

Advance Summary

U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves

2002 Annual Report

October 2003

Energy Information Administration

Office of Oil and Gas

U.S. Department of Energy

Washington, DC 20585

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Advance Summary: U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves 2002 Annual Report

Proved reserves of natural gas and crude oil have increased for the fourth year in a row. In fact, natural gas proved reserves have increased in eight of the past nine years.

U.S. crude oil proved reserves increased by 1 percent in 2002. Reserves additions were 112 percent of production. Ninety-seven percent of all new field discoveries of crude oil reported in 2002 were in the Gulf of Mexico Federal Offshore.

As of December 31, 2002 proved reserves were:

Crude Oil (million barrels)	
2001	22,446
2002	22,677
Increase	1.0%
Dry Natural Gas (billion cubic feet)	
2001	183,460
2002	186,946
Increase	1.9%
Natural Gas Liquids (million barrels)	
2001	7,993
2002	7,994
Increase	0.0%

U.S. natural gas reserves increased by 2 percent in 2002. Reserves additions were 118 percent of production. However, gas production declined 2 percent in 2002. Sharp production declines in the Gulf of Mexico were partially offset by large production increases in the Rocky Mountain States.

In 2002, the Rocky Mountain States and Texas had large gas reserves additions. These additions highlight a shift from conventional gas fields to unconventional gas fields, i.e., tight sands, shales, and coalbeds. Eleven of the top 20 natural gas fields of 2002 are located in the Rocky Mountain States. Significant reserves were added in the Powder River Basin coalbed methane fields and the Pinedale Field (deep and tight sand) in Wyoming, and the

Wattenberg Field (tight sand) and coalbed methane fields in Colorado. In Texas, significant reserves were added in the Newark East Field (Barnett Shale), the Nation's tenth largest natural gas field.

When gas reserves increase the natural gas liquids reserves usually do too, but natural gas liquids reserves remained level in 2002. That was because coalbed methane, which usually has no natural gas liquids content, accounted for a large portion of new gas reserves in 2002.

Proved reserves are the estimated quantities which geological and engineering data demonstrate with reasonable certainty to be recoverable in future years from known reservoirs under existing economic and operating conditions. Petroleum engineering and geological judgment are required in estimating proved reserves, therefore the results are not precise measurements. This report of 2002 U.S. proved reserves of crude oil, natural gas, and natural gas liquids is the 26th in an annual series prepared by the Energy Information Administration.

Crude Oil

Total discoveries are those reserves attributable to field extensions, new field discoveries, and new reservoir discoveries in old fields. They result from the drilling of exploratory wells. Total discoveries of crude oil were 946 million barrels in 2002, 7 percent less than the prior 10-year average and 63 percent less than 2001's discoveries of 2,565 million barrels. This is not surprising because 2001, which featured new proved reserves from bp's Thunder Horse Field, was an unusually successful year. Domestic field discoveries of that magnitude are no longer common.

The majority of crude oil total discoveries in 2002 were extensions, particularly in Texas, California, and the Gulf of Mexico Federal Offshore. The north slope of Alaska (normally a major contributor to total discoveries) had no significant impact on the Nation's total discoveries in 2002. Operators discovered 492 million barrels in extensions in 2002, 1 percent more than the prior 10-year average.

New field discoveries accounted for 300 million barrels of crude oil reserves additions. Almost all were in the Gulf of Mexico Federal Offshore (290 of 300 million). This was 15 percent less than the prior 10-year average.

New reservoir discoveries in old fields were 154 million barrels, 47 percent less than in 2001 and 10 percent less than the prior 10-year average.

Reserves additions are the sum of total discoveries, revisions and adjustments, and sales and acquisitions. In 2002 the net of revisions and adjustments (1,136 million barrels) contributed more to crude oil reserves additions than did total discoveries, accounting for 54 percent of total reserves additions.

The sales component of the crude oil reserves changes (804 million barrels) was less than the revision decreases component in 2002 and acquisitions (828 million barrels) were less than revision increases. The net of sales and acquisitions of crude oil proved reserves was 24 million barrels.

Other 2002 crude oil events of note:

- Exploratory and developmental oil completions were down 38 percent from 2001.
- The annual average domestic first purchase price for crude oil increased 3 percent from the 2001 level to \$22.51 per barrel.

Natural Gas

Total discoveries of dry gas reserves were 17,795 billion cubic feet in 2002. This was 36 percent more than the prior 10-year average but 22 percent less than in 2001. The majority of natural gas total discoveries in 2002 were from extensions of existing conventional and unconventional gas fields.

Field extensions were 14,769 billion cubic feet, 10 percent less than extensions in 2001 but 65 percent more than the prior 10-year average of 8,931 billion cubic feet.

New field discoveries were 1,332 billion cubic feet, 63 percent less than the volume discovered in 2001 and 24 percent less than the prior 10-year average.

New reservoir discoveries in old fields were 1,694 billion cubic feet, down 40 percent from 2001 and 31 percent less than the prior 10-year average.

Natural gas net revisions and adjustments were 4,664 billion cubic feet. The net of sales and acquisitions of dry natural gas proved reserves was 380 billion cubic feet.

Coalbed methane proved reserves and production continued to grow in 2002. Coalbed methane proved reserves were 18,491 billion cubic feet, an increase of 5 percent from 2001 and accounted for 10 percent of U.S. dry gas proved reserves. Coalbed methane production was 1,614 billion cubic feet, an increase of 3 percent from 2001 and accounted for 8 percent of U.S. dry gas production.

Other 2002 natural gas events of note:

- Exploratory gas well completions decreased 30 percent in 2002 and development well drilling was down 28 percent. Operators drilled 28 percent less wells for gas in 2002 than in 2001.
- Natural gas prices were down 27 percent in 2002 to an average of \$2.95 per thousand cubic feet at the wellhead, as compared to \$4.02 per thousand cubic feet in 2001. Prices did, however, steadily rise in the winter months of 2002 to a monthly average of \$3.84 per thousand cubic feet in December.
- U.S. gas production decreased by 2 percent in 2002. Two severe hurricanes, Isadore and Lilly, caused shut-ins of Gulf of Mexico production in September and October of 2002.

Natural Gas Liquids

U.S. natural gas liquids proved reserves remained level in 2002 (7,994 million barrels). Natural gas liquids reserves are the sum of natural gas plant liquids and lease condensate reserves.

Total proved reserves of liquid hydrocarbons (crude oil plus natural gas liquids) were 30,671 million barrels in 2002, a 0.8 percent increase from the 2001 level. Natural gas liquids represented 26 percent of total liquid hydrocarbon proved reserves in 2002.

Data

These estimates are based upon analysis of data from Form EIA-23, Annual Survey of Domestic Oil and Gas Reserves, filed by 1,577 operators of oil and gas wells, and Form EIA-64A, Annual Report of the Origin of Natural Gas Liquids Production, filed by operators of 527 active natural gas processing plants. The U.S. proved reserves estimates for crude oil and natural gas are associated with sampling errors of less than 1 percent.

Almost 97 percent of the total natural gas production estimate was reported on the EIA-23 survey, 3 percent came from State or commercial sources, and only 0.2 percent was imputed from sampling data. Over 94 percent of the total crude oil production data was reported on the EIA-23 survey, 5 percent came from State or commercial sources, and only 0.4 percent was imputed from sampling data.

Table 1. Total U.S. Proved Reserves of Crude Oil, Dry Natural Gas, and Natural Gas Liquids, 1992-2002

Year	Adjustments (1)	Net Revisions (2)	Revisions ^a and Adjustments (3)	Net of Sales and Acquisitions (4)	Extensions (5)	New Field Discoveries (6)	New Reservoir Discoveries in Old Fields (7)	Total ^b Discoveries (8)	Estimated Production (9)	Proved ^c Reserves 12/31 (10)	Change from Prior Year (11)
Crude Oil (million barrels of 42 U.S. gallons)											
1992	290	735	1,025	NA	391	8	85	484	2,446	23,745	-937
1993	271	495	766	NA	356	319	110	785	2,339	22,957	-788
1994	189	1,007	1,196	NA	397	64	111	572	2,268	22,457	-500
1995	122	1,028	1,150	NA	500	114	343	957	2,213	22,351	-106
1996	175	737	912	NA	543	243	141	927	2,173	22,017	-334
1997	520	914	1,434	NA	477	637	119	1,233	2,138	22,546	+529
1998	-638	518	-120	NA	327	152	120	599	1,991	21,034	-1,512
1999	139	1,819	1,958	NA	259	321	145	725	1,952	21,765	+731
2000	143	746	889	-20	766	276	249	1,291	1,880	22,045	+280
2001	-4	-158	-162	-87	866	1,407	292	2,565	1,915	22,446	+401
2002	416	720	1,136	24	492	300	154	946	1,875	22,677	+231
Dry Natural Gas (billion cubic feet, 14.73 psia, 60° Fahrenheit)											
1992	2,235	6,093	8,328	NA	4,675	649	1,724	7,048	17,423	165,015	-2,047
1993	972	5,349	6,321	NA	6,103	899	1,866	8,868	17,789	162,415	-2,600
1994	1,945	5,484	7,429	NA	6,941	1,894	3,480	12,315	18,322	163,837	+1,422
1995	580	7,734	8,314	NA	6,843	1,666	2,452	10,961	17,966	165,146	+1,309
1996	3,785	4,086	7,871	NA	7,757	1,451	3,110	12,318	18,861	166,474	+1,328
1997	-590	4,902	4,312	NA	10,585	2,681	2,382	15,648	19,211	167,223	+749
1998	-1,635	5,740	4,105	NA	8,197	1,074	2,162	11,433	18,720	164,041	-3,182
1999	982	10,504	11,486	NA	7,043	1,568	2,196	10,807	18,928	167,406	+3,365
2000	-891	6,962	6,071	4,031	14,787	1,983	2,368	19,138	19,219	177,427	+10,021
2001	2,742	-2,318	424	2,630	16,380	3,578	2,800	22,758	19,779	183,460	+6,033
2002	3,727	937	4,664	380	14,769	1,332	1,694	17,795	19,353	186,946	+3,486
Natural Gas Liquids (million barrels of 42 U.S. gallons)											
1992	225	261	486	NA	190	20	64	274	773	7,451	-13
1993	102	124	226	NA	245	24	64	333	788	7,222	-229
1994	43	197	240	NA	314	54	131	499	791	7,170	-52
1995	192	277	469	NA	432	52	67	551	791	7,399	+229
1996	474	175	649	NA	451	65	109	625	850	7,823	+424
1997	-15	289	274	NA	535	114	90	739	864	7,973	+150
1998	-361	208	-153	NA	383	66	88	537	833	7,524	-449
1999	99	727	826	NA	313	51	88	452	896	7,906	+382
2000	-83	459	376	145	645	92	102	839	921	8,345	+439
2001	-429	-132	-561	102	717	138	142	997	890	7,993	-352
2002	62	31	93	54	612	48	78	738	884	7,994	+1

^aRevisions and adjustments = Col. 1 + Col. 2.

^bTotal discoveries = Col. 5 + Col. 6 + Col. 7.

^cProved reserves = Col. 10 from prior year + Col. 3 + Col. 4 + Col. 8 - Col. 9.

NA=Not available.

Notes: Old means discovered in a prior year. New means discovered during the report year. The production estimates in this table are based on data reported on Form EIA-23, "Annual Survey of Domestic Oil and Gas Reserves" and Form EIA-64A, "Annual Report of the Origin of Natural Gas Liquids Production." They may differ from the official EIA production data for crude oil, natural gas, and natural gas liquids for 2002 contained in the *Petroleum Supply Annual 2002*, DOE/EIA-0340(02) and the *Natural Gas Annual 2002*, DOE/EIA-0131(02).

Sources: *U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves*, 1992 through 2002 annual reports, DOE/EIA-0216.

Table 2. Crude Oil Proved Reserves, Reserves Changes, and Production, 2002
(Million Barrels of 42 U.S. Gallons)

State and Subdivision	Published Proved Reserves 12/31/01	Changes in Reserves During 2002									Proved Reserves 12/31/02
		Adjustments (+,-)	Revision Increases (+)	Revision Decreases (-)	Sales (-)	Acquisitions (+)	Extensions (+)	New Field Discoveries (+)	New Reservoir Discoveries in Old Fields (+)	Estimated Production (-)	
Alaska	4,851	2	192	39	0	0	25	0	8	361	4,678
Lower 48 States	17,595	414	1,733	1,166	804	828	467	300	146	1,514	17,999
Alabama	42	3	8	2	1	0	1	0	5	5	51
Arkansas	43	11	9	5	4	2	0	0	0	7	49
California	3,627	18	223	85	6	25	88	0	0	257	3,633
Coastal Region Onshore	385	3	19	2	4	12	9	0	0	18	404
Los Angeles Basin Onshore	297	4	48	16	1	0	15	0	0	17	330
San Joaquin Basin Onshore	2,766	14	130	66	1	0	64	0	0	205	2,702
State Offshore	179	-3	26	1	0	13	0	0	0	17	197
Colorado	196	18	30	13	1	0	1	0	0	17	214
Florida	75	1	2	1	0	0	0	0	0	4	73
Illinois	92	22	17	15	0	0	0	0	0	9	107
Indiana	12	2	3	0	0	0	0	0	0	2	15
Kansas	216	44	37	40	4	3	11	2	0	32	237
Kentucky	17	-5	2	0	0	15	0	0	0	2	27
Louisiana	564	18	59	140	18	22	35	2	19	60	501
North	87	6	15	26	2	1	5	0	0	11	75
South Onshore	341	12	33	58	16	20	20	2	17	36	335
State Offshore	136	0	11	56	0	1	10	0	2	13	91
Michigan	46	11	13	6	2	3	2	0	0	6	61
Mississippi	167	12	23	14	40	44	3	1	1	18	179
Montana	260	0	22	9	13	14	27	5	0	18	288
Nebraska	15	5	3	2	0	0	0	0	0	3	18
New Mexico	715	16	80	75	31	38	27	0	4	64	710
East	703	16	79	72	30	35	27	0	4	63	699
West	12	0	1	3	1	3	0	0	0	1	11
North Dakota	328	-2	52	13	57	58	9	0	0	33	342
Ohio	46	19	11	2	3	0	1	0	0	5	67
Oklahoma	556	43	79	68	176	199	23	0	0	58	598
Pennsylvania	10	2	3	1	0	0	0	0	0	2	12
Texas	4,944	188	427	232	331	289	91	0	7	368	5,015
RRC District 1	46	7	13	9	13	12	1	0	0	7	50
RRC District 2 Onshore	48	3	8	6	2	5	4	0	1	7	54
RRC District 3 Onshore	195	22	37	22	7	4	16	0	1	28	218
RRC District 4 Onshore	32	2	5	7	4	3	2	0	0	5	28
RRC District 5	29	0	3	5	0	1	0	0	0	4	24
RRC District 6	200	27	19	22	10	1	3	0	0	20	198
RRC District 7B	91	31	10	9	36	5	1	0	0	11	82
RRC District 7C	188	15	23	13	30	6	4	0	0	16	177
RRC District 8	1,880	28	156	74	158	164	29	0	1	113	1,913
RRC District 8A	2,070	25	132	41	61	74	27	0	2	135	2,093
RRC District 9	104	17	13	14	10	14	3	0	1	15	113
RRC District 10	55	11	7	9	0	0	1	0	0	6	59
State Offshore	6	0	1	1	0	0	0	0	1	1	6
Utah	271	-18	12	16	0	0	4	0	0	12	241
West Virginia	8	2	4	0	0	0	0	0	0	1	13
Wyoming	489	5	92	22	93	81	18	0	0	46	524
Federal Offshore	4,835	3	521	403	24	35	125	290	110	483	5,009
Pacific (California)	547	1	24	8	0	0	32	0	0	31	565
Gulf of Mexico (Louisiana)	3,877	-2	401	264	23	32	92	260	110	395	4,088
Gulf of Mexico (Texas)	411	4	96	131	1	3	1	30	0	57	356
Miscellaneous ^a	21	-4	1	2	0	0	1	0	0	2	15
U.S. Total	22,446	416	1,925	1,205	804	828	492	300	154	1,875	22,677

^aIncludes Arizona, Missouri, Nevada, New York, South Dakota, Tennessee, and Virginia.

Note: The production estimates in this table are based on data reported on Form EIA-23, "Annual Survey of Domestic Oil and Gas Reserves." They may differ from the official Energy Information Administration production data for crude oil for 2002 contained in the *Petroleum Supply Annual 2002*, DOE/EIA-0340(02).

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

Table 3. Dry Natural Gas Proved Reserves, Reserves Changes, and Production, 2002
(Billion Cubic Feet at 14.73 psia and 60° Fahrenheit)

State and Subdivision	Published Proved Reserves 12/31/01	Changes in Reserves During 2002									Proved Reserves 12/31/02
		Adjustments (+,-)	Revision Increases (+)	Revision Decreases (-)	Sales (-)	Acquisitions (+)	Extensions (+)	New Field Discoveries (+)	New Reservoir Discoveries in Old Fields (+)	Estimated Production (-)	
Alaska	8,800	35	141	118	13	13	62	0	8	460	8,468
Lower 48 States	174,660	3,692	20,114	19,200	10,153	10,533	14,707	1,332	1,686	18,893	178,478
Alabama	3,915	72	130	155	6	0	289	0	4	365	3,884
Arkansas	1,616	27	114	107	66	80	111	24	8	157	1,650
California	2,681	29	202	127	49	48	93	0	5	291	2,591
Coastal Region Onshore	177	2	21	4	3	5	3	0	0	11	190
Los Angeles Basin Onshore	187	0	24	6	0	0	11	0	0	9	207
San Joaquin Basin Onshore	2,232	29	146	114	46	35	79	0	5	264	2,102
State Offshore	85	-2	11	3	0	8	0	0	0	7	92
Colorado	12,527	202	2,029	962	1,059	891	1,222	1	1	964	13,888
Florida	84	9	5	3	0	0	0	0	0	4	91
Kansas	5,101	210	436	350	43	22	71	5	2	471	4,983
Kentucky	1,860	-24	377	383	2	66	92	0	0	79	1,907
Louisiana	9,811	72	1,206	1,853	594	686	647	68	255	1,338	8,960
North	3,881	90	587	293	229	254	317	9	24	395	4,245
South Onshore	5,185	1	558	1,278	362	416	288	49	188	821	4,224
State Offshore	745	-19	61	282	3	16	42	10	43	122	491
Michigan	2,976	82	383	276	35	71	287	8	0	242	3,254
Mississippi	661	81	89	75	29	33	54	1	27	98	744
Montana	898	58	40	109	10	6	96	4	0	77	906
New Mexico	17,414	199	2,262	2,239	1,029	1,052	1,161	6	18	1,524	17,320
East	3,518	98	1,271	1,047	144	159	279	6	18	526	3,632
West	13,896	101	991	1,192	885	893	882	0	0	998	13,688
New York	318	-23	63	22	23	21	13	3	0	35	315
North Dakota	443	18	79	20	46	42	8	0	0	53	471
Ohio	970	148	186	139	19	2	53	2	1	87	1,117
Oklahoma	13,558	904	2,159	1,513	767	845	1,186	14	18	1,518	14,886
Pennsylvania	1,775	206	330	151	5	6	170	0	18	133	2,216
Texas	43,527	765	4,734	4,904	3,889	4,249	4,404	84	365	5,038	44,297
RRC District 1	1,018	28	91	47	242	264	31	0	0	98	1,045
RRC District 2 Onshore	1,801	21	222	245	124	139	203	2	51	288	1,782
RRC District 3 Onshore	3,770	43	460	567	493	449	462	6	42	588	3,584
RRC District 4 Onshore	9,956	91	1,218	1,655	1,389	1,319	1,159	53	115	1,398	9,469
RRC District 5	4,231	57	539	785	374	467	800	5	39	377	4,602
RRC District 6	6,128	148	342	342	289	289	566	0	38	624	6,256
RRC District 7B	252	147	54	42	108	15	0	0	1	59	260
RRC District 7C	3,320	-25	391	224	388	548	399	0	8	327	3,702
RRC District 8	5,255	86	745	548	209	206	326	2	22	524	5,361
RRC District 8A	1,085	46	99	77	17	26	15	0	0	93	1,084
RRC District 9	2,289	231	167	43	51	229	312	1	0	258	2,877
RRC District 10	3,955	-106	365	262	203	294	129	2	1	337	3,838
State Offshore	467	-2	41	67	2	4	2	13	48	67	437
Utah	4,579	13	207	490	978	720	368	0	2	286	4,135
Virginia	1,752	1	127	166	0	0	34	0	0	75	1,673
West Virginia	2,678	423	445	250	1	0	255	0	4	194	3,360
Wyoming	18,398	164	1,295	1,161	772	850	3,069	15	57	1,388	20,527
Federal Offshore ^a	27,036	53	3,210	3,744	731	839	1,012	1,097	901	4,469	25,204
Pacific (California)	540	-1	35	23	0	0	10	0	0	46	515
Gulf of Mexico (Louisiana) ^a	19,721	26	1,843	2,343	415	543	864	889	799	3,427	18,500
Gulf of Mexico (Texas)	6,775	28	1,332	1,378	316	296	138	208	102	996	6,189
Miscellaneous ^b	82	3	6	1	0	4	12	0	0	7	99
U.S. Total	183,460	3,727	20,255	19,318	10,166	10,546	14,769	1,332	1,694	19,353	186,946

^aIncludes Federal offshore Alabama.

^bIncludes Arizona, Illinois, Indiana, Maryland, Missouri, Nebraska, Nevada, Oregon, South Dakota, and Tennessee.

Note: The production estimates in this table are based on data reported on Form EIA-23, "Annual Survey of Domestic Oil and Gas Reserves," and Form EIA-64A, "Annual Report of the Origin of Natural Gas Liquids Production." They may differ from the official Energy Information Administration production data for natural gas for 2002 contained in the *Natural Gas Annual 2002*, DOE/EIA-0131(02).

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

Table 4. Natural Gas Proved Reserves, Reserves Changes, and Production, Wet After Lease Separation, 2002 (Billion Cubic Feet at 14.73 psia and 60° Fahrenheit)

State and Subdivision	Published Proved Reserves 12/31/01	Changes in Reserves During 2002									Proved Reserves 12/31/02
		Adjustments (+,-)	Revision Increases (+)	Revision Decreases (-)	Sales (-)	Acquisitions (+)	Extensions (+)	New Field Discoveries (+)	New Reservoir Discoveries in Old Fields (+)	Estimated Production (-)	
Alaska	8,901	1	142	119	13	13	62	0	8	462	8,533
Lower 48 States	182,844	4,003	21,098	20,083	10,652	11,080	15,406	1,374	1,744	19,786	187,028
Alabama	3,957	67	133	157	6	0	293	0	4	369	3,922
Arkansas	1,619	29	114	107	66	80	111	24	8	158	1,654
California	2,764	59	209	131	51	49	96	0	5	304	2,696
Coastal Region Onshore	185	2	21	4	3	5	3	0	0	12	197
Los Angeles Basin Onshore	195	2	25	5	0	0	11	0	0	10	218
San Joaquin Basin Onshore	2,299	58	152	119	48	36	82	0	5	275	2,190
State Offshore	85	-3	11	3	0	8	0	0	0	7	91
Colorado	12,949	202	2,096	994	1,094	921	1,263	1	1	997	14,348
Florida	96	9	5	3	0	0	0	0	0	5	102
Kansas	5,460	219	466	374	46	24	76	5	2	503	5,329
Kentucky	1,950	-25	395	402	2	69	96	1	0	83	1,999
Louisiana	10,041	115	1,236	1,918	610	706	664	71	265	1,380	9,190
North	3,927	78	593	295	231	256	320	9	24	398	4,283
South Onshore	5,342	53	580	1,329	376	433	300	51	196	855	4,395
State Offshore	772	-16	63	294	3	17	44	11	45	127	512
Michigan	3,032	79	390	281	36	72	293	8	0	246	3,311
Mississippi	663	81	89	76	28	33	55	1	27	99	746
Montana	907	57	41	110	10	6	97	4	0	78	914
New Mexico	18,559	203	2,449	2,415	1,092	1,118	1,239	6	20	1,634	18,453
East	3,919	75	1,404	1,157	159	176	308	6	20	581	4,011
West	14,640	128	1,045	1,258	933	942	931	0	0	1,053	14,442
New York	318	-23	63	22	23	21	13	3	0	35	315
North Dakota	495	18	88	22	51	46	9	0	0	59	524
Ohio	971	147	186	139	18	2	53	2	1	87	1,118
Oklahoma	14,365	938	2,285	1,601	811	894	1,255	15	19	1,606	15,753
Pennsylvania	1,782	206	331	151	5	6	171	0	18	133	2,225
Texas	46,465	995	5,075	5,198	4,134	4,532	4,672	88	381	5,385	47,491
RRC District 1	1,067	25	96	48	252	276	33	0	0	103	1,094
RRC District 2 Onshore	1,863	48	232	257	131	146	212	3	53	302	1,867
RRC District 3 Onshore	3,944	129	491	606	526	480	492	6	44	628	3,826
RRC District 4 Onshore	10,346	116	1,268	1,724	1,446	1,374	1,207	56	120	1,456	9,861
RRC District 5	4,289	47	545	793	378	472	809	5	39	382	4,653
RRC District 6	6,428	154	359	359	302	303	593	0	40	655	6,561
RRC District 7B	291	161	61	48	123	17	0	0	1	66	294
RRC District 7C	3,757	-48	440	252	436	617	448	0	9	368	4,167
RRC District 8	6,007	27	841	619	237	232	369	2	26	592	6,056
RRC District 8A	1,190	28	106	82	19	28	16	0	0	100	1,167
RRC District 9	2,552	262	186	48	56	255	347	1	0	289	3,210
RRC District 10	4,263	49	409	294	226	328	144	2	1	377	4,299
State Offshore	468	-3	41	68	2	4	2	13	48	67	436
Utah	4,753	-6	214	507	1,011	745	380	0	2	296	4,274
Virginia	1,752	1	127	166	0	0	34	0	0	75	1,673
West Virginia	2,825	404	463	260	1	0	265	0	4	202	3,498
Wyoming	19,399	71	1,358	1,217	810	892	3,218	16	60	1,456	21,531
Federal Offshore ^a	27,639	154	3,280	3,831	747	860	1,041	1,129	927	4,590	25,862
Pacific (California)	540	-1	35	23	0	0	10	0	0	46	515
Gulf of Mexico (Louisiana) ^a	20,289	110	1,904	2,420	428	561	893	919	825	3,540	19,113
Gulf of Mexico (Texas)	6,810	45	1,341	1,388	319	299	138	210	102	1,004	6,234
Miscellaneous ^b	83	3	5	1	0	4	12	0	0	6	100
U.S. Total	191,745	4,004	21,240	20,202	10,665	11,093	15,468	1,374	1,752	20,248	195,561

^aIncludes Federal offshore Alabama.

^bIncludes Arizona, Illinois, Indiana, Maryland, Missouri, Nebraska, Nevada, Oregon, South Dakota, and Tennessee.

Note: The production estimates in this table are based on data reported on Form EIA-23, "Annual Survey of Domestic Oil and Gas Reserves." They may differ from the official Energy Information Administration production data for natural gas for 2002 contained in the *Natural Gas Annual 2002*, DOE/EIA-0131(02).

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

Table 5. Nonassociated Natural Gas Proved Reserves, Reserves Changes, and Production, Wet After Lease Separation, 2002 (Billion Cubic Feet at 14.73 psia and 60° Fahrenheit)

State and Subdivision	Published Proved Reserves 12/31/01	Changes in Reserves During 2002									Proved Reserves 12/31/02
		Adjustments (+,-)	Revision Increases (+)	Revision Decreases (-)	Sales (-)	Acquisitions (+)	Extensions (+)	New Field Discoveries (+)	New Reservoir Discoveries in Old Fields (+)	Estimated Production (-)	
Alaska	2,309	1	58	77	13	13	62	0	4	200	2,157
Lower 48 States	159,612	3,504	17,595	17,488	9,588	10,172	14,554	1,145	1,417	17,060	163,863
Alabama	3,931	63	126	156	1	0	291	0	2	365	3,891
Arkansas	1,589	25	104	106	64	78	111	24	8	153	1,616
California	842	32	64	58	47	36	10	0	5	88	796
Coastal Region Onshore	0	0	0	0	0	0	0	0	0	0	0
Los Angeles Basin Onshore	1	-1	0	0	0	0	0	0	0	0	0
San Joaquin Basin Onshore	836	34	61	58	47	36	10	0	5	87	790
State Offshore	5	-1	3	0	0	0	0	0	0	1	6
Colorado	11,924	213	1,929	986	1,091	921	1,254	0	1	914	13,251
Florida	0	0	0	0	0	0	0	0	0	0	0
Kansas	5,355	219	452	327	45	23	75	5	1	495	5,263
Kentucky	1,925	-25	395	402	2	69	96	1	0	83	1,974
Louisiana	9,245	139	1,113	1,723	591	669	627	69	255	1,283	8,520
North	3,759	89	564	267	228	247	304	9	24	377	4,124
South Onshore	4,859	53	503	1,216	360	405	285	49	187	797	3,968
State Offshore	627	-3	46	240	3	17	38	11	44	109	428
Michigan	2,873	60	311	248	24	49	286	8	0	218	3,097
Mississippi	637	76	83	71	21	24	52	0	27	94	713
Montana	822	49	34	96	2	0	83	0	0	70	820
New Mexico	17,112	176	2,124	2,252	975	993	1,176	5	9	1,397	16,971
East	2,571	51	1,095	1,000	71	80	246	5	9	354	2,632
West	14,541	125	1,029	1,252	904	913	930	0	0	1,043	14,339
New York	311	-21	63	18	22	21	13	3	0	35	315
North Dakota	225	-2	7	2	4	0	0	0	0	15	209
Ohio	631	110	130	67	2	2	28	0	0	60	772
Oklahoma	13,256	762	2,076	1,414	664	766	1,204	13	19	1,442	14,576
Pennsylvania	1,614	215	324	128	1	6	167	0	18	127	2,088
Texas	40,376	806	3,960	4,630	3,775	4,289	4,358	85	362	4,727	41,104
RRC District 1	1,024	25	87	45	249	270	32	0	0	97	1,047
RRC District 2 Onshore	1,798	44	206	244	128	140	207	3	52	281	1,797
RRC District 3 Onshore	3,411	102	376	514	508	469	372	6	36	531	3,219
RRC District 4 Onshore	10,206	118	1,225	1,699	1,440	1,372	1,192	56	120	1,439	9,711
RRC District 5	4,206	46	540	775	378	472	806	5	39	373	4,588
RRC District 6	6,016	145	311	340	286	298	590	0	38	611	6,161
RRC District 7B	203	73	48	37	2	4	0	0	1	53	237
RRC District 7C	3,123	-60	244	190	404	591	407	0	5	286	3,430
RRC District 8	3,405	18	343	412	102	99	269	0	25	361	3,284
RRC District 8A	82	23	19	13	0	0	6	0	0	16	101
RRC District 9	2,428	244	158	34	52	252	342	1	0	269	3,070
RRC District 10	4,008	31	363	260	224	318	135	1	1	345	4,028
State Offshore	466	-3	40	67	2	4	0	13	45	65	431
Utah	4,450	-9	141	483	1,007	730	366	0	2	275	3,915
Virginia	1,752	1	127	166	0	0	34	0	0	75	1,673
West Virginia	2,777	402	460	229	1	0	265	0	4	201	3,477
Wyoming	18,911	59	1,113	1,162	556	691	3,214	15	60	1,375	20,970
Federal Offshore ^a	18,990	152	2,455	2,763	693	801	832	917	644	3,563	17,772
Pacific (California)	50	0	7	0	0	0	2	0	0	3	56
Gulf of Mexico (Louisiana) ^a	13,536	117	1,349	1,724	377	511	692	801	542	2,698	12,749
Gulf of Mexico (Texas)	5,404	35	1,099	1,039	316	290	138	116	102	862	4,967
Miscellaneous ^b	64	2	4	1	0	4	12	0	0	5	80
U.S. Total	161,921	3,505	17,653	17,565	9,601	10,185	14,616	1,145	1,421	17,260	166,020

^aIncludes Federal offshore Alabama.

^bIncludes Arizona, Illinois, Indiana, Maryland, Missouri, Nebraska, Nevada, Oregon, South Dakota, and Tennessee.

Note: The production estimates in this table are based on data reported on Form EIA-23, "Annual Survey of Domestic Oil and Gas Reserves." They may differ from the official Energy Information Administration production data for natural gas for 2002 contained in the *Natural Gas Annual 2002*, DOE/EIA-0131(02).

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

Table 6. Associated-Dissolved Natural Gas Proved Reserves, Reserves Changes, and Production Wet After Lease Separation, 2002 (Billion Cubic Feet at 14.73 psia and 60° Fahrenheit)

State and Subdivision	Published Proved Reserves 12/31/01	Changes in Reserves During 2002									Proved Reserves 12/31/02
		Adjustments (+,-)	Revision Increases (+)	Revision Decreases (-)	Sales (-)	Acquisitions (+)	Extensions (+)	New Field Discoveries (+)	New Reservoir Discoveries in Old Fields (+)	Estimated Production (-)	
Alaska	6,592	0	84	42	0	0	0	0	4	262	6,376
Lower 48 States	23,232	499	3,503	2,595	1,064	908	852	229	327	2,726	23,165
Alabama	26	4	7	1	5	0	2	0	2	4	31
Arkansas	30	4	10	1	2	2	0	0	0	5	38
California	1,922	27	145	73	4	13	86	0	0	216	1,900
Coastal Region Onshore	185	2	21	4	3	5	3	0	0	12	197
Los Angeles Basin Onshore	194	3	25	5	0	0	11	0	0	10	218
San Joaquin Basin Onshore	1,463	24	91	61	1	0	72	0	0	188	1,400
State Offshore	80	-2	8	3	0	8	0	0	0	6	85
Colorado	1,025	-11	167	8	3	0	9	1	0	83	1,097
Florida	96	9	5	3	0	0	0	0	0	5	102
Kansas	105	0	14	47	1	1	1	0	1	8	66
Kentucky	25	0	0	0	0	0	0	0	0	0	25
Louisiana	796	-24	123	195	19	37	37	2	10	97	670
North	168	-11	29	28	3	9	16	0	0	21	159
South Onshore	483	0	77	113	16	28	15	2	9	58	427
State Offshore	145	-13	17	54	0	0	6	0	1	18	84
Michigan	159	19	79	33	12	23	7	0	0	28	214
Mississippi	26	5	6	5	7	9	3	1	0	5	33
Montana	85	8	7	14	8	6	14	4	0	8	94
New Mexico	1,447	27	325	163	117	125	63	1	11	237	1,482
East	1,348	24	309	157	88	96	62	1	11	227	1,379
West	99	3	16	6	29	29	1	0	0	10	103
New York	7	-2	0	4	1	0	0	0	0	0	0
North Dakota	270	20	81	20	47	46	9	0	0	44	315
Ohio	340	37	56	72	16	0	25	2	1	27	346
Oklahoma	1,109	176	209	187	147	128	51	2	0	164	1,177
Pennsylvania	168	-9	7	23	4	0	4	0	0	6	137
Texas	6,089	189	1,115	568	359	243	314	3	19	658	6,387
RRC District 1	43	0	9	3	3	6	1	0	0	6	47
RRC District 2 Onshore	65	4	26	13	3	6	5	0	1	21	70
RRC District 3 Onshore	533	27	115	92	18	11	120	0	8	97	607
RRC District 4 Onshore	140	-2	43	25	6	2	15	0	0	17	150
RRC District 5	83	1	5	18	0	0	3	0	0	9	65
RRC District 6	412	9	48	19	16	5	3	0	2	44	400
RRC District 7B	88	88	13	11	121	13	0	0	0	13	57
RRC District 7C	634	12	196	62	32	26	41	0	4	82	737
RRC District 8	2,602	9	498	207	135	133	100	2	1	231	2,772
RRC District 8A	1,108	5	87	69	19	28	10	0	0	84	1,066
RRC District 9	124	18	28	14	4	3	5	0	0	20	140
RRC District 10	255	18	46	34	2	10	9	1	0	32	271
State Offshore	2	0	1	1	0	0	2	0	3	2	5
Utah	303	3	73	24	4	15	14	0	0	21	359
Virginia	0	0	0	0	0	0	0	0	0	0	0
West Virginia	48	2	3	31	0	0	0	0	0	1	21
Wyoming	488	12	245	55	254	201	4	1	0	81	561
Federal Offshore ^a	8,649	2	825	1,068	54	59	209	212	283	1,027	8,090
Pacific (California)	490	-1	28	23	0	0	8	0	0	43	459
Gulf of Mexico (Louisiana) ^a	6,753	-7	555	696	51	50	201	118	283	842	6,364
Gulf of Mexico (Texas)	1,406	10	242	349	3	9	0	94	0	142	1,267
Miscellaneous ^b	19	1	1	0	0	0	0	0	0	1	20
U.S. Total	29,824	499	3,587	2,637	1,064	908	852	229	331	2,988	29,541

^aIncludes Federal offshore Alabama.

^bIncludes Arizona, Illinois, Indiana, Maryland, Missouri, Nebraska, Nevada, Oregon, South Dakota, and Tennessee.

Note: The production estimates in this table are based on data reported on Form EIA-23, "Annual Survey of Domestic Oil and Gas Reserves." They may differ from the official Energy Information Administration production data for natural gas for 2002 contained in the *Natural Gas Annual 2002*, DOE/EIA-0131(02).

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

Table 7. Natural Gas Liquids Proved Reserves, Reserves Changes, and Production, Wet After Lease Separation, 2002 (Million Barrels of 42 U.S. Gallons)

State and Subdivision	Published Proved Reserves 12/31/01	Changes in Reserves During 2002									Proved Reserves 12/31/02
		Adjustments (+,-)	Revision Increases (+)	Revision Decreases (-)	Sales (-)	Acquisitions (+)	Extensions (+)	New Field Discoveries (+)	New Reservoir Discoveries in Old Fields (+)	Estimated Production (-)	
Alaska	405	20	0	0	0	0	0	0	0	20	405
Lower 48 States	7,588	42	982	951	458	512	612	48	78	864	7,589
Alabama	64	-3	3	2	1	0	3	0	0	7	57
Arkansas	5	-1	1	1	0	0	0	0	0	0	4
California	76	21	8	4	1	1	4	0	0	10	95
Coastal Region Onshore	16	0	2	0	0	0	0	0	0	1	17
Los Angeles Basin Onshore	8	0	1	0	0	0	1	0	0	0	10
San Joaquin Basin Onshore	52	21	5	4	1	1	3	0	0	9	68
State Offshore	0	0	0	0	0	0	0	0	0	0	0
Colorado	345	3	65	31	26	32	35	0	0	27	396
Florida	12	2	1	0	0	0	0	0	0	1	14
Kansas	302	-22	25	20	2	1	4	0	0	25	263
Kentucky	72	-8	13	13	0	2	3	0	0	3	66
Louisiana	391	25	57	125	21	23	24	3	14	68	323
North	62	-6	8	12	3	3	3	0	0	6	49
South Onshore	269	18	43	81	18	18	16	2	9	50	226
State Offshore	60	13	6	32	0	2	5	1	5	12	48
Michigan	43	-1	8	4	2	2	5	0	0	4	47
Mississippi	10	3	1	4	2	2	0	0	0	2	8
Montana	5	2	0	1	0	0	1	0	0	1	6
New Mexico	873	-4	142	156	48	53	58	1	1	82	838
East	279	5	102	83	12	17	23	1	1	43	290
West	594	-9	40	73	36	36	35	0	0	39	548
North Dakota	57	-10	7	2	5	4	1	0	0	5	47
Oklahoma	694	-18	107	80	38	44	56	1	1	72	695
Texas	2,653	38	315	271	209	238	227	3	18	301	2,711
RRC District 1	40	0	4	2	9	9	1	0	0	4	39
RRC District 2 Onshore	67	8	10	11	7	7	7	0	2	12	71
RRC District 3 Onshore	226	38	29	43	33	31	31	0	4	42	241
RRC District 4 Onshore	378	15	51	66	50	47	44	3	5	57	370
RRC District 5	49	-6	10	7	4	5	7	0	0	4	50
RRC District 6	269	-2	26	15	12	11	24	0	2	26	277
RRC District 7B	29	10	5	4	10	1	0	0	0	6	25
RRC District 7C	290	19	38	23	36	55	38	0	1	31	351
RRC District 8	525	-17	74	57	21	20	34	0	2	50	510
RRC District 8A	251	-62	17	13	3	4	3	0	0	16	181
RRC District 9	189	20	14	5	5	21	26	0	0	22	238
RRC District 10	335	16	36	24	19	27	12	0	0	30	353
State Offshore	5	-1	1	1	0	0	0	0	2	1	5
Utah and Wyoming	897	-36	65	66	54	55	140	1	2	66	938
West Virginia	106	-14	13	7	0	0	7	0	0	6	99
Federal Offshore ^a	976	65	149	163	49	55	43	39	42	184	973
Pacific (California)	9	-1	0	0	0	0	0	0	0	0	8
Gulf of Mexico (Louisiana) ^a	785	59	105	133	14	21	34	38	37	149	783
Gulf of Mexico (Texas)	182	7	44	30	35	34	9	1	5	35	182
Miscellaneous ^b	7	0	2	1	0	0	1	0	0	0	9
U.S. Total	7,993	62	982	951	458	512	612	48	78	884	7,994

^aIncludes Federal offshore Alabama.

^bIncludes Arizona, Illinois, Indiana, Maryland, Missouri, Nebraska, Nevada, New York, Ohio, Oregon, Pennsylvania, South Dakota, Tennessee, and Virginia.

Note: The production estimates in this table are based on data reported on Form EIA-23, "Annual Survey of Domestic Oil and Gas Reserves," and Form EIA-64A, "Annual Report of the Origin of Natural Gas Liquids Production." They may differ from the official Energy Information Administration production data for natural gas and natural gas liquids for 2002 contained in the publications *Petroleum Supply Annual 2002*, DOE/EIA-0340(02) and *Natural Gas Annual 2002* DOE/EIA-0131(02).

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

Table 8. Deepwater Production and Proved Reserves of the Gulf of Mexico Federal Offshore, 1992-2002

Year	Gulf of Mexico			Depth		Deepwater Percentage
	Total	Louisiana ^a	Texas	Greater than 200 meters	Less than 200 meters	
Crude Oil (million barrels of 42 U.S. gallons)						
Production						
1992	267	253	14	46	221	17.2
1993	266	252	14	46	220	17.3
1994	265	245	20	53	212	20.1
1995	292	262	30	77	215	26.4
1996	303	265	38	90	213	29.7
1997	342	298	44	123	219	36.0
1998	372	336	36	171	201	46.0
1999	421	376	45	228	193	54.2
2000	419	381	38	234	185	55.8
2001	459	417	42	286	173	62.2
2002	452	395	57	288	164	63.8
Reserves						
1992	1,835	1,643	192	557	1,278	30.4
1993	2,072	1,880	192	824	1,248	39.8
1994	2,127	1,922	205	877	1,250	41.2
1995	2,518	2,269	249	1,241	1,277	49.3
1996	2,567	2,357	210	1,311	1,256	51.1
1997	2,949	2,587	362	1,682	1,267	57.0
1998	2,793	2,483	310	1,611	1,182	57.8
1999	2,744	2,442	302	1,626	1,118	59.3
2000	3,174	2,751	423	2,021	1,153	63.7
2001	4,288	3,877	411	3,208	1,080	74.8
2002	4,444	4,088	356	3,372	1,072	75.9

Natural Gas, Wet After Lease Separation
(billion cubic feet at 14.73 psia and 60° Fahrenheit)

Production						
1992	4,576	3,292	1,284	166	4,410	3.6
1993	4,651	3,383	1,268	229	4,422	4.9
1994	4,797	3,505	1,292	294	4,503	6.1
1995	4,679	3,421	1,258	354	4,315	7.8
1996	5,045	3,752	1,293	549	4,496	10.9
1997	5,230	3,984	1,246	577	4,653	11.0
1998	4,967	3,817	1,150	724	4,243	14.6
1999	5,000	3,829	1,171	1,124	3,876	22.5
2000	4,901	3,747	1,154	1,196	3,705	24.4
2001	5,027	3,843	1,184	1,367	3,660	27.2
2002	4,544	3,541	1,003	1,365	3,180	30.0
Reserves						
1992	27,050	20,006	7,044	3,273	23,777	12.1
1993	26,463	19,751	6,712	3,495	22,968	13.2
1994	27,626	21,208	6,418	4,772	22,854	17.3
1995	28,229	21,664	6,565	5,811	22,418	20.6
1996	28,153	22,119	6,034	6,389	21,764	22.7
1997	28,455	22,428	6,027	7,491	20,964	26.3
1998	26,937	21,261	5,676	7,575	19,362	28.1
1999	26,062	20,172	5,890	7,726	18,336	29.6
2000	26,891	20,466	6,425	8,731	18,160	32.5
2001	27,100	20,290	6,810	11,229	15,871	41.4
2002	25,347	19,113	6,234	10,540	14,807	41.6

Table 9. Coalbed Methane Proved Reserves and Production for 1989–2002
(Billion Cubic Feet at 14.73 psia and 60° Fahrenheit)

Year	Alabama	Colorado	New Mexico	Utah	Wyoming	Eastern States ^a	Western States ^b	Others ^c	United States
Reserves									
1989	537	1,117	2,022	NA	NA	NA	NA	0	3,676
1990	1,224	1,320	2,510	NA	NA	NA	NA	33	5,087
1991	1,714	2,076	4,206	NA	NA	NA	NA	167	8,163
1992	1,968	2,716	4,724	NA	NA	NA	NA	626	10,034
1993	1,237	3,107	4,775	NA	NA	NA	NA	1,065	10,184
1994	976	2,913	4,137	NA	NA	NA	NA	1,686	9,712
1995	972	3,461	4,299	NA	NA	NA	NA	1,767	10,499
1996	823	3,711	4,180	NA	NA	NA	NA	1,852	10,566
1997	1,077	3,890	4,351	NA	NA	NA	NA	2,144	11,462
1998	1,029	4,211	4,232	NA	NA	NA	NA	2,707	12,179
1999	1,060	4,826	4,080	NA	NA	NA	NA	3,263	13,229
2000	1,241	5,617	4,278	1,592	1,540	1,399	41	--	15,708
2001	1,162	6,252	4,324	1,685	2,297	1,453	358	--	17,531
2002	1,283	6,691	4,380	1,725	2,371	1,488	553	--	18,491
Production									
1989	23	12	56	NA	NA	NA	NA	0	91
1990	36	26	133	NA	NA	NA	NA	1	196
1991	68	48	229	NA	NA	NA	NA	3	348
1992	89	82	358	NA	NA	NA	NA	10	539
1993	103	125	486	NA	NA	NA	NA	18	752
1994	108	179	530	NA	NA	NA	NA	34	851
1995	109	226	574	NA	NA	NA	NA	47	956
1996	98	274	575	NA	NA	NA	NA	56	1,003
1997	111	312	597	NA	NA	NA	NA	70	1,090
1998	123	401	571	NA	NA	NA	NA	99	1,194
1999	108	432	582	NA	NA	NA	NA	130	1,252
2000	109	451	550	74	133	58	4	--	1,379
2001	111	490	517	83	278	69	14	--	1,562
2002	117	520	471	103	302	68	33	--	1,614

^aIncludes Ohio, Pennsylvania, Virginia, and West Virginia.

^bIncludes Arkansas, Kansas, Montana, and Oklahoma.

^cIncludes Oklahoma, Pennsylvania, Utah, Virginia, West Virginia, and Wyoming; these states are individually listed or grouped in Eastern States and Western States for 2000-2002.

NA -- Not applicable.

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

Figure 1. U.S. Crude Oil Proved Reserves, 1992-2002

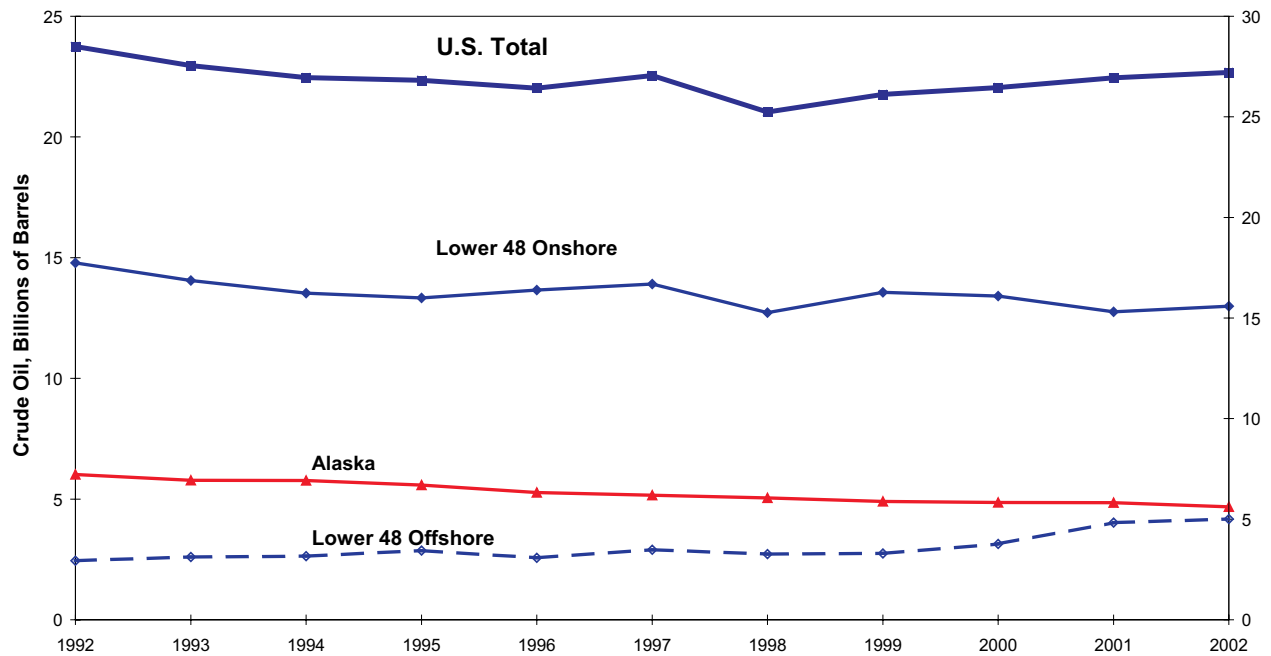
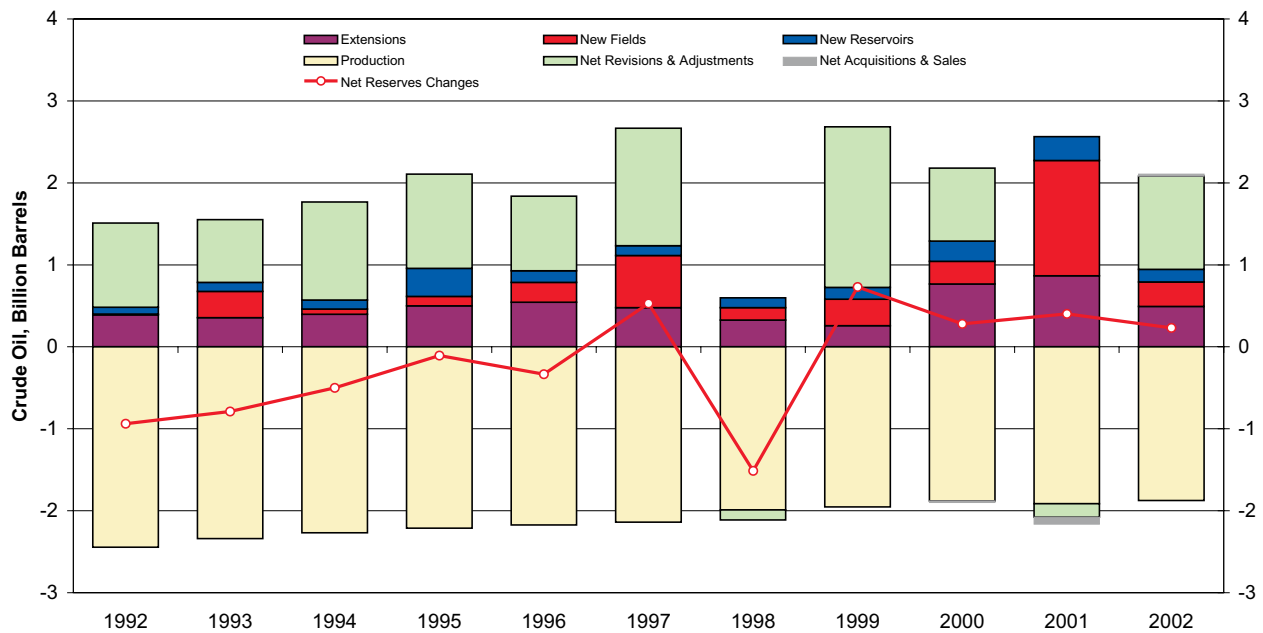


Figure 2. Components of Reserves Changes for Crude Oil, 1992-2002



Source: U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves, 1992 through 2002 annual reports, DOE/EIA-0216.

Figure 3. U.S. Dry Natural Gas Proved Reserves, 1992-2002

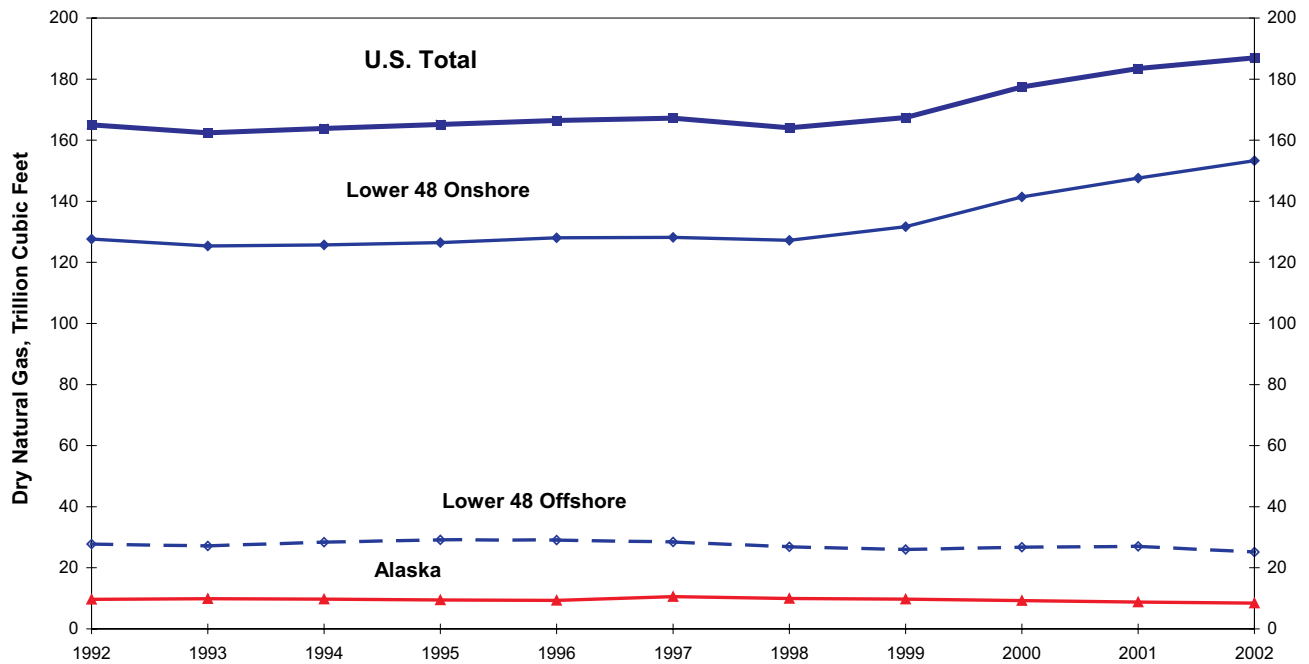
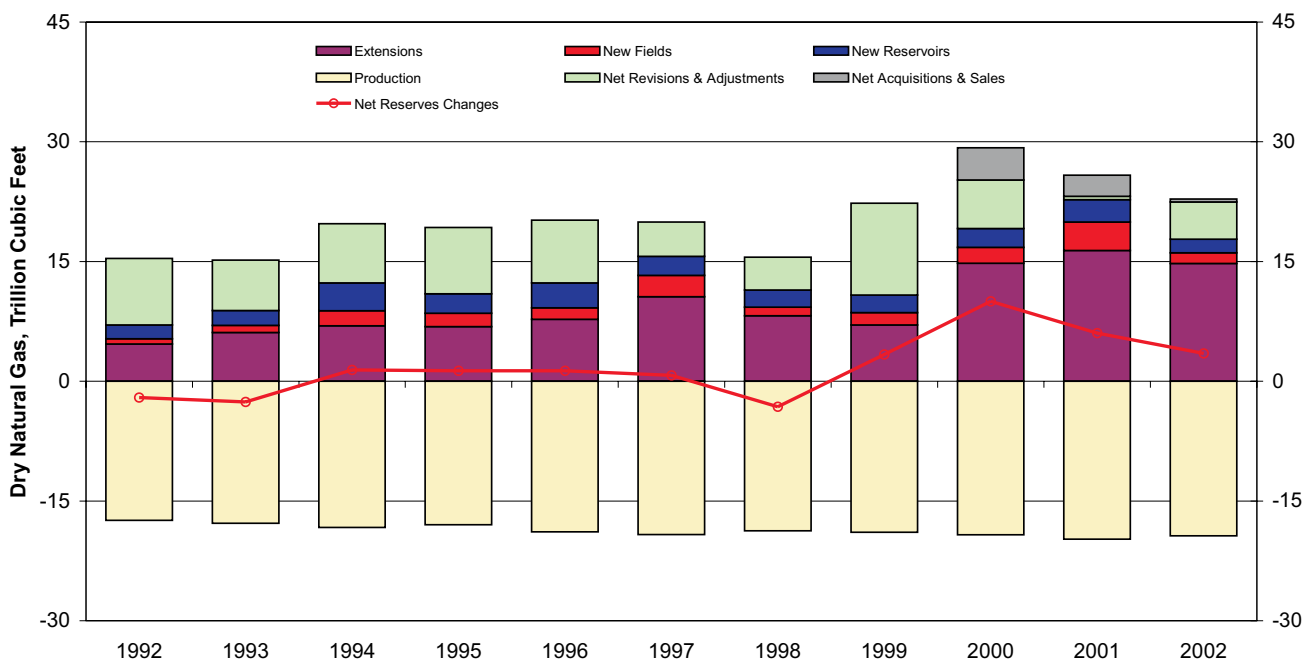


Figure 4. Components of Reserves Changes for Dry Natural Gas, 1992-2002



Source: U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves, 1992 through 2002 annual reports, DOE/EIA-0216.

Figure 5. Crude Oil Production Replaced by Reserves Additions, 1993 - 2002

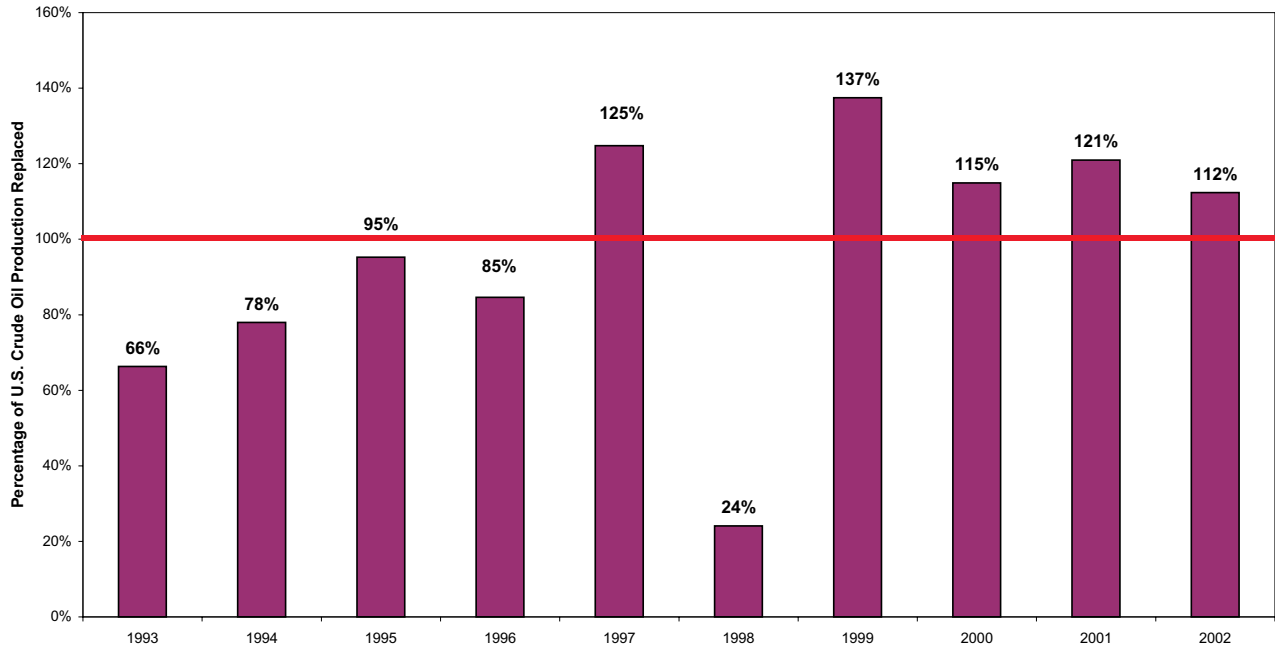
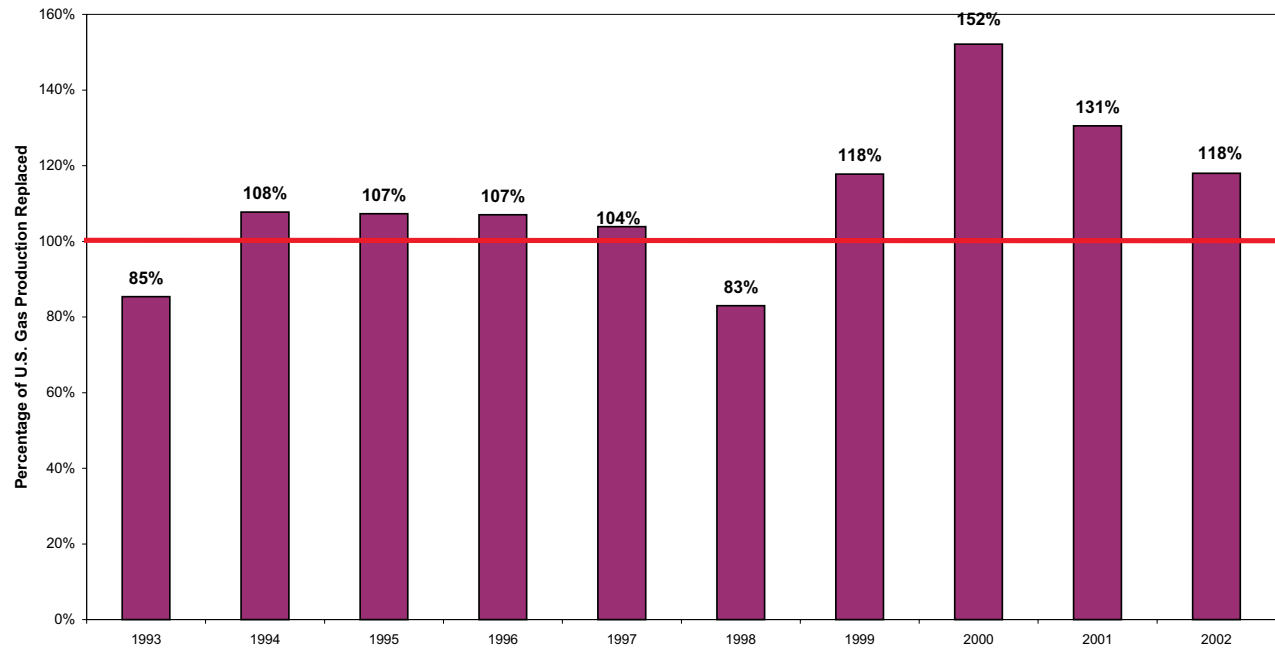


Figure 6. Dry Natural Gas Production Replaced by Reserves Additions, 1993 - 2002



Source: U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves, 1993 through 2002 annual reports, DOE/EIA-0216.

Figure 7. Exploratory Oil Wells Drilled, 1977 - 2002

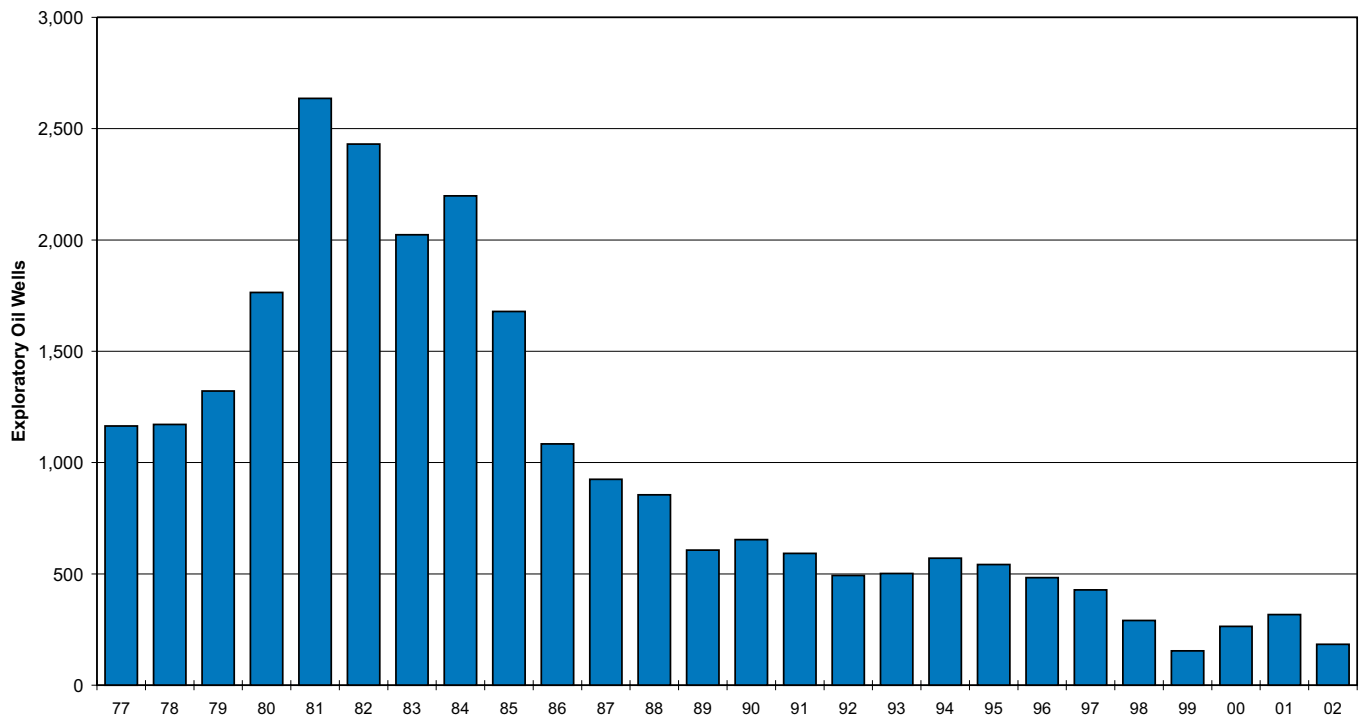
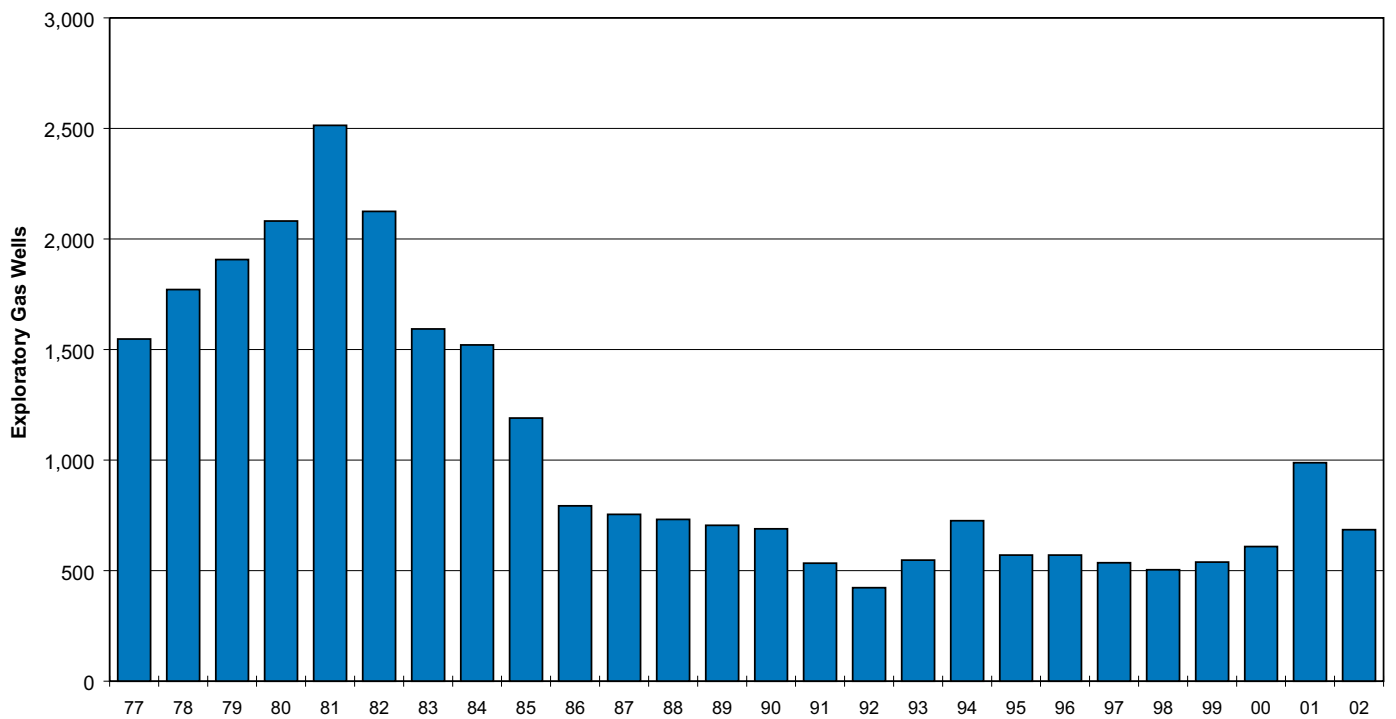
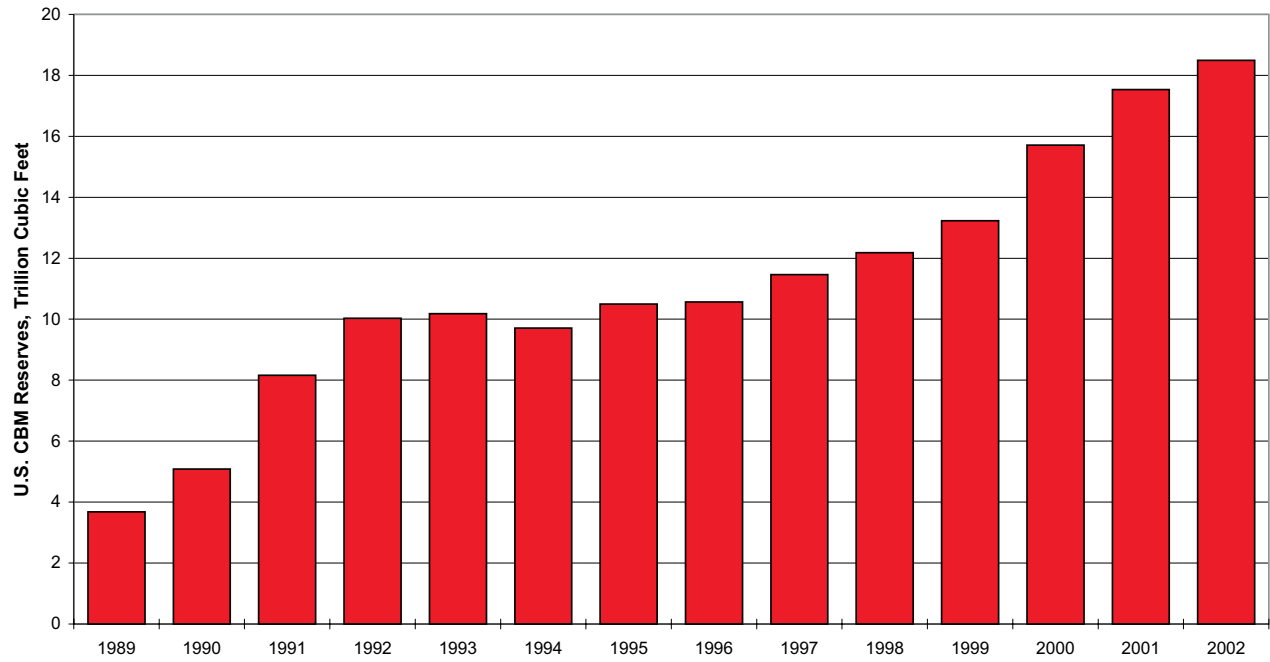


Figure 8. Exploratory Gas Wells Drilled, 1977 - 2002



Source: U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves, 2002 annual report, DOE/EIA-0216.

Figure 9. U.S. Coalbed Methane Proved Reserves, 1989-2002



Source: U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves, 1989 through 2002 annual reports, DOE/EIA-0216.