

## 5. Natural Gas Liquids Statistics

### Natural Gas Liquids

#### Proved Reserves

U.S. natural gas liquids proved reserves increased 6 percent to 7,928 million barrels in 2004 (**Table 13**), rebounding from the decline observed in 2003. Reserve additions replaced 157 percent of 2004 natural gas liquids production.

The reserves of seven areas account for 88 percent of the Nation's natural gas liquids proved reserves.

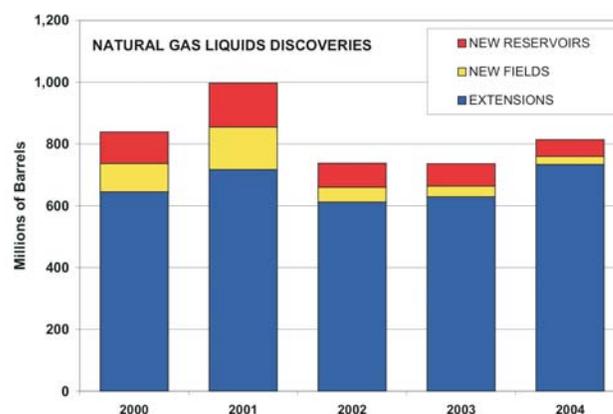
Area	Percent of U.S. NGL Reserves
Texas	35
Utah - Wyoming	12
New Mexico	11
Oklahoma	10
Gulf of Mexico Federal Offshore	9
Colorado	6
Alaska	5
<b>Area Total</b>	<b>88</b>

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**.

#### Total Discoveries

Total discoveries of natural gas liquids reserves were 814 million barrels in 2004, an increase of 11 percent from 2003 (736 million barrels). Areas with the largest total discoveries were:

- Texas (43 percent of the National total)
- Utah & Wyoming (15 percent)
- Oklahoma (12 percent)
- Gulf of Mexico Federal Offshore (10 percent)
- New Mexico (8 percent)
- Louisiana (5 percent).



#### Extensions

Extensions were 734 million barrels in 2004, 17 percent more than the 2003 volume of 629 million barrels. Areas with the largest extensions were Texas (43 percent of the National total), Utah & Wyoming (17 percent), Oklahoma (13 percent), and New Mexico (9 percent).

#### New Field Discoveries

New field discoveries in 2004 (26 million barrels) were 26 percent lower than in 2003 (35 million barrels). Areas with the largest new field discoveries were Texas (54 percent), the Gulf of Mexico Federal Offshore (27 percent), and Colorado (15 percent).

#### New Reservoir Discoveries in Old Fields

New reservoir discoveries in old fields in 2004 (54 million barrels) were 25 percent lower than they were in 2003 (72 million barrels). Areas with the largest new reservoir discoveries in old fields were the Gulf of Mexico Federal Offshore (59 percent of the National total), Texas (28 percent), and Louisiana (11 percent).

#### Revisions and Adjustments

In 2004, there were 1,232 million barrels of revision increases, 1,135 million barrels of revision decreases, and 273 million barrels of adjustments. The net of revisions and adjustments was 370 million barrels.

**Table 13. Natural Gas Liquids Proved Reserves, Reserves Changes, and Production, 2004**  
(Million Barrels of 42 U.S. Gallons)

State and Subdivision	Published Proved Reserves 12/31/03	Changes in Reserves During 2004							New Reservoir Discoveries in Old Fields (+)	Estimated Production (-)	Proved Reserves 12/31/04
		Adjustments (+,-)	Revision Increases (+)	Revision Decreases (-)	Sales (-)	Acquisitions (+)	Extensions (+)	New Field Discoveries (+)			
Alaska	387	0	0	0	0	0	0	0	0	18	369
<b>Lower 48 States</b>	<b>7,072</b>	<b>273</b>	<b>1,232</b>	<b>1,135</b>	<b>442</b>	<b>554</b>	<b>734</b>	<b>26</b>	<b>54</b>	<b>809</b>	<b>7,559</b>
Alabama	60	-5	4	2	5	0	2	0	0	4	50
Arkansas	3	0	0	0	0	0	0	0	0	0	3
California	101	9	22	7	5	7	5	0	0	10	122
Coastal Region Onshore	15	1	3	1	0	1	1	0	0	1	19
Los Angeles Basin Onshore	8	0	0	2	0	0	2	0	0	0	8
San Joaquin Basin Onshore	78	8	19	4	5	6	2	0	0	9	95
State Offshore	0	0	0	0	0	0	0	0	0	0	0
Colorado	395	55	72	56	71	69	29	4	0	32	465
Florida	17	-5	0	0	0	0	0	0	0	0	12
Kansas	248	32	44	37	8	11	3	0	0	22	271
Kentucky	66	4	7	6	0	0	4	0	0	3	72
Louisiana	295	-8	54	57	32	23	38	0	6	56	263
North	67	-2	8	7	8	6	17	0	0	7	74
South Onshore	182	-2	34	38	17	11	18	0	4	39	153
State Offshore	46	-4	12	12	7	6	3	0	2	10	36
Michigan	48	4	6	7	0	0	1	0	0	4	48
Mississippi	7	0	1	1	0	0	0	0	0	1	6
Montana	8	-1	0	1	0	0	1	0	0	1	6
New Mexico	875	-72	131	90	37	72	63	1	0	79	864
East	272	-20	48	36	21	39	30	1	0	39	274
West	603	-52	83	54	16	33	33	0	0	40	590
North Dakota	45	-1	8	6	1	2	1	0	0	5	43
Oklahoma	686	40	122	93	25	37	98	0	0	75	790
Texas	2,517	115	445	398	147	218	318	14	15	296	2,801
RRC District 1	29	6	4	4	3	2	2	4	0	4	36
RRC District 2 Onshore	69	7	12	15	6	12	11	0	2	13	79
RRC District 3 Onshore	207	32	50	63	14	13	28	4	5	41	221
RRC District 4 Onshore	287	57	51	69	19	26	41	0	3	51	326
RRC District 5	51	-2	9	6	2	4	3	0	0	4	53
RRC District 6	248	10	50	29	8	19	36	1	3	26	304
RRC District 7B	32	24	3	10	3	3	1	0	0	7	43
RRC District 7C	345	18	69	49	27	29	28	0	0	30	383
RRC District 8	498	-10	66	73	26	36	50	4	0	46	499
RRC District 8A	163	11	39	6	3	8	2	1	0	18	197
RRC District 9	236	-48	25	15	28	30	59	0	0	24	235
RRC District 10	347	10	67	58	6	34	57	0	0	31	420
State Offshore	5	0	0	1	2	2	0	0	2	1	5
Utah and Wyoming	898	-20	150	158	50	46	122	0	1	62	927
West Virginia	68	7	16	6	2	1	5	0	0	4	85
Federal Offshore <sup>a</sup>	725	119	148	208	59	68	44	7	32	155	721
Pacific (California)	8	0	0	0	0	0	0	0	0	0	8
Gulf of Mexico (Louisiana) <sup>a</sup>	598	118	104	168	57	66	43	7	31	127	615
Gulf of Mexico (Texas)	119	1	44	40	2	2	1	0	1	28	98
Miscellaneous <sup>b</sup>	10	0	2	2	0	0	0	0	0	0	10
<b>U.S. Total</b>	<b>7,459</b>	<b>273</b>	<b>1,232</b>	<b>1,135</b>	<b>442</b>	<b>554</b>	<b>734</b>	<b>26</b>	<b>54</b>	<b>827</b>	<b>7,928</b>

<sup>a</sup>Includes Federal offshore Alabama.

<sup>b</sup>Includes 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 2004 contained in the publications *Petroleum Supply Annual 2004*, DOE/EIA-0340(04) and *Natural Gas Annual 2004* DOE/EIA-0131(04).

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

**Table 14. Natural Gas Plant Liquids Proved Reserves and Production, 2004**  
(Million Barrels of 42 U.S. Gallons)

State and Subdivision	2004 Reserves	2004 Production	State and Subdivision	2004 Reserves	2004 Production
Alaska . . . . .	369	18	North Dakota . . . . .	39	5
<b>Lower 48 States . . . . .</b>	<b>6,338</b>	<b>627</b>	Oklahoma . . . . .	666	64
Alabama . . . . .	29	2	Texas . . . . .	2,466	250
Arkansas . . . . .	2	0	RRC District 1 . . . . .	31	3
California . . . . .	121	10	RRC District 2 Onshore . . . . .	64	10
Coastal Region Onshore . . . . .	19	1	RRC District 3 Onshore . . . . .	149	27
Los Angeles Basin Onshore . . . . .	8	0	RRC District 4 Onshore . . . . .	253	38
San Joaquin Basin Onshore . . . . .	94	9	RRC District 5 . . . . .	44	3
State Offshore . . . . .	0	0	RRC District 6 . . . . .	233	21
Colorado . . . . .	362	26	RRC District 7B . . . . .	42	7
Florida . . . . .	12	0	RRC District 7C . . . . .	365	27
Kansas . . . . .	267	22	RRC District 8 . . . . .	487	45
Kentucky . . . . .	71	3	RRC District 8A . . . . .	197	18
Louisiana . . . . .	167	31	RRC District 9 . . . . .	228	22
North . . . . .	53	4	RRC District 10 . . . . .	373	29
South Onshore . . . . .	87	20	State Offshore . . . . .	0	0
State Offshore . . . . .	27	7	Utah and Wyoming . . . . .	765	52
Michigan . . . . .	44	3	West Virginia . . . . .	84	4
Mississippi . . . . .	1	0	Federal Offshore <sup>a</sup> . . . . .	423	81
Montana . . . . .	6	1	Pacific (California) . . . . .	0	0
New Mexico . . . . .	805	73	Gulf of Mexico (Louisiana) <sup>a</sup> . . . . .	410	78
East . . . . .	245	35	Gulf of Mexico (Texas) . . . . .	13	3
West . . . . .	560	38	Miscellaneous <sup>b</sup> . . . . .	8	0
			<b>U.S. Total . . . . .</b>	<b>6,707</b>	<b>645</b>

<sup>a</sup>Includes Federal Offshore Alabama.

<sup>b</sup>Includes 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 2004 contained in the publications *Petroleum Supply Annual 2004*, DOE/EIA-0340(2004) and *Natural Gas Annual 2004*, DOE/EIA-0131(2004).

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

**Table 15. Lease Condensate Proved Reserves and Production, 2004**  
(Million Barrels of 42 U.S. Gallons)

State and Subdivision	2004 Reserves	2004 Production	State and Subdivision	2004 Reserves	2004 Production
Alaska . . . . .	0	0	North Dakota . . . . .	4	0
<b>Lower 48 States. . . . .</b>	<b>1,221</b>	<b>182</b>	Oklahoma . . . . .	124	11
Alabama . . . . .	21	2	Texas . . . . .	335	46
Arkansas . . . . .	1	0	RRC District 1 . . . . .	5	1
California . . . . .	1	0	RRC District 2 Onshore . . . . .	15	3
Coastal Region Onshore . . . . .	0	0	RRC District 3 Onshore . . . . .	72	14
Los Angeles Basin Onshore . . . . .	0	0	RRC District 4 Onshore . . . . .	73	13
San Joaquin Basin Onshore . . . . .	1	0	RRC District 5 . . . . .	9	1
State Offshore . . . . .	0	0	RRC District 6 . . . . .	71	5
Colorado . . . . .	103	6	RRC District 7B . . . . .	1	0
Florida . . . . .	0	0	RRC District 7C . . . . .	18	3
Kansas . . . . .	4	0	RRC District 8 . . . . .	12	1
Kentucky . . . . .	1	0	RRC District 8A . . . . .	0	0
Louisiana . . . . .	96	25	RRC District 9 . . . . .	7	2
North . . . . .	21	3	RRC District 10 . . . . .	47	2
South Onshore . . . . .	66	19	State Offshore . . . . .	5	1
State Offshore . . . . .	9	3	Utah and Wyoming . . . . .	162	10
Michigan . . . . .	4	1	West Virginia . . . . .	1	0
Mississippi . . . . .	5	1	Federal Offshore <sup>a</sup> . . . . .	298	74
Montana . . . . .	0	0	Pacific (California) . . . . .	8	0
New Mexico . . . . .	59	6	Gulf of Mexico (Louisiana) <sup>a</sup> . . . . .	205	49
East . . . . .	29	4	Gulf of Mexico (Texas) . . . . .	85	25
West . . . . .	30	2	Miscellaneous <sup>b</sup> . . . . .	2	0
			<b>U.S. Total . . . . .</b>	<b>1,221</b>	<b>182</b>

<sup>a</sup>Includes Federal Offshore Alabama.

<sup>b</sup>Includes 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" 2004.

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

## Sales and Acquisitions

There were 554 million barrels of acquisitions and 442 million barrels of sales in 2004. The net of these transactions added 112 million barrels of natural gas liquids proved reserves.

## Production

Natural gas liquids production was an estimated 827 million barrels in 2004, an increase of 3 percent from 2003. Alaskan production remained level and production in the lower 48 States increased.

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

- Texas (36 percent of the National total)
- Gulf of Mexico Federal Offshore (19 percent)
- New Mexico (10 percent)
- Oklahoma (9 percent)
- Utah-Wyoming (7 percent)
- Louisiana (7 percent).

## Natural Gas Plant Liquids

### Proved Reserves

Natural gas plant liquids proved reserves increased in 2004 to 6,707 million barrels, a 7 percent increase from the 2003 level (6,244 million barrels) (**Table 14**). Six areas accounted for about 82 percent of the Nation's natural gas plant liquids proved reserves:

Area	Percent of U.S. Gas Plant Liquids
Texas	37
New Mexico	12
Utah-Wyoming	11
Oklahoma	10
Gulf of Mexico Federal Offshore	6
Alaska	6
<b>Area Total</b>	<b>82</b>

## Production

Natural gas plant liquids production increased 6 percent in 2004—from 611 million barrels in 2003 to 645 million barrels of production (**Table 14**) even though gas production decreased in 2004. The reasons for this are primarily economic.

In 2003, given certain gas market conditions, it was more economic to offer higher BTU gas directly to the market than to strip the liquids from the produced gas stream. With higher average crude oil prices in 2004, liquids regained an advantage and more liquids were produced at gas plants.

The number of active gas plants dropped in 2004. According to survey results from Form EIA-64A, the number of unique active U.S. natural gas processing plants dropped from 497 in 2003 to 491 in 2004.

The top six areas for proved reserves of natural gas plant liquids accounted for about 82 percent of the Nation's natural gas plant liquids production:

- Texas (39 percent)
- Gulf of Mexico Federal Offshore (13 percent)
- New Mexico (11 percent)
- Oklahoma (10 percent)
- Utah and Wyoming (8 percent)
- Alaska (3 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 1,221 million barrels in 2004 (**Table 15**). This was less than 1 percent higher than the volume reported in 2003 (1,215 million barrels). The reserves of five areas accounts for about 82 percent of the Nation's lease condensate proved reserves.

Area	Percent of U.S. Condensate Reserves
Texas	27
Gulf of Mexico Federal Offshore	24
Utah-Wyoming	13
Oklahoma	10
Colorado	8
<b>Area Total</b>	<b>82</b>

## Production

Production of lease condensate was 182 million barrels in 2004, a decrease of 5 percent from 2003's production (191 million barrels). The production of five areas account for about 91 percent of the Nation's lease condensate production.

- Gulf of Mexico Federal Offshore (41 percent)
- Texas (25 percent)
- Louisiana (14 percent)
- Oklahoma (6 percent)
- Utah and Wyoming (5 percent).

## Reserves in Nonproducing Status

Like crude oil and natural gas, not all lease condensate proved reserves were producing during 2004. Proved reserves of 409 million barrels of lease condensate, an increase of 3 percent from 2003's level (399 million barrels), were reported in nonproducing status in 2004 (**Appendix D, Table D10**). About 37 percent of the nonproducing lease condensate reserves were located in the Gulf of Mexico Federal Offshore.