	WATONGA-CHICKASHA TREND	OK		61.3		1948	56
49	BUFFALO WALLOW	TX		49.8		1969	45
50	MISSISSIPPI CANYON BLK 807 (MARS-URSA)	FG		79.9		1989	41
41-50 Subtotal			8,015.6	504.7	3,751.1		

Table 2. Top 100 U.S. Wet Natural Gas Fields as Ranked by Estimated 2009 Proved Reserves (Continued) (Billion Cubic Feet at 14.73 psia and 60° Fahrenheit)

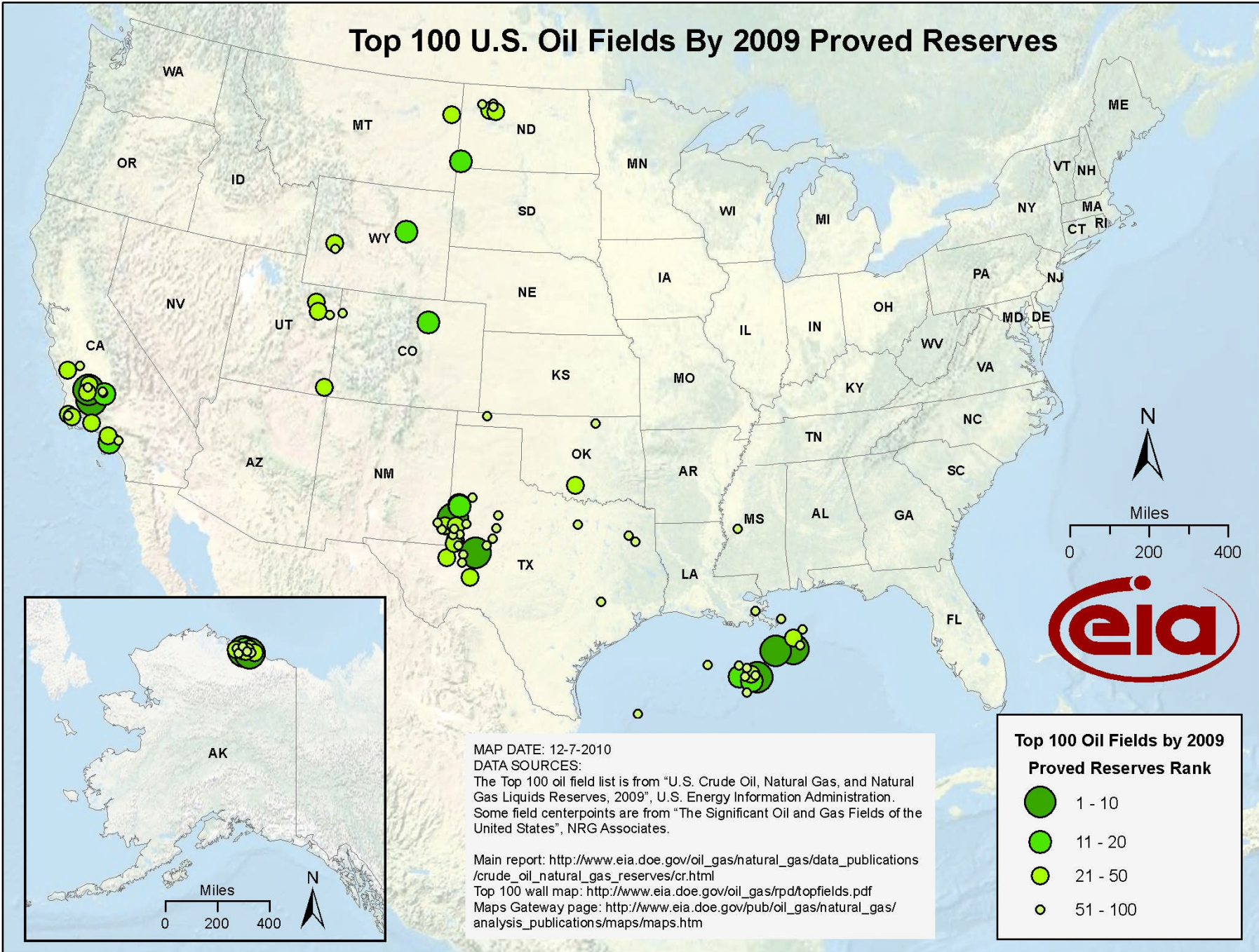
2009 Rank	Field Name	Location	2009 Proved Reserves	2009 Est. Production Volume	Non Producing Reserves	Discover Year	2008 Rank
51	MESA UNIT	WY		18.9		1981	48
52	NORA	VA		89.7		1949	59
53	GARDEN BANKS BLK 506 (GEAUXPHER)	FG		10.6		2007	72
54	SYCAMORE	PA		1.6		1895	N/R
55	RED OAK-NORRIS	OK		71.0		1910	50
56	HALEY	TX		92.6		1983	53
57	BREATHWAITE	OK		24.0		1980	114
58	BUZZARD CREEK	CO		6.0		1955	57
59	B-44 AREA	AR		92.9		2008	161
60	GIDDINGS	TX		83.7		1960	54
51-60 Subtotal			6,024.3	491.0	2,613.3		
61	DIMOCK	PA		13.3		1961	N/R
62	LISBON	UT		2.4		1960	N/R
63	TEAGUE	TX		84.2		1945	46
64	HOLLY	LA		35.7		1928	101
65	EUGENE ISLAND BLK 24	FG		41.4		1980	98
66	HONDO	FP		12.8		1969	63
67	BELUGA RIVER	AK		40.7		1962	60
68	BRUFF	WY		35.8		1969	65
69	RILEY RIDGE	WY		0.0		1980	68
70	MISSISSIPPI CANYON BLK 778 (THUNDER HORSE)	FG		56.7		1999	78
61-70 Subtotal			4,961.0	322.9	1,942.4		
71	VERNON	LA		54.8		1967	49
72	DRUNKARDS WASH	UT		45.3		1989	55
73	TIP TOP	WY		13.0		1928	70
74	CEDARDALE NE	OK		36.2		1957	52
75	BRACHFIELD SE	TX		27.9		1981	69
76	BLOCKER	TX		18.7		1954	144
77	MINDEN	TX		28.8		1953	73
78	EUGENE ISLAND BLOCK 6	LA		8.4		2008	N/R
79	GOLDEN TREND	OK		36.4		1945	58
80	HAWKVILLE	TX		12.8		2008	N/R
71-80 Subtotal			4,376.1	282.4	1,683.0		
81	MOCANE-LAVERNE GAS AREA	KS & OK & TX		51.1		1946	51
82	MAYFIELD NE	OK		14.4		1951	67
83	GREENWOOD-WASKOM	LA & TX		33.1		1926	115
84	KINTA	OK		40.8		1914	85
85	BETHANY-LONG STREET	LA & TX		35.7		1926	66
86	VERDEN	OK		30.4		1948	75
87	WASSON	TX		23.8		1937	76
88	KINGSTON	LA		26.1		1957	N/R
89	CARMICHAELS	PA		5.5		1861	N/R
90	OVERTON	TX		36.2		1973	62
81-90 Subtotal			3,909.6	297.0	1,524.1		
91	ELK CITY	OK		26.1		1947	80
92	TIERNEY	WY		8.1		1973	79
93	SHO-VEL-TUM	OK		13.1		1905	74
94	WOODARDVILLE	LA		30.8		1976	99
95	BEGERT	TX		16.7		2007	90
96	CEMENT	OK		34.1		1916	93
97	DOWDY RANCH	TX		25.7		1999	89
98	GOLDSMITH	TX		20.1		1935	118
99	CLEBURNE WEST	TX		22.0		1992	102
100	OWEN	TX		6.9		1968	N/R
91-100 Subtotal			3,397.3	203.5	1,391.1		
Top 100 Volume Subtotal			172,726.4	11,081.6	67,040.7		
U.S. Total			283,879.0	22,537.0	98,092.0		

Column totals may not add due to independent rounding. FG = Federal Offshore (Gulf of Mexico). FP = Federal Offshore (Pacific). N/R = Not Ranked in prior year. Nonproducing Reserves are a subset of Proved Reserves. Source: U.S. Energy Information Administration

Top 100 Fields Location Maps

Locations of the top 100 oil and gas fields of 2009 are shown on the following maps. Many fields appear on both maps because they have significant volumes of both hydrocarbons. A larger map is also available that combines the two lists and provides more detail; the file is large (~4 MB) and may take several minutes to download. [[Link to Map Section](#)]

Top 100 U.S. Oil Fields By 2009 Proved Reserves



MAP DATE: 12-7-2010

DATA SOURCES:

The Top 100 oil field list is from "U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves, 2009", U.S. Energy Information Administration. Some field centerpoints are from "The Significant Oil and Gas Fields of the United States", NRG Associates.

Main report: http://www.eia.doe.gov/oil_gas/natural_gas/data_publications/crude_oil_natural_gas_reserves/cr.html

Top 100 wall map: http://www.eia.doe.gov/oil_gas/rpd/topfields.pdf

Maps Gateway page: http://www.eia.doe.gov/pub/oil_gas/natural_gas/analysis_publications/maps/maps.htm

Top 100 Oil Fields by 2009

Proved Reserves Rank

- 1 - 10
- 11 - 20
- 21 - 50
- 51 - 100

Top 100 U.S. Gas Fields By 2009 Proved Reserves

