

Appendix A

Operator Level Data

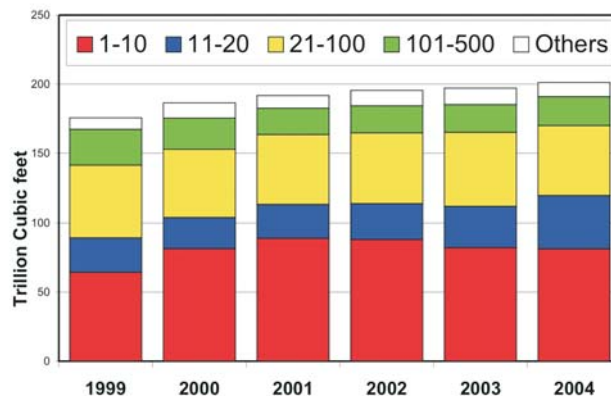
Operator Level Data

Appendix A provides a series of tables of the proved reserves and production by production size class for the years 1999 through 2004 for oil and gas well operators. The tables show the volumetric change and percent change from the previous year and from 1999. In addition they show the 2004 average per operator in each class. All companies that reported to EIA were ranked by production size for each of the 6 years. We computed company production size classes as the sum of the barrel oil equivalent of the crude oil production, lease condensate production, and wet gas production for each operator. The companies were then placed in the following production size classes: 1-10, 11-20, 21-100, 101-500, and all "other" oil and gas operators. The "other" category contains 20,170 small operators. We estimated production and reserves for small operators for 2004 from a sample of approximately 3 percent.

Class 1-10 contains the 10 highest producing companies each year on a barrel oil equivalent basis. These companies are not necessarily the same 10 companies each year.

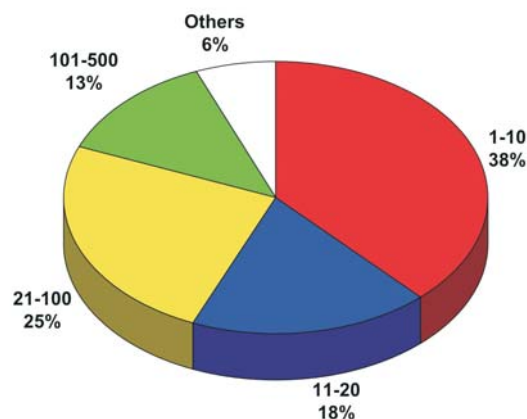
Natural Gas Proved Reserves

The wet natural gas proved reserves reported for 1999 through 2004 have changed from 176,159 billion cubic feet to 201,200 billion cubic feet (Table A1). These proved reserves are highly concentrated in the larger companies. In 2004, the top 20 operators (Class 1-10 and Class 11-20) producing companies had 60 percent of the proved reserves of natural gas. The next two size classes contain 80 and 400 companies and account for 25 and 10 percent of the U.S. natural gas proved reserves, respectively. The top 20 operators had an increase of 34 percent in their natural gas proved reserves from 1999 to 2004. The rest of the operators in (Class 21-100, Class 101-500, and Class Other) had a decrease of 6 percent in their reserves in the same period. In 2004, the top 20 operators' natural gas reserves had a increase of 7 percent from 2003.



Natural Gas Production

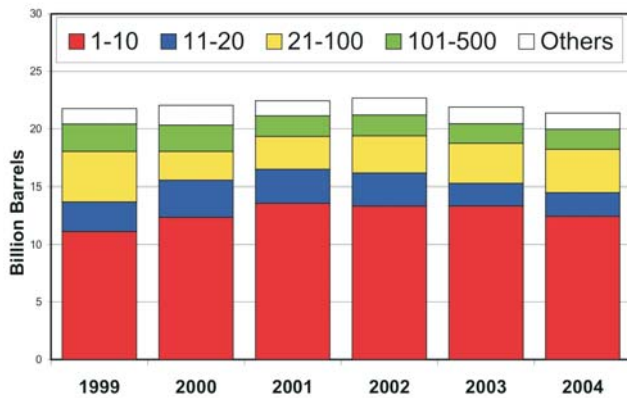
Wet natural gas production has decreased from 20,231 billion cubic feet in 2003 to 20,017 billion cubic feet in 2004 (Table A2). In 2004, the top 20 producing companies had 56 percent of the production of wet natural gas. The next two size classes have 25 and 13 percent of the wet natural gas production, respectively. The top 20 operators had an increase of 8 percent in wet natural gas production from 1999 to 2004. The rest of the operators had a decrease of 7 percent from 1999 to 2004. The top 20 operators' wet natural gas production had a decrease of less than 1 percent in 2004 from 2003.



Crude Oil Proved Reserves

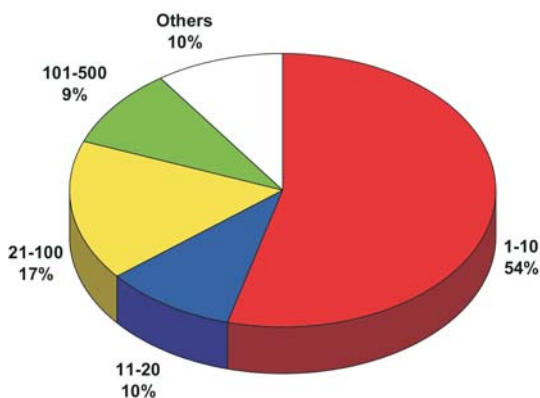
Proved reserves of crude oil are more highly concentrated in a few companies than those of natural gas. The 20 largest oil and gas producing companies in 2004 had 68 percent of U.S. proved reserves of crude oil (Table A3), in contrast to wet natural gas where these same companies operated 60 percent of the total proved reserves.

U.S. proved reserves of crude oil decreased 2 percent in 2004 from 2003. The top 20 producing companies proved reserves of crude oil during 2004 decreased 5 percent from 2003. The top 20 class had an increase of 6 percent in their crude oil proved reserves from 1999 to 2004.



Crude Oil Production

Crude oil production reported for 1999 to 2004 has decreased from 1,877 million barrels to 1,819 million barrels (Table A4). The 20 largest oil and gas producing companies had 64 percent of U.S. production of crude



oil in 2004. In 1999 they accounted for 62 percent of production.

This is in contrast to wet natural gas where these same companies produced 56 percent of the total. U.S. production of crude oil declined by 7 percent from 1999 to 2004. The top 20 operators had a decline of 4 percent in their oil production during the same period. U.S. production of crude oil declined 3 percent from 2003 to 2004. In the same period the top 20 operators production decreased by 7 percent.

Crude Oil and Natural Gas Fields

The number of fields in which Category I and Category II operators were active increased during the 1999-2004 period (Table A5). From 1999-2004, the number of fields in which the top 20 operators were active increased by 2,688 fields (66 percent) while in 2004 the number increased by 580 fields from 2003.

We also include statistics for operator Category sizes at the bottom portion of tables in this appendix. These are the categories used by EIA in processing and assessing reserves surveys and are presented here as additional perspective. For further explanation of categories sizes see definitions and descriptions in Appendix E.

Ranked Crude Oil and Natural Gas Production

Table A6 lists the top U.S. Oil and gas operators ranked by reported 2004 operated production data. Table A6 has been moved from Appendix B to Appendix A to reflect the operator nature of the table. The following list of companies taken from previous reports is representative of the tremendous change that has taken place in the US oil and gas industry since 1999. In this list are companies, formerly in the top 50 producing operators in the United States, which are longer reporting to the Energy Information Administration on the form EIA-23. Former operators in this list were either merged or acquired by other operators. On the other hand, this does not mean that all the reserves which they operated have disappeared as most reserves remained with the acquiring company. Some reserves were sold by the acquiring or merging company as the consolidation occurred.

Operators Formerly in the Ranks of the Top 50 Reported for the U.S. 1999-2003

Num	Formerly Operated As	Currently Operated By
1	AEC Oil & Gas (USA) Inc	Encana Oil & Gas Inc
2	Agip Petroleum Co Inc	Eni SpA
3	Altura Energy Ltd	Occidental Petroleum Corp
4	Arco Exploration & Production	BP Plc
5	Arguello Inc	Plains Explor & Prod Co
6	Barrett Resources Corp	Williams Energy Inc
7	BP Amoco	BP Plc
8	British Borneo USA Inc	Eni SpA
9	C N G Producing Co	Dominion Resources Inc
10	Chevron USA Production Co	ChevronTexaco Inc
11	Coastal Oil & Gas Corp	El Paso Energy
12	Coho Resources Inc	Denbury Resources Inc
13	Conoco Inc	ConocoPhillips Co
14	Evergreen Operating Corp	Pioneer Natural Resources USA
15	Fina Oil & Chemical Co	Total SA
16	Helmerich & Payne Inc	Cimarex Energy Co
17	Howell Petroleum Corp	Anadarko Petroleum Corp
18	HS Resources Inc	Kerr-McGee Corp
19	Louis Dreyfus Natural Gas Corp	Dominion Resources Inc
20	Mitchell Energy & Development Corp	Devon Energy Corp
21	Nuevo Energy Co	Plains Explor & Prod Co
22	Ocean Energy Inc	Devon Energy Corp
23	Patina Oil & Gas Corp	Noble Energy Inc
24	Phillips Petroleum Co	ConocoPhillips Co
25	Prize Operating Co	Gruy Petroleum Management Co
26	River Gas Corp	ConocoPhillips Co
27	Santa Fe Snyder Corp	Devon Energy Corp
28	Stocker Resources Inc	Plains Explor & Prod Co
29	Texaco Inc	ChevronTexaco Inc
30	Tom Brown Inc	Encana Oil & Gas Inc
31	Union Pacific Resources	Anadarko Petroleum Corp
32	Vastar Resources Inc	BP Plc
33	Westport Resources Corp	Kerr-McGee Corp

Table A1. Natural Gas Proved Reserves, Wet After Lease Separation, by Operator Production Size Class, 1999–2004
(Billion Cubic Feet at 14.73 psia and 60° Fahrenheit)

Size Class	1999	2000	2001	2002	2003	2004	2003–2004 Volume and Percent Change	1999–2004 Volume and Percent Change	2004 Average Reserves per Operator
Class 1-10	64,320	81,437	88,936	88,100	82,222	81,325	-896	17,005	8,132.536
Percent of Total	36.5%	43.7%	46.4%	45.0%	41.7%	40.4%	-1.1%	26.4%	
Class 11-20	24,925	22,590	24,588	25,938	29,890	38,643	8,753	13,718	3,864.340
Percent of Total	14.1%	12.1%	12.8%	13.3%	15.2%	19.2%	29.3%	55.0%	
Class 21-100	52,160	48,832	50,055	50,633	53,098	50,149	-2,949	-2,011	626.867
Percent of Total	29.6%	26.2%	26.1%	25.9%	26.9%	24.9%	-5.6%	-3.9%	
Class 101-500	25,967	22,620	19,046	19,723	20,030	20,912	882	-5,055	52.280
Percent of Total	14.7%	12.1%	9.9%	10.1%	10.2%	10.4%	4.4%	-19.5%	
Class Other (20,170)	8,289	11,030	9,118	11,167	11,905	10,170	-1,735	1,881	0.504
Percent of Total	5.0%	5.9%	4.8%	5.7%	6.0%	5.1%	-14.6%	22.7%	
Category I (164)	146,458	162,144	169,056	173,325	173,225	178,269	5,044	31,811	1,087.006
Percent of Total	82.8%	86.9%	88.2%	88.6%	87.9%	88.6%	2.9%	21.7%	
Category II (532)	18,033	13,123	13,346	11,051	11,983	12,494	511	-5,539	23.485
Percent of Total	12.5%	7.0%	7.0%	5.7%	6.1%	6.2%	4.3%	-30.7%	
Category III (19,974)	7,952	R11,243	9,342	11,184	11,937	10,437	-1,500	2,485	0.523
Percent of Total	4.7%	6.0%	4.9%	5.7%	6.1%	5.2%	-12.6%	31.2%	
Total Published	176,159	186,510	191,743	195,561	197,145	201,200	4,055	25,041	9.734
Percent of Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	2.1%	14.2%	

R = Revised

Note: There were 19,974 active Category III operators in the 2004 sample frame. The reserves and production of Category III operators were estimated from an adjusted sample of 606 Category III operators (Table E2). The "other" size class represents 20,170 operators in the 2004 frame (20,670 active operators minus the 500 largest operators).

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

Table A2. Natural Gas Production, Wet After Lease Separation, by Operator Production Size Class, 1999–2004
(Billion Cubic Feet at 14.73 psia and 60° Fahrenheit)

Size Class	1999	2000	2001	2002	2003	2004	2003–2004 Volume and Percent Change	1999–2004 Volume and Percent Change	2004 Average Production per Operator
Class 1-10	6,881	8,495	9,019	8,996	8,220	7,617	-603	736	761.662
Percent of Total	34.7%	42.1%	43.7%	44.4%	40.6%	38.1%	-7.3%	10.7%	
Class 11-20	3,560	2,886	3,064	2,854	3,136	3,647	511	87	364.658
Percent of Total	14.1%	14.3%	14.8%	14.1%	15.5%	18.2%	16.3%	2.4%	
Class 21-100	5,523	4,965	4,949	4,763	5,275	4,982	-293	-541	62.275
Percent of Total	29.6%	24.6%	24.0%	23.5%	26.1%	24.9%	-5.6%	-9.8%	
Class 101-500	2,793	2,780	2,609	2,475	2,386	2,559	173	-234	6.396
Percent of Total	14.7%	13.8%	12.6%	12.2%	11.8%	12.8%	7.2%	-8.4%	
Class Other (20,170)	1,099	1,038	1,000	1,161	1,215	1,213	-1	114	0.060
Percent of Total	5.0%	5.1%	4.8%	5.7%	6.0%	6.1%	-0.1%	10.4%	
Category I (164)	16,248	17,096	17,672	17,335	17,347	17,036	-311	788	103.876
Percent of Total	82.8%	84.8%	85.6%	85.6%	85.7%	85.1%	-1.8%	4.8%	
Category II (532)	2,556	1,921	1,932	1,738	1,648	1,718	70	-838	3.230
Percent of Total	12.5%	9.5%	9.4%	8.6%	8.1%	8.6%	4.3%	-32.8%	
Category III (19,974)	1,052	1,147	1,038	1,176	1,236	1,263	27	211	0.063
Percent of Total	4.7%	5.7%	5.0%	5.8%	6.1%	6.3%	2.1%	20.0%	
Total Published	19,856	20,164	20,642	20,248	20,231	20,017	-214	161	0.968
Percent of Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	-1.1%	0.8%	

R = Revised

Note: There were 19,974 active Category III operators in the 2004 sample frame. The reserves and production of Category III operators were estimated from an adjusted sample of 606 Category III operators (Table E2). The "other" size class represents 20,170 operators in the 2004 frame (20,670 active operators minus the 500 largest operators).

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

Table A3. Crude Oil Proved Reserves by Operator Production Size Class, 1999–2004
(Million Barrels of 42 U.S. Gallons)

Size Class	1999	2000	2001	2002	2003	2004	2003–2004 Volume and Percent Change	1999–2004 Volume and Percent Change	2004 Average Reserves per Operator
Class 1-10	11,121	12,367	13,590	13,346	13,355	12,454	-901	1,333	1,245.392
Percent of Total	51.1%	56.1%	60.5%	58.9%	61.0%	58.3%	-6.7%	12.0%	
Class 11-20	2,585	3,172	2,901	2,817	1,907	2,053	145	-532	205.270
Percent of Total	11.9%	14.4%	12.9%	12.4%	8.7%	9.6%	7.6%	-20.6%	
Class 21-100	4,338	2,505	2,856	3,230	3,483	3,711	228	-627	46.386
Percent of Total	19.9%	11.4%	12.7%	14.2%	15.9%	17.4%	6.5%	-14.5%	
Class 101-500	2,379	2,286	1,794	1,817	1,705	1,761	55	-618	4.402
Percent of Total	10.9%	10.4%	8.0%	8.0%	7.8%	8.2%	3.2%	-26.0%	
Class Other (20,170)	1,342	1,716	1,305	1,468	1,440	1,393	-47	51	0.069
Percent of Total	6.2%	7.8%	5.8%	6.5%	6.6%	6.5%	-3.3%	3.8%	
Category I (164)	18,952	19,421	20,325	20,213	19,499	19,055	-443	103	116.192
Percent of Total	87.1%	88.1%	90.6%	89.1%	89.1%	89.2%	-2.3%	0.5%	
Category II (532)	1,521	873	794	992	937	906	-31	-615	1.703
Percent of Total	7.0%	4.0%	3.5%	4.4%	4.3%	4.2%	-3.3%	-40.4%	
Category III (19,974)	1,293	1,751	1,326	1,472	1,456	1,410	-46	117	0.071
Percent of Total	5.9%	7.9%	5.9%	6.5%	6.6%	6.6%	-3.1%	9.0%	
Total Published	21,765	22,045	22,446	22,677	21,891	21,371	-520	-394	1.034
Percent of Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	-2.4%	-1.8%	

R = Revised

Note: There were 19,974 active Category III operators in the 2004 sample frame. The reserves and production of Category III operators were estimated from an adjusted sample of 606 Category III operators (Table E2). The "other" size class represents 20,170 operators in the 2004 frame (20,670 active operators minus the 500 largest operators).

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

Table A4. Crude Oil Production by Operator Production Size Class, 1999–2004
(Million Barrels of 42 U.S. Gallons)

Size Class	1999	2000	2001	2002	2003	2004	2003–2004 Volume and Percent Change	1999–2004 Volume and Percent Change	2004 Average Production per Operator
Class 1-10	974	961	1,061	1,037	1,047	986	-61	12	98.641
Percent of Total	49.9%	51.1%	55.4%	55.3%	55.8%	54.2%	-5.8%	1.3%	
Class 11-20	241	304	240	233	205	180	-25	-61	18.025
Percent of Total	12.3%	16.2%	12.5%	12.4%	10.9%	9.9%	-12.0%	-25.2%	
Class 21-100	350	214	233	240	272	303	31	-47	3.783
Percent of Total	17.9%	11.4%	12.2%	12.8%	14.5%	16.6%	11.3%	-13.5%	
Class 101-500	208	211	195	181	178	172	-6	-36	0.430
Percent of Total	10.7%	11.2%	10.2%	9.7%	9.5%	9.5%	-3.5%	-17.3%	
Class Other (20,170)	179	190	186	184	175	178	3	-1	0.009
Percent of Total	9.2%	10.1%	9.7%	9.8%	9.3%	9.8%	1.7%	-0.8%	
Category I (164)	1,617	1,572	1,612	1,573	1,574	1,534	-40	-83	9.353
Percent of Total	82.8%	83.6%	84.2%	83.9%	83.9%	84.3%	-2.6%	-5.1%	
Category II (532)	160	111	112	115	124	105	-19	-55	0.198
Percent of Total	8.2%	5.9%	5.8%	6.1%	6.6%	5.8%	-15.1%	-34.1%	
Category III (19,974)	175	197	191	187	179	180	1	5	0.009
Percent of Total	9.0%	10.5%	10.0%	10.0%	9.5%	9.9%	0.6%	2.6%	
Total Published	1,952	1,880	1,915	1,875	1,877	1,819	-58	-133	0.088
Percent of Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	-3.1%	-6.8%	

R = Revised

Note: There were 19,974 active Category III operators in the 2004 sample frame. The reserves and production of Category III operators were estimated from an adjusted sample of 606 Category III operators (Table E2). The "other" size class represents 20,170 operators in the 2004 frame (20,670 active operators minus the 500 largest operators).

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

Table A5. Operator Field Count by Operator Production Size Class, 1999–2004

Size Class	1999	2000	2001	2002	2003	2004	2003–2004 Number and Percent Change	1999–2004 Number and Percent Change	2004 Average Number of Fields per Operator
Class 1-10	2,559	3,444	3,794	3,596	3,689	3,409	-280	850	340.900
Percent of Total	10.0%	13.0%	14.0%	12.9%	13.2%	12.4%	-7.6%	33.2%	
Class 11-20	1,514	1,923	2,212	2,392	2,492	3,352	860	1,838	335.200
Percent of Total	5.9%	7.2%	8.2%	8.6%	8.9%	12.2%	34.5%	121.4%	
Class 21-100	8,180	7,084	7,195	7,947	8,168	8,071	-97	-109	100.888
Percent of Total	32.0%	26.7%	26.5%	28.4%	29.3%	29.4%	-1.2%	-1.3%	
Class 101-500	12,344	12,580	12,435	12,661	11,859	10,698	-1,161	-1,646	26.745
Percent of Total	48.2%	47.4%	45.9%	45.3%	42.5%	39.0%	-9.8%	-13.3%	
Rest	1,287	1,529	1,480	1,349	1,709	1,929	220	642	9.842
Percent of Total	5.0%	5.8%	5.5%	4.8%	6.1%	7.0%	12.9%	49.9%	
Category I	15,120	16,174	16,196	17,049	16,760	17,368	608	2,248	105.902
Percent of Total	59.1%	60.9%	59.7%	61.0%	60.0%	63.3%	3.6%	14.9%	
Category II	10,467	10,146	10,764	10,473	10,688	9,486	-1,202	-981	17.831
Percent of Total	40.9%	38.2%	39.7%	37.5%	38.3%	34.5%	-11.2%	-9.4%	
Total	25,587	26,560	27,116	27,945	27,917	27,459	-458	1,872	39.453
Percent of Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	-1.6%	7.3%	

Note: Includes only data from Category I and Category II operators. In 2004 there were 164 Category I operators and 532 Category II operators. The "rest" size class had 196 operators in 2004.

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

Table A6. Top 50 U.S. Operators Ranked by Reported 2004 Operated Production Data

Rank	Company Name	Crude Oil Production (thousand barrels/day)	Rank	Company Name	Total Natural Gas Production (million cubic feet/day)
1	BP PLC	827	1	BP PLC	4,252
2	CHEVRONTEXACO INC	493	2	EXXONMOBIL CORP	2,513
3	SHELL EXPLORATION & PRODUCTION CO	413	3	DEVON ENERGY CORPORATION	2,244
4	CONOCOPHILLIPS CO	322	4	CHEVRONTEXACO INC	2,128
5	OCCIDENTAL PETROLEUM CORP	261	5	CONOCOPHILLIPS CO	2,110
6	AERA ENERGY LLC	216	6	BURLINGTON RESOURCES OIL & GAS CO	1,928
7	EXXONMOBIL CORP	213	7	SHELL EXPLORATION & PRODUCTION CO	1,894
8	KERR-MCGEE CORP	152	8	ANADARKO PETROLEUM CORP	1,628
9	APACHE CORP	95	9	KERR-MCGEE CORP	1,459
10	ANADARKO PETROLEUM CORP	88	10	CHESAPEAKE OPERATING INC	1,368
Top 10 Volume Subtotal		3,080	Top 10 Volume Subtotal		21,524
Top 10 Percentage of U.S. Total		56%	Top 10 Percentage of U.S. Total		39%
11	AMERADA HESS CORP	83	11	ENCANA OIL & GAS INC	1,328
12	DEVON ENERGY CORPORATION	74	12	APACHE CORP	1,276
13	PLAINS EXPLOR & PROD CO	66	13	XTO ENERGY INC	1,219
14	MARATHON OIL CO	59	14	DOMINION RESOURCES INC	1,099
15	UNOCAL CORP	54	15	EL PASO ENERGY	1,010
16	KINDER MORGAN PROD CO INC	48	16	E O G RESOURCES INC	936
17	BURLINGTON RESOURCES OIL & GAS CO	37	17	UNOCAL CORP	843
18	MERIT ENERGY CO	36	18	MARATHON OIL CO	808
19	POGO PRODUCING CO	33	19	NEWFIELD EXPLORATION CO	745
20	CITY OF LONG BEACH	32	20	PIONEER NATURAL RESOURCES USA INC	698
Top 20 Volume Subtotal		3,602	Top 20 Volume Subtotal		31,486
Top 20 Percentage of U.S. Total		66%	Top 20 Percentage of U.S. Total		58%
21	XTO ENERGY INC	31	21	OCCIDENTAL PETROLEUM CORP	656
22	E O G RESOURCES INC	30	22	WILLIAMS ENERGY INC	577
23	CITATION OIL & GAS CORP	28	23	SAMSON RESOURCES CO	504
24	PIONEER NATURAL RESOURCES USA INC	28	24	QUESTAR CORP	471
25	DENBURY RESOURCES INC	27	25	AMERADA HESS CORP	346
26	NEXEN PETROLEUM USA INC	26	26	TOTALFINAELF SA	330
27	CHESAPEAKE OPERATING INC	26	27	HOUSTON EXPLORATION	324
28	MURPHY OIL CORP	26	28	MERIT ENERGY CO	290
29	DOMINION RESOURCES INC	23	29	NOBLE ENERGY INC	288
30	HILCORP ENERGY CO	22	30	YATES PETROLEUM CORP	280
31	NEWFIELD EXPLORATION CO	22	31	POGO PRODUCING CO	275
32	ENCORE OPERATING LP	22	32	ENERGEN RESOURCES CORP	273
33	BERRY PETROLEUM CO	21	33	PATINA OIL & GAS CORP	270
34	PATINA OIL & GAS CORP	21	34	CIMAREX ENERGY CO	257
35	FOREST OIL CORP	20	35	FOREST OIL CORP	253
36	ENI PETROLEUM CO INC	20	36	WALTER OIL & GAS CORP	248
37	NOBLE ENERGY INC	19	37	HUNT OIL CO	246
38	VINTAGE PETROLEUM INC	18	38	EQUITABLE RESOURCES INC	246
39	ST MARY LAND & EXPLOR CO	17	39	CABOT OIL & GAS CORP	236
40	STONE ENERGY CORP	16	40	HILCORP ENERGY CO	211
41	EL PASO ENERGY	16	41	HUNT PETROLEUM CORPORATION	199
42	SWIFT ENERGY CO	15	42	KAISER FRANCIS OIL CO	188
43	BHP BILLITON	15	43	W & T OFFSHORE INC	172
44	TOTALFINAELF SA	14	44	RED WILLOW PRODUCTION CO	162
45	CONTINENTAL RESOURCES INC	14	45	STONE ENERGY CORP	160
46	NATIONAL FUEL GAS	13	46	ENERGY PARTNERS LTD	158
47	GRUY PETROLEUM MANAGEMENT CO	13	47	WESTERN GAS RESOURCES INC	156
48	ENERGEN RESOURCES CORP	13	48	C N X GAS CO LLC	156
49	ENDEAVOR ENERGY RESOURCES LP	12	49	FIDELITY EXPLORATION & PROD CO	151
50	WALTER OIL & GAS CORP	12	50	PEOPLES ENERGY CORP	150
Top 50 Volume Subtotal		4,202	Top 50 Volume Subtotal		39,719
Top 50 Percentage of U.S. Total		77%	Top 50 Percentage of U.S. Total		73%

Note: Crude oil production includes production of lease condensate. Total natural gas production is wet after lease separation.

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