

Table 2. Reserves Changes, 1977-2002

Components of Change	Lower 48 States			U.S. Total		
	Volume	Average per Year	Percent of Reserves Additions	Volume	Average per Year	Percent of Reserves Additions
Crude Oil (million barrels of 42 U.S. gallons)						
Proved Reserves as of 12/31/76	24,928	—	—	33,502	—	—
New Field Discoveries	4,987	192	11.0	5,938	228	10.7
New Reservoir Discoveries in Old Fields	3,739	144	8.3	3,869	149	7.0
Extensions	11,832	455	26.2	13,388	515	24.2
Total Discoveries	20,558	791	45.5	23,195	892	41.8
Revisions, Adjustments, Sales & Acquisitions ^a	24,647	948	54.5	32,238	1,240	58.2
Total Reserves Additions	45,205	1,739	100.0	55,433	2,132	100.0
Production	52,070	2,003	115.2	66,258	2,548	119.5
Net Reserves Change	-6,865	-264	-15.2	-10,825	-416	-19.5
Dry Natural Gas (billion cubic feet at 14.73 psia and 60° Fahrenheit)						
Proved Reserves as of 12/31/76	180,838	—	—	213,278	—	—
New Field Discoveries	50,968	1,960	11.2	51,190	1,969	11.6
New Reservoir Discoveries in Old Fields	65,310	2,512	14.4	65,723	2,528	14.9
Extensions	215,162	8,275	47.3	218,151	8,390	49.6
Total Discoveries	331,440	12,748	72.9	335,064	12,887	76.2
Revisions, Adjustments, Sales & Acquisitions ^a	123,016	4,731	27.1	104,800	4,031	23.8
Total Reserves Additions	454,456	17,479	100.0	439,864	16,918	100.0
Production	456,816	17,570	100.5	466,196	17,931	106.0
Net Reserves Change	-2,360	-91	-0.5	-26,332	-1,013	-6.0

^a EIA did not separately collect data on sales and acquisitions of proved reserves until the year 2000.
Source: U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves 1977-2002 annual reports, DOE/EIA-0216.{1-25}

Looking at the components of total discoveries in 2002:

- 2002's new field discoveries (300 million barrels) were 32 percent greater than the post-1976 average for crude oil,
- New reservoir discoveries in old fields were 3 percent greater than the post-1976 average, and
- Extensions in 2002 were 4 percent less than the post-1976 average for crude oil.

Dry Natural Gas: Since 1977 U.S. operators have:

- Discovered an average of 12,887 billion cubic feet per year of new reserves
- Had proved reserves additions averaging 16,918 billion cubic feet per year from total discoveries, net revisions and adjustments, and net sales and acquisitions
- Had an average net reduction in U.S. reserves of 1,013 billion cubic feet per year.

Like crude oil reserves, natural gas reserves have been sustained primarily by proved ultimate recovery appreciation since 1977. However, extensions rather than net revisions and adjustments are usually the largest component. Extensions account for 50 percent while net revisions and adjustments account for only 24 percent of all reserves additions since 1977. In 2002, the net of revisions, adjustments, sales, and acquisitions was 22 percent of all reserves additions, and extensions were 65 percent of all reserves additions.

Compared to the averages of reserves changes since 1977, 2002 was an up year for natural gas reserves additions from total discoveries. Operators reported 17,795 billion cubic feet of total discoveries of dry natural gas proved reserves, 38 percent more than the post-1976 average (12,887 billion cubic feet). Also, the net of revisions, adjustments, sales, and acquisitions was 25 percent higher in 2002 (5,044 billion cubic feet) as compared to the post-1976 U.S. average (4,031 billion cubic feet per year).