

4. Natural Gas Statistics

Dry Natural Gas

Proved Reserves

The United States had 204,385 billion cubic feet of dry natural gas reserves as of December 31, 2005 (Table 8). Proved reserves of natural gas increased by 6 percent in 2005, the largest annual increase in natural gas proved reserves since 1970. All natural gas proved reserves data shown in this report exclude natural gas held in underground storage.

Gas reserves additions onshore in the lower 48 States were large enough to overcome a 10 percent drop in gas reserves reported for the Gulf of Mexico Federal Offshore. The majority of natural gas reserves additions in 2005 resulted from extensions of existing gas fields rather than new field or reservoir discoveries. Texas and Colorado led the nation in 2005 natural gas reserves additions with notable reserves increases in the Newark East Field (Barnett Shale, TX) and Ignacio-Blanco Field (tight sands and coalbeds, CO).

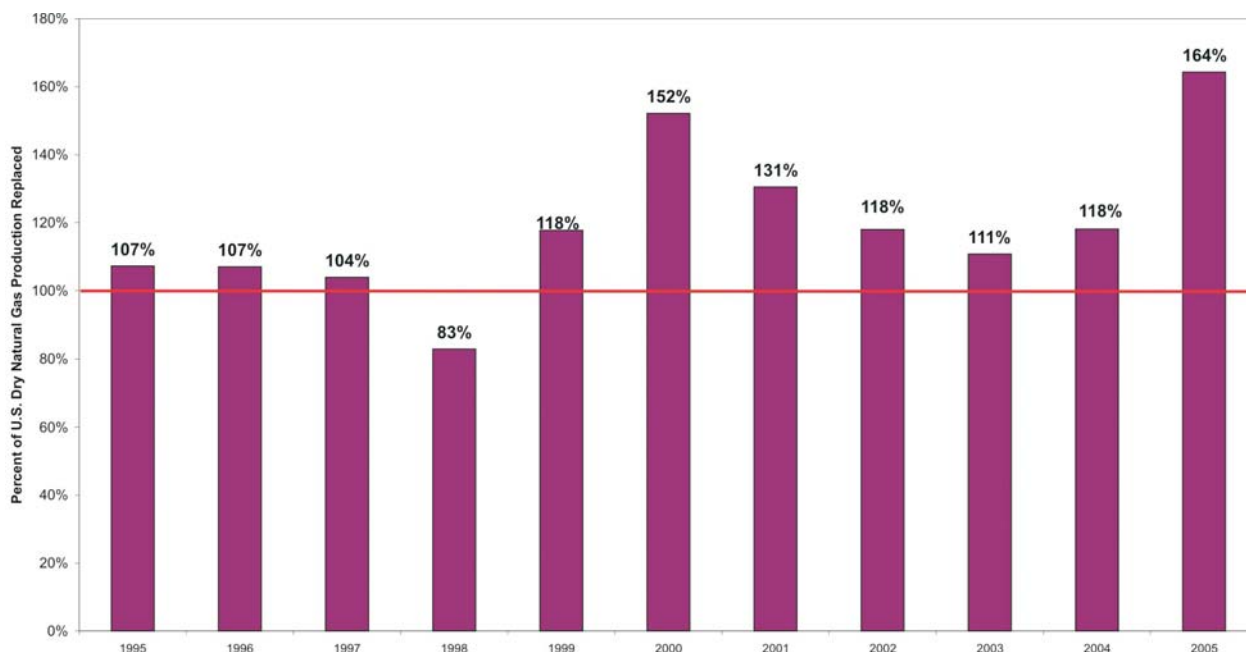
Total U.S. reserves additions replaced 164 percent of 2005 dry gas production (Figure 18).

The proved reserves by State are shown on the map in Figure 19. Seven areas account for 78 percent of the Nation's dry natural gas proved reserves:

Area	Percent of U.S. Gas Reserves
Texas	28
Wyoming	12
New Mexico	9
Oklahoma	8
Gulf of Mexico Federal Offshore	8
Colorado	8
Louisiana	5
Area Total	78

Total U.S. natural gas production declined 4 percent in 2005 because, in August and September of 2005, Hurricanes Katrina and Rita wreaked havoc along the Gulf Coast. Beyond devastating much of coastal Alabama, Louisiana, and Mississippi, and flooding

Figure 18. Replacement of U.S. Dry Natural Gas Production by Reserves Additions, 1995-2005.



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

Table 8. Dry Natural Gas Proved Reserves, Reserves Changes, and Production, 2005
(Billion Cubic Feet at 14.73 psia and 60° Fahrenheit)

State and Subdivision	Published Proved Reserves 12/31/04	Changes in Reserves During 2005									Proved Reserves 12/31/05
		Adjustments (+,-)	Revision Increases (+)	Revision Decreases (-)	Sales (-)	Acquisitions (+)	Extensions (+)	New Field Discoveries (+)	New Reservoir Discoveries in Old Fields (+)	Estimated Production (-)	
Alaska	8,407	-2	293	154	96	98	62	22	10	469	8,171
Lower 48 States	184,106	1,889	22,060	19,500	9,034	11,576	20,988	920	1,198	17,989	196,214
Alabama	4,120	-27	135	60	419	431	85	0	0	300	3,965
Arkansas	1,835	8	122	142	31	30	281	4	31	174	1,964
California	2,634	78	739	129	201	244	129	0	2	268	3,228
Coastal Region Onshore	189	72	31	13	0	1	6	0	0	18	268
Los Angeles Basin Onshore	174	1	10	17	1	16	2	0	0	9	176
San Joaquin Basin Onshore	2,185	5	685	96	200	227	120	0	2	234	2,694
State Offshore	86	0	13	3	0	0	1	0	0	7	90
Colorado	14,743	57	2,018	1,478	1,238	1,767	1,795	32	4	1,104	16,596
Florida	78	1	0	0	0	0	0	0	0	2	77
Kansas	4,652	88	207	381	44	60	108	0	4	380	4,314
Kentucky	1,880	65	251	77	1	0	101	17	0	85	2,151
Louisiana	9,588	130	876	849	224	378	1,560	6	188	1,206	10,447
North	5,770	69	337	252	71	141	1,188	0	11	498	6,695
South Onshore	3,436	32	485	554	121	208	343	6	139	640	3,334
State Offshore	382	29	54	43	32	29	29	0	38	68	418
Michigan	3,091	1	141	163	104	89	55	11	0	211	2,910
Mississippi	691	5	57	27	17	54	75	0	3	86	755
Montana	995	3	63	122	6	9	130	0	14	100	986
New Mexico	18,512	44	2,071	2,269	963	1,238	1,048	10	3	1,493	18,201
East	3,621	37	457	412	514	649	468	5	2	522	3,791
West	14,891	7	1,614	1,857	449	589	580	5	1	971	14,410
New York	324	18	51	20	1	2	7	20	0	52	349
North Dakota	417	-10	49	27	1	22	49	5	2	53	453
Ohio	974	-78	166	111	54	7	58	5	7	76	898
Oklahoma	16,238	297	3,064	2,945	539	728	1,818	1	48	1,587	17,123
Pennsylvania	2,361	186	234	154	78	139	275	0	0	181	2,782
Texas	49,955	561	6,008	5,637	4,098	5,024	9,640	138	340	5,424	56,507
RRC District 1	1,184	25	70	130	62	76	115	0	11	128	1,161
RRC District 2 Onshore	1,844	156	188	260	207	255	338	26	38	305	2,073
RRC District 3 Onshore	3,185	62	478	532	92	110	431	63	45	558	3,192
RRC District 4 Onshore	8,699	55	1,119	1,120	839	976	1,019	21	63	1,232	8,761
RRC District 5	6,523	93	1,216	398	347	348	2,609	0	163	650	9,557
RRC District 6	7,638	111	548	538	478	1,014	1,418	8	7	752	8,976
RRC District 7B	310	-33	142	50	23	121	400	0	0	65	802
RRC District 7C	4,668	79	404	487	276	283	793	8	0	349	5,123
RRC District 8	5,301	25	464	692	430	664	1,114	11	0	464	5,993
RRC District 8A	1,188	25	187	77	116	232	27	1	1	102	1,366
RRC District 9	4,221	-53	445	702	305	387	696	0	0	361	4,328
RRC District 10	4,873	-2	712	616	893	554	680	0	0	398	4,910
State Offshore	321	18	35	35	30	4	0	0	12	60	265
Utah	3,866	65	186	112	6	0	596	4	4	308	4,295
Virginia	1,742	18	163	3	1	3	166	0	0	70	2,018
West Virginia	3,397	214	646	76	6	132	371	11	0	230	4,459
Wyoming	22,632	115	2,160	1,822	139	470	1,987	11	2	1,642	23,774
Federal Offshore ^a	19,271	26	2,645	2,878	863	749	642	632	546	2,939	17,831
Pacific (California)	459	-1	418	19	0	0	0	0	0	33	824
Gulf of Mexico (Louisiana) ^a	14,685	21	1,408	1,903	716	628	546	618	375	1,997	13,665
Gulf of Mexico (Texas)	4,127	6	819	956	147	121	96	14	171	909	3,342
Miscellaneous ^b	110	24	8	18	0	0	12	13	0	18	131
U.S. Total	192,513	1,887	22,353	19,654	9,130	11,674	21,050	942	1,208	18,458	204,385

^aIndicates the estimate is associated with a sampling error (95 percent confidence interval) that exceeds 20 percent of the estimated value.

^bIncludes Federal offshore Alabama.

^cIncludes 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 2005 contained in the *Natural Gas Annual 2005*, DOE/EIA-0131(05).

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

Figure 19. Dry Natural Gas Proved Reserves by Area, 2005

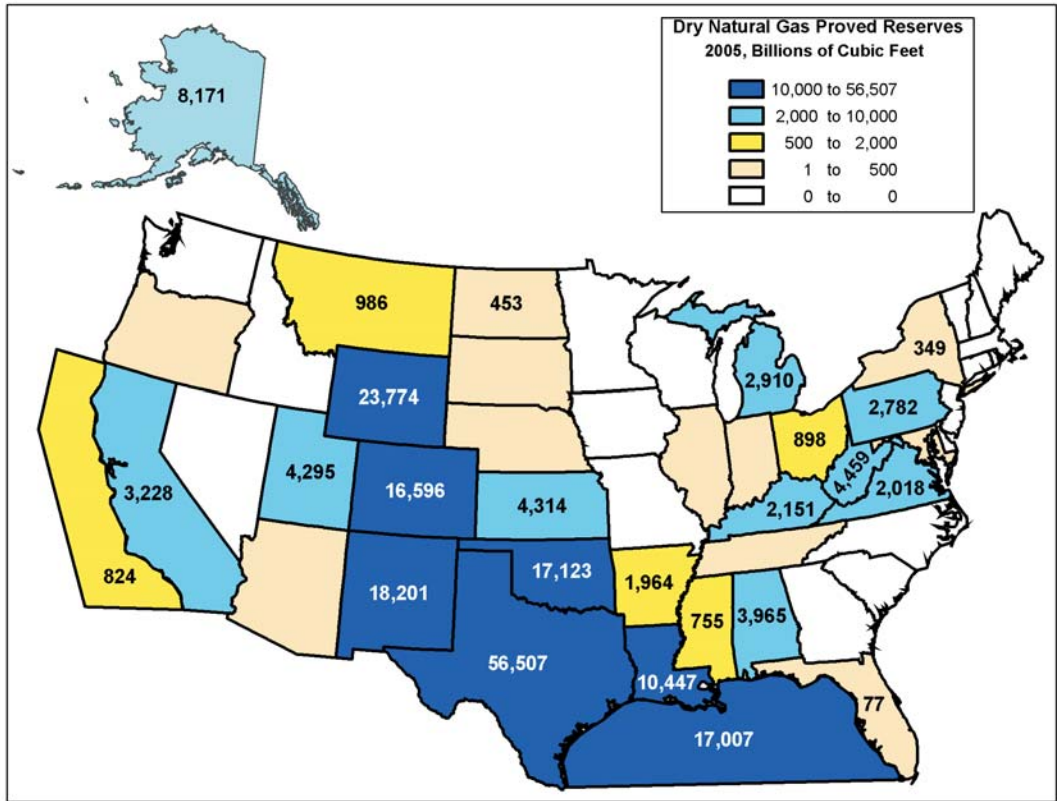
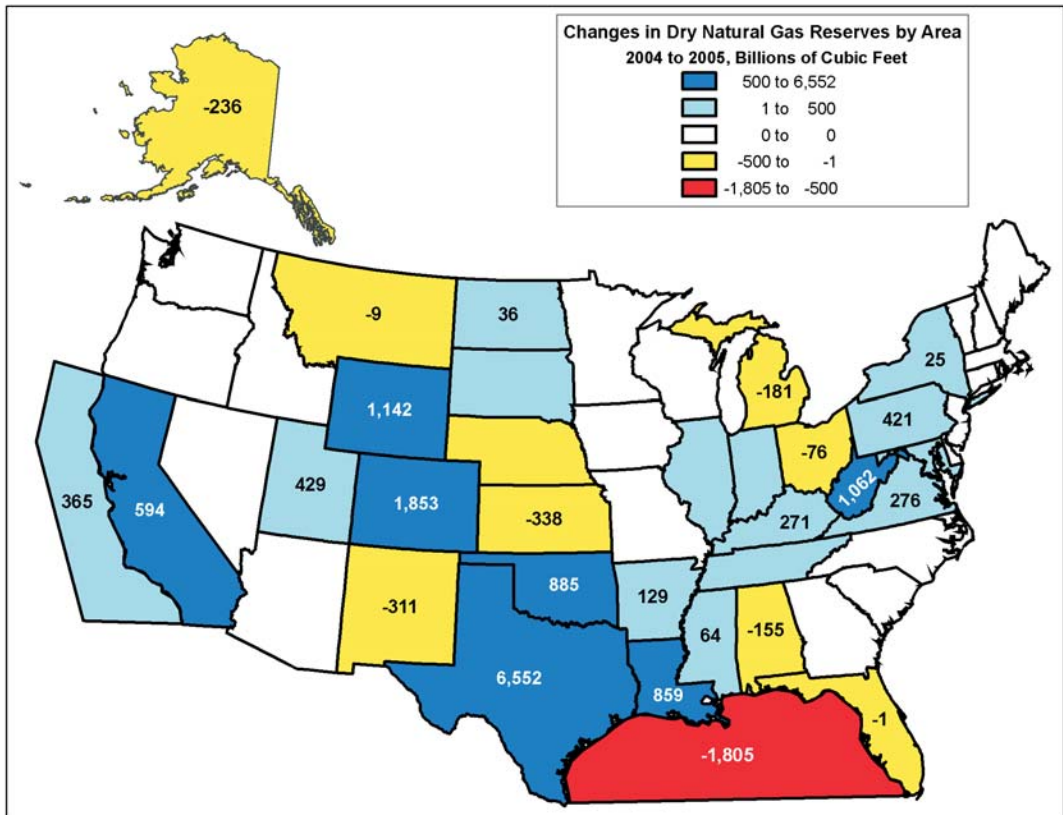


Figure 20. Changes in Dry Natural Gas Proved Reserves by Area, 2004 to 2005



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

New Orleans, these storms destroyed 113 offshore platforms and seriously damaged offshore pipelines and coastal oil and natural gas processing facilities, impacting the Nation's oil and gas production. At its lowest point, the natural gas production rate in the Gulf of Mexico was cut by 80 percent. Gulf of Mexico production slowly returned and reached roughly 80 percent of 2005's pre-hurricane production rate (10.2 Bcf/day gross withdrawal in June 2005) in September 2006.

Discussion of Reserves Changes

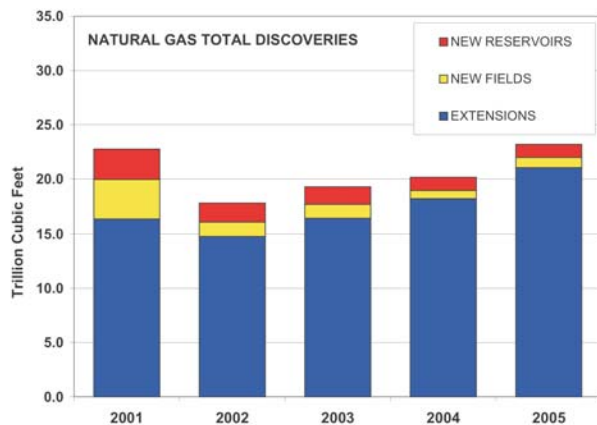
Figure 20 maps the change in dry gas proved reserves from 2004 to 2005 by area. Here's how the top six areas fared, compared to the total United States:

Area	Change in U.S. Gas Reserves (billion cubic feet)
Texas	+6,552
Wyoming	+1,142
New Mexico	-311
Oklahoma	+885
Gulf of Mexico Federal Offshore	-1,805
Colorado	+1,853
Area Total	+8,316
U.S. Total	+11,872

Figure 4 in Chapter 2 shows the components of change in dry natural gas proved reserves for 2005 and the preceding 10 years.

Total Discoveries

Total discoveries are those reserves attributable to field extensions, new field discoveries, and new reservoir



discoveries in old fields; they result from drilling exploratory wells.

Total discoveries of dry natural gas reserves were 23,200 billion cubic feet in 2005, a 15 percent increase from the level reported in 2004. Seven areas reported total discoveries of dry natural gas exceeding 1 trillion cubic feet in 2005:

Area	2005 Total Discoveries (Billion cubic feet)
Texas	10,118
Wyoming	2,000
Oklahoma	1,867
Colorado	1,831
Gulf of Mexico Federal Offshore	1,820
Louisiana	1,754
New Mexico	1,061
U.S. Total	23,200

Extensions

The largest component of total discoveries in 2005 was extensions of existing gas fields. Extensions were 21,050 billion cubic feet, 16 percent more than 2004 and 74 percent more than the prior 10-year average (12,101 billion cubic feet). Areas with the largest extensions and their percentage of total extensions were:

Area	Percent of 2005 Extensions
Texas	46
Wyoming	9
Oklahoma	9
Colorado	9
Louisiana	7
New Mexico	5
Gulf of Mexico	3

New Field Discoveries

New field discoveries were 942 billion cubic feet in 2005—24 percent more than in 2004. The areas with the largest new field discoveries were the Gulf of Mexico Federal Offshore (632 billion cubic feet; 67 percent of the total), Texas (138 billion cubic feet; 15 percent), Colorado (32 billion cubic feet; 3 percent) and Alaska (22 billion cubic feet; 2 percent). In the prior 10 years, U.S. operators had reported an annual average of 1,731 billion cubic feet of reserves from new field discoveries. Reserves from new field discoveries in 2005 were 46 percent less than the prior 10 year average.

Table 9. Natural Gas Proved Reserves, Reserves Changes, and Production, Wet After Lease Separation, 2005 (Billion Cubic Feet at 14.73 psia and 60° Fahrenheit)

State and Subdivision	Published Proved Reserves 12/31/04	Changes in Reserves During 2005									Proved Reserves 12/31/05
		Adjustments (+,-)	Revision Increases (+)	Revision Decreases (-)	Sales (-)	Acquisitions (+)	Extensions (+)	New Field Discoveries (+)	New Reservoir Discoveries in Old Fields (+)	Estimated Production (-)	
Alaska	8,473	-1	295	155	96	98	62	22	10	471	8,237
Lower 48 States	192,727	1,694	23,067	20,492	9,536	12,208	22,007	951	1,233	18,788	205,071
Alabama	4,159	-25	137	61	427	439	87	0	0	303	4,006
Arkansas	1,837	8	122	142	31	30	282	4	31	174	1,967
California	2,773	69	777	136	212	256	135	0	3	281	3,384
Coastal Region Onshore	196	72	33	13	0	1	6	0	0	18	277
Los Angeles Basin Onshore	184	1	11	18	1	16	2	0	0	9	186
San Joaquin Basin Onshore	2,306	-3	720	102	211	239	126	0	3	247	2,831
State Offshore	87	-1	13	3	0	0	1	0	0	7	90
Colorado	15,249	21	2,082	1,525	1,278	1,824	1,851	33	4	1,139	17,122
Florida	88	2	0	0	0	0	0	0	0	3	87
Kansas	5,003	50	220	406	47	64	115	0	4	405	4,598
Kentucky	1,982	43	262	81	1	0	106	18	0	89	2,240
Louisiana	9,792	156	903	878	231	389	1,589	6	195	1,242	10,679
North	5,841	60	341	254	71	142	1,201	0	11	503	6,768
South Onshore	3,557	63	506	579	127	217	358	6	145	668	3,478
State Offshore	394	33	56	45	33	30	30	0	39	71	433
Michigan	3,154	-8	144	166	106	91	56	11	0	215	2,961
Mississippi	692	7	57	27	17	54	75	0	3	86	758
Montana	1,002	8	64	123	6	9	131	0	14	101	998
New Mexico	19,687	28	2,201	2,409	1,035	1,330	1,123	10	3	1,594	19,344
East	3,965	23	498	449	561	708	510	5	2	569	4,132
West	15,722	5	1,703	1,960	474	622	613	5	1	1,025	15,212
New York	324	17	51	20	1	2	7	20	0	51	349
North Dakota	465	-8	55	31	1	24	56	5	2	59	508
Ohio	975	-79	166	111	54	7	58	5	7	76	898
Oklahoma	17,200	324	3,247	3,121	572	772	1,926	1	51	1,682	18,146
Pennsylvania	2,371	187	234	155	78	139	276	0	0	181	2,793
Texas	53,275	602	6,388	6,055	4,396	5,382	10,244	149	350	5,761	60,178
RRC District 1	1,229	27	73	136	65	79	119	0	12	133	1,205
RRC District 2 Onshore	1,934	164	197	273	217	267	355	28	40	320	2,175
RRC District 3 Onshore	3,400	67	510	568	98	118	459	67	47	596	3,406
RRC District 4 Onshore	9,067	29	1,163	1,164	872	1,014	1,059	22	66	1,280	9,104
RRC District 5	6,583	71	1,223	400	350	350	2,624	0	164	654	9,611
RRC District 6	7,966	99	570	560	497	1,056	1,476	9	7	783	9,343
RRC District 7B	364	-42	164	59	26	141	465	0	1	76	932
RRC District 7C	5,190	93	450	543	307	314	883	10	0	388	5,702
RRC District 8	6,002	44	527	786	488	753	1,263	12	0	527	6,800
RRC District 8A	1,281	24	202	82	125	250	29	1	1	110	1,471
RRC District 9	4,555	5	487	768	334	424	760	0	0	395	4,734
RRC District 10	5,383	4	787	681	988	612	752	0	0	439	5,430
State Offshore	321	17	35	35	29	4	0	0	12	60	265
Utah	3,951	38	189	114	6	0	605	4	5	313	4,359
Virginia	1,742	18	163	3	1	3	166	0	0	70	2,018
West Virginia	3,509	192	662	77	6	135	381	11	0	235	4,572
Wyoming	23,640	15	2,246	1,895	145	489	2,066	11	3	1,708	24,722
Federal Offshore ^a	19,747	5	2,689	2,938	885	769	660	649	558	3,002	18,252
Pacific (California)	459	1	418	19	0	0	0	0	0	34	825
Gulf of Mexico (Louisiana) ^a	15,144	1	1,450	1,960	738	647	563	636	386	2,056	14,073
Gulf of Mexico (Texas)	4,144	3	821	959	147	122	97	13	172	912	3,354
Miscellaneous ^b	110	24	8	18	0	0	12	14	0	18	132
U.S. Total	201,200	1,693	23,362	20,647	9,632	12,306	22,069	973	1,243	19,259	213,308

^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 2005 contained in the *Natural Gas Annual 2005*, DOE/EIA-0131(05).

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

Table 10. Nonassociated Natural Gas Proved Reserves, Reserves Changes, and Production, Wet After Lease Separation, 2005 (Billion Cubic Feet at 14.73 psia and 60° Fahrenheit)

State and Subdivision	Published Proved Reserves 12/31/04	Changes in Reserves During 2005									Proved Reserves 12/31/05
		Adjustments (+,-)	Revision Increases (+)	Revision Decreases (-)	Sales (-)	Acquisitions (+)	Extensions (+)	New Field Discoveries (+)	New Reservoir Discoveries in Old Fields (+)	Estimated Production (-)	
Alaska	2,004	-1	116	129	74	79	61	22	10	213	1,875
Lower 48 States	171,547	1,568	19,965	18,484	7,903	10,156	20,976	832	1,154	16,614	183,197
Alabama	4,127	-21	133	60	427	439	84	0	0	298	3,977
Arkansas	1,797	11	121	141	15	3	281	4	31	171	1,921
California	767	-4	66	60	211	239	84	0	3	85	799
Coastal Region Onshore	8	-1	1	0	0	0	0	0	0	0	8
Los Angeles Basin Onshore	0	0	0	0	0	0	0	0	0	0	0
San Joaquin Basin Onshore	757	-3	65	60	211	239	84	0	3	84	790
State Offshore	2	0	0	0	0	0	0	0	0	1	1
Colorado	13,956	13	2,065	1,499	587	1,123	1,736	33	4	1,048	15,796
Florida	0	0	0	0	0	0	0	0	0	0	0
Kansas	4,923	50	208	401	47	61	113	0	4	396	4,515
Kentucky	1,963	43	246	73	1	0	102	18	0	88	2,210
Louisiana	9,235	100	787	799	187	355	1,570	6	191	1,167	10,091
North	5,734	49	333	232	70	141	1,197	0	11	493	6,670
South Onshore	3,168	21	405	526	90	192	345	6	141	611	3,051
State Offshore	333	30	49	41	27	22	28	0	39	63	370
Michigan	2,961	1	136	142	106	91	54	11	0	198	2,808
Mississippi	672	6	53	25	16	54	74	0	3	83	738
Montana	872	8	44	109	5	7	92	0	14	86	837
New Mexico	18,109	48	1,975	2,287	906	1,171	943	10	3	1,383	17,683
East	2,477	42	288	329	436	554	333	5	2	367	2,569
West	15,632	6	1,687	1,958	470	617	610	5	1	1,016	15,114
New York	324	14	51	20	1	2	7	20	0	51	346
North Dakota	145	7	6	6	0	20	10	0	1	18	165
Ohio	767	-49	143	102	54	7	58	5	0	61	714
Oklahoma	16,301	364	3,070	2,937	514	694	1,878	1	50	1,570	17,337
Pennsylvania	2,246	180	228	143	78	139	259	0	0	172	2,659
Texas	46,728	517	5,612	5,549	3,821	4,525	9,817	147	345	5,146	53,175
RRC District 1	1,184	27	67	134	64	78	105	0	11	126	1,148
RRC District 2 Onshore	1,858	165	158	249	214	260	319	28	39	298	2,066
RRC District 3 Onshore	2,959	63	453	530	93	109	412	66	45	523	2,961
RRC District 4 Onshore	8,902	30	1,136	1,145	850	1,003	1,054	22	66	1,262	8,956
RRC District 5	6,525	70	1,218	394	345	347	2,623	0	164	648	9,560
RRC District 6	7,564	86	543	511	497	1,052	1,471	9	7	725	8,999
RRC District 7B	288	-42	158	52	25	138	457	0	1	64	859
RRC District 7C	4,196	83	362	458	117	136	772	9	0	318	4,665
RRC District 8	3,266	-6	253	568	321	381	1,134	12	0	322	3,829
RRC District 8A	95	14	13	52	3	2	27	1	0	12	85
RRC District 9	4,445	-8	474	759	324	405	751	0	0	376	4,608
RRC District 10	5,134	17	744	664	942	610	692	0	0	414	5,177
State Offshore	312	18	33	33	26	4	0	0	12	58	262
Utah	3,661	33	134	80	6	0	590	0	5	286	4,051
Virginia	1,742	18	163	3	1	3	166	0	0	70	2,018
West Virginia	3,489	192	661	75	6	135	380	11	0	234	4,553
Wyoming	23,278	16	2,200	1,864	127	407	2,062	11	3	1,648	24,338
Federal Offshore ^a	13,386	4	1,855	2,095	787	681	614	541	497	2,348	12,348
Pacific (California)	47	1	2	0	0	0	0	0	0	1	49
Gulf of Mexico (Louisiana) ^a	10,081	1	1,149	1,443	657	566	523	532	347	1,607	9,492
Gulf of Mexico (Texas)	3,258	2	704	652	130	115	91	9	150	740	2,807
Miscellaneous ^b	98	17	8	14	0	0	2	14	0	7	118
U.S. Total	173,551	1,567	20,081	18,613	7,977	10,235	21,037	854	1,164	16,827	185,072

^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 2005 contained in the *Natural Gas Annual 2005*, DOE/EIA-0131(05).

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

Table 11. Associated-Dissolved Natural Gas Proved Reserves, Reserves Changes, and Production, Wet After Lease Separation, 2005 (Billion Cubic Feet at 14.73 psia and 60° Fahrenheit)

State and Subdivision	Published Proved Reserves 12/31/04	Changes in Reserves During 2005									Proved Reserves 12/31/05
		Adjustments (+,-)	Revision Increases (+)	Revision Decreases (-)	Sales (-)	Acquisitions (+)	Extensions (+)	New Field Discoveries (+)	New Reservoir Discoveries in Old Fields (+)	Estimated Production (-)	
Alaska	6,469	0	179	26	22	19	1	0	0	258	6,362
Lower 48 States	21,180	126	3,102	2,008	1,633	2,052	1,031	119	79	2,174	21,874
Alabama	32	-4	4	1	0	0	3	0	0	5	29
Arkansas	40	-3	1	1	16	27	1	0	0	3	46
California	2,006	73	711	76	1	17	51	0	0	196	2,585
Coastal Region Onshore	188	73	32	13	0	1	6	0	0	18	269
Los Angeles Basin Onshore	184	1	11	18	1	16	2	0	0	9	186
San Joaquin Basin Onshore	1,549	0	655	42	0	0	42	0	0	163	2,041
State Offshore	85	-1	13	3	0	0	1	0	0	6	89
Colorado	1,293	8	17	26	691	701	115	0	0	91	1,326
Florida	88	2	0	0	0	0	0	0	0	3	87
Kansas	80	0	12	5	0	3	2	0	0	9	83
Kentucky	19	0	16	8	0	0	4	0	0	1	30
Louisiana	557	56	116	79	44	34	19	0	4	75	588
North	107	11	8	22	1	1	4	0	0	10	98
South Onshore	389	42	101	53	37	25	13	0	4	57	427
State Offshore	61	3	7	4	6	8	2	0	0	8	63
Michigan	193	-9	8	24	0	0	2	0	0	17	153
Mississippi	20	1	4	2	1	0	1	0	0	3	20
Montana	130	0	20	14	1	2	39	0	0	15	161
New Mexico	1,578	-20	226	122	129	159	180	0	0	211	1,661
East	1,488	-19	210	120	125	154	177	0	0	202	1,563
West	90	-1	16	2	4	5	3	0	0	9	98
New York	0	3	0	0	0	0	0	0	0	0	3
North Dakota	320	-15	49	25	1	4	46	5	1	41	343
Ohio	208	-30	23	9	0	0	0	0	7	15	184
Oklahoma	899	-40	177	184	58	78	48	0	1	112	809
Pennsylvania	125	7	6	12	0	0	17	0	0	9	134
Texas	6,547	85	776	506	575	857	427	2	5	615	7,003
RRC District 1	45	0	6	2	1	1	14	0	1	7	57
RRC District 2 Onshore	76	-1	39	24	3	7	36	0	1	22	109
RRC District 3 Onshore	441	4	57	38	5	9	47	1	2	73	445
RRC District 4 Onshore	165	-1	27	19	22	11	5	0	0	18	148
RRC District 5	58	1	5	6	5	3	1	0	0	6	51
RRC District 6	402	13	27	49	0	4	5	0	0	58	344
RRC District 7B	76	0	6	7	1	3	8	0	0	12	73
RRC District 7C	994	10	88	85	190	178	111	1	0	70	1,037
RRC District 8	2,736	50	274	218	167	372	129	0	0	205	2,971
RRC District 8A	1,186	10	189	30	122	248	2	0	1	98	1,386
RRC District 9	110	13	13	9	10	19	9	0	0	19	126
RRC District 10	249	-13	43	17	46	2	60	0	0	25	253
State Offshore	9	-1	2	2	3	0	0	0	0	2	3
Utah	290	5	55	34	0	0	15	4	0	27	308
Virginia	0	0	0	0	0	0	0	0	0	0	0
West Virginia	20	0	1	2	0	0	1	0	0	1	19
Wyoming	362	-1	46	31	18	82	4	0	0	60	384
Federal Offshore ^a	6,361	1	834	843	98	88	46	108	61	654	5,904
Pacific (California)	412	0	416	19	0	0	0	0	0	33	776
Gulf of Mexico (Louisiana) ^a	5,063	0	301	517	81	81	40	104	39	449	4,581
Gulf of Mexico (Texas)	886	1	117	307	17	7	6	4	22	172	547
Miscellaneous ^b	12	7	0	4	0	0	10	0	0	11	14
U.S. Total	27,649	126	3,281	2,034	1,655	2,071	1,032	119	79	2,432	28,236

^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 2005 contained in the *Natural Gas Annual 2005*, DOE/EIA-0131(05).

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

New Reservoir Discoveries in Old Fields

New reservoir discoveries in old fields were 1,208 billion cubic feet, less than 1 percent more than 2004 (1,206 billion cubic feet). The areas with the largest new reservoir discoveries in old fields and their percentage of the total were Gulf of Mexico Federal Offshore (546 billion cubic feet; 45 percent of the total), Texas (340 billion cubic feet; 28 percent of the total), and Louisiana (188 billion cubic feet; 16 percent of the total).

In the prior 10 years, U.S. operators had reported an annual average of 2,198 billion cubic feet of reserves from new reservoirs discovered in old fields. Reserves from new reservoirs discovered in old fields in 2005 were 45 percent less than that average.

Revisions and Adjustments

There were 22,353 billion cubic feet of revision increases, 19,654 billion cubic feet of revision decreases, and 1,887 billion cubic feet of adjustments in 2005. Combined, there were 4,586 billion cubic feet of net revisions and adjustments in 2005, excluding reserves additions from net sales and acquisitions. This is 7 percent less than the average volume of net revisions and adjustments of the prior 10 years (4,908 billion cubic feet).

Sales and Acquisitions

Sales represents that volume of dry natural gas proved reserves deducted from an operator's total reserves through sale or transfer of operations of an existing gas field or property to another operator (not a volume of production "sold" at the wellhead). Similarly, acquisitions are that volume of proved reserves added to an operator's total reserves by purchase or transfer of operations of an existing gas field or property.

There are several reasons why sales and acquisitions volumes are not equal. Since operators have different engineering staffs and resources, or different development plans or schedules, the estimate of proved reserves for a field can change with a change in operatorship. Timing of the transfer of operations can also impact these values.

In 2005, there were 9,130 billion cubic feet of sales transactions between operators, and 11,674 billion cubic feet of acquisitions. The net difference of 2,544 billion cubic feet was added to the National total of dry natural gas reserves in 2005.

Production

The estimated 2005 U.S. dry natural gas production was 18,458 billion cubic feet (**Table 8**), a decrease of 4 percent from 2004 (19,168 billion cubic feet). Areas with the largest production and their percentage of total production were:

Area	Percent of 2005 U.S. Dry Gas Production
Texas	29
Gulf of Mexico Federal Offshore	16
Wyoming	9
Oklahoma	9
New Mexico	8
Louisiana	7
Colorado	6

Wet Natural Gas

U. S. proved reserves of wet natural gas as of December 31, 2004 were 213,308 billion cubic feet, a 6 percent increase over the volume reported in 2004 (**Table 9**). At year-end 2005, proved wet natural gas reserves for the lower 48 States had increased by 6 percent compared to 2004, while those of Alaska had decreased by 3 percent.

The volumetric differences between the estimates reported in **Table 8** (dry) and **Table 9** (wet) result from the removal of natural gas liquids at natural gas processing plants. A discussion of the methodology used to generate wet and dry natural gas reserves tables in this report appears in Appendix F.

Nonassociated Natural Gas

Proved Reserves

Proved reserves of nonassociated (NA) natural gas, wet after lease separation, in the United States increased by 7 percent (11,521 billion cubic feet) in 2005 to 185,072 billion cubic feet (**Table 10**). The lower 48 States' NA wet natural gas proved reserves increased 7 percent to a level of 183,197 billion cubic feet, while Alaska had a 6 percent decline to a level of 1,875 billion cubic feet.

Seven areas accounted for 82 percent of U.S. NA natural gas proved reserves in 2005:

Area	Percent of 2005 U.S. NA Gas Reserves
Texas	29
Wyoming	13
New Mexico	10
Oklahoma	9
Colorado	9
Gulf of Mexico Federal Offshore	7
Louisiana	5
Area Total	82

Total Discoveries

NA wet natural gas *total discoveries* of 23,055 billion cubic feet in 2005 were 15 percent more than the 2004 total of 20,064 billion cubic feet. Areas with the most *total discoveries* of nonassociated natural gas in 2005 were Texas (10,309 billion cubic feet), Wyoming (2,076 billion cubic feet), Oklahoma (1,929 billion cubic feet), Colorado (1,773 billion cubic feet), Louisiana (1,767 billion cubic feet), and the Gulf of Mexico Federal Offshore (1,652 billion cubic feet).

Production

U.S. production of NA wet natural gas decreased 3 percent from an estimated 17,275 billion cubic feet in 2004 to 16,827 billion cubic feet in 2005. The leading producing areas were: Texas (31 percent), the Gulf of Mexico Federal Offshore (14 percent), Wyoming (10

percent), Oklahoma (9 percent), New Mexico (8 percent), Louisiana (7 percent), and Colorado (6 percent).

Associated-Dissolved Natural Gas

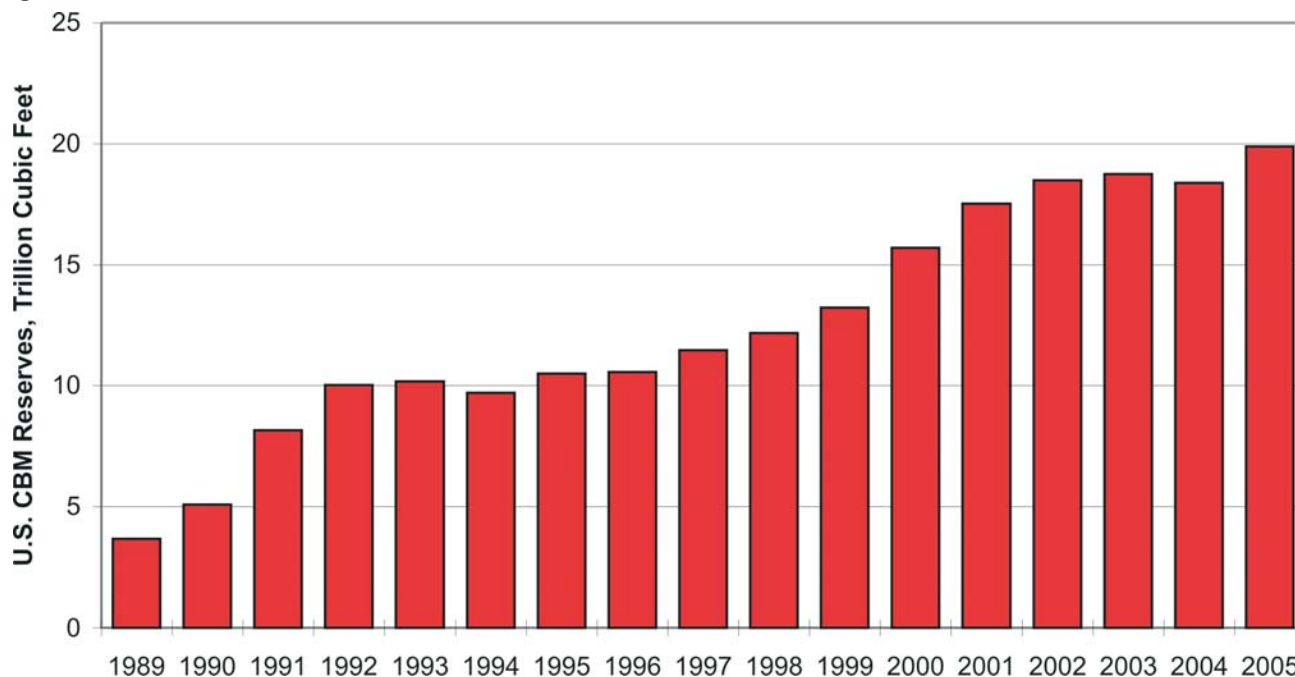
Proved Reserves

Proved reserves of associated-dissolved (AD) natural gas, wet after lease separation, in the United States increased 2 percent to 28,236 billion cubic feet in 2005 (Table 11). Proved reserves of AD wet natural gas in the lower 48 States increased by 3 percent to 21,874 billion cubic feet, and in Alaska decreased 2 percent to 6,362 billion cubic feet. The areas of the country with the largest AD wet natural gas reserves and their percentage of the total were:

Area	Percent of 2005 U.S. AD Gas Reserves
Texas	25
Alaska	23
Gulf of Mexico Federal Offshore	18
California	9
New Mexico	6
Area Total	81

These areas logically correspond to the areas of the country with the largest volumes of crude oil reserves.

Figure 21. Coalbed Natural Gas Proved Reserves, 1989-2005



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

Production

U.S. production of AD wet natural gas decreased 11 percent from an estimated 2,742 billion cubic feet in 2004 to 2,432 billion cubic feet in 2005 (Table 11). Production of AD wet natural gas in the lower 48 States decreased from 2,467 billion cubic feet in 2004 to 2,174 billion cubic feet in 2005, a decline of 12 percent. The areas of the country with the largest AD wet natural gas production and their percentage of the total were:

Area	Percent of 2005 U.S. AD Gas Production
Gulf of Mexico Federal Offshore	26
Texas	25
Alaska	11
New Mexico	9
California	8
Area Total	79

Again, these areas logically correspond to the areas of the country with the largest volumes of crude oil production.

Table 12. Coalbed Natural Gas Proved Reserves and Production, 1989–2005
(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
2004	1,900	5,787	5,166	934	2,085	1,620	898	--	18,390
2005	1,773	6,772	5,249	902	2,446	1,822	928	--	19,892
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
2004	121	520	528	82	320	72	77	--	1,720
2005	113	515	514	75	336	90	89	--	1,732

^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 2000-2004.

NA = Not applicable.

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

Coalbed Natural Gas

Proved Reserves

Proved reserves of coalbed natural gas increased to 19,892 billion cubic feet in 2005, 8 percent higher than the 2004 level (18,390 billion cubic feet) (Figure 21). Coalbed natural gas accounted for 10 percent of all 2005 dry natural gas reserves (Table 12). Five States (Colorado, New Mexico, Wyoming, Alabama and Utah) currently have the vast majority (86 percent) of U.S. coalbed natural gas proved reserves. Two of them (Alabama and Utah) reported declines in their proved coalbed natural gas reserves in 2005.

Production

U.S. coalbed natural gas production increased less than 1 percent in 2005 to 1,732 billion cubic feet. It accounted for 9 percent of U.S. dry gas production.

Areas of Note: Large Discoveries and Reserves Additions

The following State or area discussions summarize notable activities during the year concerning expected new field reserves, development plans, and possible production rates as reported in various trade publications. The citations do not necessarily reflect EIA's concurrence, but are considered important enough to be brought to the reader's attention.

Texas

Texas had a 13 percent increase in dry natural gas proved reserves in 2005 (6,552 billion cubic feet), the largest of any State. Production also increased 2 percent. This resulted primarily from extensions in the Newark East Field in north central Texas and natural gas fields in the Permian Basin of west Texas.

- **Newark East Field:** On July 26, 2005 Devon Energy Corporation announced that it had reached a significant milestone in the life of the Barnett Shale natural gas field in north Texas. The company reported that cumulative gross production from Devon's operated wells reached one trillion cubic feet (Tcf) of natural gas in June. Devon operates 1,830 wells in the Barnett Shale.

The company acquired its initial interest in the Barnett Shale by purchasing Mitchell Energy & Development Corp. in January 2002. Devon has drilled nearly 1,000 additional wells since the acquisition and has increased daily production by over 200 million cubic feet (Mmcf) per day. {42}

Colorado

Colorado's dry natural gas reserves increased by 13 percent (1,853 billion cubic feet) in 2005. This was the result of revision increases on the Colorado side of the largest natural gas area in the United States, the San Juan Basin Gas Area of Colorado and New Mexico.

Wyoming

Wyoming's dry natural gas reserves increased by 5 percent (1,142 billion cubic feet) in 2005. This was the result of development in deep, tight natural gas plays.

- **Pinedale Field:** On August 10, 2005, Ultra Petroleum Corporation (Ultra) confirmed that the Wyoming Oil & Gas Conservation Commission voted to approve 10-acre density drilling of Lance Pool (Lance and Mesaverde Formation) wells on Ultra's Pinedale Anticline acreage in the Stewart Point and Mesa areas of the Pinedale Anticline. {43}
- **Jonah Field:** EnCana Corporation increased its estimate of the gas in place in the Jonah Field using specialized core analysis, with original gas in place now estimated at 350 billion to 400 billion cubic feet per square mile. In 2005, EnCana also initiated 24-hour-a-day fracturing operations. {44}

Areas of Note: Large Reserves Declines

The following areas had large declines in dry natural gas proved reserves due to downward revisions or unreplaced production.

Gulf of Mexico Federal Offshore

Proved dry natural gas reserves in the Gulf of Mexico Federal Offshore decreased by 10 percent (-1,805 billion cubic feet) in 2005. Production also decreased by 25 percent from 3,874 billion cubic feet in 2004 to 2,906 billion cubic feet in 2005.

The large proved natural gas reserves drop experienced in the Gulf of Mexico was primarily due to storm damage in August and September of 2005 from Hurricanes Katrina and Rita. These storms destroyed 113 offshore platforms and seriously damaged offshore pipelines and coastal oil and natural gas processing facilities, impacting the Nation's oil and gas production.

For more complete assessment of the 2005 hurricane damage effects, readers should consult the joint report prepared by the Energy Information Administration, Office of Oil and Gas and the U.S. Department of Energy, Office of Fossil Energy entitled "*Impact of the 2005 Hurricanes on the Natural Gas Industry in the Gulf of Mexico Region.*" which was published in July 2006.

Kansas

Kansas' proved dry natural gas reserves decreased by 7 percent (-338 billion cubic feet) in 2005. Production in Kansas increased 1 percent (+4 billion cubic feet) in 2005.

New Mexico

New Mexico's proved dry natural gas reserves decreased by 2 percent (-311 billion cubic feet) in 2005. Production in New Mexico decreased 2 percent (-34 billion cubic feet) in 2005.

Reserves in Nonproducing Status

Nonproducing proved natural gas reserves (wet after lease separation) of 59,658 billion cubic feet were reported in 2005, 16 percent more than the 51,412 billion cubic feet reported in 2004 (**Appendix D, Table D10**). About 31 percent of the reserves in nonproducing status are located in Texas. Another 15 percent are in the Gulf of Mexico Federal Offshore, as most new deepwater reserves are in the nonproducing category. Wells or reservoirs are nonproducing due to any of several operational reasons. These include awaiting well workovers, the drilling of extensions or additional development wells, installation of production or pipeline facilities, and depletion of other zones or reservoirs before recompletion in reservoirs not currently open to production (called "behind pipe" reserves).