

Appendix D

Historical Reserves Statistics

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EIA maintains a data archive of all published proved reserves volumes at the State and National level. Appendix D provides a series of tables of the proved reserves and production of crude oil, natural gas, and natural gas liquids for the U.S. and the lower 48 States for the years 1977 through 2004.

All historical statistics included have previously been published in the annual reports of 1977 through 2003 of the EIA publication *U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves Annual Report*, DOE EIA-0216.{1-27}

Liquid volumes are in million barrels of 42 U.S. gallons. Gas volumes are in billion cubic feet (Bcf), at 14.73 psia and 60° Fahrenheit. NA appears in this appendix wherever data are not available or are withheld to avoid disclosure of data which may be proprietary. An asterisk (*) marks those estimates associated with sampling errors (95 percent confidence interval) greater than 20 percent of the value estimated.

An electronic version of the Data Archive (in Microsoft Excel™) format is available for downloading at the following link:

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

The Data Archive is listed in the “Special Files” section of the destination site.

Table D1. U.S. Proved Reserves of Crude Oil, 1976–2004
(Million Barrels of 42 U.S. Gallons)

Year	Adjustments ^a (1)	Net Revisions (2)	Revisions ^b and Adjustments (3)	Net of Sales 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)
1976	–	–	–	–	–	–	–	–	–	^e 33,502	–
1977	^f -40	386	346	NA	496	168	130	794	2,862	31,780	-1,722
1978	366	1,390	1,756	NA	444	267	116	827	3,008	31,355	-425
1979	337	437	774	NA	424	108	104	636	2,955	29,810	-1,545
1980	219	1,889	2,108	NA	572	143	147	862	2,975	29,805	-5
1981	138	1,271	1,409	NA	750	254	157	1,161	2,949	29,426	-379
1982	-83	434	351	NA	634	204	193	1,031	2,950	27,858	-1,568
1983	462	1,511	1,973	NA	629	105	190	924	3,020	27,735	-123
1984	159	2,445	2,604	NA	744	242	158	1,144	3,037	28,446	711
1985	429	1,598	2,027	NA	742	84	169	995	3,052	28,416	-30
1986	57	855	912	NA	405	48	81	534	2,973	26,889	-1,527
1987	233	2,316	2,549	NA	484	96	111	691	2,873	27,256	367
1988	364	1,463	1,827	NA	355	71	127	553	2,811	26,825	-431
1989	213	1,333	1,546	NA	514	112	90	716	2,586	26,501	-324
1990	86	1,483	1,569	NA	456	98	135	689	2,505	26,254	-247
1991	163	223	386	NA	365	97	92	554	2,512	24,682	-1,572
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
2003	163	94	257	-398	426	705	101	1,232	1,877	21,891	-786
2004	74	420	494	23	617	33	132	782	1,819	21,371	-520

^aIncludes operator reported corrections for the years 1978 through 1981. After 1981 operators included corrections with revisions.

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

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

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

^eBased on following year data only.

^fConsists only of operator reported corrections and no other adjustments.

– = Not applicable.

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". They may differ from the official Energy Information Administration production data for crude oil contained in the *Petroleum Supply Annual*, DOE/EIA-0340.

Source: *U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves*, 1977 through 2004 annual reports, DOE/EIA-0216.{1-27}

Table D2. U.S. Lower 48 Proved Reserves of Crude Oil, 1976–2004
(Million Barrels of 42 U.S. Gallons)

Year	Adjustments ^a (1)	Net Revisions (2)	Revisions ^b and Adjustments (3)	Net of Sales 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)
1976	–	–	–	–	–	–	–	–	–	^e 24,928	–
1977	^f -40	383	343	NA	496	168	130	794	2,698	23,367	-1,561
1978	-48	509	461	NA	444	142	116	702	2,559	21,971	-1,396
1979	342	429	771	NA	424	108	104	636	2,443	20,935	-1,036
1980	210	1,524	1,734	NA	479	143	147	769	2,384	21,054	119
1981	276	1,009	1,285	NA	750	254	157	1,161	2,357	21,143	89
1982	-82	684	602	NA	633	204	193	1,030	2,323	20,452	-691
1983	462	949	1,411	NA	625	105	190	920	2,355	20,428	-24
1984	160	1,587	1,747	NA	742	207	158	1,107	2,399	20,883	455
1985	361	1,667	2,028	NA	581	84	169	834	2,385	21,360	477
1986	70	359	429	NA	399	48	81	528	2,303	20,014	-1,346
1987	233	1,353	1,586	NA	294	38	101	433	2,155	19,878	-136
1988	359	1,181	1,540	NA	340	43	127	510	2,062	19,866	-12
1989	214	1,113	1,327	NA	342	108	87	537	1,903	19,827	-39
1990	151	1,001	1,152	NA	371	98	135	604	1,853	19,730	-97
1991	164	50	214	NA	327	97	87	511	1,856	18,599	-1,131
1992	297	277	574	NA	279	8	84	371	1,821	17,723	-876
1993	250	198	448	NA	343	319	109	771	1,760	17,182	-541
1994	187	527	714	NA	316	64	111	491	1,697	16,690	-492
1995	117	756	873	NA	434	114	333	881	1,673	16,771	81
1996	172	728	900	NA	479	115	141	735	1,663	16,743	-28
1997	514	695	1,209	NA	459	520	119	1,098	1,665	17,385	642
1998	-639	315	-324	NA	299	56	120	475	1,554	15,982	-1,403
1999	138	1,669	1,807	NA	253	242	145	640	1,564	16,865	883
2000	144	622	766	132	540	276	157	973	1,552	17,184	319
2001	-5	-71	-76	-87	716	1,126	292	2,134	1,560	17,595	411
2002	414	567	981	24	467	300	146	913	1,514	17,999	404
2003	162	5	167	-398	391	705	101	1,197	1,520	17,445	-554
2004	75	373	448	23	506	33	74	613	1,485	17,044	-401

^aIncludes operator reported corrections for the years 1978 through 1981. After 1981 operators included corrections with revisions.

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

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

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

^eBased on following year data only.

^fConsists only of operator reported corrections and no other adjustments.

– = Not applicable.

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". They may differ from the official Energy Information Administration production data for crude oil contained in the *Petroleum Supply Annual*, DOE/EIA-0340.

Source: *U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves*, 1977 through 2004 annual reports, DOE/EIA-0216.(1-27)

Table D3. U.S. Proved Reserves of Dry Natural Gas, 1976–2004
(Billion Cubic Feet at 14.73 psia and 60° Fahrenheit)

Year	Adjustments ^a (1)	Net Revisions (2)	Revisions ^b and Adjustments (3)	Net of Sales 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)
1976	–	–	–	–	–	–	–	–	–	^e 213,278	–
1977	^f –20	-1,605	-1,625	NA	8,129	3,173	3,301	14,603	18,843	207,413	-5,865
1978	2,429	-1,025	1,404	NA	9,582	3,860	4,579	18,021	18,805	208,033	620
1979	-2,264	-219	-2,483	NA	8,950	3,188	2,566	14,704	19,257	200,997	-7,036
1980	1,201	1,049	2,250	NA	9,357	2,539	2,577	14,473	18,699	199,021	-1,976
1981	1,627	2,599	4,226	NA	10,491	3,731	2,998	17,220	18,737	201,730	2,709
1982	2,378	455	2,833	NA	8,349	2,687	3,419	14,455	17,506	201,512	-218
1983	3,090	-15	3,075	NA	6,909	1,574	2,965	11,448	15,788	200,247	-1,265
1984	-2,241	3,129	888	NA	8,299	2,536	2,686	13,521	17,193	197,463	-2,784
1985	-1,708	2,471	763	NA	7,169	999	2,960	11,128	15,985	193,369	-4,094
1986	1,320	3,572	4,892	NA	6,065	1,099	1,771	8,935	15,610	191,586	-1,783
1987	1,268	3,296	4,564	NA	4,587	1,089	1,499	7,175	16,114	187,211	-4,375
1988	2,193	-15,060	-12,867	NA	6,803	1,638	1,909	10,350	16,670	168,024	-19,187
1989	3,013	3,030	6,043	NA	6,339	1,450	2,243	10,032	16,983	167,116	-908
1990	1,557	5,538	7,095	NA	7,952	2,004	2,412	12,368	17,233	169,346	2,230
1991	2,960	4,416	7,376	NA	5,090	848	1,604	7,542	17,202	167,062	-2,284
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
2003	2,841	-1,638	1,203	-10,092	16,454	1,222	1,610	19,286	19,425	189,044	2,098
2004	-114	744	630	1,844	18,198	759	1,206	20,163	19,168	192,513	3,469

^aIncludes operator reported corrections for the years 1978 through 1981. After 1981 operators included corrections with revisions.

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

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

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

^eBased on following year data only.

^fConsists only of operator reported corrections and no other adjustments.

^gAn unusually large revision decrease to North Slope dry natural gas reserves was made in 1988. It recognizes some 24.6 trillion cubic feet of downward revisions reported during the last few years by operators because of economic and market conditions. EIA in previous years carried these reserves in the proved category.

– = Not applicable.

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 Energy Information Administration production data for natural gas contained in the *Natural Gas Annual*, DOE/EIA-0131.

Source: *U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves*, 1977 through 2004 annual reports, DOE/EIA-0216.{1-27}

Table D4. U.S. Lower 48 Proved Reserves of Dry Natural Gas, 1976–2004
(Billion Cubic Feet at 14.73 psia and 60° Fahrenheit)

Year	Adjustments ^a (1)	Net Revisions (2)	Revisions ^b and Adjustments (3)	Net of Sales 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)
1976	–	–	–	–	–	–	–	–	–	^e 180,838	–
1977	^f -21	-1,540	-1,561	NA	8,056	3,173	3,301	14,530	18,637	175,170	-5,668
1978	2,446	-758	1,688	NA	9,582	3,860	4,277	17,719	18,589	175,988	818
1979	-2,202	-707	-2,909	NA	8,949	3,173	2,566	14,688	19,029	168,738	-7,250
1980	1,163	62	1,225	NA	9,046	2,539	2,577	14,162	18,486	165,639	-3,099
1981	1,840	2,506	4,346	NA	10,485	3,731	2,994	17,210	18,502	168,693	3,054
1982	2,367	-1,748	619	NA	8,349	2,687	3,419	14,455	17,245	166,522	-2,171
1983	3,089	421	3,510	NA	6,908	1,574	2,965	11,447	15,515	165,964	-558
1984	-2,245	2,617	372	NA	8,298	2,536	2,686	13,520	16,869	162,987	-2,977
1985	-1,349	2,500	1,151	NA	7,098	999	2,960	11,057	15,673	159,522	-3,465
1986	1,618	4,144	5,762	NA	6,064	1,099	1,761	8,924	15,286	158,922	-600
1987	1,066	2,645	3,711	NA	4,542	1,077	1,499	7,118	15,765	153,986	-4,936
1988	2,017	8,895	10,912	NA	6,771	1,638	1,909	10,318	16,270	158,946	4,960
1989	2,997	2,939	5,936	NA	6,184	1,450	2,243	9,877	16,582	158,177	-769
1990	1,877	4,572	6,449	NA	7,898	2,004	2,412	12,314	16,894	160,046	1,869
1991	2,967	3,860	6,827	NA	5,074	848	1,563	7,485	16,849	157,509	-2,537
1992	1,946	5,937	7,883	NA	4,621	649	1,724	6,994	17,009	155,377	-2,132
1993	915	4,779	5,694	NA	6,076	899	1,858	8,833	17,396	152,508	-2,869
1994	1,896	5,289	7,185	NA	6,936	1,894	3,480	12,310	17,899	154,104	1,596
1995	973	7,223	8,196	NA	6,801	1,666	2,452	10,919	17,570	155,649	1,545
1996	3,640	4,055	7,695	NA	7,751	1,390	3,110	12,251	18,415	157,180	1,531
1997	-609	3,192	2,583	NA	10,571	2,681	2,382	15,634	18,736	156,661	-519
1998	-1,463	5,696	4,233	NA	8,195	1,070	2,162	11,427	18,207	154,114	-2,547
1999	849	10,452	11,301	NA	7,041	1,512	2,173	10,726	18,469	157,672	3,558
2000	-914	8,755	7,841	4,214	12,838	1,983	2,355	17,176	18,713	168,190	10,518
2001	2,753	-2,216	537	2,630	16,321	3,504	2,796	21,621	19,318	174,660	6,470
2002	3,692	914	4,606	380	14,707	1,332	1,686	17,725	18,893	178,478	3,818
2003	2,840	-1,830	1,010	1,034	16,373	1,202	1,609	19,184	18,947	180,759	2,281
2004	-113	319	206	1,844	18,057	759	1,171	19,987	18,690	184,106	3,347

^aIncludes operator reported corrections for the years 1978 through 1981. After 1981 operators included corrections with revisions.

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

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

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

^eBased on following year data only.

^fConsists only of operator reported corrections and no other adjustments.

– = Not applicable.

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 Energy Information Administration production data for natural gas contained in the *Natural Gas Annual*, DOE/EIA-0131.

Source: *U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves*, 1977 through 2004 annual reports, DOE/EIA-0216.{1-27}

Table D5. U.S. Proved Reserves of Wet Natural Gas, After Lease Separation, 1978–2004
(Billion Cubic Feet at 14.73 psia and 60° Fahrenheit)

Year	Adjustments ^a (1)	Net Revisions (2)	Revisions ^b and Adjustments (3)	Net of Sales 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)
1978	–	–	–	–	–	–	–	–	–	^e 208,033	–
1979	5,356	-223	5,133	NA	9,332	3,279	2,637	15,248	20,079	208,335	302
1980	1,253	1,137	2,390	NA	9,757	2,629	2,648	15,034	19,500	206,259	-2,076
1981	2,057	2,743	4,800	NA	10,979	3,870	3,080	17,929	19,554	209,434	3,175
1982	2,598	455	3,053	NA	8,754	2,785	3,520	15,059	18,292	209,254	-180
1983	4,363	57	4,420	NA	7,263	1,628	3,071	11,962	16,590	209,046	-208
1984	-2,413	3,333	920	NA	8,688	2,584	2,778	14,050	18,032	205,984	-3,062
1985	-1,299	2,687	1,388	NA	7,535	1,040	3,053	11,628	16,798	202,202	-3,782
1986	2,137	3,835	5,972	NA	6,359	1,122	1,855	9,336	16,401	201,109	-1,093
1987	1,199	3,522	4,721	NA	4,818	1,128	1,556	7,502	16,904	196,428	-4,681
1988	2,180	-14,931	^f -12,751	NA	7,132	1,677	1,979	10,788	17,466	^f 176,999	-19,429
1989	2,537	3,220	5,757	NA	6,623	1,488	2,313	10,424	17,752	175,428	-1,571
1990	1,494	5,837	7,331	NA	8,287	2,041	2,492	12,820	18,003	177,576	2,148
1991	3,368	4,569	7,937	NA	5,298	871	1,655	7,824	18,012	175,325	-2,251
1992	2,543	6,374	8,917	NA	4,895	668	1,773	7,336	18,269	173,309	-2,016
1993	1,048	5,541	6,589	NA	6,376	927	1,930	9,233	18,641	170,490	-2,819
1994	1,977	5,836	7,813	NA	7,299	1,941	3,606	12,846	19,210	171,939	1,449
1995	889	8,091	8,980	NA	7,204	1,709	2,518	11,431	18,874	173,476	1,537
1996	4,288	4,277	8,565	NA	8,189	1,491	3,209	12,889	19,783	175,147	1,671
1997	-730	5,057	4,327	NA	11,179	2,747	2,455	16,381	20,134	175,721	574
1998	-1,624	5,982	4,358	NA	8,630	1,116	2,240	11,986	19,622	172,433	-3,288
1999	1,102	11,182	12,284	NA	7,401	1,622	2,265	11,288	19,856	176,159	3,726
2000	-1,295	7,456	6,161	4,286	15,550	2,055	2,463	20,068	20,164	186,510	10,351
2001	1,849	-2,438	-589	2,715	17,183	3,668	2,898	23,749	20,642	191,743	5,233
2002	4,004	1,038	5,042	428	15,468	1,374	1,752	18,594	20,248	195,561	3,816
2003	2,323	-1,715	608	1,107	17,195	1,252	1,653	20,100	20,231	197,145	1,584
2004	170	825	995	1,975	19,068	790	1,244	21,102	20,017	201,200	4,055

^aIncludes operator reported corrections for the years 1978 through 1981. After 1981 operators included corrections with revisions.

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

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

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

^eBased on following year data only.

^fAn unusually large revision decrease to North Slope wet natural gas reserves was made in 1988. It recognizes some 25 trillion cubic feet of downward revisions reported during the last few years by operators because of economic and market conditions. EIA in previous years carried these reserves in the proved category.

– = Not applicable.

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". They may differ from the official Energy Information Administration production data for natural gas contained in the *Natural Gas Annual*, DOE/EIA-013.

Source: *U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves*, 1979 through 2004 annual reports, DOE/EIA-0216.{3-27}

Table D6. U.S. Lower 48 Proved Reserves of Wet Natural Gas, After Lease Separation, 1978–2004
(Billion Cubic Feet at 14.73 psia and 60° Fahrenheit)

Year	Adjustments ^a (1)	Net Revisions (2)	Revisions ^b and Adjustments (3)	Net of Sales 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)
1978	–	–	–	–	–	–	–	–	–	^e 175,988	–
1979	5,402	-711	4,691	NA	9,331	3,264	2,637	15,232	19,851	176,060	72
1980	1,218	150	1,368	NA	9,446	2,629	2,648	14,723	19,287	172,864	-3,196
1981	2,270	2,650	4,920	NA	10,973	3,870	3,076	17,919	19,318	176,385	3,521
1982	2,586	-1,748	838	NA	8,754	2,785	3,520	15,059	18,030	174,252	-2,133
1983	4,366	493	4,859	NA	7,262	1,628	3,071	11,961	16,317	174,755	503
1984	-2,409	2,821	412	NA	8,687	2,584	2,778	14,049	17,708	171,508	-3,247
1985	-1,313	2,713	1,400	NA	7,463	1,040	3,053	11,556	16,485	167,979	-3,529
1986	2,114	4,410	6,524	NA	6,357	1,122	1,845	9,324	16,073	167,754	-225
1987	1,200	2,868	4,068	NA	4,772	1,116	1,556	7,444	16,553	162,713	-5,041
1988	2,025	9,390	11,415	NA	7,099	1,677	1,979	10,755	17,063	167,820	5,107
1989	2,545	3,128	5,673	NA	6,467	1,485	2,313	10,265	17,349	166,409	-1,411
1990	1,811	4,859	6,670	NA	8,232	2,041	2,492	12,765	17,661	168,183	1,774
1991	3,367	4,013	7,380	NA	5,281	871	1,614	7,766	17,657	165,672	-2,511
1992	2,265	6,217	8,482	NA	4,840	668	1,773	7,281	17,851	163,584	-2,088
1993	996	4,971	5,967	NA	6,349	927	1,922	9,198	18,245	160,504	-3,080
1994	1,924	5,613	7,537	NA	7,294	1,941	3,606	12,841	18,756	162,126	1,622
1995	1,304	7,525	8,829	NA	7,162	1,709	2,518	11,389	18,443	163,901	1,775
1996	4,219	4,246	8,465	NA	8,183	1,430	3,209	12,822	19,337	165,851	1,950
1997	-835	3,322	2,487	NA	11,165	2,747	2,455	16,367	19,657	165,048	-803
1998	-1,461	5,937	4,476	NA	8,628	1,112	2,240	11,980	19,104	162,400	-2,648
1999	958	11,130	12,088	NA	7,399	1,566	2,242	11,207	19,391	166,304	3,904
2000	-1,294	9,273	7,979	4,471	13,574	2,055	2,450	18,079	19,654	177,179	10,875
2001	1,849	-2,336	-487	2,715	17,123	3,593	2,894	23,610	20,175	182,842	5,663
2002	4,004	1,038	5,042	428	15,468	1,374	1,752	18,594	20,248	19,5561	3,816
2003	2,324	-1,909	415	1,107	17,114	1,232	1,652	19,998	19,751	188,797	1,769
2004	170	395	565	1,975	18,927	790	1,209	20,926	19,536	192,727	3,930

^aIncludes operator reported corrections for the years 1978 through 1981. After 1981 operators included corrections with revisions.

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

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

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

^eBased on following year data only.

– = Not applicable.

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". They may differ from the official Energy Information Administration production data for natural gas contained in the *Natural Gas Annual*, DOE/EIA-0131.

Source: *U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves*, 1979 through 2004 annual reports, DOE/EIA-0216.{3-27}

Table D7. U.S. Proved Reserves of Natural Gas Liquids, 1978–2004
(Million Barrels of 42 U.S. Gallons)

Year	Adjustments ^a (1)	Net Revisions (2)	Revisions ^b and Adjustments (3)	Net of Sales 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)
1978	–	–	–	–	–	–	–	–	–	^e 6,772	–
1979	^f 64	-49	15	NA	364	94	97	555	727	6,615	-157
1980	153	104	257	NA	418	90	79	587	731	6,728	113
1981	231	86	317	NA	542	131	91	764	741	7,068	340
1982	299	-21	278	NA	375	112	109	596	721	7,221	153
1983	849	66	915	NA	321	70	99	490	725	7,901	680
1984	-123	142	19	NA	348	55	96	499	776	7,643	-258
1985	426	162	588	NA	337	44	85	466	753	7,944	301
1986	367	223	590	NA	263	34	72	369	738	8,165	221
1987	231	191	422	NA	213	39	55	307	747	8,147	-18
1988	11	453	464	NA	268	41	72	381	754	8,238	91
1989	-277	123	-154	NA	259	83	74	416	731	7,769	-469
1990	-83	221	138	NA	299	39	73	411	732	7,586	-183
1991	233	130	363	NA	189	25	55	269	754	7,464	-122
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	-14	289	275	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
2004	273	97	370	112	734	26	54	814	827	7,928	469

^aIncludes operator reported corrections for the years 1978 through 1981. After 1981 operators included corrections with revisions.

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

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

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

^eBased on following year data only.

^fConsists only of operator reported corrections and no other adjustments.

– = Not applicable.

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 Energy Information Administration production data for natural gas liquids contained in the *Natural Gas Annual*, DOE/EIA-0131.

Source: *U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves*, 1979 through 2004 annual reports, DOE/EIA-0216.{3-27}

Table D8. U.S. Lower 48 Proved Reserves of Natural Gas Liquids, 1978–2004
(Million Barrels of 42 U.S. Gallons)

Year	Adjustments ^a (1)	Net Revisions (2)	Revisions ^b and Adjustments (3)	Net of Sales 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)
1978	–	–	–	–	–	–	–	–	–	^e 6,749	–
1979	^f 63	-49	14	NA	364	94	97	555	726	6,592	-157
1980	165	104	269	NA	418	90	79	587	731	6,717	125
1981	233	85	318	NA	542	131	91	764	741	7,058	341
1982	300	-21	279	NA	375	112	109	596	721	7,212	154
1983	850	66	916	NA	321	70	99	490	725	7,893	681
1984	-115	123	8	NA	348	55	96	499	776	7,624	-269
1985	70	152	222	NA	334	44	85	463	748	7,561	-63
1986	363	226	589	NA	263	34	72	369	735	7,784	223
1987	179	191	370	NA	212	39	55	306	731	7,729	-55
1988	10	452	462	NA	267	41	72	380	734	7,837	108
1989	-273	123	-150	NA	259	83	74	416	714	7,389	-448
1990	-60	221	161	NA	298	39	73	410	714	7,246	-143
1991	183	138	321	NA	187	25	55	267	730	7,104	-142
1992	225	254	479	NA	183	20	64	267	746	7,104	0
1993	101	124	225	NA	245	24	64	333	761	6,901	-203
1994	38	196	234	NA	314	54	131	499	765	6,869	-32
1995	204	230	434	NA	432	52	67	551	761	7,093	224
1996	417	178	595	NA	450	56	109	615	817	7,486	393
1997	-107	55	-52	NA	533	114	90	737	829	7,342	-144
1998	-74	208	134	NA	383	66	88	537	809	7,204	-138
1999	102	617	719	NA	304	50	86	440	848	7,515	311
2000	9	459	468	145	645	92	102	839	899	8,068	553
2001	-429	-280	-709	-102	717	138	142	997	870	7,588	-480
2002	42	31	73	54	612	48	78	738	864	7,589	1
2003	-338	-161	-499	30	629	35	72	736	784	7,072	-517
2004	273	97	370	112	734	26	54	814	809	7,559	487

^aIncludes operator reported corrections for the years 1978 through 1981. After 1981 operators included corrections with revisions.

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

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

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

^eBased on following year data only.

^fConsists only of operator reported corrections and no other adjustments.

– = Not applicable.

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 Energy Information Administration production data for natural gas liquids contained in the *Natural Gas Annual*, DOE/EIA-0131.

Source: *U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves*, 1979 through 2004 annual reports, DOE/EIA-0216.{3-27}

Table D9. Deepwater Production and Proved Reserves of the Gulf of Mexico Federal Offshore, 1992-2004

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	451	395	57	288	163	63.9
2003	485	426	59	336	149	69.3
2004	467	404	63	310	157	66.4
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
2004	4,144	3,919	225	3,280	864	79.2

**Table D9. Deepwater Production and Proved Reserves of the Gulf of Mexico Federal Offshore, 1992-2004
(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
2004	3,967	2,890	1,077	1,251	2,716	31.5
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
2004	19,288	15,144	4,144	8,591	10,698	44.5

**Table D9. Deepwater Production and Proved Reserves of the Gulf of Mexico Federal Offshore, 1992-2004
(continued)**

Year	Gulf of Mexico			Depth		Deepwater Percentage
	Total	Louisiana ^a	Texas	Greater than 200 meters	Less than 200 meters	
Natural Gas Liquids (million barrels of 42 U.S. gallons)						
Production						
1992	91	76	15	4	87	4.4
1993	97	80	17	6	91	6.2
1994	98	83	15	6	92	6.1
1995	85	71	14	12	73	14.1
1996	101	84	17	13	88	12.9
1997	140	123	17	17	123	12.1
1998	139	120	19	26	113	18.7
1999	167	136	31	51	116	30.5
2000	199	164	35	84	115	42.2
2001	192	147	45	96	96	50.0
2002	184	149	35	66	118	36.0
2003	148	120	28	55	93	37.2
2004	155	127	28	51	104	40.9
Reserves						
1992	590	472	118	91	499	15.4
1993	605	490	115	97	508	16.0
1994	603	500	103	110	493	18.2
1995	630	496	134	294	336	46.7
1996	753	621	132	300	456	39.8
1997	906	785	121	349	557	38.5
1998	919	776	143	387	532	42.1
1999	994	833	161	411	583	41.3
2000	1,074	921	153	468	606	43.6
2001	967	785	182	443	524	45.8
2002	965	783	182	407	558	42.2
2003	717	598	119	262	455	36.5
2004	713	615	98	292	421	40.9

**Table D9. Deepwater Production and Proved Reserves of the Gulf of Mexico Federal Offshore, 1992-2004
(continued)**

Year	Gulf of Mexico			Depth		Deepwater Percentage
	Total	Louisiana ^a	Texas	Greater than 200 meters	Less than 200 meters	
Dry Natural Gas (billion cubic feet at 14.73 psia and 60° Fahrenheit)						
Production						
1992	4,508	3,233	1,275	162	4,346	3.6
1993	4,577	3,319	1,258	224	4,353	4.9
1994	4,725	3,440	1,285	288	4,437	6.1
1995	4,627	3,376	1,251	361	4,266	7.8
1996	4,991	3,706	1,285	544	4,447	10.9
1997	5,133	3,895	1,238	565	4,568	11.0
1998	4,872	3,728	1,144	711	4,161	14.6
1999	4,885	3,721	1,164	1,099	3,786	22.5
2000	4,773	3,626	1,147	1,165	3,608	24.4
2001	4,913	3,735	1,178	1,334	3,578	27.4
2002	4,423	3,427	996	1,328	3,095	30.0
2003	4,306	3,244	1,062	1,513	2,793	35.1
2004	3,874	2,802	1,072	1,222	2,652	31.5
Reserves						
1992	26,649	19,653	6,996	3,225	23,424	12.1
1993	26,044	19,383	6,661	3,438	22,606	13.2
1994	27,218	20,835	6,383	4,709	22,509	17.3
1995	27,917	21,392	6,525	5,751	22,166	20.6
1996	27,852	21,856	5,996	6,322	21,530	22.7
1997	27,922	21,934	5,988	7,343	20,579	26.3
1998	26,422	20,774	5,648	7,425	18,997	28.1
1999	25,451	19,598	5,853	7,533	17,918	29.6
2000	26,172	19,788	6,384	8,506	17,666	32.5
2001	26,456	19,721	6,735	10,943	15,513	41.4
2002	24,689	18,500	6,189	10,266	14,423	41.6
2003	22,059	16,728	5,331	9,835	12,224	44.6
2004	18,812	14,685	4,127	8,379	10,433	44.5

**Table D9. Deepwater Production and Proved Reserves of the Gulf of Mexico Federal Offshore, 1992-2004
(continued)**

Year	Gulf of Mexico			Depth		Deepwater Percentage
	Total	Louisiana ^a	Texas	Greater than 200 meters	Less than 200 meters	
Lease Condensate (million barrels of 42 U.S. gallons)						
Production						
1992	44	35	9	2	42	4.4
1993	46	35	11	3	43	6.2
1994	47	37	10	3	44	6.1
1995	49	40	9	7	42	14.1
1996	60	49	11	8	52	12.9
1997	70	59	11	8	62	12.1
1998	72	57	15	13	59	18.7
1999	87	61	26	27	60	30.5
2000	106	76	30	45	61	42.2
2001	101	60	41	51	50	50.2
2002	90	60	30	38	52	42.2
2003	78	53	25	30	48	38.5
2004	74	49	25	27	47	36.2
Reserves						
1992	310	226	84	48	262	15.4
1993	316	235	81	51	265	16.0
1994	311	233	78	57	254	18.2
1995	412	305	107	192	220	46.7
1996	527	422	105	210	317	39.8
1997	527	433	94	203	324	38.5
1998	557	435	122	234	323	42.1
1999	567	430	137	234	333	41.3
2000	560	433	127	244	316	43.6
2001	482	325	157	221	261	45.8
2002	454	300	154	195	259	43.0
2003	353	251	102	135	218	38.2
2004	290	205	85	103	187	35.6

^aIncludes Federal Offshore Alabama.

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

Table D10. 2004 Reported Proved Nonproducing Reserves of Crude Oil, Lease Condensate, and Wet Natural Gas, After Lease Separation^a

State and Subdivision	Crude Oil (mbbls)	Lease Condensate (mbbls)	Nonassociated Gas (bcf)	Associated Dissolved Gas (bcf)	Total Gas (bcf)
Alaska	707	0	664	17	681
Lower 48 States	4,436	409	45,332	5,399	50,731
Alabama	2	3	369	2	371
Arkansas	3	0	315	10	325
California	267	0	221	403	624
Coastal Region Onshore	16	0	6	12	18
Los Angeles Basin Onshore	63	0	0	30	30
San Joaquin Basin Onshore	158	0	215	342	557
State Offshore	30	0	0	19	19
Colorado	62	39	3,788	621	4,409
Florida	6	0	0	0	0
Kansas	11	0	54	5	59
Kentucky	5	0	107	0	107
Louisiana	150	30	3,524	282	3,806
North	11	6	1,982	46	2,028
South Onshore	115	23	1,376	215	1,591
State Offshore	24	1	166	21	187
Michigan	10	1	468	29	497
Mississippi	79	0	76	7	83
Montana	104	0	158	41	199
New Mexico	142	15	4,169	160	4,329
East	142	10	613	159	772
West	0	5	3,556	1	3,557
New York	0	0	26	0	26
North Dakota	52	1	14	22	36
Ohio	7	0	92	11	103
Oklahoma	92	38	3,800	80	3,880
Pennsylvania	1	0	410	38	448
Texas	625	76	13,084	831	13,915
RRC District 1	9	2	395	6	401
RRC District 2 Onshore	13	2	545	15	560
RRC District 3 Onshore	21	20	760	51	811
RRC District 4 Onshore	4	22	3,067	42	3,109
RRC District 5	1	1	2,461	23	2,484
RRC District 6	15	12	1,729	30	1,759
RRC District 7B	5	0	21	4	25
RRC District 7C	14	1	842	98	940
RRC District 8	218	0	737	186	923
RRC District 8A	311	0	10	327	337
RRC District 9	9	1	1,417	4	1,421
RRC District 10	5	14	1,041	41	1,082
State Offshore	0	1	59	4	63
Utah	61	5	1,136	127	1,263
Virginia	0	0	742	0	742
West Virginia	0	0	510	0	510
Wyoming	45	41	5,524	23	5,547
Federal Offshore ^b	2,708	160	6,718	2,707	9,425
Pacific (California)	55	8	47	60	107
Gulf of Mexico (Louisiana) ^b	2,581	112	5,114	2,488	7,602
Gulf of Mexico (Texas)	72	40	1,557	159	1,716
Miscellaneous ^c	4	0	27	0	27
U.S. Total	5,143	409	45,996	5,416	51,412

^aIncludes only those operators who produced during the report year 400,000 barrels of crude oil or 2 billion cubic feet of wet natural gas, or more (Category I and Category II operators).

^bIncludes Federal offshore Alabama.

^cIncludes Arizona, Maryland, Missouri, Nevada, Oregon, South Dakota and Tennessee.

Source: Form EIA-23, "Annual Survey of Domestic Oil and Gas Reserves," 2004.

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