

Advance Summary

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

2003 Annual Report

September 2004

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 2003 Annual Report

Proved reserves of natural gas increased for the fifth year in a row as U.S. natural gas reserves increased by 1 percent in 2003. The majority of natural gas total discoveries were from extensions of existing conventional and unconventional gas fields. Reserves additions replaced 111 percent of 2003 gas production. Natural gas proved reserves have increased in nine of the past ten years. U.S. gas production remained almost level in 2003 as declines in the Gulf of Mexico and New Mexico were offset by production increases in the Rocky Mountain States and Texas.

As of December 31, 2003 proved reserves were:

Crude Oil (million barrels)	
2002	22,677
2003	21,891
Decrease	-3.5%
Dry Natural Gas (billion cubic feet)	
2002	186,946
2003	189,044
Increase	+1.1%
Natural Gas Liquids (million barrels)	
2002	7,994
2003	7,459
Decrease	-6.7%

Crude oil proved reserves declined 3 percent in 2003, the first decline in five years. Operators only replaced 58 percent of oil production with reserves additions. Total discoveries, that included significant new field discoveries in the Gulf of Mexico Federal Offshore, were larger than average. However, proved reserves in several fields were lowered substantially because of poor well performance accompanied by engineering reassessments. The net of revisions, adjustments, sales, and acquisitions was a negative 141 million barrels in 2003 compared to a more typical positive 1,160 million barrels in 2002.

The Rocky Mountain States and Texas saw large gas reserves additions in 2003. These were driven by continuing development of unconventional gas fields, i.e., fields developed in tight sands, shales, and coalbeds. Significant reserves were added in the Powder River basin (coalbed methane) and Green River basin (deep and tight sand) in Wyoming, and in the Wattenberg Field (tight sand) and San Juan basin (coalbed methane) in Colorado and New Mexico. Significant reserves were also added in Texas' Newark East Field (Barnett Shale) which is the Nation's sixth largest natural gas field.

Coalbed methane reserves increased 1 percent from 2002 and accounted for 10 percent of U.S. dry gas proved reserves. Coalbed methane production declined very slightly in 2003 (less than 1 percent) and accounted for 8 percent of U.S. dry gas production.

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 2003 U.S. proved reserves of crude oil, natural gas, and natural gas liquids is the 27th 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 1,232 million barrels in 2003, 16 percent more than the prior 10-year average and 30 percent more than 2002's discoveries of 946 million barrels.

The majority of crude oil total discoveries in 2003 were new field discoveries in 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 2003.

New field discoveries accounted for 705 million barrels of crude oil reserves additions. Almost all were in the Gulf of Mexico Federal Offshore (702 of 705 million). This was more than double the new field discoveries of 2002 and 84 percent more than the prior 10-year average.

Operators discovered 426 million barrels in extensions in 2003, 13 percent less than in 2002 and 14 percent less than the prior 10-year average.

New reservoir discoveries in old fields were 101 million barrels, 34 percent less than in 2002 and 43 percent less than the prior 10-year average.

Reserves additions are the sum of total discoveries, revisions, adjustments, sales, and acquisitions. In 2003, reserve additions were 1,091 million barrels which is 48 percent less than the volume of reserves additions in 2002.

Crude oil net revisions and adjustments were 257 million barrels, which is 77 percent less than the net revisions and adjustments of 2002. The net of sales and acquisitions of crude oil proved reserves was -398 million barrels.

Other 2003 crude oil events of note:

- The annual average domestic first purchase price for crude oil increased 22 percent from the 2002 level to \$27.56 per barrel.
- Exploratory and developmental oil completions were up 4 percent from 2002.

Natural Gas

Total discoveries of dry gas reserves were 19,286 billion cubic feet in 2003. This was 36 percent more than the prior 10-year average and 8 percent more than in 2002. The majority of natural gas total discoveries in 2003 were from extensions of existing conventional and unconventional gas fields.

Field extensions were 16,454 billion cubic feet, 11 percent more than extensions in 2002 and 66 percent more than the prior 10-year average of 9,941 billion cubic feet.

New field discoveries were 1,222 billion cubic feet, 8 percent less than the volume discovered in 2002 and 33 percent less than the prior 10-year average.

New reservoir discoveries in old fields were 1,610 billion cubic feet, down 5 percent from 2002 and 34 percent less than the prior 10-year average.

Natural gas net revisions and adjustments were 1,203 billion cubic feet, which is 74 percent less than the net revisions and adjustments of 2002. The net of sales and acquisitions of dry natural gas proved reserves was 1,034 billion cubic feet.

Coalbed methane proved reserves grew in 2003, while production declined slightly. Coalbed methane proved reserves were 18,743 billion cubic feet, an increase of 1 percent from 2002 and accounted for 10 percent of U.S. dry gas proved reserves. Coalbed methane production was 1,600 billion cubic feet, a decrease of less than 1 percent from 2002 and accounted for 8 percent of U.S. dry gas production.

Other 2003 natural gas events of note:

- Natural gas prices were up 69 percent in 2003 to an average of \$4.98 per thousand cubic feet at the wellhead, as compared to \$2.95 per thousand cubic feet in 2002.
- Exploratory and developmental gas completions were up 22 percent from 2002.
- U.S. gas production increased slightly (less than 1 percent) in 2003.

Natural Gas Liquids

U.S. natural gas liquids proved reserves declined 7 percent in 2003 to 7,459 million barrels. This resulted from changes in the relative economics of natural gas and natural gas liquids, and in the liquids content of the gas production. 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 29,350 million barrels in 2003, a 4 percent decrease from the 2002 level. Natural gas liquids represented 25 percent of total liquid hydrocarbon proved reserves in 2003.

Data

These estimates are based upon analysis of data from Form EIA-23, Annual Survey of Domestic Oil and Gas Reserves, filed by 1,554 operators of oil and gas wells, and Form EIA-64A, Annual Report of the Origin of Natural Gas Liquids Production, filed by operators of 507 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.

Table 1. Total U.S. Proved Reserves of Crude Oil, Dry Natural Gas, and Natural Gas Liquids, 1993-2003

Year	Adjustments (1)	Net Revisions (2)	Revisions ^a and Adjustments (3)	Net of Sales ^b and Acquisitions (4)	Extensions (5)	New Field Discoveries (6)	New Reservoir Discoveries in Old Fields (7)	Total ^c Discoveries (8)	Estimated Production (9)	Proved ^d Reserves 12/31 (10)	Change from Prior Year (11)
Crude Oil (million barrels of 42 U.S. gallons)											
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	1958	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
2003	163	94	257	-398	426	705	101	1,232	1,877	21,891	-786
Dry Natural Gas (billion cubic feet, 14.73 psia, 60° Fahrenheit)											
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
2003	2,841	-1,638	1,203	1,034	16,454	1,222	1,610	19,286	19,425	189,044	+2,098
Natural Gas Liquids (million barrels of 42 U.S. gallons)											
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
2003	-338	-161	-499	30	629	35	72	736	802	7,459	-535

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

^bNet of sales and acquisitions = acquisitions - sales.

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

^dProved 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 2003 contained in the *Petroleum Supply Annual 2003*, DOE/EIA-0340(03) and the *Natural Gas Annual 2003*, DOE/EIA-0131(03).

Table 2. Crude Oil Proved Reserves, Reserves Changes, and Production, 2003
(Million Barrels of 42 U.S. Gallons)

State and Subdivision	Published Proved Reserves 12/31/02	Changes in Reserves During 2003							New Reservoir Discoveries in Old Fields (+)	Estimated Production (-)	Proved Reserves 12/31/03
		Adjustments (+,-)	Revision Increases (+)	Revision Decreases (-)	Sales (-)	Acquisitions (+)	Extensions (+)	New Field Discoveries (+)			
Alaska	4,678	1	168	79	0	0	35	0	0	357	4,446
Lower 48 States	17,999	162	1,318	1,313	1,107	709	391	705	101	1,520	17,445
Alabama	51	1	4	0	0	0	2	0	0	6	52
Arkansas	49	9	2	1	4	2	0	0	0	7	50
California	3,633	-18	190	107	58	49	9	0	0	246	3,452
Coastal Region Onshore	404	-4	11	5	8	12	2	0	0	17	395
Los Angeles Basin Onshore	330	0	31	24	31	26	3	0	0	16	319
San Joaquin Basin Onshore	2,702	-13	139	62	19	11	4	0	0	197	2,565
State Offshore	197	-1	9	16	0	0	0	0	0	16	173
Colorado	214	-4	19	4	1	2	7	0	0	16	217
Florida	73	-1	0	1	0	0	0	0	0	3	68
Illinois	107	22	11	5	0	0	0	0	0	10	125
Indiana	15	5	1	0	0	0	0	0	0	2	19
Kansas	237	19	31	13	4	2	5	0	0	34	243
Kentucky	27	2	2	4	0	0	0	0	0	2	25
Louisiana	501	3	57	75	46	38	31	0	6	63	452
North	75	5	4	9	1	0	2	0	0	10	66
South Onshore	335	1	46	48	26	19	23	0	3	39	314
State Offshore	91	-3	7	18	19	19	6	0	3	14	72
Michigan	61	12	14	16	10	21	0	0	0	7	75
Mississippi	179	9	20	9	15	1	0	0	0	16	169
Montana	288	-6	15	8	2	5	42	0	0	19	315
Nebraska	18	0	1	0	0	0	0	0	0	3	16
New Mexico	710	-5	65	69	18	15	38	0	0	59	677
East	699	-6	64	67	17	15	38	0	0	58	668
West	11	1	1	2	1	0	0	0	0	1	9
North Dakota	342	8	20	24	1	7	31	0	0	30	353
Ohio	67	9	4	8	1	0	0	0	0	5	66
Oklahoma	598	3	80	49	36	21	26	0	0	55	588
Pennsylvania	12	-3	6	1	0	0	1	0	0	2	13
Texas	5,015	63	362	178	639	242	77	3	2	364	4,583
RRC District 1	50	10	4	4	1	0	7	1	0	8	59
RRC District 2 Onshore	54	4	4	5	2	3	0	0	0	7	51
RRC District 3 Onshore	218	1	15	14	32	15	14	0	0	27	190
RRC District 4 Onshore	28	1	6	3	2	2	1	0	1	4	30
RRC District 5	24	1	1	2	8	8	0	0	0	4	20
RRC District 6	198	6	11	8	9	6	2	0	0	17	189
RRC District 7B	82	-2	15	3	18	5	0	0	0	11	68
RRC District 7C	177	9	28	5	3	3	12	0	0	16	205
RRC District 8	1,913	-5	118	57	513	144	23	1	0	111	1,513
RRC District 8A	2,093	20	142	47	48	53	13	0	0	137	2,089
RRC District 9	113	10	11	10	1	2	4	0	0	15	114
RRC District 10	59	9	6	20	2	1	1	0	0	6	48
State Offshore	6	-1	1	0	0	0	0	1	1	1	7
Utah	241	1	7	18	24	25	1	0	0	12	221
West Virginia	13	0	2	1	0	0	0	0	0	1	13
Wyoming	524	24	29	36	23	36	5	0	0	42	517
Federal Offshore	5,009	8	376	686	225	243	115	702	93	515	5,120
Pacific (California)	565	1	10	2	0	0	22	0	0	30	566
Gulf of Mexico (Louisiana)	4,088	5	289	616	201	230	93	698	91	426	4,251
Gulf of Mexico (Texas)	356	2	77	68	24	13	0	4	2	59	303
Miscellaneous ^a	15	1	0	0	0	0	1	0	0	1	16
U.S. Total	22,677	163	1,486	1,392	1,107	709	426	705	101	1,877	21,891

^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 2003 contained in the *Petroleum Supply Annual 2003*, DOE/EIA-0340(03).

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

Table 3. Dry Natural Gas Proved Reserves, Reserves Changes, and Production, 2003
(Billion Cubic Feet at 14.73 psia and 60° Fahrenheit)

State and Subdivision	Published Proved Reserves 12/31/02	Changes in Reserves During 2003									Proved Reserves 12/31/03
		Adjustments (+,-)	Revision Increases (+)	Revision Decreases (-)	Sales (-)	Acquisitions (+)	Extensions (+)	New Field Discoveries (+)	New Reservoir Discoveries in Old Fields (+)	Estimated Production (-)	
Alaska	8,468	1	427	235	0	0	81	20	1	478	8,285
Lower 48 States	178,478	2,840	19,485	21,315	10,174	11,208	16,373	1,202	1,609	18,947	180,759
Alabama	3,884	-36	588	122	246	264	315	0	4	350	4,301
Arkansas	1,650	21	148	134	63	82	125	0	0	166	1,663
California	2,591	-52	301	172	60	47	55	5	0	265	2,450
Coastal Region Onshore	190	5	13	30	2	2	0	0	0	11	167
Los Angeles Basin Onshore	207	3	19	34	25	26	1	0	0	10	187
San Joaquin Basin Onshore	2,102	-60	263	99	33	19	54	5	0	238	2,013
State Offshore	92	0	6	9	0	0	0	0	0	6	83
Colorado	13,888	-3	2,114	812	429	604	1,215	1	0	1,142	15,436
Florida	91	-9	0	0	0	0	0	0	0	3	79
Kansas	4,983	149	206	180	230	239	78	0	0	426	4,819
Kentucky	1,907	49	128	167	0	0	49	0	1	78	1,889
Louisiana	8,960	281	792	1,159	622	513	1,584	12	244	1,280	9,325
North	4,245	95	255	319	287	242	1,233	5	6	401	5,074
South Onshore	4,224	154	452	755	237	166	323	7	164	753	3,745
State Offshore	491	32	85	85	98	105	28	0	74	126	506
Michigan	3,254	65	303	235	201	386	74	0	2	220	3,428
Mississippi	744	-26	67	41	42	29	81	0	28	94	746
Montana	906	-28	46	26	225	326	146	0	0	86	1,059
New Mexico	17,320	-104	1,547	1,941	652	852	1,394	3	16	1,415	17,020
East	3,632	-14	622	950	218	242	475	3	16	507	3,301
West	13,688	-90	925	991	434	610	919	0	0	908	13,719
New York	315	41	37	29	118	111	24	19	0	35	365
North Dakota	471	25	36	44	1	6	5	0	0	50	448
Ohio	1,117	97	121	127	7	0	7	0	0	82	1,126
Oklahoma	14,886	226	2,892	2,843	1,598	1,864	1,509	6	13	1,554	15,401
Pennsylvania	2,216	314	241	263	30	1	149	21	3	165	2,487
Texas	44,297	1,289	4,462	5,100	2,552	2,878	5,044	195	383	5,166	45,730
RRC District 1	1,045	36	59	87	15	6	109	0	9	100	1,062
RRC District 2 Onshore	1,782	200	205	333	146	29	279	11	25	282	1,770
RRC District 3 Onshore	3,584	45	383	531	191	83	458	50	44	576	3,349
RRC District 4 Onshore	9,469	325	943	1,936	441	465	1,084	38	197	1,381	8,763
RRC District 5	4,602	130	706	278	336	350	638	5	47	457	5,407
RRC District 6	6,256	184	383	496	667	787	829	1	50	642	6,685
RRC District 7B	260	165	57	104	5	5	19	0	0	57	340
RRC District 7C	3,702	149	425	173	36	91	507	1	11	350	4,327
RRC District 8	5,361	-97	546	532	202	207	322	21	0	484	5,142
RRC District 8A	1,084	10	112	54	11	12	3	0	0	100	1,056
RRC District 9	2,877	0	116	154	211	563	450	0	0	332	3,309
RRC District 10	3,838	87	490	333	268	261	326	1	0	338	4,064
State Offshore	437	55	37	89	23	19	20	67	0	67	456
Utah	4,135	40	188	767	729	690	230	0	7	278	3,516
Virginia	1,673	1	45	37	0	0	117	0	0	82	1,717
West Virginia	3,360	54	182	306	1	36	167	0	3	189	3,306
Wyoming	20,527	132	2,072	2,704	333	406	3,068	32	0	1,456	21,744
Federal Offshore ^a	25,204	311	2,963	4,106	2,035	1,873	902	908	903	4,353	22,570
Pacific (California)	515	-1	41	2	0	0	5	0	0	47	511
Gulf of Mexico (Louisiana) ^a	18,500	261	1,866	2,922	1,557	1,563	713	824	724	3,244	16,728
Gulf of Mexico (Texas)	6,189	51	1,056	1,182	478	310	184	84	179	1,062	5,331
Miscellaneous ^b	99	3	6	0	0	1	35	0	2	12	134
U.S. Total	186,946	2,841	19,912	21,550	10,174	11,208	16,454	1,222	1,610	19,425	189,044

^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 2003 contained in the *Natural Gas Annual 2003*, DOE/EIA-0131(03).

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

Table 4. Natural Gas Proved Reserves, Reserves Changes, and Production, Wet After Lease Separation, 2003 (Billion Cubic Feet at 14.73 psia and 60° Fahrenheit)

State and Subdivision	Published Proved Reserves 12/31/02	Changes in Reserves During 2003									Proved Reserves 12/31/03
		Adjustments (+,-)	Revision Increases (+)	Revision Decreases (-)	Sales (-)	Acquisitions (+)	Extensions (+)	New Field Discoveries (+)	New Reservoir Discoveries in Old Fields (+)	Estimated Production (-)	
Alaska	8,533	-1	428	234	0	0	81	20	1	480	8,348
Lower 48 States	187,028	2,324	20,352	22,261	10,593	11,700	17,114	1,232	1,652	19,751	188,797
Alabama	3,922	-42	598	125	251	270	321	0	4	352	4,345
Arkansas	1,654	19	149	134	63	82	125	0	0	166	1,666
California	2,696	-36	317	180	63	50	57	5	0	277	2,569
Coastal Region Onshore	197	5	14	31	2	2	0	0	0	11	174
Los Angeles Basin Onshore	218	1	20	36	26	28	1	0	0	10	196
San Joaquin Basin Onshore	2,190	-43	277	104	35	20	56	5	0	250	2,116
State Offshore	91	1	6	9	0	0	0	0	0	6	83
Colorado	14,348	-51	2,176	836	442	622	1,250	1	0	1,175	15,893
Florida	102	-7	0	0	0	0	0	0	0	3	92
Kansas	5,329	148	219	192	245	256	83	0	0	455	5,143
Kentucky	1,999	41	134	174	0	0	51	0	1	81	1,971
Louisiana	9,190	278	815	1,193	638	525	1,612	12	254	1,317	9,538
North	4,283	111	258	323	291	245	1,249	5	6	406	5,137
South Onshore	4,395	135	468	781	245	171	334	7	170	780	3,874
State Offshore	512	32	89	89	102	109	29	0	78	131	527
Michigan	3,311	69	308	240	205	392	75	0	2	224	3,488
Mississippi	746	-27	67	41	42	29	81	0	28	93	748
Montana	914	-29	46	26	227	329	147	0	0	86	1,068
New Mexico	18,453	-3	1,672	2,106	703	915	1,503	3	18	1,526	18,226
East	4,011	2	690	1,054	242	268	527	3	18	562	3,661
West	14,442	-5	982	1,052	461	647	976	0	0	964	14,565
New York	315	41	37	29	118	111	24	19	0	35	365
North Dakota	524	25	41	49	1	7	6	0	0	56	497
Ohio	1,118	97	121	127	7	0	7	0	0	82	1,127
Oklahoma	15,753	175	3,048	2,996	1,684	1,964	1,590	6	13	1,638	16,231
Pennsylvania	2,225	313	242	264	30	1	150	22	3	165	2,497
Texas	47,491	1,053	4,750	5,396	2,699	3,060	5,346	200	395	5,483	48,717
RRC District 1	1,094	20	61	89	15	6	113	0	9	104	1,095
RRC District 2 Onshore	1,867	205	214	348	153	30	292	11	26	295	1,849
RRC District 3 Onshore	3,826	18	406	562	202	88	485	53	46	610	3,548
RRC District 4 Onshore	9,861	258	974	2,000	455	481	1,121	39	203	1,427	9,055
RRC District 5	4,653	125	713	281	339	354	644	5	47	461	5,460
RRC District 6	6,561	144	399	516	695	819	862	1	52	668	6,959
RRC District 7B	294	186	64	118	6	6	22	0	0	65	383
RRC District 7C	4,167	99	471	192	40	100	561	0	12	387	4,791
RRC District 8	6,056	-80	619	604	230	235	365	24	0	550	5,835
RRC District 8A	1,167	12	121	59	12	13	3	0	0	108	1,137
RRC District 9	3,210	-50	128	169	231	620	496	0	0	365	3,639
RRC District 10	4,299	59	543	369	298	289	362	1	0	376	4,510
State Offshore	436	57	37	89	23	19	20	66	0	67	456
Utah	4,274	20	194	789	750	710	237	0	7	286	3,617
Virginia	1,673	1	45	37	0	0	117	0	0	82	1,717
West Virginia	3,498	13	187	315	1	37	171	0	3	194	3,399
Wyoming	21,531	52	2,164	2,825	347	424	3,205	33	0	1,521	22,716
Federal Offshore ^a	25,862	174	3,016	4,187	2,077	1,915	921	931	922	4,444	23,033
Pacific (California)	515	0	40	2	0	0	5	0	0	47	511
Gulf of Mexico (Louisiana) ^a	19,113	141	1,916	2,998	1,597	1,604	731	846	742	3,330	17,168
Gulf of Mexico (Texas)	6,234	33	1,060	1,187	480	311	185	85	180	1,067	5,354
Miscellaneous ^b	100	0	6	0	0	1	35	0	2	10	134
U.S. Total	195,561	2,323	20,780	22,495	10,593	11,700	17,195	1,252	1,653	20,231	197,145

^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 2003 contained in the *Natural Gas Annual 2003*, DOE/EIA-0131(03).

Table 5. Nonassociated Natural Gas Proved Reserves, Reserves Changes, and Production, Wet After Lease Separation, 2003 (Billion Cubic Feet at 14.73 psia and 60° Fahrenheit)

State and Subdivision	Published Proved Reserves 12/31/02	Changes in Reserves During 2003									Proved Reserves 12/31/03
		Adjustments (+,-)	Revision Increases (+)	Revision Decreases (-)	Sales (-)	Acquisitions (+)	Extensions (+)	New Field Discoveries (+)	New Reservoir Discoveries in Old Fields (+)	Estimated Production (-)	
Alaska	2,157	0	241	215	0	0	81	20	1	204	2,081
Lower 48 States	163,863	2,121	17,495	19,490	9,553	10,638	16,297	785	1,528	17,172	166,512
Alabama	3,891	-45	595	125	251	270	321	0	4	347	4,313
Arkansas	1,616	17	146	132	63	81	125	0	0	161	1,629
California	796	-22	70	28	15	4	36	5	0	87	759
Coastal Region Onshore	0	-1	2	0	0	0	0	0	0	0	1
Los Angeles Basin Onshore	0	0	0	0	0	0	0	0	0	0	0
San Joaquin Basin Onshore	790	-21	65	27	15	4	36	5	0	86	751
State Offshore	6	0	3	1	0	0	0	0	0	1	7
Colorado	13,251	-64	2,068	826	438	615	1,185	1	0	1,085	14,707
Florida	0	0	0	0	0	0	0	0	0	0	0
Kansas	5,263	144	195	187	245	255	79	0	0	446	5,058
Kentucky	1,974	40	134	174	0	0	51	0	1	80	1,946
Louisiana	8,520	270	704	1,051	559	464	1,573	12	246	1,227	8,952
North	4,124	113	241	309	283	241	1,246	5	6	386	4,998
South Onshore	3,968	126	397	671	202	142	302	7	165	728	3,506
State Offshore	428	31	66	71	74	81	25	0	75	113	448
Michigan	3,097	50	225	197	82	244	75	0	2	195	3,219
Mississippi	713	-26	59	37	40	28	81	0	28	85	721
Montana	820	-21	39	23	227	325	122	0	0	79	956
New Mexico	16,971	31	1,320	1,936	650	831	1,379	3	16	1,284	16,681
East	2,632	37	345	895	192	184	403	3	16	328	2,205
West	14,339	-6	975	1,041	458	647	976	0	0	956	14,476
New York	315	41	37	29	118	111	24	19	0	35	365
North Dakota	209	11	4	30	0	2	2	0	0	17	181
Ohio	772	107	112	106	7	0	7	0	0	62	823
Oklahoma	14,576	184	2,908	2,838	1,603	1,923	1,511	6	10	1,501	15,176
Pennsylvania	2,088	279	229	249	30	1	146	22	3	156	2,333
Texas	41,104	935	3,843	4,885	2,452	2,846	5,111	199	394	4,815	42,280
RRC District 1	1,047	20	57	87	14	6	108	0	9	99	1,047
RRC District 2 Onshore	1,797	205	189	342	150	29	276	11	26	273	1,768
RRC District 3 Onshore	3,219	8	332	433	164	78	429	53	46	524	3,044
RRC District 4 Onshore	9,711	248	955	1,971	449	476	1,116	39	202	1,408	8,919
RRC District 5	4,588	126	702	277	327	344	644	5	47	454	5,398
RRC District 6	6,161	125	340	491	692	809	862	1	52	595	6,572
RRC District 7B	237	198	26	113	4	3	19	0	0	52	314
RRC District 7C	3,430	45	319	163	26	85	474	0	12	312	3,864
RRC District 8	3,284	-87	257	443	102	94	327	23	0	321	3,032
RRC District 8A	101	0	17	4	0	2	0	0	0	16	100
RRC District 9	3,070	-57	110	140	229	620	488	0	0	348	3,514
RRC District 10	4,028	49	502	332	272	281	348	1	0	347	4,258
State Offshore	431	55	37	89	23	19	20	66	0	66	450
Utah	3,915	23	174	721	713	667	232	0	7	266	3,318
Virginia	1,673	1	45	37	0	0	117	0	0	82	1,717
West Virginia	3,477	14	182	314	1	37	171	0	3	193	3,376
Wyoming	20,970	-24	2,128	2,667	336	418	3,202	33	0	1,458	22,266
Federal Offshore ^a	17,772	171	2,272	2,898	1,723	1,515	712	485	812	3,502	15,616
Pacific (California)	56	0	1	0	0	0	0	0	0	2	55
Gulf of Mexico (Louisiana) ^a	12,749	137	1,415	1,843	1,321	1,220	527	404	638	2,600	11,326
Gulf of Mexico (Texas)	4,967	34	856	1,055	402	295	185	81	174	900	4,235
Miscellaneous ^b	80	5	6	0	0	1	35	0	2	9	120
U.S. Total	166,020	2,121	17,736	19,705	9,553	10,638	16,378	805	1,529	17,376	168,593

^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 2003 contained in the *Natural Gas Annual 2003*, DOE/EIA-0131(03).

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, 2003 (Billion Cubic Feet at 14.73 psia and 60° Fahrenheit)

State and Subdivision	Published Proved Reserves 12/31/02	Changes in Reserves During 2003							New Reservoir Discoveries in Old Fields (+)	Estimated Production (-)	Proved Reserves 12/31/03
		Adjustments (+,-)	Revision Increases (+)	Revision Decreases (-)	Sales (-)	Acquisitions (+)	Extensions (+)	New Field Discoveries (+)			
Alaska	6,376	-1	187	19	0	0	0	0	0	276	6,267
Lower 48 States	23,165	203	2,857	2,771	1,040	1,062	817	447	124	2,579	22,285
Alabama	31	3	3	0	0	0	0	0	0	5	32
Arkansas	38	2	3	2	0	1	0	0	0	5	37
California	1,900	-14	247	152	48	46	21	0	0	190	1,810
Coastal Region Onshore	197	6	12	31	2	2	0	0	0	11	173
Los Angeles Basin Onshore	218	1	20	36	26	28	1	0	0	10	196
San Joaquin Basin Onshore	1,400	-22	212	77	20	16	20	0	0	164	1,365
State Offshore	85	1	3	8	0	0	0	0	0	5	76
Colorado	1,097	13	108	10	4	7	65	0	0	90	1,186
Florida	102	-7	0	0	0	0	0	0	0	3	92
Kansas	66	4	24	5	0	1	4	0	0	9	85
Kentucky	25	1	0	0	0	0	0	0	0	1	25
Louisiana	670	8	111	142	79	61	39	0	8	90	586
North	159	-2	17	14	8	4	3	0	0	20	139
South Onshore	427	9	71	110	43	29	32	0	5	52	368
State Offshore	84	1	23	18	28	28	4	0	3	18	79
Michigan	214	19	83	43	123	148	0	0	0	29	269
Mississippi	33	-1	8	4	2	1	0	0	0	8	27
Montana	94	-8	7	3	0	4	25	0	0	7	112
New Mexico	1,482	-34	352	170	53	84	124	0	2	242	1,545
East	1,379	-35	345	159	50	84	124	0	2	234	1,456
West	103	1	7	11	3	0	0	0	0	8	89
New York	0	0	0	0	0	0	0	0	0	0	0
North Dakota	315	14	37	19	1	5	4	0	0	39	316
Ohio	346	-10	9	21	0	0	0	0	0	20	304
Oklahoma	1,177	-9	140	158	81	41	79	0	3	137	1,055
Pennsylvania	137	34	13	15	0	0	4	0	0	9	164
Texas	6,387	118	907	511	247	214	235	1	1	668	6,437
RRC District 1	47	0	4	2	1	0	5	0	0	5	48
RRC District 2 Onshore	70	0	25	6	3	1	16	0	0	22	81
RRC District 3 Onshore	607	10	74	129	38	10	56	0	0	86	504
RRC District 4 Onshore	150	10	19	29	6	5	5	0	1	19	136
RRC District 5	65	-1	11	4	12	10	0	0	0	7	62
RRC District 6	400	19	59	25	3	10	0	0	0	73	387
RRC District 7B	57	-12	38	5	2	3	3	0	0	13	69
RRC District 7C	737	54	152	29	14	15	87	0	0	75	927
RRC District 8	2,772	7	362	161	128	141	38	1	0	229	2,803
RRC District 8A	1,066	12	104	55	12	11	3	0	0	92	1,037
RRC District 9	140	7	18	29	2	0	8	0	0	17	125
RRC District 10	271	10	41	37	26	8	14	0	0	29	252
State Offshore	5	2	0	0	0	0	0	0	0	1	6
Utah	359	-3	20	68	37	43	5	0	0	20	299
Virginia	0	0	0	0	0	0	0	0	0	0	0
West Virginia	21	-1	5	1	0	0	0	0	0	1	23
Wyoming	561	76	36	158	11	6	3	0	0	63	450
Federal Offshore ^a	8,090	3	744	1,289	354	400	209	446	110	942	7,417
Pacific (California)	459	0	39	2	0	0	5	0	0	45	456
Gulf of Mexico (Louisiana) ^a	6,364	4	501	1,155	276	384	204	442	104	730	5,842
Gulf of Mexico (Texas)	1,267	-1	204	132	78	16	0	4	6	167	1,119
Miscellaneous ^b	20	-5	0	0	0	0	0	0	0	1	14
U.S. Total	29,541	202	3,044	2,790	1,040	1,062	817	447	124	2,855	28,552

^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 2003 contained in the *Natural Gas Annual 2003*, DOE/EIA-0131(03).

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

Table 7. Natural Gas Liquids Proved Reserves, Reserves Changes, and Production, Wet After Lease Separation, 2003 (Million Barrels of 42 U.S. Gallons)

State and Subdivision	Published Proved Reserves 12/31/02	Changes in Reserves During 2003									Proved Reserves 12/31/03
		Adjustments (+,-)	Revision Increases (+)	Revision Decreases (-)	Sales (-)	Acquisitions (+)	Extensions (+)	New Field Discoveries (+)	New Reservoir Discoveries in Old Fields (+)	Estimated Production (-)	
Alaska	405	0	0	0	0	0	0	0	0	18	387
Lower 48 States	7,589	-338	882	1,043	403	433	629	35	72	784	7,072
Alabama	57	-2	8	3	4	4	5	0	0	5	60
Arkansas	4	-1	0	0	0	0	0	0	0	0	3
California	95	11	12	9	2	2	2	0	0	10	101
Coastal Region Onshore	17	1	1	3	0	0	0	0	0	1	15
Los Angeles Basin Onshore	10	-1	1	2	1	1	0	0	0	0	8
San Joaquin Basin Onshore	68	11	10	4	1	1	2	0	0	9	78
State Offshore	0	0	0	0	0	0	0	0	0	0	0
Colorado	396	-38	51	21	10	13	33	0	0	29	395
Florida	14	4	0	0	0	0	0	0	0	1	17
Kansas	263	3	11	10	12	12	4	0	0	23	248
Kentucky	66	3	4	6	0	0	2	0	0	3	66
Louisiana	323	15	52	79	23	19	34	0	16	62	295
North	49	12	6	7	4	3	15	0	0	7	67
South Onshore	226	3	39	63	12	8	16	0	8	43	182
State Offshore	48	0	7	9	7	8	3	0	8	12	46
Michigan	47	1	5	6	3	6	1	0	0	3	48
Mississippi	8	0	1	1	0	0	0	0	0	1	7
Montana	6	1	0	0	1	2	1	0	0	1	8
New Mexico	838	66	103	137	39	47	78	0	1	82	875
East	290	10	53	81	19	20	40	0	1	42	272
West	548	56	50	56	20	27	38	0	0	40	603
North Dakota	47	3	4	6	0	1	0	0	0	4	45
Oklahoma	695	-23	124	123	69	86	66	0	0	70	686
Texas	2,711	-180	267	302	123	147	246	9	18	276	2,517
RRC District 1	39	-9	1	2	0	0	2	0	0	2	29
RRC District 2 Onshore	71	6	9	13	7	1	12	0	1	11	69
RRC District 3 Onshore	241	-26	29	30	9	4	27	4	4	37	207
RRC District 4 Onshore	370	-53	38	70	14	16	38	2	7	47	287
RRC District 5	50	-3	6	4	3	3	6	0	0	4	51
RRC District 6	277	-21	19	42	26	31	29	0	5	24	248
RRC District 7B	25	15	5	10	0	0	2	0	0	5	32
RRC District 7C	351	-40	35	16	4	8	39	0	1	29	345
RRC District 8	510	9	54	60	21	21	31	2	0	48	498
RRC District 8A	181	-11	17	9	2	2	0	0	0	15	163
RRC District 9	238	-30	9	12	15	39	32	0	0	25	236
RRC District 10	353	-18	45	33	22	22	28	0	0	28	347
State Offshore	5	1	0	1	0	0	0	1	0	1	5
Utah and Wyoming	938	-70	115	144	33	32	121	1	0	62	898
West Virginia	99	-29	4	6	0	1	3	0	0	4	68
Federal Offshore ^a	973	-101	118	189	84	61	33	25	37	148	725
Pacific (California)	8	0	0	0	0	0	0	0	0	0	8
Gulf of Mexico (Louisiana) ^a	783	-93	89	129	77	58	30	25	32	120	598
Gulf of Mexico (Texas)	182	-8	29	60	7	3	3	0	5	28	119
Miscellaneous ^b	9	-1	3	1	0	0	0	0	0	0	10
U.S. Total	7,994	-338	882	1,043	403	433	629	35	72	802	7,459

^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 2003 contained in the publications *Petroleum Supply Annual 2003*, DOE/EIA-0340(03) and *Natural Gas Annual 2003* DOE/EIA-0131(03).

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

Table 8. Deepwater Production and Proved Reserves of the Gulf of Mexico Federal Offshore, 1992-2003

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
2003	485	426	59	336	149	69.3
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
2003	4,554	4,251	303	3,627	927	79.6

^aIncludes Federal Offshore Alabama.

Source: Based on data reported on Form EIA-23, "Annual Survey of Domestic Oil and Gas Reserves."

**Table 8. Deepwater Production and Proved Reserves of the Gulf of Mexico Federal Offshore, 1992-2003
(continued)**

Year	Gulf of Mexico			Depth		Deepwater Percentage
	Total	Louisiana ^a	Texas	Greater than 200 meters	Less than 200 meters	
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
2003	4,397	3,330	1,067	1,545	2,852	35.1
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
2003	22,522	17,168	5,354	10,041	12,481	44.6

^aIncludes Federal Offshore Alabama.

Source: Based on data reported on Form EIA-23, "Annual Survey of Domestic Oil and Gas Reserves."

Table 9. Coalbed Methane Proved Reserves and Production for 1989–2003
(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
2003	1,665	6,473	4,396	1,224	2,759	1,528	698	--	18,743
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
2003	98	488	451	97	344	71	51	--	1,600

^aIncludes Indiana, 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 2000-2003.

NA -- Not applicable.

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

Figure 1. U.S. Crude Oil Proved Reserves, 1993 – 2003

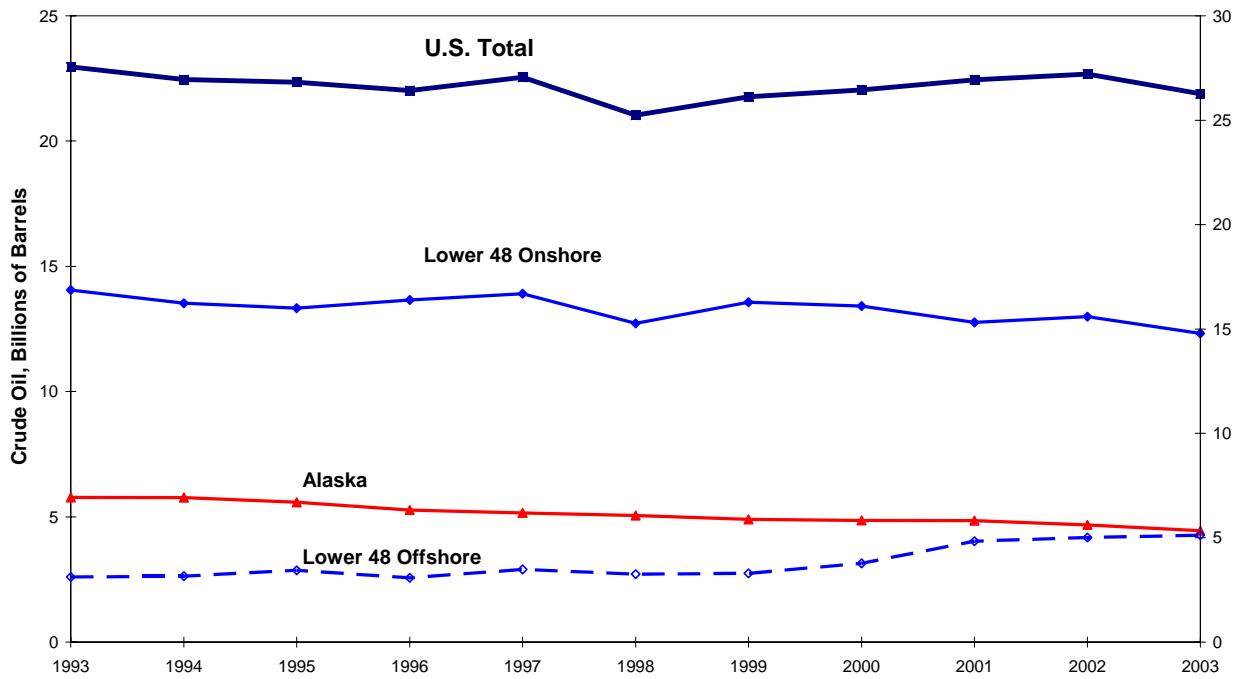
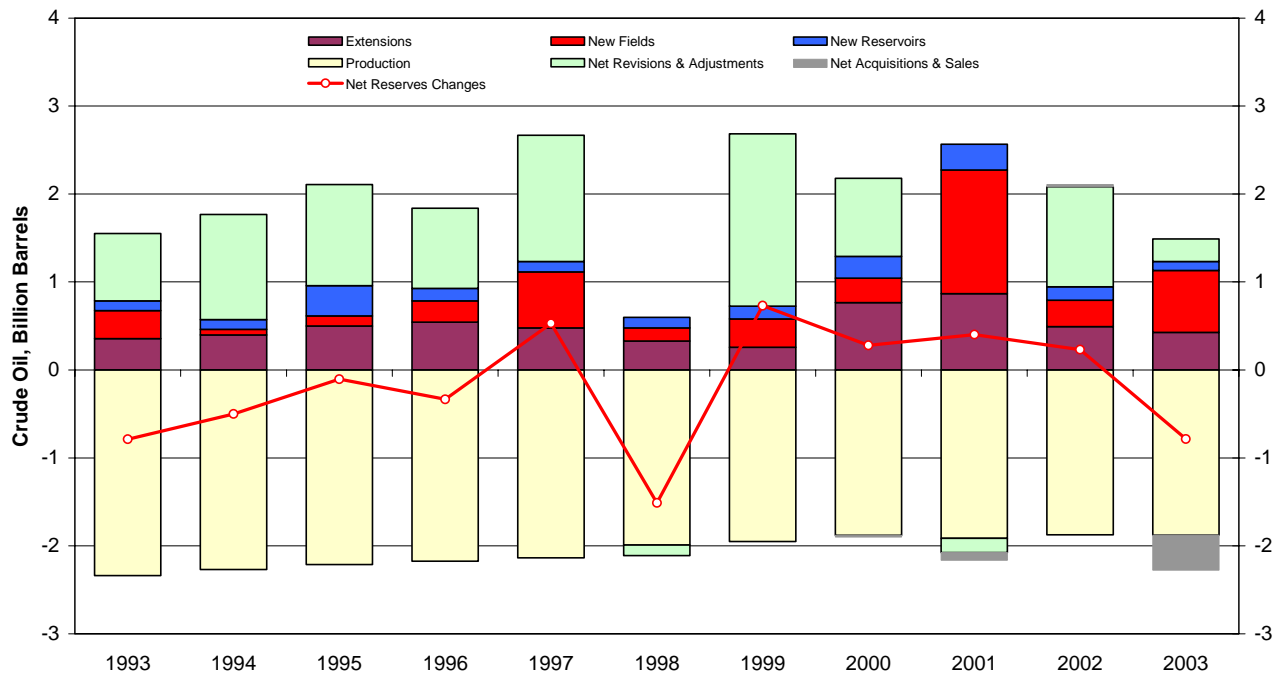


Figure 2. Components of Reserves Changes for Crude Oil, 1993 – 2003



Source: U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves, 1993 through 2003 annual reports, DOE/EIA-0216.

Figure 3. U.S. Dry Natural Gas Proved Reserves, 1993 – 2003

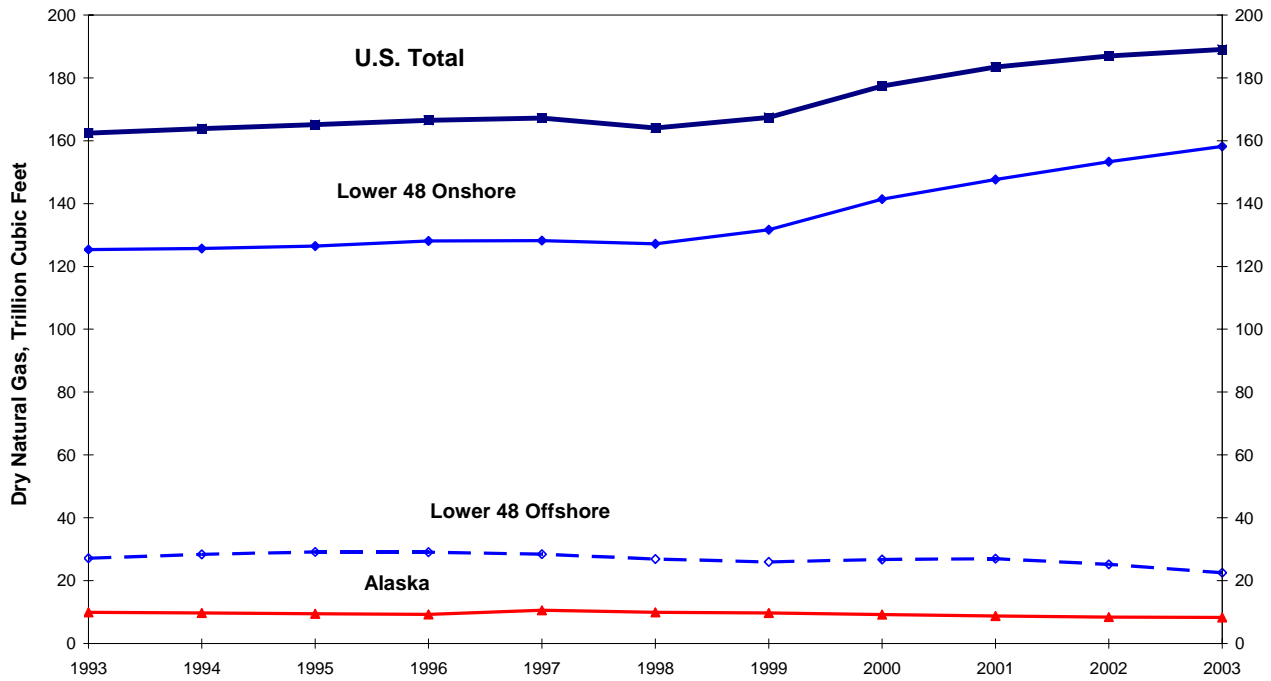
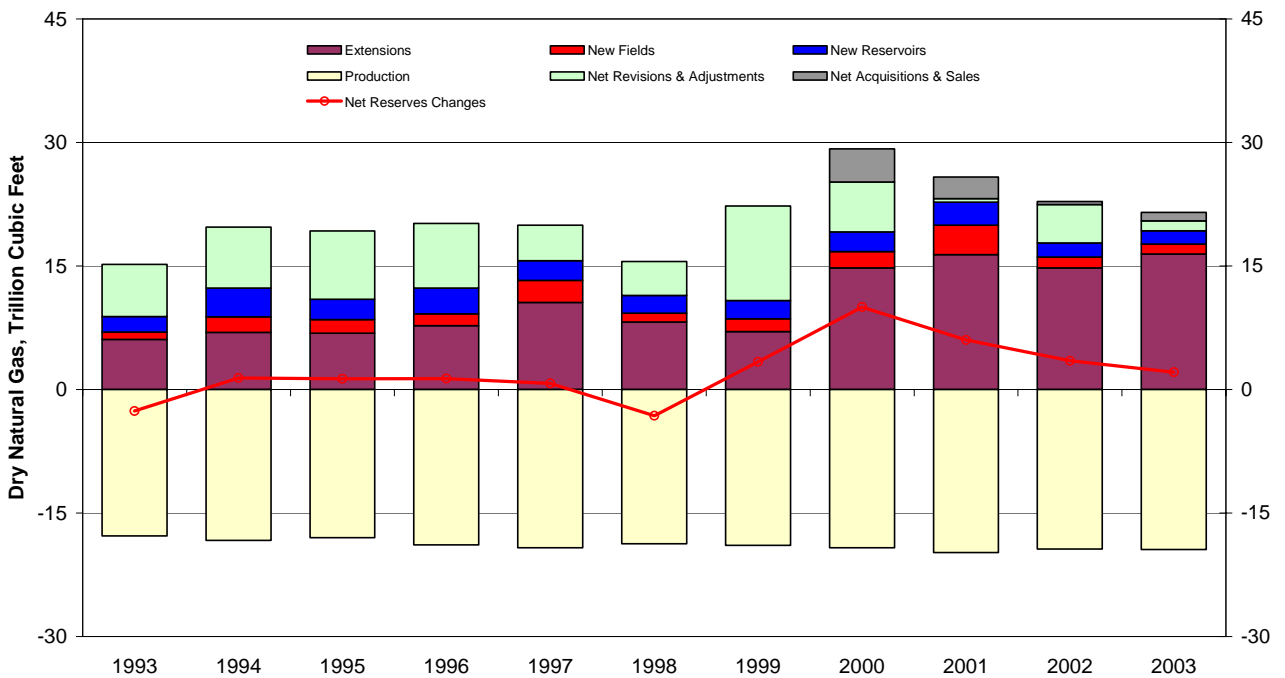


Figure 4. Components of Reserves Changes for Dry Natural Gas, 1993 – 2003



Source: U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves, 1993 through 2003 annual reports, DOE/EIA-0216.

Figure 5. Crude Oil Production Replaced by Reserves Additions, 1994 – 2003

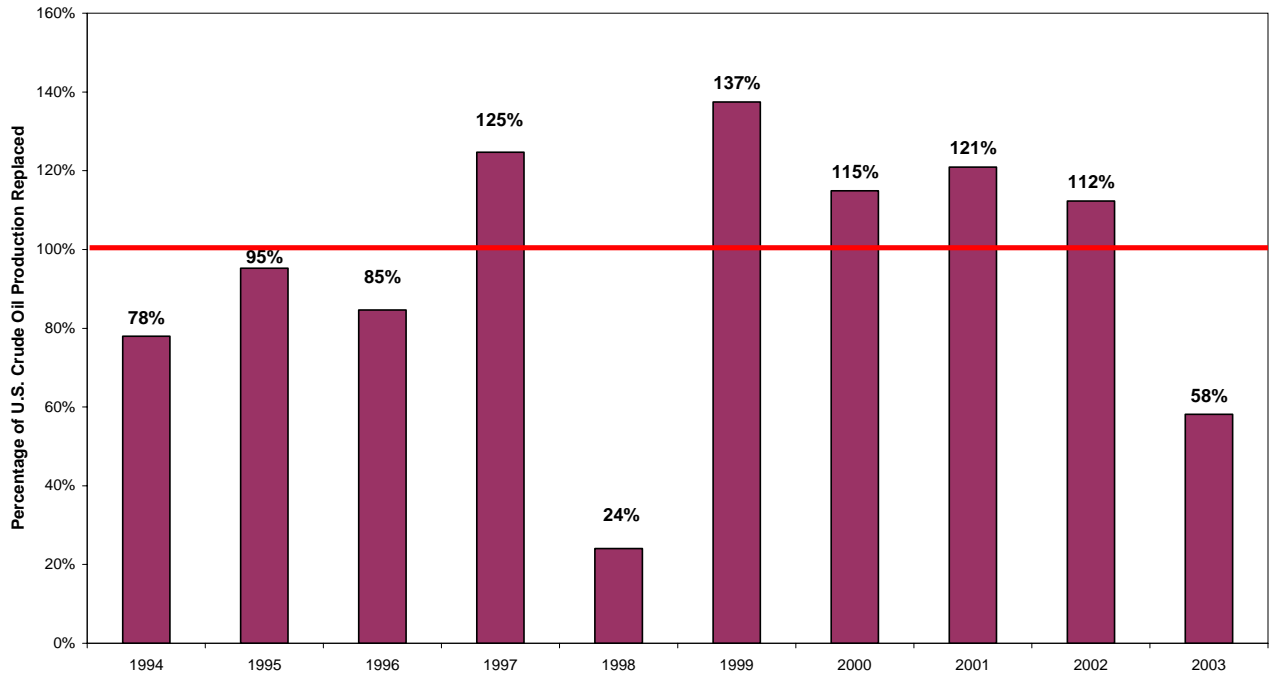
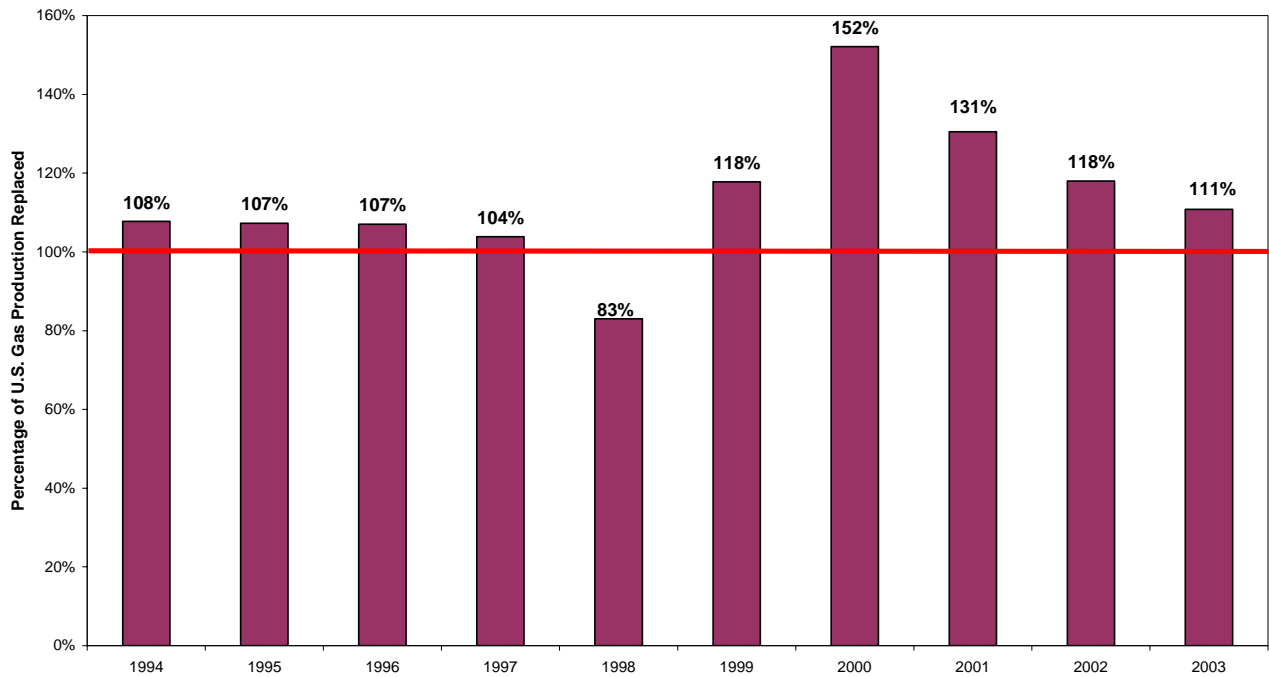


Figure 6. Dry Natural Gas Production Replaced by Reserves Additions, 1994 – 2003



Source: U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves, 1994 through 2003 annual reports, DOE/EIA-0216.

Figure 7. Exploratory Natural Gas Wells Drilled, 1977 – 2003

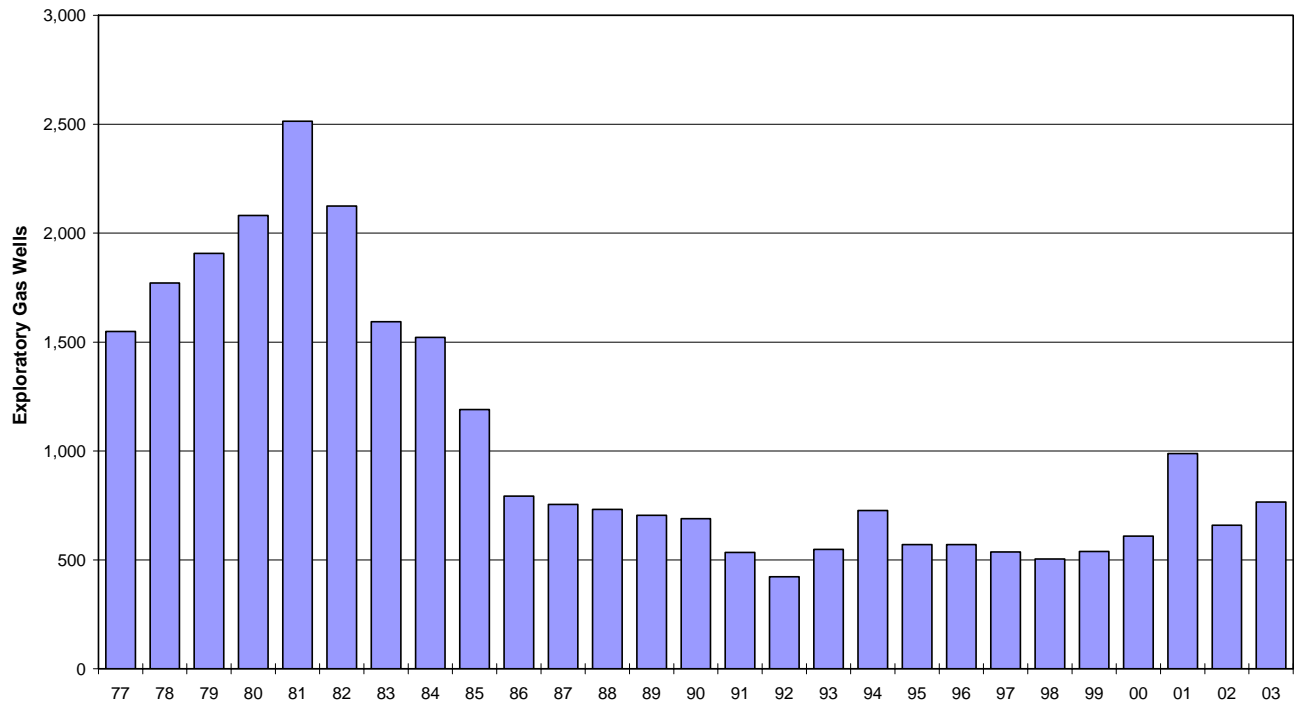
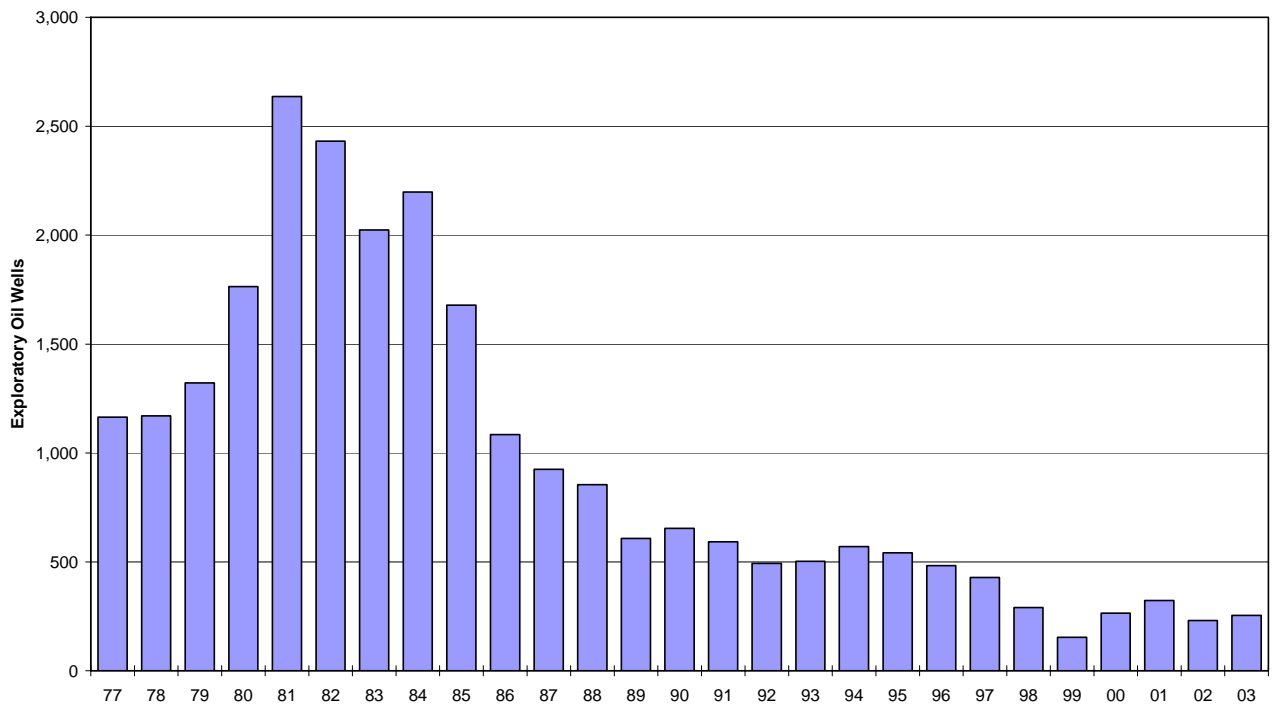
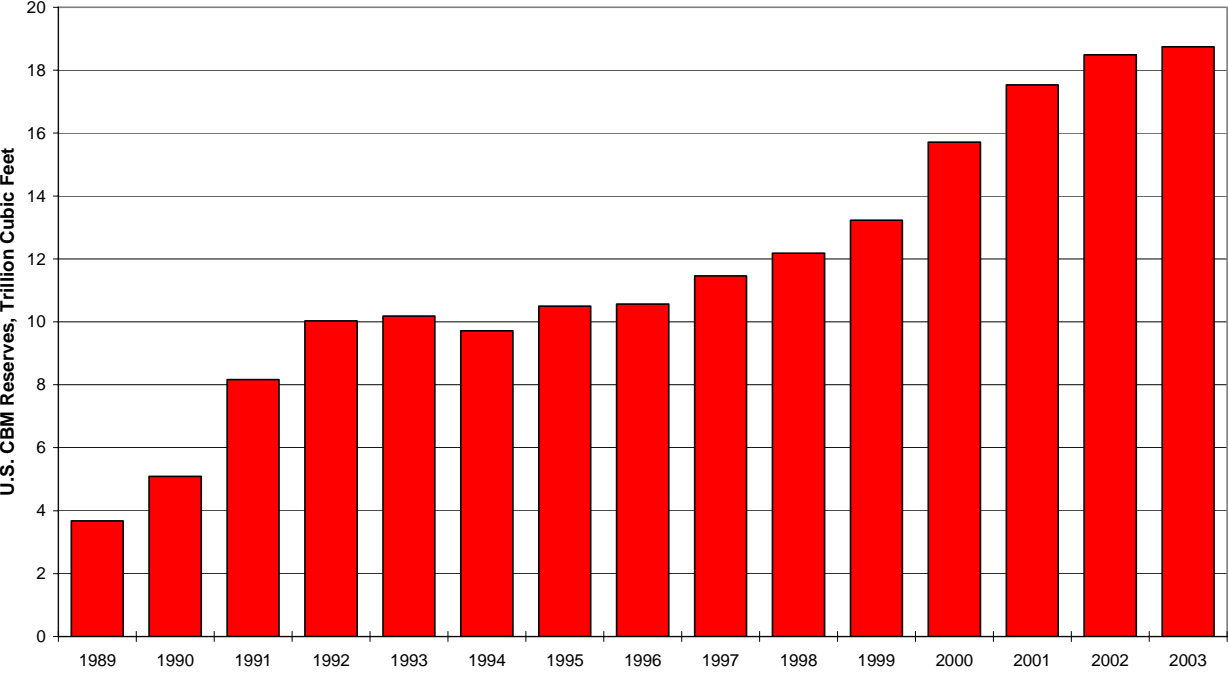


Figure 8. Exploratory Crude Oil Wells Drilled, 1977 – 2003



Source: EIA *Monthly Energy Review*, Table 5.1 Crude Oil and Natural Gas Drilling Activity Measurements, August 2004.

Figure 9. U.S. Coalbed Methane Gas Proved Reserves, 1989 – 2003



Source: U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves, 1989 through 2003 annual reports, DOE/EIA-0216.