

5. Natural Gas Liquids Statistics

Natural Gas Liquids

Proved Reserves

U.S. natural gas liquids proved reserves decreased 4 percent to 7,993 million barrels in 2001 (**Table 13**). Reserve additions replaced 60 percent of 2001 natural gas liquids production.

The reserves of six areas account for 81 percent of the Nation's natural gas liquids proved reserves.

Area	Percent of U.S. NGL Reserves
Texas	33
Gulf of Mexico Federal Offshore	12
Utah - Wyoming	11
New Mexico	11
Oklahoma	9
Louisiana	5
Area Total	81

The volumes of natural gas liquids proved reserves and production shown in **Table 13** are the sum of the natural gas plant liquid volumes listed in **Table 14** and the lease condensate volumes listed in **Table 15**.

Discoveries

Total discoveries of natural gas liquids reserves were 997 million barrels in 2001, an increase of 19 percent from 2000 (839 million barrels). Areas with the largest *total discoveries* were:

- Texas (34 percent)
- Gulf of Mexico Federal Offshore (21 percent)
- Utah & Wyoming (12 percent)
- Louisiana (8 percent)
- Oklahoma (8 percent)
- New Mexico (7 percent).

New field discoveries in 2001 (138 million barrels) were 50 percent higher than in 2000. Areas with the largest *new field discoveries* were the Gulf of Mexico Federal Offshore (68 percent of 2001 new field discoveries) and Texas (25 percent).

New reservoir discoveries in old fields (142 million barrels) were 39 percent higher than they were in 2000. Areas with the largest *new reservoir discoveries in old fields* were the Gulf of Mexico Federal Offshore (40 percent of 2001 new reservoir discoveries in old fields), Louisiana (30 percent), and Texas (22 percent).

Extensions were 717 million barrels in 2001, 11 percent higher than the 2000 volume of extensions (645 million). Areas with the largest *extensions* were Texas (39 percent), Utah & Wyoming (16 percent), and Oklahoma (10 percent).

Revisions and Adjustments

In 2001, there were 957 million barrels of *revision increases*, 1,089 million barrels of *revision decreases* and -429 million barrels of *adjustments*. The net of *revisions* and *adjustments* was 561 million barrels.

Sales and Acquisitions

There were 550 million barrels of *acquisitions*, and 448 million barrels of *sales* in 2001. The net of these transactions added 102 million barrels of natural gas liquids proved reserves.

Production

Natural gas liquids production was an estimated 890 million barrels in 2001, a decrease of 3 percent from 2000. Alaska production decreased 9 percent to 20 million barrels in 2001, while lower 48 States production decreased 3 percent to 860 million barrels in 2001.

Six areas accounted for about 87 percent of the Nation's natural gas liquids production.

- Texas (33 percent)
- Gulf of Mexico Federal Offshore (22 percent)
- New Mexico (9 percent)
- Oklahoma (8 percent)
- Louisiana (8 percent)
- Utah-Wyoming (7 percent).

Table 13. Natural Gas Liquids Proved Reserves, Reserves Changes, and Production, Wet After Lease Separation, 2001 (Million Barrels of 42 U.S. Gallons)

State and Subdivision	Published Proved Reserves 12/31/00	Changes in Reserves During 2001									Proved Reserves 12/31/01
		Adjustments (+,-)	Revision Increases (+)	Revision Decreases (-)	Sales (-)	Acquisitions (+)	Extensions (+)	New Field Discoveries (+)	New Reservoir Discoveries in Old Fields (+)	Estimated Production (-)	
Alaska	277	0	148	0	0	0	0	0	0	20	405
Lower 48 States	8,068	-429	809	1,089	448	550	717	138	142	870	7,588
Alabama	150	-71	3	16	0	0	4	1	0	7	64
Arkansas	5	0	1	0	0	0	0	0	0	1	5
California	101	-18	5	10	0	1	5	0	0	8	76
Coastal Region Onshore	27	-6	1	5	0	0	0	0	0	1	16
Los Angeles Basin Onshore	10	-2	1	1	0	0	0	0	0	0	8
San Joaquin Basin Onshore	64	-10	3	4	0	1	5	0	0	7	52
State Offshore	0	0	0	0	0	0	0	0	0	0	0
Colorado	316	-34	49	38	59	76	60	0	0	25	345
Florida	11	1	1	0	0	0	0	0	0	1	12
Kansas	306	10	17	13	15	20	3	0	0	26	302
Kentucky	56	18	13	15	2	2	2	0	1	3	72
Louisiana	436	-29	43	93	42	62	37	2	43	68	391
North	61	-4	9	13	2	6	11	0	1	7	62
South Onshore	337	-39	27	72	35	42	20	1	37	49	269
State Offshore	38	14	7	8	5	14	6	1	5	12	60
Michigan	35	14	4	8	0	0	1	1	0	4	43
Mississippi	8	3	2	1	1	1	0	0	0	2	10
Montana	4	1	1	1	0	0	0	0	0	0	5
New Mexico	896	-10	90	86	25	18	70	2	2	84	873
East	333	-32	42	52	21	11	38	2	1	43	279
West	563	22	48	34	4	7	32	0	1	41	594
North Dakota	54	4	6	4	1	1	0	0	2	5	57
Oklahoma	734	-14	74	109	27	35	72	1	3	75	694
Texas	2,819	-128	246	365	151	187	277	35	31	298	2,653
RRC District 1	55	-12	3	6	1	2	3	0	0	4	40
RRC District 2 Onshore	72	-8	7	10	3	10	6	1	4	12	67
RRC District 3 Onshore	209	16	33	29	30	36	24	6	5	44	226
RRC District 4 Onshore	406	-37	32	48	24	25	47	19	11	53	378
RRC District 5	49	-6	5	13	0	9	8	1	0	4	49
RRC District 6	283	-15	26	24	32	42	16	0	1	28	269
RRC District 7B	34	2	2	5	2	1	3	0	0	6	29
RRC District 7C	434	-95	28	93	38	40	41	0	2	29	290
RRC District 8	526	22	49	68	11	11	36	7	7	54	525
RRC District 8A	217	39	19	21	3	3	14	0	0	17	251
RRC District 9	161	-22	10	11	2	2	66	0	0	15	189
RRC District 10	369	-13	32	37	5	6	13	0	1	31	335
State Offshore	4	1	0	0	0	0	0	1	0	1	5
Utah and Wyoming	947	-147	104	78	73	87	118	2	2	65	897
West Virginia	105	1	12	11	1	1	4	0	1	6	106
Federal Offshore ^a	1,078	-30	137	240	51	59	64	94	57	192	976
Pacific (California)	4	0	0	0	0	0	5	0	0	0	9
Gulf of Mexico (Louisiana) ^a	921	-27	103	224	50	57	52	47	53	147	785
Gulf of Mexico (Texas)	153	-3	34	16	1	2	7	47	4	45	182
Miscellaneous ^b	7	0	1	1	0	0	0	0	0	0	7
U.S. Total	8,345	-429	957	1,089	448	550	717	138	142	890	7,993

^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 2001 contained in the publications *Petroleum Supply Annual 2001*, DOE/EIA-0340(01) and *Natural Gas Annual 2001* DOE/EIA-0131(01).

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

Table 14. Natural Gas Plant Liquids Proved Reserves and Production, 2001
(Million Barrels of 42 U.S. Gallons)

State and Subdivision	2001 Reserves	2001 Production	State and Subdivision	2001 Reserves	2001 Production
Alaska	405	20	North Dakota	50	5
Lower 48 States	6,190	655	Oklahoma	605	66
Alabama	32	3	Texas	2,318	252
Arkansas	3	1	RRC District 1	35	4
California	75	8	RRC District 2 Onshore	53	9
Coastal Region Onshore	16	1	RRC District 3 Onshore	144	28
Los Angeles Basin Onshore	8	0	RRC District 4 Onshore	281	40
San Joaquin Basin Onshore	51	7	RRC District 5	43	3
State Offshore	0	0	RRC District 6	215	23
Colorado	298	22	RRC District 7B	28	6
Florida	12	1	RRC District 7C	271	26
Kansas	300	26	RRC District 8	504	52
Kentucky	72	3	RRC District 8A	250	17
Louisiana	204	35	RRC District 9	182	14
North	35	3	RRC District 10	311	30
South Onshore	128	23	State Offshore	1	0
State Offshore	41	9	Utah and Wyoming	782	54
Michigan	41	4	West Virginia	105	6
Mississippi	2	1	Federal Offshore ^a	486	91
Montana	5	0	Pacific (California)	1	0
New Mexico	794	77	Gulf of Mexico (Louisiana) ^a	460	87
East	259	38	Gulf of Mexico (Texas)	25	4
West	535	39	Miscellaneous ^b	6	0
			U.S. Total	6,595	675

^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 plant liquids for 2001 contained in the publications *Petroleum Supply Annual 2001*, DOE/EIA-0340(2001) and *Natural Gas Annual 2001*, DOE/EIA-0131(2001).

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

Table 15. Lease Condensate Proved Reserves and Production, 2000
(Million Barrels of 42 U.S. Gallons)

State and Subdivision	2001 Reserves	2001 Production	State and Subdivision	2001 Reserves	2001 Production
Alaska	0	0	North Dakota	7	0
Lower 48 States	1,398	215	Oklahoma	89	9
Alabama	32	4	Texas	335	46
Arkansas	2	0	RRC District 1	5	0
California	1	0	RRC District 2 Onshore	14	3
Coastal Region Onshore	0	0	RRC District 3 Onshore	82	16
Los Angeles Basin Onshore	0	0	RRC District 4 Onshore	97	13
San Joaquin Basin Onshore	1	0	RRC District 5	6	1
State Offshore	0	0	RRC District 6	54	5
Colorado	47	3	RRC District 7B	1	0
Florida	0	0	RRC District 7C	19	3
Kansas	2	0	RRC District 8	21	2
Kentucky	0	0	RRC District 8A	1	0
Louisiana	187	33	RRC District 9	7	1
North	27	4	RRC District 10	24	1
South Onshore	141	26	State Offshore	4	1
State Offshore	19	3	Utah and Wyoming	115	11
Michigan	2	0	West Virginia	1	0
Mississippi	8	1	Federal Offshore ^a	490	101
Montana	0	0	Pacific (California)	8	0
New Mexico	79	7	Gulf of Mexico (Louisiana) ^a	325	60
East	20	5	Gulf of Mexico (Texas)	157	41
West	59	2	Miscellaneous ^b	1	0
			U.S. Total	1,398	215

^aIncludes Federal Offshore Alabama.

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

Note: The estimates in this table are based on data reported on Form EIA-23, "Annual Survey of Domestic Oil and Gas Reserves" 2001.

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

Natural Gas Plant Liquids

Proved Reserves

Natural gas plant liquids proved reserves decreased in 2001 to 6,595 million barrels, a 4 percent drop from the 2000 level (6,873 million barrels) (**Table 14**). Six areas accounted for about 80 percent of the Nation's natural gas plant liquids proved reserves:

Area	Percent of U.S. Gas Plant Liquids
Texas	35
Utah-Wyoming	12
New Mexico	12
Oklahoma	9
Gulf of Mexico Federal Offshore	7
Kansas	5
Area Total	80

Production

Natural gas plant liquids production decreased 5 percent in 2001—from 710 million barrels in 2000 to 675 million barrels of production (**Table 14**). The top six areas for proved reserves of natural gas plant liquids accounted for about 84 percent of the Nation's natural gas plant liquids production:

- Texas (37 percent)
- Gulf of Mexico Federal Offshore (14 percent)
- New Mexico (11 percent)
- Oklahoma (10 percent)
- Utah and Wyoming (8 percent)
- Kansas (4 percent).

Natural gas processing plants are usually located in the same general area where the natural gas is produced. Table E4 in Appendix E lists the volumes of natural gas produced and processed in the same State, and the volumes of liquids extracted.

Lease Condensate

Proved Reserves

Proved reserves of lease condensate in the United States were 1,398 million barrels in 2001 (**Table 15**). This was 5 percent less than the volume reported in 2000 (1,472 million barrels). The reserves of five areas account for about 85 percent of the Nation's lease condensate proved reserves.

Area	Percent of U.S. Condensate Reserves
Gulf of Mexico Federal Offshore	34
Texas	24
Louisiana	13
Utah-Wyoming	8
Oklahoma	6
Area Total	85

Production

Production of lease condensate was 215 million barrels in 2001, an increase of 3 percent from 2000's production (208 million barrels). The production of five areas account for about 92 percent of the Nation's lease condensate production.

- Gulf of Mexico Federal Offshore (47 percent)
- Texas (21 percent)
- Louisiana (15 percent)
- Utah and Wyoming (5 percent)
- Oklahoma (4 percent).

Reserves in Nonproducing Reservoirs

Like crude oil and natural gas, not all lease condensate proved reserves were contained in reservoirs that were producing during 2001. Proved reserves of 562 million barrels of lease condensate, an increase of 13 percent from 2000, were reported in nonproducing reservoirs in 2001 (**Appendix D, Table D10**). About 48 percent of the nonproducing lease condensate reserves were located in the Gulf of Mexico Federal Offshore.