

## **Operator Data by Size Class**



## Operator Data by Size Class

Appendix A provides a series of tables of the proved reserves and production by production size class for the years 1997 through 2002 for oil and gas well operators. The tables show the volumetric change and percent change from the previous year and from 1997. In addition they show the 2002 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 22,323 small operators. We estimated production and reserves for small operators for 2002 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.

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.

### Natural Gas

#### Proved Reserves

The wet natural gas proved reserves reported for 1997 through 2002 have changed from 175,721 billion cubic feet to 195,561 billion cubic feet (Table A1). These proved reserves are highly concentrated in the larger companies. In 2002, the top 20 operators (Class 1–10 and Class 11–20) producing companies had 58 percent of the proved reserves of natural gas. The next two size classes contain 80 and 400 companies and account for 26 and 10 percent of the U.S. natural gas proved reserves, respectively. The top 20 operators had an increase of 18 percent in their natural gas proved

reserves from 1997 to 2002. The rest of the operators in (Class 21–100, Class 101–500, and Class Other) had an increase of 2 percent in their reserves in the same period. In 2002, the top 20 operators’ natural gas reserves had no percentage change from 2001.

#### Production

Wet natural gas production has decreased from 20,642 billion cubic feet in 2001 to 20,248 billion cubic feet in 2002 (Table A2). In 2002, the top 20 producing companies had 59 percent of the production of wet natural gas. The next two size classes have 24 and 12 percent of the wet natural gas production, respectively. The top 20 operators had an increase of 13 percent in their wet natural gas production from 1997 to 2002. The rest of the operators had a decrease of 13 percent from 1997 to 2002. The top 20 operators’ wet natural gas production had a decrease of 2 percent in 2002 from 2001.

### 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 2002 had 71 percent of U.S. proved reserves of crude oil (Table A3), in contrast to wet natural gas where these same companies operated 58 percent of the total proved reserves.

U.S. proved reserves of crude oil increased 1 percent in 2002. The top 20 producing companies proved reserves of crude oil during 2002 decreased 2 percent. The top 20 class had an increase of 12 percent in their crude oil proved reserves from 1997 to 2002.

#### Production

Crude oil production reported for 1997 to 2002 has decreased from 2,138 million barrels to 1,875 million barrels (Table A4). The 20 largest oil and gas producing companies had 68 percent of U.S. production of crude oil in 2002. In 1997 they accounted for 61 percent of

production. This is in contrast to wet natural gas where these same companies produced only 58 percent of the total. U.S. production of crude oil declined by 12 percent from 1997 to 2002. The top 20 operators had a decline of 3 percent in their oil production during the same period. U.S. production of crude oil decreased by 2 percent from 2001 to 2002, the top 20 operators production also decreased by 2 percent.

## **Fields**

The number of fields in which Category I and Category II operators were active increased during the 1997–2002 period (Table A5). From 1997-2002, the number of fields in which the top 20 operators were active increased by 1,165 fields (24 percent) while in 2002 the number decreased by 18 fields from 2001.

**Table A1. Natural Gas Proved Reserves, Wet After Lease Separation, by Operator Production Size Class, 1997–2002**  
(Billion Cubic Feet at 14.73 psia and 60° Fahrenheit)

Size Class	1997	1998	1999	2000	2001	2002	2001–2002 Volume and Percent Change	1997–2002 Volume and Percent Change	2002 Average Reserves per Operator
Class 1-10	68,876	64,336	64,320	81,437	88,936	88,100	-837	19,224	8,809.961
Percent of Total	39.2%	37.3%	36.5%	43.7%	46.4%	45.0%	-0.9%	27.9%	
Class 11-20	27,705	28,338	24,925	22,590	24,588	25,938	1,350	-1,767	2,593.823
Percent of Total	15.8%	16.4%	14.1%	12.1%	12.8%	13.3%	5.5%	-6.4%	
Class 21-100	45,593	47,009	52,160	48,832	50,055	50,633	577	5,040	632.908
Percent of Total	25.9%	27.3%	29.6%	26.2%	26.1%	25.9%	1.2%	11.1%	
Class 101-500	23,338	24,471	25,967	22,620	19,046	19,723	677	-3,615	49.308
Percent of Total	13.3%	14.2%	14.7%	12.1%	9.9%	10.1%	3.6%	-15.5%	
Class Other (22,019)	10,209	8,289	8,289	11,030	9,118	11,167	2,049	958	0.500
Percent of Total	5.8%	4.8%	5.0%	5.9%	4.8%	5.7%	22.5%	9.4%	
Category I (179)	147,491	146,458	146,458	162,144	169,056	173,325	4,270	25,834	984.803
Percent of Total	83.9%	84.9%	82.8%	86.9%	88.2%	88.6%	2.5%	17.5%	
Category II (430)	17,764	18,033	18,033	13,123	13,346	11,051	-2,294	-6,713	23.024
Percent of Total	10.1%	10.5%	12.5%	7.0%	7.0%	5.7%	-17.2%	-37.8%	
Category III (22,519)	10,467	7,952	7,952	R11,243	9,342	11,184	1,843	717	0.505
Percent of Total	6.0%	4.6%	4.7%	R6.0%	4.9%	5.7%	19.7%	6.9%	
<b>Total Published</b>	<b>175,721</b>	<b>172,443</b>	<b>176,159</b>	<b>186,510</b>	<b>191,743</b>	<b>195,561</b>	<b>3,818</b>	<b>19,840</b>	<b>8.569</b>
<b>Percent of Total</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>2.0%</b>	<b>11.3%</b>	

R = Revised

Note: There were 22,167 active Category III operators in the 2002 sample frame. The reserves and production of Category III operators were estimated from an adjusted sample of 861 Category III operators (Table E2). The "other" size class represents 22,323 operators in the 2002 frame (22,823 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, 1997–2002**  
(Billion Cubic Feet at 14.73 psia and 60° Fahrenheit)

Size Class	1997	1998	1999	2000	2001	2002	2001–2002 Volume and Percent Change	1997–2002 Volume and Percent Change	2002 Average Production per Operator
Class 1-10	7,178	6,954	6,881	8,495	9,019	8,996	-24	1,818	899.569
Percent of Total	35.7%	35.4%	34.7%	42.1%	43.7%	44.4%	-0.3%	25.3%	
Class 11-20	3,286	3,317	3,560	2,886	3,064	2,854	-210	-432	285.386
Percent of Total	15.8%	16.4%	14.1%	14.3%	14.8%	14.1%	-6.9%	-13.2%	
Class 21-100	5,729	5,595	5,523	4,965	4,949	4,763	-186	-966	59.537
Percent of Total	25.9%	27.3%	29.6%	24.6%	24.0%	23.5%	-3.8%	-16.9%	
Class 101-500	2,665	2,721	2,793	2,780	2,609	2,475	-134	-190	6.187
Percent of Total	13.3%	14.2%	14.7%	13.8%	12.6%	12.2%	-5.1%	-7.1%	
Class Other (22,019)	1,276	1,035	1,099	1,038	1,000	1,161	161	-115	0.052
Percent of Total	5.8%	4.8%	5.0%	5.1%	4.8%	5.7%	16.1%	-9.0%	
Category I (179)	16,897	16,619	16,248	17,096	17,672	17,335	-337	438	98.493
Percent of Total	83.9%	84.9%	82.8%	84.8%	85.6%	85.6%	-1.9%	2.6%	
Category II (430)	1,979	2,019	2,556	1,921	1,932	1,738	-194	-241	3.620
Percent of Total	10.1%	10.5%	12.5%	9.5%	9.4%	8.6%	-10.1%	-12.2%	
Category III (22,519)	1,258	984	1,052	R1,147	1,038	1,176	137	-82	0.053
Percent of Total	6.0%	4.6%	4.7%	R5.7%	5.0%	5.8%	13.2%	-6.6%	
<b>Total Published</b>	<b>20,134</b>	<b>19,622</b>	<b>19,856</b>	<b>20,164</b>	<b>20,642</b>	<b>20,248</b>	<b>-394</b>	<b>114</b>	<b>0.887</b>
<b>Percent of Total</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>-1.9%</b>	<b>0.6%</b>	

R = Revised

Note: There were 22,167 active Category III operators in the 2002 sample frame. The reserves and production of Category III operators were estimated from an adjusted sample of 861 Category III operators (Table E2). The "other" size class represents 22,323 operators in the 2002 frame (22,823 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, 1997–2002**  
(Million Barrels of 42 U.S. Gallons)

Size Class	1997	1998	1999	2000	2001	2002	2001–2002 Volume and Percent Change	1997–2002 Volume and Percent Change	2002 Average Reserves per Operator
Class 1-10	11,434	11,501	11,121	12,367	13,590	13,346	-245	1,912	1,334.553
Percent of Total	50.7%	54.7%	51.1%	56.1%	60.5%	58.9%	-1.8%	16.7%	
Class 11-20	2,977	2,894	2,585	3,172	2,901	2,817	-85	-160	281.676
Percent of Total	13.2%	13.8%	11.9%	14.4%	12.9%	12.4%	-2.9%	-5.4%	
Class 21-100	4,384	3,677	4,338	2,505	2,856	3,230	375	-1,154	40.381
Percent of Total	19.4%	17.5%	19.9%	11.4%	12.7%	14.2%	13.1%	-26.3%	
Class 101-500	2,111	1,754	2,379	2,286	1,794	1,817	23	-294	4.541
Percent of Total	9.4%	8.3%	10.9%	10.4%	8.0%	8.0%	1.3%	-13.9%	
Class Other (22,019)	1,640	1,208	1,342	1,716	1,305	1,468	163	-172	0.066
Percent of Total	7.3%	5.7%	6.2%	7.8%	5.8%	6.5%	12.5%	-10.5%	
Category I (179)	19,461	18,819	18,952	19,421	20,325	20,213	-113	752	114.845
Percent of Total	86.3%	89.5%	87.1%	88.1%	90.6%	89.1%	-0.6%	3.9%	
Category II (430)	1,400	1,018	1,521	873	794	992	198	-408	2.068
Percent of Total	6.2%	4.8%	7.0%	4.0%	3.5%	4.4%	24.9%	-29.1%	
Category III (22,519)	1,685	1,197	1,293	R1,751	1,326	1,472	146	-213	0.066
Percent of Total	7.5%	5.7%	5.9%	R7.9%	5.9%	6.5%	11.0%	-12.7%	
<b>Total Published</b>	<b>22,546</b>	<b>21,034</b>	<b>21,765</b>	<b>22,045</b>	<b>22,446</b>	<b>22,677</b>	<b>231</b>	<b>131</b>	<b>0.994</b>
<b>Percent of Total</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>1.0%</b>	<b>0.6%</b>	

R = Revised

Note: There were 22,167 active Category III operators in the 2002 sample frame. The reserves and production of Category III operators were estimated from an adjusted sample of 861 Category III operators (Table E2). The "other" size class represents 22,323 operators in the 2002 frame (22,823 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, 1997–2002**  
(Million Barrels of 42 U.S. Gallons)

Size Class	1997	1998	1999	2000	2001	2002	2001–2002 Volume and Percent Change	1997–2002 Volume and Percent Change	2002 Average Production per Operator
Class 1-10	1,047	1,025	974	961	1,061	1,037	-24	-10	103.677
Percent of Total	49.0%	51.5%	49.9%	51.1%	55.4%	55.3%	-2.2%	-1.0%	
Class 11-20	262	255	241	304	240	233	-7	-29	23.329
Percent of Total	12.3%	12.8%	12.3%	16.2%	12.5%	12.4%	-2.9%	-11.0%	
Class 21-100	373	342	350	214	233	240	7	-133	3.001
Percent of Total	17.4%	17.2%	17.9%	11.4%	12.2%	12.8%	3.1%	-35.6%	
Class 101-500	237	206	208	211	195	181	-14	-56	0.453
Percent of Total	11.1%	10.3%	10.7%	11.2%	10.2%	9.7%	-7.3%	-23.6%	
Class Other (22,019)	219	163	179	190	186	184	-2	-35	0.008
Percent of Total	10.2%	8.2%	9.2%	10.1%	9.7%	9.8%	-1.2%	-16.1%	
Category I (179)	1,760	1,714	1,617	1,572	1,612	1,573	-39	-187	8.938
Percent of Total	82.3%	86.1%	82.8%	83.6%	84.2%	83.9%	-2.4%	-10.6%	
Category II (430)	157	118	160	111	112	115	3	-42	0.240
Percent of Total	7.3%	5.9%	8.2%	5.9%	5.8%	6.1%	3.1%	-26.6%	
Category III (22,519)	221	159	175	R197	191	187	-4	-34	0.008
Percent of Total	10.3%	8.0%	9.0%	R10.5%	10.0%	10.0%	-2.2%	-15.5%	
<b>Total Published</b>	<b>2,138</b>	<b>1,991</b>	<b>1,952</b>	<b>1,880</b>	<b>1,915</b>	<b>1,875</b>	<b>-40</b>	<b>-263</b>	<b>0.082</b>
<b>Percent of Total</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>-2.1%</b>	<b>-12.3%</b>	

R = Revised

Note: There were 22,167 active Category III operators in the 2002 sample frame. The reserves and production of Category III operators were estimated from an adjusted sample of 861 Category III operators (Table E2). The "other" size class represents 22,323 operators in the 2002 frame (22,823 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, 1997–2002**

Size Class	1997	1998	1999	2000	2001	2002	2001–2002 Number and Percent Change	1997–2002 Number and Percent Change	2002 Average Number of Fields per Operator
Class 1-10	2,566	2,475	2,559	3,444	3,794	3,596	-198	1,030	359.600
Percent of Total	10.4%	9.5%	10.0%	13.0%	14.0%	12.9%	-5.2%	40.1%	
Class 11-20	2,257	1,822	1,514	1,923	2,212	2,392	180	135	239.200
Percent of Total	9.1%	7.0%	5.9%	7.2%	8.2%	8.6%	8.1%	6.0%	
Class 21-100	7,159	7,526	8,180	7,084	7,195	7,947	752	788	99.338
Percent of Total	28.9%	29.0%	32.0%	26.7%	26.5%	28.4%	10.5%	11.0%	
Class 101-500	12,878	12,817	12,344	12,580	12,435	12,661	226	-217	31.653
Percent of Total	52.0%	49.4%	48.2%	47.4%	45.9%	45.3%	1.8%	-1.7%	
Rest	1,332	1,524	1,287	1,529	1,480	1,349	-131	17	8.647
Percent of Total	5.4%	5.9%	5.0%	5.8%	5.5%	4.8%	-8.9%	1.3%	
Category I	15,232	15,666	15,120	16,174	16,196	17,049	853	1,817	96.869
Percent of Total	61.5%	60.4%	59.1%	60.9%	59.7%	61.0%	5.3%	11.9%	
Category II	R9,530	10,271	10,467	10,146	10,764	10,473	-291	943	21.819
Percent of Total	38.5%	39.6%	40.9%	38.2%	39.7%	37.5%	-2.7%	9.9%	
<b>Total</b>	<b>R24,762</b>	<b>25,937</b>	<b>25,587</b>	<b>26,560</b>	<b>27,116</b>	<b>27,945</b>	<b>829</b>	<b>3,183</b>	<b>42.599</b>
<b>Percent of Total</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.00%</b>	<b>3.1%</b>	<b>12.9%</b>	

R = Revised

Note: Includes only data from Category I and Category II operators. In 2002, there were 176 Category I operators and 480 Category II operators. The "rest" size class had 156 operators in 2002.

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